



**Applied Research Institute – Jerusalem (ARIJ)**  
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# **ARIJ Newsletter**

**Published in July, 1993**

Work at the applied Research Institute continues despite numerous obstacles, with the road closure foremost among them. Since the end of March, residents of the West Bank and Gaza are unable to travel to Jerusalem unless they possess special permits. As a result, many Palestinians have lost their jobs and are now entering their fifth month without employment. Like others, ARIJ has been affected by these measures. Staff members are refused permission to travel to Bethlehem; meetings and seminars are often cancelled; and administrative tasks are delayed.

Despite the injustice of such measures and the corresponding constraints and complications, ARIJ has made substantial progress in various projects.

### **Rainfed Farming Unit :**

Work in the Rainfed Farming Unit is proceeding as scheduled. The Villages Guide Report, the result of a survey of 72 villages in the West Bank, includes data on population and employment, village infrastructure, agricultural practices, extension, cultivated areas, land ownership, livestock, and water resources, among others. A full report on the villages surveyed will be published in September.

This preliminary survey report assisted the Rainfed Unit in the identification of numerous research priorities, including the role of women in agriculture development. ARIJ consequently initiated a pilot study of women in four villages, Wad Foukin and Dar Salah in the Bethlehem district and Al-Bourj and Taffuh in the Hebron district. ARIJ aimed to clarify the nature of women's involvement and responsibilities and to identify the distinct problems they face through investigating their role as producers, sellers and processors of food. However, while an awareness of the pivotal role of rural women in the production processes has begun to emerge in the OPTs as in other developing countries, women's contribution and responsibilities remain virtually unrepresented in national accounting and statistics which form the basis for development planning. Thus the survey attempted to identify not only relevant socioeconomic data but also the type of input on the farm and distribution tasks, realms of expertise, areas of responsibility, and cooperation among women. The final project report to be published in August will be accompanied by a project proposal identifying specific objectives to foster the development of Palestinian women in agriculture.

The Rainfed Farming Unit initiated a number of demonstrations, which focus on the introduction of new varieties and agricultural practices. In Taffuh in the Hebron District seedless grape varieties were planted in March. Project duration is three years after which the mature crops can be compared with local varieties for quality and competitiveness. New wheat varieties were planted in Dahariyya in October with the aim of increasing output by the use of specific agricultural practices. These include ploughing at designated intervals, regulated use of fertilizers, herbicides, pesticides, and mechanized harvesting. Dahariyya was chosen because of its low rainfall, large production area, and consistent wheat cultivation. This season's harvest yielded higher average output in all four varieties than on local farms. For example, Total output in

some varieties was approximately 270-300 kg/dunum while average output generally does not exceed 180kg /dunum. While these demonstrations proved successful during the first season, few conclusions can be made at present.

ARIJ will attempt to reproduce similar results the next season and will publish its recommendation after the three-year project duration has come to a conclusion.

Associated Libraries, which promotes international understanding and dialogue between cultures.

### **ICARDA Visit :**

Shehadeh Dajani, president of ARDG, led a group of local agriculturists and professors from the West Bank to Aleppo, Syria, for a week training program. The group met with director General Dr. Nasart Fadda and ICARDA specialists in an effort to encourage cooperation, exchange, and further training. Sessions were conducted on most significant issues in rainfed farming, including livestock and pasture, cereals, lentils, and chickpeas, and resource management and marketing. Participants included Rushdi Mishmesh, Dr. Azzam Tbeilad, Dr. Mohammed Hassounah, Ahmad Mohesen, Daoud Istanbuli, and Jad Isaac.

### **Election to the Board:**

**A new executive committee was elected in February. Its composition is now as follows:**

- President - Shehadeh Dajani
- V.President - Prof . Riad Khoudary
- Treasurer - Jerasmos Kharoub
- Members - Daoud Istanbuli
- Dr. Nasri Qumsiyeh
- Dr. Hassan Dweik
- Dr. Jamal Safi

### **Staff News:**

Leonardo Hosh left the Rainfed Farming Unit to attend University of California at Davis. Leo was awarded a Fulbright Scholarship and will do his Masters in the Fisheries Program. Abdallah Al- Laham was awarded a scholarship from the French Government to study Agriculture Policy, a two - year program. Issam Andoni won a scholarship to an American University where he will begin his Master in Computer Programming. In February Hisham Zarrour traveled to Winnipeg where he attended the First Canadian Conference on Water conservation. Violet Qumsieh Traveled to U.S.A in May to attend a USIS program entitled "Desertification, Conserving Water. Nadia Al-Dajani, Yousef Abu Asad, Nadim Issa, Ghadeer Sababa, and Eliza Laham recently joined ARIJ. Rabah Odeh, Jameela Abu Dohou, Ahmad Naser, Thouraya Butros, Ahmad El-Masri, And Omar Zayd left their position.

## **Visitors:**

Several guests and speakers came to visit ARIJ, among them Mr.Santen and Mr.Jensen from the World Bank; Gilbert Sherman, USIS; Roger Guarda, UNDP; Dr.David Brooks, IDRC; Dr. Lohmannsroben; Dr. Margaret scherb,SAR; Alexei Maslov, Russian Embassy; CD Falkowski, EEC; Mr. T. Dupla del Moral, EEC; Hans Lehmann, SESAG; Joke Buringa, Royal Netherland Embassy; David Nygaard, Ford Foundation; Mr. Van Duiji and Mr. Vrins, EEC Consultant; Jitendar srivastava and Ivan Buddenhagen, World Bank Consultants; and Como Hubar, Royal Netherlands Embassy. A number of groups also came to ARIJ, from Germany, France, the United States and on behalf of the Mennonite Central Committee and CIDA.

## **Publications:**

Natural Resources and Security in the Israeli Palestinian Conflict, Presented in the Workshop Future Security Arrangement in the Middle East", American Association for the Advancement of Science, Istanbul, April 15-18,1993.

Occupation and Environmental Degradation in Palestine, Presented to the conference "The Right to Health, Health and the environment in the Occupied Palestinian Territory", Montreal, May 27-30,1993

Water Problems in the West Bank and Gaza," Water Problem in the Middle East ". Center for Strategic Research and Documentation, Beirut, 1993, (in press).

Approaches to the Legal Aspects of the Conflict on Water Rights in Palestine/ Israel "water and Peace", Taffuh Village was the site for an initial land use study which began in November. Land use analysis includes the study of topography, slope, soil, watershed, and geology to determine the relationship between total cultivated areas and built- up areas. Field work and spot imagery, aerial photos, and software modules can be used to plan advantageous and profitable growth of infrastructure and agriculture. Based on the results of the model study in Taffuh a land use Survey proposal is now being prepared to launch a three-year project to expand the use of land resource management in the occupied territories.

In September, the Unit will produce a number of bulletins and sectoral reports.

ARIJ is continuing to monitor the effects and benefits of hydroponic fodder on sheep. Conducted at the Hope School in Beit Jala, the six-month project will endeavor to fatten sheep on hydroponic fodder which is high in nutrient content and more economical than fodder concentrate. The sheep are divided into two groups; one that is fed a ration of hydroponic Fodder, Concentrate, and roughage and the other is fed a ration excluding hydroponic fodder. Project result are expected at the end of August.

## **Water Research Unit :**

The Water Database, the foundation for subsequent research, has been installed. The Database includes a bibliography of all data published locally,

a CD-ROM which facilitates the retrieval of international documents, and GIS. The Water Unit will soon publish the result of the First Phase on the Status of Water in the occupied territories in book form. Made possible by a grant from the Government of Canada, new digitizing equipment and other facilities has enabled ARIJ to accept jointly a two-year project with the Ecole Biblique on mapping and digitizing old maps and overlays. In addition, ARIJ submitted a Phase Two project proposal for the West Bank and the potentials for sustainable and equitable development of irrigated agriculture.

In December, ARIJ presented two papers at the First Israeli - Palestinian International Academic conference on Water, Zurich, 1992.

The Palestinian team for the multilateral peace negotiation assigned ARIJ to list available technology for water conservation in the occupied territories.

The Water Research Unit is negotiating to purchase PAMAP software for use in water management and analysis. This package will enhance the Water and Agriculture Databases and provide a platform towards managing GEO-coded information.

## **Resource Center:**

ARIJ's Resource Center is enjoying greater use by individuals and organizations around the occupied territories as it continues to expand. The Center's CD ROM collection includes new titles on world weather, water, geological data, and statistics. ARIJ joined the many institutions that communicate by e-mail. ARIJ's number (100727.344) makes it accessible anywhere. A workshop conducted by the Children's Alliance and Peacenet that used ARIJ's facilities benefited staff from various local organizations, in addition to ARIJ. Furthermore, the Center's Agricultural Database has been designed and data processing continues, while an Environment Database is currently under planning and should emerge to further the work of the Environment Unit and the Resource Center. In this vein, more publications are continuing to appear in the Environmental Awareness Series.

The Resource Center has also benefited from the British Council's Agriculture and Water Information Programme. One of six institutions chose to participate, ARIJ received specialized resources to further its work in the Rainfed Farming and Water Units. The British Council has received 10,000 per year for three years to purchase resources for all six institutions. The award is based on open access to all potential users. Follow-up includes a number of workshops for ARIJ staff and publication and seed exchange between the resources for workshop for ARIJ staff and publication and seed exchange between the two research institutions.

ARIJ is a new member of the UNESCO Network for Proceedings of the First Israeli-Palestinian International Academic Conference on Water, Zurich, December 10-13, Elsevier Science Publishers, 1993, (in press).

Israel's Water Policies, "water Problem in the Middle East ", center for Strategic Research and Documentation Beirut,1993,(in press).

Nature's Apportionment and the Open Market: A Promising solution to the Arab-Israeli Water Conflict, "Water International ", 18,40-53,1993.

A Novel Approach to the Allocation of International Water Resources, "Water and Peace ", Proceeding of the First Israeli- Palestinian International Academic Conference on Water, Zurich, December 10-13,Elsevier Science Publishers,1993,(in press).