REPORT ON THE WORKSHOP ON WATER, SANITATION AND HEALTH EDUCATION

HELD AT JIMMA, 21 - 27 MARCH 1982

ETHIOPIAN WATER COMMISSION - MINISTRY OF HEALTH
MINISTRY OF EDUCATION - UNITED NATIONS CHILDREN'S FUND
ADDIS ABABA - ETHIOPIA

ETHIOPIA

WORKSHOP ON WATER, SANITATION AND HEALTH EDUCATION

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UNICEF planned to hold national level workshops on the theme of Water, Sanitation and Health Education in six countries in 1981 and in 1982. The workshops were seen as helping to strengthen the existing programme in these areas. The workshop was to include an analysis of the on-going programme as well as a plan of action for the future, so as to ensure follow-up by UNICEF/Government on decisions taken during the workshop.

A synthesis of the findings and recommendations of the six workshops would be attempted so as to share common constraints and problems with other countries which have on-going water programmes, and to possibly recommend alternative approaches.

The workshop was based on a participatory approach and included an over-night field visit at a Peasants' Association.

The Conclusions and Recommendations of the workshop are reported in the summary of sessions X and XI.

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WORKSHOP PROCEEDINGS

WORKSHOP PROCEEDINGS

1. Opening Session:

Mr. Mulatu Gessese, Deputy Administrator of Keffa Region formally opened the workshop at Ghibe Hall on March 21st at 6:30 p.m.

Brief introductory speeches concerning the plan and objectives were also made by Mr. Asnake G/Ghiorgis, MOH, Keffa region and also by Mr. Kassa Kinde Head of Environmental Health Division, Ministry of Health.

Following Mr. Kassa Kinde's speech, Dr. Nyi Nyi from UNICEF, HQ, NY, expressed UNICEF's appreciation of the keen interest shown by the Government of Ethiopia in organising the workshop. He also stressed that this workshop would prove to be a good starting point, being the first National workshop held on the above subject. Dr. Nyi Nyi concluded his speech by outlining the objectives of water programme.

After a programme of cultural dances from the Keffa region, the opening session was concluded.

SESSION I (Plenary): OBJECTIVES AND METHODOLOGY OF THE WORKSHOP

Objectives:

1. To explain the objectives of the workshop.
2. To outline the methodology to be adopted in the workshop to achieve these objectives.

Summary:

Four background papers were presented and discussed. Before the presentation of these papers, officers were elected and the objectives and methodology of the workshop were outlined.

Election of Officers:

The group elected the following officers:

- Mr. Elias G/Egziabher	-	Chairman	- CPSC
- Mr. Berhane Worku	-	Vicechairman	- EWNCA
- Ms. Emebet Admassu	-	Rapporteur	- MOH
- Ms. Kelemework Demissie	-	Rapporteur	- MOE

Objectives and Methodology of Workshop:

Dr. R. Padmini (UNICEF) outlined the objectives and methodology of the workshop as follows:

General Objectives:

1. Understanding of issues related to water, sanitation and health education.
2. Opportunities for sanitation and health education components in water programmes.
3. Development of ways of, and instruments for, strengthening national capacity (Government and UNICEF) for implementation of water and sanitation programmes.

Specific Objectives:

1. To help in the formulation of new water, sanitation and health education programmes for presentation to the UNICEF Executive Board for the year 1983 and onwards.
2. To co-ordinate and integrate efforts of all agencies working in this field.
3. To incorporate and strengthen, if necessary, sanitation and health education elements in current water projects with specific action plans by the Government and UNICEF.

Methodology:

Regarding the methodology of the workshop, it was pointed out that working group sessions and the field visits were the core of the workshop and that the full participation and keep observation of each participant in both was essential.

The large group would be divided into four sub-groups to discuss different topics namely:

Group A - National Plan

Group B - Integration and Co-ordination of Different Sectors

Group C - Community Participation, Project Support Communication, Monitoring and Evaluation

Group D - Keffa Regional Plan

Also in order to monitor the workshop's progress and improve the workshop as it progresses, participants would fill an evaluation form after each session. The evaluation results would be fedback to the participants on a daily basis for joint corrective action.

Philosophy Behind the Workshop:

After the brief outline of the objectives and methodology of the workshop, Dr. Nyi Nyi (UNICEF) addressed the group and explained the philosophy behind the workshop.

He said that hundred millions of dollars were spent in water projects to improve the health conditions of the people in a country. But when donating agencies stopped to look at the benefits of this investment, they found no marked improvement.

He cited a UNICEF study in Bangladesh where investment in a water project aimed at improving the health situation of the Bangladesh people did not show any marked improvement. Infant mortality rates have not changed much and health conditions did not improve markedly. Though we could claim that morbidity and mortality does not depend on water alone, if we have water accompanied by sanitation and health education, it might help in the reduction of the overall mortality and morbidity, this, he said, led UNICEF to promote Regional and International workshops on these aspects.

He then pointed out that unless one reaches a certain stage where knowledge is already existing, International or Regional workshops where one or two people from each country participate and go back did not make an impact. Because of different cultures and different situations, solutions are country specific. That, he said, is the philosophy behind this kind of a national workshop where nationals are conducting, identifying and finding solutions to their problems. The solution of that country lies within that country (National Capacity).

He also mentioned the role of UN Organizations in this - that of technical and financial support to solve the problems.

He stated that this was the first of six workshops to be held.

He pointed out that:

- Community organization and participation is vital - that when a community is convinced, things are already half achieved.
- That global studies indicated that if mothers are educated, infant mortality decreases.

SESSION II (Plenary): WORKSHOP PAPERS - PRESENTATION AND DISCUSSION (Part I)

Objectives:

1. To obtain an over-view of the country situation with respect to water supply, health education and sanitation.
2. To acquaint the group with the on-going Water Education programme and its future plans.
3. To discuss these two papers and to relate them to background papers provided for the workshop as well as to the objectives of the workshop.

Summary:

1. Water Supply, Sanitation and Health Education Situation

   - paper was presented by Mr. Berhane Worku (EWWCA) (Appendix III)

In this paper the present status of water supplies and sanitation and health education and future prospects were presented.

It was stated that:

- Only about four percent of the rural population has access to improve water supply.
- Water supply in urban areas also leaves a lot to be desired. Out of 60 municipal towns, only seventeen have some form of house connections and most provide service through only public stand pipes. Domestic water consumption ranges from 5 L/C/D (litres per capita per day) to 120 L/C/D while 20 L/C/D is considered the absolute minimum required to have significant health benifits.

- A major problem in the area of rural water supply is the maintenance and operation of systems. Community involvement and means of raising funds and creating effective organization should be sought.
- Sanitation in rural areas is very poor, and fouling of water and soil with human excrement and refuse is common.
- In urban areas traditional houses use dry pit latrines which in some cases are too close to the dwelling and create problems of flies and overflowing during the rainy season.
- Lack of understanding of the relationship between water supply, sanitation with one's health and productivity.
- Poor intersectoral co-ordination and community participation has resulted in negligence and misuse of water supply schemes and sanitation.
- Lack of adequate technical and administrative capacities which often make proper implementation of programmes difficult.
- In line with the UN resolution on the International Water and Sanitation Decade, Ethiopia's decade plan envisages water supply coverage of 35 percent of rural and the whole of the urban population by 1990; construction of refuse pits and pit latrines in rural areas; introduction of water-seal pit latrines; construction of simple incineratation systems in urban fringe areas; and introduction of proper waste disposal systems in 10 major centres of the country.

Points/Issues Raised during the Discussion

In relation to the water and sanitation decade programme it was pointed out that:

- A National Action Committee consisting of eight ministries (represented by their permanent secretaries) has been set up.
- The different sectors of Ethiopian Water Authority has been reorganized.

- In the 10 year indicative plan, objectives, strategies and cost estimates would be worked out, refined, the final plan would be effective by 1983.

Problem of daily operation, management and maintenance of existing water pumps:- It was pointed out that in some areas, water pumps are not working. In others it does function, but is not working because of fuel. In some places people are not aware of the wells dug in their area.

Problem of payment (water fees) - In some areas people are asked to pay water fees and some people complain of the high charge. There is then the problem of going back to their polluted water. To keep up with the cost of operation, some sort of payment has been levied.

The problem of latrine usage, and use of different types of excreta disposal was discussed in detail:

- People do not use latrines because of the smell.
- They are used to defecating in the open space.
- In some areas (Harar) they have a habit of defecating in the open space and then they dig and cover it with soil. What harm would these be to reinforce this habit? (Discussion on this point was inconclusive).
- The programmes of and conversion to water seal latrines from pit latrines in terms of cost, availability of local materials etc.
- The problem of pit latrines being easily damaged and/or demolished.
- The idea of using human excreta for fuel (biogas).

Mention was also made of health education in relation to water supply and sanitation:

- Health education is given through the radio, newspapers, mass media of the Ministry of Education, the Mobile Cinema Unit in the Literacy Campaign, by the Health Committee of the different associations, using posters, films and pamphlets, and at the grass-root level by the Community Health Agents.

- There is lack of systematic assessment.
- In the future, community participation promoters are to be trained. (Some clarification has given about the level and work of these promoters).

Problems such as the lack of co-ordination at the community level of different agents, like the Community Health Agent, Home Economics Agent, Nutrition Agent ... etc, the duplication of work; wastage of energy; and sometimes the confusion created; were cited.

2. Water Education Project:

Paper presented by Mr. Mulugeta Kechema (MOE) (Appendix IV).

The objectives of water education, the important components of the Water Education Project, its implementation, some of the constraints and suggested solutions for the problems were presented:

- Education should serve society.
- The water education Project was intended to teach the students and the people around about water, construction of water supply, health in relation to water, and the sanitation aspect of water.
- The major components of the water project included identifying the source, storage, and mechanising of transport and protection of water.
- Over a period of four years, 330 village water supply projects were to be implemented phase by phase. During the 1st phase, eight schools were involved in Shoa administrative region; during the second phase, the project is going on in four administrative regions involving 51 schools this year; and in the third phase, the project will begin in five other additional administrative regions. On the whole, Water Education Project activity is planned to cover about 123 water points (schools) within three years.

- The Water Education project, however, has some constraints and problems like lack of guide and reference books, lack of personnel, financial and transportation problems.
- There is an advisory committee for this project which does not seem to function - it has never met so far.

Points/Issues Raised During the Discussion

- School health education lacks proper emphasis. A more systematic programme of health education needs to be given in schools, particularly in primary schools, so that children acquire proper health habits. At present, health education is given with other subjects like home economics, sports, etc. Home Economics is mostly taken by girls and most of the boys will miss the health education given with home economics subject.
- With regard to giving health as a separate subject in primary schools, it was pointed out that there is the problem of burdening the child with many subjects and that it is the way we teach that is important.
- It was also mentioned that it would be useful to find out if the health education children acquire in schools is transmitted to parents, sisters, brothers, etc.
- The importance of teaching health using songs, role-playing etc. at the pre-school stage to imprint the health habit at that early age was raised.
- With regard to Water Education, the question of a follow-up with adults was raised, and mention was made of the the health education in the literacy campaign with good results in terms of digging pit latrines and providing sanitary facilities.
- The question of continuity of the Water Education programme was also raised. For those who have participated in the construction of a new water supply scheme, water education could be effective. How about the coming generation of students who just find that the water is already available? It was pointed out that students learn continuously from

- the project since the school management committee would follow upon with new students.

- Another question raised was about the physical planning of schools - whether the planning included provision of water, latrines and other sanitation facilities. Though there is no problem of these facilities in high-schools, the inclusion of these in the physical planning of elementary-schools seems to be doubtful.

- The question of who is responsible for what was also raised with regard to digging wells, education about latrines and proper use of latrines.

SESSION III (Plenary): WORKSHOP PAPERS - PRESENTATION AND DISCUSSION-PART II

Objectives:

1. To familiarise the group with the situation in the Keffa Region with respect to water supply, health education and sanitation.

2. To familiarise the group with the Integrated Water Supply project in the Shoa Region.

3. To discuss these two papers in the light of the papers and discussions of Session II.

Summary:

1. Water, Sanitation and Health Education in Keffa Region

(Paper was presented by Mr. Asnake G/Giorgis, RMOH, Keffa Region) (Appendix V)

This presentation discussed the water, sanitation and health education situation in Keffa region, the achievements and some of the problem encountered in planning and carrying out sanitation and health education activities. It made suggestions for planning and programming of sanitation, water and health education.

Mr. Asnake stated that the Regional Health Department understood earlier that the health of the people could not improve unless the community itself took the responsibility and hence the training of Sanitary Health Agents (SHA) whose main responsibility lies in carrying out environmental sanitation activities.

- When the MOH launched training of CHA (Community Health Agent) programme in 1979 some of the SHAs were selected and given additional training.
- Keffa has 1400 sanitary health workers, 208 CHAs and 436 TBA's (Traditional Birth Attendant).
- The results achieved in sanitation like spring protection, latrine construction were noteworthy.

Issues Raised During the Discussion

- The relationship and differences of CHA and SHA was discussed in detail. SHAs are trained for 15 days and do only environmental sanitation. CHA's are trained for 3-4 months and though they are trained to focus on preventive aspects they also give some curative services. The training of SHAs was started by the region before the Ministry of Health launched the training of CHA programmes. Some of the SHA's were selected for CHA training.
- A question was raised if all the latrines constructed were being used and it was pointed out that since the people are convinced to dig and use it, they use it. The problem is of it being demolished by rain or flood.
- The problem of leaving health only to health workers was also raised. It was stated that administrators do not regard health as a priority and that there is difficulty in carrying out health campaigns. With regard to priority mention was made that health is being mentioned in policy papers and that it takes some time to reorganize our priority.

2. Shoa Integrated Water Supply Project:

- (Presented by Dr. Padmini (UNICEF), (Appendix VI)

The highlights of the study report and the recommendations based on the results of the study was presented.

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Shoa Integrated Water Supply Scheme

Study Findings (Highlights)

Site	Population	Distance to Nearest Facility (Km.)		Percent going more than 2 km for water	
		Health	Primary School	(Rainy)	(Dry)
Project	8,436	11	7	4	57
Control	4,908	7	10	10	40

Site	Per Capita Consumption of water (lit./day)		Dissatisfaction with water quality	Households with joint latrines	Households with garbage disposal
	(Rainy)	(Dry)			
Project	9	8	79	14	22
Control	8	10	77	1	10

Site	No windows	Animals inside house	Daycare services needed	Handwashing after toilet
Project	59	67	79	33
Control	54	60	77	30

Effect of Sex and Literacy Level on some Practices

		% Handwashing after toilet	% Utilization of Health Services
Literate	Men	51	93
	Women	89	97
Illiterate	Men	35	84
	Women	63	87

Discussion:

The importance of studying the attitudes, beliefs and practices of the community and reinforcement of existing practices where they are useful was stressed.

3. Water, Sanitation and Health Education Situation in Zambia:

(Presented by Dr. Ngombe from Zambia)
(Appendix VII)

General information, environmental health facilities, environmental services, the International Drinking and Water Supply and Sanitation Decade in Zambia, and the Health Demonstration Zone Project were presented.

Discussion:

It was suggested that reorientation of priorities towards the water sector should be considered and that such considerations had favourable response from donor agencies.

A question was raised if the Zambian participants had come across a successful result through legislation. A few instances of successful results through legislation were cited. However, social pressure, peer pressure and other similar methods should be considered. It was pointed out that there was no single approach.

SESSION IV WORKING GROUPS

Objectives:

1. To review in each group the highlights and outcomes of the plenary sessions and to underline points relevant to its own tasks.

2. To discuss and plan specific observations that may be possible during the field trip.

Summary:

Four working groups were formed. The topics for discussion were:

Group	Topic
A	National Plan
B	Inter-Sectoral Co-ordination, Monitoring & Evaluation.
C	Community Participation and Project Support Communication**
D	Keffa Regional Plan.

Appendices VIII and IX are respectively, the questions for Working Groups and guidelines for the field trips provided for the working groups.

Note: Monitoring and Evaluation were transferred to Group B from Group C as Group C was felt to have too many diverse topics.

SESSION V: FIELD TRIP

Objectives:

1. To observe first hand conditions in a rural area - with respect to water supply and sanitation including personal hygiene.

2. To experience to some extent these conditions for one night.

3. To discuss with the local communities their perceptions, needs and priorities, aspirations and frustrations with respect to the above mentioned areas.

4. In each group, to follow the guidelines set by itself in session IV for the field visit, in its observation and discussions.

Summary:

The workshop participants were divided into two groups for field visits, each of which contained some members from each working group. Thus, the working groups had the benefit of the experience of each field visit group. Appendix X gives the composition of the two field visit groups.

The field visits included an overnight stay in the rural area, with participants being housed in small groups in homes, guest houses, mosques, etc.

SESSION VI: WORKING GROUPS

Objectives:

1. To discuss the main findings of the field trip, keeping in view the workshop objectives, and the highlights of the background papers and the previous sessions.

2. To prepare the group's report on the implications of the trip and of its discussions for its tasks.

Summary:

The working groups met again after the field trip to discuss points relevant to there respective topics and prepare their reports for session VII.

SESSION VII (Plenary)

Objectives:

1. To report to the plenary the main findings and implications of the field trip for each group, and to share experiences with the other groups.

2. To discuss specific points that are needed to be taken note of by each group.

Summary:

Each working group presented a brief report on the field trips and their implication for its topic (Appendix XI).

Points raised during the discussion:

- Community participation (CP) and government commitment are necessary.
- Change of attitudes (health education) and service should go hand in hand, because in the field visit there was a community health agent (CHA), and health education was given, but water was scarce. So in such a condition to expect sanitation is difficult.
- The problem of integration between sectors was mentioned.
- There is a need for detailed information before launching a project.
- Specific problems of the community should be taken into consideration.
- Workshop suggestions should be based on the existing agencies in the country.
- Problem of latrines in schools was mentioned.
- In order to teach students sanitation and health education, teachers should have training in these subjects.

- The importance of building latrines for the litracy campaign was raised.
- Legislation should be enacted to ensure provision of sanitary facilities when schools are constructed.
- Studies of attitudes and practices is something which the community participation group should consider.
- Competitions of health songs, etc. should be held between schools, weredas, awrajas and at regional level.
- Emphasis should be laid on training of agents at the community level.
- The use of school for information and dissemenation should be explored.
- It was mentioned that monitoring and evaluation are necessary.

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SESSION VIII: WORKING GROUPS

Objectives:

1. To arrive at a set of recommendations on topic set for each group.

2. To list implications of its recommendations, if any, for other groups and to pass this list on to the concerned group.

SESSION IX: WORKING GROUPS

Objectives:

1. To revise, if necessary, recommendations in the light of the implications conveyed by any of the other groups.

2. To draw up action plans based on the recommendations made.

Note: The working groups recommendations and action plans, discussed in sessions VIII and IX are reported on in session XI.

SESSIONS X & XI (Plenary): GROUP REPORTS ON RECOMMENDATIONS AND ACTION PLANS

SESSION X: (Plenary)

Objectives:

1. To present groups' reports on recommendations and action plans.

2. To discuss the group reports and suggest amendments to the recommendations and action plans, if necessary, in order to achieve a harmonious, inter-laced set of recommendations and action plans.

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SESSION XI: (Plenary)

Objectives:

1. To present the workshop report including the synthesis of the groups' recommendations and action plans.

2. To discuss the evaluation trends of the workshop.

3. To adopt the workshop report.

4. To formally close the workshop.

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REPORT OF GROUP "A" ON NATIONAL PLAN

1. Group Members:

Mr. Gedion Asfaw	-	Chairman	- CPSC
Mr. Gebre Meskel H/Mariam	-	Member	- MOH
Mr. Zebenigus Wuhib	-	"	- MOE
Dr. Nyi Nyi	-	"	- UNICEF
Mr. Mirchandani	-	"	- UNICEF
Dr. Ngambe	-	"	- Zambia
Mr. M. Beyer	-	"	- UNICEF
Mr. P. Lowes	-	"	- WHO
Dr. C. T. Lo	-	"	- WHO
Mr. Berhane Worku	-	"	- EWWCA
Mr. Workineh Kassa	-	Rapporteur	- NCC

2. Introduction:

The group in its successive meetings has reviewed the country papers presented by Mr. Berhane Worku (EWWCA) and Mr. Mulugeta Kechema (MOE). The country situation paper on water supply, sanitation and health education indicates that:

- Poor town planning with congested houses made the provision of water and sanitation difficult.
- High - infant mortality rate of 155/1000
  - child mortality rate of 247/1000
  - maternal mortality rate of 20/1000
  - life expectancy of 43 years

Unsafe and inadequate drinking water, poor sanitation and personal hygiene are contributing factors.

- Only four percent of the rural population has access to clean and adequate water.
- 80 percent of the diseases in Ethiopia are communicable which can be controlled by the provision of safe water and improved sanitary conditions.
- The national 10 year indicative rural water supply plan of the Revolutionary Government envisages the:
  - provision of safe and adequate water to 35 percent of the rural and 100 percent of the urban populations.

- construction of refuse pits and pit latrines in rural areas.
- introduction of water sealed pit laterines and construction of simple incineration systems in the urban fringe areas.
- introduction of proper waste disposal systems in 10 major centers of the country.

The group has also reviewed objectives, strategy and implementation of the water education project. The main objectives being:

- to teach students the importance of water.
- to integrate students with communities for joint action in water protection.
- to provide safe and adequate water to those schools having no water supply system.

The Ministry of Health's 10-year plan focuses on the expansion and strengthening of health institutions, the training of community health agents (CHAs), and traditional birth attendants (TBAs) in 80 percent of the peasant associations and in all town dweller associations. Though no target has been set, the plan envisages to improve the sanitary conditions of the Ethiopian masses using the CHAS and TBAs.

When reviewing the 10-year indicative plan of the Government and the International Water and Sanitation Decade Plan (IWSDP), the group realized that the life spans of both plans to be almost the same, but differing in targets. The national plan envisages providing safe and adequate water to 35 percent of the rural and to 100 percent of the urban populations. The International Water and Sanitation Decade on the other hand envisages the provision of clean water and improved sanitary conditions to all by the end of the decade (1990). The group has, therefore, from this point, noticed the unrealistic and ambitious character of the international decade plan understanding the economic, social and other constraints prevailing in each country.

The group has also tried to extract some experience on the planning, implementation and evaluation processes of the International Decade in Zambia from the Zambian delegates Dr. Ngambe. From the delegate's report, it was learnt that:

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- a national survey on water and sanitation was first undertaken.
- intersectoral planning was made to meet the target by the end of the decade.
- communities were involved not only in the implementation but also in drawing the national plan.

The group after exhaustively discussing all points mentioned above, outlined in detail the possible components of a national plan. Field observations and their implication in national plans were discussed and finally presented to the seventh plenary session of this workshop.

Finally, having exhaustively reviewed discussed and note of the overall water and sanitation programmes in the country, the group has accepted the 10-year National Water and Sanitation Plan(NWSP) and the Water Education Project of the Ministry of Education. It has also listed the following objectives, targets and strategy recommendations to be incorporated in the national water and sanitation decade plan, and actions be taken on the following recommendations:

3. Objectives:

3.1 To provide clean and adequate water to the rural and urban population.

3.2 To develop rivers, lakes and basins of the country for drinking, power generation and irrigation schemes.

3.3 To maximize health benefits through proper sanitation.

3.4 To ensure community participation in water and sanitation projects.

4. Targets

4.1 Provide clean and adequate water to:

4.1.1 35 percent of the rural population

4.1.2 All urban populations

4.2 Establish hydro-metrological stations as per international standard.

4.3 Irrigate up to 60,000 hectares of land.

4.4 Promote proper sanitation activities in rural and urban areas.

4.5 Other indicative manpower, financial and material needs as treated in the national plan.

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5. Strategy and Recommendations

5.1 Detailed planning should be made at all levels of administrative zones (region - district) to identify areas to be provided with potable water on priority basis and decide on the technology to be used, the targets to be achieved and of the finance required.

5.2 Preference should be given to the protection of community water supplies, that involve low cost water technology operation and maintenance. Where these are not available, digging of shallow and deep wells should be done by NWRC engineers. Hydro-geologists of the National Water Resource Commission (NWRC) should be aware of technology alternatives through seminars, refresher and sandwitch courses. Headquarter engineers should make regular visits to evaluate regional and field activities.

5.3 Use of communities in project identification, planning, implementation, evaluation, operation and maintenance of water supply and sanitation schemes is essential.

5.4 Schools should be used to disseminate information on water and sanitation.

5.5 Integration of concerned government agencies at the regional level in all process of water, sanitation and health education programmes is essential.

5.6 Nucleated communities should get priority in receiving water, sanitation and health education facilities.

5.7 Wherever a water programme is introduced, efforts should be made to combine a sanitation and health education programme.

5.8 Simple techniques of maintenance must be available at the community level and establishment and up-grading of maintenance workshops at regional level must be undertaken. Specific funds should be available to train all levels of maintenance workers (region-community).

5.9 Standardization of equipments and construction methodology is essential. So, existing government purchasing policies must be flexible to effect standardization of equipments and methodologies.

5.10 In designing a water supply system, care should be taken not to create a favourable habitat for disease transmiting mosquitos and insects (e.g. malaria, bilharzia), Proper drainage facilities must be provided and other measures must be taken for all water supply schemes. Health education in areas of concern should be intensified.

5.11 Efforts must be made to change the attitudes of communities towards pit laterines through health education campaigns.

5.12 Programmes should be evaluated and monitored on realistic basis at regular intervals and appropriate action must be taken to remove constraints as per the recommendations of the workshop on monitoring and evaluation.

5.13 Collection and evaluation of all publications of previous and existing pilot projects, follow-up and popularization of new and useful technological developments in relation to water, sanitation and health education should be undertaken by NWRC.

5.14 Basic and technical data collection regarding water and sanitation be undertaken by NWRC in collaboration with other technical agencies.

5.15 Field visits must be arranged for NWRC, MOH and MOE professionals to rural development projects like ARDU, etc., so that they can acquaint themselves with field performances.

6. Other Recommendations:

6.1 National and per capita economic growth are important for the implementation of national and community oriented plans. So efforts should be made to strengthen and boost up the economy.

6.2 Efforts should also be made to arouse all peasant and town dwellers' associations for regular water protection and sanitation campaigns.

6.3 The careful and exhaustive search of water sites must be continued.

6.4 The Ministry of Health needs to launch a health education campaign using applicable methods before a water and sanitation plan is executed in a community so that community participation can be guaranteed.

6.5 The provision of safe and adequate water and the improvement of sanitary conditions of communities cannot alone be enough to solve their health problems. Other services such as medical care, nutrition, immunization etc. are also equally important.

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6.6 Changing food habits, improving living conditions, using appropriate technology such as rubber-wheeled carts to reduce physical burdens, utilization of biogas as fuel, raising the consciousness of community members through radio, folk songs and dances, theatrical troupes are matters to be considered to change the living conditions of societies.

6.7 The national action committee should see that integrated services reach communities along with water and sanitation programmes.

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REPORT OF GROUP "B" ON INTEGRATION, CO-ORDINATION MONITORING AND EVALUATION

1. Group Members:

Mr. Kassa Kinde	-	Chairman	- MOH
Dr. R. Padmini	-	Member	- UNICEF
Mr. Elias G/Egziabher	-	"	- CPSC
Mr. B.H. Michelo	-	"	- Zambia
Mr. Getachew Molla	-	"	- RRC
Mr. Beyene Alemu	-	"	- EWNCA
Mr. Tekle Fiji	-	"	- REYA, Jimma
Dr. Amare Beyene	-	"	- MOA, Jimma
Mr. Mulugeta Kechema	-	Rapporteur	- MOE

2. Introduction:

The group began discussion on the topic by analyzing the problem facing the integration and co-ordination of water, sanitation and health education programme in the country at all levels. The group members then embarked upon a thorough discussion of the need to establish an adequate intersectoral co-ordination mechanism able to promote integrated water, sanitation and health education programme.

Some Proposals Concerning More Efficient Integration

2.1 The group members were of the opinion that there is lack of established priorities. At lower levels, health and education problems are not perceived as priorities and planning is usually restricted to certain areas. It is, therefore, believed it is essential that:

- First, different activities be identified and discussed by all members/agencies concerned.
- Second, priorities be set according to the concrete condition of each community, district, province and region.
- Third, discussion over possible adjustments be made and finally adhered to.

2.2 Another constraint that was thoroughly discussed was the problem of co-ordination. The group has fully recognised that at present each Ministry or Agency gives priority to its own programmes, and at times planning, budgeting, supervision and implementation

are fragmentary. In most cases, manpower training at all levels is handled by different ministries and agencies. Hence, in order to solve this problem, the group believed that, because of its administrative capacity, responsibility and experience in co-ordination, the Central Planning Supreme Council (CPSC) at all levels be the co-ordinator of the programme. The Development Campaign Committee at different levels may include the following membership:

2.2.1 Community Level:

- Peasant Association (Development Committee)	- Chairman
- Community Health Agent	- Member
- School Representative/where there is a school	- "
- Literacy Management Committee Representative	- "
- Mass Organisations (REYA, REWA) Representative	- "

2.2.2 District/Woreda Level:

- Woreda Administrator	- Chairman
- Development Agent	- Member
- School Representative	- "
- Health Representative	- "
- CSTC Representative	- "
- Political and Production Cadre	- "

2.2.3 Provincial/Awraja Level:

- Awraja Administrator	- Chairman
- Awraja Health Representative	- Member
- " Education Representative	- "
- " Agricultural "	- "
- " Urban Dev. & Housing Representative	- "
- " Labour & Social Affairs	- "
- " RRC Representative	- "
- " COPWE/Political Cadre	- "
- " Mass Organisation/REYA, REWA, AFPA and UDA Representatives	- "

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2.2.4 Regional Level

-	Regional Administrator	- Chairman
-	Regional Health Department	- Member
-	Regional Education Office	- "
-	" Agriculture Office	- "
-	" Urban Dev. & Housing Representative	- "
-	" Labour & Social Affairs Representative	- "
-	" Water Commission Representative	- "
-	" RPC Representative	- "
-	" Representative of Ministry of Industry/ WASIDA/	- "
-	" State Farm Representative	"
-	" Mass Organisation (REYA, REWA, AFPA & UDA) Representative	- "

2.2.5 National Level:

-	CPSC Representative	- Chairman
-	Ministry of Health Representative	- Member
-	Ministry of Education Representative	- "
-	Ministry of Agriculture Representative	- "
-	Ministry of Urban Development & Housing Representative	- "
	Ministry of State Farm Representative	"
-	Ministry of Industry Representative	"
-	National Water Commission	- "
-	Relief & Rehabilitation Representative	- "
-	Mass Organisation (REYA, REWA, AFPA & UDA) Representative	- "

Note: Addis Ababa being considered as the 15th region will form its own committee.

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2.3 During the discussion, it was also emphasised that shortage of trained manpower exists at all levels which has a negative impact on integration and co-ordination, especially at lower levels where some individuals serve in different mass organisations. Even though the group has fully recognised the problem, it is suggested that as far as possible a mechanism should be found that can exclude individuals from serving is not more than two committees or mass organisations, or minimize the frequency of meeting of such committees/organizations.

2.4 Lack of integration of transportation was another problem discussed by the group. After discussing the existing transportation systems and regulations in different ministries and agencies, it is suggested that:

- Advance planning of visits be designed, and discussed by all concerned agencies.

2.5 The last, but not least, problem discussed was the inadequacy of finance. It is believed that budgetary support should be given by all concerned ministries for co-ordinated supervisory activities and maintenance of projects.

The group after exhaustively reviewing the above facts and ideas discussed at the plenary sessions was able to list the following general recommendations and appropriate action plans:

3. Recommendations and Action Plans:

3.1 Integration and Co-ordination

A. Recommendations:

1) Each concerned Ministry should seriously consider increasing its skilled manpower through crash programmes.

2) The training content of skilled manpower should be discussed among concerned agencies and an agreement reached and adhered to it.

3) An attempt be made to establish a special integration between sectors where possible using preliminary planning.

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4) Agitations should be launched through mass media services in order that the people, especially concerned agencies, are aware of the objectives of the Water Decade. In addition, ways and means of providing radio sets for community services should be thought of.

5) Find ways and means of including sanitary facilities and water supply to public institutions. This should be checked by the Water Commission and the Ministry of Health.

6) Establish technical Core Committees comprising of technical persons from the Ministry of Health Ministry of Education, Ministry of Agriculture and Water Commission at all levels, to serve under the main committees. These core groups help in the preparation of draft guidelines and resolutions which will be discussed and approved by the members of the main committees.

7) Promote a comprehensive school health programme, including personal hygeine, class-room and compound sanitation, provision of adequate latrine facilities safe water supply and school health services through adequate support of School Management Committees, co-ordinated intersectoral efforts and promotion of the Water Education Project.

8) Knowledge, attitude and practices of community usage of water supply should be studied to determine any change in behaviour patterns periodically.

B. Action Plan:

Action plan concerning the Decade Programme of Water Supply, Sanitation and related development activities should proceed as follows:

Development Committees at all levels

1) Responsibilities:

- problem identification
- planning
- implementation
- monitoring and evaluation
- operation and maintenance

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C. Membership:

Please refer to the introduction of this paper under No. 2.2.

D. Co-ordination:

1) The co-ordinating bodies are already functional.

2) The co-ordinating bodies can accept and handle their responsibilities after policy decisions and guidelines are given from the central level.

E. Supervision:

1) Development Committees will be supervised by the Control Committees at their level.

2) Quarterly plans of field visits of all agencies can be discussed by the development committees to achieve co-ordination.

F. Training and Orientation:

1) This component will be dealt by short orientations and seminars at all levels supported by agitations through the Mass Media.

2) Regarding training of skilled manpower of different sectors, the group has understood that curriculum revisions are being carried out by the Ministry of Health. So the group suggested that the compatability of the curriculum with the training of other sectors be studied and insured. (eg. Water Commission, MOA, MOH & Ministry of Urban Development.)

3) The group also suggested that National and Regional orientations and seminars should be carried out by international assistance.

3.2 Monitoring and Evaluation:

Concerning monitoring and evaluation, the group has adopted the draft resolution attached herewith of the Workshop on Monitoring and Evaluation of the Social Sector held in January, 1982 with the following additions to the suggested list of indicators:

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1) On page 2 in item 22 - eye infections and schistosomiasis.

2) On page 4, from Nos. 4 to 14 - Home Agent, N Water Commission and Ministry of Education.

3) On page 5, after No. 9 the following items, at project level information:-

10 - Number of sanitary facilities by type, i.e. dry pit, water borne

11 - Number of refuse disposal systems by type, i.e. incineration, pit

12 - Number of water reserviors

13 - Number of water tanks (urban)

14 - Water handling methods (transportation)

15 - Number of cattle water troughs, laundry places, bathing places, irrigation of gardening places.

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LIST OF INDICATORS

Name of the Indicator	Availability of Data	Responsible Institution	Remarks
I. Common:			
1. Population by age, sex	Yes	CSO	At National and Regional level.
2. Number of households and their distribution by size, household composition.	Yes	CSO	" "
3. Crude birth rate.	Yes	CSO	" "
4. Crude death rate	Yes	CSO	" "
5. Natural rate of increase, growth rate of the population	Yes	CSO	" "
6. Infant and child mortality rates.	Yes	CSO	National level
7. Economic dependency burden	Yes	CSO	National & Reg.
8. Expectation of life at birth	Yes	CSO	National level
9. Maternal mortality rate	NO	CSO	
10. Growth rate of the economy	Yes	CPSC	
11. Per capita GDP	Yes	CPSC	
12. Literacy rate by age, sex	Yes	CSO	National & Regional
13. Average household income	Yes	CSO	but not yet processed
14. Average per capita per day consumption by source and by age and sex			" " "
15. Total annual food/ production by type.	Yes	CSO	National and Regional
16. Ratio in the share of production of the three sectors: state, producers co-operatives and private	Yes	CSO	National Level
17. Mean (Bega, Kremt, Belg, Tseday) Imperative	Yes	CSO	
18. Mean rainfall (Bega, Kremt, Belg)	Yes	CSO	
19. Proportion of households/ population living within 200 meters of adequate supply of safe water.	DK	CSO	

Name of the Indicator	Availability of Data	Responsible Institution	Remarks
20. Proportion of households population/with adequate sanitary facilities.	NO	CSO	
21. Proportion of children immunized against the most important infectious diseases	DK	MOH	
22. Prevalence/incidence rate of common diseases, malaria, diarrohea, TB, intestinal parasites, hookworm, febril illness, schistonsomasis, oncocheriasis, eye infection.	NO	CSO	
23. Proportion of farmers using fertilizers by private and producers co-operatives and per capita use of fertilizers	Yes	CSO	
24. Proportion of children at specified ages less than 80 percent of the index values for weight-for-height, and height-for-age.	NO	CSO	
II. Sector Specific Indicators			
A. Health Sector			
1. Proportion of GDP spent in health care	NO	CSO	
2. Proportion of the national budget allocated to health care	Yes	MOH	
3. Proportion of the national health resources devoted to "primary health care	NO	MOH & CPSC	Health resources have to be defined
4. Proportion of GDP spent on Health related activities	NO	CPSC	Health relates activities have to be defined

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Name of the Indicator	Availability of Data	Responsible Institution	Remarks
5. The distribution of per capita expenditure on health by administrative regions.	Yes	MOH	
6. The ratio of hospital beds, health centres, health stations, doctors, nurses, health assistants, community health agents and traditional birth attendants to population.	Yes	MOH	
7. Number of health committees at different administrative levels.	Yes	MOH	
8. Proportion of pregnant women give tetanus toxoid	Women DK	MOH	
9. Proportion of deliveries attended by trained person	NO	CSO	
10. Proportion of CHs, and HC with adequate oral rehydration mixturies/salt	DK	MOH	
11. Availability of essential Vv drugs at primary health care facilities	DK	MOH	
12. Proportion of Kebeles/both urban and rural/with community health agents and traditional birth attendants.	DK	MOH	
13. Accessibility of PHC facilities interms of time and for distance	DK	MOH	
14. Number of supervisions by CHAs, HS, HC, Home Agents, Water Education	DK	MOH (Relevant Agencies)	

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Name of the Indicator	Availability of Data	Responsible Institution	Remarks
C. Water Supply & Sanitation			
1. Consumption of water per person per day	NA	CSO	
2. Distance to supply points	NA		
3. Number of private connections			
4. Cost of water per meter cube			
5. Percent of flush toilet users and percent of pit latrine users.	Parcially available	CSO	
6. Number of public stand points			
7. Percent of time water is available at an improved water supply system	NA		
The following two indicators are added by us:			
8. Cost of constructing and maintaining a water supply system by cost per served unit	NA		
9. Number of protected water supply systems by type	NA		
10. Number of sanitary latrines by type(pit, water-carried) Public/individual/institution household			
11. Number of refuse pits			
12. Number of waste disposal systems(household/ institution)			
13 Number of cattle troughs			Project level

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Name of the Indicator	Availability of Data	Responsible Institution	Remarks
14. Number of bathing places etc.)			Project level
15. Number of laundry places)		Project Authorities	" "
16. Number of water supplies watering vegetable garden)			" "
17 Number of water tanks)			
18. Water handling methods and transport system)		CSO Survey	

DK = Don't Know
NA = Not Available

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REPORT OF GROUP "C" ON COMMUNITY PARTICIPATION AND PROJECT SUPPORT COMMUNICATION

1. Group Members:

Mr. Tamiru Dibeya	-	Chairman	- MOH
Mr. Abdu Semed	-	Rapporteur	- Social Affair Jimma
Ms. Enebet Admassu	-	Member	- MOH
Ms. Yansheng Ma	-	"	- UNICEF
Ms. Bimba Kebede	-	"	- UNICEF
Mr. Efrem Dehne	-	"	- EWCA
Mr. Samuel Olana	-	"	- UNICEF
Sister Kelemework Demissie	-	"	- MOE

2. Introduction:

As background information, the group reviewed the discussion paper for the workshop on community participation in primary health care presented by Ms. Yansheng.

Community participation is the process by which individuals and families assume responsibility for their own health and welfare and for that of the community and develop the capacity to contribute to their and the communities development.

Project support communication is a series of communication steps and sub-steps in the programming cycle designed to change attitude and behaviour of target groups.

With this understanding, the group had a long discussion on the above topics and recommended the following:

3. Recommendations - Community Participation

3.1 Community should be involved in the preparatory, planning, implementation, monitoring of water, sanitation and health education programme. The quality of participation is important i.e., the community's opinion, ideas and practices should be given due consideration.

3.2 Before and after starting water, sanitation and health education projects, baseline data like infant mortality and morbidity, traditional values and customs (intimate information) should be gathered and analyzed.

3.3 Organize seminars on the concept of community participation for senior officials at the regional/national level for their reorientation on community participation.

3.4 Train front line workers in community participation approaches and techniques with emphasis on basic service which implies intersectoral co-ordination.

3.5 Rules and regulations can be made by the community themselves regarding waste disposal, sanitation (pressure of public opinion).

3.6 Launch a pilot project of water, sanitation and health education for replication at national and regional levels.

3.7 Evaluate existing appropriate technology devices (pit latrine design, model houses, improved houses, etc.).

4. Recommendations - Project Support Communication (PSC)

4.1 Organize study tours of government officials, leaders and members of mass organisations to model and problem sites, regarding water, sanitation and health education so that will learn from one another.

4.2 Evaluate the effectiveness of the existing messages and media on target groups.

4.3 Messages and media should be pretested with members of target groups. People involved in water, sanitation and health education should be oriented on PSC. Officials and mass organisation should be convinced about the n importance of PSC. Include more water, sanitation and health education components in the post literacy reading materials.

4.4 Radio programmes of ETMS and Ministry of Information and National Guidance should contain more focus on water, sanitation and health education components. Interviewing farmers in radio programmes can be to the benefit of farmers in other peasant associations.

4.5 Filming, photographing of successful water, sanitation and health education schemes should be used to educate others.

4.6 Convince officials about the importance of PSC for the successful implementation of water, sanitation and health education projects.

4.7 Use low cost and appropriate media and messages.

4.8 PSC should be incorporated right from the inception of Water, Sanitation and Health Education Projects

5. Plan of Action - Community Participation:

5.1 The following is an exercise on plan of action taking Keffa region as an example.

5.2 Objectives:

- To orient senior regional, awraja and wereda officials on the concept of community participation on water, sanitation and health education.

5.3 Plan:

- Organize a community participation seminar for the following 45 senior regional, awraja and wereda officials and 5 staff members of international organizations.

  a. Regional (9 participants)
     - Administrator
     - Regional Ministry of Health
     - Regional Education Officer
     - Representative of NWRC
     - Representative of Ministry of Agriculture (2)
     - REWA, REYA, REPA and Urban Development representatives.

  b. Awraja (18 participants from 2 Awrajas)
     - 2 Administrators
     - 2 Health Representatives
     - 2 District Education officers
     - 2 Awraja EWNCA Representatives
     - 2 Ministry of Agriculture Representatives
     - 2 REWA, 2 REYA, 2 REPA, 2UDA Representatives

  c. Wereda (18 participants from 2 Weredas)
     - 2 Administrators
     - 2 Health Representatives
     - 2 Officials of Teacher Associations
     - 2 Wereda Representatives of EWNCA
     - 2 Ministry of Agriculture Representatives
     - 2 REWA, 2 REYA, 2 REPA, 2 UDA Representatives

  d. International organisations (3 participants and 2 resource persons)
     - UNICEF (1 participant + 2 resource persons)
     - WHO (1 ")
     - UNDP (1 ")

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5.4 Organizers:

- The Ethiopian Government and UNICEF, Addis Ababa Office.

5.5 Focal Point - NWRC and other concerned ministries such as:

Ministry of Health
Ministry of Education
Ministry of Agriculture

5.6 Other Details:

Date of Seminar	-	March 1983
Duration	-	5 Days
Venue	-	Jimma

Per diem)
Transport) _____ Birr 10,000
Other Costs)

6. Plan of Action - Programme Support Communication

6.1 To evaluate the effectiveness of water, sanitation and health education messages and media on the target group.

6.2 Responsibility:

- Ministry of Health
- Ministry of Education
- Ministry of information and National Guidance
- National Water Resources Commission
- UNICEF will bear the salary and related allowances of a PSC consultant. The methodology for evaluation will be worked out by this consultant.

6.3 Cost:

- The Ethiopian Government will bear the costs for the evaluation. UNICEF, WHO and UNDP will provide the necessary support.

6.4 Focal Point:

- The Health Education Unit of MOH.

REPORT OF GROUP "D" ON KEFFA REGIONAL PLAN ON WATER, SANITATION AND HEALTH EDUCATION

1. Group Members:

Mr. Bekele Meshesha	- Chairman	- CPSC	-	Jimma
Mr. Sahile Wolde Gabriel	- Member	- MOE	-	"
Mr. Asnake G/Ghiorgis	- "	- MOH	-	"
Mr. Hassen Ali	- "	- EWWCA	-	"
Ms. Adisalem Derssa	- "	- Home Econ.	-	"
Ms. Zeritu Bekele	- "	- REWA	-	"

2. Introduction:

Existing Conditions:

a. Geographical Situation:

The region of Keffa has an area of 53,000 sq.m. and it is divided into six administrative awrajas and 38 woredas. Population is estimated to be 1.6 - 1.8 million of which more than 90% live in the rural areas.

The region has rugged topography which makes it difficult for communication. With the exception of southern and south western areas, the region is blessed with relatively sufficient rainfall and natural forest.

Keffa is sparsely populated with great concentration on coffee and cereal growing awrajas of Jimma and Limu. It is in these awrajas that we have a better means of communication such as roads, telephone and postal services.

Kulo-Konta and Maji awrajas have rough dry weather roads and most of the time, they can be reached only by airoplane.

In all awrajas and woredas, there are administrative and police offices, in addition to the mass organisations; REWA, REYA, REPA and UDA, which are supposed to participate in all development projects.

The educational and health services, though insufficient, are spread all over the region.

b. Social Services:

i. Health

Hospital - 1 with 200 beds, located at Jimma.

Health centers - 8 in Jimma & Limu have got two each and others one each.

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Health Stations	-	85, Keffa, Limu & Jimma have got 19 each.
S. H. A.	-	1400
T.B.A	-	436) with a higher concentration
C.H.A	-	205) in Jimma, Limu & Keffa
Medical Doctors	-	1 Ethiopian
	-	7 Expatriates
Health Officers	-	5 - all stationed in Jimma
Nurses	-	9 in the Hospital
	-	20 in Health Centers
Saniterians	-	10
Health Assistants	-	150

ii. Training Centre:

- There is one health assistants' training school, located in Jimma.
- Duration of Training - 1½ years.
- Present students number - 120 of which 36 are from Keffa administrative region and the rest from Shoa, Wellega & Illubabor administrative regions.

iii. Education

- One Junior Agricultural College, capacity - 270
- One Teachers Training Institute, " - 550
  of which 310 are from Keffa region.
- Senior Secondary Schools, 6 - one in each awraja.
- Junior Secondary Schools, 31 of which 11 are in Jimma and 5 in Limu.
- Elementary Schools from 1-6 grades - 393
- CSTC, 26 most of which are in Keffa, Jimma and Limu awrajas.
- Total No. of students in the region - 164,000
- Total Kindergartens - in the region - 31
- Number of literates who can read and write, taught during the campaigns - 267,000
- Sanitary facilities exist in schools, most of which are however non-functional.
- Libraries are not functioning due to shortage of trained librarians.

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iv. Water Supply:

- Potable water supply - more emphasis is given for nuclated areas.
- Jimma, Agaro, Limu Genet and Bonga water supply are constructed and managed by Water and Sewerage Authority*
- EWNCA constructed 14 water supply schemes where most of which are found in Jimma and Limu awrajas and mainly managed by the community (Water Committee). Roughly estimated to 115,000 people are getting potable water.
- Properly protected springs by (MOH) are 46, which serve 5,000 people. This brings to the total of 120,000 - i.e. almost 6% of the regional population.
- Thousands of springs of varying capacities exist that could be used for water supply if exploited.

v. Sanitary Services:

- No sewerage system exists in the region.
- Urban latrine system is in a very poor condition.
- Rural pit-latrines are newly introduced.
- Health Education by MOH, though newly introduced specially in rural areas, is being given and seems to function well.
- Model dwelling houses for better sanitary services are being introduced and adopted by the community.

vi. Agriculture:

- Cash crops, mainly coffee and spices.
- Cereals - maize, sorghum, teff, etc.
- Root crops - Goders' sugar beat, 'Anchots' 'incense' etc. but in limited areas.
- Fruits - banana, orange, papaya, pineapple in limited areas.
- Cattle and poultry - scarce
- Rich in wild life.
- Forestry - in comparison to the other regions good, but fast decreasing.

* Jimma's water supply is scarce and not potable.

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- Veterinary - not enough.
- Horticulture - not practiced.
- In some areas, primitive type of equipment and method of farming are seen.

vii. Diets:

- Deficiency symptoms due to inbalance of proteine and carbohydrates is seen in infants and young children.
- No supplementary food items are provided to children.

3. General Objectives:

- To improve water, sanitation and health education conditions of Keffa region according to the motives of the International Water and Sanitation Decade.
- To promote water supply, sanitation, health education and nutrition in the region.
- To recommend the action to be taken for the implementation of the above mentioned points.
- To increase and strengthen community participation in the region.

4. Constraints:

- Lack of intersectoral integration.
- Lack of trained man-power.
- Shortage of material and financial resources.
- Due to the topography and poor infrastructure communication and transportation is limited.
- Dispersed type of settlements.
- Primitive and backward cultural practices.a

5. Strategies and Recommendations:

- Training more skilled personnel in every section.
- Intersectoral integration of the concerned sectors (MOH, MOE, MOA, NWRC) under the chairmanship of the regional development campaign offices.
- Close relationship of mass organizations and concerned sectors.

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Discussion:

After each group's report, the participants of the workshop commented on some of the recommendations and action plans, raised questions and accepted the recommendations with the following suggestions.

Group B Report:

Re-establishment of a co-ordinating body

After a thorough discussion on who should be the co-ordinating body, the formation of a core committee from the concerned ministries was agreed upon. This core committee should be accountable to the existing Development Campaign Committee at each level. The group identified four concerned ministries namely: National Water Commission, and Ministries of Education, Health and Agriculture to form the Core Committee, with scope for including other members as the need arose.

Organizing a Seminar:

The action plans of Group "B" and "C" regarding the organization of seminars was reviewed by the participants and there was a consensus in organizing a seminar at different levels and that the seminar should not be only on Community Participation, but should touch on all aspects of the water and sanitation decade.

Group C's recommendation on the revision of public health legislation to support water, sanitation and health education programmes be appropriately placed with the set of recommendations on National Plan.

Group C's recommendation on the importance of schools as a source of necessary manpower as well as source of skills and knowledge be appropriately placed with the recommendations on project support communication.

The targets given in Group 'D's report of the national plan be considered as tentative targets.

A target should be set for sanitation also. Regarding sanitation, it was suggested that the 80 percent coverage in the 10-year indicative health plan could be taken as a tentative target for sanitation. However, it was pointed out that the 80 percent coverage is for health service and there is no mention of number of any set target regarding sanitation.

Due consideration should be given for setting up of national standards.

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There must be a maintenance chain in water supply system because in other countries it was found that 80 percent of the water supply schemes were not functioning.

- CHA with simple maintenance training (hand pump attendant).
- Use of the existing health infrastructure for communication link for maintenance.
- Strengthening of the mobile maintenance group.
- The plan to have a water community participation office and water committee at the community level were suggested as possible resources for creating the maintenance link.
- As much as possible payment of water fees must be low.

In Group D's recommendation sanitation and health education should be treated with equal vigour and be included in their recommendation. Any water scheme must be accompanied by sanitation and Health Education.

Operation and maintenance of water supply schemes must be included. The role of the Home Economics agents should be spelled out.

The section on agriculture must be summed-up in a line or two as it relates to water supply, sanitation and health education programmes.

Closing Session:

The workshop was officially closed by Mr. Kassahun PMAC Standing Committee on COPWE Central Committee, Member and Chief Administrator of Keffa Region by saying that he was very greatful that the workshop was held in Keffa region. This would help the development of the region. He also expressed his pleasure at being able to act as host, and at being invited to closing the workshop. He promised all possible assistance within his capacity to implement the workshop recommendations. He also stressed the effort of the region programme which is to create healthy and productive citizen by eliminating disease, famine and illiteracy. After the revolution, the number of regular schools have increased by 153.9 percent and this shows that the revolution has brought increase opportunity of education for the children of the oppressed masses. The health services of this region has grown by 267 percent when compared with that of the pre-revolution health facilities and the health education given regarding primary care is also of significance in the process of our struggle. Mr. Kassahun concluded his speech,

- Inservice training and on the job training.
- Increase community participation through water and health committees.
- Training in CSTC for the promotion of water, sanitation and health education.
- Include community participation from planning up to implementation and operation of the projects.
- Dug-well development.
- Laundering and bathing facilities to be given from springs the community to be taught to use the excess water for gardening.
- Encourage the community to use water from roof catchments (if there are CIS roofs).
- Introduction of low cost methods of construction and cleaning of water sources (including water lift to higher located villages, e.g.hydrams).
- Promotion of afforestation and soil conservation programmes.
- Improve the ways of exchanging agricultural products.
- Teach the community the advantage of gardening and preparation of nutritional food and frequent visit by Home Economic Agent.
- Change in the size and designs of toilet rooms in schools.
- Special care to be taken for animal health as we do for human-beings.
- Priority in water, sanitation and health education for nuclated areas and producers co-operatives.
- Posters, reading materials and mobile films to the neo-literates should be used for agitation and teaching, in order to bring about a positive attitudnal change towards a better life.
- Make maximum utilisation of the existing facilities and natural resources in its proper form.
- Intensify the importance of health education, sanitation and water utilisation in the educational system.
- Monitoring and evaluation to be carried on by a body to be formed.

6. Inputs:

Financial Resources:

To achieve the goals of water and sanitation decade, to increase the water sanitation and health education facilities of the broad masses, there should be material and financial support from community, government and donar agencies (international organizations).

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by saying the objective of the workshop held in Keffa region is to make concrete study in the implementation of water sanitation and health education in order to fulfil the global objectives of "Health For All In The Year 2000" and the region will make the necessary effort to help the people of Keffa region in striving to get benefit from the programme.

Mr. Gernay, the UNDP Representative, also said a few words regarding the workshop and the water and sanitation decade. He said that Ethiopia's commitment to the water and sanitation decade is well known and the presence of the regional administrator in this workshop and the keen interest shown is an indication of this commitment. The set up of a National Action Committee is a further indication to this commitments. UNDP's and UNICEF's commitment to the Water and Sanitation Decade together with NAC will see to it that the decade's plan is achieved.

Dr. Padmini (UNICEF) commented that specific implementable recommendations did come out of this workshop. A core group consisting of representatives of ENWCA, MOH, MOE and UNICEF had planned and organised the workshop, with the help of the Regional fficials. This had shown the effective working of several agencies towards a common objective.

Lastly, a word of thanks to the Regional Administration, A Institute of Agriculture, Regional Health Department (especially Mr. Asnake) participants from international agencies, UNICEF, workshop participants, typists, was expressed by the chairperson and vicechairperson.

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A P P E N D I C E S

APPENDIX - I

LIST OF PARTICIPANTS

MINISTRY OF HEALTH (MOH)

1.	Ms. Dejyitnu Gebru	- Head, Training Division
2.	Ms. Emebet Admassu	- Head, Health Edu.Division
3.	Mr. Gebre Meskel H. Mariam	- Expert, Planning & Prog. Division
4.	Mr. Tamiru Debiya	- Basic Health Services Div.
5.	Mr. Kassa Kinde	- Head, Environmental Sanitation Division

MINISTRY OF EDUCATION (MOE)

6.	Mr. Mulugeta Kechema	- Formal Education Dept.
7.	Mr. Fisseha Ayehu	- Curriculum Department
8.	Mr. Zebenigus Wuhib	- " "
9.	Ms. Mulu Gebre Meskel	- Adult Education Dept.
10.	Sister Kelemework Demmissie	- Educational Mass Media Services Department

ETHIOPIAN WATER COMMISSION (EWWCA)

11.	Mr. Berhane Worku	- Head, Shallow Wells and Spring Protection Division
12.	Mr. Muluneh Emeru	- Engineer, Engineering Department
13.	Mr. Beyene Alemu	- Engineer, Water Supply Project
14.	Mr. Efrem Dehne	- Training Division

RELIEF AND REHABILITATION COMMISSION (RRC)

15. Mr. Getachew Molla

CENTRAL PLANNING SUPREME COUNCIL (CPSC)

16.	Mr. Gedion Asfaw	- Expert, Water, Mining and Power Department
17.	Mr. Elias Gebre Egziabher	- Expert, Social Services Department

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UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)

18.	Mr. J. P. Jernay	- Deputy Resident Representative
19.	Mr. Peter Lowes	- WHO, Geneva

WORLD HEALTH ORGANIZATION (WHO)

20.	Dr. C. T. Lo	- Medical Officer Malacologist

NATIONAL CHILDREN'S COMMISSION (NCC)

21.	Mr. Workineh Kassay	- Expert Health Services

REVOLUTIONARY ETHIOPIA YOUTH ASSOCIATION (REYA)

22.	Mr. Tekle Faji	- Vice, Chairman, Regional Committee Keffa, Jimma

REVOLUTIONARY ETHIOPIA PEASANT ASSOCIATION (REPA)

23.	Mr. Biya Abamecha	- Regional Peasant Association Member

ZAMBIAN GOVERNMENT

24.	Mr. J. Ngombe	
25.	Mr. B. H. Michelo	

KEFFA REGIONAL ADMINISTRATION

26.	Mr. Asnake Gebre Ghiorgis	- Regional Health Representative
27.	Mr. Negash	- EWWCA Representative
28.	Mr. Bekele Meshesha	- CPSC (Jimma)
29.	Mr. Sahile Wolde Gabir	- MOE (Jimma)
30.	Dr. Amare Beyene	- MOA (Jimma)
31.	Mr. Abdu Semed	- Social Affairs, Jimma
32.	Ms. Adisalem Deressa	- Home Economics, Jimma

UNITED NATIONS CHILDREN'S FUND (UNICEF)

33.	Dr. R. Padmini	- Project Officer, Planning & Co-ordination
34.	Mr. Indur Mirchandani	- Head, Water Supply Sec.
35.	Mr. Francis Kisendi	- Asst.Programme Officer
36.	Mr. Samuel Olana	- Asst.Programme Officer
37.	Ms. Bimba Kebede	- Community Relation Off.
38.	Dr. Nyi Nyi	- Director, Div. of Programme Development and Planning, HQ, N.Y.
39.	Mr. Martin Beyer	- Senior Policy Specialist (Drinking Water & Sanitation), HQ, N.Y.
40.	Ms. Yansheng Ma	- Senior Consultant, Health, Education in Water/ Sanitation, HQ, N.Y.

APPENDIX - II

ETHIOPIA — JIMMA 21 - 28, 1982

Time	Sunday 21-3-82	Monday 22-3-82	Tuesday 23-3-82	Wednesday 24-3-82	Thursday 25-3-82	Friday 26-3-82	Saturday 27-3-82	
8:00 A.M. Coffee Break	JIMMA	Session II (Plenary) - Country Situation - Water Supply, Sanitation and Health Education - Water Education Project	Session IV (Groups) Group discussions on background papers	Session V (Contd.)	Session VI (Groups) Group discussions on field trip & background papers	Session VIII (Groups) Discussions & recommendations	Session XI Group reports on recommendations and action plans	
12:00 Noon		L U N C H						
1.30 P.M. Coffee Break 5.30 P.M.	TRAVEL TO	Session III (Plenary) - Water Sanitation & Health Edu. in Keffa Region. - Integrated Water Supply Proj., Shoa	Session V Field Trip	FIELD TRIP CONCLUDED	Session VII (Plenary) Group Reports on Field Trip	Session IX (Groups) Groups' Action Plans	Session XII Workshop Recommendations & Report Closure of Worksnop	Sunday 28-3-82 Departure
		F R E E T I M E						
7.00 P.M 8.00 P.M	Session I (Plenary) Opening Session: Objectives and Methodology of Workshop formal opening	Free Time	Stay Overnight in Village	Free Time	Films	Reception		

APPENDIX - III

WATER SUPPLY, SANITATION AND HEALTH EDUCATION

COUNTRY SITUATION PAPER

By: Ato Berhane Worku (WWDA) and
Ato Kassa Kirde (MOH)

BACKGROUND

It is now generally recognised that the provision of adequate safe water and sanitation facility would go a long way in improving the health situation of people in developing countries. It has also been recognised that such health benefit does not directly follow from the availability of adequate safe water and sanitation facility. They have to be used and maintained properly: hence the need for health education.

Ethiopia is a large country, with diversified physical features, climate and people. It would be useful to look at these characteristics a bit more closely as they have implication for the provision of safe water, sanitation and health education.

Most parts of the country receives adequate rainfall. But, it is highly seasonal and hence, in most places, surface water such as springs and rivers dry up during the dry season. The ground water potential of the country, though adequate for rural water in many places, is limited. In some areas, where ground water is plentiful, such as the Rift Valley, the water quality is generally poor due to high floride content or high salinity.

The rugged mountains and deep gorges in many parts of the country make communication difficult. Even more important is the difficulty of educating, mobilising and arousing 32 million people with over fifty different languages for development efforts such as the provision of safe water and sanitation.

The vast majority of the population live in scattered communities and significant numbers are nomadic. Many of the settled communities live in highland areas which often are relatively far from water sources. In urban areas too, where about 14% of the people live, poor town planning with congested houses make the provision of water and specially, sanitation is very difficult.

Responsibilities for water supply, sanitation and health education are fragmented. Moreover, concerned government bodies have not always had adequate technical and administrative capacities, and this has often made proper implementation of programmes difficult. There has been poor inter-sectoral co-ordination and community participation. This has resulted in negligence and misuse of water supply schemes and sanitation elements.

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Other constraints to effective implementation of water and sanitation programmes are beliefs, practices and customs that conflict with the usage of these services. These factors are specially relevant to sanitation programmes such as the use of pit latrines.

Ethiopia is one of the least developed countries in the world. Some health statistics indicate what remains to be done:

- Infant mortality rate.....155/1000
- Child mortality rate.....247/1000
- Maternal mortality rate..... 20/1000
- Life expertancy..... 43 years

It is believed that over 80% of the diseases are communicable and they could be prevented through simple measures such as improved water supplies and sanitation, including personal hygiene and waste management.

PRESENT STATUS OF WATER SUPPLIES AND SANITATION

In rural areas, the vast majority of people use unprotected water sources such as rivers, springs, ponds and open dug-wells. Hours are spent by the rural women in fetching water from distant sources. Only about 4% of the rural population has access to improved water supply which might be from a borehole, protected dug-well or spring.

In the past, improved water supply to rural population was provided through boreholes by the Ethiopian Water Works Construction Authority (EWWCA) in co-operation with donor agencies. Improved water supply was mainly provided in areas with chronic water shortages such as those with marginal rainfall. UNICEF is one of these donor agencies that has been recently taking more and more prominent role in rural water supply. UNICEF support for water supply started in 1975 in response to emergency needs created by drought. The erarlier schemes were in Tigrai and Wollo and the objective was to provide water for survival. Later, UNICEF-supported schemes were started in Bale and Harrar and these are part of the regular EWWCA water supply schemes. The programme expanded from well drilling to well digging, surface water development and training support for maintenance workers.

Other organisations are involved in water supply, sanitation and health education. The development of simple water schemes and appropriate use of water for hygiene and sanitation is promoted through the Ministry of Health: community health agents and sanitarians. International agencies involved in these various fields are UNDP, WHO and bilateral agencies such as FRG, SIDA, FRG, CIDA, etc. NGOs like OXFAM and Save the Children Fund are also assiting in these approaches. The ministry also has the responsibility of monitoring the quality of water. Appropriate use of water is also promoted by the Basic Education Project of the Ministry of Education. Both the Basic Education

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project and community health personnel receive UNICEF assistance. The follow-up materials for the literacy campaign of the government also include health education which stresses water and sanitation issues. The Water Education Project in the Ministry of Education attempts to give students education in water use and involve them as agents of change and technical support in protecting springs and digging wells.

In the last few years, more emphasis has been given to low-cost technologies in rural water supplies. This is due to the rising cost of fuel, scarce foreign currency and the rising awareness of engineers and planners of the rural situation and need. A hand-pump and wind-pump research and development project is underway. Ferro-cement water storage tanks of 25 cubic meters have been tried and show some saving both in cost and time over traditional methods of masonry and reinforced concrete reservoirs. Recently, UNICEF has constructed major water supplies with distribution systems based on infiltration galleries in such places as Gursum and Adele. More gravity schemes from spring sources are being built. Springs are also being capped to protect the quality of water. Where feasible, all these are better alternatives to borehole- engine pump systems which has high initial and running cost and more foreign exchange cost component.

Water supply coverage in the urban areas also leaves a lot to be desired. The coverage is 95% for Addis Ababa and Asmara and 32% for the other towns with present population of more than 6000 people. Some of these urban systems need improvement of extension. The pattern of water use in the urban areas indicates its deficiencies. Out of sixty municipal towns, only seventeen have some form of house connections and most provide service through only public standpipes. Domestic water consumption ranges from 5 litres per capita per day 5 L/C/D 120 L/C/D while 20L/C/D is considered the absolute minimum required to have significant health benefits.

A major problem in the area of rural water supply is the maintenance and operation of systems. Local skills, capabilities and funds for proper maintenance and repair are lacking. Systems are usually misused. It is believed that a major effort in community involvement in this area should be made, and means of raising funds and creating effective organisation from community level to regional office level for maintenance purpose should be sought.

In the field of urban sanitation, a combination of methods are used. Traditional houses use dry pit latrines which in some cases are too close to dwellings and create problems of flies and over-flowing during the rainy season. Modern villas and buildings use flush toiletts connected to cesspools or septic tanks. Large hospitals and institutions discharge their sewers direct into the soil to be leached or into storm drains or directly into streams.

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Asmara is the only town with some form of sewer system. It has some 200 k.m. of combined sewers. Presently, a new sewerage system is under construction in Addis Ababa. However, the system is very expensive and when completed, a large segment of the population will still not be covered.

Some large towns have vacuum trucks that collect liquid waste from cesspools and septic tanks and some times from pit latrines. Some towns have garbage trucks for collecting refuse.

In the rural areas, elements of sanitation are negligible and fouling of soil and water with human excrement and refuse is common practice. But, presently, communities are being actively encouraged to dig pit latrines and refuse pits.

HEALTH EDUCATION

Community education on the relationship between water supply and sanitation to health diseases and well-being and to its productivity, is carried on through various means. Schools, churches, health institutions, prisons and meetings of any type are used for discussions. Teaching media include lectures, newspaper, radio, television, films and slides, posters and leaflets. The literacy campaign is another important avenue for health education.

The constraints are lack of trained manpower, fragmented responsibilities, shortage of appropriate testing materials and lack of education compounding traditional beliefs and customs.

COMMUNITY PARTICIPATION

Many of the simpler water supply schemes are based upon community participation which may include resource generation and mobilisation, provision of labour and responsibility for proper use, operation and maintenance of the system.

FUTURE PROSPECTS

The UN has declared 1981-1990 the International Water and Sanitation Decade. This is to help mobilise governments and international organisations for the enormous task of providing safe water and sanitation to the millions without them at present.

Ethiopia on her part has also taken some action in line with this. A decade plan has been prepared.

The plan envisages:

- Water supply coverage of 35% of rural and the whole of the urban population by 1990. (In rural areas, all nucleated communities: state farms, projected settlements and producers co-operative could be covered).

- Construction of refuse pits and pit latrines in rural areas and the introduction of water sealed pit latrines and construction of simple incineration system in urban fringe areas.

- Introduction of proper waste disposal systems in ten major centres of the country.

- There are some recent positive developments that could enhance the efforts in the provision of these safe water and sanitation services.

- The organisation of rural population in peasant associations, women's association and youth association creates a favourable situation for community involvement and health educations.

- The skilled manpower situation is improving fast. In the water sector, mid-level technicians and engineers are being trained and some graduates have already been deployed.

- The massive and successful literacy campaign that is underway will definitely facilitate the dissemination of development ideas and help to foster change in attitudes.

- It is believed that effective utilisation of these opportunities with better co-ordinated approach in water supply, sanitation and health education and more vigorous community participation in planning implementation, and most importantly, in the proper utilisation and upkeep of facilities would make more certain the attainment of better health through safe water, sanitation and health education.

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APPENDIX - IV

EVALUATION OF THE WATER EDUCATION PROJECT

By: Mulugeta Kechema
Ministry of Education

WATER EDUCATION PROJECT

By: Mulugeta Kechema
Ministry of Education

I. INTRODUCTION

The Ethiopian Revolution assigns that educational activities should fall inside the new framework, permitting the schools to serve the people of the broad masses, particularly the rural population with its different environments.

High on the list of rural needs is the provision of safe and adequate water supply systems for domestic as well as other uses. At present the rural population which is more than 80%, not only suffers from restricted access to sources of water, but recurrent events and experience have demonstrated that, in the dry season and during periods of extended and recurrent drought real suffering can be experienced as large populations are exposed to conditions which endanger many lives. On the other hand, in some parts of the country, although water is at the disposal of the people, they do not make proper use of it due to lack of knowledge and facilities for making water easily available to them.

It is evident that rural water supply be regarded primarily as a social service although obviously there are economic benefits too. It is important therefore to consider the range of social benefits. It is also clear that social and economic benefits are closely interrelated thus, a higher standard of well being leads to an increased labour productivity.

In developing rural water supplies, there are a number of hypothesis related to social and economic benefits which will accrue. The most important are:

- The distance travelled to obtain water will be reduced.
- The quality of water will improve.
- Time and energy spent on the provision of water will decrease.
- The quantity of water used will increase.
- Improved water supplies will be more reliable.
- If the water supply provided is improved, people will use it.
- If time is saved, this time can be used productively.
- Better water means better health.
- Better water supply provides a surplus for livestock, thus generating income.
- Increased water supply makes small-scale irrigation system possible.

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- Water reserviors can be combined with fish pond culture.
- Improved water supply may encourage water using industries.
- A new water supply is a factor in settlement growth and villagization.
- An improved water supply will act as a catalyst and an incentive in rural development.

Thus, because of the above social and economic benefits, it is the view of the Ministry of Education that schools are, and can be the sources of a collected and better skilled manpower for most waster-related practical activities needed in the community, and that they are the right point for dissemination of water education. The proper utilisation of water in the community can easily be brought into the picture in and around the schools.

In realizing the above, the Ministry of Education prepared a project on water education and submitted it to the European Economic Community for assistance. The project was fully supported by the agency and an agreement was signed on the 27th of November, 1978.

According to the agreement, the contribution of the European Development Fund was for:

- Project preparation and production of teaching aids
- Training of Ethiopian Personnel and purchase of a vehicle,
- Supply and transport of construction material and equipment, and
- Ex-post review and evaluation of the project.

In accordance with the guidelines laid down in the Water Education Project Document, over a period of 4 years 330 village water supply projects were to be implemented phase by phase. During the first phase the project was implemented in Shoa Administrative Region in which 8 schools were involved. During the second phase the project is going on in 4 additional Administrative Regions; namely, Wollo, Gondar, Gojam and Wollega, in which 51 schools are participating. This year, which is the beginning of the third phase the project will begin in other 5 additional Administrative Regions, namely, Shoa, Arsi, Bale, Sidamo and Gamogafa. As whole, Water Education Project activity is planned to cover about 128 water points (schools) within 3 years i.e. upto July 1982.

The project is believed to be a better means for the promotion of self-sufficiency for the Ethiopian Community. Hence, it seeks both internal and external aids to support the practical activities for water education within the formal and non-formal education systems, in relation, to community needs and centered on revised curricula now under operation in schools.

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II. OBJECTIVES OF WATER EDUCATION PROJECT

In order for the schools to participate in the process of organizing, installing and maintaining activities for the supply of water, the project shall have the following general objectives:

1 To assist the Ministry of Education to implement the general principles underlying the present school curricula that studies in school should be relevant to and related to the conditions of the local environment and to community needs.

2 To assist the Ministry and also facilitate the schools in implementing the environment curriculum requirement that theoretical studies should be combined with practical application of theoretical knowledge as well as with practical development activity in support of the objectives of labour education at the school level.

3 To develop knowledge and capabilities of appropriate technology for the improvement of the quality, quantity, and accessibility of water resources in and around the schools through properly designed curriculum and other guides.

4 To promote and encourage village level innovations and experimentations for the proper utilisation of water through water education project in and around the school.

5 To enable the schools gain the skills to provide good quality and sufficient quantity of water continuously for domestic and other uses.

6 To encourage the schools and the community to combine their technical manpower (know-hows) and financial resources and work together under the motto of "self-sufficiency" for better water sources.

7 It is well known in other fields that an emphasis on practical activity to meet particular needs results in a greater expansion of innovative capacity in a community. It is expected that the joint practical activities between school and the community in the solution of practical problems, using locally available materials and which are to be generated in this project, will stimulate innovative capacity, and results in an upward flow of self-sufficient technology.

8 To promote awareness in the minds of the students and also the other members of the community about the importance of water in the economic sector of the country such as agriculture, transport, and in the production (generation) of hydroelectricity.

9 To work in collaboration with other national and international agencies in the organisation, installation and maintenance of good quality with sufficient quantity of water for Ethiopians, especially those living in rural areas.

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10 To educate the students and the public on:-

11.1 Water-borne diseases, and
11.2 Sanitary measures to be taken at different stages of water protection and handling.

It should be clearly understood that, the scope of the project is limited to these objectives and that the project should not be considered as a direct and short-term mechanism for a wide-spread upgrading of rural water supplies in communities and schools, which is the direct responsibility of other agencies.

The project is designed as a broad support mechanism for the development of practical activities within the school curricula at the various levels of the education system. Although it is expected that the largest volume of water development activity will be generated by the primary school system by virtue of the fact that these schools are located in rural areas in close association with Peasant Associations, the project also has implications for the higher level of the school system.

III. IMPORTANT COMPONENT OF THE PROJECT

Within the general framework of the objectives of water education and development activity, the following components have been given an appropriate place in the general plan of action:

1 development of various sources of domestic water(e.g. roof catchment, surface catchment, spring improvement, shallow hand-dug wells, etc.)

2 development of low-cost, self-reliant methods of storing water using local resources and materials (e.g. barrels, pots, tanks, reservoirs, soildams etc.)

3 development of improved methods of transporting water (larger, lighter containers for human or animal transport, and simple water carts).

4 dissemination of practical ideas for the proper treatment and maintenance of the quality of water (low cost filters, chemical treatment, etc.). This component also includes practical exercises in the safeguarding of water sources.

5 introduce a programme of instruction in the use of water for domestic and other purposes.

6 skill components related to the maintenance of water installations and to the construction of water systems by the community.

7 other elements of water development requiring a higher skill element and additional resources (e.g. pumping mechanisms and roof collection systems for institutions) in a limited number of locations on trial basis.

In defining the plan of operations at least four situations have been borne in mind so that full cooperation can be achieved with other water development activities:

- The relationships between the Ministry of Education and Ethiopian Water Works Resources Construction Authority (EWWCA programmes in areas identified by the Authority for Rural Water Supply Development.

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- Ways in which the Ministry of Education programme can reinforce the activities of EWWRCA's low cost, self-reliant village level programme as well as the health and sanitation education programmes of the Ministry of Health.

- Cooperation between the school programme and a number of non-government water development programmes.

- The most appropriate form for the water education project in all other areas.

The educational element of the Water Education Project includes certain building and construction standard materials, as well as materials related to specific practical exercises in the selected schools. In other words, it was intended to strengthen the general understanding of the problems and possibilities in obtaining, safeguarding and using water, by applying the experience generated during the project throughout the school system.

IV. IMPLEMENTATION

A. Activities and Field Investigation

Water Education Project has been in operation since 1971 E.C. (1979). A brief history of the Water Education Project since then is as follows:

The project activities (are surveyed through visits and supervisions by the Manager of the Project and other teams from the Ministry of Education) are:

7 - 9 May 1979	- Initial seminar for the project;
22 May 1979	- Appointment of Project Manager;
May 1979	- Project car supplies;
June 1979	- Discussions between Project Manager and Curriculum Department for Water Education Curriculum Development;
Mid-July 1979	- Survey of Gojam Administrative Region for project identification and familiarization.
Beginning August 1979	- Same for Sidamo Administrative Region;
September 1979	- Discussion with Shoa Regional Education Office and Central Region Office of EWWRCA on possibilities for implementing the project;
October 1979	- Production of a work programme for selected school sites in Shoa Region;
April/May 1980	- Survey of sites by Ministry of Education Team.
May 1980	Discussion of survey findings with members of the Technical Advisory Group.

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Manager's Report

According to the report by the Manager of the project one year after implementation (i.e. 1980), the following important points about the problems of implementation were noted.

Projects started and accomplished

No of Regions	No of springs	No of wells	No. of River streams	No of Guttering	Total No of Sources
1 Gojam	2	10	2	-	14
2 Wollega	3	7	1	-	11
3 Gondar	3	12	-	1	16
4 Wollo	1	4	5	-	10
5 Shoa	3	1	-	-	4
	12	34	8	1	55

NOTE: Out of the 8 projects implemented in Shoa region during phase one, only four succeeded. The other four projects were discontinued for technical and other reasons.

More than 65% of the 51 sub-projects (phase 2) conducted at different localities from 1972-1973 E.C. have been accomplished. However, because of the different problems encountered, the whole activity of the project could not be realised according to the plan of action.

B. Findings of a Survey Team

a. General Conclusions on the status of the project

According to a Survey Teamfrom the Ministry of Education the amount of work which has been accomplished during that period at the field level was disappointing. Sub-projects have been initiated at only 9 sites.

However, the Survey Team suggested that this mechanical conclusion be placed in a different setting, bearing in mind the following factors.

i) The initial period of any development of a project is the most difficult. It is the period of orientation and mobilization for the first hesitant steps. In this case the experience was more difficult, because the project manager was not familiar with either the project or the proceedures and organisation of the education services on his appointment.

ii) The launching of the project required careful thinking about the initial centres of activity, bearing in mind the need for a rapid build-up of experience, and the need close supervision of all pilot projects, since all represented a new category of activity for the school system. This process took time.

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iii) The successive steps in initiating each of the sub-projects have proved to be very time-consuming for the Project Manager. These have involved the identification of a community group or committee for participation, arranging for mechanisms for contribution, discussing the details of the project, transporting and delivering materials, and carrying out a close supervision of technical work.

b. Comments on practical construction activity

The Survey Team has found that:

i) The project in the first phase has included a useful range of water development activities which was summarised as follows:

- Spring improvement actions
- Roof collection schemes
- Well digging
- Pipe line connections with water distribution point
- Water technology device manufacture

ii) Most of the sub-projects initiated were the most appropriate to local circumstances.

iii) In all the locations visited, both the community and the students have been involved in project implementation.

iv) In all locations, the community supported the activity with funds and material inputs. All project identification has been carried out through discussion with the representatives of the community.

v) The immediate objective in all projects has been to provide a source of water on the school compound.

vi) The projects which have been viewed were all capable of replication by local initiative.

vii) In the construction design of the various sub-projects there has so far been little application of improved or "appropriate" technology.

c. Comments on Curriculum Activity for Water Education

Although, in all cases, the labour education aspect of the curriculum has been supported by student participation in construction activities, and although the curriculum is already well developed, stressing the necessary elements of knowledge through Science,

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Geography, Health, Agriculture and gardening and Home Economics syllabi, the impression is gained that specific teaching and learning programmes centred around the construction activity have not yet been properly developed.

This curriculum activity should follow all the steps in water improvement schemes.

V. CONSTRAINTS AND PROBLEMS

A. Curriculum and other guides

The curriculum for water education project for the 51 schools is delayed. There is no guide and reference books according to the curriculum guide which is already prepared. This situation has affected the penetration of water education project in the schools and the proper implementation of the project in the schools at the same time.

B. Lack of Personnel for the project

Such a national project covering many regions and localities has been tried to be run by one person, who is also the manager of the project. This looks unrealistic to implement the project effectively and efficiently. In fact, this can invite other problems.

During field visits, it is observed that even the school teachers and AFC supervisors who could have been additional sources of manpower and were expected to participate in the project are found to be ignorant about the water education project. This is due:

- Lack of orientation concerning the objectives and the importance of Water Education Project.
- Lack of interest by teachers and AFC supervisors to give direct voluntary services to the well being of the schools and the community in the development of water.
- It is also found to be difficult to find skilled manpower from members of the community or from near the place where the project is undertaken for water source development.

C. Financial Problem of the Project

i) There is a big gap between the cost analysis for each type of water source and the budget allocation in addition to the changing prices of materials due to inflation.

According to the report the average allocation

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of budget for subsidies have shown a difference of 26 - 36 Birr more for one locality, whereas the budget is 900 Birr only.

ii) Lack of cash for subsistence allowances for local agents or supervisors has affected the speed of implementation according to plan.

D. Transportation Problem

Transporting subsidized materials from Addis Ababa, or from various towns to the sites of the sub-projects were affected by transportation problem. This has created a delay in the accomplishment of the sub-projects in most localities.

VI. SUGGESTED SOLUTIONS FOR THE PROBLEM

A. Temporary Solutions for the on-going project

i) At least the circulars should reach the schools until the guide and reference books is produced. Other technical guides can be prepared roughly to reach practising communities. Later on refined material can follow.

ii) There should be a short time orientation programme or workshop for selected teachers and PSC supervisors to implement the plan of the project in all localities.

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iii) The local bodies of the N.R.D.C. & C.P.S.C. and other cadres should agitate and mobilize the community to participate in the project.

iv) There should be mechanism to convince regional administrative offices to supply means of transportation for the raw materials and also try to use the existing project vehicle as much as possible.

b. Long Range Solutions

1. Additional personnel in the Central Office and technical advisors for the field work should be employed.

2. The work programmes of the Awarja Pedagogical Centres (APC's) has to be coordinated for better implementation of the project.

3. Workshops should be conducted at regional levels for APC supervisors, teachers, agents of Ministry of and Regional Offices of NRDC & CPSC to work together for the same goal.

4. Allocate minor allowances as incentives and petty cash at a sub-regional level for speeding up the implementation of the project.

5. In order to implement the project effectively it is a must to have a properly designed educational and technical framework. This would help the stage by stage realization of the project within the capacity and availability of material, money, and manpower for the development of water in and around the schools.

5.1. Revise and develop curriculum for the project

5.1.1. Preparation of general guide and reference books in Amharic related to the Water Education Project.

5.1.2. Preparation of any other relevant handbooks in Amharic for practical activities for the selection and implementations of simple activities for the development and utilization of water in and around the school (Specifically it contains techniques and methods for the different water sources.)

5.2. Plan a phase out programme inorder to accomplish all elements for the development of water stage by stage over the period of years, hence forth the community is assumed to continue helping itself by working in collaboration with other water development agencies.

5.3. Formulate major operational lines of communication and means of strengthening the project within and outside the Ministry of Education.

5.3.1. Establishing advisory groups at higher and lower levels for the implementation of Water Education Project from different concerned national institutions, (this is inorder to take advantage of the experiences of the experts of other institutions). Possible representatives are.

- Ministry of Education
- National Water Commission
- Ministry of Agriculture
- Ministry of Health
- Ministry of Urban Development and Housing
- Science and Technology Commission etc.

5.3.2. Arranging frequent meetings scheduled for thorough discussions over the implementation of Water Education Project in the Ethiopian context.

5.4. Establish one central office in the Ministry of Education, where one technical manager and other personnel with technical knowledge and know-how are posted.

5.5. Design criteria for the selection of regions and schools for a stage by stage implementation according to priority of needs and necessity of water in and around the schools. The requirements for drawing the criteria are:

5.5.1. Elements reflecting the severity of water in a certain locality.

5.5.2. Capacity to afford contributions and provide other facilities in the community. (The level of cooperation and enthusiasm of the community assures the implementation of the project.)

5.5.3. The size of the community demanding the Water Education Project, the available manpower, quality, and quantity of water must be considered.

5.5.4. The nature and the scientific rationale for water sources pointed out by a school or the community to be developed in a certain locality.

5.5.5. The level of technology required to be implemented in the locality.

5.5.6. The physical environment helping easy availability and continuity of water supply for that community (easy accessibility)

5.5.7. Considering Basic Education Programme as an integral part of the national education system,

and in accordance with the Basic Agreement concluded between the Government and UNICEF priorities will be given to the areas mentioned in the agreement.

5.6. Plan procedures and techniques for continuous agitation and to create conviction to implement the project for self help and self-reliance with the collaboration of regional provincial and district agents of National Revolutionary Development Campaign and cadres.

5.7. Devise a continuous formative evaluation mechanism and techniques for getting feedback which will be useful for new project sites in the following manner:

5.7.1. Conduct workshops for local agents and concerned people.

5.7.2. Visit and supervise water education project centres by the manager of the project and report to the Advisory Group.

5.7.3. Prepare and send questionnaires for the schools and the other members of the community for additional evaluation.

5.8. Specify clearly the shares of responsibility to be carried among the schools, the community and the Central Office of the Project.

a) The School

i) The teachers should be oriented and participate in workshops inorder to have a thorough understanding about the importance of water and its utilization in their localities.

ii) The teachers of a school should emphasize the importance of water in the community and disseminate educational information continously in and around the schools. This can be done by frequent presence of the school-community in the work of water development.

iii) The schools should try to use the curriculum, the handbook, reference books, and any other available guides when possible.

iv) The schools must be able to locate and point out appropriate areas for the development of water sources in and around.

v) The school is expected to give reports about the water development, primarily to the School Management Committee and secondly to the Central Office.

b) The Community

i) The community should be organized and reflect a favourable attitude for working water development project in their locality in collaboration with the school and the Central Office.

ii) [illegible]

iii) The community should [illegible]

iv) [illegible]

c) [illegible]

[illegible]

ii) [illegible] requests [illegible] development of water schemes [illegible] according to the criteria given.

iii) It is the [illegible] of the Central Office [illegible] for projects according to the [illegible] and [illegible]

iv) It is the obligation of the Central Office to [illegible] the community receive subsidized materials and other things [illegible] different localities.

C. Budgetting

As a basis for budgetting within the project, allocation of resources have to be made to each of the major elements in the project, reflecting the importance given to these elements.

The element which forms the core of the project is lowcost rural water technology to which the wider spread of school-community activity is achieved. This has been allocated 70% of the total project resources and a preliminary estimate has been made that around 1896 sub-projects [illegible] expected to be developed, implemented below their average cost in the range of government assistance from 950 to 2000 [illegible]. A sum of 1475 Drm [illegible] therefore been used for this calculation.

The institutional water development programme has been based on a target of one demonstration point in each of the 102 rural awrajas and on an average figure from the costings of various alternatives available (See table 1). This required the allocation of 11% of the total project.

The allocation of resources to both the experimental programme and the assistance to the production of educational materials have been based on the assumption that other funds and activities are available in these areas which will give considerable support to the project.

On the other hand, it is desirable to have project resources for these two elements to cater for particular needs and to give the management the necessary freedom of action. The allocation to experimental activities includes expenditure for minor research projects and for the decentralization of water analysis equipment which will be required for the health aspects of the programme. Full definitions of these aspects of the programme is left to the project management, with the guidance of the Technical Advisory Group, but an obvious possibility is that selected secondary schools can be provided with equipment and can begin after this service.

The calculations for programme element allocations are summarised in the following table.

Table 1

Programme Elements and Allocation of Resources

Development Element	% of total project resources	Equivalent Million Birr	Estimated Average Birr	Estimated No. of Sub-project Locations
a) Low-cost Rural Water Technology	70%		147k(1)	180(1)
b) Institutional Water Development (Mostly applied to primary schools)	11%			102(2)
c) Experimental Programme	4%			103(3)
d) Educational Element (a supplement to larger budgets already available for curriculum and instructional material development)	5%			(All Schools)

continued on the next page

Table 1

Programme Elements and Allocation of Resources

Development Element	% of total project resources	Equivalent	Estimated	Estimated No of Sub-project Locations
a) Project organization (supplement to existing budgets in the Ministry of Ed.)	20%			
Totals	100%			

Remarks: 1. Permitting an average distribution of about 4 sub-projects per rural [illegible]
2. Permitting one sub-project in each [illegible]
3. It is envisaged that this element can be subsidized from a number of other sources.

Table 2

Programme Framework

	Phase one		phase two		Remarks
1. Preparation Stage	1975	1976	1977	1978	(Sub [illegible])
- workshops	x				
- workshop material	x	x			
- Distribution of material		x	x	x	
- training	x	x			
- Purchase of tool kit/vehicle	x				
2. Operational Programme					
- low cost materials		x			
- institutional Infrastructure		x			
- experimental Programme					
- research		x	x		
3. Evaluation					
- review workshop		x	x		
- (and technology status evaluation)					
- project evaluation			x		
- evaluation of experimental					
- programme				x	
4. Over heads					
- salaries	x	x	x	x	
- perdiem	x	x	x	x	
- transport costs	x	x	x	x	
- maintenance			x	x	

VIII Conclusion & Recommendation

The sub-projects implemented so far have reflected some-way the other disadvantages. The springs cleaned and fenced are tending to dry after some expenses incurred; a well is sometimes found to have been dug deep and have ended with little or no water; a river is sometimes found very far away from a school and the community; and the development of a roof catchment of rain water is also found to have served more the urban population than rural ones. Hence, the project should concentrate more on the development of long lasting and sufficant quantity of water for the rural population and for those who do not have the privilege of getting clean and healthy water.

The project must entertain more activities for conserving water and properly utilizing the supply for better production and longer consumption. For this simple Reservoirs such as soil dams, etc....

Soil Dam Building

a) Simple techniques of building a soil dam across a dry river

b) Advantages:

- The cost for soil dam building is comparatively small sufficient and long lasting water for domestic use can be available
- Fisheries can be conducted around the schools.
- Through irrigation system simple morticulture can be done in and around the schools.

c) Disadvantages

- Stagnant water and its effect for the multiplication of harmful insects should be considered within the activity
- It should also be encountered these water bodies are to be dangerous for children & other animals.

APPENDIX - V

WATER, SANITATION AND HEALTH EDUCATION IN KEFFA REGION

By: Asnake G/Giorgis
RMOH, Keffa Region

1. INTRODUCTION

Health which had an obscure or vague meaning in this country in the past regime, gained its proper meaning after the bitter struglle of the masses and after the Ethiopian Popular Revolution.

"Health For All By The Year 2000", which sounds nice, is rather a decisive statement. The idea had been there since the foundation of WHO but there had not been a time limit, and it was meant for all people indiscriminately; but the third world countries did not experience this in reality.

"Health For All By The Year 2000" means appropriate health facilities, pure and ample water, proper refuse pits, personal hygiene, a balanced diet, proper excreta disposal, proper housing, better farming methods, extended immunisation programmes, proper health delivery system, adequate money (budget) and efficient and well qualified health manpower. To meet all these requirements, the masses, governmental and other agencies should put emphasis on the health care system.

2. WATER, SANITATION AND HEALTH EDUCATION, KEFFA REGION

Three years after the revolution, the Regional Health Department, Keffa, decided to put much effort on the development of pure water, sanitation and health education. The peasants who are the majority of the population (85% of the whole population) have faced a lot of health problems for years. Health facilities were built for the urban dwellers who are only 15% of the population in the past. To improve the health of the people, we have to know the basic health problems. Most of the diseases seen in our health facilities are commuicable; intestinal parasites, infection of the skin gastroentrities, eye diseases, etc., which can easily be erradicated by improving the water and sanitation. Some diseases like typhus and relapsing fever which are indirectly caused by lack of water and health education, are directly responsible for the loss of many lives in the villages and suburbs.

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3. STRATEGIES AND PROCESSING

(a) The awareness of the problem by all health personnel was the most important.

(b) The contact between health personnel and administration was developed.

(c) Contact between health workers and farmers aa association had to be started.

(d) Selection of the health workers from farmers associations was introduced.

(e) The goodwill of the farmers to discuss the problem and the understanding developed in them was very essential.

The Regional Health Department understood earlier that the health of the people could not improve unless the responsibility was given to the people themselves. So training of peasant health workers was found to be the only solution. The training was meant only in environmental health, water, sanitation, housing, nutrition, epidemic reporting, etc. at the beginning.

A 15-day training was given to 97 young farmers who were selected from different farmers' associations in a woreda. The trained farmers, during their stay in their training centre, were paid by their farmers' associations. When these trainees went back to their respective villages, unexpected results were seen; so, we started in four of the awrajas. Gradually, our projects started to be popular among the peasants, more and more farmers' associations were asking for the training programmes to continue.

4. NEW HEALTH DEVELOPMENT

The Ministry of Health launched the Primary Health Care programme in 1979 which became a component of our programme. Training of Health Agents and Traditional Birth ttendants was designed, which, for this region, was already facilitated because we had not to go to select new people but to select the best ones from the already health-oriented young farmers. The TBA's were already registtered by the sanitary workers, so we continued with the training. To date we have 1400 Sanitary Health Workers, 208 Health Agents and 436 TBA's.

Results Achieved To-Date

Pit latrines constructed	109,720
Springs (water) cleaned and fenced	24,115
Springs protected with cement	46
Houses improved	2,369
Refuse pits dug	83,923
Water wells dug	1,925
Protected fire places	2,821
Epidemic calls	607
Number of people given (health education)	372,541

As mentioned earlier unless, from the planning to implementation the responsibilities are given to the people and continuous follow-up made, no results can be achieved or expected. In some of the areas, very successful results were seen whereas in others there were failures, but no serious failures were experienced.

To Show Or Cite Some Successful Areas

The water protection in and around Agro town is still a very successful one. Some of the reasons are:

(a) The plan was from grass root level to the Regional Health Department (RHD).

(b) It was the priority of the people.

(c) The health workers and other government agencies believed in it and worked together.

(d) The area was divided into two zones and managed by two sanitarians.

(e) People had the money to buy cement, iron bars and pipes.

(f) There were several visits from within the country and from abroad.

(g) The health centre had money and vehicles for their field programme.

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Failures Experienced

Some examples and reasons can be given with reference to pit latrines construction and health education.

(a) The pit latrines constructed were not built of concrete.

(b) The super-structures were made of sticks and grass roof which in most cases happen to get ruined and deteriorated.

(c) Health education and practice did not match in some areas.

(d) Lack of materials such as cement, iron bars, corrugated iron sheets.

(e) Lack of money in the health stations for regular visits.

(f) Lack of vehicles or mules at the health station level.

(g) Lack of integrated work especially with Water Resources and Ministry of Agriculture (special attention is paid this time both by the Regional Water Resources and our office to work together, which in the near future will be fruitful).

(h) Transfer of health workers and administrators from their areas (new people coming in and as a result projects get delayed or do not function).

The use of pure and ample water in association with sanitation, we believe, is the first and the real solution to control most of the communicable diseases, because directly or indirectly, the ten top diseases seen in this region are water borne or associated with lack of sanitation and health education (see table next page). Although some materials and money are lacking to support the rural people, we are able to make them aware of the health problem in and around them. Health concept awareness and health consciousness, we think, are the most important goals we should aim at.

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DISEASE PATTERNS FOR CONSECUTIVE THREE YEARS

KEFFA REGION - THE TEN TOP DISEASES

NO.	1978-79	1979-80	1980-81
1	Helmenthiasis	Helmenthiasis	Helmenthiasis
2	Infection of the skin	Respiratory Infection	Respiratory Infection
3.	Gastro-enteritis	Gastro-enteritis colitis	Rheumatism
4.	Rheumatism	Rheumatism	Infection of skin
5.	Respiratory Infection	Gastritis and Dudoentis	Gastro-entritis
6.	Gastritis and Duodenitis	Infection of skin and sub-cutaneous tissue	All eye diseases
7.	Eye Infection	Malaria	Malaria
8.	Pneumonia	All eye diseases	Gastritis and Duodentis
9.	Malaria	V.D.	V.D.
10.	Amebiasis	Other diseases the digestive system	Other diseases the digestive system

5. PROBLEMS IN PLANNING AND IMPLEMENTING SANITATION AND HEALTH EDUCATION

5.1 (a) Lack of planning with people.

(b) Lack of integrated planning among the concerned sector.

(c) Little or no knowledge of the concerned authorities regarding health and as a result health being not a priority in the planning process.

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(d) No integral planning in different sectors, resulting in duplication of work and misunderstanding.

(e) No incentive for the professionals, resulting in frustration.

5.2 Constraints:

(a) Lack of inter-ministerial integration.

(b) Inter-ministerial differences in budgeting.

(c) The low salaries of health workers.

(d) Inadequate vehicles for active health centres.

(e) Manpower shortage.

(f) Lack of priority for health in administrative bodies.

5.3 Sectoral Integration

Water + Agriculture + Communication----Road, Air
/---Personal + Education + Administration
+ Etc. = Health = Socio-Economic & Political well-being.

Lack of Integrated Work

(Water) (Agriculture) (Communication) (Education) (Administration) Etc. = No.

Health = Poor Socio-Economic and Political Result.

/...

6. RECOMMENDATIONS AND SUGGESTIONS FOR PLANNING AND PROGRAMMING OF SANITATION, WATER AND HEALTH EDUCATION

6.1 (a) Concerned ministries should have integrated programmes.

(b) Avoid duplication of projects as much as possible.

(c) All concerned personalities plan with the people at the grass-root level.

(d) The wide gap in budgeting (differences) should be narrowed (adequate budgeting).

(e) Trained manpower, equipment, and reasonable pay for health workers are needed.

(f) Top officials should be concerned and pay attention to "Health For All By The Year 2000" and the "Water Decade".

(g) WHO and UNICEF should have good monitoring and evaluation system in their expenditures in all sectors.

The year "2000" is getting nearer and let's not hope for the year 3000; it will be too far to reach!

6.2 The above seven points are just to give clues from our experience but there will be a lot of other points to be mentioned. This seminar, we hope, should enable us to understand the problems through field visits.

"HEALTH FOR ALL BY THE YEAR 2000" BY THE PEOPLE!!

APPENDIX - VI

SHOA INTEGRATED WATER SUPPLY PROJECT

By: R. Padmini

Based on Sehlewongel's Report on "Multi-Sectoral Baseline Study on Water, Health, Sanitation and Education

SHOA INTEGRATED WATER SUPPLY PROJECT

1. UNICEF support for water supply schemes in Ethiopia originated in 1975 in response to emergency needs created by severe drought: the urgent priority was to provide water for survival. The chronic water shortage of the rural areas, however, led to the extension of the emergency programme into a regular programme for water resources development in co-operation with the Ethiopian Water Works Construction Authority (EWWCA) recently constituted into a Commission with enhanced powers and resources.

2. In the early projects which were designed primarily for the technical task of urgently providing water, few opportunities for community participation existed. Later, communities became involved through their contribution of labour with various schemes, particularly well digging and spring development. More recently, initiatives of EWWCA offered prospects of more active community participation. For example, it has been decided that water committees will be established comprised of representative of the community and various government agencies.

3. There has been slower progress in integrating sanitation in the water supplies. Moreover, the potential for using water as an entry point for other community development efforts has so far remained virtually unexplored. Hence, there is a great need for attempting some specific initiatives with respect to these aspects. One such attempt is described below:

4. Genesis of the Project

UNICEF assistance for water supply schemes in drought-stricken pockets in the Shoa, Arssi and Eastern Wellega which together constitute central region for the EWWCA was requested in mid-1981. This was seen as an excellent opportunity to attempt community development on the convergence of various programme components starting with sanitation and health education which might later evolve into a basic services strategy covering various aspects of children's needs.

5. The beginning of the project was a series of meetings between the representatives of ministries of health, education and agriculture (Home Economics) with UNICEF in order to initiate the project and the co-ordinated approach required for it. The EEC funded water education project was cited as a positive precedent for such co-operation. However, the co-operation in that project was of an ad hoc nature whereas it was now proposed to be systematised as a basic component of this project.

6. It was initially agreed that the project would be confined to Shoa. The locations within Shoa which offered the best opportunities for a co-ordinating approach were short-listed. The co-ordinating group had a field visit in Shoa and discussions with the awraja, wereda and peasant association representatives. This led to a general understanding that water was indeed a felt need (it was 2 or 3 hours walking distance from most households). The community was willing to help dig the well and manage its operation. It was suggested that a committee at the peasant association level would be formed to help co-ordinate the water supply activities and other development activities. Students and teachers participating in the literacy campaign took part in this discussion and were asked to help motivate and educate the community.

7. A Survey as a Multi-Purpose Tool

A survey had been seen as an essential preliminary to this project. Its purpose was to establish baseline data for both programming and future evaluation as well as to help involve and motivate the community and local level officials. It could also help in identifying entry points for integrated services. The survey started within two months of the initial discussions on this project.

8. Highlights of the Study Report

8.1 The findings of the study generally reflect the condition of rural communities in Ethiopia. The results are fairly uniform and comparable amongst the ten sites with the exception of Chefe Ol Kebele, the Wereda town of Gembechu.

It is quite clear that most of the study sites have no ready and convenient access to schools, health facilities and improved water supply points. In addition, communication with the rest of the country is limited to dry weather roads. There are no postal and telephone links. The major economic activities are farming, cattle raising and marketing.

The communities are organised into women and youth associations in addition to peasant associations. These mass organisations link to the central government through hierarchies at the wereda, provincial and regional levels. The organisations provide ready entry points for the mobilisation of the communities into common ventures.

In a previous report on 'Evaluation of Rural Women Services Project (ADD)' (Sablewongel Yeshewaleul, 1980), the following was noted:

> "It is clear that the rural women are being organised and mobilised to improve the quality of their life. The widespread presence of women's associations throughout the study area is a clear evidence... The sole contact and main organisers of the rural women so far are the ADD home agents, and they are greatly appreciated by the rural women."

This survey again confirmed that home economics programmes do reach some of the women in the study sites but the impact on home life was not impressive and indeed minimal. The home agents are represented at the wereda level and the extent of coverage and limited supervisory services given to the peasant women leaders have been the limiting factors.

One of the most impressive recent development programmes that has succeeded to reach the study sites is the National Literacy Campaign. Its success is undoubtedly related to the organisation of the population into socio-political groups that provide the framework by which the rural population become readily accessible to development efforts.

The percent of the population under five years is very high and indicates the burden to the communities as this age group is the one likely to be affected by low socio-economic status, illiteracy, lack of health services, poor nutritional practices and lack of safe and adequate water supply. It is also well recognised that both infant and early childhood mortality rates reflect these factors, but this study did not attempt to collect such information in depth.

There is a wide variation in illiteracy rate. Communities with functional and active national literacy centres have achieved good results, and the figures indicate a direct

correlation with the existence of such centres. As stated earlier, the National Literacy Campaign is one of the few development efforts that has penetrated the rural sector. Availability of schools at some distance from the communities does not appear to influence the illiteracy rate.

The state of water supply is grossly unsatisfactory with absence of improved water supply in most of the sites. The proportion of households living within 500 meters or 30 minutes walk of adequate supply of safe water in rural areas has been suggested as an indicator of the extent of availability of water supply (Ethiopian Water Resources Authority, 1980). In this study hardly any of the sites can boast of having water accessible at such a distance even ignoring the quality of the water. Women have to travel great distances and spend considerable portion of their time transporting unsafe water. The per capita consumption of water is very low and far from a minimum of 20 litres that has been suggested for rural communities (White et al, 1972).

The knowledge, attitude and practices in health, sanitation and in personal hygiene reflect the absence of impact of health education and services on the communities. There are no community health agents in any of the sites except Chefe Ol Kebele and no evidence of attempts to institute primary health care programmes in the study sites.

8.2 Accumulated experience from several village/ rural water improvement projects have shown that successful implementation requires a number of pre-requisites.

1) Appropriate national and local infrastructures to coordinate activities of agencies involved in supplying water and development of an effective organisational structure reflecting the practical and economic realities of the country.

2) Healthy financing and continued higher level support, including financial inputs, supervision, training of villagers to maintain the water points.

3) Real community involvement not only in implementation but also in the planning and design stages. This assumes the need to raise rural organisations so that members possess opportunity to democratically participate

and form committees, to raise motivational levels, provide funds for maintenance and upkeep and to plan further development programmes.

4) Need for placing water programmes within the context of integrated development and educational programmes for changing sanitation and hygiene attitudes and practices in the home, and also realisation of the importance of contributions of supportive economic and other social inputs by other sectors.

5) Linkages of water supply and sanitation to primary health care systems.

8.3 There is an increasing recognition by development workers that improvement in the life of rural communities cannot be obtained by launching isolated programmes. Isolated projects in rural communities will rarely bring about significant economic benefits and betterment of the quality of life. The assumption that certain projects (e.g. water) will act as a kind of development 'take-off' points and that spin-off benefits will automatically accrue in other sectors has not been proved by experience. It is dangerous to identify water supply, health, etc., as a lead sector in rural development from which development of other sectors will automatically follow.

It is best to provide development programmes as a 'package' in which education, health, sanitation, nutrition, water supply and improved farming methods become the key components. The package should be provided in a coordinated manner. These inputs and additionally political commitment to the rural masses are essential for the continued economic and social development of rural communities. They will inevitably require continuing government support, if they are to be realised.

This multisectoral study of selected communities provides the baseline data to follow the effect of such a package development programme. The collection of data before and after the launching of the package programme in project and control sites will provide the necessary ingredients for evaluation. However, collection of data for monitoring and evaluation on a longitudinal basis will be even more useful.

During the period of the survey, it was found out that water improvement programmes have already started in some sites. On the other hand, the other inputs in health, nutrition, sanitation, education, etc., have not as yet started. It is essential that these inputs be provided together with the water improvement projects. The conceptual evolution of the integrated basic services approach that link socio-economic development such as health, nutrition, sanitation, agriculture, water supply, and community participation may provide the entry point for coordination of the package programme.

8.4 Specifically the following warrant immediate implementation to help in the realisation of the integrated package project:

1) As a basic building block for development effort and because of the already existing enthusiasm and felt need of the communities for improved water supply, all efforts currently undertaken by EWWCA to improve water supply should be strongly supported. Constructions that have already been initiated (or discontinued for lack of materials or funds, such as in Chefe Donsa) should be completed as soon as possible.

2) In view of the fact that health and sanitation inputs are essential components that bring out the benefits of water supply, primary health care programmes should be started in the project sites. To this end community health agents and traditional birth attendants from amongst the members of the project sites should be trained and assume practice.

3) National literacy centres should be established in the project sites that do not have them and strengthened in those that are not functioning optimally.

4) The leadership training programme for women should be intensified. The programme should be conducted for a 'critical core group' (at least 3-5) from each women's association, who will assist the home agents. The 'critical core group' approach enhances

team work, as well as facilitates respect and acceptability by the rest of the association members. (As per recommendation in 'Evaluation of Rural Women Service Project', 1980.)

5) UNICEF may undertake the responsibility to create a mechanism for the coordination of the implementation of the integrated package project and for future monitoring and evaluation.

9. Conclusion

It is generally acknowledged that the provision of safe water supply in Ethiopia, now reaching only 4% of the rural population, falls desperately short of national needs, both qualitatively and quantitatively. Lack of adequate technical expertise, and multi-sectoral co-ordination have been identified among the main constraints. Positive community involvement, apart from the specific task of providing labour for construction, has also still to develop; failure, for example, to involve women as the main users of water either in the design or maintenance of water schemes is an obvious shortcoming. In this context, current proposals relating to the central region project are significant. The representatives of the concerned government ministries have taken it as a 'pilot' case to improve water supply in a small number of villages and have worked with UNICEF programme staff in developing the general approach. The details of activities to be undertaken involve the regional and awraja officials along with the community's inputs. The implementation will require the co-operation of communities and awraja officials except for technical support for water installations: this will come from the regional office, which remains a focal point for programme planning and implementation support because of the technical capacity of the government structure at that level. But a clear organisational framework has yet to emerge. The ad hoc initiative taken to link water supplies with other development activities can continue on a regular basis and spread within the region or in other regions only if an organisational arrangement for collaboration emerges involving the concerned government agencies at the regional and sub-regional levels with associations such as the farmers' and the women's providing the base of such a structure. It is possible and it is hoped that such an organisational structure can emerge once the efficacy of the linkage begins to be demonstrated through positive results in the communities.

APPENDIX - VII

WATER, SANITATION AND HEALTH EDUCATION SITUATION IN ZAMBIA

By: Dr. J. Ngombe, MO,
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Demonstration Zone,
Zambia

1.0 INTRODUCTION

1.1 Zambia has an areas of some 753,000 square kilometers and a population estimated in 1981 of 5.1 million with 59% of her population living in rural areas. 72% of the pop. have access to water supply and 66% have access to adequate sanitation facilities. The country is well endowed with water, having a large potential for the development of river basin.

1.2 The Department of Water Affairs in the Ministry of Agriculture and Water Development is responsible for all aspects of water resource study, conservation, planning and utilisation as well as the provision of water supply to most rural areas.

1.3 The operation and maintenance of public water supply schemes in townships areas are in the hands of Government agencies such as the Provincial and Local Government Administration in the Office of the Prime Minister (rural councils, Township Councils, Municipal and City Councils) Department of Water Affairs and the Buildings Departments.

1.4 Sanitation activities remain individual responsibility in the rural areas and peri-urban areas except in rural townships where sanitation schemes are planned and executed by the Buildings Department of the Ministry of Works and Supply depending on availability of funds. Nearly all urban centres have water-borne sewerage systems run by the City and Municipal Councils.

1.5 The Ministry of Health is responsible for quality control of water supply, environmental health and housing and uses its influence on the entire communities to provide water supply and proper latrines wherever and whenever these services are lacking.

2.0 ENVIRONMENTAL HEALTH FACILITIES

2.1 Zambia is well endowed with water resources both from surface and underground sources, but has not been fully explored. Planning, administration, operation and maintenance of water supply facilities throughout the country are in the hands of Government agencies. Department of Water Affairs, Rural and Municipal Councils.

2.2 Rural and Municipal authorities are responsible for sewerage/water-borne systems in their own areas. The Buildings Branch of the Ministry of Works and Supply operates and maintains Government institutional systems such as schools, hospitals and other Government housing estates.

2.3 There is no agency in charge of the overall planning and programming for waste disposal including sanitation in the rural areas. This therefore remains as an individual responsibility whose all guidance is requirement of Public Health Act that one should have a latrine for each organised household. The Ministry of Health uses its influence on the communities as a whole to provide latrines.

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3.0 ENVIRONMENTAL HEALTH SERVICES

3.1 The environmental health activities in Zambia cover a variety of jobs such as inspection of villages, houses, latrines, unprotected water supply sources, markets, bazaars, bars, tea and eating places, butcheries, dairies, compost pit etc.

3.2 The Health Assistant is the first officer at the grassroot level in the field and he has his area or location where he works which most of time covers the rural health centre or clinic catchment area.

3.3 He is regularly advised by the District Health Inspector who is supervised by the District Medical Officer.

3.4 The Provincial Health Inspector supervises Provincial environmental health activities which he reports to the Provincial Medical Officer.

3.5 At National level the Chief Health Inspector co-ordinates the national environmental health programme which he reports to the Director of Medical Services through the Assistant Director of Medical Services (Preventive Medicine).

4.0 INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE IN ZAMBIA

Zambia as a developing country and member of United Nations had welcomed the Mar del Plata Declaration.

It is an established fact that the lack of safe and sufficient water supply together with poor sanitation are contributing factors to disease. It is also estimated that majority of all illness in the developing countries is linked to water.

Water supply and sanitation as an essential health measure particularly in respect to rural and urban fringe populations, were stressed by the recommendations of HABITAT - the United Nations Conference on Human Settlements (Vancouver, June, 1976) and the United Nations Water Conference (Mar del Plata March, 1977).

The International Conference on Primary Health Care (Alma-Ata, September, 1978) recognised that water supply and sanitation are an integral part of Primary Health Care and clarified the country and Global approaches required, as well as the implications for both countries and external support agencies of the implementation of such approaches.

The World Health Organization on her own part has also actively mapped out programme of activities to be carried out before and during the IDWSSD. To this end the WHO African Region Office has established the Intercountry Project on Basis sanitary measures (ICP/BSM/002) in order to increase the effectiveness of the major programme on Promotion of Environmental Health and to develop technical co-operation on a sub-regional basis.

WHO-ICP/BSM/002 Project

The Project covers the whole of the WHO African Region and follows the limits of the three sub-regional TCDC component areas referred to as Sub Region I, Sub-Region II and Sub-Region III.

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Zambia is located in Sub-region III and other countries in this Sub-region are Angola, Botswana, Comores, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Reunion, Sao Tome and Principe Seychelles, Swaziland, Tanzania and Zimbabwe.

Dr. J.W. Kwamina Duncan Project Manager in charge of Sub-region III countries has his office located in the Water Affairs Department of the Ministry of Agriculture and Water Development in Lusaka Zambia.

The Director-General for the National Commission for Development Planning formally announced the formation of the National Action Committee (NAC) for co-ordinating IDWSSD programmes in April 1980.

At a joint meeting of NAC, U.N. Agencies and Donor agencies held in July, 1980 assessment of progress of IDWSSD programmes, shortcoming priotity ratings, new ideas and development were made; and agreement was reached for the preparation of Government Declaration of Intent for launching the IDWSSD in the country on 10th November 1980.

The NAC had executed with assistance of WHO Cooperative Programmes (SIDA, World Bank, UNDP) the activities of rural water supply and sanitation in the country: Decade Planning exercise, Terms of reference for the NAC, Project Adviser on Decade Activities, Implementation and Co-ordination of rural Water supply, hand pumps field testing (supported also by NORAD).

The Department of Water Affairs of the Ministry of Agriculture and Water Development the Technical Secretary to the NAC had hosted the two WHO/AFRO projects. (ICP/BSM/002 and ZAM/BSM/001) and the WHO/SIDA Co-operative Project for Technical Advisory Services in planning for the International Drinking Water Supply and Sanitation Decade. (INP/BSM/046) based in Lusaka, Zambia since April 1980. Dr. G.V.V. Rao is the Decade Planner.

5. MWACHISOMPOLA HEALTH DEMONSTRATION ZONE PROJECT (MHDZ/IDWSSD/ZAM/01/001

Mwachisompola Health Demonstration Zone (MHDZ) is a National Pilot Project of the Ministry of Health intended to spearhead all national health programmes. It covers an areas of 5,500 square kilometres and an estimated population of 80,000 in 1981 living in 444 villages made up 14,527 households.

In 1981, 32 villages out 444 villages were surveyed to assess the health situation on various aspects including environmental health and water supply with view to improve each sector.

In 32 surveyed villages where 5739 people live in 1047 households using 593 wells 508 of which were unprotected, 236 pit latrines and 180 refuse pits.

This meant 85.6% of wells were un-protected, 17.1% of households had refuse pit 22.54% of household had a pit latrine.

Targets and strategies were set at one protected well with handpump or bucket serving 20 households (110 persons) one pit latrine serving 2 households (11 persons) and 2 elevated refuse depots serving 5 household (28 persons).

With assistance from WHO Experts in Zambia a Project Data Sheet was prepared and approved by National Authority (Annex 1). The Project is aimed at spearheading the Decade goals through active community participation.

During the same year (1981) in these selected villages health personnel went explaining and discussing with the local health committees and people how to tackle the Water supply and sanitation problems and by the end of the year 312 pit latrines were in use 129 pit latrines were under construction. 73 of them had been dug but not completed. 293 refuse pits were in use. The protections of wells were set for 1982 programme at the request of the community concerned. The above mentioned results were achieved through Health Education and Community participation without any external financial support.

6.0 CONCLUSIONS:

Despite the optimistic figures the safe water supply and sanitation are matter of concern and efforts to mobilise the rural and urban fringe populations need to be intensified if the Decade goals have to be attained.

Training programme for health and Water Departments personnel should be conducted, stressing on appropriate technology for sanitation facilities, standardised water supply and sanitation policies for rural and urban fringe population, health education activities to solicite community awareness, involvement and participation in environmental health activities.

External inputs are crucial to the success of the Decade targets Technical and Financial support from U.N. and bilateral co-operation agencies will be needed throughout the Decade, to attain the assigned goals.

Dr. J. L.G. Ngombe
Acting Project Director
Health Demonstration Zone

ANNEX I

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

PROJECT DATA SHEET

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1. COUNTRY: ZAMBIA 2. No: 01
WHO/AFRO SUB-REGION III

3. TITLE: IMPLEMENTATION OF DEMONSTRATION PROJECT FOR WATER SUPPLY AND SANITATION IN MWACHISOMPOLA HEALTH DEMONSTRATION ZONE, KABWE RURAL

4. SCOPE:
To Support constructions of limited number of protected wells/hand pumps pit latrines and elevated refuse depots within the framework of a broad programme of environmental health in rural Kabwe.

The project would develop, appropriate technologies for sanitation acilities; stardardized water supply and sanitation policies for the rural areas; and health education activity to solicite community awareness involvement and participation in environmental health programmes.

It is expected that approximately one year following the initiation of the project, Government will have for its consideration the findings and recommendations for application to other rural areas in the country.

5. BACKGROUND:

Mwachisompola Health Demonstration Zone (MHDZ) is the national Pilot project of the Ministry of Health. It covers an area of 5,500 square kilometers with an estimated population of 80,000 living in 444 villages made up of 14,527 households. In 1981 a village survey activity was carried out in 36 villages selected at random and the statistics of the environmental health infrastructure facilities gave the following figures 508 unprotected wells, 236 pit latrines and 180 refuse disposal pits serving 1047 households (5,739 persons). It was concluded that the environmental health facilities available to the entire community of MHDZ was poor. Desirable targets were therefore set at one protected well with handpump/bucket serving 20 households (110 persons); one pit latrine serving two households (11 persons); and two elevated refuse depots serving 5 households (28 persons). There are no demonstration projects for rural water supply and sanitation sector in Zambia, for which a large degree of community participation is envisaged, and MHDZ project would go a long way in this respect.

6. RESPONSIBLE GOVERNMENT AGENCY:
Mwachisompola Health Demonstration Zone
Ministry of Health
Private Bag
Lusaka, Zambia

7. INSTITUTIONAL SUPPORT:

The Mwachisompola Health Demonstration Zone is staffed with Public Health doctors, health inspectors and health iassistants. Mukuni Rural Council, Department of Water Affairs and Ministry of Works and Supply have sections within the MHDZ and would participate in the project. Frequent contacts with WHO experts in environmental health working in Zambia have been established and backstopping can be expected.

8. DURATION: 12 months

9. STARTING DATE: 01 June 1982

10. ESTIMATED COST: US$ 160,000

11. GOVERNMENT INPUTS:

(i) Personnel: Professional $1000/m
others $300/m
- Managerial support 3 months
- Professional officers 6 months
- Others (Drilling technicians, Driver, Rigman, mason, 2 labourers) 72 manmonths

(ii) Equipment & Supplies:
Office Accommodation
Local travels/transport

(iii) Funds: Personnel= US$ 30,600
= US$ 9,400
US$ 40,000

12. EXTERNAL INPUTS

(i) Personnel: (Professional US$ 7000/m)
- 1 Sanitarian (STC) 6 months

(ii) Equipment and Supplies:
- Health education films, materials$ 2,000
- Construction materials for (wells 100 § $300 pitlatrines 200 § $100 refuse depot 100 at $50)$55,000
- 1 pickup landrover, fuel and mainteriance $15,000
- Scholarship/exchange visits $ 6,000

(iii) Funds: Personnel US$ 42,000
Equipment & supplies $ 78,000
US$ 120,000

13. SECTOR DEVELOPMENT PERFORMANCE: Full Government support to the sector is demonstrated by high priority given to sector development projects in the 3rd National Dev. Plan 1979-83. The project will constitute the first of its kind in the rural water supply and sanitation sector emphasizing additionally a revolving fund through community participation and sales of concrete slabs and handpumps supplies initially by the project from external funds.

14. OUTPUTS

- Directo assistance to MHDZ and the entire population of rural Kabwe.
- Development of rural village level committees for self-help mobilization in the construction of environmental health facilities supported by health education activity.
- Preparation of phased plans to ensure full coverage of thepopulation of MHDZ with water supply and sanitation by 1990
- On site training of health assistants and others including scholarships and exchange visits
- Development of estandardized sector policies for rural areas in Zambia.

15. GOVERNMENT PRIORITY & COMMITMENT:

The project comes as a support to the National programmes of water supply and sanitation reflected in the TNDP (1979-83). Government attaches high priority to the project in view of the existing poor environmental health in the rural areas, and its interest in immediate measures to solve water supply and sanitation problems in these areas.

16. EXPECTED BENEFITS

Through community involvement and participation village level comittees would be set up to mobilize available resources for self help construction of environmental health facilities which will ensure total coverage in the MHDZ by the end of the IDWSSD (1990). Experience from a revolving fund generated from sales of concrete slabs, handpumps etc would be applied to other areas. Plans and other projects findings would contribute substantially to the achievement of Decade goals for the rural areas in Zambia

17. PREPARED BY: Dr. Jerome E.G. Ngombe, MD, DTM &H, DPH (AiX - Marseilles, France)
Project Director a.i
Mwachisompola Health Demonstration Zone
PB Lusaka

INTERNATIONAL DRINKING WATER SUPPLY AND SANITATION DECADE

1. COUNTRY: ZAMBIA: WHO/AFRO SUB-REGION III

2. NO- 01

3. TITLE: IMPLEMENTATION OF DEMONSTRATION PROJECT FOR WATER SUPPLY AND SANITATION IN MWACHISOMPOLA HEALTH DEMONSTRATION ZONE, KABWE RURAL.

4. PLAN OF ACTIVITIES

FEBRUARY 1982: Circulation of the Project Data Sheet to United Nations Agencies, and bilateral agencies

MARCH-MAY 1982:

a. Selection of Auxilary personnel
   2 Lay Vaccinators Artisans/technicians
   2 Multipurpose labourers

b. Develop training arrangements and schedules with WHO experts, Water Affairs, Appropriate Technology, Advisory Unit (UNZA), UNICEF, Mukuni Rural Council etc.

c. design and listing of various items and materials for conducting re-orientation exercises for Health assistants and others.

d. Requests for equipment for:
   8 handpumps
   8 dug wells constructions
   8 pit latrines constructions
   8 refuse pits constructions

e. Selection of 14-21 villages for the launching of the programme.

JUNE 1982: Training programme in Appropriate Technologies regarding concrete slabs, protection of wells and refuse pits for all health assistants and others

SEPTEMBER 1982-MAY 1982 Demonstration of technologies on pit latrines protection of wells etc. in some selected areas: Churches, public institutions one per Rural Health Centre.

OCTOBER 1982: Launch of the Programme in 21 Villages.

N.B The availability of funds and equipment is crucial to the launching of this ambitious programme

IDWSSD - ZAMBIA PROJECT NO. 01

IMPLEMENTATION OF DEMONSTRATION PROJECT FOR WATER SUPPLY AND SANITATION IN MWACHISOMPOLA HEALTH DEMONSTRATION ZONE, KABWE RURAL

EVENTS	PLAN OF WORK FOR PREPARATORY PHASE - 1982											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
1. Circulation of Project Data Sheets and identification of Donors												
2. Selection of personnel; Development of training arrangements and schedules; equipment requisition; and selection of villages for the project												
3. Mounting of Training programmes												
4. Demonstration of constructional aspects of the EH facilities (dug wells, pit latrine, refuse depots)												
5. Commencement of actual project												

MHDZ/IDWSSD/ZAM/01

8 February 1982

APPENDIX - VIII

QUESTIONS FOR WORKING GROUPS

1. How can the health benefits of water and sanitation projects be accelerated? What examples do we have of successful combinations of the provision of water with other health related activities?

2. Is sanitation a felt community need? If not, how to promote the awareness of decision makers and the community of the benefits of improved sanitation and hygiene?

3. How do you interpret the term sanitation? What are the major activities which need be developed in sanitation? How are they to be organised and managed? What are the groups that should be involved? How to bring about behavioural changes?

4. What communications media and approaches are being used in water and sanitation? Which ones are effective?

5. What indicators will best serve to help monitor and evaluate water and sanitation schemes?

6. Do we mean the same thing when we talk of community participation? State your understanding of community participation. What are the rationales for community participation in water and sanitation schemes? Do we believe in the people's ability to participate.

7. Lack of co-ordination and integration of the various agencies in water and sanitation projects has been identified as one of the main constraints. Give concrete examples, how to overcome this constraint?

8. Make suggestions of action plans to incorporate and strengthen sanitation and health education elements in current water projects, including who is to do what.

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GUIDELINES FOR FIELD TRIPS

1. Information regarding water, quality, quantity, distance, habit of drawing, handling water, housing conditions, food habit, causes of child mortality and morbidity, health conditions disease patterns, excreta and garbage disposal.

2. Traditional and cultural attitudes around water and sanitation.

3. Factors that hinder or help sanitation.

4. Methodologies that will help persuade village people to improve sanitation.

5. People's wishes and feelings towards new ideas and innovations.

6. Livestock watering - river.

7. Where animals live.

8. Animal waste disposal.

ADDITIONAL POINTS FOR FIELD TRIP

1. General layout of village topography (including sketch map).

2. Population:

   Total
   Male/Female
   Children: Young
   Infants

3. Distribution of habitations (agglomerations, dispersed, etc.)

4. Economy:

   Agricultural production + seasonal
   (types of products,
   tons/year (husbandry)
   cattle head, etc.) (forestry)

   Trade (local markets, imports)

5. Work distribution in men, women and children.

/...

6. Energy (fire-wood, access to, kerosene, etc.)

7. Present exposure to communication from outside:

   Schools
   Health Centres
   Political
   Rural Extension
   Media (radio, newspapers)
   Roads (travellers bringing news)

8. Climate:

   Rainy/dry season - when?

   Rain - how much and when?

9. Nutrition pattern:

   Staple foods
   Drinking habits
   Vegetables
   Fruits
   Breast feeding
   Weaning n

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APPENDIX - X

GROUPS FOR FIELD VISIT

Group I (Jimma Awraja)

Led by Health Officer, Jimma

Mr. Kassa Kinde	-	MOH
Mr. Gebre Meskel	-	MOH
Ms. Emebet Admassu	-	MOH
Ms. Mulu Gebre Meskel	-	MOE
Mr. Zebenigus Wuhib	-	MOE
Mr. Fisseha Ayehu	-	MOE
Mr. Sahile W/Gabir	-	MOE, Jimma
Mr. Beyene Alemu	-	EWWCA
Mr. Gideon Asfaw	-	CPSC
Mr. Efrem Dehne	-	EWWCA
Mr. Workineh Kassay	-	NCC
Mr. Negash	-	EWWCA, Jimma
Mr. Bekele Meshesha	-	CPSC, Jimma
Mr. Tekle Fiji	-	REYA, "
Mr. Abdu Semed	-	S.A., "
Dr. Nyi Nyi	-	UNICEF
Mr. Samuel Olana	-	UNICEF
Mr. F. Kisendi	-	"
Mr. I. Mirchandani	-	"
Dr. R. Padmini	-	"
Mr. J. Ngombe	-	Zambia

Group II (Limmu Awraja)

Led by Mr. Asnake - MOH, Jimma

Ms. Dejyitnu Gebru	-	MOH
Mr. Tamiru Debiya	-	MOH
Mr. Mulugeta Kechema	-	MOE
St. Kelemework Demissie	-	MOE
Mr. Muluneh Emeru	-	EWWCA
Mr. Berhane Worku	-	"
Mr. Elias G/Egziabher	-	CPSC
Mr. Getachew Molla	-	RRC
Ms. Adisalem Deressa	-	Home Economist, Jimmma
Mr. Biya Abamecha	-	REPA, Jimma
Dr. Amare Beyene	-	MOA
Ms. Yansheng Ma	-	UNICEF
Mr. M. Beyer	-	UNICEF
Ms. Bimba Kebede	-	UNICEF
Ms. Aster Kebede	-	UNICEF
Mr. P. Lowes	-	UNDP
Mr. B.H. Michelo	-	Zambia
Dr. C.T. Lo	-	WHO

APPENDIX - XI

NOTES ON FIELD TRIPS

GROUP A: NATIONAL PLAN

COMPONENTS

1. Objective, strategy
2. Basic Data
3. Target - coverage
   - Distribution
4. Requirements:
   - Material
   - Financial
   - Manpower
5. Resources:
   - Government
   - Community
   - Foreign
6. Sectoral Linkage
   - Water
     - Quantity required
     - Usage - drinking, food preparation
     - Personal hygiene
     - Production and irrigation animals
   - Health
     - Manpower development
     - Drugs
     -
     - Immunisation - Health Education
   - Sanitation
   - Education
   - Nutrition

OTHERS (Fuel, Transport, Communication)

7. Monitoring
8. Evaluation

FIELD OBSERVATIONS

1. Real community needs not assessed.
2. Community participation
3. Change of attitude
4. Technicalities of pit latrines and water supplies, improved houses - evaluated
5. Inter-sectoral Co-ordinated at Regional Levels
6. Follow-up and maintenance
7. Health as a result of related services

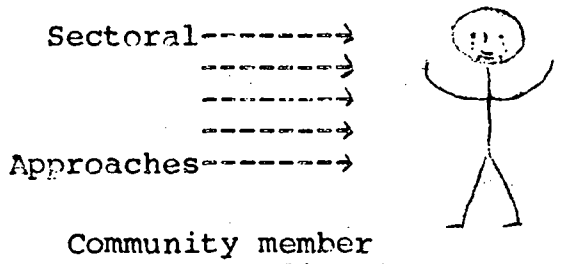
/...

GROUP B - IMPLICATIONS OF FIELD TRIP

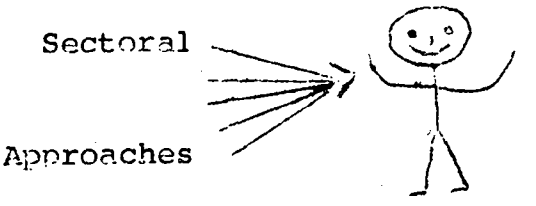
1. Choice of Appropriate Technology:
   - Spring Protection
   - Shelter (Human and Animal)
2. Relationship between CHA and HA
3. Comprehensiveness of programmes:
   - Other uses of water
   - Nutrition
4. Emphasis on Health Education:
   - Child Care
   - Bad traditional practices
   - Good timing of radio messages
   - Provision of radio sets
5. Strengthening support to the community effort

GROUP C - COMMUNITY PARTICIPATION (CP)

- CP could be confusing and is interpreted differently by members of group.
- Rationale:
  - CP is for effectiveness, low-cost and self-reliance
- Community should be involved in identification of problems, planning, implementation, monitoring and evaluation of projects.
- Professionals + Government officials should be reoriented to CP approaches and to believe in the people's ability to participate.
- For effective CP, co-ordination of sectoral departments (Inter-sectoral co-ordination) is necessary.



Community member lacks co-ordination



Community member co-ordination efforts

Project Support Communication (PSC)

- There is a need to loot at the PSC component in rural areas.
- Face-to-face communication (through CHA, TBA, women leaders, pump attendants, National Literacy campaigners, etc.
- Some communication media that could be used for water, sanitation + health education.

GROUP - C

- Radio
- Functional follow-up readers of National Literacy Campaign.
- Mobile cinemas
- Posters
- Newspapers
- Water education - primary level
- Model houses + improved stoves

- Effectiveness:
  - Face-to-face communication - most effective in changing attitudes
  - Others of marginal importance
  - For better effectiveness, CP is essential in PSC.

/...

GROUP C - FIELD VISIT - FINDINGS

1. SOCIO-ECONOMIC CONDITIONS

Agriculture

- -Single cash crop
- -Extensive animal husbandry
- -Local food production

Population

- -Predominantly Muslim

Economy

- -Relatively well-to-do

Work Distribution

- -Men/women/children

2. INFRASTRUCTURE

- -Highlands: Meadows/fields/forests.
  Average 1600 m. above sea level.
- -Dispersed hamlets with central township
- -Seasonal road
- -No electricity

3. SOCIAL SERVICES

Health

- -Station + Unit(s)

Education

- -Primary school 1-6th grade
- -Adule Education Centre

Water

- -Some protected springs
- -Single drilled well with handpump(s)

Sanitation

- -Pit latrines in many compounds

4. PROBLEMS

Agriculture/Economy

- -Varying crop and market conditions
- -Cattle disease
- -Fertiliser shortage

Food + Nutrition

-Quantity

-Quality

-Weaning and child nutrition age 0-9 years

Health

-Water-fences-related diseases

-Respiratory diseases including T.B., skin + eyes problems

-Malnutrition

-Insufficient services and medical supplies

Attitudes/Habits

-'Chat' eating habits

-Health practices related to children and infants

5. NEEDS

Agriculture/Economy

-Roads

-Transport

-Improved market conditions

Education

-Focus on attitudes: Health/Nutrition/Water Sanitation/Children/Chat

Water/Sanitation/Horticulture

-Funds

-Knowhow

-Materials

As related to Regional Plan

/...

6. INPUTS

Government Commitment - Priorities

Finances:

-Central - Regional - Communities

Human Resources

-Training

Equipment and Materials

Transport

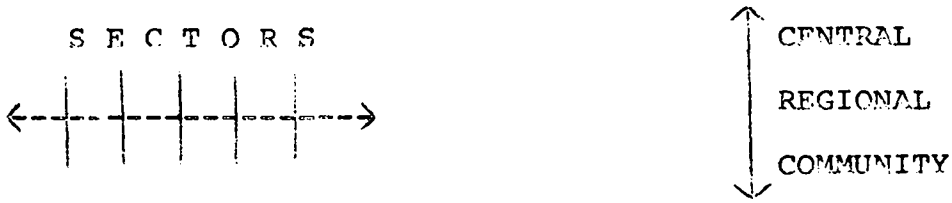
Non-Supply

-Funds for training

-Means of higher mobility for government, administration and services personnel

7. MECHANISMS

-Integration



8. FOLLOW-UP

-Monitoring, assessments, evaluations

-Feed-back to different levels

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APPENDIX - XII

WATER, SANITATION AND HEALTH EDUCATION

Final Workshop Evaluation Results

(Number of participants = 31 - number of questionnaires filled in = 29 (some left earlier))

Q. 1 Overall Reaction to the Workshop

	No. of Responses		No. of Responses
Good	25	could be better	4

Reasons (not mutually exclusive)

a. Nil	12	More specific discussion guidelines needed	2
b. Full participation	3	Need better co-ordination	1
c. Educational useful	7	Quicker session reports	1
d. Based on the need of the people	2	More time needed for action plans	1
e. Concrete subject, tangible objective	2		5
f. Participants were able to see the reality	2		
g. Objective of each session clear	1		
h. Well managed	1		
	30		

Q. 2 Most Useful Session

Session No.	No. of Responses
VIII	12
V	11
VI	9
IX & XI	8
IV	7
II, III & VII	4
All	4
XII	3
I	2
	29

Comments

a. Information gained session I and II

b. The smallness of the group made the people to participate well - session IV, VI, VIII

c. Being the effort of all participants - session XII

/...

Q. 3 Least Useful Session

REASON	SESSIONS I	II	III	V	VI	VII	XII	NIL
a. Hall noisy - message not clear	1							
b. Participants exhausted							1	
c. Not structured well					1	1		
d. Group presentation not based on topic					1			
e. Field trip & group topics not well co-ordinated						1		
f. "Good" sites chosen for field trip - care mislead people				1				
g. Some participants too shy to participate		1	1			1		
h. No reason given	1	1	1			1		
i. Nil								20
T O T A L	2	2	2	1	2	4	1	20

(Sessions IV, VIII - XI were not listed as "least useful")

/...

Q. 4 Able to Participate Fully

REASONS	SESSIONS I	II	III	IV	V	VI	VII	VIII	IX	XI	XII	NIL
a. Deals with practical problems	1											
b. Discussions were carried out topic by topic				1		1		1	1			
c. No courage to speak infront of many people												
d. Interesting topic				1								
e. First workshop experience and a bit reserved.												
f. Concerned on the subject				1								
g. Due to lack of information regarding water												
h. Very useful workshop and encourages for participation	1											
i. In "a" I found it more fruitful to gather experience				1		1		1	1			
j. Too many miscellaneous duties				1		1		1	1			
k. No reason given												18
l. Nil												1
T O T A L	2			5		3		3	3			19

Q. 5 Guidance Provided by Chairperson/Resource Person

REASONS	PLENARIES	SESSION GROUP	PLENARIES AND GROUP	
Too little		4	1	
Okay	4	1	22	
Too much	1		1	
T O T A L	5	5	24	34

Q. 6 (Workshop) Experience Useful to Participants Work

Useful - 29

Reasons	No. of Responses
a. Better understanding gained on administrative structure, problems and successes.	2
b. Helped to improve own programme, to foresee existing problem in different corners.	2
c. Helped to learn the importance of integration, data collection.	1
d. Gave opportunity to look at different project, problems and success.	1
e. Expansion of view points.	1
f. Report useful for national plan.	1
g. No reason	10
	18

Q. 7(a). Suggestion for Future Workshop Topics

	No. of Responses
a. Nutrition	5
b. Community participation (definition, strategies in social development, methodologies, and training)	4
c. Integrated Basic Services.	1
d. Project support control methodologies.	1
e. Public Health and Sanitation, School Health.	1
f. External immunisation programme.	1
g. Workshop follow-up methods.	1
h. Simple techniques to improve the life of rural people.	1
i. Objective, target and strategy of the water decade.	1
j. Other prominent problems	1
k. Nil	14
	31*

Q. 7(b). Suggestions for Future Workshops - Method/Approach

	No. of Responses
a. Less formal in field visit, one day for field visit prefer more groups for field visit.	3
b. Advance despatch of background materials.	1
c. Recommendation in writing, rather than oral.	2
d. More time for group discussion.	2

* Responses not mutually exclusive.

/...

	No. of Responses
e. More elaboration before-hand on group working methodology, and use of pads/blackboards etc.	1
f. Different sectors from the region should be involved preparing the workshop.	1
g. Objective of each session must be specific, presented at the end of morning and evening session.	1
h. Presentation of pilot study papers and field trips.	1
i. Assessment of the present services, identify weaknesses, requirements and proceed to strengthening and expansion..	1
j. Nil	17
	30*

Q. 8 Comments/Suggestions Regarding Administrative Arrangements	No. of Responses
a. Nil	8
b. Food - 1, preparation	7
c. Okay	6
d. Could be better:	
1. One type of accommodation for all participants	1
2. Early notification, despatch of objective paper, and programme	2
3. Telephone close to committee rooms	1
4. Sessions too intensive	1
5. (Mineral) water for afternoon sessions	2
6. Regional officials should be briefed on every programme	1
7. Number documents	1
8. Contact with individuals, smaller groups	1
	30*

* Responses not mutually exclusive

GLOSSARY

AEPA	-	All Ethiopia Peasants Association
CHA	-	Community Health Attendant
CIDA	-	Canadian International Development Authority
CIS	-	Corrugated Iron Sheet
COPWE	-	Commission for the Organization of the Party of the Workers of Ethiopia
CP	-	Community Participation
CPSC	-	Central Planning Supreme Council
CSTC	-	Community Skills Training Centre
DEO	-	District Education Office(r)
EEC	-	European Economic Community
EMMS	-	Educational Mass Media Services
EWWCA	-	Ethiopian Water Works Construction Authority
FRG	-	Federal Republic of Germany
GDP	-	Gross Domestic Product
HASIDA	-	Handicrafts and Small Industries Development Agency
HC	-	Health Centre
HS	-	Health Station
IWSDP	-	International Water & Sanitation Decade Plan
IDWSSD	-	International Drinking Water Supply and Sanitation Decade
L/C/D	-	Litre per Capacity per Day
MOA	-	Ministry of Agriculture
MOE	-	Ministry of Education
MOH	-	Ministry of Health
NAC	-	National Action Committee (for IDWSSD)
NCC	-	National Children's Commission
NGO	-	Non-government Organisation
NWRC	-	National Water Resources Commission
NWSP	-	National Water & Sanitation Plan
PHC	-	Primary Health Care
PSC	-	Project Support Communication
REO	-	Regional Education Office
REPA	-	Revolutionary Ethiopia Peasant Association
REWA	-	Revolutionary Ethiopia Women Association
REYA	-	Revolutionary Ethiopia Youth Association
RMOH	-	Regional Ministry of Health
RRC	-	Relief & Rehabilitation Commission
SHA	-	Sanitary Health Attendant
SIDA	-	Swedish International Development Agency
TBA	-	Traditional Birth Attendant
UD	-	Urban Development
UDA	-	Urban Development Association
UN	-	United Nations
UNICEF	-	United Nations Children's Fund
WHO	-	World Health Organization