

R&D Division
Course On:
**AGRICULTURE AND
ENVIRONMENT IN A
CHANGING CLIMATE -
THE ISRAELI PERSPECTIVE**

November 27th – December 18th , 2012



STATE OF ISRAEL



Israel's Agency for
International Development
Cooperation
Ministry of Foreign Affairs



CINADCO
Center for International
Agricultural Development
Cooperation,
Ministry of Agriculture
And Rural Development

**MASHAV – Israel's Agency for International Development
Cooperation, and CINADCO - Center for International
Agricultural Development Cooperation, in association with the
ARO Volcani Center's Institute of Soil, Water and
Environmental Sciences invite professionals to participate in the
course on:**

**“Agriculture and environment in a changing
climate” - the Israeli perspective**

**The course will take place in CINADCO's Training Centre, the
Volcani Agricultural Complex, Israel.**



Agricultural Research
Organization
ARO

About the course

Background

The increase in quantities of atmospheric greenhouse gases over the last 150 years and its influence on climate has become a major contemporary concern. In the Eastern Mediterranean, climate models predict increased temperatures and decreasing rainfall in the coming decades. This can lead to profound impacts on the environment, and requires adaptation steps in all sectors, including agriculture, to prevent detrimental results.

Israel has semi-arid and arid climates, and suffers from frequent drought years. Pressure on Israel's water resources has challenged its aquifers both in quantity and quality. In order to maintain its intensive agricultural production under these harsh conditions there has been a constant drive to (a) increase water use efficiency by utilizing improved understanding of soil properties, crop water use, and atmospheric demand for evapotranspiration, (b) to use new resources (e.g. marginal water) and (c) to develop new techniques and methodologies that enable the practice of sustainable agriculture. Solutions adopted include improved irrigation practices, replacing fresh water with treated urban/domestic sewage water for irrigation of many crops, amendment of soils with composted sewage sludge and breeding of varieties with greater resistance to marginal water. At the same time attention has been given to the environmental aspects of these practices so as to prevent contamination of soil and aquifers.

Aims

Upon their return to their home countries, it is expected that participants should be able to:

- Initiate and conduct research needed for improving crop water use and irrigation.
- Initiate and conduct research needed for optimizing the use of marginal waters (saline and treated sewage) for irrigation for a wide range of crops with minimal risks to the environment.
- Contribute to the scientific knowledge on these subjects in their home countries.
- Maintain the scientific relations formed during the course and implement combined agricultural projects and joint research between Israel and their respective organizations.

Main Subjects

- Introductory aspects of climate change – theory and evidence.
- Plant nutrition and soil properties, including marginal water irrigation.
- Plant physiology – salt and water stress.
- Introductory agricultural meteorology, including theory and calculations of crop water requirements.
- Irrigation technologies, design and scheduling, including marginal water irrigation.
- Recycling sewage sludge and fertigation waters.
- Soil-pesticides interactions including sorption, desorption and bound hazardous residues.
- Soil and water conservation technologies aimed at reducing sodicity hazards, runoff and erosion problems.
- Water use and quality and micro-climate in protected cultivation.

Qualifications

The Course is designed for researchers, academic staff of agricultural research institutes and universities and senior executive staff active in areas related to the subject matter of the course. Applicants should have relevant academic degrees and at least 3 years experience in their work.

Application forms

Application forms and other information may be obtained at the nearest Israeli mission and at Israel's Ministry of Foreign Affairs website: <http://mashav.mfa.gov.il> (in Contact Us → Information and Registration).

Completed application forms, including the medical form should be sent to the Israeli mission in your area and also faxed or e-mailed to the CINADCO Training Center in Israel: Fax no: +972 3 9485771 / e-mail: sigalp@moag.gov.il .

General Information

Location and accommodation

The course will be held at the Volcani Agricultural Complex, situated 10 km east of Tel Aviv, Israel.

Transportation

Participants will be transported from and to Ben Gurion airport, without charge, by Tal Limousine Company, which is located on the mezzanine level at the Arrivals Hall. Participants are requested not to take any other transport company.

Clothing

The course will be held in the winter season. Temperatures may vary between 10°C and 25°C with probabilities of rainfall. It is therefore recommended to bring warm clothing, suitable footwear for field trips and swimwear.

Insurance

Participants are medically insured by a health insurance policy. This policy does not cover the treatment of chronic or serious diseases, dental care, eyeglasses, pregnancy and specific medication taken by the participant on a regular basis. Participants are required to bring with them their usual medication. No insurance of personal belongings like money, video cameras, laptops or jewelry will be provided.

About MASHAV

Israel's Agency for International Development Cooperation (MASHAV) was founded in 1958 as part of Israel's Ministry of Foreign Affairs. MASHAV is responsible for initiating and implementing Israel's development cooperation programs worldwide. MASHAV aims at transferring to developing countries the expertise and technologies that have assisted Israel on its own path to development. Today, Israel cooperates with over 140 countries, providing training in Israel and abroad, and operates on-site long-term demonstration projects. MASHAV is active in fields ranging from agriculture to health and from community development to entrepreneurship. <http://mashav.mfa.gov.il>

About CINADCO

The Center for International Agricultural Development Cooperation (CINADCO) is a part of the Israel Ministry of Agriculture and Rural Development. Since 1958, CINADCO has been in charge of the International Agricultural program conducted by MASHAV in Israel and abroad. CINADCO's activities consist of: International and country "tailor-made" courses in Israel, on-the-spot courses, long- and short-term projects and advisory missions. Israeli experts have also been sent to different locations around the world to conduct projects and to share their expertise in various aspects of agricultural production, extension and project planning. <http://www.cinadco.moag.gov.il/cinadco>

About ARO

The Agricultural Research Organization (ARO) is the research arm of the Ministry of Agriculture and Rural Development and is responsible for most of the agricultural research conducted in Israel. The scientists of the ARO collaborate with the regional R&D Stations and with the Agricultural Extension Service of the Ministry of Agriculture. Research at the ARO aims to improve existing agricultural production systems and introduce new products, processes and equipment on which Israel's future agricultural efforts will be based. ARO website: <http://www.agri.gov.il>

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