

PN-ACB-136

Environmental Policy and Technology Project

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**NEW INDEPENDENT STATES
FIELD REPORT
Training in Health Education and
Promotion, Water and Sanitation
Kazakstan, Turkmenistan, and
Uzbekistan**

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Environmental Policy and Technology Project
For the New Independent States of the former Soviet Union
A USAID Project Consortium Led by CH2M Hill

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Executive Summary

A primary condition for the success of the Environmental Policy and Technology Project for the Aral Sea Region is that residents of the area take responsibility for and carry out the necessary behaviors to obtain safe water, exercise habits of personal hygiene and sanitation, and promote a healthy lifestyle. To empower people with these capabilities requires effective public health education programs that reach children and adults in families, schools, workplaces, farms, and other community and institutional settings.

In late 1994 an assessment of water and sanitation needs in three of the Central Asian Republics, Kazakstan, Uzbekistan and Turkmenistan, was completed. This assessment revealed a strong need for health education. It was followed in the spring of 1995 by a series of Interagency Planning Seminars which identified the need for demonstration sites in the project areas. Following this brief exposure to health education as an approach to problem solving, health professionals from these three countries identified as a high priority the need for training staff in effective health education and training methods to help them implement the water and sanitation projects and to plan and carry out other health education programs in the target areas.

In response to the local needs for training, the EPT planned a four week workshop for teams from each of the three countries who will be responsible for planning, implementing, and evaluating health education programs for people in the Aral sea communities. Twenty seven participants were selected from the Aral Sea Basin in Kazakstan, Uzbekistan (including the independent Republic of Karakalpakstan), and Turkmenistan. These participants held positions at the republic, oblast/velayat, rayon/etrap, and municipality levels and included specialists and representatives from education, journalism and mass media, health education, medical care, epidemiology, sanitation, pediatrics, child care, agriculture and administration.

The major outputs of the workshop were four work plans which the participants (who were formed into three country teams) produced using the knowledge and skills they learned. These plans consisted of: a health education program plan, a health education training plan, an organization plan and a regional media plan specific to each of the countries involved in the training.

A post-test questionnaire was given to participants at the end of the workshop to evaluate what they learned and how they planned to use the knowledge and skills that they gained. The responses to these questionnaires indicate that, in general, the objectives of the workshop were accomplished. The detailed results of this evaluation and their recommendations for future activities are described in the report.

Section 1 Introduction

1.1 Background

A major component of the Environmental Policy and Technology Project (EPT) for the Aral Sea Region is to provide health education that will promote healthy behaviors in the use of water and sanitation among the populations in the affected areas. In late 1994 an assessment of needs for health education in Kazakstan, Uzbekistan and Turkmenistan was completed. This was followed in the spring of 1995 by a series of Interagency Planning Seminars which identified the need for demonstration sites in the project areas. EPT is to provide equipment for each site in order to improve sanitary conditions and water accessibility. In addition, health professionals from these three countries identified as a high priority the need for training staff in effective health education and training methods to help them implement these projects and to plan and carry out other health education programs in the regions.

To meet this need, EPT planned a four week workshop for teams from each of the three countries who will be responsible for planning, implementing, and evaluating health education programs for the purpose of enabling people in Aral sea communities, such as in schools, farms, and workplaces, to improve their health conditions, specifically regarding water and sanitation.

The workshop was designed to strengthen the knowledge and skills of the participants in order that they would be able to perform a variety of health education activities. These activities included planning, implementing and evaluating health education programs that promote healthy behaviors for improved water and sanitation; use participative methods to organize communities, local groups and agencies in health education demonstration projects; communicate via the media and other channels of information; use effective management procedures; collaborate with government and non-government organizations and sectors such as health, education, public information, and agriculture; provide training and support for regional and local health and other personnel responsible for public health education; and collaborate with other Central Asian Republic countries in the development and implementation of regional health education programs.

1.1.1 Participants

Participants for the training workshop were selected from the Aral Sea basin in Kazakstan, Uzbekistan (including the independent Republic of Karakalpakstan), and Turkmenistan. These nine participants from each country included specialists and representatives from education, journalism and mass media, health education, medical care, epidemiology, sanitation, pediatrics, child care, agriculture and administration. Twenty-seven participants attended who held positions at the republic, oblast/velayat, rayon/etrap, and municipality levels.¹

1.1.2 Trainers

In addition to EPT Almaty human resources, four US based senior Health Educators and trainers lead the training/workshop. Regional experts from Kazakstan, Turkmenistan and Uzbekistan were invited to share their experience as guest lecturers during the seminar.

1.1.3 Support staff

The support staff played a key role in making the seminar successful. A team of translators, drivers and organizers helped prior to, during and after the seminar.

Section 2 Training Content

2.1 Scope of Work

The training team's scope of work includes three phases:

- The preparation phase included site selection, program development and selection of material and documentation and training and translation personnel selection. Ms. Karlygash Sea in Almaty, and Prof. Jean de Malvinsky in California lead these activities.
- The training phase directly involved in addition to the above mentioned individuals, Dr. Donald Johnson, Dr. Wilbur Hoff, Ms. Susan Purdin. Ms. Yelena Shulgina was put in charge of the translation unit.
- An immediate follow up to the training to be conducted by Jean de Malvinsky and Karlygash Sea. This activity is to be conducted in Almaty, Tashkent and Ashgabad.

A report is to be submitted to EPT Almaty following the seminar.

2.1.1 Training Goal

Each country will have a core group of persons who will be able to plan, implement, and evaluate health education programs to improve health conditions relating to water and sanitation in homes, communities, schools, and workplaces.

2.1.2 *Specific Training Objectives*

The workshop was designed to enable the participants to perform the following activities:

- Communicate via the media and other channels of information to promote health and sanitary practices among specific target groups;
- Design and implement educational programs that promote healthy behaviors that focus on, but are not limited to, water and sanitation problems;
- Use participative methods to involve individuals and groups in health education programs;
- Use effective management procedures to plan and implement health education programs;
- Organize communities, local groups and agencies to use local resources in health demonstration projects;
- Collaborate with governmental and non-governmental organizations and sectors such as health, education, public information, and agriculture to implement health education programs;
- Provide training and support for regional and local health and other personnel responsible for public health education;
- Use appropriate methods to evaluate the effectiveness of health education projects and programs;
- Collaborate with other Central Asian Republic's in the development and implementation of regional health education programs.

2.2 **Training methods**

The strategy of the workshop was to build upon, update, and expand the existing communications media technology which has been used extensively in the Central Asian Republics. This technology has been primarily medically oriented, didactic, and centrally directed lectures and propaganda.

Consequently, in line with the Primary Health Care model of the World Health Organization, the trainers relied heavily on interactive participatory methods of education and training. Extensive use of problem centered small group work sessions, demonstrations, learning by doing sessions, focus groups, role playing, education/training games and other experiential learning sessions were used to supplement lectures. Participants were introduced to new modern concepts of learning techniques in management, organization, education, communication and journalism.

A **pre-test questionnaire**² was given to the participants at the beginning of the workshop to determine the participants expectations and needs, what types of health education programs they had been conducting, and which methods they were using.

The results of these questionnaires helped the trainers to modify the workshop content according to the participants needs. The data obtained indicated that the majority of participants wanted to

learn more about methods of health education, planning, and implementation, and that the health education methods they were using relied heavily upon the use of communication media such as TV, radio, and newspapers to convey health information.

The training workshop staff and the four week training schedule can be seen in Appendices 3 and 4.

Section 3 Outputs

The major outputs of the workshop were four work plans⁵ which the participants (who were formed into three country teams) produced using the knowledge and skills they learned about how to plan, organize, implement, and evaluate health education programs.

3.1 Health Education Program Plan

A health education program plan was produced by each team which they, with other country members, intend to implement at the republic, rayon/etrap, and oblast/velayat levels in the Aral Sea Regions.

Each of these country plans contains an identification of the problems and needs of the target groups in their region; specific goals and objectives with behavioral indicators; health education methods and materials; strategies for implementation; obstacles and resources; evaluation methods; and a budget.

3.2 Health Education Training Plan

Each team prepared a training plan for their oblast/velayat that could be used to train appropriate persons to implement health education and health promotion activities related to water, sanitation, and related health conditions.

Each of these plans includes all or parts of the following:

- a sample of task analysis & daily plan
- objectives & content for training
- numbers & types of persons to be trained
- training for trainers
- methods to be used
- a strategy for implementing the plan
- budget

3.3 Organizational Plan

An organizational plan that diagrams how each level of the vertical health education structure of the Ministry of Health will work to better achieve its' objectives. It also shows how the elements of this structure will collaborate horizontally with other sectors, including education, information, water authorities and general administration. In addition, the attached documentation and the chart show:

- directions in the flows of information
- how decisions are made
- nature of job descriptions
- nature and amount of delegation

3.4 Regional Media Plan

The participants developed a regional media plan designed to cover the Aral Sea Basin and provide support to the community based health education. This plan provides an opportunity for coordination of and collaboration among professionals of the three countries.

3.5 Evaluation

Tools to evaluate each session and daily events were applied on an ongoing base to evaluate absorptive capacity exhibited by the participants. This allowed for modulating the input of material. As a final evaluation the training staff relied on a post-test questionnaire, oral evaluation, and written individual and private behavior assessment by the participants for each trainer present.

3.5 Post-test Questionnaire

At the end of the workshop a post-test questionnaire⁶ was given to participants to obtain their responses as to what they learned and how they planned to use their new knowledge and skills. The responses to these questionnaires indicate that generally the objectives of the workshop were accomplished.

For example, over half the participants indicated that they enjoyed learning about participative teaching methods the most, and that the four most highly rated things that trainees found important or useful were evaluation methods, the planning process, participative learning, and the bottom up approach. When asked how they planned to use the workshop ideas when they returned the most frequently rated items were, to conduct training with colleagues, use the planning process, and use focus groups and participative methods. And when participants were asked what new methods they learned to educate the public they indicated use of video spots and participative health education methods including role playing and focus groups.

The complete results of the responses to these questionnaires can be found in Appendix 6.

3.6 Oral Evaluation

The last session of the workshop was allocated for an oral evaluation by the participants. Trainees were encouraged to express positive or negative responses to the workshop in general. The following quotations are a sample of their feelings about the training experience:

“The knowledge that we lost in the Institute I regained here. It’s nice to work with world professionals. I got spiritual enrichment. We are now ready to share our information with foreigners. Thanks for your willingness to share knowledge with us. This is like a light post for us.”

“This was a good workshop for organization and health education. Health education is the most important part of the prevention process. Our health education is too formal - now we have some more interesting approaches.”

“If our goal is to improve effectiveness of health education, we have to use strategies that involve the community, famous people, schools, senior citizens, respected people, religious groups, trade unions, and public and non-governmental organizations.”

“The present system doesn’t work. If we keep the old system, we’ll be buried in our own system.”

“This training course made me change my approach from treatment to health promotion.”

“Some activities we planned in the past are no longer appropriate. We have to adjust our plans. Learning theory and teaching skills has demonstrated that lectures are the least effective way to facilitate learning.”

Section 4 Recommendations and Comments

4.1 Finding

Through reforms, Health Education has become a privileged instrument for prevention in Uzbekistan and Turkmenistan. In Kazakstan, the structural reform taking place in the Ministry of Health does not yet provide a clear mandate for health education in primary health care services.

4.2 Participant Recommendations

The participants proposed and endorsed the creation of a CAR Regional Health Education Center (RHEC). This center would provide support to and expertise for the planning, monitoring and evaluation of country specific programs. This support would be done through training, material

development and information diffusion among the CAR as well as coordinate inter-country program. The draft documentation for the incorporation and registration of the RHEC has been completed. Organizations which mandate focus on the Aral Sea should be tapped for financing.

Participants requested support for the implementation of country specific seminars designed during the workshop. EPT should provide temporary support before each of the country training teams becomes autonomous.

In the fall of 1996, a two to three day workshop should be held in Nukus to review lessons learned during the demonstration projects and to complete and develop a framework for a systematic approach to improving conditions of community based water and sanitation.

Participants from all three countries requested that further assistance be provided by USAID, UNICEF or other organizations to provide republic, oblast/velayat, and rayon/etrap staff with follow-up, and assistance in the form of health education equipment and supplies to help launch and initiate their health education program plans.

Appendix A Participant List

Uzbekistan and Karakalpakstan

Kahlmakhamat Tashbaev	Deputy Head Doctor	Republic Health Center	Tashkent
Dzankhongir Baltaev	Editor Uzbek TV	Education Programs	Tashkent
Nodira Muminova	Cardiologist	Republic Diagnostic Center	Tashkent
Khakim Mumimov	Head Doctor	Oblast Health Center	Urgench
Bakhtiyar Zuripov	Deputy Head Doctor	Sanitary Epid. Station	Urgench
Khudainazar Matnazarov	Head Doctor	Khiva Oblast Health Center	Khiva
Svetlana Uteeva	Head Public Utilities	Sanitary Epid. Station	Nukus
Nuratdin Khafizova	Head Doctor	Beruni Oblast Health Center	Beruni
Gulfiya Khafizova	Head Hygiene Dept.	Sanitary Epid. Station	Beruni

Turkmenistan

Annamurat Nazarov	Head, SES	Ministry of Health	Ashgabat
Orazdurdy Turkishev	Doctor-Instructor	Republican Health Center	Ashgabat
Yagmyr Akmirodov	Specialist Education	Ministry of Education	Ashgabat
Ayman Madrimova	Head, Health Center	Dashhovuz Velayat	Dashhovuz
Nurmet Matyakubev	Head, SES	Dashhovuz Velayat	Dashhovuz
Aisha Yazyeva	Head, Health Center	Dashhovuz City	Dashhovuz
Kandzha Matsapaev	Sanitation Specialist	Dashhovuz Etrap SES	Dashhovuz
Dovietgeldy Akiev	Head, Health Dept.	Aktepinsk Etrap, SES	Dashhovuz

Kazakstan

Beysengali Tustukbaev	Methologist	Republic Health Center	Almaty
Bakhytkoul Suybaeva	Social Issues	Ministry of Education	Almaty
Ayzhan Sadykova	Doctor/Media	TV Program "Health"	Almaty
Dauletbek Zholamanol	Head Doctor	Oblast Health Center	Kzyl-Orda
Bazarbai Omirzakuly	Epidemiologist	Sanitary Epid. Station	Kzyl-Orda
Amangeldy Kadyrbaev	Head Doctor	Oblast Health Center	NovoKazalinsk
Sakhyp Dostanova	Health Educator	Sanitary Epid. Center	NovoKazalinsk
Kunliyash Kyzdarbekova	Pediatrician	Central Rayon Hospital	Aralsk
Tubi Ibraeva	Head, Child. Clinic	Central Rayon Hospital	Aralsk

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Appendix B
Pre-test Questionnaire

1. List three things that you would like to learn from this workshop.
2. Are there any policies in your department/organization that support or promote programs for health education (and/or health promotion)? Yes No If so, what are they?
3. Do any plans or programs now exist in your department or organization that are aimed at improving the health education of people who live in rayons/etraps or oblast/velayat in the Aral Sea region?
4. Have you involved groups such as communities, collective farms, schools, or work places in the planning (making decisions), or implementing of water and sanitation programs?
Yes No If so, which groups?
5. Do you collaborate with other government or non-government organizations in planning, implementing & evaluating programs to improve water and sanitation?
Yes No If yes, which organizations?
6. Do you have any plans now for training personnel responsible for health education?
Yes No If yes, what types of personnel?
7. What types of communication media do you use to convey health information to people?
8. During the last two years have you done any evaluation to determine how effective your health education or health promotion programs have been?
9. Describe what you believe are the three largest barriers to enabling the general public to carry out healthy behaviors and to prevent problems related to impure water and poor sanitation.

Appendix C
List of Training Workshop Staff

Trainers

Jean de Malvinsky
Susan Purdin
Don Johnson
Wilbur Hoff

Interpreters/Translators

Elena Shulgina
Elena Didkovskaya
Alia Dzhiembaeva
Berikbayeva Gulnur
Konstantin Delver

Guest Lecturers

Ormanbek Zhuzzhanov, Scientific Center of Medical and Economic Problems of Health
Boris Raushkin, Institute of Epidemiology, Microbiology and Infectious Diseases
Atabai Tashliev, Health Education Media Specialist

Appendix D
Schedule of Training

Environmental Policy and Technology Project
Training in Health Education and Promotion in Water and Sanitation — May 12 to June 7, 1996
Training Framework

Sunday May 12	Monday May 13	Tuesday May 14	Wednesday May 15	Thursday May 16	Friday May 17	Saturday May 18
	<ul style="list-style-type: none"> • Logistics • Needs assessment • Expectations • Program review • Andragogy • Ground rules • Contract 	<ul style="list-style-type: none"> • Where Are We? • Alma Ata Declaration Education and Promotion for Health • Intersectoral Collaboration • Review of Demonstration Projects • US CDC Presentation • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Management Functions Program Planning • Problem Definition • Aral Sea Region Epidemiology • Field Trip to Exhibit of Medical Equipment and Pharmaceuticals • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Health Education and Health Policy Reform in Kazakstan • The Communication Process • Know Your Community: Perception of Community Needs • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Community Health Education Plan • Site Visit to Hospital and Polyclinic • Report from Site Visits • Identification of Health Education Plan Target Group • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Behavioral Indicators for Health Education • Program Planning: Goal and Objectives • Types of Communication • Reflection
PM Arrival	Introduction to Health Education and Promotion					
1830 Welcome & Opening						
1700 Dinner	Reflections					
Evening Work			Problem Definition	Community Plan		PM -City Tour (Part 1)
May 19	May 20	May 21	May 22	May 23	May 24	May 25
	<ul style="list-style-type: none"> • Where Are We? • Health Beliefs Model • Preparation for return • Site Visit: Interpersonal Communication • Reports from Site Visits • Health Education Plan Goal and Objectives Development • Interpersonal Communication: Transactional Analysis • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Group Reports on Plan Development • Identification of Demonstration Project Obstacles & Resources • Distortion and Perception: audio and visual • Visual Message Development • Audio Message Development • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Health Education Communication Plan: Strategies and Activities • Reproductive Health and Contraceptive Technology Update for Central Asia • Management Skills: Monitoring and Supervision • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Management Skills: Budgeting • Health Education Communication Plan Development: Costing and Finance • Program Planning: Evaluation • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Health Education Communication Plan: Budgeting • Group Work: Plan Development continued • Reflections 	<ul style="list-style-type: none"> • Where Are We? • Charting Organizational Structure: The Current Situation • Presentations of Organizational Structure • The Spectrum of Prevention • Reflections
AM - Trip to Medeo						
PM - City Tour (Part 2)						
Evening Work	Plan Development					

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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
May 26	May 27	May 28	May 29	May 30	May 31	June 1
Trip to Grand Almaty Lake - picnic	Where Are We? Job Tasks Related to Planned Health Education Communication Program Tasks Required to Accomplish the Spectrum of Prevention Reflections	• Where Are We? Organizational Structure for Plan • Plan Completion for Typing Introduction to Advanced Training of Trainers How People Learn • Reflections	• Where Are We? Training Techniques for the Three Domains of Learning Focus Group example of pre-testing mass media messages Participant-led Focus Group Reflections	• Where Are We? • Grab Bag exercise Task Analysis of Plan Objectives Overview of Training Program Support Requirements Training Program Session Designing Reflections	• Where Are We? Health Education Around the World Training Program Development and Health Education Communication Plan Revision Reflections	• Where Are We? Developing a Training Program Budget Evaluating Training • Reflections

Evening Work

June 2	June 3	June 4	June 5	June 6	June 7	June 8
Free Day	Where Are We? Training Plan Development Reflections	• Where Are We? Completion of Training Plan Completion of Organizational Management Plan Completion of Communication Plans Preparations of Presentations for each republic Reflections	Where Are We? Presentation of Outputs by Turkmenistan Team • Presentation of Outputs by Kazakstan Team Reflections	Where Are We? Presentation of Outputs by Uzbekistan Team Evaluations • Reflections	Departures	

Evening Work

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Appendix E
Country Plans

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WORK PLAN FOR THE REPUBLIC OF KAZAKSTAN

PROBLEM STATEMENT:

High morbidity and mortality rates due to the lack and poor quality of potable water.

TARGET GROUP IDENTIFICATION:

The whole population of the Aral and Kazalinsk districts of Kyzyl-Orda region - (those who suffered the most from the ecological situation in the region.)

The total population : 150,000. Among them:

0-14 year old - 50,000

15-18 year old - 11,000

retired and people with disabilities - 22,000

STUDY AND ANALYZE TARGET GROUPS

The population suffers from virus hepatitis, especially 0-3 year old children, and acute intestinal diseases (AID) of undetermined aetiology. Eighty percent of female population suffer from anaemia, 92% of children suffer from caries. The tuberculosis morbidity rate exceeds the regional indicators by 1.5 and the republic indicators by 2.0, especially among youth and working population (advanced form of the disease,) the pediculosis and itch morbidity rates among children has grown by 2-3 times (annual indicators.)

IDENTIFY AND VERIFY RELEVANT INFORMATION

According to the SES epidemiological data on the Syr-Darya River, the quality of the water does not meet state standards on the level of sulphate and nitrate concentration.

STATEMENT OF THE NEED

Promotion and development of health education.

GOAL:

To reduce morbidity and mortality rates among the population of the Aral region by implementing health education and quality potable water supply programs.

To reduce the AID morbidity rate by 50% and the somatic disease morbidity rate by 10% within five years.

GENERAL OBJECTIVES:

1. Health education promotion activities through mass media (primary health care) such as lectures, workshops, discussions, demonstrations, etc.)
2. Development and implementation of programs promoting the healthy life style.
3. Mobilization of the local population and authorities to promote demonstration projects.
4. Request local authorities to purchase sanitation supplies and equipment for schools, pre-schools and hospitals in order to create satisfactory sanitation conditions for the population.
5. Develop a program aimed to control the quality of water using advanced water control analysis techniques.

SPECIFIC OBJECTIVES:

- Within five years to create five short video films (30 seconds each) promoting the prevention of acute intestinal and other diseases.
- Design brochures, posters and other handout materials promoting the prevention of acute intestinal and other diseases.
- Conduct discussions and lectures among different groups of the local population.
- To ensure that
 - at the end of the academic year 80% of elementary school children will be aware of the personal hygiene rules and of the dangers of the poor quality water.
 - during the academic year 20% of the teachers will be able to explain and communicate their knowledge on the subject of the prevention of acute intestinal disease.
 - at the end of the academic year all schools will develop health education programs and 50 % of students' parents will participate in those programs and will attend lectures.
- Organize the "text tests" for school children during the outbreak of the infectious diseases.
- Educate parents about the child care through the School for Young Mothers.

- Administrators of all district institutions will ensure frequent disinfections.

OBSTACLES:

- Insufficient financial resources in the state budget and among the population with low living standards.
- Shortage of educational materials and equipment.
- Low level of sanitation awareness among the population
- Lack of information and differences in the priorities between local administration and local communities
- Remote location from the major water supply pipe lines.
- Aged water system pipe lines, lack of the spare parts, absence of an adequate sewage system and latrines, and a severe continental climate.
- Inadequate knowledge of personnel and an absence of a water-pumping tower.
- Irresponsibility of the implementer and lack of the control on site.
- Lack of video-editing equipment and other materials.
- Lack of paper, dyes, office supplies, video tapes, VCRs and tape-recorders.

RESOURCES:

1. Health education methodologists.
2. Public utilities system.
3. Aral-Sarbulak water pipe line.
4. Highly educated population.
5. Availability of teachers at pre-school and school levels
6. Bilingual state television
7. Religious resources (mosques, traditional medicine)

8. International organizations, funds, public organizations (Fund Aral, ASPERA, Bobek, USAID, Asian Fund, "Children of Aral.")

STRATEGIES:

- Improve the sanitation education among the population of Aral region
- Train specialists
- Locate sources of funding for construction of the water pipe line, purchase of the equipment and disinfectants.
- Influence the psychology and moral beliefs of the local population

ACTIVITIES:

- Reinforce sanitation education among the population.
- Create conditions for the adequate sanitation at the workplace (lighting, ventilation, sewage system, individual sets of personal hygiene.)
- Provide quality potable water, filter devices, desoltanators.
- Provide visual aids and health clubs.
- Request district health departments to improve school and pre-school medical services. (81 schools, 40 pre-schools, 40 child care centers and others (150 entities.)
- Design a program promoting the improvement of health behavior aimed at the school personnel, students and their parents, journalists, young mothers, employees of industrial enterprises.
- Design an inter-sectorial program promoting infectious diseases prevention.
- Create a special school that will promote the healthy life style education among school personnel, students and their parents.
- Design safe playgrounds.
- Create health clubs at every organization and institution of the Aral and Kazalinsk

districts and provide them with visual aids.

- Issue the newsletters to promote the identification and preparation of healthy food and distribute it among all organizations and institutions.
- Promote physically active life styles through health education activities to influence the change in population health behavior patterns.

TASKS:

1. The local health education departments in conjunction with the mass media are to design a composite plan to promote sanitation awareness of the quality of water and the prevention of AID and other diseases.
2. Design the health education program to promote healthy life styles among pre-school and school children (games, visual demonstrations, film, "text tests.")
3. Provide Schools for Young Mothers with methodological recommendations
4. Conduct a workshop using the facilities of the Health Center to promote healthy life styles and the prevention of AID and other diseases.
5. Create TV programs to promote healthy life styles and the prevention of AID and other diseases. Produce short video films about the sanitation of the water and rules of personal hygiene.
6. The local authorities are to secure budget funds for implementing above mentioned programs and for providing the population with adequate potable water.

DEVELOP MATERIALS

1. Develop materials to facilitate the awareness of a personal hygiene routine among children and to promote healthy life styles among adults.
2. Develop health education programs for pre-schoolers.
3. Provide Schools for Young Mothers with methodological recommendations.
4. The Health Center is to produce methodological recommendations on the prevention of AID and other diseases.
5. Utilize TV and newspapers for the discussion of important disease prevention issues.

6. Questionnaires.

VERIFICATION OF THE MATERIALS

To verify the materials, questionnaires, focus group discussions, video viewing and interviews will be conducted among different groups of the population.

SELECTIONS OF THE CHANNEL

Radio, television, local newspapers and other regional mass media.

District press, radio, and lecture clubs.

WORKING PLAN

- Regional Health Center (Daulet) will conduct sanitation education programs on a monthly basis through the mass media.
- To produce two video films promoting sanitation and personal hygiene among pre-school and school children.
- Design posters, brochures, sanitary bulletins and publications in the local newspapers.
- The regional department of education :
 1. in conjunction with the health centers is to create a health education program to promote the healthy life style among the pre-school children by September 1, 1996.
 2. Prepare text tests on the subject of the water sanitation and the healthy life style for the first quarter of the academic year (September - November, 1996.) The teachers and assistant principal are to be responsible for the drafts of the text.
 3. Conduct a questionnaire among high school students on the subject of ethics and psychology of the married life. (The teachers and assistant principal are to be responsible for the drafts of the text.)
- District hospitals:
 1. Are to create health clubs, Schools for Young Mothers, and consultations on the topics of prevention of AID and other diseases, of primary child-care and healthy life style

throughout the year.

2. Conduct educational classes on the sanitation education among different population groups every 3 months.
 3. Administration of health care and education departments to ensure the availability of good quality potable water, water containers, filters and disinfectants, other materials and equipment to secure adequate sanitation conditions at the beginning of the academic year and from then on permanently.
- District SES:
 1. Are to participate in evaluation of water condition.
 2. Conduct sanitation education campaigns among the population using the mass media.

BUDGET

Financial means for implementing or solving particular tasks. This budget is calculated for the Health Center "Zdorovie" (Daylet.)

Educational Classes

1 educational class - 1836 tenge
Total number of target areas -310
two educational classes at every target area - 620 total

$1836 * 620 = 1,038,370$ tenge (total annual cost)

Radio

$400 \text{ tenge} * 5 \text{ minutes} = 2000 * 12 \text{ (times per year)} = 24,000$ tenge per year

Television

$1000 \text{ tenge} * 15 \text{ minute} = 15,000 * 8 \text{ (times a year)} = 120,000$ tenge per year

Newspaper

$600 \text{ tenge} * 20 = 12,000$ tenge per year

Brochures

20 tenge * 3000 copies = 60,000 tenge per year

Leaflets

20 tenge * 1000 copies = 20,000 tenge per year

Posters

40 tenge * 1000 copies = 40,000 tenge per year

Total 1,314,370 tenge

EVALUATION

At the end of the year an evaluation of the program of sanitation education in Aral is to be performed according to the following methods:

- analysis or survey of the information from the target areas;
- interviews with school teachers, students, and representatives of other groups of the population;
- using the mass media to conduct a questionnaire of all population groups
- discussions with representatives of the health care and education departments and other groups of population;
- feedback from the population (children will demonstrate the knowledge of personal hygiene, people will demonstrate the behavioral change in dealing with water and sanitation and in the life styles, etc.)

The major indicator of the results of our work with Aral problems will be the reduction of the morbidity rate of the AID and other infectious diseases.

If we succeed with our programs, the conclusion can be made that we selected the most effective and economical way to solve problems in the present ecological situation.

WORK PLAN OF THE REPUBLIC OF TURKMENISTAN

PROBLEM IDENTIFICATION:

1. Infectious disease outbreaks due to poor quality of drinking water.
2. Insufficient sewerage system in Dashhovuz.

Dashhovuz Velayat is located in the northern part of Turkmenistan bordering the Aral Sea. The population of the Velayat is about 920 thousand people, including 40 thousand children.

Due to the desiccation of the Aral Sea, intensive contamination of environment, soil and air is being observed. As a consequence, the health of the population in this region is deteriorating. There is a tendency towards the growth of common and infectious diseases, cardiovascular system disorders, kidney disorders, liver malfunctions, joint aches, acute intestinal diseases, TB, and various diseases among pregnant women and children.

Due to the above-mentioned, the following problems require urgent and prompt attention:

1. Improve the quality of potable water;
2. Upgrade sanitation health education work oriented at improving the health of the population;
3. Provide advanced training of health educators on the subject of encouraging healthful behaviors;
4. Provide trainers with information related to methods of teaching and with audio-visual equipment.

GOAL:

Supply the population of Dashhovuz with safe potable water.

OBJECTIVES:

1. To supply the population of Dashhovuz with quality water.
2. To organize preventive activities for curbing common and infectious diseases related to the poor quality of drinking water.
3. To improve health of the population by improving their everyday life.
4. To teach people how to properly dispose of solid and liquid wastes.

GENERAL STRATEGIES:

1. Set forward a problem concerning the allocation of funds to upgrade the sanitary state of the water pipeline network and sewerage system for the Dashhovuz administration to consider. Include School 13 and Children's Hospital.

TARGET STRATEGIES:

1. Undertake reconstruction of the water conduit network and replace the pipes that have outlived their service.
2. Supply the population with the tap water of good quality and speed up the construction /renovation of the pipeline (Tuyamoyun-Dashhovuz).
3. Encourage the khakimyat of Dashhovuz to provide the necessary technical facilities for routine collection and disposal of household waste and refuse from Dashhovuz.
4. Upgrade and intensify sanitation health education among the population through the mass media (press, radio, TV).
5. Pursuant to the National Health Care Program, it is required that a program on the development of beneficial health habits be introduced in the curricula of educational institutions starting September 1, 1996.

BEHAVIORAL INDICATORS:

1. Encourage people to drink boiled water, and thoroughly rinse vegetables and fruit before eating them.
2. Introduce elements of the healthy way of life, rational nutrition in the everyday life of the population.
3. Conduct annual medical examinations among the population.
4. Observe hygiene practices of workers.

IDENTIFICATION OF TARGET GROUP:

1. Organized stratum of the population: preschools, schools, organizations, enterprises, etc.
2. Non-organized stratum of the population in the city: housewives, pensioners, disabled people.

OBSTACLES:

Shortage of technical equipment; utility services' constraints: shortage of pipes, lack of transport; skeptical attitude; shortage of visual aids.

STRATEGIES:

1. Speed up getting the Tuyamoyun-Dashhovuz water pipeline into operation by channeling involvement of the local administration.
2. Intensify monitoring of water resource use by the public utility services.
3. Reconstruct water pipeline and sewerage systems of Dashhovuz, including those on premises of School 13 and Kindergarten 15.
4. Drill boreholes and construct a water pumping tower for each project (School 13, Kindergarten 15 and the Children's Hospital).
5. Connect School 13 and Kindergarten 15 to the municipal sewerage system.
6. Upgrade sanitation health education among the population through mass media and other sources.

PROGRAM ON SANITATION HEALTH EDUCATION:

PROBLEMS:

1. Insufficient awareness.
2. Skeptical approach.
3. Shortage of visual aids.

OBJECTIVE:

Study and upgrade the hygienic behavior of the population through sanitation health education programs. Curb the growth of common and infectious diseases among the population.

MAIN STRATEGIES:

Involve public organizations in the process of sanitation health education: council of elders, union of women, youth organizations, Press Center, people from religious communities, TV, etc.

Impact the hygiene education of children.

SPECIAL STRATEGIES:

1. Arrange meetings with the leaders of the public organizations, and discuss the objectives and strategies in sanitation health education with members of the community.
2. Encourage local leaders to publicize the importance of sanitation health education and the promotion of health habits through public appearances and other media events.
3. Show films and plays promoting sanitation health education.
4. Organize advanced training classes for teachers and trainers involved in the sanitation health education process.
5. Conduct a workshop for the employees of public canteens, trade outlets and public utilities.

OBSTACLES:	RESOURCES:
1. Shortage of technical equipment.	1. Trained staff in the field of sanitation health education: teachers, parents (mother), medical personnel, members of religious communities, mass media, movie cameras, overhead projectors, other technical equipment.
2. Insufficient supply of information.	2. Press Center: public organizations (USAID, UNICEF and other international organizations)
3. Lack of employee motivation.	3. Doctors and teachers visits to remote places inhabited by people during harvest time.
4. Shortage of training materials, films, etc.	
5. Remote location of settlements.	
6. Lack of transport.	
7. Insufficient motivation among leaders.	
8. Children's unwillingness to study.	

STRATEGIES:

1. To conduct sanitation health education through the mass media (radio, TV, video.)
2. To involve the sanitation health education training staff in working with certain groups of the population .
3. To make sanitation health education attractive for international organizations, ministries, sectorial entities and administration, health care and educational institutions.
4. To introduce sanitation health education basics into the curricula of public schools in 1996/97 school year.
5. To preserve and expand the role of the local traditions promoting observance of hygienic habits and the health of the population.

ACTIVITIES:

1. Organize radio lectures on the value of good hygiene for the population.
2. Invite a doctor to deliver a lecture on the following: observance of good personal hygiene in summer, preventive activities to curb acute intestinal disease, proper nutrition, preventive prenatal measures for fetal safety, etc.
3. Conduct a workshop-training for selected people working in the field of sanitation health education and those working in educational institutions.
4. Organize a lecture course on the problems of maternal and child safety and upgrade working conditions and everyday life of the women.
5. Establish in all local clinics "A School for Mothers" aiming at educating young mothers.
6. Organize a school for family planning.
7. Coordinate activities with the USAID's Environmental Policy and Technology Project in the field of sanitation health education and encourage participation of the local population in these activities.
8. Create a press center affiliated with the Health Center.
9. Ensure close contact between religious organizations to promote local and religious traditions which help promote healthy ways of life.

TASKS:

1. Make a joint effort with the Department of Public Education to discuss the problem of introducing the subject "health" in the curriculum starting September 1, 1996.
2. Discuss the creation of schools for the young mothers, rehabilitation centers, family planning departments, and measures for enhancing the dissemination of hygienic habits and awareness among the population together with the authorities of hospitals and dispensaries.
3. Involve public and religious organizations in sanitation health education with the help of the mass media.
4. Provide continuous monitoring of potable water quality and publicize the results regularly.
5. Prepare applications for the required printed information related to sanitation health education topics.

6. Provide Health Centers in velayats with appropriate audio-visual aids, properly equipped vehicles, and other technical means that will help improve sanitation health education among the population.

BUDGET

1.	Air a radio lecture	24*12,000=288,000 manat
2.	Conduct a round- table discussion	36,000*4=144,000 manat
3.	Air a TV lecture	90,000*3=270,000 manat
4.	Conduct a workshop with professionals engaged in sanitation health education and public education	36,000*6=216,000 manat
5.	Draft text tests	2*70,000=140,000 manat
6.	Set up Health Schools for four targeted groups	70,000*4=28,000 manat
7.	Purchase training materials	500,000 manat
8.	Conduct lectures	11,000*20=22,000 manat
9.	Purchase audio-visual equipment (1 set)	3,000,000 manat
10.	Purchase a type-writer	1,000,000 manat
11.	Purchase paper and copy - machine cartridges	200,000 manat
12.	Purchase a properly equipped car (UAZ model)	25,000,000 manat
13.	Wages and bonuses for lecturers (four times a year)	1,000,000 manat
14.	Organize a contest for "The Best Sanitation Wall-Newspaper"and a photo exhibition.	100,000 manat

EVALUATION:

The evaluation of health education performance in the Dashhovuz velayat shall be conducted in the following way:

1. Administering questionnaires in target groups through the mass media.
2. Analyzing the feedback information (responses from the sites): interviewing adult

workers, high school and secondary school students.

3. Holding discussions among health educators and promoters and representatives of different strata of population (teaching staff, employees, children, housewives).
4. Conducting entertaining dramas and role plays for school and pre-school children as well as evaluation of personal hygiene skills.

The reduction of infectious and common diseases morbidity rates in the Dashhovuz velayat community will be the basic performance indicator.

WORK PLAN OF THE REPUBLIC OF UZBEKISTAN

PROBLEM IDENTIFICATION:

Khorezm and Karakalpakstan, Republic of Uzbekistan are situated directly in the Priaralvc region. The population of the region totals to about 3 mln.

During the last decade the territory has been intensively polluted and salinated due to the desiccation of the Aral Sea. This led to deterioration of the chemical and bacteriological indicators of the Amudaria River basin water as well as those of soil and air. As a result, 20% of the pipeline water in Khorezm does not meet standard requirements in terms of its bacteriological indicators, and almost 100% - in terms of its chemical indicators.

These factors had a negative effect on the community health in the region; acute intestinal infections and other diseases morbidity rates increased. In connection with this fact, the problem of quality fresh water supply for the population has emerged.

IDENTIFICATION OF TARGET GROUPS:

In Urguench:

1. Silk Factory, Urgench, Uzbekistan, 1000 persons
2. School named after R. Abduraimov, the Achunbabayev Collective Farm, Urguench District, Khorezm, 700 students
3. Trucking and Tractor Fleet, the Achunbabayev Collective Farm, Urguench District, Khorezm, 130 workmen
4. "Lola" Kindergarten, the Achunbabayev Collective Farm, Urguench District, Khorezm, 75 children
5. Rural clinic in the village of Karaman, the Achunbabayev Collective Farm, Urguench District, Khorezm

In the Republic of Karakalpakstan:

6. Cotton Seed Oil Plant, Biruni, Karakalpakstan, 200 persons

7. School named after S. Rakhimov, 1018 students
8. Kindergarten at the Cotton Seed Oil Plant, 140 children
9. Trucking division, Shabboz Collective Farm, 50 workmen

BEHAVIORAL INDICATORS

TARGET GROUP	POSITIVE BEHAVIOR
1. Cotton Seed Oil Plant, Biruni 2. Silk Factory, Urgench	1. Consumption of boiled water by workmen 2. Personal hygiene (taking showers, washing hands, changing underwear) 3. Clean work places 4. Well-balanced nutrition 5. Continuous upgrading of health knowledge 6. To convince the factory administration that the improvement of work conditions is necessary
3. School at the Cotton Seed Oil Plant, Biruni 4. "Lola" Kindergarten, the Achunbabayev Collective Farm, Urgench District, Khorezm	1. Acquisition of personal hygiene habits: <ul style="list-style-type: none"> - hand washing - visiting restrooms - keeping clothes clean - handling table utensils properly - obtaining separate towels for faces, hands and showers - drinking only boiled water - using water in order to become stronger and less susceptible to diseases 2. Support personnel: <ul style="list-style-type: none"> - to learn proper hygienic habits; then to teach them to children - to keep the kindergarten, equipment and toys clean and teach this habit to children - learn how to prepare and use disinfectants 3. Administration of the kindergarten: <ul style="list-style-type: none"> - to monitor formation of habits and to follow them, too - to identify resources to provide enriched and diversified food - to supply with quality potable water

<p>5. School named after S. Rachimov, Biruni</p> <p>6. School named after R. Abduraimov, Urguench District, Khorezm Oblast</p>	<p>1. Teaching staff:</p> <ul style="list-style-type: none"> - to upgrade knowledge in health education and improve teaching it to students - to drink boiled water - to practice personal hygiene (hand washing, bathing, wearing clean clothes) - to learn about detriment of smoking, alcohol and drugs - to develop beneficial health habits - to organize sex education
<p>7. Trucking Division, Shabbaz Collective Farm, Biruni, Republic of Karakalpakstan</p> <p>8. Trucking Division, Akhunbabayev Collective Farm, Urguench District, Khorezm Oblast</p>	<ul style="list-style-type: none"> - to drink boiled water - to take showers - to practice personal hygiene (hand washing, bathing ...) - to wear a uniform (for fitters, turners, workmen in the accumulators shop) - to acquire knowledge about well-balanced/rational nutrition - to keep the work place clean - to convince the administration of the necessity to provide appropriate conditions (heating, ventilation, illumination, water supply)
<p>9. Rural clinic in the village of Karaman, the Achunbabayev Collective Farm, Urguench District, Khorezm</p>	<ul style="list-style-type: none"> - to drink tap water - to exercise continuous control over workers', students' and children's health in the model centers - to conduct sessions for workmen, students and children on health education and promotion in water and sanitation - to observe hygiene practices in the model centers

GOAL:

Morbidity rate reduction among workers and office employees.

OBJECTIVES:

for Khorezm Oblast:

To recommend that the factory administration:

1. Install water-freshening/desalination equipment within five years.
2. Purchase water containers and a water-cooling shed within a period of one year, in order

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to provide 50% of the workers with cool boiled water in summer-time

3. Provide safe working conditions for 10% of workers during a year.
4. Introduce the principles of food hygiene to the workers and develop appropriate health behavior, e.g. vegetables inclusion in everyday meals.
5. Develop the habit of well-balanced food consumption by 50% of the workers.
6. Develop the habit of taking a shower daily by 15% of the workers within six months.

For School named after R. Abduraimov, Urguench District, Khorezm Oblast:

The collective farm board shall:

1. Undertake the construction of the 1,800 meter water conduit (EPT will provide pipes. 150 mm in diameter).
2. Install 13 wash-stands and a water conduit to the canteen, the medical examination room and a teaching staff room (EPT will provide 13 wash-stands, faucets and other related appliances).
3. Connect the wash-stands to the local sewerage system.

The school administration shall:

1. Supply with one liter of boiled water per a student each day. With a view to doing this, it shall purchase containers and identify a storage site.
2. Perform activities aimed at behavioral changes among students, at promoting beneficial health habits in water and sanitation and practicing personal and public hygiene.
3. Maintain appropriate health conditions on the premises of the schools.

The district health care department shall:

1. Ensure that dispensaries have trained medical personnel.

For "Lola" Kindergarten, the Achunbabayev Collective Farm, Urguench District, Khorezm

The collective farm board shall:

1. Connect the water conduit to the kitchen, construct a bathroom and a water closet for

each group (EPT will provide water pipes).

2. Plan construction of a water closet with two toilet seats connected to the local sewerage system for each group.
3. Construct a double pit-latrine and furnish it with toilet seats.
4. Lay a local sewerage system with further connection to the water closet and the bathroom.

For Trucking Division

The collective farm board shall:

1. Construct a 550 meter water pipe line, 150 mm in diameter (EPT will provide a 550 meter water pipe).
2. Rehabilitate the car wash and lay a local sewerage system.
3. Supply hot water for the canteen and its auxiliary premises. Install a three-section wash stand in the canteen. Construct a water closet.
4. Replace water and heating system pipes in the sauna, shower room and recreation room (EPT will provide a 200 meter pipe, 15/20/30 mm in diameter).
5. Construct a double-seat water closet in the health rehabilitation center.
6. Lay a sewerage system and connect it to the kitchen and the health rehabilitation center.

The Trucking Division Management shall:

1. Develop activities aimed at changing workmen' personal and public hygiene, their water consumption habits and health behavior, including activities on prevention of accidents and acute intestinal diseases (AID).
2. Maintain proper hygiene standards at the work sites.

For the rural dispensary

The collective farm board shall:

1. Replace the current water pipe line (EPT will provide 100 meter pipes, 25 mm in diameter).
2. Install wash stands in the pediatrician's, gynecologist's, treatment rooms and in the

pharmacy and connect them to the water conduit and sewerage system.

The head of the dispensary shall:

1. Observe hygiene practices of the students in the school named after Abduraimov, of the teaching staff and children in "Lola" kindergarten and of the workmen in the Trucking Division.

The dispensary medical staff shall:

1. Conduct health education sessions promoting water, personal, public and occupational hygiene, accident prevention techniques among students of the school, teaching staff of the kindergarten, workmen of the Trucking Division on a regular basis.

In the sphere of health education

1. To identify sanitary needs of all the model centers, and proceed from this to develop topics and select methods for discussion.
2. To ensure continuous promotion of proper hygienic habits in accordance with the developed curriculum through the mass media.
3. To conduct a two-week workshop for head doctors of health centers on health education program development in conjunction with the EPT representatives by end - 1996.
4. To involve EPT in the creation of coordinating center for the implementation of the developed programs for the model centers in Khorezm, Karakalpakstan and Dashhovuz region in Turkmenistan.

For other cities and districts of the oblast

To identify new model centers by selecting a school, a kindergarten, a trucking division, a rural dispensary in each district and city in the second half of 1996.

To develop a health program similar to the one used in the operating model centers, after the situation in the target groups has been studied and evaluated.

To increase the number of model centers in Khorezm to sixty by end - 1996.

For Karakalpakstan

1. The Cotton Oil Plant administration shall connect the plant kindergarten to the municipal water conduit and sewerage system.
2. The kindergarten administration shall provide containers for boiled water, shower rooms, swimming pools, disinfectants, enriched food and detergents within a year.
3. The city education department administration shall connect the school named after Rachimov to the municipal water conduit and sewerage system.
4. The school administration shall provide containers for boiled water and wash stands; shall conclude an agreement with disinfection stations on disinfection of the premises within a year.
5. The Shabbaz collective farm board shall:
 - ensure the construction of a water conduit, shower rooms on the premises of the Trucking Division;
 - furnish the recreation room;
 - provide well-balanced food and uniforms within three years;

OBSTACLES	RESOURCES
1. Insufficient funding for health education activities, such as: <ul style="list-style-type: none"> - water supply - sewerage system - heating system - ventilation - sanitation premises furnishing (backyard lavs, shower rooms) 	The factory and plant management, ministries, departments, heads of model centers, EPT, international charity organization
2. Public Utilities Services	Public Utilities Services

<p>3. Equipment and visuals shortage:</p> <ul style="list-style-type: none"> a. slides b. video equipment c. cinematographic equipment d. XEROX machines e. computers f. office supplies g. radio equipment 	<p>Republic, city, district health centers, EPT, international charity organizations, public organizations, humanitarian aid</p>
<p>4. Lack of health education experts due to low wage rates</p>	<p>The Ministry of Health and Regional Health Department of Khorezm Oblast</p>
<p>5. Relatively low level of health education among population</p>	<p>Local administrations, collective farms, health care network, city and district health centers, SES medical staff, model centers management</p>
<p>6. Insufficient transportation facilities for the health education activities</p>	<p>City health care network, district sites, city and district health centers, SES medical staff, the factory and plant management</p>

STRATEGIES:

1. Work with the city authorities, target sites management, utility services administrators in order to channel their efforts into fulfilling the planned activities.
2. Develop certain water, sanitation, and health education activities for workers' and office employees, school and pre-school children to assure behavioral changes.
3. Together with trade unions and other public agencies, study workmen' and office employees' social status, and provide assistance in solving relevant problems.
4. Request local health care and education administrations to provide district health centers with additional health education personnel, transportation means and equipment.
5. Considering the urgency of those problems, neighborhood health centers will develop ways of promoting health education at the target sites and utilizing the mass media.
6. Together with neighborhood polyclinics, study morbidity rates at the target sites and explore opportunities for curing identified patients.
7. Make a suggestion to local SE stations to reinforce their control of sanitary conditions at the target sites.
8. If the agreement is achieved with local health departments, the Ministry of Health of

the Republic, local administrations and the EPT headquarters, a two-week workshop on health education program development will be conducted for head doctors of city and district health centers in Khorezm.

9. The issue of creation of a coordinating center for implementation of the developed programs for health centers in the target areas shall be considered in conjunction with EPT by end 1996.

ACTIVITIES:

For the model centers in Khorezm

1. To invite heads of the module centers to a sitting of the coordinating center at the local administration and to submit the developed program;
To schedule hearings of the quarterly program progress report;
2. To distribute responsibilities among the model centers for the program implementation period;
To make them aware of its importance.
3. To convince the management of how important water desalination is.
4. At each target site, to conduct a meeting with a "work team" (director, chief engineer, trade union leader, representative of the district SE station, representative of the local administration) focusing on the issues of desalinated potable water supply for workers at the sites.
5. Encourage workers to address the factory management with their requests about water supply.
6. Make a suggestion to the factory management to learn about functioning desalination systems installed at other sites, and to explore other water desalination methods that could be applicable to the specific climate and situational conditions.
7. In order to assure boiled water consumption at the target sites during summertime, conduct relevant educational activities.
8. Using the medical station data on morbidity rates and studying the information about sick leaves, discuss with the factory management the impact produced by work conditions on the health of workers at the cocoon-processing shop and at the Trucking Division in Achunbabayev collective farm.

9. With a view to identifying health education needs, to hold meetings with the module center representatives and to use the outcome of such meetings for development of topics for lectures and TV speeches and for advertizing.
10. To have neighborhood SES employees observe the hygiene practices of the module centers as well as health of its personnel.
11. To have head doctors of the neighborhood health centers develop topics and identify techniques for health education activities of the module centers.
12. To convince the local administration, oblast health care departments, relevant departments of the Ministry of Health, and the EPT representative in Almaty that it is important to conduct a two-week workshop on health education program development for head doctors of the Khorezm health centers.
13. To convince the EPT leadership and local administrations that it is important to create a coordinating center for implementation of the developed programs in the module centers of the target groups.
14. Together with the oblast health care department to resolve the issue of medical personnel provision, availability of transportation means and funding for the city and district health centers.

For the model centers in Karapalkstan

1. To organize a meeting with the Cotton Oil Plant administration and public utility services, public education departments and the collective farm boards with a view to convincing them of the program implementation.

For target groups:

For the Cotton Oil Plant, Biruni

- To have the management identify funding in order to purchase water and sewerage pipes, sanitary equipment as well as to construct installations to purify liquid wastes from the plant; to purchase installations reducing dust and noise; to construct a shed for cooling boiled water in summertime;
- To procure containers for water storage and boilers;
- To purchase equipment for shower rooms, rubber rugs, bowls, wardrobes;
- To supply hot and cold water;

- To furnish recreation room with sofas, armchairs, samovars, table and tea sets;
- To provide protective clothing and safety tools, protection glasses, respirators, etc.;

For the plant kindergarten

- To lay a water conduit and sewerage system;
- To construct and equip a shower room and a swimming pool;
- To supply hot water;
- To procure containers for boiled water storage;

For the school named after S. Rachimov

- To lay a water conduit and sewerage system;
- To supply hot water;
- To install wash stands;
- To purchase containers for boiled water storage and boilers;

For the Trucking Division

- To lay a water conduit and sewerage system;
- To supply hot water;
- To procure containers for boiling and storing water;

Health Education Activities in the Target Groups

- To organize a meeting with the target groups leadership in order to convince them of the necessity to cover all the employees with health education;
- To encourage the health educators to constantly upgrade their professional skills;
- To develop a set of educational classes on all types of diseases that have spotted in the area.
- To discuss with the oil plant management the importance of noise and dust reduction at

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work places, and of the need for installing purification systems;

- To study the needs for health education activities at the sites through conducting surveys and administering questionnaires, and through interviewing.
- To obtain visual aids, videos, posters, and technical aids;
- To write a scenario/script for dramas and role plays;
- To provide materials for the oblast and district mass media;
- To organize radio and TV programs on the values of healthful practices;
- To organize contests for schools and kindergartens in order to encourage the best health practices.

Main Topics for Health Education Activities

For all the model centers

1. Water Hygiene - 15 hours - to have discussions on:
 - value of water in everyday life;
 - water consumption rates in different communities;
 - water as an infectious diseases agent;
 - how water affects internal organs;
 - water purification and disinfection techniques;
2. Personal and Public Hygiene - 15 hours of discussions on:
 - concepts of personal and public hygiene;
 - how to practice personal hygiene;
 - basics of household, public and occupational hygiene;
 - soil and air contamination factors and prevention measures;

- urbanization and its impact on environment;
- 3. Issues of Beneficial Health Habits - 18 hours of discussions on:
 - What is the healthy life style?
 - nutrition and health
 - physical exercises and health
 - What a healthful regimen is and how it impacts a person's health status
 - interpersonal communication and health
 - bad habits and their detriment to health

For the Trucking Division and Targeted Groups in Biruni

- 4. Prevention of accidents - 3 hours discussion
- 5. Occupational hygiene requirements - 3 hours discussion

BUDGET of health education activities for Khorezm Oblast

1. 48 health classes in each model center (a lecture costs Sum 1100)	$48 \times 5 = 240$ $240 + 6 = 246$ $246 \times 1100 = 290600$
2. 6 TV programs (a TV program costs Sum 3000)	$3000 \times 6 = 180000$
3. 18 features in local newspapers (a feature costs Sum 1100)	$1100 \times 18 = 19800$
4. 3 types of posters (1000 copies of each) (a poster costs Sum 30)	$30 \times 3000 = 90000$
5. A brochure on healthy life style (2000 copies) (a copy costs 70 Sum)	$70 \times 2000 = 140000$
6. 3 types of booklets (9000 copies) (a copy costs Sum10)	$9000 \times 10 = 90000$
SUBTOTAL:	
educational classes	290600
TV programs	180000
features	19800
posters	90000
brochures	140000
booklets	90000
TOTAL:	810400

BUDGET for Karakalpakstan

1. 48 classes in each model center (a lecture costs Sum 1100)	$48 \times 4 = 192$ $192 + 6 = 198$ $1100 \times 198 = 217800$
2. 6 TV programs (a TV program costs Sum 3000)	$3000 \times 6 = 180000$
3. 18 features in local newspapers (a feature costis Sum 1100)	$1100 \times 18 = 19800$
4. 3 types of posters (1000 copies of each) (a poster costs Sum 30)	$30 \times 3000 = 90000$
5. 3 types of booklets (9000 copies) (a copy costs Sum10)	$9000 \times 10 = 90000$

SUBTOTAL:		
classes		217800
TV programs		180000
features		19800
posters		90000
booklets		90000
TOTAL:		597600

PROCUREMENT OF EQUIPMENT

	Name	Khorezm	Karakalpakstan
1	Video - 1 set	Sum 250000	Sum 250000
2	Typewriter	Sum 50000	Sum 50000
3	Paper and cartridge	Sum 5000	Sum 5000
4	Car (The UAZ)	Sum 100000	Sum 100000
	TOTAL:	Sum 405000	Sum 405000

TOTAL BUDGET:

For Khorezm: 1 215 400

For Karakalpakstan: 1 002 600

Commentary

Considering that this is only a draft program, several items and deadlines for activities will be specified as soon as a field analysis is done. Furthermore, the budget figures are likely to be adjusted for inflation.

Appendix F
Results of Post Test Questionnaire

(23 respondents)

1. What did you enjoy most about this workshop?

participative teaching methods	13
good organization of materials	6
accessibility, quality, kindness of trainers	5
planning methods	3

2. How well did the sessions of the workshop relate to the objectives?

Excellent	10
Very good	5
Good	6
Fair	1
Poor	0

3. What were the three most important or useful things that you learned from this workshop?

evaluation methods	11	innovations	2
planning process	9	spectrum of prevention	2
participative learning	5	management	2
bottom up approach	3	healthy way of life	2
needs assessment	2	role playing	2

One response each with the following answers: marketing; use of group leaders; organizing training; create a regional center; changing behavior; learning about other Republics; identifying community needs; coordinating implementation; travelling workshops; health centers in schools; mass media; training.

4. Describe how you plan to use these ideas when you return.

conduct training with colleagues	7
use the planning process	4
use focus groups	4
use participative methods	3
work with colleagues	1
evaluate programs	1
organize health centers in schools	1
use media	1

5. Did you learn any new management techniques that you can use in your job?

Yes responses:	
planning methods	5
public opinion polls	4
evaluation methods	3
budgeting	2
participation methods	2
management techniques	2
intersectoral collaboration	1
SMART technique to write objectives	1
bottom up approach	1
No, responses	1

6. Did you learn new methods to educate the public for improving water and sanitation practices?

Yes responses:	
use of video spots	6
participatory health education methods	5
role playing	3
focus groups	3
management	2
influencing behavior change	2

7. How do you plan to involve community members or other groups in the planning and implementation of water and sanitation programs?

informing, persuading people	5
media	5
training	3
health education	3
meetings	3
lecture clubs	1
polling	1
text tests	1

8. Were any sessions not clear or not helpful to you?

Yes responses:	
the field visit to the hospital	2

9. Do you have any suggestions for how the workshop could have been organized or presented in a better manner?

hold trainings in the field and involve mass media 2

One response each with the following answers:

use Russian terms for some ideas; too intensive; reduce the amount in program or extend the length; translate materials beforehand; manage handouts and copying better; two weeks is enough; don't invite all people for all the training; trainers should speak Russian; hold classes no longer than 7 hours per day; give an invitation to the USA.

10. Do you have any comments about how the trainers could have presented the sessions more effectively?

use synchronous translation with headphones 3

give a few more examples and visual aids 2

Ivan's Russian is not good enough 1

11. Do you have any suggestions for the content of a future training workshop if one could be planned? Please describe them.

make the work days & workshop shorter, ie 2-3 weeks 4

continue with follow up to this workshop 3

hold workshop in Tashkent/Kirgistan/Tajikistan 2

involve more mass media & education people in workshop 2

One response each with the following answers:

clarify the concept of strategy; have participants generate more specific ideas; demonstrate more videos, films and health education methods; hold a 2 day workshop for health educators, teachers and nurses; select participants for their interest and creativity; give more details on management; distribute handouts on the same or next day.