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World Vision

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**PROJECT:
INTEGRATED MANAGEMENT OF 5 WATERSHEDS
MUNICIPALITIES OF JUJUTLA & GUAYMANGO, IN THE DEPARTMENT OF
AHUCHAPAN**

GRANT NO 519-A-00-99-00210-00

**QUARTERLY REPORT OF ACTIVITIES
January-March 2002
Submitted: April 30, 2002**

**Submitted To:
USAID El Salvador
Office of Water and Environment
C/o American Embassy
San Salvador, El Salvador**

**Submitted By:
World Vision El Salvador
Avenida Bernal No. 222
Colonia Carmita
San Salvador, El Salvador
(503) 260-0643**

Executive Summary

- 1 -

The current report describes the main actions carried out by the **Integrated Watershed Management Project** by World Vision during the period of January to March 2002. The positive outcomes for this program, which is in its third and last year of operations, indicates that all project's goals and objectives will be achieved by the end of September 2002.

During this quarter, project efforts were focused on objectives 1 and 2, as the following summary describes it:

OBJECTIVE 1: TO PRODUCE WATER IN SUFFICIENT QUANTITY AND WITH THE QUALITY REQUIRED FOR HUMAN CONSUMPTION

- Creation of Watershed Committees composed of members of the Water Councils, with two current committees being members of ANDAR, also known as the National Association for the Defense, Development and Distribution of the Water in Rural areas.
- Construction of 40 improved Finland-type stoves, including training of an equal number of women in the construction and use of the stoves.
- Construction of 24 composting latrines in the Cuevitas watershed.
- Training of Water Councils and Health Committees in the management of gray water systems.
- Fumigation campaign in 935 houses of five watersheds to control against incidence of dengue and malaria.
- 50.000 forest plants produced in community orchards.

OBJECTIVE 2: 100% OF PRODUCERS ADOPT A MINIMUM OF SEVEN APPROPRIATE FARMING TECHNOLOGIES IN THEIR DEMONSTRATION FIELDS

- The training of 20 Promoter Producers in the following activities: use of organic fertilizers, small irrigation systems, identifying areas of the micro-watershed, and construction of land and water conservation structures.
- Environmental training was provided to 120 children (boys and girls) and 8 teachers (men and women) from five different schools in the project area, including the following modules:
 - The Water's House
 - Sources that Water the Earth
 - Living with Nature
- A field tour for the Watersheds was carried out with students and teachers of the five schools in the project area.
- Construction of 1500 meters of irrigation ditches for hillsides was carried out.

- Five demonstrative parcels with vegetables and fruits under irrigation were established.

Further information on these activities is annexed at the end of the report.

Next quarter's plans will include the following activities:

- Production of 50,000 plants
- Purchase and sowing of 4,000 citrus trees
- Purchase of Vetiver grass for the elaboration of barriers
- Construction of 41 Finland-type stoves, and 24 composting latrines
- Training children, teachers, watersheds and health committees in environmental education.
- Providing technical assistance in sustainable agriculture to 300 farmers.

OBJECTIVES, ACTIVITIES AND OUTCOMES

Following is a description of the main activities carried out under each of the to grant objectives:

OBJECTIVE 1: TO PRODUCE WATER IN SUFFICIENT QUANTITY AND WITH THE QUALITY REQUIRED FOR HUMAN CONSUMPTION.

Activities Carried Out

A. Development of Watershed Committees

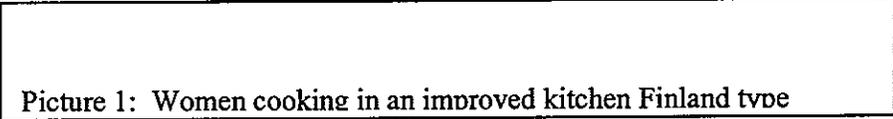
With the purpose of strengthening community organization in the handling of natural resources, a Watershed Management Committee was organized. This committee assembles representatives from the five Water Councils assisted by this project and also other watersheds committees supported by the project 'AGUA' located at southern part of the Department of Ahuachapán. The Watershed Committee will be receiving continuous training in order to build the necessary capacities in their members for the administration and management of the natural resources of their own communities. The Watershed Committee has coordinated this activity with Salvanatura, a local environmental NGO.

In addition, Water Councils from the Hoja de Sal and the Cuilapa Watersheds are now members of the National Association for the Defense, Development and Distribution of the Water in Rural areas (ANDAR).

B. Construction of 40 improved kitchens Finland Type

During this quarter, a total of 40 new improved Finland-type stoves have been built. The process included the selection of the beneficiary families, procurement and transportation of materials to the watershed areas, training in stove construction, and the process of construction itself.

A local promoter, specialized in this type of improved stoves, and the benefited families actively participated throughout the construction process. Each family supplies some local materials and their labor, and the promoter provides technical advice and instruction for the proper usage of the stoves. The involvement of women in the construction activities, allows them to learn the process of building this type wood-reduced-consumption stoves.



Picture 1: Women cooking in an improved kitchen Finland type

C. Construction of 24 fertilizer Latrines

In this reported quarter, a total of 24 dry-composting latrines were built in the Cuevitas Watershed, where the lack of sanitary facilities was creating health & environment problems among this community's population.

The construction of latrines also included the community participation through the provision of non-skilled labor, which is overseen by the project's skilled personnel. The project also provides the required latrine construction materials.

The criteria used for the selection of the beneficiary families was the following:

- Families dwelling within the recharge watershed area
- Families not possessing any type of latrines
- Families being part of the sustainable agricultural program carry out by the project.

It is considered that the usage of this type of latrines will reduce the contamination in water or soil resources, as well as reducing vector proliferation centers.

D. Training to Water and Health Committees

A total of 37 members of the Water and Health Committees from various watersheds areas, participated in the **Gray Waters Treatment** training. During this training, the participants became aware of the different problems caused by the inappropriate gray water disposal. Also, different gray water treatment methods were taught, such as the usage of gray water pits, for which the participants received instructions on the selection of construction materials, the building process, and guidelines for a proper pit maintenance measures.

It is expected that the knowledge and experience acquired by the participants will be shared and practiced amongst the targeted communities in order to improve environmental-sanitary conditions.

E. Fumigation Campaign

WV coordinated a fumigation campaign with the Ministry of Health that provided this service for the five supported watersheds. A total of 935 houses were fumigated as a direct result of this coordination. The objective of the fumigation campaigns was the fight against vectors producing Dengue and Paludism (malaria), which especially proliferate during this time of the year.

In order to develop this activity, the Ministry of Health provided qualified personnel, fumigation pumps, transportation, and the active ingredient for the vectors' control. The Watersheds Project collaborated with fuel (diesel) for the chemical mixture to be applied, (gasoline) for the fumigation pumps, and the batteries for the ignition of the pumps.

F. Production of 50.000 Plants in Community orchards

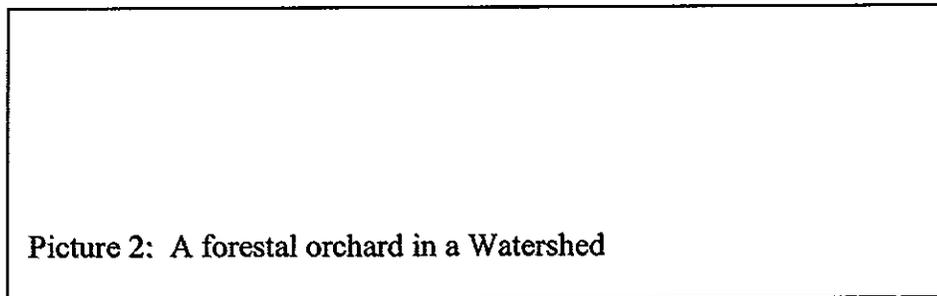
A total of 50.000 plants are being produced in the five-targeted watersheds. The actions carried out in this quarter have been the following:

- Filling bags with soil
- Elaboration of seedbeds and the transplantation of the small plants to plastic bags.
- Purchase of forests certified seeds from the Ministry of Agriculture and Live stocks (MAG)
- Sowing plant varieties including Teak, Eucalyptus, Yellow Flower, Cedar, Mahogany and Cortés, etc. Some of the trees are native of the zone and they are endangered species; other species are promissory and with multiple usages: firewood producing, wood and organic fertilizers.

The plants grown during this summer will be sowed until the rainy season becomes steady in the country, which is expected to be from the months of June and August.

The purpose of producing the plants at a local level is that people learn the different reproduction techniques and they do not depend only on external sources for plants supplies, but in they could be able to produce them.

The plants of the orchards will be used for the reforestation of the recharge zones of the Watersheds, and enlarge the forest mass, increasing the capacity of infiltration of the water and increasing the hydric recharge of the aquifers cloaks.



Picture 2: A forestal orchard in a Watershed

OBJECTIVE 2: THAT 100% OF PRODUCERS ADOPT A MINIMUM OF 7 APPROPRIATE FARMING TECHNOLOGIES IN THEIR DEMONSTRATION FIELDS.

Development of activities

The following section is the description of all the activities carried out for objective #2 during the reported period:

A. Training for Promoter Producers

A promoter producer is a farmer that has innate leadership abilities, and who has been trained with the purpose of being the keyed person to provide technical assistance to the others neighboring producers of their community.

During the quarter, several activities were carried out in order to train 20 Promoter producers, who are already working as volunteers in the project.

The training was focused in the following themes: Elaboration of organic fertilizers, the usage of micro irrigation systems, identification Watershed's components, measures for the preservation of water and soil.

The promoter producers will receive training in regularly bases, in such way that they may attain a good technical knowledge level to provide technical assistance to others productive of their community. Presently, each promoter productive is assisting an average of 15 productive of in their community.

B. Environmental Education for children (boys and girls) and teachers attending schools located in the Watersheds.

As part of the awareness' program imparted to various populations dwelling in the watersheds, a series of 3 out of 8 modules of environmental training was imparted to 120 children and 8 teachers (men and women). (This group of students is different to the group trained last year). The subject included in these modules were the following:

- The House of the Water
- The Spouts that shower the Earth
- Living with Nature

Besides, boys and girls had the opportunity to participate in an educational tour for their Watersheds, where they observed the work that the producers carry out in their parcels, such as the diversification of crops, plantation of multiple purposes trees, live barriers, and land conservation.

The Ministry of the Environment produced the teaching materials used during training, which are of high quality for the teaching of the environmental education to boys and girls in the communities. An expert in the field imparted the modules. The interactive method used for the training allowed the children to learn about the different topics in an amusing and dynamic way. After each module, homework was assigned to the children so they may put into practice their knowledge, and to contribute in the improvement of agriculture production and in the quality of water. Examples of these assignments are carrying out of cleaning campaigns, chlorination of the water, and garbage recycling.

In addition, trainings had the purpose of building new values in the children, so they could have better life practices, which may improve the current environmental conditions, and create better and sustainable Watersheds.

C. Construction of hillside irrigation ditches.

In this quarter, a total of 1500 meters of hillside irrigation ditches were built. The irrigation ditches are built to keep the lands free from erosion and to reduce the superficial dripping of the rainwater.

In order to develop this activity, the project has provided training and technical assistance to the producers. Each producer is in charge of carrying out the traces and the construction of their irrigation ditches. During this year, the project has included in the work plan, the elaboration of more hillside irrigation ditches to protect the lands and to keep its humidity.

D. Establishment of Parcels of Vegetables and Fruit plants under irrigation.

In each one of the five watersheds, the project has created demonstrative parcels with dripping-irrigation systems that allow farmers to learn the usage of these systems, and to produce non-traditional crops, like vegetables and fruits. Thus, 5 micro irrigation systems were purchase for an area of 1000 mt2. Also, the groups of producers received vegetables seeds and technical assistance, so they could learn, in an effective way, how to produce vegetables in hillsides.

Each group of producers was qualified for the management and installation of the irrigation systems, and in this way, they are able to handle their own irrigation systems. In Cuilapa community, a handmade irrigation system was established to irrigate 3.459 acres of citrus fruit trees (lemon and oranges).

These efforts are the first practices in order to promote the diversified agriculture using irrigation. Producers are experimenting new non-traditional productive options that they could be more profitable than just to grow the basic grains.

