



United Nations
Educational, Scientific and
Cultural Organization



International
Hydrological Programme

INTERNATIONAL DROUGHT INITIATIVE [IDI]



Regional Centre
on Urban Water Management
(under the auspices of UNESCO)

INTERNATIONAL HYDROLOGICAL PROGRAMME
Division of Water Sciences

THE INTERNATIONAL DROUGHT INITIATIVE (IDI)

proposed by Iran has been approved at the 19th Session of the Intergovernmental Council in Paris, July 2010. The Regional Centre on Urban Water Management (RCUWM) in Tehran hosts the Secretariat. IDI aims at providing a platform for networking and dissemination of knowledge and information between international entities that are active working on droughts. This initiative will collaborate with, UNESCO category II centers and water chairs, the World Meteorological Organization (WMO), the World Water Council (WWC), the Food and Agricultural Organization (FAO), the United Nations Development Program (UNDP), the International Strategy for Disaster Reduction (ISDR) and Global Water Partnership (GWP). The initiative is open to other related entities interested in joining.

THE CONTEXT

Drought as a natural disaster has caused many economic and social damages to human beings and the environment, since early human civilizations. The human society always struggled with mitigating the negative impacts of natural disasters such as droughts. Droughts remain a widely underestimated natural hazard because they develop very gradually, covering large areas, often going unnoticed elsewhere in the world until they trigger a famine. Droughts can cause crop failures costing billions, severe bushfires as well as economic losses by restricting shipping or the generation of electricity. The history of human civilization and existing documents show that drought related disasters caused severe threat not only to livelihoods but also to the environment at any time and place. In recent decades the population growth resulted in an increasing demand for water and food supplies. Current climate change projections suggest an increase in frequency, intensity and durations of droughts in some regions which impact various sectors such

as food production, water supply, energy and health. The Intergovernmental Panel on Climate Change (IPCC) expects heat waves and droughts to increase in many regions of the world over the coming decades, in the course of which droughts will become one of the most destructive natural catastrophes. The drought in the US Midwest (Corn Belt) in 2012 resulted in agricultural losses of around US\$ 20bn, of which about US\$ 15bn were insured. Data related to human and economic losses from droughts that have occurred between 1980 and 2008 (www.preventionweb.net) is shown in **Table 1**.

Table 2 also shows droughts sorted by continents from 1900 to 2013. National governments are encouraged to take appropriate measures, develop drought management plans and policies, and enhance regional and international cooperation in order to increase their capacities to cope with droughts. One of the most effective and useful measures for helping the countries to reduce the

TABLE 1: HUMAN AND ECONOMIC LOSSES FROM DROUGHTS

N° of events:

410

N° of people killed:

558 565

Average people killed per year:

19 261

N° of people affected:

1 551 455 112

Average people affected per year:

53 498 452

Economic Damage (US\$ X 1,000):

76 949 488

Economic Damage per year (US\$ X 1,000):

253 431

national programs and actions could be useful, by having an integrated drought management approach. This could significantly improve the capacity of countries reducing the negative impacts of drought disasters.

With the necessity for strengthening societies' capacities facing droughts, particularly in developing and least developed countries and taking benefit of countries experiences and based on the contents of UN Convention to Combat Desertification (UNCCD) which emphasises on codifying a Drought Preparedness Plan, the establishment of the International Drought Initiative (IDI) is seen as an appropriate action to mobilize countries confronting with different dimensions of droughts.

Prior to executing procedures for running the initiative, and by taking into consideration previous successful international experiences, compiling a general framework entitled as the IDI Road Map including the principles, and missions and its approval at the highest decision making level is necessary for putting the plan into action and reaching its goals.

risks associated with droughts is to establish an internationally organised vision to cope with this phenomenon. The global experiences of various countries around the world have proved that

TABLE 2: HUMAN AND ECONOMIC LOSSES FROM DROUGHTS

		Number of Events	Death	Total Affected	Damage (000 US\$)
Africa	Unspecified	1	-	2 400 000	-
	average per event		-	2 400 000	-
	Drought	291	847 143	362 225 799	2 920 593
	average per event		2 911.1	1 244 762.2	10 036.4
Americas	Drought	134	77	69 505 391	50 471 139
	average per event		0.6	518 696.9	376 650.3
Asia	Drought	153	9 663 389	1 707 836 029	44 251 865
	average per event		63 159.4	11 162 327	289 227.9
Europe	Drought	42	1 200 002	15 488 769	25 481 309
	average per event		28 571.5	368 780.2	606 697.8
Oceania	Drought	22	660	8 034 019	12 303 000
	average per event		30	365 182.7	559 227.3

MISSION

IDI aims at providing policy and management guidance through sharing scientific information, best practices and knowledge for drought risk management by focusing on drought prone regions and switching from reactive to proactive measures in drought management through mitigation, vulnerability reduction and preparedness.

PRINCIPLES

The IDI is based on the following principles:

- Creating a competent environment for following relevant drought issues at national, regional and international levels.
- Facilitating the establishment, expansion and continuous relation between active organizations at the national, regional and international levels while taking benefit and sharing information on existing drought knowledge at these organizations.
- Training and promoting scientific and professional basics of drought management.
- Creating a drought integrated data base.
- The role of UN and non-governmental affiliated entities as well as developed and developing countries should be taken into consideration when compiling and implementing this initiative, therefore effective cooperation with such entities gains a high importance in the success to be achieved.

HISTORY

The Regional Centre on Urban Water Management (RCUWM) as a category II Centre under the auspices of UNESCO recognized the high importance of international cooperation on drought management issues due to severe impacts of this phenomenon on the water resources in the Middle East and North African (MENA) and Central-Asia Countries. Hence RCUWM proposed to establish the International Drought Initiative (IDI) during the IHP National Committee's meeting held in Tehran, Iran, during July 2009. With respect to the high importance of droughts and its negative impacts on human life especially in arid and semi-arid regions, it was decided to launch a global initiative under the umbrella of UNESCO's IHP programme. The 19th Session of IHP Intergovernmental Council in July 2010 approved the establishment of IDI and received the support of many Member States. Iran through its UNESCO category II Regional Centre on Urban Water Management (RCUWM) declared its preparedness to host the IDI secretariat. Similar initiatives have been established such as the International Flood Initiative (IFI) and the International Sediment Initiative (ISI) which are hosted by other UNESCO category II Centres in Japan and China respectively.

An IDI inception meeting was held in Tehran, in November 2011 hosted by the Ministry of Energy to

discuss the current activities and develop a road map for its future action plan. Structure of the initiative, the composition of its committees, the way of cooperation with international entities, the budget and finally the promotion of IDI have been major parts of these discussions. This meeting was attended by national and international drought related entities.

In addition, UNESCO-IHP together with the IDI interim secretariat (RCUWM) supported by the Iranian Ministry of Energy and the Iranian IHP National Committee in collaboration with a number of UN Agencies, International and Regional Organizations and key national agencies, jointly motivated the scientific expertise and knowledge and facilitated the exchange of experience among countries through the joint International Seminar on "Drought Management" and "2nd International Drought Initiative Meeting" held in the convention halls of the Ministry of Energy, Tehran, Iran on 14 to 15 May 2013.

Holding this event by the cited entities was considered as one of the most important joint activities in the field of drought in 2013 within the framework of the International Year of Water Cooperation.



OBJECTIVES

The overall aim of the initiative is to develop and strengthen capacity at the regional and international levels to better understand and respond to droughts by taking into account socio-economic, cultural, educational and environmental aspects. The initiative will share experiences and best practices to deal with droughts for a better management of water resources in line with sustainable development approaches and for water, energy and food security. The specific objectives are as follows:

- Serving as a knowledge hub for networking between international entities active in drought issues.
- Surveying the current situation of drought management in interested countries including aspects such as: policy making, structural and non-structural plans.
- Collecting information on drought related plans and measures from international and regional governmental/non-governmental entities.
- Strengthening the Global Drought Preparedness Network (GDPN).
- Helping affected countries especially developing and less developed countries to prepare and compile strategic and practical drought management plans.
- Developing and building capacities in drought monitoring, forecasting, assessments, mitigation, adaptation, preparedness techniques and methodologies.
- Strengthening public participation and promoting the level of awareness with the aim of increasing the initiative effectiveness.
- Promoting and developing organizational cooperation at the national and international levels with the aim of increasing capacities and avoiding duplication of activities.

IDI MEETINGS

>>> **1st International Drought Initiative Meeting (IDI)** organized by the Regional Centre on Urban Water Management – Tehran (RCUWM) and the Water and Wastewater Affairs of the Ministry of Energy in cooperation with UNESCO's IHP secretariat, Paris and Cluster Office, Tehran, Iran, 9-10 November 2011.

>>> **2nd International Drought Initiative Meeting (IDI)** organized by the Regional Centre on Urban Water Management – Tehran (RCUWM) and the Water and Wastewater Affairs of the Ministry of Energy in cooperation with UNESCO's IHP secretariat, Paris and UNESCO Tehran Cluster Office, Tehran - Iran, 14-15 May 2013.



STRATEGIC ACTIVITIES

The initiative will focus on research, training and capacity development at all levels, sharing of data, information, networking, strengthening communities and providing technical and institutional assistance to countries in need. The proposed strategic activities for achieving IDI's objectives are as follows:

Training and capacity building

- Enhanced public awareness for urban and rural communities including various educational courses in schools and universities on various aspects of droughts.
- Technical trainings through organizing specific training workshops and courses for managers and experts in the field of drought at national and international levels.
- Providing scientific and technical information for public media.
- Holding international and regional conferences, seminars and workshops in order to exchange viewpoints, improve joint activities and exchange knowledge and experience related to different aspects of drought management.
- Promoting awareness and general knowledge and expertise among decision-makers in management and mitigation of droughts under emerging global changes.

Research

- Identifying gaps and future requirements between developed and developing countries in relation to drought and organizing necessary activities between different countries to follow acceptable standards.

- Compiling a document entitled as "International and National Policies and Visions in the Field of Drought" by taking benefit of existing literature.
- Provide a literature review on drought management issues.

Data/ information networking

- Contributing to the existing data bases in the field of drought at national, regional and international levels including training and research institutes, initiatives, drought centres, projects, publications and meetings.
- Creating the IDI webpage and data base.
- Collecting and documenting information on early warning systems run by drought prone countries.
- Cooperating with networks/entities for meteorological and hydrological data and information.
- Contributing to the Drought Help Desk (IDMP) to respond to expressed needs for assistance in drought risk assessment, monitoring, prediction, early warning, preparedness and mitigation.
- Preparing and compiling a World Report on Drought Management (WRDM) and identifying the gaps and strong points at various geopolitical scales (national, regional, global).
- Executing necessary surveys to clarify needs and priorities of global measures in the framework of IDI.

Tools

- Preparing and recommending policies and strategies to drought management.
- Developing procedures for addressing environmental conflicts.
- Providing effective strategies for drought risk reduction and response measures.



IDI STRUCTURE

The International Drought Initiative (IDI) is consisted of the Advisory Committee (IDI-AC), and the IDI Secretariat.

Advisory Committee

In order to provide effective coordination at the international level, an IDI Advisory Committee (IDI-AC) has been established, which is comprised of elected representatives of the IHP Inter-Governmental Council (through the IHP Bureau), the WMO Commission for Hydrology (Chy), UNU and ISDR. The Advisory Committee is open to membership of three other academic or research organizations which will be member of the IDI-AC for a period of four years. The Advisory Committees duties are:

- Holding ad-hoc meetings and reviewing the activities and outcomes of the IDI participating entities.
- Compiling the bylaw and required regulations for selecting members among persons, companies, organizations and qualified educational and research institutes.
- Directing all IDI activities toward its mission.
- Identifying the deficiencies and future needs in regard to achieving IDI objectives.
- Providing recommendations to active IDI entities and to IDI secretariat for joint programming and resource mobilization.

Secretariat

The secretariat of IDI is located at the Regional Centre on Urban Water Management (RCUWM) in Tehran, Iran. The International Drought Initiative (IDI) secretariat in close cooperation with IHP

secretariat will implement the IDI roadmap. The IDI and IHP Secretariats' duties are as follows:

- Compiling IDI activities and making decision on annual plans as well as recommending extraordinary meetings if required.
- Coordinating and providing relevant facilities for regular meetings, seminars and sessions.
- Anticipating and estimating the annual budget and financial requirements.
- Registering and documenting correspondences and minutes of various meetings and received letters.
- Providing cooperation with relevant entities, governmental, and non-governmental organizations.
- Publishing, distributing and notifying issued directives to all relevant partners.
- Launching, updating and monitoring the IDI website presenting drought relevant subjects.
- Securing the alignment of IDI with the Strategic Plan of the IHP VIII Phase (2014-2021).
- Inviting relevant organizations, authorities and entities to visit IDI secretariat to exchange ideas and using existing facilities to cooperate and consult in the relevant fields.

RESOURCE MOBILIZATION

In the *short and medium terms*, IDI must engage as much donors as possible for funding of its activities. In the *medium to long terms*, IDI should increase the number of donors contributing to its action plan and meet their expectation for IDI's sustainability (programmatic, financial, and institutional). In order to increase chances of success, it is recommended that IDI requests UNESCO - IHP to champion its resource mobilization efforts.

THIS DOCUMENT WAS COMPILED BY:

RCUWM-Tehran
Homayoun Motiee
Alireza Salamat
Shahram Khorasanizadeh

UNESCO Tehran Cluster Office
Niloofar Sadeghi

UNESCO-IHP
Siegfried Demuth

IDI SECRETARIAT, CONTACT INFORMATION:

**REGIONAL CENTRE ON URBAN
WATER MANAGEMENT – TEHRAN
(RCUWM)**

(UNDER THE AUSPICES OF UNESCO)
NO.1, SHAHRSAZ LANE, KARGOZAR ST., ZAFAR
(DASTGERDI) AVE.,
TEHRAN 1919839713, IRAN
TEL: +98 (21) 22911027-8 – FAX: +98 (21) 22911027
info@rcuwm.org.ir – www.idi-drought.com



United Nations
Educational, Scientific and
Cultural Organization



International
Hydrological Programme

