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**Project in Development and the Environment**

**SCOPING SESSION REPORT**

**PROGRAMMATIC ENVIRONMENTAL ASSESSMENTS:**

**INSTITUTIONAL DEVELOPMENT PROJECT  
(US AID Project Number 294-0159.53)**

**SAVE THE CHILDREN FEDERATION**

and

**COOPERATIVE AND MUNICIPAL DEVELOPMENT PROJECT  
(US AID Project Number 294-0004)**

**AMERICAN NEAR EAST REFUGEE AID**

**Jerusalem and West Bank/Gaza Strip**



July 26, 1994

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The objective of the Project in Development and the Environment (PRIDE) is to help the U.S. Agency for International Development (AID) design and implement programs that foster the agency's environmental and natural resources strategy for sustainable economic growth in the Near East and Eastern Europe.

PRIDE provides AID and participating countries with advisory assistance, training, and information services in four program areas: (1) strategic planning, (2) environmental policy analysis, (3) private sector initiatives, and (4) environmental information, education, communication, and institutional strengthening.

The project is being implemented by a consortium selected through open competition in 1991. Chemonics International is the prime contractor; subcontractors include RCG/Hagler, Bailly, Inc.; Science Applications International Corporation; Capital Systems Group, Inc.; Environomics, Inc.; Industrial Economics, Inc.; Lincoln University; and Resource Management International, Inc. In addition, AID has entered into a cooperative agreement with the World Environment Center to support implementation of PRIDE.

The opinions expressed in this paper are those of the author(s) and do not necessarily reflect the positions of the sponsoring agency or contractors.

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## 1.0 INTRODUCTION

The U.S. Agency for International Development (USAID) is funding two Programmatic Environmental Assessments (PEAs) of the proposed a) Save the Children Federation (SCF) Institutional Development Project (USAID Project Number 294-0159.53) and b) American Near East Refugee Aid (ANERA) Cooperative and Municipal Development Project (USAID Project Number 294-0004). As an initial component of the assessment process and in accordance with USAID regulations (22 CFR 216), a scoping session was held on July 25, 1994, at the Pilgrim's Palace Hotel in East Jerusalem. The purpose of the scoping session was to inform interested parties, particularly PVOs, NGOs and engineering consulting firms, of the proposed scopes of the two PEAs to be conducted and to solicit assistance in identifying any significant environmental issues relating to the proposed project.

A Scoping Statement summary was prepared and submitted to the USAID Asia/Near East Bureau's Environmental Coordinator (BEC) for review and approval. This report summarizes and documents issues and concerns raised as a result of the scoping session. (On May 24, 1994, a PIO/T was approved, which included a Scope of Work for environmental assessments for West Bank/Gaza PVO Community Development and Environmental Infrastructure Activities.)

The purpose of preparing and distributing this report is formally to maintain the critical review process, which is deemed essential to the conduct of appropriate and comprehensive PEAs for the SCF Institutional Development and ANERA Cooperative and Municipal Development projects.

The need to conduct these PEAs was established as a result of the evaluations by the Project Review Committee, conducted on March 21, 1994 (for the SCF project), and by the West Bank/Gaza Institutional Strengthening Working Group, conducted on March 25, 1994 (for the ANERA project), in Washington, DC, when both recommended Initial Environmental Examinations (IEEs) with positive threshold decisions. The two IEEs with positive threshold decisions were prepared and submitted to the BEC for his approval, which was obtained on March 24, 1994 (for SCF) and March 31, 1994 (for ANERA). Such IEEs thus recognize that the two development projects could result in potentially significant environmental impacts in light of the diversity of both the types of projects/sub-projects that could be funded and the geographic locations of communities where interventions might occur.

## 2.0 PROJECT DESCRIPTIONS

### 2.1 SCF Institutional Development Project

The overall objective of this project is to enhance the management and administrative capability of Palestinian development institutions.

Through bloc grants, disbursed during the project's three-year term, SCF will partner with ten "national" level organizations to implement community development activities, strengthen forty local institutions and facilitate the formation of at least six effectively functioning impact area committees, which will have their capacities/capabilities enhanced through timely training workshops/seminars and focussed technical assistance.

Two phases of project implementation will occur: a) SCF will intensify and organize training opportunities for Palestinian institutions and provide sector grants; and b) SCF will fund proposals through bloc grants. Recent political changes and the newly formed and struggling Palestinian Economic Committee for Development and Reconstruction (PEDCAR) will require alterations regarding earlier methods of operation and continued cooperative coordination with the newly created entity.

SCF plans to target three levels of institutions: a) national; b) local; and c) grassroots. National institutions will receive the majority of bloc grant funds. However, a dynamic NGO sector requires cooperation with institutions from national to grassroots levels. Sector grants, on the other hand, will focus on the implementation of projects in areas where SCF and its partner organizations historically have worked:

- Water resource development--potable drinking and agricultural purposes
- Sanitation:
  - Small-scale sewage collection and treatment
  - Household solid waste collection and disposal
- Agricultural development:
  - Land reclamation
  - Crop diversification
  - Construction of earth or gravel access roads
  - Fencing of cultivated areas
- Environmental awareness through campaigns
- Women's activities:
  - Management and technical training
  - Small-scale income generating projects
  - Promotion of credit models for loans
  - Basic literacy
  - Job-related skills training

SCF plans to continue to implement and coordinate development activities funded by non-USAID sources with local NGOs and grassroots organizations. Activities to be stressed will include: empowerment of women, rehabilitation of the environment, development of low-cost agricultural technology and encouragement of creative learning environments for young children.

Potential partners include:

- Women's Organizations:
  - Union of Women's Working Committees
  - Women's Committee for Social Work
  - Islamic Women's Committees
  - Shu'un al Mar'a (Women's Affairs)
  - Women's Graduates Society
  - Bisan Research Center
- Agriculture Committees:
  - Union of Agricultural Works Committees
  - Palestinian Agricultural Relief Committees
  - Palestinian Farmers Union
  - Palestinian Hydrology Group
- Child Community and Research Centers
  - Rafah Community Center
  - El-Toffah Educational Center
  - Child Health and Community Research Association
  - Palestinian Youth Union
  - YMCA

## 2.2 ANERA Cooperative and Municipal Development Project

The purpose of the American Near East Refugee Aid (ANERA) proposed program is to strengthen the capacity of selected Palestinian cooperative and municipal institutions to deliver and maintain economy stimulating services. This will be accomplished through:  
a) increased marketed production of agricultural commodities; and  
b) increased marketed production of manufactured goods and services. Moreover, the project proposes an integrated program of high-leverage irrigation development with West Bank/Gaza Strip cooperatives and integrated municipal development through industrial zones and agricultural markets.

The integrated agricultural cooperative strategy recognizes several priority substantive needs in West Bank/Gaza agriculture, which can be grouped into three strategic objectives:

- Improved management of key intangible agricultural resources, notably extension services
- Improved management of priority tangible resources, primarily water
- Improved general management of major cooperatives, namely, administrative, financial and member participation.

All three objectives emphasize institution building through improved resource management, and improved services and strengthening of cooperative management capabilities. The following critical farmer needs will be addressed:

- More cost-effective, productive, safe and environmentally sound use of pesticides and fertilizers (i.e., maximize the concept of Integrated Pest Management (IPM), which, in turn, minimizes the employment of the former chemicals)
- More efficient and water conserving irrigation methodologies and crop varieties
- Improved methods of marketing and quality control
- More efficient and healthier livestock production
- Improved management of financial and technological resources in farms and farmer cooperatives.

Achieving greater efficiency in water use (including reuse) is clearly among most important West Bank/Gaza Strip agricultural priorities. Historically, it is the largest sectoral consumer of water. To combine the efficiency promoting extension, training and technical assistance, the strategy of this activity focusses on: a) improved irrigation storage and conveyance infrastructure; b) well, spring and pump rehabilitation; and c) water conservation (and reuse) technologies, methods and crop varieties that have high value.

The second component consists of urban development and municipal planning, infrastructure and institutional strengthening activities. Of specific relevance to the proposed project is the importance of municipalities for industry and agribusiness.

The following is a summary of the "Cooperative and Municipal Development Project" activities:

- A. Municipal Development Activities
  - Nablus Municipal Light Industry and Handicrafts Facility
  - Hebron Chamber of Commerce and Light Industry Complex
  - Gaza Municipality Wholesale Market
  - Khan Younis Municipality Wholesale Market
- B. Agricultural Activities
  - Al-Fara'a Valley Irrigation Works, Jiftlik Valley (Jericho)
  - Bala'a Village Irrigation Infrastructure
  - Jayyous Village Irrigation Infrastructure
  - Nassariah Irrigation Pipeline
  - Rafah Water Reservoir
  - Beit Lahiya Irrigation Pipeline and Wells Rehabilitation
  - Abassan Kabira Village Council Irrigation Well, Reservoir and Pipeline
  - Ein Al-Bida Village Irrigation Pipeline

- C. Agricultural Extension Services/Cooperative Activities
- Brucellosis Program
  - Mother Grapes Rootstocks Farm
  - Protected Grazing Area
  - IPM vs Pesticides
  - Seedless Grapes Farm
  - Produce Agricultural Extension Materials

### 3.0 PRELIMINARY FINDINGS

#### 3.1 Pre-Scoping

Pre-scoping was accomplished at USAID/W during the period of April 12-15, 1994, among Near East Bureau environmental and West Bank/Gaza Strip staff, in order to develop a preliminary list of perceived negative environmental impacts requiring further discussion:

- excessive soil erosion and transport of debris off-site;
- exposure of village inhabitants to environmental health problems;
- disruption/destruction of cultural/agricultural resources;
- potential effects due to seismic activity of seasonal flooding;
- worker or occupant accidents;
- increased point-source discharges of wastewater or septage;
- misuse/mismanagement of pesticides and fertilizers;
- improper collection and disposal of household solid waste;
- improper siting/management of landfills; and
- increased exploitation of groundwater sources.

#### 3.2 SCF Site Visits

Site visits were conducted to the following SCF villages/towns:

1. Kissan (S. of Bethlehem) comprising community pit latrines and shower facilities, with collection sump for wastewater. Accumulated waste is removed by truck regularly; emissions filtered to reduce odors and flies.
2. Rashaydeh (further south) on a ridge overlooking the Jordan Valley near an Israeli game preserve. Some indoor/outdoor showers and latrines. Village notorious for aiding terrorists from Jordan; therefore, Israeli reprisals are common, e.g., no water supplied for three months. One family of 18 with 150 goats/sheep pays NIS 400-500 (\$135-170) per month for potable water.
3. Zanouta (near Yatir Forest, West Bank/Israel southern border). Meeting with Abou Nimr (father of the tiger), Bedouin shepherd and local headman, who explained the history of the many Roman cisterns in the area and how SCF has helped repair/upgrade and provide new cisterns for him and the Bedouin settlement (varies from 500 families in spring to 50 families in winter).

SCF is currently evaluating a slow sand filter device for treatment of rainwater and an evaporative cooler system for food storage. The rehabilitated cisterns cost \$400 each, with a holding capacity of 80 - 200 m3.

4. Sai'r (town of 17,000 population, NE of Hebron). SCF provided concrete storage tanks for rainwater harvesting, which is used for irrigation purposes. Also, individual household septic tanks were provided including perforated PVC pipes. SCF additionally provided the town's cistern system; however, it currently requires both cleaning of debris and a one-meter elevation of the delivery pipe to assure potability.

5. Beit Anoun (small community near Sai'r). SCF provided \$2000 to re-route the spring and consolidate the flow for the inhabitants. Also, a septic tank leach field, using a subsurface drainage technique with 10-meter sections of 10-cm pipe packed in gravel, has been utilized for crop irrigation at a cost of \$350 for materials.

6. Al-Odaseh (small community near Sai'r). A highly polluted cistern of 80 m3, which provided the water supply for 400 families (8-15 persons per household), required disinfection/treatment using a low-cost, low maintenance system. Plans call for the use of slow sand filters at the cost of \$500 per household.

7. Kwaziba (a rich, fertile valley area some distance from Sai'r). Spring-fed concrete ponds/tanks holding 180-240 m3 each were constructed by SCF at the cost of \$10,000 per 10 units. This water source is used for vegetable irrigation, drip-type. There is evidence of a stone Roman aqueduct, which at one time delivered water to Jerusalem.

8. Aseera Al-Qybliyah (village of 2500 people, 20 km SW of Nablus)--a cooperative project with a village charitable association. The project comprises upgrading and repair of a playground and kindergarten building, including latrines, for 80 children. Here, a village women's committee of 100 elected five women, three housekeepers and one teacher to provide skills needed to run the kindergarten. Three villages included in the impact area southwest of Nablus will participate in the activity, which entails a \$4000 SCF/\$4000 community cost-share. As a result, men were motivated to form an electricity committee to liaise with SCF. A decision-making management course is now offered in Nablus for female teachers.

Currently, village committee requests have involved the following issues:

- children's education
- spring water quality evaluation to include utility of sand filtration
- beekeeping enterprise skills course (for 20-25 women):
  - loans for participating women (up to \$1000 for hives)
  - loans must be repaid in 3 years @ 8% p.a.

Honey sells for NIS 80-100 (\$27-34) per kilogram here; in the Jordan Valley, NIS 20-30 (\$7-10) per kilogram. (The higher, local prices are due to the pollination of medicinal plants.)

One household (8-10 persons) plus animals pays \$42 per 12 m<sup>3</sup> of water per month (from a tank car), which requires disinfection. Unfortunately, no one in the village is trained to dispense HTH (chlorine tablets) at the proper dosage to accomplish correct disinfection.

9. Boureen (town of 3000 people with an additional 7000 having emigrated to Jordan and the Gulf; it is located near Aseera)--here, many different groups of women selected committee members to improve the quality of the town's community center. In this case, SCF decided that the committee must pay in-kind participation in cash upon signing of the contract; SCF will hire local labor as needed up to the limit--a \$7900 SCF/\$7900 town cost-share to pay for construction of outdoor stage (which will be rented out), play areas, roof maintenance, building repairs, latrines, etc., in the community center area. Another aim of the activity is to develop skills and offer training courses to women to improve teaching methods for children.

### 3.3 ANERA Site Visits

Site visits were also conducted to the following villages/towns where ANERA has been or will be active:

1. Al-Bireh abattoir. A pay-as-you-go slaughterhouse, only three years old. Fees charged for animals: NIB 10 per sheep; NIB 50 per cow or NIB 60 per large cow. Only waste treatment observed was a concrete-lined trench for drying of solids; wastewater and blood pumped to a nearby wadi. All animals are slaughtered, dressed and removed by 08:30 hours daily, and floors are washed down and cleaned thoroughly.

2. Aluja irrigation canal (west of Jericho). A natural spring produces 2500 m<sup>3</sup>/hr via a 5 km open channel, gravity flow conveyance system to 10,000 dunums of irrigated land, which includes a banana plantation.

3. Nablus (city of 120,000 population, N. of Jerusalem). Met Hani Arafat, Deputy Mayor, who introduced six members of his staff, including Maher Hanbali, City Engineer. ANERA's light industrial park is to be erected on 8 dunums (10 dunums = 1 hectare) of land in Eastern Nablus and will contain 86 workshops, 12 x 4 meters each, on two floors. The purpose of the project, i.e. the handicraft shops, is to a) employ local citizens, including inhabitants of three nearby camps, and b) organize better by planning a single light industrial area within a residential area. The project has been approved by the Higher Planning Council and the Health Department of the Civil Administration. The shops are designed to open inwards to a courtyard to reduce noise pollution and aesthetic nuisances as well as minimize outward expansion.

A list of potential renters include: textile sewing, clothing and leatherworks, cotton mattresses, leather shaping and shoes, goldsmithing, rattan furniture, aluminum assembly, carpentry, repair shops, printing presses, traditional handicrafts, cosmetics packing, and also a cafeteria.

Issues not resolved include wastewater treatment, solid waste disposal, etc. Estimated cost of facility is \$1.65 million, not including land (estimated value \$1.5 million)

4. Ghore Al Fara'a (E. of Nablus on way into Jordan Valley). Observed the headworks (spring water mixed with some Nablus raw sewage), where open-channel flows of 100-150 m<sup>3</sup>/hr are piped (underground). Area currently irrigated is about 6,000 dunum. Very little O&M noticed, with gabions already eroding, two-year old concrete wall, designed to shore up stream bank, already showing signs of failing, sedimentation channels not maintained.

A 28-inch diameter pipeline, coated with asbestos outside to prevent erosion and with mortar inside to prevent gasification, transports irrigation water to the Jiftlik valley below. The ANERA irrigation pipeline project begins in the Jiftlik valley, where plans call for extending three pipelines as far as available funds allow--it is about 8 km to the Jordan River, which is 400 meters below sea level.

5. Beit Lahiya Cooperative (Gaza Strip) -- has an existing well that supplies 60-65 m<sup>3</sup>/hr of fresh water for irrigation of 45 dunums. The proposed pipeline will help reclaim new land amounting to about 30 dunums. This reclaimed land will create new jobs and improve the standard of living for the cooperative (20 families). The existing well is similar to a shaft rather than a borehole and is 31 meters in depth, where the groundwater table is intercepted. The water pump, some type of outdated reciprocating device, was installed in 1960 and discharges about 65 m<sup>3</sup>/hr. Oil seepage and diesel fuel were observed from both the pump and the generator. This organic seepage represents a future risk and must be considered during well rehabilitation and pump replacement. Fuel tanks must be stored outside the pumping room in a separate storage shed.

6. Gaza Municipality Stormwater System -- the existing lagoon has transformed itself into a storage reservoir for raw sewage flowing from pumping station #6. The site is located within a densely populated area. Raw sewage is flowing into a settling basin of 2 meters depth, acting as an anaerobic pond, from two main inlets and illegal house connections to the pond and the conduit; a nearby sewerage manhole is flooding, continuously draining to the pond. Pumps are installed at all pond inlets to trap all incoming sewage for distribution to the nearby trunk line. The wastewater has accumulated to a depth of more than 5 meters in the lagoon, which has an area of approximately 34 dunums and an estimated volume of 350,000 m<sup>3</sup>. This lagoon is now acting as a facultative pond (naturally self-treating); obvious algal growth on surface is noticeable.

Persons living in the vicinity of the lagoon are suffering from malodors, aesthetic nuisances from arthropods of public health importance, such as Musca domestica, Culex pipiens, Anopheles sergentii and the notorious Anopheles pharoensis malaria vector in the agricultural areas. The preponderance of potentially dangerous vector mosquitoes requires priority attention.

Infiltration of raw sewage into the groundwater is causing a measurable increase of nitrate and other materials such as pesticides and fertilizers.

This current state of affairs is adversely affecting the reputation of those involved with any aspect of the project. It is quite clear that there is a great need to carry out interventions/actions to limit further deterioration of the environment and groundwater.

7. Gaza Municipality Slaughterhouse and Wholesale Produce Market Sites -- the project consists of three phases: a) civil works (completed); b) finished works (70% completed); and c) electro-mechanical works (on hold). The abattoir is located in a proposed commercial area of Gaza City.

ANERA has secured significant real estate adjacent to the abattoir to construct a wholesale produce market at a cost of \$2.5 million, including infrastructure and landscaping. Municipal water network is 4 km from the site.

Many private wells are in existence at close proximity to the site and could be utilized if the quality is adequate for its intended use. Wastewater from the abattoir will be separated with the blood collected in tanks that will be emptied weekly by the municipality, whereas other wastewater will be collected in septic tanks (temporarily). A permanent solution would entail hookup to the Sheikh-Ejleen wastewater treatment plant, some 1700 meters west of the site. The current construction includes the supply and installation of two electrical generators (one in standby status). Municipal electrical supply currently is about 1700 meters away.

Notes: The existing Gaza City slaughterhouse was constructed in 1937 when the population was 20,000 at a full capacity of 20 animals per day; it is located within the city center. The new abattoir capacity is designed to process 600 cows and 200 sheep in 2020. Pre-treatment of the blood must be managed on-site.

8. Abassan Village Council (Southeastern Gaza Strip) -- the proposed well is located in an area suffering from high salinity exceeding 1000 mg/l. The water will be utilized for agricultural purposes such as vegetables, olives and dates on a proposed irrigated area of 500 dunums. The on-site engineer explained that several wells exist in the area, and the council plans to mix saline water from this new well with fresh water bought from the Israeli system. No license has been obtained nor is there approval from the agricultural and water departments in Gaza. There are fears that any additional water abstracted from the proposed area will encourage saline water intrusion from the east.

Notes: Village water source is Mekorot with local wells outnumbering others by 2:1. Most of the hydrologic data are lacking.

9. Rafah Ahlieh Cooperative -- the proposed 500 m<sup>3</sup> reservoir and distribution pipeline (6-inch diameter) would improve the following:

- Drip irrigation use for agriculture thus conserving more water that can be utilized to expand the irrigated area by 120 dunums
- Increase in irrigated area will create new jobs and improve standards of living for both the cooperative members (42 families) and workers
- Water cost will decrease due to benefits generated
- There will be a savings in investment of small pumps and generators used currently to create pressure necessary for the irrigation system
- The reservoir will limit further use of oil and diesel fuel; hence, it will prevent any seepage and infiltration to the groundwater
- Water conserved will reduce potential for drilling and exploitation of more groundwater; therefore, deterioration of the aquifer will be reduced.
- Increasing the irrigated land will require more use of fertilizer and pesticides that could create potential harm to groundwater quality if not used in a conservative and safe manner.
- Proposed crops include vegetables, strawberries and flowers. Current well capacity is 100 m<sup>3</sup>/hr.

#### 4.0 RESULTS OF THE SCOPING SESSION

The abbreviated minutes of the scoping sessions and commentary from participants are provided in Appendix C. As previously described, the actual scoping session was preceded by a number of initial activities, including:

- preliminary discussion with West Bank/Gaza Strip staff in Washington, DC;
- literature and design reviews;
- identification of attendees (Appendix A);
- pre-scoping meetings held in Washington, DC, April 12-15, 1994; and
- additional briefings and meetings among USAID/Jerusalem, SCF and ANERA staffs.

The basic agenda for the scoping session used as a reference for discussion is included in Appendix B. The scoping session was attended by 27 individuals representing USAID, SCF, ANERA, Catholic Relief Services (CRS), Palestinian Agricultural Research Center (PARC), Applied Research Institute of Jerusalem (ARIJ), Cooperative Development Project (CDP), Bethlehem University, CARE, Environmental Protection and Research Center/Gaza Strip, UNDP, West Bank Department of the Environment, and PRIDE (see Appendix A).

The significant issues raised and explored during the scoping session concerned:

For the SCF Institutional Development Project:

- odors and groundwater contamination resulting from inadequate solid waste disposal and siting;
- collection, treatment and disposal of wastewater (shower pit latrines) and related solid waste debris
- soil erosion and stormwater runoff
- exposure of residents to environmental health problems
- worker accidents during construction and operations
- potential seismic and flooding hazards of interventions
- need for public awareness campaigns with the agricultural community regarding safe disposal of infected/contaminated materials and how activities such as using untreated sewage for irrigation affects the community
- lack of coordination with public institutions, other donors, and among other PVOs and NGOs
- social impact assessments equally as important as environmental assessments

For the ANERA Cooperative and Municipal Development Project:

- septage removed from project sites
- odors and groundwater contamination resulting from improper/inadequate solid waste disposal and siting
- collection, treatment and disposal of wastewater and solid waste debris
- magnitude of industrial waste generated (oils, grease, detergents, etc.) and methods for safe treatment and disposal

- safe handling and use of pesticides/fertilizers
- ultimate disposal of used pesticide and fertilizer containers
- adequacy of potable water supplies and increased use of water resources (i.e., new well in Gaza)
- soil erosion and stormwater runoff from construction activities involving new reservoirs, wells, pipelines, roads, etc.
- destruction/disruption of aquatic and terrestrial habitats and cultural/archaeological
- exposure of residents and workers (farmers) to environmental health problems
- increased use of electricity
- worker accidents during construction and operations
- potential seismic and flooding hazards of interventions
- consider use of solar heat/radiation for pest control at agricultural sites as an alternative to insecticides
- coordination of project with public institutions, other donors, and among other PVOs/NGOs and research institutes
- environmental issues need to be addressed regarding cooperatives for sustainable programs
- testing of agricultural products by qualified laboratories both for local and international markets
- environmental awareness can and should be addressed through agricultural extension programs

## **5.0 SCOPE OF WORK FOR ENVIRONMENTAL ASSESSMENT FOR WEST BANK/GAZA PVO COMMUNITY DEVELOPMENT AND ENVIRONMENTAL INFRASTRUCTURE ACTIVITIES**

### **BACKGROUND**

As a result of prolonged neglect by authorities and increasing poverty, the rural areas of the West Bank and Gaza Strip suffer from underdevelopment of their physical, economic, and social infrastructures. In an effort to improve the social and economic well-being of communities in the territories, the U.S. Agency for International Development (USAID) has decided to support programs of cooperative municipal development, water/wastewater systems, institutional development, and rural development.

Grants to private voluntary organizations have been provided for implementing the following projects: 1) West Bank Integrated Rural Development-Capacity Building Project/Catholic Relief Services (Project No.294-0159.48); 2) Institutional Development Project/Save the Children Federation (Project No.294-0159.53); 3) Ramallah Wastewater Systems Project/ANERA (Project No.294-0014); and, 4) Cooperative and Municipal Development Project/ANERA (Project No.294-0004).

In accordance with USAID's regulation 22 CFR 216.3(a)(4) (ii), Environmental Assessments (EAs) and Programmatic Environmental Assessments (PEAs) will be carried out for each project. Implementation of the EAs/PEAs will be based on the Initial Environmental Examinations (IEE) which have already been completed. The IEEs resulted in positive threshold decisions stating that the above listed projects could result in potentially significant environmental impacts in light of the diversity of both types of projects/sub-projects to be funded and geographic locations of communities where interventions will occur. Consequently, in-country scoping sessions will be carried out and a scoping session report with scoping statement and a scope of work (SOW) will be prepared for the Near East Bureau Environmental Coordinator's (BEC) review and approval. Implementation of the PEAs/EAs will be implemented upon receiving the BEC's approval. In the case of the West Bank Integrated Rural Development-Capacity Building Project/Catholic Relief Services (Project No.294-0159.48), the scoping activity has been completed, the scoping statement prepared, and the SOW approved by the BEC.

### **PURPOSE**

For all the activities, the goal of the program is to improve the economic and social well-being of Palestinians in the West Bank and Gaza. A brief description of the projects and their primary and secondary purposes are outlined below:

Task 1 - PEA for Integrated Rural Development/Capacity Building (IRD/CB) (CRS)

The IRD/CB Project's activities will take place in 20 villages in the West Bank. The main areas of intervention will be in potable water networks, spring water development, water catchments, land reclamation, agricultural roads upgrading and installation, and women's enterprise development. The primary purpose of this activity is to improve health in rural communities, to increase productivity of the agricultural/economic sector, and to increase income to women. The secondary purpose will be to increase the capacity of local Palestinian NGOs to plan and manage rural development activities in a participatory manner. PRIDE will evaluate the CRS activities, make recommendations for technical assistance and training programs designed to improve CRS' institutional capacity to perform environmental reviews of projects. PRIDE will also develop a preliminary system for assessing and monitoring environmental issues within a program context.

Task 2 - Institutional Development Project (SCF)

For this three-year project, the SCF will partner with ten national level organizations to implement community development activities, strengthen 40 local institutions and facilitate the formation of at least 6 grassroots/area committees. Areas of intervention will be in: water resource development (drinking and agricultural purposes); sanitation (small-scale sewage collection and treatment, household solid waste collection and disposal); agricultural development (land reclamation, crop diversification, construction of earth or gravel access roads, fencing of cultivated areas); environmental awareness through campaigns; and, women's activities (management and technical training, small-scale income generating projects, promotion of credit models for loans, basic literacy, job related skills training). The primary purpose of this activity is to enhance the management and administrative capability of Palestinian development institutions. The secondary purpose is to improve health in rural communities and to increase productivity of the agricultural/economic sector. PRIDE will develop a scoping session report and a PEA to outline direct and indirect effects of the project on the environment and address environmental concerns associated with water/wastewater activities USAID intends to fund.

Task 3 - Ramallah Wastewater Systems Project (ANERA)

This project entails assistance to the Municipality of Ramallah in the West Bank for the engineering design and construction of a sewage collection, treatment and recycling system for the benefit of the city and nearby agricultural communities. One of the main objectives will be to increase the

technical capacity and experience of Palestinians regarding wastewater treatment and recovery, and operations and maintenance of such treatment and reuse/irrigation systems among consulting engineers and contractors, the impacted communities and the agricultural cooperatives. The primary purpose of this activity is to improve the environment and economy of the Ramallah environs. The secondary purpose is to improve health in rural communities and to increase productivity of the agricultural/economic sector. PRIDE will review issues concerning irrigation/water management and potable water and sewerage. This will include reviewing the use of pesticides and their impact on the environment, and surveying the local industrial sector for types of production, raw materials used, estimation of effluent flow rates and quality of specific pollutants of concern.

#### Task 4 - Cooperative and Municipal Development Project (ANERA)

This is the only ongoing project in question that will be implemented both in the West Bank and Gaza. It will focus on increasing the marketed production of agricultural and manufactured goods and services. Activities include developing irrigation systems with West Bank/Gaza Strip cooperatives and municipal development through the construction of industrial zones and agricultural produce markets. The primary purpose of this project is to strengthen the capacity of selected Palestinian cooperatives and municipalities to deliver and maintain economy-stimulating services. The secondary purpose is to increase productivity of the agricultural/industrial sector. PRIDE will define the direct and indirect effects of the project on the environment, and address the following areas of intervention: development of water sources, including springs, wells and small reservoirs, land reclamation for workshops and markets, agricultural access roads repair, sewage and solid waste collection and disposal, industrial waste disposal, and pesticide and fertilizer activities. An environmental training course entitled, "Principles of Environmental Assessment" will be offered to the US PVO community in the fall of 1994.

#### **ACTIVITIES**

Each of the above-mentioned tasks will be coordinated among the offices of AID/ANE, AID/West Bank-Gaza, the BEC, and PRIDE. Each activity will be backstopped and monitored by PRIDE staff to ensure the timely completion of tasks (before the end of 1994). The activities and their requirements are described below. A summary of activities is outlined in Table I (attached).

Task 1 - PEA for Integrated Rural Development/Capacity Building (CRS)

The team will attend a two-day briefing at the PRIDE office in Washington, DC, will meet with USAID/Washington, and will review all relevant documentation in preparation for the PEA. While in the field, site visits will take place in northern part of the West Bank, including Jenin, Nablus, Tulkarem, Ramallah, and the Jordan Valley. Following is a list of activities to be performed under Task 1:

1. Review all documentation pertaining to the IRD/CB Project and related materials.

2. Study the Catholic Relief Services-U.S. Catholic Conference (CRS-USCC) related materials prior to projects supported by USAID.

3. Conduct up to eight site visits considered representative of the twenty to be selected by CRS-USCC. A few sites may include successful past activities. The team will meet with USAID at the U.S. Consulate in West Jerusalem and CRS-USCC officials to gather background information for these activities and the PEA in general.

4. Evaluate the Participatory Rapid Appraisals (PRAs) technique to be employed by CRS-USCC, which will be used to assess the needs and priorities of the communities and select the final twenty villages to be targeted by the IRD/CB program. Recommend improvements as necessary.

5. Develop recommendations for technical assistance, interventions and training programs designed to improve CRS-USCC's institutional capacity to perform "environmental reviews" of projects and sub-projects (recall project goal, purposes, and monitoring component outlined above).

6. A major environmental issue raised by the Project Review Committee and elaborated upon during the scoping session concerns the treatment and disposition of septage removed from pit latrines and septic tanks by village-owned special vehicles. Therefore, the team will discuss applicable approaches with USAID staff in West Jerusalem in concert with CRS-USCC staff and a selected Palestinian sanitary/civil engineer skilled in this area. NB: It is recommended that the team visit with USEPA (Cincinnati, Ohio) expert, J. Kreissl, to obtain his professional input regarding applicable, small community wastewater treatment options in semi-arid areas that are capable of reducing high BOD/high TSS (suspended solids) strength waste to acceptable levels.

Furthermore, the draft of the PEA should consider the following issues:

1. Multiple activities of a typically similar nature.
2. Cumulative and irreversible impacts and how these can be avoided/mitigated through proper and early design, siting adaptations or reductions in number.
3. Supportive or contradictory policies, institutional

constraints including management and maintenance capability, and cross-sectoral impacts.

The PEA should encompass the following (Annex I provides a sample outline of a PEA):

1. Recommendations on whether or not each CRS-USCC activity is managed in an environmentally responsible manner.
2. Recommendations on design, administrative, policy and other adjustments that can be made to the project to address site-specific "environmental review" requirements.
3. Address major environmental issues identified and agreed upon during the scoping session.
4. Develop a preliminary system for assessing and monitoring environmental issues within the program context.
5. Summarize/abstract CRS-USCC's environmental procedures and monitoring needs.
6. Provide a workable scheme to assure adequate monitoring of mitigative activities and reporting to the USAID/Jerusalem Affairs Officer.
7. Include photographs of sites visited.

#### Task 2 - Institutional Development Project (SCF)

The team will attend a two-day briefing at the PRIDE office in Washington, DC, will meet with USAID/Washington, and will review all relevant documentation available on projects previously implemented by Save the Children Federation (SCF). While in the field, site visits will take place in the West Bank. The following activities will be performed under this task:

1. Preliminary discussion with USAID West Bank/Gaza Strip staff in Washington, DC
2. Literature and design reviews.
3. Identification of participants in scoping session, including, PRIDE team members, USAID representatives, PVO representatives, local organizations, and municipalities.
4. Pre-scoping meetings to be held in Washington and Jerusalem with USAID and SCF staff.
5. Organize and facilitate scoping session meeting in Jerusalem.
6. In scoping session meeting, identify environmental issues, technical assistance needs, training needs, and sub-projects throughout the region.
7. Identify sites for PEA and local entity (university or private entity) to conduct an environmental review of the sites.
8. Write up scoping session report which summarizes the scoping session and presents scoping statement with a SOW for PEA.
9. Present report and scoping statement to the USAID Affairs Officer for review and submission to the Bureau Environmental Coordinator (BEC) for his/her review and approval.
10. Upon receiving BEC approval, implement PEA. Guidance for implementing the PEA is outlined under Task 1.

### Task 3 - Ramallah Wastewater Systems Project (ANERA)

During its two-day briefing at PRIDE and USAID/Washington, the team will review all relevant documentation available on activities previously implemented by ANERA. While in the field, site visits will take place in Ramallah area to include the villages of Al Jeeb, Betunia and Rafat. The list of activities required under this task will be the same as those listed above under Task 2, except that an EA (rather than a PEA) will be implemented to include an industrial survey. The industrial survey will consist of an examination of industrial effluents (their type and quantity including DO, pH and temperature) discharging into the wastewater system and the implications regarding the assimilative capacity of the newly designed wastewater treatment system.

### Task 4 - Cooperative and Municipal Development Project (ANERA)

During its two-day briefing at PRIDE and USAID/Washington, the team will review all relevant documentation available on activities previously implemented by ANERA. While in the field, site visits will take place in the West Bank (including Jericho) and Gaza. The list of activities required under this task will be the same as those listed above under Tasks 2.

#### **SPECIALISTS AND LEVEL OF EFFORT**

- Configuration of the expatriate and local team members with their level of effort (LOE) is outlined below and summarized in Table II (attached).
- All expatriate members must have approximately 10 years of professional experience, have experience working in a developing country, be sensitive to the political, economic and social conditions in the region, and have worked with USAID.
- Ability to speak Arabic and previous experience working in the Middle East is preferred.
- Qualification requirements for the local consultants will be the same for each task: the local water supply specialist must be knowledgeable about water transport/supply in rural/urban areas, including irrigation practices in agriculture use of treated wastewater and springs; the civil/sanitary engineer must be knowledgeable about irrigation in rural/agricultural communities and wastewater treatment and disinfection practices.

### Task 1 - PEA for Integrated Rural Development/Capacity Building (CRS)

- Two expatriate consultants, agricultural/water engineer and

environmental engineer; and two local consultants, water supply specialist and civil/sanitary engineer, are required for this task.

- Each expatriate team member will have 38 days LOE: 6 days preparation in the U.S. before traveling to the field; 4 days roundtrip travel including a stopover in Europe; 4 6-day workweeks in the field; and 3 days to finalize reports and debrief USAID after returning to the U.S.

- Each local team member will have 24 days LOE to work with the expatriate team members during 4 6-day workweeks. Qualifications additional to those mentioned earlier for all expatriate experts are as follows:

1. Agricultural/water engineer - Expert in the field of water reuse, wastewater treatment, and water conservation. Familiarity with agricultural cooperatives and the finance and construction of irrigation systems in a rural setting are required. Experience working with a wide variety of terrains and soils (semi-arid, mountainous, below sea level).

2. Environmental engineer - Professional training and experience in environmental engineering planning and the production and maintenance of basic infrastructures (roads, sewerage, potable water supply and solid waste disposal). Expert in small-scale community development, able to provide low-cost/low-technology solutions such as upgrading/replacing roads, cisterns and springs.

#### Task 2 - Institutional Development Project (SCF)

- Two expatriate consultants, agricultural/water engineer and environmental engineer; and two local consultants, water supply specialist and civil/sanitary engineer, are required for this task.

- Each expatriate will have 44 days LOE: 6 days preparation in the U.S. before traveling to the field; 5 days roundtrip travel including a stopover in Europe; 5 6-day workweeks in the field; and 3 days to finalize reports and debrief USAID after returning to the U.S.

- Each local team member will have 30 days LOE to work with the expatriate team members during 5 6-day workweeks. Qualifications additional to those mentioned earlier are the same as those for Task 1 (above).

#### Task 3 - Ramallah Wastewater Systems Project (ANERA)

Two expatriate consultants, municipal/water-wastewater engineer and industrial water/supply effluent specialist; and two local consultants, water supply specialist and civil/sanitary engineer, are required for this task. Each expatriate will have 44 days LOE: 6 days preparation in the U.S. before traveling to the field; 5 days roundtrip travel including a stopover in Europe; 5 6-day workweeks in the field; and 3 days to finalize reports and debrief USAID after returning to the U.S. Each local team member will have 30 days LOE to work with the expatriate team members during 5 6-day workweeks. Qualifications additional to those mentioned earlier are as follows:

- Municipal/water-wastewater engineer - Professional training and experience in the design, repair, and maintenance of small city water/wastewater treatment facilities.

- Familiarity with water reuse options and issues such as post-treatment disinfection to decrease pathogens, disinfection alternatives, and water/wastewater reuse applications in agriculture.

- Industrial water supply/effluent specialist - Experience in a wide range of manufacturing sectors, analyzing effluents from small industries and recommending pre- and post-treatment options as a basis for detailed planning of water/wastewater treatment facility.

- Familiarity with the use of pesticides (EPA-approved and/or registered pesticides and non-EPA-approved) and their effect on reservoirs, groundwater and agriculture.

- Hands-on experience performing industrial surveys in regards to raw materials use, general manufacturing operations, and wastewater characteristics and flows (e.g., slaughterhouse, leather tanning, soap, paints, etc.)

#### Task 4 - Cooperative and Municipal Development Project (ANERA)

Two expatriate consultants, agricultural/water engineer and sanitary engineer; and two local consultants, water supply specialist and civil/sanitary engineer, are required for this task. Each expatriate will have 50 days LOE: 6 days preparation in the U.S. before traveling to the field; 5 days roundtrip travel including a stopover in Europe; 6 6-day workweeks in the field; and 3 days to finalize reports and debrief AID after returning to the U.S. Each local team member will have 36 days LOE to work with the expatriate team members during 6 6-day workweeks. Qualifications additional to those mentioned earlier are as follows:

- Agricultural/water engineer - same as Task 1 (above), except that consultant must have familiarity with the use of pesticides

and integrated pest management (IPM) techniques and their application and used pesticide container disposal methods.

• Civil/sanitary engineer - Undergraduate degree in civil/sanitary engineering with experience conducting environmental assessments in hilly and semi-arid terrain. Experience in the design and planning of roads, water/wastewater systems, landfill/solid-waste issues, and small-scale infrastructures. Sensitivity to cultural heritage of the region (Roman archeology and artifacts).

#### PRIDE Project Management

Management of the tasks will require support from the PRIDE project management staff. PRIDE will act as the prime coordinator/liaison between USAID/ANE and USAID/West Bank-Gaza, and the office of the BEC, to ensure flexibility, responsiveness, and adaptability to changing circumstances and requirements both in Washington, DC, and in the field. A number of scenarios for fielding and implementing the activities are described (see "schedule" below) whereby the tasks will either overlap or follow one after the other. The PRIDE Team Leader and Project Administrator will need to ensure that necessary logistical and technical support are provided to the team. As resource economist, the PRIDE Team Leader will provide technical input on the macro- and micro-economic and developmental analysis of the activities. The PRIDE Project Administrator will assist in identifying and contacting local institutions and local consultants in preparation for the scoping session meetings and will assist in drafting scopes of work and researching information for the consultants such as discharge standards for industrial effluents, as needed.

#### DELIVERABLES

Due dates for all deliverables are outlined in Table IV (attached) and have been presented according to three different scenarios. PRIDE will aim to complete all tasks by December 31, 1994, however, contingencies are made in case any of the activities are delayed by circumstances in the field or in Washington, DC.

#### Task 1 - PEA for Integrated Rural Development/Capacity Building (CRS)

The team will produce a report detailing both the process by which the PEA was conducted and the results of the PEA. This activity, and hence this report, will serve as a prototype for environmental reviews that will be conducted during the design of future projects in the West Bank/Gaza Strip. The team will complete and submit its report jointly to the USAID Affairs

Officers in Jerusalem and Tel Aviv.

Task 2 - Institutional Development Project (SCF)

In preparation for the PEA under this task, the team will produce a scoping session report detailing the outcomes of the scoping session, a scoping statement, and scopes of work for the PEA, which will be submitted by USAID/Jerusalem to the BEC for approval. A PEA report, detailing both the process by which the PEA was conducted and the results of the PEA, will also be submitted jointly to the USAID Affairs Officers in Jerusalem and Tel Aviv.

Task 3 - Ramallah Wastewater Systems Project (ANERA)

In preparation for the EA under this task, the team will produce a scoping session report detailing the outcomes of the scoping session, a scoping statement, and scopes of work for the EA and industrial survey. Upon approval by the BEC, the EA will be prepared. The EA report, detailing both the process by which the EA was conducted and the results, will also be submitted jointly to the USAID Affairs Officers in Jerusalem and Tel Aviv. A report detailing the means by which the industrial survey was carried out and its findings will also be prepared and submitted to those offices.

Task 4 - Cooperative and Municipal Development Project (ANERA)

In preparation for the PEA under this task, the team will produce a scoping session report detailing the outcome of the scoping session, a scoping statement, and scope of work for the PEA. Upon approval by the BEC, the PEA will be prepared. The PEA report, detailing both the process by which the PEA was conducted and the results of the PEA, will also be submitted jointly to the USAID Affairs Officers in Jerusalem and Tel Aviv.

**SCHEDULE**

Because of the uncertain political situation in the territories and potential delays caused by curfews, riots, and strikes, there may be delays. Four illustrative scenarios are presented in Table III (attached) for implementing Tasks 1-4. In all scenarios, team members must be available for briefings in Washington, DC, prior to departure, with work scheduled to begin in Jerusalem on July 18, 1994. Scenario A assumes that Tasks 2 and 3 would follow immediately after Task 1, followed by Task 4. Scenario B is a worst case option in which tasks are scheduled sequentially. In scenario C, Tasks 1, 2, and 4 would begin simultaneously on July 18, with Task 3 following immediately after Task 1 and 2, and overlapping with Task 4 as it comes to completion. Scenario D is presented as the best case option whereby all tasks are implemented simultaneously by a three-

member expatriate team and two local consultants. In Scenario D, there would occur a singular scoping session at the onset of the activity to cover Tasks 2-4, followed by roughly simultaneous implementation of the three PEAs and one EA/industrial survey for Tasks 1-4, with the three PEAs and EA/industrial survey presented in two separate documents. Tentative timeframes (assuming no unforeseen delays) for completing the deliverables under each task are outlined in Table IV (attached).

For Tasks 2-4, the USAID Affairs Officers in Jerusalem and Tel Aviv (Task 4) will submit the scoping statements to the BEC for review and approval. For Tasks 1-4, the PEA/EA should begin immediately upon receipt of approval from the BEC. A draft PEA or EA/industrial survey should also be submitted to the ANE/NE BEC for his review. Final editing will take place between the submission of the draft PEA/EA and due date of final draft of the PEA/EA which will be submitted for ANE/NE BEC final approval.

#### **PACD**

Project Action Completion Date is set for September 30, 1995, allowing for unexpected delays and problems in the field.

<u>Budget Category for West Bank/Gaza</u>	<u>Scenario B (high option)</u>	<u>Scenario D (low option)</u>
<b>Salaries &amp; Wages</b>		
PRIDE Project Staff	\$ 44,000	\$ 26,000
Short-Term Expats Consultants	257,000	147,000
Short-Term Local Consultants	<u>106,000</u>	<u>37,000</u>
Subtotal	\$ 407,000	\$ 210,000
<b>Travel &amp; Transportation</b>		
PRIDE Staff	\$ 4,000	\$ 0
Short-Term Consultants	<u>34,000</u>	<u>12,500</u>
Subtotal	\$ 38,000	12,500
<b>Per Diem</b>		
PRIDE Staff	\$ 4,000	\$ 0
Consultants	<u>83,000</u>	<u>45,000</u>
Subtotal	\$ 87,000	\$ 45,000
<b>Other Direct Costs</b>		
Communications	\$ 2,000	\$ 2,000
Medical Insurance, etc.	7,000	3,000
Office Supplies/Clerical Support	2,000	400
Reproduction Costs	3,000	2,800
Office-Space Rental	20,000	7,500
Laptop Usage	<u>2,000</u>	<u>1,800</u>
Subtotal	\$ 36,000	\$ 17,500
<b>Total Labor</b>	\$ 407,000	\$ 210,000
<b>Total Materials</b>	<u>161,000</u>	<u>75,000</u>
<b>TOTALS</b>	\$ <u>568,000</u>	\$ <u>285,000</u>

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EA FOR WEST BANK/GAZA PVO COMMUNITY DEVELOPMENT & ENVIRONMENTAL INFRASTRUCTURE ACTIVITIES

TABLE I: ACTIVITIES

Task #	Required Activities						
	Prescoping Session	Scoping Session	Report	SOW	PEA	EA	Industrial Survey
Task 1					X		
Task 2	X	X	X	X	X		
Task 3	X	X	X	X		X	X
Task 4	X	X	X	X	X		

TABLE II: LOE (person days)

Task #	Expat Labor Category					Local Labor Category		PRIDE Staff		
	agnc/water engineer	environl engineer	munic-w/ww engineer	ind/water sppl effluent spclst	sanitary engineer	water sppl spclst	civil/sanitary engineer	proj mngr res econ	project administr	editor
Task 1	38	38				24	24	5	20	5
Task 2	44	44				30	30	5	20	5
Task 3			44		44	30	30	5	20	8
Task 4	50				50	36	36	5	20	5
Total LOE	132	82	44	44	50	120	120	20	80	23

TABLE III: SCHEDULE OF ACTIVITIES

Illustrative Scenarios	Month of Activity				
	Jul 1994	Aug 1994	Sep 1994	Oct 1994	Nov 1994
A	Task 1	Task 1 & 2	Task 4		
B	Task 1	Task 1 & 2	Task 3	Task 4	
C	Task 1	Task 3			
D	Task 1	Task 2	Task 3		

TABLE IV: SCHEDULE OF DELIVERABLES (due dates)

Task #	Scenario A				Scenario B			
	Start Date	Scoping Report	Draft PEA/EA	Final PEA/EA	Start Date	Scoping Report	Draft PEA/EA	Final PEA/EA
Task 1	Jul 18	N/A	Aug 8	Aug 15	Jul 18	N/A	Aug 8	Aug 15
Task 2	Aug 15	Aug 29	Sep 9	Sep 16	Aug 15	Aug 29	Sep 9	Sep 16
Task 3	Aug 15	Aug 29	Sep 9	Sep 16	Sep 18	Oct 2	Oct 14	Oct 21
Task 4	Sep 18	Oct 2	Oct 21	Oct 28	Oct 23	Nov 6	Nov 24	Dec 2

Task #	Scenario C				Scenario D			
	Start Date	Scoping Report	Draft PEA/EA	Final PEA/EA	Start Date	Scoping Report	Draft PEA/EA	Final PEA/EA
Task 1	Jul 18	N/A	Aug 8	Aug 15	Jul 18	N/A	Sep 5	Sep 19
Task 2	Jul 18	Aug 1	Aug 15	Aug 22	Jul 18	Jul 25	Sep 5	Sep 19
Task 3	Aug 15	Aug 29	Sep 9	Sep 16	Jul 18	Jul 25	Sep 5	Sep 19
Task 4	Jul 18	Aug 1	Aug 19	Aug 26	Jul 18	Jul 25	Sep 5	Sep 19

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U.S. AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT

**ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR THE BUREAU  
FOR ASIA AND THE NEAR EAST**

THRU: ANE/NE/ME, Frederick Machmer *Frederick Machmer*  
ANE/NE/DR/MENA, Zachary Hahn *Zachary Hahn*

FROM: ANE/NE/ME/WBG, Dorothy Young *Dorothy Young*

SUBJECT: Incremental Funding for Buy-in to Contract ANE-1078-C-00-1046-00, Project in Development and the Environment (PRIDE)

**ACTION:** Your approval is requested for \$285,000 for a buy-in to Contract ANE-1078-C-00-1046-00, Project in Development and the Environment (PRIDE). (PRIDE is an ANE/NE Regional Project designed to provide missions, host-country institutions and the Bureau with technical support.) The funding will cover a series of environmental assessments for West Bank/Gaza PVO community development and environmental infrastructure activities. Every effort will be made to minimize expenditures, according to the lowest cost (best case) scenario, which is estimated at \$285,000. WB/G PD&S funding will be used for this activity.

**BACKGROUND:** To improve the social and economic conditions in communities in the territories, USAID will support the following PVO programs: cooperative and municipal development; Ramallah water/wastewater; institutional development; and rural development/capacity building. USAID's environmental regulation 22 CFR 216 requires that Initial Environmental Examinations (IEEs) be conducted for each proposed project. Where positive threshold decisions are recommended due to perceived potentially significant environmental impacts of planned interventions, environmental assessments must be conducted. A positive threshold decision is recommended for each project.

**DISCUSSION:** The following four projects will require either Programmatic Environmental Assessments (PEAs) (items a-c) or an Environmental Assessment (EA):

- a) West Bank Integrated Rural Development/Capacity Building Project (Catholic Relief Services)
- b) Institutional Development Project (Save the Children)

- c) Cooperative and Municipal Development Project (ANERA)
- d) Ramallah Wastewater Systems Project (ANERA)

A PEA is called for due to the diversity of the types of activities and sub-activities and the geographic locations of the affected communities, which present a variety of environmental considerations. Consequently, in-country public "scoping" sessions must be convened. These entail organizing meetings with stakeholders such as the PVO/NGO community, representatives of municipalities and other interested parties. The scoping session synopsis or scoping statement will be forwarded to the ANE/NE Environmental Coordinator for review and approval prior to the commencement of the PEA/EA activity.

The attached scope of work (SOW) includes four tasks to cover the four projects. The tasks entail three PEAs and one EA, all to be accomplished in tandem. Every effort will be made to consolidate tasks, e.g., scoping sessions, field evaluations and review in order to minimize costs. (Recall that USAID's environmental regulation, when a positive threshold is advised, mandates a procedure for the conduct of the environmental assessment.) Considerable flexibility has been built into the schedule because of the uncertain situation in the territories and potential for delays caused by curfews, riots and strikes. Barring the unforeseen, all assessments should be completed before the end of September 1994.

**RECOMMENDATION:** That you indicate your approval by signing below and on the attached PIO/T to authorized \$285,000 for the buy-in to the Project in Development and the Environment (PRIDE) (ANE-0178-C-00-1046-00).

Approved: Margaret Carpenter

Disapproved: \_\_\_\_\_

Date: May 19, 1994

Attachment: PIO/T requesting obligation of \$285,000 for the buy-in

Clearances:

ANE/NE/DR/ENR:PdesRosiers  
 ANE/NE/DR/ENR:DWalker  
 ANE/NE/DP:TO'Keefe  
 ANE/NE/ME/WBG:DRhod

[Signature]  
[Signature]  
[Signature]  
[Signature]

Date 5/16/94  
 Date 5/19/94  
 Date 5/19/94  
 Date 5-19-94

U\NEDR\DOCS:PdesRosiers:cw:x32492:05/13/94:ACTMEM2.PDR

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APPENDIX A

July 25, 1994

ENVIRONMENTAL SCOPING SESSION

ATTENDANCE LIST

<u>NAME</u>	<u>AFFILIATION</u>	<u>TELEFAX</u>
1. Jack Farmer	PRIDE Team Leader	2-283557
2. Majda Zaher	USAID/TelAviv, Project Manager	5-255549
3. Rebecca Latorraca	USAID/AED, NE Analyst/Facilitator	
4. Ibrahim Matar	ANERA, Deputy Representative	894351
5. Mazer Asid	ANERA, Marketing Consultant	"
6. Dr. Wahib Tarazi	ANERA, Veterinary Dairy Consultant	"
7. Ghada Rabah	ANERA, Education/Training Cons.	"
8. Kamal Khriasheh	ANERA, Agricultural Consultant	"
9. Khalil Nijem	SCF, Monitoring/Eval. Super.	834497
10. Shawkat Sarsour	PARC, Technical Director	831899
11. Lance Matteson	ANERA, Middle East Repr.	277076
12. Ibrahim Dajani	ARIJ, Env. Engineer	741889
13. Adnan Obeidat	ANERA	277076
14. Sufian Mahasha	USAID/ Jerusalem	253288 x237
15. Carol Yee	Cooperative Development Project	859690
16. Rex Schultz	" " "	"
17. Raid Malki	CARE	561834
18. Adnan Shqueir	Bethlehem University	744440
19. Mohammed Sbeih	ANERA, Agricultural Consultant	894351
20. Abdelrahim Alasaid	CRS	828175
21. Bassam Kort	CRS	828175
22. Samir K. Shaath	Env. Prot. & Res. Center	7-851304
23. Stuart Wollman	PRIDE	001-202-331-1871
24. Joseph Karam	PRIDE	001-202-331-1871
25. Nader Al-Khatib	PRIDE	02-828684
26. Ramez El-Titi	PRIDE	09-381088
27. J.P.E.des Rosiers	USAID/ANE, Sr. Env. Spec.	001-202-663-2494

APPENDIX B

**AGENDA**

9:00 - 9:15

Welcome, Introductions, Opening Remarks - Paul des Rosiers/USAID

Why USAID Requires Scoping Sessions

- a. USAID Regulation 22 CFR 216
- b. Definition and scope of a Programmatic Environmental Assessment (PEA)

Background information on the Save the Children Federation's (SCF) Institutional Development Project

- a. Project Overview
- b. Past experiences and present proposal

Environmental Considerations

- a. Issues identified to date (see the SCF Initial Environmental Assessment)
- b. Study methods and identified concerns
- c. Preliminary findings and observations - Why the Initial Environmental Examination recommended a positive threshold decision

9:15 - 10:15

Response to questions or statements

Questions and comments from the floor

10:15 - 10:45

**BREAK**

10:45 - 10:55

Background to ANERA's Cooperative and Municipal Development Project

- a. Project Overview
- b. Past experiences and present proposal

Environmental Considerations

- a. Issues identified to date (see the ANERA Initial Environmental Assessment)
- b. Study methods and identified concerns
- c. Preliminary findings and observations - Why the Initial Environmental Examination recommended a positive threshold decision

10:55 - 11:55

Response to questions or statements

Questions and comments from the floor

11:55 - 12:00 Summary

APPENDIX C

Project: Institutional Development Project, Save the Children Federation (SCF)

Moderator: J. Paul E. des Rosiers  
Senior Environmental Specialist - USAID/Washington

Facilitator: Rebecca Latorraca  
Near East Analyst, AED Contract - USAID/Washington

Location: Pilgrim's Palace Hotel, Jerusalem, July 25, 1994

Duration: 9:00 am - 12:30 pm

Number of participants: 27

INTRODUCTION: J. Paul E. des Rosiers

The purpose of this meeting is to bring people together in a formal scoping session setting since the planned projects will all affect the environment. Therefore, USAID requires that interested parties be invited to comment on potential effects and to suggest how to avoid these problems. With this information, USAID representatives will prepare a Scoping Session report which will recommend that a programmatic environmental assessment (PEA) be carried out.

In this forum, the two projects to be discuss are a) Save the Children Federation (SCF) Institutional Development Project, and the American Near East Refugee Aid's (ANERA) Cooperative and Municipal Development Project.

Materials shared with participants of the session include a) an agenda with Initial Environmental Examination (IEE) threshold decisions; b) a collated version of legal writings of USAID's environmental procedures; and c) the Catholic Relief Services (CRS) Scoping Session Report for Jerusalem, West Bank and Gaza, dated October 14, 1993.

USAID would like for PVOs, NGOs, and consulting engineers to learn the process of how to conduct environmental assessments (EAs) according to USAID procedures. To that end, sometime between October 1994 and March 1995, USAID will offer a course on how to critically review proposals and prepare EAs which will be physically included in new project proposals submitted to USAID.

PROJECT OVERVIEW - Khalil Nijem (SCF)

SCF has worked in the West Bank and Gaza Strip on water networks since 1978. Starting in the late 1980s, SCF shifted its focus to community based rural development, or developing local capacity. To accomplish this, SCF realized that community leaders need assistance in planning, programming, and procurement, and village representatives and leadership

need strengthening. Moreover, villages need to link with the community, local institutions, national level institutions, and the Palestinian Authority.

This project facilitates training to local institutions, and provides grants which are restricted to certain activity areas. SCF grants are closely monitored at first, but once SCF is comfortable with a community, it will provide umbrella grants.

Project Constraints: a) Many local institutions were political during the intifada. The challenge now is to develop the political agenda to a more "professional" agenda; b) currently, women's roles in managerial and decision making areas are minimal. SCF will work to enhance women's opportunities in local institutions; and c) Palestinian NGOs are not tax exempt by the Government of Israel. USAID prohibits paying taxes (e.g., VAT) on donated monies.

Project Focus: SCF will invest funds in water resource development; sewage collection and treatment; garbage disposal; women-focussed projects; and agriculture, including land reclamation, roads, and collection points. SCF will not initiate credit programs, rather, only enhance them.

#### PAUL DES ROSIERS

This project received a positive threshold decision because it will work in the areas of potable water, sewage and agriculture. The IEE determined the following effects may occur as a result of certain project activities (See the SCF IEE):

- odors from groundwater contamination as a result of improper solid waste disposal and siting
- collection, treatment and disposal of wastewater and solid waste/debris
- soil erosion and storm water runoff
- adequacy of potable water supply or increased exploitation of fresh water resources
- destruction/disruption of aquatic and terrestrial habitats
- destruction/disruption of cultural/archeological resources
- exposure of residents to environmental health problems
- improper siting of solid waste landfills
- increased establishment of point sources for wastewater discharge
- worker accidents during construction and operations
- potential seismic or flooding hazards of interventions.

#### COMMENTS

DR WAHIB TARAIZI (ANERA)

Disposal of bacterial wastes: Residents must be taught how to dispose of infected and contaminated materials properly. Without this, flies,

animals, and water will carry diseases which can affect people's health.

LANCE MATTESON (ANERA)

Does SCF plan livestock-oriented interventions? (No)  
What institutional resources does SCF plan to use in order to provide support training for its program, especially as it relates to environmental issues?

ADNAN OBEIDAT (ANERA)

Coordination: Will SCF coordinate with public institutions including with the water supply department, the municipality, etc?

Women: What does SCF see as the role for women in this project?

Sustainability: Are the village committees that SCF works with sustainable? Will SCF help to strengthen them? Are they institutionalized?

NADER AL-KHATIB (PRIDE)

Public Awareness: Technical implementation is important, but without public awareness, it will not work.

Sustainability: SCF needs to think about the best technical and capacity building interventions.

Public Health/Awareness: SCF needs to work with farmers who do not protect themselves, nor realize how their activities affect the community. (Use of untreated sewage in agriculture.)

KAMAL KHRIASHEH (ANERA)

Please address the issue of animal feed.

ADNAN SHQUEIR (BETHLEHEM UNIVERSITY)

Post Project Assessments: Environmental impact assessments should be continuous; post project monitoring is as important as pre-project.

Social Impact Assessments: These are also important.

Palestinian Authorities: The Palestinian Environmental Protection Authority is now putting together regulations and programs for awareness.

USAID: It would be useful to have the project materials prior to the scoping sessions.

JACK FARMER (PRIDE)

USAID: A scoping session is a starting point in the discussion. Any comments after the session are welcome.

SUFIAN MSHASHA (USAID/JERUSALEM)

USAID: USAID will provide more information sooner in the future.

Public Awareness: Environmental awareness projects shouldn't be stand-alone projects, rather, they should be related to water, health, or other projects.

JACK FARMER (PRIDE)

Costs of Environmental Considerations: As projects look at environmental constraints, the costs should be factored into the project proposal. Initial and on-going costs should be included in proposals so USAID can see a more realistic picture of project costs and benefits.

MOHAMMED SBEIH (ANERA)

Wastewater disposal: Wastewater needs to be treated so that it doesn't affect groundwater or agricultural products.

SAMIR SHAATH (ENVIRONMENTAL PROTECTION AND RESEARCH CENTER - GAZA)

Soil classification: Soil research is needed in Gaza.

ABDELRAHIM ALASAIID (CRS)

Coordination: SCF should coordinate with CRS in order to reduce redundancies in assistance.

MAJDA ZAHER (USAID/TEL AVIV)

Public Awareness: Have the NGOs considered using the new Palestinian media to educate the Palestinians in areas including how to conserve water, dispose of waste, etc? The Israelis have run successful campaigns in this area.

MAZEN ASAD (ANERA)

Public Awareness: Campaigns to increase the public awareness of the environment should be designed like marketing tools. Additionally, mitigating environmental problems should be considered part of the production costs and should be passed on to consumers. The public should be aware that there are environmental costs associated with using certain products.

RAMEZ EL-TITI (PRIDE)

Information: Are there any assessments of disposal sites including topology, hydrology, centralized sites, etc?

GHADA RABAH (ANERA)

Public Awareness: Schools should be a target of environmental education. Adults need a deeper understanding of how their daily actions affect the environment.

How can projects be integrated to have one environmental focus per project?

Groundwater Contamination: In Gaza, people are digging wells nearby the dump without realizing that the leachate produced contaminates the groundwater.

SHAWKAT SARSOOR (PARC)

Chemical use: be aware.

IBRAHIM DAJANI (ARIJ)

Worker Safety: PVOs need to push for labor policies and legislation which require employers to protect workers and impose penalties on them if the workers' health is not safeguarded.

IBRAHIM MATAR (ANERA)

Odors: How can odors be controlled, even in small wastewater treatment plants?

LANCE MATTESON (ANERA)

Worker Safety: Perhaps one way to deal with this issue is to put bounty clauses on construction contractors. Also, working with unions, at least informally, could help improve worker safety.

Environmental Standards or Policy: What are the sources of environmental standards and policies that the PVOs should work with? ANERA would appreciate knowing more about sources of environmental policies and standards that PVOs should be working with authorities. PVOs and NGOs should pay attention to environmental NGOs and PVOs and not leave them out of the development process.

IBRAHIM DAJANI (ARIJ)

Worker Safety: Workers may find the protective measures a nuisance but management needs to enforce and comply with safety measures.

RAID MALKI (CARE)

Public Awareness: The legislative bodies of the new authorities need to be influenced. They need a strong organization to have effective planning. Local NGOs have much experience to contribute.

BASSAM KORT (CRS)

Post-Project Assessment: Preliminary assessments are not enough.

Public Awareness: USAID dropped the public awareness component from the ANERA proposal because other NGOs have similar projects. But, this project is located in different areas from the others.

Increased Exploitation of Fresh Water (see the IEE): This is a political

issue since the Israelis are the ones who issue permits for this. How can a PVO be held accountable for this goal?

Water Conservation: Too much conservation affects the health of the people. Some people are saving too much and need to use more.

Archeological Resources (see the IEE): When a CRS project in Hebron assisted a farmer in redigging his Roman well, USAID said that they should not have done so because it was an archeological resource. However, USAID needs to realize that there are hundreds of similar wells that are still used today. Please define "archeological sites" and "exploitable."

REX SCHULTZ (CDP)

USAID Interventions: Raw sewage is flowing out of the settlements into Palestinian villages. USAID needs to discuss this with the Israelis.

NADER AL-KHATIB (PRIDE)

Coordination: The Water Resources Action Plan was drafted by a public group which supports NGO/PVO projects. It should be used to avoid duplicative project planning. This organization has hired a water and sanitation specialist to highlight water conservation. They will conduct two workshops in the West Bank and Gaza Strip in August. Also, this organization can help local NGOs/PVOs learn how to obtain funding from donors.

RESPONSE BY SCF: Khalil Nijem

Training Capabilities: Part of the scope of SCF's activities is to improve training capacities. When skills are not available locally, SCF has hired international consultants.

Integration of projects: SCF has "environmental health" projects which are umbrella projects. These deal with water resource development, wastewater, garbage, pest management, etc. SCF will do a pilot project in this area in which awareness building is a component. Additionally, SCF will train 25 instructors in its environmental health program.

Women: SCF will train women to change household trash into useful things.

Women: SCF is experimenting with women's, men's and mixed committees to carry out village planning.

Wastewater: SCF has only small-scale wastewater treatment and disposal projects for agricultural purposes. It uses two models including 1) oxidation lagoons in Jericho; and 2) sequential biological reactors, which serve up to 2000 people.

Odor: This a small problem.

Animal Feed: SCF, in this project, only supports farmers in purchasing animal feed through credit programs. If it did not, the farmers would pay 40-50% interest on their purchases.

Sustainability: SCF looks at five areas to determine sustainability of any project including: a) behavioral changes; b) economic sustainability; c) environmental sustainability; d) structural and institutional sustainability; and e) policy level sustainability.

Public Awareness: Good idea.

Centralized Disposal Sites: SCF has no capacity in this area but would like to coordinate with other groups which do.

Decreasing Solid Waste: Traditionally, people separated household wastes and animals received the organic matters. SCF is introducing composting.

Agriculture: SCF works to reduce soil erosion and restricts pesticide use.

Project: Cooperative and Municipal Development Project - American  
Near East Refugee Aid (ANERA)

Moderator: J. Paul E. des Rosiers  
Senior Environmental Specialist - USAID/Washington

Facilitator: Rebecca Latorraca  
Near East Analyst, AED Contract - USAID/Washington

Location: Pilgrim's Palace Hotel, Jerusalem, July 25, 1994

Duration: 9:00 am - 12:30 pm

Number of participants: 27

PROJECT OVERVIEW - Lance Matteson (ANERA)

The IEE outlines those areas in which the ANERA project will work. In the areas of municipal development, ANERA will assist in increasing municipal infrastructure through the councils, where it will assist in setting up two produce markets (Gaza) and two industrial workshop complexes (West Bank).

In the area of agricultural cooperative activities, ANERA will assist in extension services, irrigation infrastructure and water management.

Part of the project mandate requires that ANERA assess and strengthen management skills, encourage joint ventures, and, in general, increase WB/G economic development.

PAUL DES ROSIERS

The reason that the project must undergo an environmental assessment is because the following issues were determined to cause a positive threshold decision based on a review of potential environmental issues:

- septage removed from project sites
- odors and groundwater contamination resulting from improper solid waste disposal and siting
- collection, treatment and disposal of wastewater and solid waste/debris
- magnitude of industrial waste (animal blood, etc.) generated and methods for safe treatment and disposal
- safe handling and use of pesticides
- ultimate disposal of used pesticide and fertilizer containers
- adequacy of potable water supplies and increased exploitation of water resources (i.e., new well in Gaza)

- soil erosion and stormwater runoff from construction activities involving new reservoirs, wells, pipelines, roads, etc.
- destruction/disruption of aquatic and terrestrial habitats, including the central zone
- destruction/disruption of cultural/archeological resources
- exposure of residents and workers to environmental health problems
- improper siting of solid waste landfills
- increased establishment of point sources of wastewater discharge
- increased use of electrical energy
- worker accidents during construction and operations
- potential seismic and flooding hazards of interventions

COMMENTS - IN ADDITION TO THOSE FROM THE SCF SECTION OF THE SESSION

IBRAHIM MATAR (ANERA)

Many of the project's components have a positive effect on the environment including reduction of pesticide use, brucellosis control and increased awareness of industrial waste disposal.

IBRAHIM DAJANI

Energy and Pesticides: Has ANERA considered solar energy, not just for industry, but also for agriculture, as an alternative to pesticides?

SHAWKAT SARSOUR (PARC)

Pesticides: The Israelis should prevent entry of internationally-banned pesticides.

GHADA RABAH (ANERA)

Pesticides: Bir Zeit University did a study on the safe use of pesticides.

Veterinary Drugs: Since there are no analytical laboratories in the pharmaceutical factories, at this time, no factories are licensed to make veterinary drugs.

RAMEZ EL-TITI (PRIDE)

Groundwater pollution: Digging wells affects groundwater pollution.

Solid Waste Disposal: ANERA needs to carefully select the locations of the industrial workshops as solid wastes from these sites can be dangerous.

MAZEN ASAD (ANERA)

Worker Safety: Workers don't yet understand the long term negative

effects of some of their production jobs; production safety standards need to be set within international standards guidelines.

MAJDA ZAHER (USAID/TEL AVIV)

Production Standards: Armenian ceramics are made with lead based glazes. Tourists aren't aware of this.

SAMIR SHAATH (ENVIRONMENTAL PROTECTION AND RESEARCH CENTER, GAZA)

Lessons learned: Hopes ANERA has learned from the Stormwater Project before it begins to dig new wells in Gaza.

Feasibility studies: Did ANERA study the aquifer where it wants to dig the well? How much water is there? How saline is it?

MOHAMMAD SBEIH (ANERA)

Industrial waste is an issue and is destroying the irrigation infrastructure.

KAMAL KHRIASHEH (ANERA)

Cooperation: These projects will best succeed here only if they are coordinated with all the research centers and departments.

Farmer Credit: Guarantors should address the environmental issues, such as what the farmer will do with the greenhouse plastic when he's finished with it.

PVO/NGO Cooperation: There are 500,000 acres to re-green. ANERA has a 500 acre demonstration site. All organizations working with agriculture are invited to view this and work with ANERA to complete more.

NADER AL-KHATIB (PRIDE)

Lessons learned: ANERA has had much success except in Sheikh Adnan. ANERA should learn from this.

Feasibility Studies: Abassan needs to be studied before drilling.

Palestinian Authority: To drill, projects should get permits from the Palestinian Authority.

Enforcement: Although environmental regulations exist, they have not been well enforced. If enforcement won't occur, PVOs should wait to implement the projects so the project doesn't fail.

ADNAN SHQUEIR (ANERA)

Sustainability: ANERA must address environmental issues with cooperatives for permanent and sustainable programs.

Some sort of quality control on vegetables, fruits and seeds, and food additives needs to take place.

Organic Farming: Can Palestinians adopt some of these techniques? How can they be educated? How can they market this produce? Perhaps the extension program can introduce this.

DR. WAHIB TARAZI (ANERA)

Palestinian Authority: In Gaza and Jericho, ANERA should work with the Palestinian Authority to help legitimize the government. It should participate with extension services, unions, and social associations.

Quality Control: Testing of food and agricultural products needs to happen. Laboratories need to be able to test for problems and report misuse.

Quality Control: To export to Israel and other countries, Palestinians need to follow the international production standards so they can export drugs, food, produce, etc.

STUART WOLLMAN (PRIDE)

Information: To implement projects and protect the environment, technicians need data on geology, groundwater, air and wind flows, etc. These data need to be available and concentrated for easy use and access. Engineering plans fail when data isn't available or takes too long to find.

IBRAHIM DAJANI (ARIJ)

Response to environmental assessments in order to get loans: Farmers do not have all the information to respond to solid waste questions, etc.

SUMMARY - LANCE MATTESON (ANERA)

Some of the impacts with which USAID is concerned are debatable, some are valid. ANERA has no solid waste or sewerage activities in DA5, although, admittedly, there maybe indirect effects.

Solar Energy: ANERA is open to ideas and information.

Wells in Gaza: ANERA has two separate activities. One is well rehabilitation, which ANERA believes will have a positive environmental impact; and a large project in Abassan, which ANERA will not rush. ANERA will work with the Palestinian Authority.

Funding: Use it or lose it. ANERA can't wait until the time is right; however, it can shift it to other areas.

Palestinian Authority: The Authority needs to organize as soon as possible or opportunities will be lost. There need to be interim guidelines.

Donors, NGOs and PVOs need to know who is in charge of issues or funding will be lost.

Noise Pollution: Generally, the industrial areas are outside of the towns. Even if there is some noise pollution, it will be better than not doing anything at all.

Sheikh el-Ruwan: No comparable stormwater projects at this time. ANERA agrees that it needs to learn from previous projects. But, imagine if the lagoon wasn't there, what would have happened in the flooding? The project is under separate review by USAID. ANERA is more than willing to share information with the Palestinian Authority. Many of the problems here were institutional rather than technical. Still, ANERA learned some good lessons.

Environmental Awareness: Agricultural extension is a good place to raise environmental awareness.

Abassan: Agrees with comments made.

Solid Waste: ANERA has no solid waste projects but will cooperate with other projects' solid waste sites.

Recycling: Priority in Gaza and Jericho.

Advantage of DA5 over previous projects: There are fewer components to this project which means that ANERA can better concentrate on the quality of each activity.

Information: ANERA has no scientific research in Gaza on water resources and needs it. Israel sometimes shares technical data but getting information is difficult. ANERA has requested data often and been promised it on Brucellosis and aquifers in Gaza. ANERA has given the Israelis all it has on brucellosis. Please encourage Israel to share information, especially on brucellosis.

NADER AL-KHATIB (PRIDE)

There are data for Gaza, but the Palestinian Authority needs to make a formal request.

LANCE MATTESON (ANERA)

The information needs to be available publicly.

## APPENDIX D

### Sample Outline of a Programmatic Environmental Assessment

PEA reports should be concise and focussed on the significant environmental issues. The detail and sophistication of the report should be commensurate with the potential impacts. The target audience should be project designers, implementing agencies, proponents and the local communities. The PEA report should include:

- (a) Executive Summary: Concise discussion of significant findings and recommended actions.
- (b) Policy, legal, and administrative framework within which the PEA is prepared. The environmental requirements of USAID should be explained (can be included under (c) Project Description).
- (c) Project Description in a geographic, ecological, social, and temporal context, including any off-site investments that may be required by the project (e.g., dedicated pipelines, access roads, electricity, water supply, housing, and solid waste and disposal).
- (d) Baseline Data: Dimensions of the study area and description of relevant physical, biological, and socio-economic conditions, including any changes anticipated before the project commences. Current and proposed development activities within the project area (but not directly connected to the project) should also be taken into account.
- (e) Environmental Impacts: The positive and negative impacts likely to result from the proposed project should be identified and assessed. Mitigation measures and the residual impacts that cannot be mitigated should be identified. Opportunities for environmental enhancement should be explored. The extent and quality of available data, key data gaps, and uncertainties associated with predictions should be identified/estimated. Topics that do not require further attention should be specified.
- (f) Analysis of Alternatives: Proposed design, site, technology, and operational alternatives should be compared systematically in terms of their potential environmental impacts; suitability under local conditions; and institutional, training, and monitoring requirements. To the extent possible, for each of the alternatives, the environmental costs and benefits should be quantified, and economic values given where feasible. The basis for the selection of the alternative proposed for the project design must be stated. The "no action" alternative must also be considered.
- (g) Mitigation Plan: Feasible and cost-effective measures which may reduce potentially significant adverse environmental impacts to acceptable levels should be proposed, and the potential environmental impacts, and institutional and training requirements of those measures estimated. The plan should provide details on proposed work programs and schedules, to ensure that the proposed environmental actions are in phase with engineering and other project activities throughout implementation. The plan should consider compensatory measures if mitigation measures are not feasible or cost-effective.
- (h) Monitoring Plan regarding environmental impacts and performance. The plan should specify the type of monitoring, who would do it, how much it would cost, and what other inputs (e.g., training) are necessary.
- (i) Environmental Management and Training: The existence, role, and capability of environmental units at the on-site, agency, and ministry level should be assessed, and recommendations made concerning the establishment and/or expansion of such units, and the training of staff, to the point that the PEA recommendations can be implemented.

#### Appendices

List of PEA preparers: individuals and organizations.

References: written materials used in study preparation. This is especially important given the large amount of unpublished documentation often used.

Record of Consultation Meetings: Include lists of both invitees and attendees. The record of consultations to obtain the informed views of the affected people should be included.

## APPENDIX E

### Example of Information Useful for Evaluation of Solid Waste Landfills

1. Topographical maps showing area of solid waste sites, surface water drainage pathways, nearby bodies of water, and roadways in and around the landfills;
2. Current photographs of the solid waste sites;
3. Types and estimated quantities of industrial, hazardous, and liquid waste in the solid waste sites;
4. Distances of solid waste sites to the nearest freshwater intakes (both surface and groundwater);
5. Depths to uppermost groundwater aquifers underlying solid waste sites;
6. Type(s) of access control, scavenging restrictions, and proximity to populated areas;
7. Extent of open burning;
8. Measures used to control disease vectors;
9. Data from soil borings and groundwater samples;
10. Results of any recent inspections; and
11. Locations(s) and descriptions of soils available for cover.

## APPENDIX F

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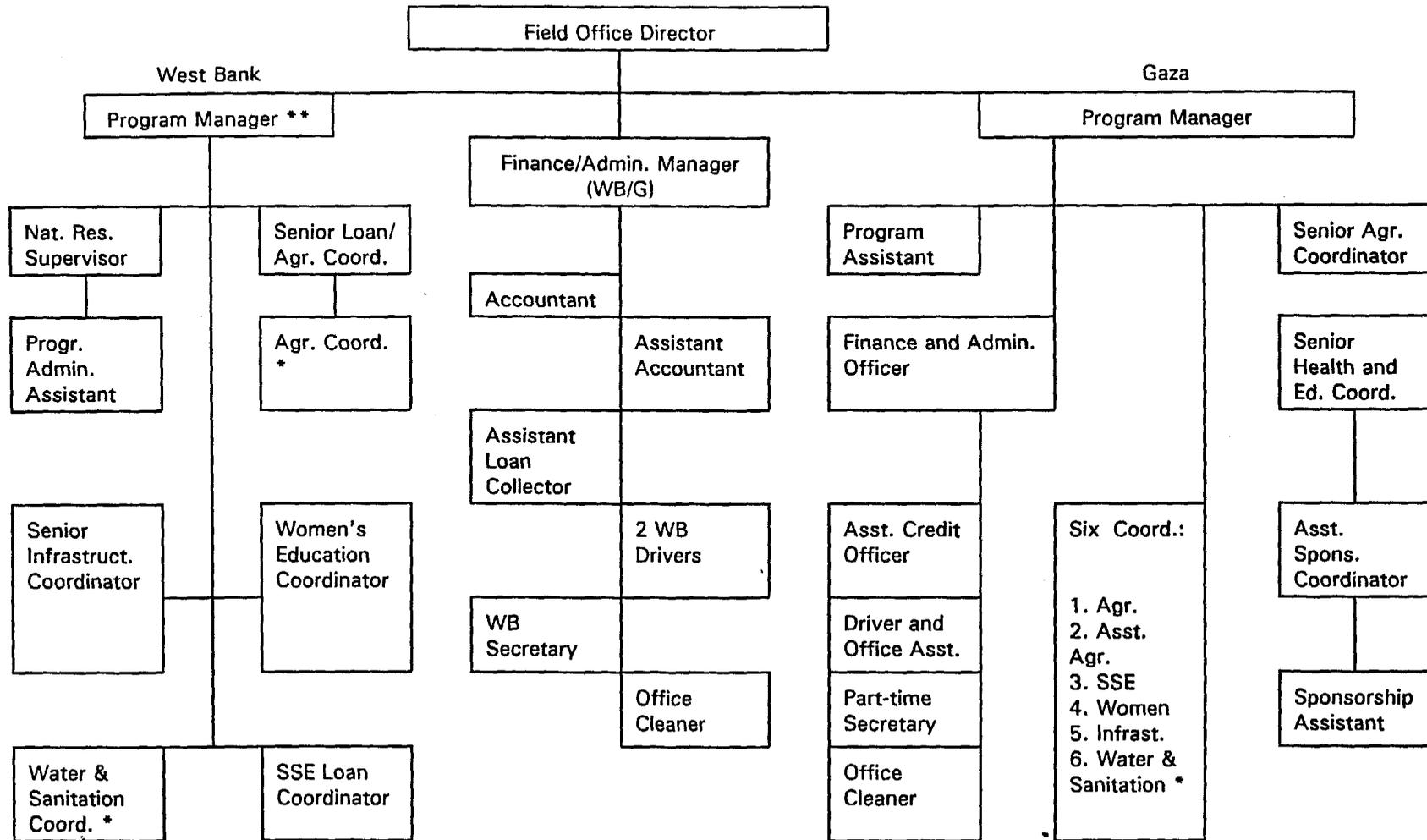
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APPENDIX G

SCF ORGANIZATIONAL CHART AND SITE DESCRIPTIONS

**SAVE THE CHILDREN FEDERATION  
ORGANIZATIONAL CHART FOR THE WEST BANK AND GAZA**



\* denotes new positions added for FY 94 FO programming    \*\* Field Office Director is Acting West Bank Program Manager

SP



## PROFILE OF SCF SITES

In implementing the Institutional Development, SCF will be restricted to two types of sites: those pertaining to SCF's Impact Areas and those of partner institutions . The description below is limited to SCF's impact areas, since project sites of partner institutions will be identified during the course of implementation . SCF's impact areas are cluster of villages that share a common social, economical, demographical and administrative base . In FY95, SCF will work in four impact areas . Two more new impact areas will be identified in FY96 after the regular mapping and selection procedures are completed . The selection of these areas is based on a set of 21 indicators such as location, linkages, population, productivity activities, development environment, and their readiness to work with SCF . Gaza Strip will be considered as one impact area where the implementation sites will be identified with partner institution in course of work .

### I. Al-Araqa, Al-Hashimiya, Al-Yamoun Impact Area

- A) *Al-Yamoun:* It is the largest among the three villages . It is located nine kilometers to the north-west of Jenin city at an altitude of 250m above sea level . It has a mountainous terrain . The estimated annual rainfall is around 500mm . The total area of the village is 16 km<sup>2</sup> whereas the residential area is 4 km<sup>2</sup> . There are around 13,000 persons living in the village . The internal affairs of the village are the responsibility of a newly elected village council in addition to four "Mukhtars" . The village has 4 mosques, one post office (with four telephone lines), two wheat mills, and four olive oil pressing facilities . There are 14 km of internal streets of which only seven are paved .

Transportation links to the nearby Jenin city is relatively regular . There is a bus that makes 10 journeys daily in addition to around 25 taxis .

Al-Yamoun possesses a relatively poor infrastructure and public facilities . There exists a local network for electricity with four generators of a total capacity of 600 kw . Electricity is supplied at an average of 20 hrs/days . The village depends mainly on rainwater collecting cisterns for their water supply in addition to three springs of a total capacity of 7-8 m<sup>3</sup>/day . The number of cisterns existing in the village is around 225 cisterns with an average capacity of 50 m<sup>3</sup>/cistern .

The village has three K.G's serving around 80 children . In addition, there are two schools up to the twelfth grade one for boys and the other for girls . The total number of students is around 1200 males and 900 females . Illiteracy rates are relatively small 5% for males and 10% for females .

There exists one charitable society in the village which runs a literacy program for the elderly people of Yamoun .

There are two public clinics in addition to two private ones, the services of which do not suffice the whole village . Most of the villagers seek health services in Jenin city . The villagers depend mainly on work in Israel for their income . 55% of the villagers' income used to come from workers in Israel (a figure which is greatly reduced now due to the closure of Palestinian Occupied Territories since April 1993) . 20% of the villagers income comes from local agricultural activities, 20% from villagers residing in Jordan or Gulf states, and the remaining 5% comes from work in nearby Jenin city .

- B) *Al-Araqa*: It is located 15 km to the west of Jenin city, 3 km away from Al-Yamoun village on a hill facing the border with Israel . The population is around 1250 persons more than 50% of them are under 16 years of age . Females constitute 45% of the total population .

The village possesses a relatively poor infrastructure . There is a local electricity network providing the village for 4-5 hrs/day of electricity . Similarly, the villagers depend on collecting rainwater to meet their needs . There exists no clinic in the village . In time of need, the villagers go to the clinics and hospitals of Jenin city .

The main source of income for the village is through work in Israel where more than 80% of the labor force work there (estimates are for the pre-closure) . The second source of income is agriculture . Around 2000 dunums of land is planted by olive and almond trees . In addition the villagers have around 85 cows, and 400 heads of sheep .

A major problem facing the village is the lack of appropriate schools . There is one elementary and one preparatory schools (i.e., up to the 9th grade) . The schools are mixed for boys and girls . In the conservative context of the village, this leads to early dropouts among the female students at earlier stages . The majority leave school after the fifth grade .

- C) *Al-Hashimiya*: Al-Hashimiya village is located to the south west of Jenin city and is 3 km far from Al-Yamoun village . It is a relatively small village of a population around 650 persons, 42% of which are under 16 years of age . The village depends on rainwater harvesting for their water in addition to a nearby spring which has a capacity of 4 m<sup>3</sup>/day .

Electricity is supplied 4-5 hrs/day by a local generator which is relatively old and maintenance costs are high .

The internal streets of the village are mostly unpaved . The village lacks basic infrastructure . There is one elementary school for both sexes . Thus, the illiteracy rate is around 20%, and it is specially high among the women .

There is no kind of health services, and people usually go to the nearby Jenin city for treatment . With irregular transportation this becomes very difficult especially in times of emergency .

The village depends mainly on work in Israel for its income . The village land ownerships is 840 dunums of which 720 dunums are planted with olives and almonds . In addition, it is estimated that there are around 15 cows and 150 heads of sheep . Thus the agricultural contribution to the village economy is small .

*In expanding this Impact Area two other nearby villages might be added, namely Kufur-Qud and Burqin, the profiles of which will be prepared in due time .*

## II. Ramin, Beit Lead Impact Area

- A) *Ramin:* Ramin is 15 km west-ward from Nablus city . It has a mountainous terrain 350 m above sea level and with an annual rainfall of 600 mm . It has a population of 1600 persons administered locally by a village council and a "Mukhtar" who himself is a member of the village council . 5 km of its 8 km internal streets are paved . Electricity provided by Nablus municipality .

Transportation to the nearby cities Nablus and Tulkarem is irregular since there are only 9 taxis serving this purpose in addition to around 30 cars owned by the villagers .

For its water supplies, the villagers depend on around 215 rainwater collection cisterns with an average capacity of 60 m<sup>3</sup>/cistern in addition to a spring which has the capacity of 9 m<sup>3</sup>/hr .

There are two K.G's, one elementary and one preparatory schools (up to the 10th grade) . Education is done mixed for boys and girls . The Illiteracy rates are relatively high for the age group 30-50 years of age especially among women which is round 20% . This is extremely high for women older than 50 years which is around 95% compared to only 5% for men for the same age group .

There exists one women charitable society which provides literacy courses for women .

There are two clinics in the village which barely suffices the health needs of the people .

Main income to the village comes from labor in Israel which consists of 45% of the total village income . 25% is provided through agricultural activities, 25% is provided by villagers residing in the surrounding countries and only 10% of the income comes from work in the West Bank . (Note: these are pre-closure estimates, where now most of the villagers depend on agriculture for their primary source of income) .

The village owns around 72000 dunums of land of which 85% is being cultivated . In 10% of the cultivated land vegetables are being grown, 70% is planted with olives and 20% is used as grazing area .

In the village there are around 50 cows and 350 heads of sheep in addition to around 3000 chickens .

- B) *Beit Lead:* The village is located 18 km to the west of Nablus city on a hilly area 440 m above sea level . The annual rainfall is estimated to be around 600 mm . The total village area is 16,000 dunums of which only 275 dunums are residential area . The internal streets are of a length of 5 km of which 2.5 km is paved . The total population is around 5500 persons .

Transportation to Nablus city is irregular . There is only one bus which makes one journey a day in addition to two taxis which peddle between the village and Nablus city .

The village is supplied regularly with electricity from Nablus Municipality .

There are around 1200 rainwater collection cisterns with a capacity of 50 m<sup>3</sup>/cistern . The village lacks basic sanitation and garbage collection services .

There is one school in the village for both boys and girls . Illiteracy rates are, as a result, relatively high for the females especially for those who are older than 40 years which is around 50% compared to 10% for men of the same age group .

Income from labor in Israel provides 60% of the villagers income, where as agriculture contributes around 20% . 10% is provided through work in the West Bank and 10% from villagers residing outside the village .

The villagers own 7 cows, around 1500 heads of sheep, 10000 chicken, and 200 bee hives in addition to around 500 donkeys .

### III. Assira El-Qibliyeh, Burin and Madama Impact Area

A) *Assira El-Qibliyeh:* The village is located 15 km south-west of Nablus city at an altitude of 700 m above sea level with an estimated annual rainfall of 600 mm . The total residential area is 1000 dunums . The total population is estimated to be around 2000 persons .

The village lacks basic infrastructure facilities . A generator of a capacity of 110 kw provides electricity 4-6 hrs daily . Only 2 km of its internal 5 km streets are paved .

Transportation to the nearby Nablus city is provided through a bus which makes two journeys a day in addition to three taxis and 20 privately owned cars .

The village depends on 210 rainwater catching cisterns with a capacity of 60-70 m<sup>3</sup>/cistern in addition to a relatively small spring which needs lot of maintenance .

The village has one school up to the 9th grade for both boys and girls . The estimated Illiteracy rates are 10% for men and 30% for women .

There is only one clinic in the village which provides clinical services four days a week and only 3 hours per each day, which scarcely covers the needs of the village. Sanitation and garbage collection services are lacking .

The village is rich in its community activities . They have five charitable or cooperative societies which sponsor various activities in the village, starting with supervising electrical supply to providing health education .

More than 50% of the villagers income is provided by workers working inside Israel . 25% is provided by agriculture, 20% through work in the West bank and 5% from villagers residing outside the village .

Surely the unemployment rate has risen abruptly after the closure of the territories in April 1993 .

Major agricultural products are olive and wheat . But still thousands of dunums of land are not being cultivated due to the continuous harassment of the nearby Israeli settlers .

The agricultural wealth of the village is modest . They own around 60 cows, 150 heads of sheep and about 6000 chicken, in addition to three bee hives .

Main agricultural activity of the village is raising wheat (3000 dunums) in addition to around 1500 dunums of olive trees .

#### IV. Tquu', Al-Rashaydeh, and Kisan Impact Area

This impact area lies on the edge of the Judean desert 12 km south-east of Bethlehem city. The annual rainfall is between 200-300 mm . The population is estimated to be around 12,000 persons . They are mostly of beduin origin who Israel worked on resettling them in that area .

Of its 20 km internal roads only 5 km are paved . There is no regular transportation especially in the remote areas of Kisan and Rashaydeh . Around 10 taxis provide transportation services for this large number of people .

Although electricity and water is supplied by Bethlehem Municipality, most of the time it is cut because the people cannot afford paying the fees .

In addition to the water supplied by the network, there are around 450 cisterns for collecting rainwater most of which are badly maintained and need rehabilitation .

In remote areas of Kisan and Rashaydeh basic needs are lacking . There are tens of families who are living in shabby huts or old buses with no services what so ever .

The Illiteracy rate is relatively high 60% for males and 80% for females . Most of income comes from work in Israel, which composes 70% of the communities income . Although the community owns around 50,000 heads of sheep yet the returns from this sector constitute 25-30% . High water and feed costs needed for the animals puts more pressure on the relatively poor community .

APPENDIX H

**ANERA ORGANIZATIONAL CHART AND SITE DESCRIPTIONS  
GAZA STRIP SCHEDULE AND LOCATION MAP**

MIDDLE EAST HEAD OFFICE  
8 Abu Obeldah El Jarrah Street  
P. O. Box 19982 EAST JERUSALEM  
Tel. 02-277076  
Fax 972-2-894351



GAZA OFFICE :  
Shuhada' Street  
P. O. Box 44, GAZA  
Tel. 07 - 820328, 07 - 820329  
Fax 07 - 821157 - Attn. ANERA

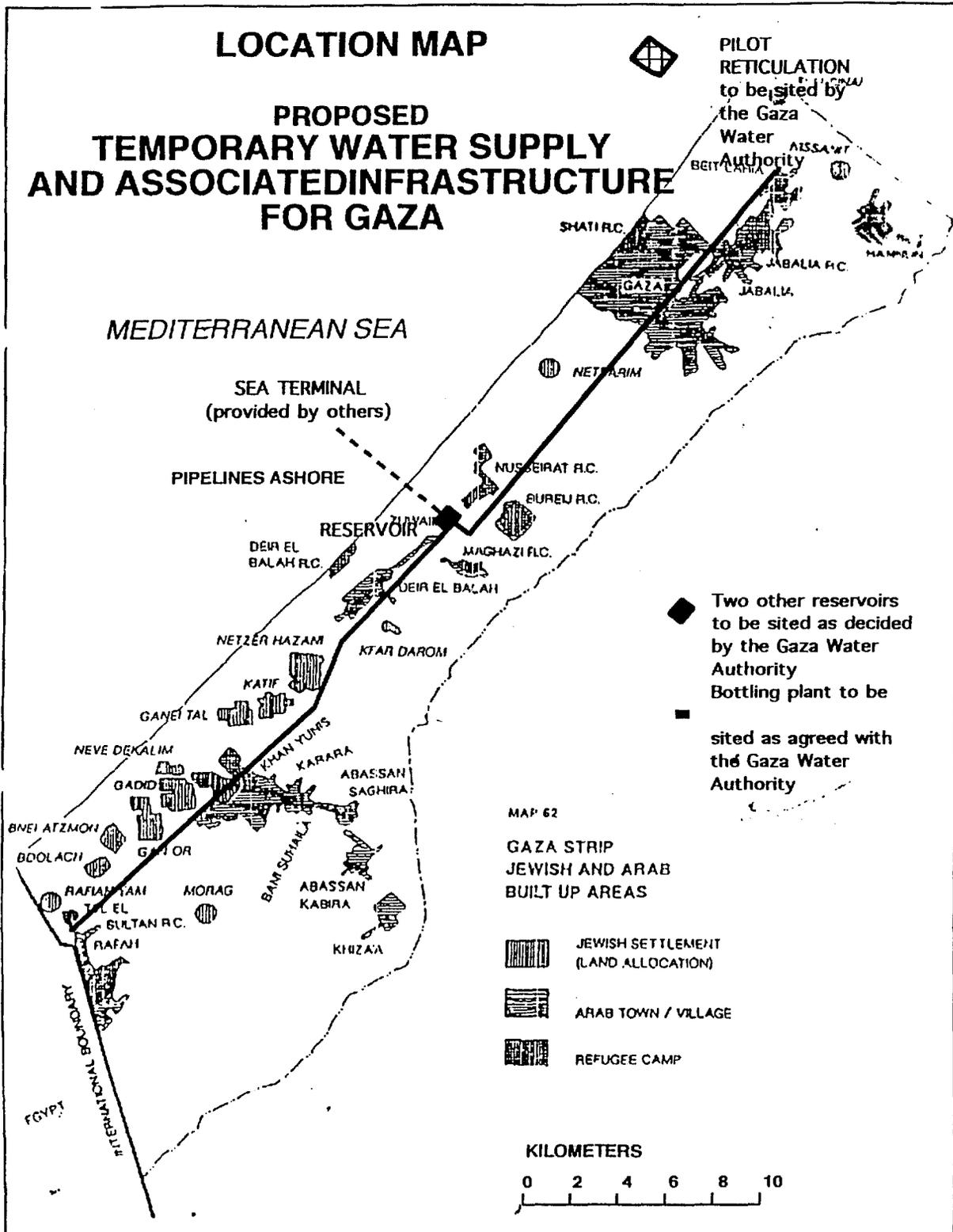
## AMERICAN NEAR EAST REFUGEE AID

### ANERA GAZA STRIP SITE VISIT SCHEDULE AID ENVIRONMENTAL/PRIDE TEAM 28 July 1994

8:30	Meet at Paz service station near Eres checkpoint
8:45 - 9:30	Beit Lahiya Cooperative (sample well rehabilitation/irrigation sites)
9:45 - 10:15	Gaza Municipality Stormwater System (Sheikh Radwan lagoon site)
10:45 - 11:45	Gaza Municipality Slaughterhouse and Wholesale Produce Market sites
12:00 - 12:45	Abasan Village Council (well site and surrounding community)
13:15 - 14:00	Rafah Ahlieh Cooperative (sample well rehabilitation/irrigation sites)
14:30	Return to Paz station

In addition, but only if there is enough time, the Khan Younes Municipality Wholesale Produce Market site and/or a Gaza Livestock Cooperative mobile veterinary clinic service site could be seen briefly.

FIGURE 1  
GAZA - Project Location



## APPENDIX H

### GENERAL INFORMATION ON ANERA:

#### ORGANIZATIONAL CHART AND SITE DESCRIPTIONS

##### I. AGRICULTURAL COOPERATIVE ACTIVITIES

###### A. Agricultural Extension and Technology Transfer

1. Agricultural Cooperatives Marketing Union (ACU). There are insufficient quantity and quality of agricultural extension services in the West Bank. One major element of the problem is the lack of field transportation support. Another major element is the ACU's uneven record on delivering practical, tangible services to farmer members. ACU is an important democratic institution representing 12,000 West Bank farmers. Assistance is proposed by providing an estimated total of \$215,000 funding for four part-time agronomy extension agents for 3 years (\$63,000), two U.S.-made field vehicles (\$40,000), eight specialized demonstration units (\$66,000), 21 agronomy extension workshops for 3 years (\$21,000), and initial administrative and logistical support (\$25,000).

2. West Bank Union of Livestock Cooperatives. There are insufficient quantity and quality of West Bank agricultural extension services for livestock owners. Assistance is proposed by providing an estimated total of \$60,000 for three veterinary/animal husbandry agents for 3 years (\$30,000), three specialized veterinary demonstration units (\$15,000), 10 veterinary extension workshops for 3 years (\$10,000) and initial administrative support costs (\$5,000).

3. Gaza Strip Union of Agricultural Cooperatives. The problem is the same as that described in (1) above. Assistance is proposed by providing an estimated total of \$110,000 for two agronomy extension agents for 3 years (\$24,000), one U.S.-made field vehicle (\$20,000), five specialized demonstration units (\$43,000), eight agronomy extension workshops for 3 years (\$8,000), and initial administrative and logistical support (\$15,000).

4. Gaza Strip Livestock Cooperative. The problem is the same as that described in (2) above. Assistance is proposed by providing an estimated total of \$60,000 for three part-time or temporary veterinary/animal husbandry agents/trainers for 3 years (\$30,000), three specialized veterinary demonstration units (\$10,000), 15 veterinary extension workshops for 3 years (\$15,000), and initial administrative support costs (\$5,000).

## B. Irrigation Infrastructure and Agricultural Water Management

1. Jericho Marketing Cooperative/ Al Fara'a Pipeline System (30 km N. of Jericho at Al Fara'a, Jiftlik Valley). To help the Jericho Agricultural Marketing Cooperative establish a modern irrigation network by replacing the old deteriorated, open concrete canal with closed pipelines for supply of spring water. The source of water is a spring 18 km from the site at an elevation 150 meters above the irrigated area utilizing gravity flow to the site. The total cost of the activity is estimated at \$1,560,000, and would be used to irrigate 10,000 dunums of farmland.

2. Jericho Marketing Cooperative/ Marj Naajah Reservoir (50 km N. of Jericho). To help the Jericho Agricultural Cooperative establish a modern irrigation network and storage system for member farmers of the cooperative in the Marj Naajah village. The main activity will be the construction of a new reservoir in the center of the village for more efficient and productive management of available irrigation water. The total cost of the activity is estimated at \$176,000 and will provide for irrigation of an additional 300 dunums of land.

3. Ramallah Marketing Cooperative/ Springs Rehabilitation. To help the Ramallah Agricultural Cooperative to establish modern irrigation systems for member farmers in several villages through rehabilitation and modernization of about 20 springs. The activities will include construction and rehabilitation of storage tanks for spring water, replacement of open earth canals with concrete canals or pipelines, and replacement of traditional surface irrigation methods with modern drip irrigation. The total estimated cost of the activities is \$223,850 which will provide for irrigation of an additional 200 dunums of farmland.

4. Rafah Ahlia Cooperative/ Well Rehabilitation, Reservoir and Pipeline (Southern part of the Gaza Strip). To help Rafah Ahlia Agricultural Cooperative establish a modern irrigation network to member and non-member farmers in Rafah. The activity consists of constructing a 500 cubic meter reservoir, installing 300 meters of pipeline, and provide training, extension and technical support. It will provide a pilot system for increasing the availability of agricultural water in the Rafah area, and increase farmer's income by expanding their irrigated area. The total estimated cost of the activity is \$98,200.

5. Beit Lahiya Agricultural Cooperative/ Well Rehabilitation (Gaza Strip). To help the Beit Lahiya Agricultural Cooperative to establish a modern irrigation network for the farmers of the Beit Lahiya area. The activity entails installing a 500 meter 6-8 inch pipeline to irrigate an additional 40 dunums. The total estimated cost of the activity is \$49,500.

6. Abassan Kbira Village Council/ Well (S. Gaza Strip). To help the Abassan Council establish a modern irrigation network for the farmers of the Abassan region. The activity involves drilling a new groundwater well, constructing a 500 cubic meter reservoir, installing 2500 meters of pipeline, and training Council staff and farmers in use of the system. The new well will have a lower salinity (700 ppm) than the other seven wells in the area which have salinities up to 1200 ppm, since it will be located farther from the sea. The well will provide irrigation for an additional 300 dunums, and the estimated total cost of the activity is \$467,500.

7. Training and Technical Assistance. Technical assistance and training in the area of water and irrigation management, and the related area of systems maintenance, will be vital for this subcomponent. A budget of \$200,000 is proposed for this purpose. A portion of this will be allocated for temporary managerial support, particularly for the larger systems such as the Al Fara'a pipeline. Much effort and funding will go into activity-specific training appropriate to the particular system and institutional needs. Finally, local workshops will be devoted to improved understanding and coordination in the Palestinian community concerned, particularly among West Bank/Gaza water technocrats and agricultural leaders.

## II. MUNICIPAL DEVELOPMENT ACTIVITIES

### A. Municipal Industry Stimulation (Industrial Zones)

1. Nablus Municipality Light Industry and Handicraft Complex. The proposed activity consists of assistance to the Municipality of Nablus in constructing a light-industry complex on 8 dunums of land to serve entrepreneurs and industrialists who wish to establish small factories and workshops in the city. The light-industry park will be located in the city of Nablus and will consist of about 81 workshops. The total estimated cost of the complex is \$1,936,000.

2. Hebron Chamber of Commerce and Industry Light Industry Complex. The proposed activity consists of assistance to the Chamber of Commerce and Industry of the City of Hebron for the construction of a building complex to house a number of small industries. It will serve small entrepreneurs who wish to set up their industries and workshops in the complex. The complex will be located 3 km. south-west of the city near the Hebron-Jerusalem highway on a 20-dunum plot for 52 workshops. The total estimated cost of the activity is \$1,056,000.

**B. Municipal Agri-Business Stimulation (Wholesale Produce Markets and Marketing Centers)**

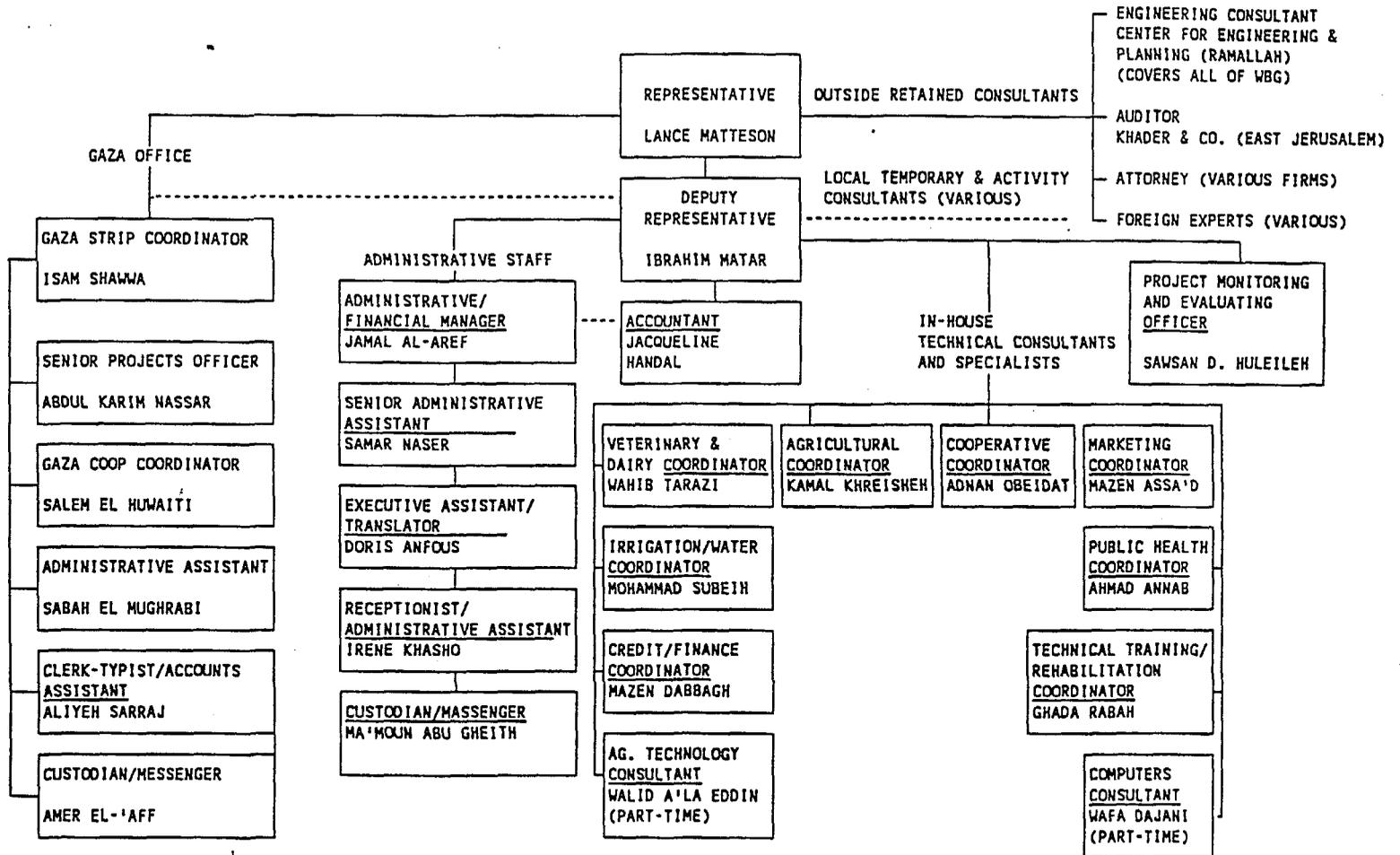
1. Gaza Municipality Wholesale Fruit and Vegetable Market. The purpose of this activity is to help the Municipality of Gaza to construct a wholesale fruit, vegetable, and meat market that would enable the city to render more competitive the marketing of such produce. The wholesale market will be located in the southern outskirts of the city and will include 50 shops with loading docks in front. The wholesale market is expected to receive most of the produce of the Gaza Strip and will sell the produce to retailers. The estimated total cost of the activity is \$1,045,000.

2. Khan Younes Municipality Wholesale Fruit and Vegetable Market. The purpose of this activity is to help the Khan Younes Municipality construct a wholesale fruit, vegetable and meat market that would enable the municipality to render more competitive the marketing of such produce. The wholesale market will be located in the city of Khan Younis which is located in the southern part of the Gaza Strip and is a crucial consumer market for this region. The proposed market will be located in the downtown area of the city and will include 30 wholesale fruit, vegetable and meat shops. The estimated total cost of the activity is \$616,000.

**C. Training and Technical Assistance.**

A proposed estimated budget of \$200,000 will be used for training of counterpart municipalities and business/industrial associations in management, maintenance, and environmental aspects of industrial complex or park administration as well as produce market administration. USAID/ANERA-assisted activities of the industrial complex/nature in Beit Jala and Ramalla have been operational long enough to provide excellent hands-on training resources. With respect to produce markets, USAID/ANERA-assisted activities of this nature in Halhul and Tulkarem have been operational long enough to provide excellent hands-on training resources. Continued integration of such marketing centers with the ACU-based market information system will be a crucial objective, since the wholesale markets constitute the source of the data being collected and disseminated.

ANERA WEST BANK AND GAZA STRIP ORGANIZATION CHART - 1 MAY 1993





Pilgrim's Palace Hotel, E. Jerusalem.  
Scoping session, July 25, 1994



Kissan, South of Bethlehem.  
Newly excavated pit latrine (SCF)



Aseera Al-Qybliyah, SW of Nablus.  
Kindergarten upgrade (SCF)



Nablus, North of Jerusalem.  
Proposed site of handicraft shops (ANERA)



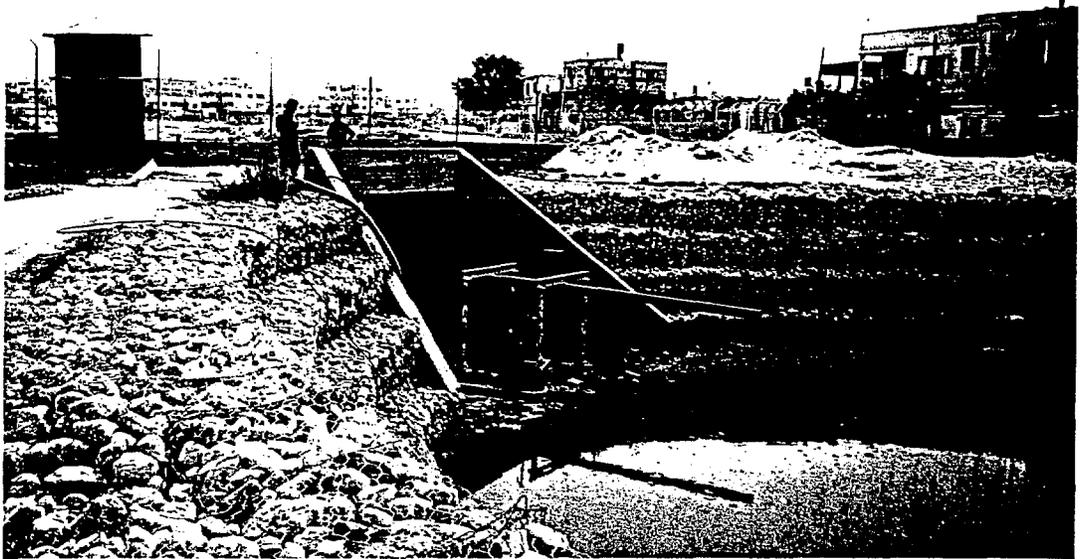
Ghore Al Fara'a, Jiftlik Valley.  
Beginning of pipeline extension (ANERA)



Rafah Ahlieh Cooperative.  
Sample well rehabilitation, center-rear



Rafah Ahlieh Cooperative.  
Future irrigation site



Gaza Municipality Stormwater System, Sheikh Radwan.  
Settling basin and headworks to lagoon



Gaza Municipality Stormwater System, Sheikh Radwan.  
Western end of the stormwater lagoon



Gaza Municipality Stormwater System.  
Entrance to Stormwater lagoon, after settling basin



Gaza Municipality Stormwater System.  
Top of northern inlet for surface runoff to stormwater lagoon



Gaza Municipality Stormwater System  
Settling basin showing gabions and outlet



Gaza Municipality Stormwater System  
Panorama of stormwater lagoon

مَسَاحُ بِلْدِيَّةِ عَزَّة  
أُنشِيَ هَذَا الْمَسَاحُ بِمُسَاهَدَةِ جَمْعِيَّةِ  
أَنْبِيْرَا  
وَتَبَرَعَاتِ الشَّعْبِ الْفَلَسْطِينِي  
وَالشَّعْبِ الْأَمِيرِكِي

Gaza Municipality Slaughter House  
Built With Assistance From  
Anerá  
With Contributions From  
The Palestinian People  
And The People Of The United States  
1990

Gaza Municipality Slaughterhouse.  
Plaque



Gaza Municipality Slaughterhouse.  
Inside, unfinished