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הרשות למחקר ולפיתוח

Authority for
Research &
Development

Mr Larry Gumbiner
Science Attache
Embassy of the United States
71 Hayarkon Street
63903 Tel Aviv

Dear Mr Gumbiner,

re: US-AID MERC Project TA-MOU-00-M21-013
"A joint Palestinian-Israeli Project to Develop a Recycling Industry for
Sustainable Development, Environmental Protection and International
Cooperation"
Dr Edy Kaufman

I am pleased to enclose the semi-annual report for the above project covering July to
December 2001.

With thanks for your cooperation.

Yours sincerely,

Elinor Slater

Elinor Slater
Coordinator, US-Sponsored
Research Programs

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A

Semi Annual Report

Period covering: July 1, 2001 through December 31, 2001

Submitted to: U.S. Agency for International Development; Bureau for Global Programs, Field Support and Research; Center for Economic Growth and Agricultural Development.

Project title: "A Joint Palestinian-Israeli Project to Develop a Recycling Industry for Sustainable Development, Environmental Protection, and International Cooperation".

Project number: M21-013

Award number: TA-MOU-00-M21-013

Principal Investigator and Institution:

Dr. Edy Kaufman

The Truman Institute for the Advancement of Peace, Hebrew University.

Co-Principals and Institutions:

Nader Khateeb

Water and Environmental Development Organization (WEDO).

Dr. Imad Khatib

Palestinian-Israeli Environmental Secretariat (PIES).

Section 1: Technical Progress

1A. Research Objectives

Research to prepare a technical and market feasibility analysis vis-à-vis the establishment of a solid waste recycling industry; survey of relevant public and private sector initiatives, programs, models and legislation as appropriate to the local circumstances. In addition to these technical and economic surveys, the research will also explore relevant social and development elements that may be obstacles, assets, or beneficiaries of this project.

Publication of a final report summarizing the results and recommendations of the research. This report will serve as the suggested guideline for the establishment of the joint recycling industry.

Conference to disseminate the findings of the research to a network of NGOs, academics institutions, and public and private sector stakeholders who will work together on the second stage of the project – the establishment of the recycling industry on a regional scale.

1B: Research Accomplishments

In describing the research accomplishments to date, it should be noted that the initiation of this project six months ago unfortunately coincided with the continued destabilization in the immediate region. And yet, despite the difficult events that had transpired over the six months prior to this project commencing, all three partner institutions were no less determined to implement the project as originally conceived. While many other cooperative projects fell apart or were halted, whether for ideological or logistical reasons, this project has proceeded almost entirely as planned, and where necessary, by adapting to the new circumstances and developing means for each organization to execute its part of the work plan. As a result, and as described below, this project is by-and-large still proceeding according to the original time table, with the full expectation that the final result will be as planned originally, and with all its goals being met.

WEDO and PIES

Training Workshop. Upon signing the contract with MERC and the Truman Institute, WEDO and PIES coordinated to identify and recruit the students who would participate in the training workshop. The goal of the workshop was to prepare the students to execute the in-the-field domestic waste analyses (weighing, separation, etc.), various industrial waste surveys, and questionnaires. After recruiting 16 students from the Science and Technology College in Jerusalem who had expressed interest in joining the project, the PIES office administrator provided each student with a broader picture of the nature of the project and the work it would entail. This was followed by preparation for the training workshop, including developing a detailed plan describing the logistical and secretarial support needed for the workshop, as well as preparing the technical content. All technical and logistical matters were coordinated with the trainer, Mohammed Said Al Hmaid, former Director General at the Ministry of Environmental Affairs and USAID Solid Waste Expert. A manual, both in Arabic and English, was prepared by Mr. Hmaid, and printed at PIES for dissemination to the participating students. The manual covered the following subjects relevant to carrying out the field survey:

- general introduction to solid waste management in the West Bank;
- appraisal of the solid waste problem;
- role of public involvement and public relations vis-a-vis solid waste management;
- institutional, financial, planning, training, human resources and employment issues
- technical aspects of solid waste management.

The workshop, which took place on the premises of Palestine Academy for Science and Technology in Ramallah on the 15th of September 2001 and the 3rd of October 2001, was organized and executed according to the order of contents presented in the training manual. Following this workshop, the students began their fieldwork for the domestic waste composition analysis in November 2001. The fieldwork will cover 62 sites, as follows:

- Hebron: 13 sites
- Bethlehem: 6 sites
- Jerusalem: 6 sites
- Ramallah: 7 sites
- Jericho: 4 sites
- Nablus: 9 sites
- Jenin: 8 sites

Industrial waste composition survey and questionnaire. The waste composition survey and questionnaire, to be executed by the students at various sites throughout the West Bank, is currently being prepared. The goal of this survey and questionnaire is to gather current data on the nature of industrial production in the West Bank (i.e. types of businesses, products being produced, markets being targeted, etc.), materials being used in the various production processes, waste materials being created as a result, and the potential to integrate these waste materials back into the production process through re-use and/or recycling.

Web site. A web designer has been recruited by PIES to construct the project web page. The site is already registered and it is currently under construction. The design of the main page, dynamic links, scripts, and contents will be discussed during the next meeting with the project partners.

Truman Institute

Following receipt of the project contract between The Truman Institute and USAID from the USAID's MERC program, Truman's project coordinator has been involved in logistical/administrative and technical research activities. The following reflects this division of responsibilities.

Logistical/administrative.

- Coordination between project partners and Hebrew University's Research Authority in preparation and signing of sub-contracts by the end of July.

- Coordination between project partners and Hebrew University's Research Authority in submitting tri-monthly fund request forms.
- Coordination of meetings between partners as necessary; bi-weekly telephone and/or e-mail updates of partner activities and progress. Initially, the security situation prevented face-to-face meetings, necessitating a heavy reliance on such long-distance updates. More recently, while such meetings have become more practically feasible, political pressures – particularly domestic political pressures applied to the Palestinian partners – have required the project partners to adopt a low profile and execute their work plan “in the field” with as little mention of the Israeli cooperation element as possible. Accordingly, telephone and e-mail updates currently suffice while minimizing political sensitivity and exposure.

Technical research

A significant amount of information regarding the composition and quantity of solid waste in Israel already exists, but it is fragmented and dispersed throughout numerous literary sources, including the most recent Israel Ministry of Environment (MoE) solid waste survey (1995), updated MoE partial surveys, magazine and newspaper articles, etc. Accordingly, a significant amount of time has been necessary to locate and gather this information.

A similar situation exists for technical information regarding the numerous technologies available for recycling various waste products, international experience and pilot programs, political and economic trends affecting the feasibility and desirability of recycling, etc. This information is also very fragmented and dispersed through an even wider set of forums and venues, including government documents, newspaper and journal articles, and a virtually limitless number of Internet sites dedicated to the myriad methods, technologies, approaches, and costs and benefits of recycling in its multitude of forms. While this data gathering is an on-going process that can never be truly “complete”, at this stage of the project, a substantial amount of data and information has nevertheless been gathered, and is currently being organized and analyzed, a process that will continue throughout the project's duration. The following has been accomplished:

- Waste surveys of the quantity and composition of solid waste in Israel (quantity, type, trends, etc.). This information has been gathered through government documents and surveys, journal and newspaper articles, and the occasional Internet site as relevant.
- Currently recycled materials data (quantity, as % of total waste generated, etc.) gathered primarily from a number of updated Ministry of Environment surveys.
- List of all factories and businesses involved in any form of recycling in Israel, including relevant contact information.
- Technical information regarding recycling of plastic, glass, paper, tires, agricultural waste, biogas, composting, metals, ethanol production, wood for energy and non-energy uses. This has required a significant amount of time dedicated to Internet-based searches for information applying to the various technologies, market actors, technical and logistical procedures, and approaches and policies developing in response to a growing international realization that

recycling is not only necessary, but even a desirable market with ever-expanding applications. This element will continue throughout the duration of the project.

1C: Scientific Impact of Cooperation

At this relatively early stage of the project, the technical consultants from both sides have had relatively little contact with each other within the framework of this project. This is because:

- The current political/security situation prevents the consultants from either side traveling to a mutually accessible location.
- The current lack of data requiring joint analysis makes such a meeting unnecessary. As the project proceeds and such data is gathered, such meetings for joint analysis will become more desirable, and hopefully more feasible vis-à-vis the above point.

1D: Project Impact

As the concept of recycling is still relatively new for the Palestinian civil society and is not, broadly speaking, of urgent priority for either the Palestinian leadership or for most ordinary citizens, the initiation of this project in general, and the training workshop specifically, have helped introduce a more concrete concept of recycling to Palestinian university students. This provides them with new knowledge and skills, and so positively affects their attitudes and approaches towards recycling.

1E: Strengthening of Middle East Institutions

In the aim of strengthening institutional capacity (including infrastructure and human capacities), new equipment has been purchased by PIES (a new computer) in order to meet the needs of the computer work entailed in this project such as building relevant database, web design, etc.

Continuous work in administrative management, coordination, communication and facilitation has strengthened and refined both PIES and WEDO administrative staffs' skills and capacities.

Moreover, the manual that has been utilized in the workshop could be used for future training courses of the same sort.

1F: Future Work

PIES

- Monitoring and coordinating with the work progress of its partners.
- As preparations proceed for the execution of the industrial sector survey, PIES is facilitating the process of obtaining formal information documents and previous survey data and reports on the industrial sector from various parties such as the Central Bureau of Statistics and the Ministry of Industry. These parties have been contacted and the needed information will be delivered soon to WEDO.

WEDO

- Managing the domestic solid waste survey being executed by the students;
- Conducting the industrial sector survey (industries located in the West Bank, waste produced by these companies, etc.);
- Survey of public and private sector recycling initiatives;
- Data analysis.

Truman Institute

- Continuing analysis of Israeli data regarding domestic waste composition and quantity with the aim of refining the list of potential waste items having greatest relevance to the goals of this project (i.e. economic and social feasibility for inclusion in a regional industry).
- Continuing analysis of the various technologies and approaches to recycling waste materials.
- Examining international recycling efforts and pilot programs.
- Establishing relationships with various Israeli private sector enterprises involved in recycling in Israel to both gain additional technical knowledge, and build a network of companies interested in possible involvement in the execution of the second stage of this project, the actual establishment of the regional recycling industry infrastructure.
- Examining the internal Palestinian civil society dynamic vis-à-vis the feasibility of decentralized private sector service provision.

The first three items listed above are already being executed and will continue throughout the duration of the project. The last two items will begin within the next 1-2 months.

Part II: Project Management and Cooperation

II A: Managerial Issues

For all the partners, the most significant managerial issue that has arisen has been due to the political/security situation. The on-going restrictions on the movement of the students, WEDO staff, trainers, and PIES project coordinator, initially made it difficult for the project partners to meet face-to-face. Furthermore, this has prevented the planned monthly meetings of the steering committee. However, this has not had a significant impact on the execution of this project as, through the use of faxes, phones, and email, all necessary matters have been addressed satisfactorily, and the key principals have recently been able to meet as necessary. [This is further discussed in section IIC.]

The difficult conditions for all have understandably resulted in some questioning within both societies as a whole as to the attractiveness of joint Palestinian-Israeli projects. However, all the project partners remain fully committed to this project and its goals, both short term and long term, and are constantly looking for ways to overcome these politically-grounded obstacles.

For example, on the Palestinian side, such concerns led PIES to approach the Palestine Academy for Science and Technology whose president, Dr. Fathi Arafat, the brother of Palestinian Authority chairman Arafat and also the Co-President of PIES, accepted PIES'

proposal to use the Academy as an umbrella when coordinating logistical matters on the Palestinian national level. This makes matters simpler and easier to conduct because the fieldwork on the Palestinian side can now be executed regardless of individual project participant political concerns about the political acceptability of Israeli-Palestinian cooperative projects. This potential political obstacle is therefore not currently an issue. Furthermore, this measure is proving to have no negative affect on the quality of the work conducted and appears to be a suitable solution for the time being. Indeed, the willingness to find an alternative mechanism to enable work to continue on both sides clearly demonstrates all the partner institutions' dedication to this project and its expressed goals.

II B: Special Concerns – Not relevant

II C: Cooperation, Travel, Training and Publications

Cooperation. In addition to emails, faxes, and weekly or bi-weekly phone calls to maintain a continuity of communication between all the project partners, there have been several meetings between PIES, WEDO, and the project coordinator from the Hebrew University in order to coordinate the project work plan and to discuss the progress of the project. A comprehensive face-to-face meeting of the steering committee has yet to convene due to the difficult political/security situation but will be organized as soon as the political situation allows. Nevertheless, each organization is in continuous contact with its respective consultant, so all members of the steering committee are nevertheless aware of all developments and progress.

Travel and Training. PIES paid the travel expenses for all the students who attended the training workshop (executed in coordination with WEDO), from the place of residence to the Palestine Academy for Science and Technology in Ramallah. [See section 1B.] For the six-month period that this report covers, the travel item is not relevant for WEDO or Truman beyond meetings between each institution's project leaders and the respective national technical consultants. Again, the current political/security situation prevents larger meetings between both sides' technical consultants, project leaders and coordinators, etc. As soon as the situation affords, such meetings will convene as originally planned.

Publications. As mentioned, PIES and WEDO prepared a training manual for the student training workshop. A copy of this document can be provided as necessary.

All data collected by the Truman Institute's project coordinator will be arranged and edited into a presentable format upon completion of the cross-correlation of the data gathered vis-à-vis potential recycling opportunities associated with each type of waste material. This document will serve both by itself as a valuable piece of literature relevant for both national and regional waste management analysis, and also as part of the final publication co-authored by both Israeli and Palestinian contributors.

II D: Request for USAID Actions – None