



World Meteorological Organization
Organisation météorologique mondiale

Secrétariat

7 bis, avenue de la Paix – Case postale 2300 – CH 1211 Genève 2 – Suisse

Tél.: +41 (0) 22 730 81 11 – Fax: +41 (0) 22 730 81 81

wmo@wmo.int – www.wmo.int

Weather • Climate • Water
Temps • Climat • Eau

Our ref.: ETR/CRS-1613

GENEVA, 3 September 2013

Annexes: 2 (available in English only)

Subject: Advanced Training Workshop on Hydrometeorology: Impact of Climate Variability and Change on Water Resources, RTC Bet Dagan, Israel, from 2-12 December 2013, Shefayim, Israel

Action required: For information and appropriate action, as necessary

Dear Sir/Madam,

I have the pleasure to inform you that the IMS/WMO RTC Bet Dagan of the Israel Meteorological Service will host an international training course on Hydrometeorology: Impact of Climate Variability and Change on Water Resources from 2–12 December 2013, at the Regional Training Centre (RTC) facilities in Shefayim, Israel.

This course is designed primarily for meteorological staff engaged and interested in the application of advanced hydrometeorological methodologies and techniques of water resources management. It aims to provide participants with a general view and information on the effects of climate change on aspects of the hydrological cycle and availability of water resources and modern hydrometeorological techniques and methods for efficient water resources management. The training course will be conducted in English.

For suitable applicants from developing countries only, scholarships will be provided by the Government of Israel – MASHAV – Israel's Agency for International Development Cooperation. Scholarships will cover full board accommodation (two persons per room) for the duration of the workshop, tuition fees and field trip transportation

The international travel costs including round trip tickets and transit fares are to be covered by the participants themselves or their respective Governments. Attached please find the "Course Information" and the "Participant Nomination Form".

To: Permanent Representatives of Members of Regional Association I (AFR-774)
Permanent Representatives of Members of Regional Association II (ASE-629)
Permanent Representatives of Members of Regional Association VI (EUR-730)

cc: Hydrological Advisers to Permanent Representatives of RAs I, II and VI

The nominated participants are requested to complete the attached Participant Nomination Form, which should be endorsed by the Permanent Representative of their respective countries, and to send it directly to the given address of RTC Bet Dagan, Israel not later than **15 October 2013**.

Yours faithfully,



(E. Manaenkova)

for the Secretary-General

**ADVANCED TRAINING WORKSHOP ON HYDROMETEOROLOGY: IMPACT OF CLIMATE
VARIABILITY AND CHANGE ON WATER RESOURCES**

**Shefayim, Israel
2–12 December 2013**

1. Introduction

The IMS/WMO RTC Bet Dagan of the Israel Meteorological Service has provided training at a post-graduate level since 1967. Several thousands of participants from all over the world, mainly from developing countries, have taken advantage of the opportunities provided by our RTC to study the application of meteorology to various aspects of economic activity.

The topics of this workshop are in accordance with the concept of the Global Framework for Climate Services (GFCS), where water is one of the four key areas selected by the High Level Taskforce of GFCS.

Since Israel was successful with developing an efficient Water Management System, despite its inherent water scarcity, the growing demands of the population and the possible impact of climate change and variability, many of the methodologies and techniques developed during the years could be used also to support development and improvement of existing and planned water resources management systems in other parts of the world. These methodologies and techniques will be presented to the participants in a combination of classroom lectures, discussions, exercises, demonstrations, field trips and round-table discussions.

2. Workshop Objectives

- a) To discuss the effects of climate change on aspects of the hydrological cycle and availability of water resources;
- b) To demonstrate modern hydrometeorological techniques and methods for efficient water resources management.

3. Main Workshop Content:

Precipitation measurements:

- Observational Network
- Data Management and Quality Control

Precipitation Diagnostics and Prediction/Projection:

- Mapping
- Trends
- Statistical Analysis of Extreme Events (rainfall, floods, peak discharge)
- Sub-seasonal to Seasonal Prediction
- Climate change projections

Water Resources Management:

- Climate Change impact on the hydrological cycle (evaporation, infiltration and surface flow)
- Climate variability and change and water resources (rainfall – runoff relationship, spring flow and reservoirs recharge)
- Tools for water management under precipitation deficit conditions

- Hydrological and hydrometeorological models for water balance calculations under climate change scenarios
- Impact of land use changes on water resources
- Role of Rain Radar in Flash Flood Management

4. Participation cost

- The airfare cost should be covered by the participant, by his/her employer, or by the granting institution;
- The total cost of lodging at full board for one person in a double room during the duration of the workshop, including tuition fees and field trips transportation will amount to app. \$200 per day (inc. insurance).

5. Scholarships

Scholarships, covering full board accommodation (two persons per room) during the duration of the workshop, tuition fees and field trip transportation will be provided by the Government of Israel – MASHAV – Israel's Agency for International Development Cooperation for suitable applicants from developing countries only.

6. Criteria

The Advanced Training Workshop is designed primarily for meteorological staff of National Meteorological and Hydrological Services engaged and interested in the application of advanced hydrometeorological methodologies and techniques of water resources management.

7. Language

The workshop will be held in English. A working knowledge of English is mandatory.

8. Training Staff

The workshop will be conducted by senior staff of the IMS/WMO RTC Bet Dagan and other Institutes having extensive knowledge and experience in climatology, hydrology and meteorology in Israel and elsewhere. Invited guest lecturers will also participate in providing and sharing their knowledge and experience in specific fields of expertise.

9. Registration

Interested candidates are requested to complete the attached Participant Application Form for the workshop and return it directly to:

RTC Bet Dagan
Israel Meteorological Service
P.O. 25
Bet Dagan 50250
Israel

to rmtc@ims.gov.il or to gershteing@ims.gov.il not later than the **15 October 2013**.

WORLD METEOROLOGICAL ORGANIZATION



ETR/CRS-1613, ANNEX II

ADVANCED WORKSHOP ON CLIMATE CHANGE AND AGRICULTURE
SHEFAYIM, ISRAEL
2-12 December 2013

APPLICATION FORM

Applicants willing to take part in this workshop are requested to fill this form and send it to:

Mr Giora. G. Gershtein, IMS/WMO RTC Bet Dagan, P.O.B 25, Bet Dagan 50250, Israel

E-mail: gershteing@ims.gov.ill; rmtc@ims.gov.il

Please print or type

Country _____ Date of Birth _____

Family Name: _____ Given Name: _____

Work Experience _____

Education _____

Academic degree (if available) _____

Place of employment _____

Position held _____

Posting address _____

Telephone: _____ Fax: _____

E-mail: _____

Financial assistance for required travel:

Yes No

Applicant's signature _____ Date _____

Recommendation of Director of the Service:

Signature _____ Date _____