The WHO Regional Center for Environmental Health Activities (CEHA) was established in 1985, to provide coordinated and focused technical support



to the Member States of the Eastern Mediterranean Region of WHO, for building national capacities in environmental health (EH).

This was in recognition of the growing need for an augmented promotion of the creation of healthy environmental settings, as necessary conditions for human

health protection, within the context or sustainable development The Arab-Gulf Program for the UN Development Organizations (AGFUND), which was instrumental in the provision of US\$ 1 million towards the establishment of CEHA (Phase I), subsequently approved an amount of US\$ 200,000 under Project 28/4 (Phase II).

THE PROJECT WATER AWARENESS AND CONSERVATION PACKAGE

Water is an essential commodity without which no living thing could exist on this earth. One can get along without food for days, but one must have safe drinking water daily. Two liters of water per day per person for drinking is enough for survival; it would be better to have at least twenty liters per day for drinking, food preparation, and essential cleansing. WHO recommends that; at least 50 liters per person per day should be supplied; the more the better. Certain developing countries consume 400 liters per person per day.

Many countries in the region, especially those in the Middle East, are among the poorest in the world in water resources. Water conservation and awareness is essential in these countries to survive in the future. Water is also essential for developing a country; scarce water resources hinder sustainable development in all fields.

Water Conservation Strategies:

A plan for water conservation for each Country/Governorate needs to be set and implemented. A three-leveled structural plan to cover all conservation measures must be laid and implemented. The current or previous efforts, needs to be continued. The **Socio-Econmic** appraisal should be a part of each level shown below, it is the controlling factor most of the time.

• Level 1 Measures

Universal metering; water accounting and loss control; Costing and pricing, Information and education.

• Level 2 Measures

Water use audits; Retrofits; Pressure management; Landscape efficiency.

• Level 3 Measures

Replacement and promotion; Reuse and recycling; Water-use regulation; integrated resource management.

CEHA is ready to cooperate with all National agencies and with the civil community and donors to help in setting up such plans.



A package of information related to raising water awareness and conservation among the public was prepared by CEHA for this purpose. The following is a summary of the package and activities carried out to date.

Package Objectives:

- Answer Frequently Asked Questions (FAQ) by the public about water.
- Enhance public participation in water conservation.
- Raise public awareness regarding the importance of water in their lives, especially in arid countries.
- Inform the public of the importance of water disinfection.

If the package (or a modification to it) is used as a contest or in any other form; answers could be analyzed to serve many other purposes. For example: it could be tailored to find out the degree of water awareness among the public.

The Package:

This package consists of forty units; each unit consists of three items.

Item One:

It consists of FAQ, such as:

- Where does water come from?
- How does water become polluted and unfit for drinking?
- How can one conserve in house water consumption?

Item Two:

Questions in item one are answered here in a simple language.

Item Three:

These are simple questions to the reader. The reader could answer most of them if he reads all of the 40 units. Such as:

- Generally, which water is less polluted before treatment, underground or surface water? Why?
- Are harmful bacteria (germs) are counted or weighed?
- What is your annual expenditure on water? What percentage of family income does that represent?

AN EXAMPLE OF ONE UNIT

Item One: Is it possible to get ill if you drink polluted water?

Item Two: Yes, and most wide spread diseases are due to water that is polluted with germs. The symptoms are throwing up, diarrhea, dehydration and sometimes death if the illness is not treated immediately (cholera is carried in water). Illnesses happen when the water is improperly treated or polluted. Boiling water kills all germs in it. Children are affected more from polluted water than are adults.

Item Three: Have you or anyone you know ever been ill because of drinking polluted water? What was the type of illness?

The Jordan Activity

CEHA in cooperation with Jordan Environmental Society (JES), Amman Rotary Club and Al-Rai Newspaper, published the forty units, three units per week. The public was requested to answer Item Three of every Unit; any person that answers any 15 questions correctly was eligible to win a prize. JES checked the replies of those that participated in the contest. Later, a committee consisting of of representatives the above mentioned institutions was formed to choose the winners through a lottery type contest. The activity was held during the year 2000, it took about three months. The four parties carried the financing of this activity.

Participants and winners were from most of the governorates of Jordan, forty percent of winners were women. Two hundred and ten replies were received; ten of them received financial prizes, four of those were women.

مسابقة المياه والبيئة

برعاية لجنة البيئة بنادي روناري عمان و WHO-CEHA وجمعية البيئة الأردنية وبالتعاون مع جريدة الرأي ١٩-هل انمواد الكيميائية الموجودة طبيعيا في مياد انشرب ضارة

ليس بالضرورة ، ولكن معظم المواد الكيميائية الموجودة في الطبيعة ضارة (خاصة الا ما خان تركيزها عاليا) ويمكن أن تذوب في المياد مثل (الزرنيخ ، السيلينوم)، وكذلك توجد بعض المواد الكيميائية في الطبيعية غير ضارة ولكذبا قد تتحد مع مواد عبيائية أخرى التنج مواد عبيائية وضارة ، لذلك عن الواجب مراقبة تركيز المواد الكيميائية في مياه الشرب، وتوجد في المواصفة الاردفية حدودا لذلك. كما توجد مواد كيماوية في المياه تقيدك صحية، ويعضها لا يضر ولا ينقع الاضمن تراكيز معينة ، ملا: الفتور أيد ، فاته يقيد الاستان ضمن تراكيز معينة و إذا ما زاد عن ذلك فانه يصبح ضارا، ولا يجوز استعمال المياه المحدوية على الفلور إيد نفسيل الكلي مثلا.

السؤال رقم...١٩....: هل نشرب العياه من الصنبور أم نشتري مياها معبأة وتعاذا ؟؟؟؟؟ وكم بكلف ذلك شهريا أو سنويا؟؟



The Photo shows HRH Prince Feras Ben Raed, Minister of Water Eng. Hatem El-Halawani and COR of CEHA Dr. M.Z. Ali Khan.



A ceremony was held at a hotel in Amman-Jordan to handover the prizes, in which, many publications and tools were displayed to give information about water and water conservation. HRH Prince Feras Ben Raed, Minister of Water (MOW), COR of CEHA, the Head and members of The Rotary Club and many other officials and newspapers representatives attended the ceremony. HRH gave the Shields of Honor and appreciation certificates of the Rotary Club to all major participants, and distributed the prizes to the winners. Similarly the MOW gave similar shields. Photos and reports about the ceromony were published in most of Jordan newspapers.

The Syrian Activity

CEHA in cooperation with the Ministry of Housing and Public Works and Syrian TV, choose thirty questions of the package.

A contest was broadcasted, during the Ramadan month of 1999. Daily and after the "eftar" time, the broadcaster of "Good Evening" program would read a question to the public and any body who sends the answers, would be eligible for a prize. A committee was formed to check the replies, then choose the winners. The committee consisted of: Deputy of Minister of Public works and Housing (PWH), Head of Environmental Protection Department, Representative of Minister of PWH, Representative of Radio and Television Establishment and Arab Advertisement Agency.

A Photo showing the Syrian Committee members during the one hour TV Show, in the Syrian TV.



Later, after Ramadan month, another one-hour TV program was arranged with the Syrian TV, where the contest committee asked the public to answer the thirty questions, explained the answers; and the prizes were given to the winners.

Three prizes were announced by the committee, 1,500 participated in the contest, twenty nine only answered the questions right. Participants from most of the Syrian Governorates were engaged in the contest.



To promote water awareness and conservation among the EMRO countries, any Ministry or Organization interested in the publication or broadcasting of this package is encouraged to contact CEHA of Jordan to obtain a copy this package. An Arabic and/or English version of the package are available upon request. These entities are encouraged also to tailor the package to suit their own conditions, or use it as is. A small committee of knowledgeable persons in water could add many other items to this package and/or tailor it to find degree of water awareness, water pricing, metering or others related to water in their community.
