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AN INTERIM REPORT FOR THE MCHINJI WATER PROJECT

PHACE

: Phase II

PHASE PERIOD

: April, 1995-March, 1996

NAME OF DONOR

: Comic Relief

EXECUTING AGENCY

: Save The Children Fund (UK)-Malawi

DATE OF REPORT

: 29th April, 1996

EXECUTIVE SUMMARY

This report highlights progress made for Phase II of the Mchinji Water Project since April, 1995. It also explains problems encountered and the lessons learned during the period.

The broad objective of the project is to promote community participation in the identification of their needs for safe water sources, the drilling and rehabilitation of their water points and the eventual community based management in operation and maintenance by encouraging women participation.

This report is therefore a consolidation of the main issues obtained from the hardware and the software components for the past 12 months. The targets which are included in this report are supposed to be met by March, 1997.

Tables, appendices and graphical representations have been included for reference purposes.

GENERAL BACKGROUND

The Mchinji Water Project is a component of the Mchinji Primary Health Care Programme. The water project started in October, 1993 and covers the construction of tubewells using vonder rigs; rehabilitation of old boreholes to fit them with VLOM-type pumps and the implementation of community based management and hygiene education in all the beneficiary communities.

The broad objective of the construction component of the water points is to provide safe drinking water to the rural communities within reasonable walking distances so that women do not spend a lot of time fetching water at the expense of child care and also to

reduce the incidence of water borne diseases in the beneficiary communities.

The hardware component is complimented with the software component in order to ensure sustainability and reliability of the water installations hence maximising the health benefits of these water points to the user communities.

Specific objectives

- To provide safe water to the communities by drilling 30 tubewells and rehabilitating 20 boreholes in phase II all of which are to be fitted with Afridev hand pumps.
- To promote community participation in the drilling of tubewells and rehabilitation of old boreholes.
- To promote a multi sectoral approach in the planning, implementation, monitoring and evaluation of an integrated rural water supply development; local communities (especially women) are to be involved as much as possible in projectdecisionn making.

A. OVERVIEW OF THE CONSTRUCTION COMPONENT

Despite the persistent drought which has been hitting Malawi and other countries in the Southern part of Africa since 1992 the water table in Mchinji has remained relatively higher than most of the districts in the country. The water table varies between 6 and 10 metres below ground surface and this fact has led to the success of the drilling activity.

The demand for tubewells has increased to such an extent that some communities feel that their turn to drill water points is taking too long to come. The major problem has been presence of semi-decomposed rock at depths of between 10 and 15 metres coupled with difficult stiff clays has resulted in the abandonment of a number of sites after drilling for a few days.

In general, the drilling of tubewells has been preferred to construction of hand-dug open shallow wells by the community. Communities appreciate the benefits that come about due to provision of such protected water supplies.

Achievements

Achievements have been looked at in terms of progress made against work plan as follows:

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Table 1 Construction progress against set objectives

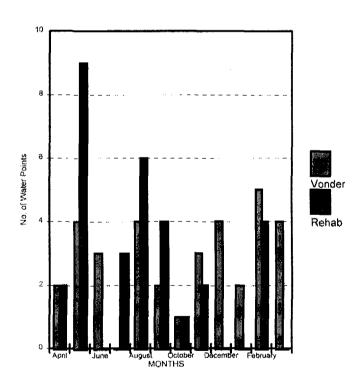
	WORK PLAN	PROGRESS ACHIEVED
1.	Drill 5 tubewells (carried over from phase I) Drill 30 tubewells	Drilled 5 tubewells (carried over from phase I) Drilled 29 tubewells
2.	Rehabilitate 20 boreholes	Rehabilitated 31 boreholes
3.	Monitor the functioning of tubewells and boreholes	Monitored and maintained most of the water points where local communities have not yet been trained in CBM

From the table above it can be seen that a 97% success rate has been attained in tubewell construction while 155% success has been attained for borehole rehabilitation. The graph that follows shows monthly progress for construction and rehabilitation.

Graph 1

MCHINJI CONSTRUCTION PROGRESS

No. of Vonder and Rehab Water Points



Justification for remarkable progress for vonder drilling

- A large backup of vonder rig spares was ordered and repairs to broken parts carried out by an identified local tradesman.
- In Phase I, 9 months were actively spent on vonder drilling unlike the entire 12 months for phase II.
- Community mobilisation greatly improved during phase II; extension workers went under training of trainers where they were equipped with community mobilisation skills which proved very instrumental. At the same time there has been tremendous improvement in understanding between SCF vonder teams and the roles of the extension workers; this was lacking during phase I. Similarly, the vonder team technicians had gained more experience in operating the rig.
- By the end of phase I communities had established confidence in the workability of the vonder rig as such there was good community participation amongst communities under phase II.

Problems

- Frequent breakdown of the vonder rig when drilling through semi-decomposed rock. To make tubewells more reliable it is necessary to drill at least beyond 15 metres so that a water column of more than 5 metres is attained. This is also coupled with delays in repairs of vonder rig parts.
- Change of sites to new sites after drilling for some days on one site due to difficult soil formations especially in villages where the communities are committed to finding water.
- Deterioration of the security situation in Mchinji District led to the suspension of field activities for a few weeks which was another disturbance.
- Community problems such as funerals led to temporal suspension of vonder drilling activities.

On the other hand the rehabilitation of the boreholes has been very successful. A 155% success rate has been attained even before the end of second phase of the project mainly because of the following reasons:

- The rehabilitation team worked with communities continuously without unnecessary breakdowns of the rehabilitation equipment. The only problem which affected the pace was funerals.
- Materials and equipment for borehole rehabilitation works were readily available;

a second compressor was kept standing as a back up.

Future plans

While the project activities continue with vonder drilling, a few other activities will be done during the coming period which include:

- Vonder drilling of 31 tubewells; 30 originally earmarked for phase III and 1 carried over from phase II.
- Field assessment of more boreholes which need to be rehabilitated. This exercise will help the fund to implement a district wide community based management initiative without community conflicts due to other boreholes falling under the government's centralised maintenance system. This assessment will also include identification of the communities which cannot be served with tubewells due to vonder rig failure in which case a proposal to drill air holes will be prepared and submitted to the donor.
- Monitoring of groundwater recession rates resulting from the persistent drought which has been hitting Malawi since 1992. The information obtained help the fund to plan the reliable drilling depth of its water points which will not be affected by the dry spells.
- Maintenance of boreholes and tubewells where communities have not yet been trained in operation and maintenance.

LESSONS LEARNT

- Monitoring civil works has revealed that short reinforcing bar laps between apron and drainage lead to breaking of concrete at the apron-drainage joint. This is being checked by providing reinforcement bar overlap of not less than 0.5 Metre long and apron-drainage points.
- It has also been observed that critical analysis of the water points and some ground features would enable to reduce the incidence of site abandonment. The traditional methods in site survey for tubewells do not provide information on quantity of underground water, depth of water table and soil formation.
- Participation of communities in the drilling process depends to a large extent on the level of community involvement in problem identification and decision making on the course of action to be taken to address the problem. In line with

this it has also been noted that community mobilisation does not just involve telling the communities what will be done and how-- community mobilisation is in fact a process of lobbying the community to organise itself for involvement and participation in the project activities. The fund is advocating such an understanding.

B. OVERVIEW OF THE COMMUNITY BASED MANAGEMENT (CBM)

Overall aim

The overall aim of CBM is to implement a district-wide community based management and hygiene education project in all the beneficiary communities served with boreholes equipped with Afridev pumps with the objective of enhancing the prospects of sustainability and maximising the use and effectiveness of the installations thereby improving the health of the user population.

Specific objectives

- . To train 142 borehole committees of Phase II in leadership skills, committee procedure, financial management and hygiene education.
- To train 426 caretaker members from the 142 committees in basic preventive maintenance of the Afridev pump.
- To localise sparepart distribution network to be used for the repair and maintenance of the boreholes for easy accessibility to the beneficiary communities.
- To encourage women participation in the management of their own water resources.
- To continue implementation of hygiene education and sanitation component in 30 villages and expand these activities to the neighbouring communities.

Achievements

- 1. Formation and training of committee members
 - 129 borehole committees were formed and given leadership training so that they

are responsible for overall management of the water activities of which only 121 have received caretaker training during the twelve months period. The caretakers were given technical training so that they are able to carry out basic preventive maintenance and simple repairs. The caretaker group comprises three members of which two are women.

Committee formation and training was conducted by the multi sectoral teams of trained extension workers from the Ministries of Health and Population, Irrigation and Water Development, and Women and Children Affairs and Community Services. These extension workers have formed multi sectoral local coordinating teams which are responsible for the implementation of the project activities within their respective catchment areas with the support from the District Community Based Management Team of which SCF is a member. After training the communities they are responsible for follow up of activities which builds up chances for the sustainability of the project activities. The extension workers also assist the communities in problem solving in case of conflicts between the committee members or technical problems with the borehole.

Since this is an ongoing project, it is hoped that the remaining 13 borehole committees and 21 caretaker committees will be trained in phase III.

2. Sparepart distribution system

The project has introduced the sale of Afridev spareparts in Chipiku Stores, a local wholesaler with reliable distribution centres throughout the country, which is selling the spareparts to local shopkeepers. Agreements were reached with three Chipiku Stores in July, 1995 following which 50 sets of the fast wearing spareparts were delivered to each of the stores. The money realised from the sales of these spareparts will be deposited into the Community Based Management Revolving Fund Account which has been opened with the National Bank of Malawi.

In addition, 15 local shopkeepers were identified by the communities and are now buying the spareparts from Chipiku Stores and stocking them in their shops. As the system expands, the spareparts will be easily accessible to the communities that need them throughout the district.

While using the Mchinji Project as a model project, SCF through the National Advisor to the CBM Unit is influencing the government of Malawi to distribute the borehole spareparts throughout the country to support the borehole committees which were trained in the past three years but do not have access to spareparts yet. The government of Malawi has only made available few spareparts to the Chipiku Stores especially in the Southern Region. Meanwhile, the Water

Department has ordered a large consignment of spareparts for distribution throughout the country.

3. Water points in operation and pump repairs done

Water point monitoring was done to determine the efficiency of the project which would be measured by:

- . The number of pumps which are operational at any given time
- . Whether the committees have maintenance funds which will be used for buying spareparts or not.
- The ability of the caretakers to undertake preventive maintenance.

TABLE 2. Percentage Performance of 134 Boreholes Monitored in Phase 1 and Phase II

FEATURE	PERCENTAGE
Boreholes working well	87
Boreholes working poorly	9
Boreholes not working	4
Committees that have maintenance fund	69
Committees that have bought spare parts	53
Caretakers committees that have done repairs and preventive maintenance	58

NOTE Those boreholes that are not working properly are attributed to low water levels and low yields.

Faults identified for those boreholes that are not working were beyond the capabilities of caretakers; thus borehole maintenance teams have to intervene.

4. Hygiene education and sanitation promotion

In order to achieve lasting benefits of the installed water points 30 villages were selected for hygiene education and sanitation promotion. Initially 15 villages in the intervention area, under intensive hygiene education, and 15 villages in the control area; the latter being for comparison of the results with those from the intervention villages. Lessons learnt from these HESP activities especially in the intervention area have proved quite beneficial to the communities as such decision has been arrived at to expand these activities to neighbouring villages in order to increase coverage of hygiene education and sanitation promotion in the project area.

The hygiene and sanitation activities will be closely monitored and the information that will be obtained will be analysed to evaluate the effectiveness of hygiene education in rural water supply projects. This evaluation will focus on the hygiene behaviours commonly associated with drinking water and sanitation coverage of the villages. The water quality results during collection and storage will be determined by the bacteriological analysis of the water samples both from intervention and control areas. Data will be presented in terms of coliform counts per 100 ml of water and interpreted using the WHO standards for safe drinking water which is <10 faeacal coliform/100 ml of water for rural untreated water.

The activities which have so far been carried out are as follows:

- KAP (Knowledge, Attitude and Practice) survey to determine hygiene practices currently in the communities. The information collected provided baseline data to enable SCF to identify the problem areas related to water hygiene and sanitation so that it provides a benchmark for planning the appropriate hygiene education messages for intervention in the communities.
 - Analysis of first monitoring data in relation to baseline data in the intervention area reveals the following observations:

 While there is only 3% improvement of acceptable levels of E. Coli at source, there has been 29% and 23% improvement during transportation and in household storage respectively. On the other hand only 3% and 7% improvement has been achieved during transportation and in household storage respectively in the control area where not much hygiene education activities are being conducted.

This is directly as a result of the impact of the hygiene education messages being imparted in the communities that fall under the intervention area (unlike those in the control area) and clearly underlines the importance of hygiene education and sanitation promotion initiatives alongside safe water provision if the degree of contamination has to be minimised before consumption.

- Development of water hygiene education messages after the KAP survey. The messages have been developed in form of songs, drama and village level hygiene education lessons.
- Training of 166 volunteers from the intervention villages of which 80 are women. These volunteers are responsible for dissemination of the developed hygiene education messages to the communities.

Improved pit latrines using sanitation platform has been identified as one area of improving village sanitation. San plat casting has started with 29 sanplats casted of which 10 have been installed, but to be encouraged to all beneficiary communities to the water project. On one hand this activity has delayed because the community was busy with agricultural activities. On the other coarse aggregate for Sanplat plat casting has been difficult to get within the communities targeted. Communities have now suggested that they be ferried to some place where they can readily get aggregate sand and SCF provide transport to get the aggregate to their villages. Now that the agricultural season is coming to an end the activities will be intensified again.

Currently hygiene education activities are on going in 15 villages whose effectiveness will be assessed in June.

IMPACT OF THE PROJECT

Health benefits

Before the project was launched a large majority of the local inhabitants relied on unsanitary rivers or dug wells as domestic water supply source. This resulted in frequent occurrence of water and sanitation related diseases.

With the construction of boreholes, tubewells and borehole rehabilitations people have access to safe water. Women and children spend less time and effort in fetching water since they no longer travel long distances. Time and labour saved on water collection is now being used for other development projects. Women have now enough time to care for their children.

With the inclusion of hygiene education and sanitation component there is a reduction in water and sanitation related diseases; no cases of cholera have been reported so far.

Social Benefits

Sense of ownership has been created in communities resulting in acceptance of responsibilities by the communities like:

Communities willing to contribute funds for purchasing fast wearing spareparts. Todate beneficiary communities have raised funds for the purposes of borehole maintenance. Communities organise themselves in different ways; some through household contributions, some through income generating activities. The majority of these communities choose to buy and keep in stock spare parts rather than actual cash.

Improvement of sanitation around water points. Through hygiene messages incorporated in CBM trainings, communities appreciate the need for sanitary sound water poit surroundings. Proper drainage and soak pit arrangements have been put in place in most of the water points where training has been conducted. Similarly, brickwall fences constructed around these boreholes assist in keeping away livestock from direct access to the water points. Communities organise themselves in the tidiness of the water points; traaditionally women do the sweeping while men the bush clearing around the water points.

Institutional structures established allow effective implementation of the project. Efficient and effective collaboration and coordination between the communities and government has improved and hence clear partnership in operation and maintenance has been established

LESSONS LEARNT

- Bacteriological water quality monitoring revealed that the provision of a safe water point alone without hygiene education of the user communities does not provide lasting solutions to ensure the health benefits of the installations as evidenced by the level of bacterial content of the water sample drawn from the storage facilities (baseline data indicates a fall in acceptable levels of faecal coliform as compared to first monitoring data). On the other hand water provision should be complemented with intensive hygiene education for the user community as regards to water collection, transportation and household storage and storage facilities where it is evidenced high levels of contamination can be minimised through hygiene education.
 - A HESP component may be more effective if implemented after a CBM component since the communities are more likely to be receptive once their confidence has been gained and the relationships with the extension workers have

been established.

- The success of a CBM programme depends on effective community awareness and training followed by the availability of tools and spareparts to be used for maintenance of the water points backed by a well established support unit for the major repairs of the boreholes. A demand driven approach should be emphasised at the onset of the community based management project.
- The strenghth of a CBM community depends on the local bye-laws set aside by the community to establish control on the abuse of the water points. Certain communities have indicated that anyone violating the laws is charged a fine.
- There is increased appreciation and understanding of the CBM programme in the district. This has been evidenced by the willingness of the communities to construct brickwall fences around water points to deny direct access to animals to water points. At the end of phase I only one brickwall fence was constructed while 114 brickwall fences have been constructed by the end of phase II.

PROBLEMS ENCOUNTERED AND POSSIBLE SOLUTIONS

- . The security situation in Mchinji has been poor due to armed robberies. For the security of the project staff and vehicles, project activities were on and off for a couple of months and this affected the implementation pace.
- The high rate of perdiem being offered by the UNDP Fifth Country Programme to the government's extension workers, local leaders and the communities in Mchinji during training sessions is affecting the working relationship between the extension workers and Save the Children. SCF, however, continues to liase with the exension workers to consider the value of their involvement in assisting the communities in their catchment areas as a fundamental principle. As for the local leaders and the communities SCF advocates the long term value of the training to the communities which is generally accepted as opposed to more money for perdiem.
 - This year the country has experienced an extended rainy season which has affected community participation in most activities, more noticed in san plat casting and installation.

BUDGET.

The budget for Phase II covered several line items such as office and housing

construction, mid-term evaluation and the casting of sanplats which have not been implemented according to plan because of the following reasons:

- . Construction of the office has been delayed by the move of the Water Department from the Ministry of Works to the Ministry of Irrigation and Water Development. The Water Department Staff in Mchinji are still based in the Ministry of Works premises but there are plans for the department to move to their own site. This time the department has indicated where the offices need to be constructed. Thus the offices will be constructed during phase III.
- Other project activities such as project evaluation did not start as planned due to security problems as well as choice of priorities at a given time. The proposed date for interim project evaluation was slotted for March, but due to delays in preparatory phase, it is now being planned for June 1996.
- Sanplat casting and installation lags behind schedule more so for poor community participation due to communities dedicating the majority of their time to agricultural activities. With the extended rainy season communities have this season been involved in agricultural activities for a longer period than previously.

FUTURE PLAN

- To form and train 218 borehole committees in leadership skills, committee procedure, fund raising activities, financial management and hygiene education.
 - To train (678) caretaker members from (226) borehole committees in repair and maintenance of the Afridev pump.
- To continue monitoring water quality every three months in order to assess the impact of hygiene education. Emphasis will be on acceptable levels of faeacal coliform in household storage and storage facilities where the greater proportion of collected water is consumed.
- To continue samplat casting and installation in the intervention villages and expanding to more villages in order to increase coverage of improved pit latrines by means of samplat in the project area.
 - To initiate water hygiene lessons for primary school children.
- . To conduct theatre for development workshops for drama groups.
 - To carry out interim project evaluation.

CONCLUSION

Despite the heavy and continued rains, construction activities have been carried out quite efficiently almost meeting construction targets for phase II. The CBM component which relies more on community commitment in participation has had some set back as a result of the rains. Also, CBM activities lag behind construction activities which means training of these communities can only take place after the water point has been put in place. However, the targets for phase II have been planned to be completed by the end of May.

Findings of the monitoring exercise which showed that 96% of the water points are operational at a given time is a clear demonstration of the commitment by the community to take responsibility in operation and maintenance hence a high sense of ownership. This, coupled with the fund raising activities and active participation by the communities in the construction of their water points further justifies that the project is meeting the community needs. More importantly is the lead role taken by women in the management of their water sources which is very encouraging.

The approach which has been used for the project is widely accepted at all levels; community, district and national level such that the National CBM Unit is using the project's approach to develop guidelines for implementation of CBM for replication in other districts.

Learning from experience is the strength of the fund. The experience gained from the Mchinji Water Project is being used to implement similar projects in the country. The project has also been used as a training ground for the vonder and borehole rehabilitation teams by other organisations like Concern Universal and Inter Aide. Shortly in May the fund trained its own teams in Mchinji for the ODA funded drought project in Salima District where vonder drilling and borehole rehabilitation is being done. Also part of the vonder team has been transferred to Ntchisi in order to build another team for Ntchisi operations. Heads of partner ministries in Ntchisi went on a study/orientation tour of the Mchinji project with view of replicating the Mchinji project initiatives in Ntchisi.

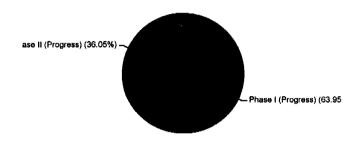
Through the Mchinji project, the fund has played a leading role when it comes to advocacy. Right now civic education through a radio play on CBM initiatives based on the project is on the air. The ministry of irrigation and water development in the CBM Unit is in the forefront of the whole exercise.

The fund is also in preparatory phase of starting yet another project in Dowa where it is hoped that district partner ministries heads will undergo a study tour of the Mchinji district.

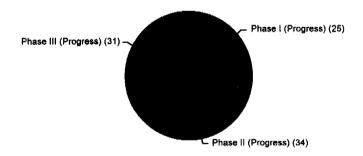
Appendix I

BOREHOLE REHABILITATION AND TUBEWELL CONSTRUCTION

BOREHOLE REHABILITATION

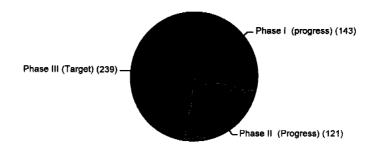


VONDER DRILLING (tubewells)



COMMUNITY BASED MANAGEMENT TRAINING

COMMUNITY BASED MANAGEMENT TRAINING





SAVE THE CHILDREN FUND (UK) MCHINLII PHC PROJECT (COMIC RELIEF)

CONSTRUCTION AND COMMUNITY BASED MANAGEMENT SUMMARY REPORT FOR SOREHOLE REHABILITATIONS AND TUBEWELLS

VONDER/ REHAB	SITE NAME	PHASE	WATER POINT No.	DATE CONSTR		DEPTH	STAT LVL	DYN LVL	CYLR DEPTH	PUMP TYPE	VGE WATER HEALTH COM'TE	L/SHIP, SAN'TION	C/TAKERS
			714.	····-		(M)	(M)	(M)	(M)		FORMED	TRAINED	TRAINED
								-					
R	NCHOKWE	ı				38.00	7.00	18.00	24.00	AFDV	NO	NO	NO
R	KALULU SCH	1				10.00	4.00	6.50			NO	NO	NO
R R	KAPILI CHIKHOWA	1	W149			39.25 14.20	99,8 08.8	20.00 10.00		AFDV AFDV	NO YES	NO YES	NO YES
R	NATHYOLA	i				46.00	7.00	24.00		AFDV	YES	YES	YES
R	SINUMBE	1				42.00	6.00	21.00	27.00	AFDV	YES	YES	YEB
R R	PINDA SCH MPHALABUNGU	1				38,00	4.00 7.00	18.00		AFDV	YES	YE8	YES
R	NSILOMBE	i				43.20 45.00	7.25 14.00	18.00 17.00		AFDV AFDV	YES YES	YES YES	YES YES
R	NKHWAZI SCH	ŧ	M36			34.20	6.00	21.00		AFOV	YES	YES	YES
R	CHAZUKA SCH	I				43.00	17.00	21.00		AFDV	YES	YE\$	YES
R R	KANKHANDE SCH NYONGANI	1	IM818			46.00 25.00	7.00 8.00	23.00 18.00		AFDV AFDV	YES YES	YES YES	YE\$ YE8
R	MTAWIRA MKT	1				45.00	16.00	22.00		AFDV	YES	YES	YE8
R	WALIRANJI CRT	ι				24.00	6.00	14.00	18.00	AFO V	YES	YES	YES .
R R	MPHITA MKANDA II	l F	RK107			45.00	2.10	3.00		AFDV	NO	NO	NO
Ř	MKANDA III	i				22.10 38.00	7.40 8.95	15.00 18.00		AFDV AFDV	NO NO	NO NO	NO NO
R	CHIBONYOLE	1				39.00	8.25	19.00		AFDV	YES	YES	YES
R	NKANDA I	1				42.25	7.00	20.00		AFDV	NO	NO	NO
R R	MLONYEN! KAFULAMA SCH	1	GK229			39.00	6.00 8.00	19.00		AFDV	YES YES	YES YES	YES YES
R	GUILLIME HAC	i	GRAZE			80.20 43.00	7.00	18.00 18.00		AFDV AFDV	YES	YES	YES
R	MANDAWALA	t				14.00	10.00	12.00		AFDV	YES	YES	YES
R	SANKHANI	1				24.00	12.00	18.00		afdv	YES	YES	YES
R R	GAMULILA KAPILI COURT	1				46.70 38.00	9.60 7.00	21.00 24.00		ADFV AFDV	NO NO	NO NO	NO NO
R	KADZOMBE	i	RM296	07	7/11/94	30.00	15.00	21.00		AFDV	YES	YES	YES
R	NZANDA	1		08	8/04/94	46.60	12.00	18.00	30.00	AFOV	YES	YEŞ	YES
R	NATHOLA	!			9/05/94	29.00	7.00	21.00		AFDV	YES	YE8	YES
R R	CHINKWENDE LEZINALA	l t	PM820		9/07/94 9 / 08/94	14.00 39.00	7.00 5.25	11.00 15.00		AFDV AFDV	YES YES	YES YES	YES YES
R	GUILLIME SCHOOL	ì	MOZO		9/09/94	8.20	3.00	4.00	6.00		YES	YES	YES
R	CHIPUMI H/C	1			9/12/94	36.00	7.00	20.00	24.00	AFDV	NO	NO	NO
R R	TAMANI MWENDO TEMBWE	!	PM819		9/13/94	32.50	8.00	18.00		AFDV	YES	YEB	YE8
R	NKHUMBA	1	IR180		9/13/94 0/08/94	28.30 35.00	8.70 6.90	18.00 20.00		AFDV AFDV	YES YES	YES YES	YES YES
R	NGUBO	1		11	1/22/94	33.00	6.00	14.00		APDV	YES	YE\$	YES
R	PITALA	1			1/26/94	34.00	6.00	18.00		AFDV	NO	NO	NO
R R	KAIGWAZANGA SCH SITOLA SCHOOL	1			2/07/94 2/07/94	45.00 38.00	5.00 3.23	18,00 15.00		AFDV AFDV	NO NO	NO NO	NO NO
R	MPAZI	i			2/11/94	40.75	11.07	21.00		AFDV	NO	NO	NO
R	FANUELE	t		12	2/13/94	30.00	5.13	18.00		AFDV	NO	NO	NO
R	KAWELE SCHOOL KADZILA SCHOOL	l I	A70		1/09/95 1/11/95	24.00	6.00 8.30	12.00		AFDV AFDV	NO	NO NO	NO NO
R	ZULU COURT	i	A71		1/13/95	24.75 35.00	9.40	12.00 19.00		AFDV	NO YES	YES	NO YES
R	СНІРИМІ	1	48A	01	1/13/95	40.00	9.30	15.00	27.00	APDV	NO	NO	NO
R	GUMBA COURS	1	A76		2/14/95	36.00	6.00	12.00		AFDV	NO	NO	NO NO
R R	GUMBA SCHOOL MZAMA	1			2/14/95 3/14/95	31.00 57.40	8.50 \$.30	12.00 18.00		AFDV AFDV	NO NO	NO NO	NO NO
R	CHIKOZO	i			2/17/95	30,10	5.30	18.00		AFDV	NO	NO	NO
R	CHIMONGO	1			3/18/95	37.20	6.00	16.00		AFDV	NO	NO	NO
R R	jusi Kakuda	l l			1/19/95 1/20/95	38.00 34.60	3.25 4.00	12.00 9.00		AFOV	NO NO	NO NO	NO NO
R	KACHUKA	1			3/23/95	34.6Q 38.35	3.00	9.00		AFDV AFDV	NO.	NO NO	NO
R	TSWIDI	н			4/11/95	40.00	5.06	12.00		AFDV	NO	NO	NO
R	M'DUWA	11			4/18/95	39.00	6.02	14.00		AFDV	NO	NO	NO
R R	KANGWERE KALULU	II II	R131 A67		5/08/95 5/07/95	42.30 42.00	\$.00 \$.50	15.00 15.00		AFDV AFDV	NO NO	NO NO	NO NO
R	KAMANGILIRA). H			5/08/95	40.00	6.00	18.00		AFDV	NO	NO	NO
R	MPONDA	0	RM4		5/09/95	47.30	6.00	12.00		AFDV	NO	NO	NO
R	CHIWALO	H			5/12/95	57.00	14.00	18.00		AFDV	NO.	NO	NO
R R	KATSUKA KHOLONI SCH	11 11	SM442		5/14/95 5/16/95	37.00 42.00	6.00 6.00	27.00 18.00		AFDV AFDV	NO YEB	AEB NO	NO YEŞ
R	CHIDAMBO	 A			5/21/95	45.00	12.00	12.00		AFDV	YES	YES	YE8
R	CHIWOKO	11			5/26/96	\$4.00	10.00	18.00		AFDV	YES	YES	YES
R	KATONDA	11	PM194		7/05/95	39.00	6.00 # 00	21.00		AFDV	NO NO	NO NO	NO NO
R R	POKA GANDALI	ii It	W22 R139		7/10/95 7/13/95	28.00 21.00	6,00 6,00	18.00 18.00		AFDV AFDV	NO NO	NO NO	NO NO
R	JENJEWA	8			8/02/95	32.00	6,20	14.30		APDV	YES	YES	YE8
R	BENJE	u		06	8/04/95	38.00	6,00	15.00	24.00	AFDV	YES	YES	YES

NTHEMA 1	41		08/05/95	39.00	6.50	12.60	27.00	AFDV	NO	NO	NO
KHWERE	it		08/09/95	37.00	8.50	11.70	27.00	AFDV	NO	NO	NO
MTEMA 2	H		08/17/95	29.00	6.00	13.80	21.00	AFDV	NO	NO	NO
KAKUDA 2	u		08/18/95	37.00	7.00	18.00	24.00	AFDV	NO	NO	NO
MASAMBA	£I		09/14/95	39.00	7.50	14.00	24.00	AFDV	NO	NO	NO
MASITALA	н		09/17/95	56.50	6.25	15.00	27.00	AFDV	NO	NO	NO
MISALE TC	11		09/18/95	31.00	12.00	17.00	21.00	AFOV	YES	YES	YES
	IJ		09/26/95	37.80	7.00	15.00	24.00	AFDV	NO	NO	NO
	н		10/31/95	30.00	9.00	21.00	27.00	AFDV	YES	YES	YE\$
	II .		11/03/95	30.00	8.00	21.00	27.00	AFDV	NO	NO	NO
	II		11/07/95	30.00	7.00	21.00	27.00	AFDV	NO	NO	NO
	li .		02/03/96	38.00	7.00	21.00	27.00	AFDV	NO	NO	NO
	0		02/04/96	48.70	9.60	18.00	27.00	AFDV	NO	NO	NO
	11		02/05/96	36.00	6.00	21.00	24.00	APDV	NO	NO	NO
	11		02/09/96	38.00	6.00	21.00	24.00	AFDV	NO	NO	NO
		w/C05		16.00	9.00			AFOV	YE8	YES	YES
		w/C06		17.00	9.00		15.00	AFDV	YES	YES	YES
		w/C03		15.00	2.00			AFDV	YES	YES	YES
	-	w/C02		15.00	8.00		14.00	AFDV	YES	YES	YES
	1	w/C01		15.00	6.00		14.00	AFDV	YES	YEB	YES
		w/C07		15.00	7.00			AFDV	YES	YES	YES
	1	w/C09	07/08/94	14.00	4.00		12.00	AFDV	YES	YES	YES
		w/C08	07/08/94	12.00	4.00		10.00	AFDV	YES	YES	YES
		w/C10		14.00	4.00			AFDV	YES		YES
		w/C11	07/11/94 07/11/94	15.00	7,00		13.00	AFDV	YES	YES YES	YES
		w/C12	07/22/94	14.00	2.50		12.00	AFDV	YES	YES	YES
		w/C12	09/07/94	15.00				AFDV	YES	YES	YES
		w/C13	09/07/94	16.00	2.00 5.00		14.00	-		YES	
				16.00				AFDV	YES		YES
*		w/C18	11/06/94		6.00		15.00	AFDV	YES	YES	YE8
	!	w/C16	12/08/94	16.00	6.00		15.00	AFDV	YES	YEB	YES
		w/C17	12/14/94	16.00	8.00		15.00	AFOV	YES	YES	YES
		w/C18	12/17/94	16.00	6.00		14.00	AFOV	YES	YES	YE8
		w/C19	01/08/95	16.00	6.00			AFDV	YE8	YES	YE8
		w/C20	01/14/95	14.00	4.00			AFDV	YES	YES	YE8
	1	w/C22	02/15/95	15.00	4.00			AFDV	YES	YES	YES
	1	w/C23	02/15/95	15.00	2.00			AFDV	YES	YEB	YES
	1	w/C24	02/20/96	15.00	7.00			AFDV	YES	YE\$	YES
	1	w/C25	02/22/95	15.00	4.00			AFDV	YE8	YE\$	YES
•	ı	w/C28	03/23/95	17.00	6.00			AFDV	YES	YES	YES
	l .	w/C27	03/31/95	15.00	8.00			AFDV	YES	YES	YES
		w/C28	04/11/95	15.00	5.00			AFOV	YES	YES	YE\$
	H	w/C29	04/15/95	15.00	6.00			AFDV	YES	YES	YES
		w/C33	05/01/95	17.00	9.00		16.00	RU)	YES	YES	YES
CHIMOMBO	Ħ	w/C30	05/04/95	15.00	9.00		14.00	AFDV	YE8	YES	YES
NKHWINJILI	11	M/C35	05/05/95	15.00	8.00		14.00	AFDV	YES	YES	YES
ANDERSON	11	w/C31	05/16/95	16.00	9.00		15.00	AFOV	YES	YES	YES
BALILA	II.	w/C34	06/05/95	15.00	7.00		14.00	AFD	YE8	YES	YES
MASUMBA	A	w/C35	06/09/95	15.00	6.00		14.00	AFDV	YES	YES	YES
NKHUNGULU	Ħ	w/C36	06/14/95	28.00	9.00		25.00	AFDV	YES.	YES	YES
KAMWENDO	II	w/C21	08/07/95	17.00	9.00		16.00	AFDV	YES	YES	YES
THUMBA	H	w/Ç37	08/12/95	14.00	8.00		13.00	AFDV	YES	YES	YE8
CHIOSHYA HC	н	w/C43	08/17/95	18.00	9.00		17.00	AFDV	YE\$	YE\$	YES
KOCHILIRA	II	w/C04	06/20/95	15.00	8.00		14.00	AFDV	YES	YE8	YES
SITIMA	II	w/C35	09/20/95	18.00	8.00		16.00	AFDV	YÉS	YES	YES
KAPANILA	u	w/C39	09/21/95	12.00	6.00		11.00	AFDV	YES	YES	YES
CHAPULIRO	#1	w/C40	10/12/95	16.00	8.25		15.00	AFDV	YES	YES	YES
KOSAMU	11	w/C41	11/04/95	18.00	9.00			AFDV	YES	YES	YES
FILIPO		w/G4Z	11/08/95	18.00	9.00			AFDV	YES	YES	YES
		w/C46	11/28/95	18.00	7.00			AFDV	NO	NO	NO
TOMASI	11	w/C45	12/11/95	18.00	9.00			AFDV	NO	NO	NO
KAPHANDE	ii	w/C47	12/22/95	17.00	8.00			AFDV	NO	NO	NO
WANJOLE	н	w/C48	12/28/95	18.00	8.00			AFDV	NO	NO	NO
MTANGA	11	w/C44	12/28/95	19.00	7.00			AFDV	NO	NO	NO
KAGOLO	16	w/C49	01/17/96	21.00	11.00			AFDV	NO	NO	NO
MITIWA	11	w/C50	01/17/96	16.00	8.00			AFDV	NO	NO	NO
KAPHANDE II	 11	w/C52	02/09/96	18.00	8.00			AFDV	NO	NO	NO
FRIDAY		W/C55	02/12/96	16.00	0.8Q			AFDV	NO.	NO	NO.
CHIKHASU	li Ii	w/C51	02/12/96	13.00	7.0Q			AFDV	NO NO	NO NO	
	8 11	W/C51	02/14/96	17.00	9.00					NO NO	NO
CHILILIMA								AFDV	NO NO		NO
FRIDAY	IR 	W/C55	02/12/96	16.00	0.80			AFDV	NO	NO	NO
LIKISHU	H	w/C53	02/22/96	17.00	9.00			AFDV	NO	NO	NO
KAMWENDO	11	W/C56	03/15/96	16.00	5.00			AFDV	NO	NO	NO
CHIDAMBO	Iŧ	W/C87	03/19/96	18.00	7.00			AFDV	NO	NO	NO
KAMWENDO	fi	W/C59	03/27/96	18.00	5.00			AFDV	NO	NO	NO
KALIMANG'OMBE	II	W/C58	03/27/96	16.00	4.00		17.00	AFDV	NO	NO	NO

SUCCESSFUL VONDER	60
REHAB	84
TOTAL SUCCESSFUL	144

TOTAL VGE WATER COMITE FORMED 76
TOTAL VGE WATER COMITE TRAINED
LEADERSHIP 76
CARETAKER 76