

STATE OF ISRAEL



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



A.R.O.

Agricultural Research Organization



Center for International Agricultural Development Cooperation Ministry of Agriculture and Rural Development

R&D Division

International Course:

Intensive Agriculture in Arid and Semi-Arid Environments

At the Gilat Research Center, Israel November 22nd – December 4th 2015



Israel's Agency for International Development Cooperation – MASHAV together with the Center for International Agricultural Development Cooperation – CINADCO in cooperation with ARO – Agricultural Research Organization, the Institutes of Plant Science, Plant Protection and Soil, Water and Environmental Sciences, invite professionals to participate in the aforementioned training program, which will take place at the Gilat Research Center, Israel.

Background

Arid and semi-arid regions are growing world-wide due to climate change, overgrazing, deforestation, drought, and improper/inappropriate agricultural techniques. Traditionally such areas produce low yields and poor quality food. However, to sustain existing human populations, food production must become more intense. Israel is unique in the world in that her deserts are receding instead of expanding. In fact, the U.N. Development Program called Israel "one of the driest, but agriculturally most successful, countries of the world". The quantity and quality of food production in arid areas can be improved through the application of modern technologies and know-how being developed in Israel. The type of plant cultivar, soil, fertilization, irrigation practice and pest control greatly affect yield. Livestock are often thought of in terms of overgrazing and soil degradation; however, proper animal species and breed, herd size and movement can yield greater plant diversity, stimulate grass tillering and improve seed germination. Modern technology has allowed the production, unthinkable a few years ago, of fish in the desert with yields as high as 100 kg/m³ of water, greatly adding to food diversity and security. Agriculture using modern technology, and executed properly under arid and semi-arid conditions, enables farmers to control or optimize many variables to create a more favorable environment for enhanced food production and hence food security.

Aims

To enrich the participants with a basic understanding of the latest advances in agriculture in arid and semi-arid environments including: effects of biotic and abiotic environmental conditions, biological principles involved in plant and animal production, and technologies to improve production.

Main Subjects

The main subjects include: The effects of abiotic stress-causing factors (temperature, humidity, drought, salinity) on vegetable production, fish production, nutrient requirements for vegetables, orchard crops (citrus and olive), rain-fed crops, plant protection (arthropods, nematodes and pathogens), and rangeland grazing.

The course will consist of two major components: 1. Frontal lectures from experts in each field. 2. Professional tours and visits to relevant sites.

Each participant will be asked to prepare before arriving, a 10 minute PowerPoint presentation reviewing an aspect of agriculture in his/her country, the problems that they are facing and ways to improve the situation.

Application Requirements

This course is designed for professionals from governmental institutions, universities and research institutes, private companies and non-governmental organizations involved in agricultural research and/or extension programs. Candidates should hold an academic degree in related disciplines with at least a three- year professional work experience. A full command of English is required.

Application forms

<u>Application forms</u> and other information may be obtained at the nearest Israeli mission and at Israel's Foreign Ministry's website:

<u>http://mashav.mfa.gov.il/MFA/mashav/Courses/Pages/default.aspx,</u> or at Volcani website at <u>http://www.agri.gov.il/en/departments/118.aspx</u>

http://www.moag.gov.il/agri/English/Ministrys+Units/CINADCO/courses_seminars/

Completed application forms, including the medical form, should be sent to the relevant Israeli mission in the respective country and to CINADCO's R&D Department in Israel sigalp@moag.gov.il, by or before October 6th, 2015.

General Information

Location and Accommodations

MASHAV awards a limited number of scholarships. The scholarship covers the cost of the training program including lectures and field visits, full board accommodation in double rooms, health insurance (not included dental services, eye glasses, chronic illnesses and pregnancy) and transfers to and from the airport. The scholarship does not include air fares and per diem.

The course will be held at the Gilat Research Center, situated 15 km west of Be'er Sheva, Israel. Participants will be hosted in double rooms.

Arrival and Departure

Participants should plan to arrive to Israel on November 22nd and leave on December 4th 2015.

About MASHAV

MASHAV – Israel's Agency for International Development Cooperation - at Israel's Ministry of Foreign Affairs was founded in late 1957, and is responsible for the design, coordination and implementation of the State of Israel's development cooperation programs. **MASHAV** concentrates on human and institutional capacity building by sharing Israel's own development experience and expertise, imparting know-how and transferring innovative technologies and tested methodologies adaptable to developing country needs. **MASHAV's** approach is to ensure social, economic and environmental sustainable development, joining the international community's efforts to implement the Millennium Development Goals by 2015. <u>http://mashav.mfa.gov.il</u>

About CINADCO

The Center for International Agricultural Development Cooperation - **CINADCO** is part of Israel's Ministry of Agriculture and Rural Development. Since 1958, **CINADCO** has been in charge of the international agricultural cooperation programs conducted by **MASHAV** in Israel and in many developing countries around the world.

CINADCO's activities consist of international, regional and tailor-made training programs, short missions as well as planning and implementation of long-term projects. <u>http://www.moag.gov.il/agri/English/Ministrys+Units/CINADCO/</u>

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/en/home/default.aspx



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