IAO - Overseas Agronomic Institute

IAO is an Institute of the Italian Ministry of Foreign Affairs, a technical-scientific body for research, training, consulting and technical assistance in the fields of tropical and subtropical agriculture and environmental protection. Based in Florence, IAO is a centre of excellence for training and geo-information technologies. The Institute provides technical assistance for poverty reduction, food security, sustainable development and it undertakes development-oriented research.

DEISTAF - Department of Agricultural and Forest Economics, Engineering, Sciences and Technologies, University of Florence

DEISTAF works together with several Italian research organizations, and it provides technical support to institutions and public and private bodies. The Department’s faculty members have a well rooted tradition in studying, teaching, research and consulting in the field of tropical and subtropical agriculture. DEISTAF is involved in cooperation projects in developing countries promoted by the Italian Ministry of Foreign Affairs, the European Commission, Italian firms and several NGOs.

Master Coordination

Supervision: Giovanni Totino, Director General, IAO
Direction: Elena Bresci, Professor, University of Florence
Organisation: Tiberio Chiari, Technical Director, IAO

Further details and up-to-date information can be found at www.iao.florence.it/training/irrigation
irrigation@iao.florence.it

Eligible Countries - Contacts

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www.iao.florence.it
www.deistaf.unifi.it
Florence, 7 November 2011 - 30 June 2012
**Presentation**

African countries have great potentiality in the development of irrigated lands. At the same time, present irrigation systems should be improved in order to overcome low efficiency problems. Rehabilitation of irrigation structures as well as improvement of irrigation management should be seen as a priority. The aim of this Master is to enhance the skills of local water managers through a training programme focusing on the main issues of irrigation and drainage. The course has reached its fifth edition; the previous ones were attended by a total of 65 persons coming from more than 20 African countries.

**Master Organisation**

The Master is co-organised by the Istituto Agronomico per l'Oltremare (IAO) and the University of Florence (DEISTAF) through funding by the Italian Ministry of Foreign Affairs. The Master will last 8 months, from 7 November 2011 to 30 June 2012. Lectures, seminars, case studies, practical classes and field visits will be held over the first 6 months, while the last 2 months will be devoted to the preparation of the Master thesis. Attendance is required.

The Master awards a total of 60 academic credits, including modules, workshops, and final thesis, in accordance with the European Credit Transfer and accumulation System (ECTS). Classes will be held at the IAO Training Centre in Florence. All participants coming from eligible countries will reside at the Institute’s guesthouse. English will be the working language.

**Participants**

The Master is conceived for a maximum of 20 participants, 12 coming from Ethiopia, Kenya, Mozambique, Tanzania, Sudan and Uganda.

The Master is addressed to public administration staff, extension service employees and researchers working in the domain of irrigation and/or drainage.

**Master Syllabus**

The Master includes the following 13 modules:

- Principles of Fluid Mechanics and Irrigation Engineering
- Applied Hydrology
- Principles of Irrigation Techniques
- Irrigation Methods
- Drainage Techniques
- Diagnostic Analysis of Irrigation Systems
- Diagnostic Analysis: Priority of Solutions
- Users Participation in Irrigation Systems Design and Management
- Information Technology in Irrigation and Drainage
- Deficit Irrigation
- Irrigation with Saline Water
- Irrigation with Non-Conventional Water
- Functioning and Monitoring of Hydraulic Structures in Irrigation Systems

A number of seminars will be selected from the following topics:

- Management of Natural Resources
- Technical and Economic Feasibility of Projects
- Financial Analysis of Projects
- Equitable and Ethic Exploitation of Water Resources
- Agricultural Research for Sustainable Production
- Extension Strategies
- Gender Sensitive Approach
- Appropriate Technologies for Irrigation and Drainage
- Irrigation and Plant Pathology
- Soil Suitability for Irrigation
- Principles of Geomorphology
- Valorisation of Indigenous Knowledge
- Irrigation and Weed Control
- Environmental and Natural Resource Economics
- Soils Hydrological Behaviour
- Drip Irrigation Applications

Moreover, a number of technical visits will be carried out at selected facilities, laboratories and institutions in order to complement the in-class training activities with relevant field experience. In previous years such visits have targeted the following: National Laboratory of Irrigation, Pisa; Consortium for the Land Reclamation of the Emilia Romagna Region (CER), Bologna; Consortium for the Land Reclamation of the Capitanata Region, Foggia; Bilancino Dam, Firenze; Water Potabilization plant of Anconella, Firenze; FAO, Land and Water Division, Roma; specialized fairs in the agricultural sector.

**Admission Requirements**

At least a three-year bachelor degree (or equivalent) in Civil and Environmental Engineering, Agriculture or other related disciplines is required.

Professional experience will be considered an asset, while knowledge of English is required.

The 12 participants from eligible countries will be provided with return air ticket, food and lodging, insurance and pocket-money for the training period. Also, their application for a permit of stay in Italy for the duration of the course will be by arranged by the course staff, according to Italian laws.

**Application Procedure**

A detailed curriculum vitae (CV), including academic studies and working experience, should be submitted to the Italian diplomatic delegation in the candidate’s country, according to its forms and regulations.

The following details should be included:

- full name, title, date of birth and nationality;
- complete address, telephone number, fax, e-mail;
- details on educational background, including earned academic degrees and/or equivalent qualifications (date, subject of specialisation and list of attended courses and final grades included);
- current job and/or relevant, prior working experience;
- certificate of proficiency in English (TOEFL, BCT/IELTS or Cambridge ESOL or other);
- motivation letter for applying to the Master course;
- supporting statement(s) from local institution(s).

Please note that selected participants will be asked, before their departure, to collect the following documents, required for enrolling at the University of Florence:

- a copy of their University degree, authenticated by the local Italian Embassy;
- a certified translation of the degree in Italian;
- a “statement of value” (Dichiarazione di Valore) issued by the local Italian Embassy.

**Deadline for submissions: 9 September 2011**