



INTERNATIONAL HYDROLOGICAL PROGRAM
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STATE OF ISRAEL

NATIONAL REPORT ON IHP RELATED ACTIVITIES

July 2006

General

Activities of the Israel National Committee for Hydrology are sponsored by the Ministry of Education, Culture and Sport and the Ministry of Science and Technology. The present Chairperson of Israel IHP is Prof. Daniel Ronen from the Israel Water Commission and the Ben Gurion University of the Negev. The Israel IHP Committee is a statutory committee of the Israel National Commission for UNESCO.

The members of the Bureau of the Israel National Committee for Hydrology are: Mr. Daniel Bar-Eli, Coordinator (Israel National Commission for UNESCO); Prof. Eilon Adar (Ben Gurion University of the Negev); Prof. Gedeon Dagan (Tel Aviv University); Dr. Joseph Guttman (Mekorot-Israel National Water Co.); Ing. Shalom Goldberger (Ministry of Health); Prof. Joel Gat (Weizmann Institute of Science); Dr. Gabriel Weinberger (Israel Hydrological Service); Mr. Yacob Keidar (Ministry of Foreign Affairs); Prof. Ronit Nativ (The Hebrew University of Jerusalem); Dr. Ehud Simon (TAHAL); Dr. Alon Rimmer (The Kinneret Limnological Laboratory); Prof. Raphael Semiat (GWRI, Technion – Israel Institute of Technology); Prof. Avner Adin (The Hebrew University of Jerusalem); Dr. Arie Pistiner (Ministry of Environmental Quality); Mr. Avner Furshpan (Director, Climatology and Agro-Meteorology, Israel Meteorological Service); Prof. Hillel Rubin (Technion – Israel Institute of Technology); Prof. David Sharon (The Hebrew University of Jerusalem); Dr. Husam Masalha (Ministry of Science and Technology); Dr. Avner Vengosh (Ben Gurion University of the Negev); Prof. Haim Gvirzman (The Hebrew University of Jerusalem); Dr. Abraham Melloul



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(Israel Hydrological Service).

Activities undertaken in the period August 2004 – June 2006

1. Israel IHP Committee, the Israel National Commission for UNESCO and the Division of Science Teaching of the Weizmann Institute of Science (Prof. Abraham Arcavi, Head) presented to UNESCO (June 26, 2003) and through UNESCO to all countries of the world, a syllabus for the study of water related issues at the junior-high school level entitled "*The Blue Planet – The Water Cycle in the Earth's Eco-Systems*" (hereafter referred to as "*The Blue Planet*"). *The Blue Planet* is an innovative curriculum reflecting recent research findings on water issues.

Israel hopes that this contribution will help improve people's understanding and awareness of the importance of water to our planet as a limited, necessary and long-lasting commodity for mankind. Israel also hopes that the syllabus will help in bridging differences and misunderstandings between people by demonstrating that our needs are alike and that only together can we work to preserve this indispensable common resource and a better world.

The syllabus was prepared by the Division of Science Teaching of the Weizmann Institute of Science as a joint venture with the Curriculum Development Center of Israel Ministry of Education. The syllabus was the Ph.D. thesis of Dr. Orit Ben Zvi – Assaraf, conducted under the supervision of Professors Nir Orion and Daniel Ronen.

The Blue Planet is presently being translated into Spanish for implementation in Latin America countries.

The Israeli chapter of the IHP established contacts with CAZALAC, UNESCO's Center for Arid and Semi-arid Areas of Latin America, in Chile,



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and UNESCO's secretariat, in Uruguay, for the organization of seminars and workshops with the participation of Israeli experts and teachers from Latin America. During this events the Blue Planet curriculum will be transferred to our colleagues in Latin America. UNESCO's support is required for acquisition of chemical laboratory kits necessary for applying the curriculum.

2. The Israeli chapter of the IHP contacted CAZALAC and the Embassy of Chile for the establishment of cooperation programs related to water in arid zones and eLearning.

The following topics were suggested:

- Reutilización de aguas negras municipales para usos agrícolas
- Desarrollo y adaptación de mini- plantas de tratamiento de aguas negras para pequeñas poblaciones
- Modelación y gerenciamiento de recursos hídricos
- Penetración de cuña marina en acuíferos costeros
- Desalinización
- Gerenciamiento de recursos hídricos en zonas áridas
- Desarrollo de sistemas de monitoreo de calidad de aguas de superficie y subterráneas
- Interrelación de aguas de superficie y aguas subterráneas en zonas áridas
- Desarrollo de agricultura con plantas tolerantes a aguas de alta salinidad
- Análisis costo-beneficio relacionado a la utilización de aguas con contaminantes naturales (por ejemplo, metales pesados, arsénico)
- Adiestramiento y enseñanza a distancia

3. The Israeli chapter of the IHP and the Israel National Commission for



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UNESCO proposed Prof. Arie Shimshon Issar as a nominee for the UNESCO Great Man-Made River International Water Prize for Water Resources in Arid and Semi-Arid Areas (2005). Prof. Issar's outstanding work and interdisciplinary approach was dictated by the special conditions of scarcity of data and resources in arid and semi arid regions.

4. The Israeli chapter of the IHP and the Israel National Commission for UNESCO cooperated with the Zukerberg Institute for Water Research of the Ben Gurion University of the Negev (Directed by Prof. Eilon Adar) and the Stephen & Nancy Grand Water Research Institute of the Technion, Israel Institute of Technology (Directed by Prof. Raphael Semiat) in the organization of the Workshop "Microorganisms – Water and Aquifers". The Workshop was held at the Sde Boker Campus of the Ben Gurion University of the Negev (September 20 and 21, 2005) with the participation of colleagues from Egypt, Jordan and the Palestinian Authority.
5. No progress was made in relation to the proposal presented to UNESCO (July 23, 2003) by the Israeli chapter of the IHP and the Israel Water Commission on the creation of "The Water Museum of the Middle East". Israel is still waiting for an answer to her request for UNESCO's sponsorship and guidance.
6. Following the proposal of the Delft-based International Institute for Infrastructural, Hydraulic and Environmental Engineering (IHE) to establish the UNESCO-IHE Institute for Water Education, the Israel National Committee for the IHP of UNESCO submitted a proposal (October 10, 2001) for cooperation between the UNESCO-IHE Institute for Water Education and the Institute for Water Sciences and Technology (IWST) of the Ben Gurion University of the Negev. No progress was made in this area. A list of Israeli



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experts willing to cooperate with IHE activities is being prepared and will be submitted to UNESCO.

7. The unknown status of the above mentioned activities proposed by the IHP of Israel (items 5 and 6) to UNESCO were discussed during UNESCO's DDG Mission to Israel and the Palestinian Territories (June 5, 2004) – Strategy for Reconstruction and Reconciliation in the Middle – East.
8. Prof. Daniel Ronen participated as Chairperson of the Israel IHP Committee in the regional meeting of Europe IHP National Committees of Electoral Groups I and II of UNESCO held in Wallingford, UK, (July 5 and 6, 2005).
9. To celebrate the International Water Day, the Israeli chapter of the IHP and the Israel National Commission for UNESCO cooperated with the Zukerberg Institute for Water Research (Ben Gurion University of the Negev) in the organization of the Workshop “Water Technologies”. The Workshop was held at the Sde Boker Campus of the Ben Gurion University of the Negev (March 22, 2006).
10. The Israeli chapter of the IHP of UNESCO proposed (April 24, 2006) Prof. Jonathan B. Laronne of the Department of Geography & Environmental Development of the Ben Gurion University of the Negev as a candidate for the Advisory Board of the International Research and Training Centre for Erosion and Sedimentation (IRTCES) in Beijing, China and the International Centre for Water Hazard and Risk Management (ICHARM), Tsukuba, Japan.
11. The Israeli chapter of the IHP suggested that Integrative and Quantitative Management of Water Resources on National and International Scales is a



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subject of outmost importance to all countries of the world and especially to those suffering from water shortage. Therefore, Israel's IHP recommended including this topic in IHP-VII. It was also recommended that Israeli scientists be involved in all facets of IHP-VII.

12. The Israeli chapter of the IHP and the Israel National Commission for UNESCO co-sponsored the IIIrd Symposium of the Israel Water Association held at the Ben Gurion University of the Negev (May 25, 2006).