

**Background  
Compendium Materials**

**Seventh  
Governing Board  
Meeting**



**REGIONAL CENTRE ON URBAN  
WATER MANAGEMENT–Tehran**

**Tehran – May, 2010**

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## **GLOSSARY**

ACSAD: The Arab Centre for the Studies of Arid Zones and Dry Lands

APMCHUD: Asia-Pacific Ministerial Conference on Housing and Urban Development

BMBF: Ministry of Education and Research, Germany

CHRS: Centre for Hydrometeorology and Remote Sensing

DC: Donors Conference

EC: Executive Committee

ECM: Executive Committee Meeting

GB: Governing Board

GBM: Governing Board Meeting

IAHS: International Association of Hydrological Sciences

ICHARM: International Centre on Water Hazards and Risk Management

ICQHS: International Centre on Qanats and Historic Hydraulic Structures

IHP: International Hydrological Programme

INWRDAM: Islamic Network on Water Resources Development and Management

IPCC: Intergovernmental Panel on Climate Change

ISESCO: Islamic Educational, Scientific and Cultural Organization

IWA: International Water Association

IUWM: Integrated Urban Water Management

IWRM: Integrated Water Resources Management

LDCs: Less Developed Countries

MDG: Millennium Development Goals

MENA: Middle East and North Africa

MoU: Memorandum of Understanding

NWVEC: National Water and Wastewater Engineering Company

RCTWS: Regional Centre for Training and Water Studies

RCUWM: Regional Centre on Urban Water Management

PC: Planning Conference

POWER: Partnership for Water Education and Research

TIWA: The International Water Academy

TOT: Training of Trainers

UNESCO: United Nations Educational, Scientific and Cultural Organization

UNESCAP: United Nations Economic and Social Commission for Asia and the Pacific

UN-HABITAT: United Nations Human Settlements Programme

UNW-DPC: United Nations Water Decade Programme on Capacity Development

UWM: Urban Water Management

WCRP: World Climate Research Programme

WMO: World Meteorological Organization

WRC: Water Research Centre

WWC: World Water Council

## 1- Introduction

This report has been compiled for the seventh Governing Board Meeting (7<sup>th</sup> GBM) of the Regional Centre on Urban Water Management, which is to be held in Tehran – Iran, 5-6 May 2010. This report includes a set of implemented and undergoing projects and activities of the Centre since the sixth Governing Board Meeting (GBM6) of the Centre which was held in Muscat – Oman, 2 November 2008 up to the seventh GBM. It also includes the proposed budget and work plan for 2010 which will be presented by the Director of the Centre.

Summary of the activities of the Centre, since its establishment in 2002 is presented in this report.

Worth noting that the main challenge confronting the Centre's activities during the second five year period of its activities (2008 – 2013), despite of financial support provided by the Ministry of Energy, I.R. Iran as the main source towards the Centre's activities / projects, is supplying sustainable financial resources for implementing necessary projects (similar to the first 5 year period of the Centre's activities). We wish to observe the implementation process of the Centre's activities for the next five years period to be facilitated with appropriate decisions taken during the 7<sup>th</sup> GBM.



## **2- An overview on the activities of the Centre since its establishment**

### **2-1- Background**

With increasing global change pressures, existing limitations, un-sustainability factors and risks inherent to conventional urban water management (UWM), cities will increasingly experience difficulties in efficiently managing scarcer and less reliable water resources. Further challenges lie ahead, such as satisfying water uses/services and waste water disposal, without creating serious environmental, social and/or economic damage. This situation will further be aggravated by the ever-increasing ‘Syndromes of Global Change’ pressures.

These problems are of a complex nature and can only be properly addressed with a concerted effort involving scientific, social and institutional approaches.

In compliance with the above-mentioned challenges and in order to create a platform for being involved in solving these problems at the regional level, an agreement between the Government of I.R. Iran and UNESCO with the presence of Mr. Matsuura, the Director General of UNESCO in February 2002 was signed based on which the Regional Centre on Urban Water Management (RCUWM), under the auspices of UNESCO, as a category II Centre was officially inaugurated, in light of the sixth phase of the International Hydrological Programme (IHP).

### **2-2- Road to Establishment**

**August 2000** – Created an ad hoc Task Force of top government officials and IHP National Committee representatives;

**September 2000-** Investment of Iranian Government in acquiring and equipping the venue of the Centre;

**October 2000** – Gathering a large group of the governmental, scientific, academic and professions from water community of Iran behind it, having held an open forum on the subject;

**November 2000** – Initiated a number of contacts conducive to gathering regional and international support for the RCUWM;

**December 2000** – The mission of UNESCO’s secretariat delegation to discuss and deliberate with the Iranian authorities, monitoring the existing capabilities and evaluate the I.R. Iran capacities regarding to the proposal considered for establishing the RCUWM – Tehran;

**May 2001** – Holding a regional meeting with various regional countries’ representatives and regional / international organizations to exchange views for submitting the final proposal regarding to the Centre’s establishment;

**May 2001** – Formal submission of the Government of I.R. Iran detailed proposal to UNESCO;

**June 2001** – Approval of the 161<sup>st</sup> Executive Board Meeting of UNESCO on the Centre’s establishment;

**October 2001** –Approval of the 31<sup>st</sup> session of the General Conference;

**February 2002** – Signing the agreement between the I.R. Iran and UNESCO and starting formal activities of the Centre.

## **2-3- Mission, Objectives and Functions**

### **2-3-1- Mission**

The mission of the Centre is to transfer applicable scientific and experimental knowledge and to increase know-how and capacities in all cases and dimensions of Urban Water Management (UWM) in order to promote sustainable development and to undertake relevant activities to enhance human welfare within the region States.

### **2-3-2- Objectives**

- Generate and provide scientific and technical information on UWM issues in the region that will allow the formulation of sound policies leading to sustainable and integrated UWM at the local, national and regional level;
- Promote research activities on UWM issues through regional co-operative arrangements using and strengthening local capabilities and involving

international institutions and networks, in particular those which are under UNESCO/IHP auspices;

- Undertake regional effective capacity building activities at institutional and professional levels, and awareness raising activities targeted at various audiences, including public;
- Enhance co-operation with international institutions in order to advance knowledge in the field of UWM.

### **2-3-3- Functions**

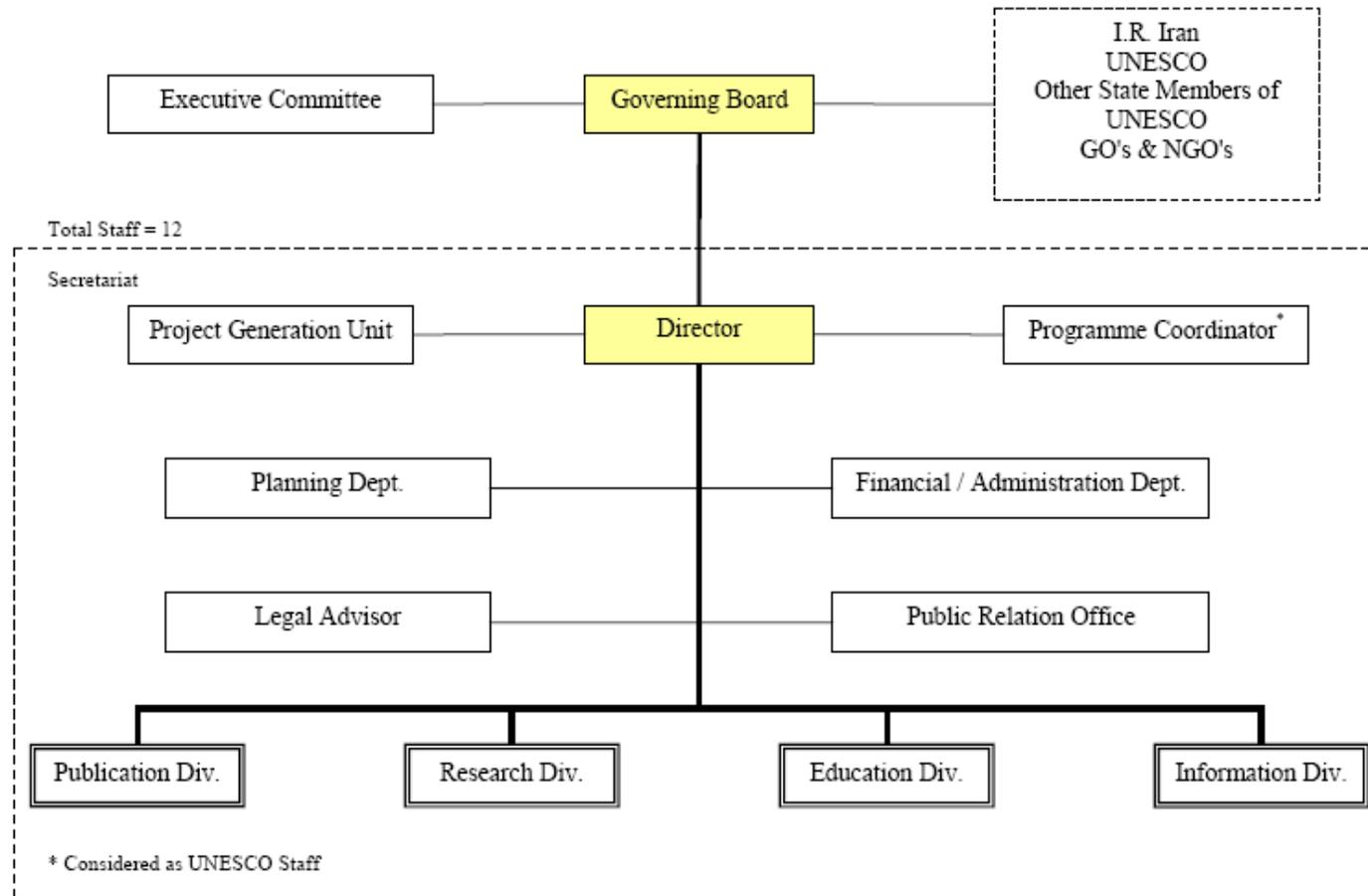
- Promote scientific research on the issues and problems related to UWM of the region;
- Create and reinforce networks to exchange scientific, technical and policy information on UWM issues among the institutions and individuals within the region and other countries;
- Develop and coordinate in joint research activities on UWM issues, taking advantage particularly of the installed scientific and professional capacity of the region and of the relevant IHP networks and NGO's;
- Organize knowledge and information transfer activities on the subject, including international training courses, symposiums or workshops, and to engage in appropriate awareness raising activities;
- Develop a strong program of information and communication technology to further the Centre's objectives;
- Provide technical consulting and advisory services in the region and beyond as required;
- Produce technical publications and other media items related to the activities of the Centre.

### **2-4- Organization Chart**

The following organization chart has been approved by the GB and has been put into action, but due to inadequate financial resources all posts have not been completed yet.

It's worth mentioning that RCUWM – Tehran uses the facilities of universities; research Centres and other entities according to the signed agreements in order to implement the approved plans by the Governing Board.

## Organization Chart



## 2-5- Governing Board Members

The Centre's GBM is the highest constituent of decision making within the Centre's organization chart. In article VI of the agreement signed between the Government of I.R. Iran and UNESCO, the composition of this board has been determined.

According to this article the membership of other UNESCO member countries (1-b) and international governmental and non-governmental entities (1-d) in addition to the founders of the Centre (Iran and UNESCO representatives), has been foreseen.

RCUWM since its establishment in 2002 up to now, has received the following countries and organizations as the members of the GB according to the protocols mentioned in section 2 of article II of the agreement signed and exchanged between I.R. Iran and UNESCO.

### a) Countries

- Afghanistan at the Ministerial Level
- Bangladesh at the Ministerial Level
- Egypt at the Ministerial Level
- Germany at the Minister Representative Level
- India at the Ministerial Level
- Kuwait at the Minister Representative Level
- Lebanon at the Ministerial Level
- Oman at the Ministerial Level
- Pakistan at the Ministerial Level
- Syria at the Ministerial Level
- Tajikistan at the Ministerial Level
- Yemen at the Ministerial Level

### b) Organizations

- International Water Association (IWA)
- UNESCO-IHE
- Wageningen University and Research Centre
- The International Water Academy (TIWA)
- United Nations Water Decade Programme on Capacity Development (UNW-DPC)
- Islamic Network on Water Resources Development and Management (INWRDAM)

The number of GB members including Iran and UNESCO (as founders) has reached up to 20 by the end of 2009.

Worth noting that two new countries as **Bahrain** and **Iraq** as well as United Nations Human Settlements Programme (UN-HABITAT) and Center for Hydrometeorology and Remote Sensing (CHRS) are considered as candidates for new memberships in the Centre's Governing Board. Their membership procedure will be finalized during the 7<sup>th</sup> GB Meeting in Tehran, 5 May 2010. In addition, correspondences have been made with Turkmenistan, Azerbaijan and Armenia to become members of RCUWM Governing Board.

## 2-6- Governing Board Meetings

According to the agreement made between I.R. Iran and UNESCO, the Centre has held its ordinary GB meetings as demonstrated in the following table.

**Table 1- Date and venue of the Governing Board Meetings**

Year	Venue	Date	Participant Members		
			Countries	Organisations	Total
2002	Muscat-Oman	18 May 2002	1	1	2
2003	Tehran-Iran	17 Dec. 2003	9	4	13
2005	Tehran-Iran	27 Feb. 2005	9	5	14
2006	Tehran-Iran	13 May 2006	10	3	13
2007	Tehran-Iran	24 Nov. 2007	8	2	10
2008	Muscat-Oman	2 Nov. 2008	8	6	14

## 2-7- Memorandums of Understandings (MoU)

In order to attract the cooperation of international organizations and also national entities and organizations, negotiations have been made between relevant entities and the Centre since its establishment of which most have concluded in Memorandums of Understandings (MoU). These Memorandums of Understandings have been included in table 2.

## 2-8- Executive Committee Meetings

RUCWM – Tehran Executive Committee has been established based on the agreed minutes of the 3<sup>rd</sup> Governing Board Meeting which was held in Tehran, February 2005. The following member countries and organizations were selected as the members of EC:

- Islamic Republic of Iran, Ministry of Energy
- Federal Republic of Germany, Ministry of Education and Research

- Sultanate of Oman, Ministry of Regional Municipalities, Environment and Water Resources
- UNESCO-IHP
- The International Water Academy (TIWA)

Up to the end of 2007, five executive committee meetings have been organized as follows:

- First EC Meeting on 30<sup>th</sup> November 2005, Berlin, Germany;
- Second EC Meeting on 15<sup>th</sup> February 2006, Tehran, Iran;
- Third EC Meeting on 5<sup>th</sup> September 2006, Muscat, Oman;
- Fourth EC Meeting on 18<sup>th</sup> February 2007, Tehran, Iran;
- Fifth EC Meeting on 13<sup>th</sup> September 2007, Paris, France.

**Table 2- List of MoUs**

No.	Organization	Date of Signature and Exchange	Validity Duration
1	Islamic Educational, Scientific and Cultural Organisation (ISESCO)	17 Jan 2006	--
2	National Water and Wastewater Company	9 Jun. 2007	3 years
3	Ministry of Energy and Water, Lebanon	17 Dec. 2003	
4	Water and Power University of Technology (Extended)	13 Nov. 2002	3 years (5 years)
5	Mahab Ghodss Consulting Engineers Co.	01 Oct. 2003	5 years
6	International Water Association (IWA)	9 May 2001	--
7	International Association of Hydrological Sciences (IAHS)	9 May 2001	--
8	Japanese National Committee for IHP	9 May 2001	--
9	UNESCO-IHE	22 Jun. 2001	--
10	National Cloud Seeding Research Centre (NACSER)	13 Nov. 2002	3 years
11	Water Research Centre (WRC)	13 Nov. 2002	3 years
12	RCTWS – Cairo	17 Dec. 2003	--
13	ICHARM	09 June 2008	--
14	International Agricultural Research and Training Center (IARTC) - Turkey	To be signed in near future	3 years

## **2-9- Workshops, Conferences, Training Courses**

Since the beginning of the Centre's activities from Feb. 2002, 22 workshops, Conferences, Seminars and Training Courses have been organized by the Centre and its GB members. The list of activities has been included in table 3.

## **2-10- Studying, Research and Executive Projects**

The projects which have been listed in table 4, as research, studying and executive projects are the ones which have been started since the beginning of the Centre's establishment and they have all been completed or are under operation.

It is worth mentioning that the projects on rows 3, 4, 5 and 6 are related to Afghanistan Reconstruction Projects in the water sector and RCUWM – Tehran has been assigned as the implementing body for these projects on behalf of I.R. Iran's Government.

**Table 3- Workshops, Conferences and Training Courses (Feb. 2002- up to present)**

No.	Name of Event	Organizer/s	Venue	Date	No. of Participants	No. of Countries	Final outcome	Estimated Costs (USD)
1	Workshop on “Promotion of Public Awareness on Water Conservation”	RCUWM & UNESCAP	Tehran	7-9 May 2003	42	10	Compendium + CD	45,000
2	Workshop on “Water and Wastewater Technology”	RCUWM & BMBF-Germany	Tehran	30 Aug – 3 Sep 2003	24	2	Compendium + CD	120,000
3	Training Course on “Water Demand Management”	RCUWM & UNESCO	Tehran	6-19 Sep 2003	22	7	CD	65,000
4	Workshop on “Policies and Strategic Options for Water Management in the Islamic Countries”	RCUWM-Tehran & Islamic Development Bank	Tehran	15-16 Dec 2003	38	12	Compendium + CD	70,000
5	Seminar on “Experiences and Practices of Water and Wastewater Technology”	RCUWM-Tehran, BMBF (Germany) and MRMWR (Oman)	Muscat	5-7 Oct 2004	60	9	Compendium + CD	46,000
6	Workshop on “Management of Aquifer Recharge and Water harvesting in Arid and Semi-Arid Regions of Asia”	RCUWM-Tehran, ICQHS-Yazd & UNESCO Tehran Cluster Office	Yazd	27 Nov – 1 Dec 2004	52	11	Proceedings CD	63,000
7	Training of Trainers Expert Group Meeting on UWM	RCUWM-Tehran, UNESCO Tehran Cluster Office, UNESCO New Delhi Office	Tehran	11 – 13 Dec 2004	15	8	Draft Training Manual	50,000

No.	Name of Event	Organizer/s	Venue	Date	No. of Participants	No. of Countries	Final outcome	Estimated Costs (USD)
8	Workshop on “Promotion of Women’s Participation in Water Management”	RCUWM-Tehran & Ministry of Energy, I.R. Iran	Tehran	23 – 24 February 2005	85	9	CD	17,000
9	RCUWM-Tehran Planning Conference	RCUWM-Tehran & UNESCO	Tehran	25-26 Feb 2005	25	15	Report	23,000
10	Workshop on “Public Participation in Water Resources Management”	RCUWM-Tehran, Ministry of Regional Municipalities and Water Resources, Oman & INWRDAM	Muscat	26 – 28 Sep 2005	78	9	Compendium + CD	40,000
11	Workshop on “Innovations in Water and Wastewater Technology”	RCUWM-Tehran & BMBF-Germany	Berlin	28 Nov – 1 Dec 2005	48	9	CD	63,000
12	Training of Trainers Workshop on “Urban Water Management”	RCUWM-Tehran, UNESCO-IHP, UNESCO Tehran, New Delhi and Cairo Offices	Tehran	11-14 Feb 2006	40	9	Draft Manual	45,000
13	Tehran Water Conservation Demonstration Project and International Workshop on “Innovations in Water Conservation”	RCUWM-Tehran, UNESCAP & Tehran Province Water and Wastewater Company	Tehran	12- 23 Feb 2006	57	9	Project Report	321,150
14	Training of Trainers Workshop on “Application of Models and New Techniques in Groundwater Management in Arid and Semi-arid Regions”	RCUWM-Tehran, UNESCO Tehran Cluster Office, Ministry of Jihad-e Agriculture, I.R. Iran, Toosab Consulting Engineering Company	Karaj	29 July-1 August 2006	62	11	CD	19,632
15	International Workshop on “Flash Floods in Urban Areas and Risk Management”	RCUWM-Tehran, UNESCO, MRMWR (Oman), INWRDAM	Muscat	4-6 September 2006	73	14	CD	45,000

No.	Name of Event	Organizer/s	Venue	Date	No. of Participants	No. of Countries	Final outcome	Estimated Costs (USD)
16	International Workshop on “Groundwater for Emergency Situations”	RCUWM-Tehran, UNESCO Tehran Cluster Office, UNESCO-IHP	Tehran	29-31 October 2006	40	8	Proceedings CD	31,086
17	Expert Group Meeting on “Municipal Wastewater Use for Irrigation”	RCUWM-Tehran, Wageningen University and Research Centre, University of Sana’a, Water and Environment Centre	Sana’a	4-7 November 2006	60	8	CD	30,000
18	Participating in the 4 <sup>th</sup> International Water Exhibition	RCUWM-Tehran, BMBF-Germany	Tehran	22-25 November 2006		6	Report & CD	63,644
19	International Conference on “Water Resources Management in the Islamic Countries”	RCUWM-Tehran, UNESCO, ISESCO, Power and Water University of Technology	Tehran	19-20 February 2007	370	17	CD	119,495
20	Training of Trainers (TOT) Workshop on “Integrated Urban Water Management”	RCUWM-Tehran, Pakistan Council of Research in Water Resources	Lahore	2-5 May 2007	25	5	Manual on IUWM	20,000
21	International Workshop on “Water Demand Management in Urban Areas in light of Tourism Development”	RCUWM-Tehran, Ministry of Regional Municipalities, Environment and Water Resources, Oman, UNESCO-IHP	Muscat	27-28 August 2007	62	12	CD	50,202
22	International Workshop on “Capacity Development for Water Journalists”	RCUWM-Tehran, UNW-DPC, UNHABITAT	Tehran	26-28 November 2007	34	8	Country reports	19,301

No.	Name of Event	Organizer/s	Venue	Date	No. of Participants	No. of Countries	Final outcome	Estimated Costs (USD)
23	Technical Workshop on “Wastewater Reclamation and Water Reuse”	Sharif University of Technology, RCUWM-Tehran	Tehran	5 May 2008	150	1	Proceeding	7500
24	Technical Workshop on “Decentralized and Small Wastewater Treatment Systems”	Sharif University of Technology, RCUWM-Tehran	Tehran	6 May 2008	100	1	Proceeding	7500
25	Training Workshop on “Impacts of Climate Change on Water Resources Management in the Region”	RCUWM-Tehran, RCTWS-Cairo, UNESCO	Damascus	13-16 Oct. 2008	30	15	CD	15000
26	Participating in the “3rd Iranian Water Resources Management Conference Exhibition”	Iranian Association of Water Resources	Tabriz	15-16 Sep. 2008			CD	2000
27	International Conference on “Water Resources and Climate Change in the MENA Region”	RCUWM-Tehran, MRMWR (Oman)	Muscat	2-4 Nov. 2008	200	17	CD & Proceeding	70000
28	Participating in the “7 <sup>th</sup> Iranian Hydraulics Conference Exhibition”	Power and Water University of Technology	Tehran	11-13 Nov. 2008			CD	10000
29	Participating in the “5 <sup>th</sup> World Water Forum”	World Water Council	Istanbul	16-22 Mar. 2009	33,000	192	CD	15000
30	Presenting the outcomes of the 5 <sup>th</sup> WWF in Iran (3 exhibitions)	RCUWM-Tehran	Tehran & Yazd	26 – 28 Apr. 2009 6-8 May 2009			Report & CD	5000
31	Workshop on “Integrated Flood Management”	RCUWM-Tehran, UNW-DPC, WMO	Tehran	11–14 May 2009	40	11	CD	35000
32	IHP National Committees’ Meeting	RCUWM-Tehran, Iranian IHP Committee, UNESCO	Tehran	27-28 July 2009	31	9	IDI Proposal	10000
33	Training Workshop on “Risk Assessment & Flash Flood Mitigation Strategies”	RCUWM-Tehran, ICHARM-Japan, HTC-Kuala Lumpur	Kuala Lumpur	10–13 Aug. 2009	30	11	CD	31000

No.	Name of Event	Organizer/s	Venue	Date	No. of Participants	No. of Countries	Final outcome	Estimated Costs (USD)
34	Training Workshop on “Challenges of Sustainable Water Use in Arid and Semi-arid Regions”	RCUWM-Tehran, BMBF-Germany, Uzbekistan Gov.	Tashkent	28-30 Sep. 2009	50	9	CD	30200
35	Training Workshop on “Dam Reservoirs Sedimentation Control”	RCUWM-Tehran, Ministry of Energy, Ministry of Agriculture, Forests, Ranges and Watershed Management Organization, Water Research Institute, Iranian Company of Water Resources Management	Karaj	19-22 Oc. 2009	50	7	CD & Manual	10000
36	Training Workshop on “Development of Hydropower Plants”	RCUWM-Tehran, ECO, IWPD Co	Tehran	9-12 Nov. 2009	20	6	CD & Manual	10000
37	International Conference on “Capacity Building in Urban Water Management under Water Scarcity Conditions”	RCUWM-Tehran, MRMWR Oman	Muscat	13-15 Dec. 2009	200	7	CD & Proceeding	58500

Table 4: Studying, Research and Executive Projects (February 2002 – up to present)

No.	Project Name	Consultant / Research Institute	Duration	Final outcome	Estimated cost (USD)	Fund Provider
1	Urban Databank of Urban Water Management Literature, Organizations and Human Resources in the Region	Amirkabir University of Technology	Jan. 2003 – Dec. 2004	Designing a data base webpage	35,000	I.R. Iran and UNESCO
2	Urban Water Management in the Region (Problems Assessment and Strategic Plan on Urban Water Management)	UNESCO-IHE	Mar. 2003 – Nov. 2004	Demonstrating Urban Water Management in the Countries of the Region	45,000	I.R. Iran
3	Afghanistan Reconstruction Projects, Master Plan Study on Water Management in Kabul River Basin	Toosab Consulting Engineers	Jan. 2002 – Dec. 2006	Analyzing existing water resources conditions of Kabul Basin	1,000,000	I.R. Iran and UNESCO
4	Afghanistan Reconstruction Projects, Reconstruction of Hydro-meteorological Network of Afghanistan	Water Research Institute	Jan. 2003 – Jul. 2007	Establishing and equipping 13 hydrometric and 10 meteorological stations	3,500,000	I.R. Iran
5	Afghanistan Reconstruction Projects, Establishment of Water Research Centre in Kabul	Water Research Institute	Jan. 2003 – Jul. 2007	Establishing and equipping the Water Research Centre in Kabul		I.R. Iran
6	Afghanistan Reconstruction Projects, Supplying Potable Water to Zaranj City in Nimrooz Province	Sistan & Balouchestan Water Authority	Jan. 2003 – Dec. 2003	Implementing water conveyance pipeline system of Zaranj, using PVC type of 110mm	125,000	I.R. Iran
7	RCUWM – Tehran Website	RCUWM-Tehran	March 2006	RCUWM – Tehran Homepage	7,000	I.R. Iran
8	ToT Manual on Urban Water Management	RCUWM-Tehran	2006-2007	ToT Manual	5000	I.R. Iran
9	Updating RCUWM-Tehran Website	Power and Water University of Technology	April 2010	RCUWM-Tehran	10,000	I.R. Iran

## **3- Activities and Achievements between GB6 and GB7**

### **3-1- Governing Board Members**

During the 6<sup>th</sup> and 7<sup>th</sup> Governing Board Meeting, the procedure for membership of the Governments of “Bahrain” and “Iraq” as well as the United Nations Human Settlements Programme (UN-HABITAT) and probably the Center for Hydrometeorology and Remote Sensing (CHRS) as organizations in the Governing Board was initiated, based on the articles in the agreement signed and exchanged between the Government of I.R. Iran and UNESCO about the formation of RCUWM, as by this the number of members, including organizers, countries and international governmental and non-governmental organizations will reach 24. The membership requests have been presented in annex (1).

### **3-2- Organizing the Sixth GBM and Investigating the Approvals of the Meeting**

The 6<sup>th</sup> GB meeting was held in Muscat, 2 November 2008. 14 GB members including 8 countries and 6 international organizations participated in this meeting. The agreed minutes of the meeting, has been presented in annex (2).

The most important approvals of 6<sup>th</sup> GBM and the follow ups which have been made are as follows:

#### **Bangladesh representative emphasized on:**

- The importance of climate change and its impacts on water resources and sustainable development particularly on the sea level rise.

**Egypt representative stated that:**

- Capacity development is amongst one of the most important activities of category II Centres acting under the auspices of UNESCO. RCTWS- Cairo is quite prepared to cooperate with RCUWM-Tehran for promoting this vital mission by carrying out joint projects based on regional needs.

**UNW-DPC representative mentioned that:**

- One of the main goals of the UNW-DPC is to focus on capacity building. By taking into account RCUWM's mission and objectives, our programme is prepared to further support the centres activities.
- UNW-DPC stated that the Integrated Flood Management Training Workshop would be held in Tehran in close cooperation with UNW-DPC, WMO and the Centre with the participation of around 25 qualified experts from the countries in the region in May 2009.

**IWA representative stated that:**

- The centre has an extensive capacity for fulfilling the needs of the region. We should investigate proper mechanisms in order to use this capacity for the benefit of the inhabitants of the region. IWA is prepared to support the Centre in this respect, and wishes to further express its willingness to become a member of RCUWM-Tehran executive committee. He also congratulated the Centre for its successful first 5-year performance.

**INWRDAM representative mentioned that:**

- INWRDAM representative is pleased that it has been accepted as a new member of the Governing Board. He also emphasized on searching for new financial resources through international organizations by the GB members contribution.

**Wageningen UR representative stated that:**

- Wageningen University and Research Centre is ready to contribute in jointly implementing the Centre's activities and work plan in 2009 by closer contacts to be made in near future.

**UNESCO-IHE representative proposed that:**

- UNESCO-IHE is prepared to hold short / online courses to train young professionals in close cooperation with RCUWM – Tehran GB members.

**Oman representative mentioned that:**

- In continuation with the joint implemented activities carried out with the Centre, The Ministry of Regional Municipalities and Water Resources is willing to co-

organize an International Conference on Capacity Building in Urban Water Management under Water Scarcity Conditions to be held in Muscat, 2009.

- It was suggested to have all of the GB members' financial and technical contribution in at least one of the projects of the Centre.
- The Director of the Centre presented the Strategic Plan for the 2<sup>nd</sup> five year activities focusing on the financial resources. This was initially approved by the Executive Committee members meeting held on 1 November 2008. The report was highly received and approved by the GB members.

### **3-3- Fifth World Water Forum**

The 5th World Water Forum, held from March 16th to 22nd, 2009, brought together 33,058 attendees in total, from 192 countries with the overarching theme of Bridging Divides for Water. These participants gathered with both urgency and hope, to contribute their solutions and perspectives to some of mankind's greatest current challenges. Through the Forum, Istanbul, at the crossroads of continents, maintained a bridge between different regions, cultures and opinions, thus creating the ideal atmosphere to discuss, reach greater understanding and agree on joint action regarding the next steps on the resolution of these challenges.

This was the first World Water Forum to be held so close to water. The two sides of the venue, the Sutluce Congress and the Cultural Center and the Feshane, stand on the two sides of the Golden Horn, an inlet of the Bosphorus Strait, which provided a waterway venue for the Forum. Symbolically, the historic Galata Bridge was moved downstream to bridge the divide between both sides of the venue. With the aim of placing water firmly on the international stage, the 5th World Water Forum served as a platform for the water community and policy makers, non-governmental organizations (NGO) as well as individuals across the world to foster discussions and debate in a bid to find sustainable solutions to the challenges of clean drinking water and sanitation issues.

Through the Forum, broader and more diverse participation and representation was fostered, as well as enhanced interaction and dialogue among all levels and processes over a two-year period, thus providing an equalitarian and open platform. The continual sharing of experiences and outcomes between the thematic, regional and political processes, allied to the systematic inclusion of Major Groups of Agenda 21, ensured that the declarations of the Forum are meaningful to the world, in the sense that they echo a common voice of a multi-stakeholder process.

The political process built on the successful inclusion of local authorities and parliamentarians, established at the 4th World Water Forum, allied to the ministerial process, and for the first time at a World Water Forum invited a limited number of Heads of State to attend a specially-organized Summit. Each of these political processes yielded specific outcomes, on which follow up will take place over the coming months and years.

5<sup>th</sup> World Water Forum participants aimed to reach effective long-term conclusions for the world's water agenda. In this manner, youth and children are not only tomorrow's leaders but also today's counterparts, hence the participation of youth and children held a crucial importance. While the Youth Declaration signified the stance of youth on water crisis, the importance of global cooperation for a better future was underlined throughout the document. Similarly, children in their declaration emphasized the necessity for international cooperation, measures to be taken against climate change.

### **3-4- Organizing an exhibition for demonstrating the outcomes of the 5<sup>th</sup> World Water Forum**

RCUWM – Tehran managed to demonstrate the outcomes of the 5<sup>th</sup> World Water Forum held in Istanbul – Turkey, March 2009 in Tehran, Ministry of Energy, I.R. Iran during 26-28 April 2009 and in the International Centre on Qanats and Historic Hydraulic Structures (ICQHS), during 6-8 May 2009.

### **3-5- Training Workshop on Integrated Flood Management**

This training workshop is being developed by the World Meteorological Organization (through its Associated Programme on Flood Management) in cooperation with UN-Water Decade Programme on Capacity Development (UNW-DPC) for flood-prone countries, cities, and communities, with the aim of scaling-up action on integrated flood management to contribute to a minimization of losses of life from flooding and to an efficient use of flood plain resources. This three-day course is designed to familiarize participants with the concept of Integrated Flood Management and prepare them to identify possible paths of action towards implementation of the concept in their own field of work. The course will provide participants an in depth exposure to the social, economic, environmental and institutional dimensions of flood management and allow them to develop an integrated perspective on floods, flood plains and the development process in their own country.

The objectives of this workshop were:

- To provide participants with a balanced outlook on floods, flood plains and the development process, and the role they play in the overall framework of Integrated Water Resources Management (IWRM).
- To provide the participant with an opportunity to think out of the box about possible ways of addressing the issue of floods within their own context.
- To provide participants an opportunity to share their conceptions and ideas with water/disaster managers from other countries.
- To provide a sufficient basis for future self-study on the issue and for an exchange network with other participants.
- To equip participants with an analytical framework to allow them to analyze the various dimensions of flood management and to identify the multidisciplinary input requirements for IFM.
- To equip participants with knowledge about available tools and methodologies to improve their flood management practices in their home institution.
- To encourage the compilation of reports from countries representatives that will be prepared for the workshop regarding the national situation of Integrated Flood Management in their countries.

The concluding remarks of this workshop is presented in annex (3) and the summary report is presented in annex (4).

### **3-6- IHP National Committees' Meeting**

During the 5th Governing Board Meeting of the Regional Centre on Urban Water Management (RCUWM – Tehran) held in July 2007, a recommendation was made to hold a meeting in 2009 among the National IHP Committees of the member countries of RCUWM (Afghanistan, Bangladesh, Egypt, Germany, India, Iran, Kuwait, Oman, Pakistan, Tajikistan, Turkmenistan) and also some other Asian countries such as China, Japan, Indonesia and Malaysia. The main goal of this meeting would be to identify areas and priorities as well as to agree on an effective mechanism for cooperation among the countries within the 7th Phase of IHP (2008 - 2013).

The relevance of holding a meeting was also pegged on the desire of the I.R. Iran to establish a dedicated initiative on drought under the name of “International Drought Initiative (IDI)” as one of the regional and cross-cutting initiatives to assist communities in developing countries to address challenges related to droughts. A meeting of IHP National Committees would provide an opportunity to solicit collective ownership to the initiative of other countries suffering from drought.

The RCUWM – Tehran, the Iranian National Commission for UNESCO and its IHP National Committee, and UNESCO Tehran responded positively to this call and a 2-

day meeting of the IHP National Committees meeting was held in Tehran on 27-28 July 2009 in the Central building of the Ministry Energy, I. R. Iran.

The full report is attached in annex (5).

### **3-7- Training Workshop on Risk Assessment and Flash Flood Mitigation Strategies**

“A sudden local flood of great volume and short duration” is a definition provided to flash floods. In a natural setting, intense rain, soils that are of low permeability or are in a highly saturated state, impervious ground surfaces, steep slopes that facilitate rapid flood wave movement, and possibly anchor convection are all conducive to the genesis of this disastrous event.

As urbanization activities and personal preferences continue to entice people to develop in flood plains, the number of flood-prone communities continues to increase and the need for more timely and accurate warnings becomes greater.

Despite advanced technologies, several societies world-wide still suffer the impact of flash floods; it continues to claim lives of innocent people all over the world. Other losses are also worth mentioning like loss of property, and even infrastructure of whole areas.

One of the most important measures to be implemented could be promoting awareness, knowledge and capacity development for the managers and decision makers with the aim of convincing them to compile strategic plans and to finally invest and prepare action plans to combat with this phenomenon. This event was defined for approaching the stated goals and it was implemented by the Regional Centre on Urban Water Management (RCUWM – Tehran), the Humid Tropic Centre in Kuala Lumpur and International Centre for Water Hazards and Risk Management (ICHARM) in Kuala Lumpur, Malaysia, 10-13 August 2009.

The main goal of this workshop was capacity development and the target group were managers, decision makers and planners involved in natural water disasters management in arid and semi-arid regions of Asia and the Middle East. During this workshop, theoretical visions on the forming procedure of flash floods along with general information by considering the participants level on different managerial methods for these kinds of floods were presented.

The full report is attached in annex (6).

### **3-8- Participating in SWITCH-in-Asia Regional Workshop**

During the 4th World Water Forum in Mexico in March 2006, the EU and UNESCO-IHE launched the SWITCH initiative, a world-wide innovative urban water management project, implemented through a 33 partner consortium. The Asia and Pacific region being home to over 60% of the world population, having the highest number of people without access to water supply and sanitation (62 and 74% respectively), and showing the most rapid destruction of water resources in terms of quality and quantity, called upon a region-specific SWITCH programme in the frame of SWITCH-in-Asia.

In order to meet the challenges, such as increasing global change pressures, existing limitations and un-sustainability factors and risks inherent to conventional urban water management, SWITCH-in-Asia calls for a paradigm shift in UWM. There is a need to convert ad-hoc actions and responses (problem and incident driven) into coherent, holistic, and consolidated approaches (sustainability driven). This need drives the adoption of an integrated programme approach, referred to as ‘SWITCH-in-Asia’, as presented in this programme description.

The SWITCH-in-Asia Programme is a visionary programme that addresses the un-sustainability aspects of current urban water management practices by developing and testing innovative solutions and approaches that contribute to the development of effective and sustainable urban water management (UWM) schemes in Asian Cities. The approach will be to develop efficient and interactive urban water systems and services (city level) in the context of the city’s geographical and ecological setting (river basin level), which are robust, yet flexible and adjustable to a range of global change pressures (global level).

The SWITCH-in-Asia workshop brochure, including full information on the project is attached in annex (7)

### **3-8- Training Workshop on Challenges of Sustainable Water Use in Arid and Semi-arid Regions**

According to the approvals of the 6th Governing Board Meeting of the Regional Centre on Urban Water Management- Tehran (under the auspices of UNESCO) which was held in October 2008 in Muscat, Oman , it was approved that the Training Workshop on “Challenges with Sustainable Water Use in Arid and Semi-arid Regions” to be held in close cooperation of the Regional Centre on Urban Water Management- Tehran ( under the auspices of UNESCO) and Federal Ministry of Education and Research (BMBF) as one of the members of the Governing Board. Therefore, by the close cooperation between the two institutions and considering the research projects

conducted by Germany in Uzbekistan on Climate Change and Water Use Challenges in Urban and Rural Areas, holding the above mentioned workshop in cooperation with the Center for Development Research (ZEF), Program for Sustainable Agriculture in Central Asia and the Caucasus (CAC), Republic of Uzbekistan and the International Center for Agricultural Research in the Dry Areas (ICARDA) was put in agenda on 28-30 September in Tashkent, Uzbekistan.

As the most important objectives of this workshop, the below notes can be referred:

- To strengthen human resources and institutional capacity building to enhance awareness on global change issues;
- To familiarize participants with demand management concepts and fair water allocation;
- To familiarize participants with structural and non-structural activities for sustainable water consumption;
- To familiarize participants with climate change impacts on sustainable water use;
- To familiarize participants with concepts and technologies of water resources management for mitigating the impacts of water stress in arid and semi-arid areas;
- To provide the participants on opportunities to share their ideas and view-points.

The full report of this event is presented in annex (8).

### **3-10 Reservoir Dam Sedimentation Control**

Annually, due to erosion in rivers' basins which will be intensified during flash floods, a huge amount of sediment is transported with the river flow. The accumulated sediment is quite fertile and sediment transport greatly contributes to agriculture in the downstream area. Although sediment transport is very vital for agriculture, it has caused serious problems for the dam reservoirs. A huge amount of sediment enters dam reservoirs each year and results in the dam storage capacity decrease. It costs too much each year for sedimentation control and sediment removal. Due to the mentioned problems, the Regional Centre on Urban Water Management (RCUWM) decided to hold a workshop on "Reservoir Dams Sedimentation Control" in cooperation with the Ministry of Energy, Ministry of Agriculture, Forests, Ranges and Watershed Management Organization, Water Research Institute, Iranian Company of Water Resources Management. It was aimed to train Iranian and foreign experts from Sudan, Turkey, Pakistan and Iran by inviting keynote speakers from the International Committee on Large Dams (ICOLD), International Research and Training Centre on Erosion and Sedimentation- China, International Association of Hydrological Sciences (IAHS), International Institute for Geo-Information Science and Earth Observation- Holland.

As the most important objectives of this workshop, the below notes can be referred:

- Getting familiar with the different methods of precise assessment of sediment inflow and calculation of its volume on the basis of proper data and information as well as methods of sedimentation study in reservoirs in the studying and design phases;
- Getting familiar with the different methods sediment control and watershed management in the upstream area of the dams in order to reduce sediment inflow and consequently extend the economical life of dams;
- To familiarize participants with structural and non-structural activities to control sediment;
- To familiarize participants with sediment removal;
- To provide the participants on opportunities to share their ideas and view-points.

The full report is presented in annex (9).

### **3-9- Participating in the 2<sup>nd</sup> Governing Board Meeting of ICQHS**

The 2nd Governing Board Meeting of the International Centre on Qanats and Historic Hydraulic structures was held in Yazd – Iran, 23 – 24 November 2009. The director of RCUWM-Tehran as a member organisation participated in this board meeting. The meeting was attended by participation of representatives from Azerbaijan, Iran, Iraq, UNESCO and RUCWM-Tehran.

The minutes of the board meeting is presented in annex (10).

### **3-10- International Conference on Capacity Building in Urban Water Management, under Water Scarcity Conditions**

Capacity building is an essential element to tackle water management problems in an integrated manner. Investments in the water sector should not be in 'hard ware' only. However, so far it has been proven to be difficult to formulate the requirements in capacity to be built, and methodologies to use while doing so.

Many developing countries have not yet been able to develop and integrate the requisite suite of human and institutional capacities into an effective water management regime.

What is urgently needed is a new water paradigm, one of integrated, holistic capacity development based on country ownership, adaptive homegrown policies, inclusive stakeholder participation and greater equity in the North-South development relationship.

Based on this rationale, The Regional Centre on Urban Water Management – Tehran in close cooperation with the Ministry of Regional Municipalities and Water Resources – Sultanate of Oman will be organizing the International Conference on “Capacity building in Urban Water Management under Water Scarcity Conditions” in Muscat, Oman, 13-15 December 2009.

The conference aimed to gather the concern parties to share their knowledge and experiences particularly innovations in urban water management to help in developing the capacity of those who are in need. Different approaches and techniques were explored to reach better understanding of them. In addition, close relationship was enabled between the developers or practitioners of these techniques and knowledge exchange for those who are in need of them for current and future use.

About 20 papers were presented from Iran, Oman, England, Germany, Malaysia, Turkey, and Lebanon.

The full report is presented in annex (11).

### **3-11- Regional Workshop on Development of Hydropower Plants**

As the Islamic Republic of Iran was the chair of the ECO in the recent period, it was decided to present the abilities of the I.R. Iran on engineering services in the water sector to experts and high level managers of the ECO member countries through a regional workshop in Iran.

Due to this intention, the Regional Centre on Urban Water Management- Tehran under the auspices of UNESCO with the cooperation of the Economic Cooperation Organization (ECO) and Iran Water and Power Resources Development Company affiliated to the Ministry of Energy as the main responsible authority of the hydropower plants in Iran, planned to hold a three day workshop on “Development of Hydropower Plants” 9-12 November in Tehran, Isfahan and Khuzestan.

As the most important objectives of this workshop, the following notes can be referred:

- To familiarize water and energy sector high level managers and decision makers of the ECO member countries with the abilities and potentials of Iranian companies in dams and hydropower plants construction industry;
- To familiarize the participants with the energy status, water resources and hydropower plants of participating countries in the workshop;

- Proposing the establishment of the ECO Regional Centre on Water in the Islamic Republic of Iran;
- Creating opportunities for the participants to exchange ideas.

More than 20 managers and experts from Azerbaijan, Iran, Kyrgyzstan, Pakistan, Tajikistan and Turkey participated in the training workshop on “Development of Hydropower Plants”, which was held in Tehran, Isfahan and Khuzestan provinces in Iran, 9 – 12 November 2009.

The full report is presented in annex (12).



## 4- RCUWM – Tehran Costs and Budget for 2009

The costs of RCUWM – Tehran are divided into two main parts:

- The running costs
- The operating costs, concerning the projects including study, research, workshops, seminars and training courses projects.

The running cost of the Centre based on financial affairs department information by the end of 2009 has been demonstrated in Table 8. As it is clear in the table, the total cost is 174500 USD which has been entirely provided by the I.R. Iran based on the contract made between the I.R. Iran and UNESCO.

In respect to the operating costs, Table 9 has been compiled. This table shows the costs and shared costs between the I.R. Iran, UNESCO and other partners.

According to the presented information, in table 8 and 9 the total amount of running costs and Centre's projects has been summarized in table 10.

The information and figures of table 10 demonstrate that:

- 100 percent out of total running and 46 percent of operating costs have been supplied by I.R. Iran
- 6.5 percent of the total operating costs have been supplied by UNESCO. It is worth noting that, based on the contract made between the I.R. Iran and UNESCO, it was supposed to supply the main part of the operating costs of the Centre's activities through UNESCO or other organizations, governments and other donors.

**Table 8 – Running costs for the year 2009 (USD)**

Employees' Salaries and wages	85000
Publication, printing, transportation, utilities, etc.	4500
Amortization of properties	60000
Other costs	25000
<b>Total</b>	<b>174500</b>

**Table 9 - Costs of the Organizing Workshops, Training Courses and Projects included in 2009 Work plan (USD)**

Title	Costs	Shared Costs		
		RCUWM	UNESCO	Other
Participating in the Fifth World Water Forum – Istanbul, Turkey	15000	15000	--	--
Presenting the outcomes of the 5th WWF in Iran – Ministry of Energy (Tehran), Yazd, IWP Co. (Tehran)	5000	5000	--	--
Organizing the Training Workshop on “Integrated Flood Management”- Tehran	35000	26400	--	8600
Organizing the IHP Committees' Meeting	10000	1000	9000	--
Organizing the Training Workshop on “Risk Assessment and Flash Flood Mitigation Strategies” - Malaysia	31000	16000	--	15000
Organizing the Training Course on “Challenges of Sustainable Water Use in Arid and Semi-arid Regions under Conditions of Climate Change” - Uzbekistan	30200	1200	--	29000
Organizing the Training Workshop on “Reservoir Dams Sedimentation Control” - Tehran	10000	6000	4000	--
Organizing the Training Workshop on “Development of Hydropower Plants” – Tehran, Isfahan and Khuzestan	10000	10000	--	--
International Conference on “Capacity Building in Urban Water Management under Water Scarcity Conditions” - Oman	58500	13500	--	45000
<b>Total</b>	<b>204700</b>	<b>94100</b>	<b>13000</b>	<b>97600</b>

**Table 10 - Summary of the budget, 2009 (USD)**

Title	Costs	Shared Cost Distribution (%)		
		RCUWM	UNESCO	Others
Running	174500	100	0	0
Projects	204700	46	6.5	47.5
Total	379200			

Note: I.R. Iran has covered 100% of the running costs as well as 46% of the operation costs.



## **5- Work Plan in 2010**

The activities and projects to be carried out during 2010 are described in this section. Detail information on each of the following activities could be found in the annexes.

### **5-1- Third National Water and Wastewater Conference**

In spite of shortage in water resources, statistics show that; the amount of water demand is higher than the international level in our country. The economical value of water & the importance of preserving the environment are the other reasons for the requirement of demand management & the improvement of consumption pattern.

Since the year of 2009 is called as the year of improving consumption pattern in Iran and also after the successful holding of the 1st and 2nd National Water & Wastewater Conference, NWWEC & PWUT (Shahid Abbaspour) has held the 3rd National Water & Wastewater Conference with the issue of demand management in 23rd to 24th of February 2010.

The Conference aimed at the followings:

- To prepare a suitable situation in regard to searching, exchanging the idea and being familiar with the experiences of scientific and industrial experts;
- To define the position of water demand management in country
- Recognize the problems which are related to improving the consumption pattern;
- To be familiar with the new technologies in regard to the demand management;
- The authorities of water & wastewater industry should pay attention to the importance of supply management & water demand and its rule in the sustainable development and preserving the environment;

- To develop the education, culture and make familiar with the optimized patterns in the water consumption;

### **Conference themes & topics**

- Demand Management & water consumption (in point of technical & engineering, economical, cultural, social and legislation);
- Decreasing the RNW;
- Improving the energy efficiency in water & wastewater sectors
- Optimization in water & wastewater sectors (design, construction & operation);
- Innovative technologies in the field of demand management;
- Environment, water supply & demand management.

During this conference, the director of the Centre presented a technical paper on “An Integrated and Innovative Programme towards Water Management in Asia Cities” known as SWITCH.

## **5-2- First National Workshop on Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity, using AquaCrop**

Global demand for fresh water is constantly rising as a consequence of population growth and the rise in living standards. Agriculture is not only the world's largest water user in terms of volume, but is also a relatively low-value, low efficiency, and highly subsidized user. In the years to come the agricultural sector will compete with households and industry for increasingly scarce water resources, and yet is under pressure to produce more food and fiber with less water to satisfy the food needs of a growing world population. The overall future scenario is further aggravated by the impact of climate change.

Rainfed and irrigated agriculture needs to improve its water productivity. To assess accurately crop yield under limited water availability, user-friendly software and simulation models can be valuable tools.

A new crop model, named AquaCrop, has been recently developed by FAO. AquaCrop focuses on simulating the attainable yield in response to water which is the key driver for agricultural production and which becomes increasingly the critical factor limiting crop production. AquaCrop uses a relatively small number of explicit and mostly intuitive parameters and attempts to balance simplicity, accuracy and robustness.

As the Centre intends to get involved in more water-related issues besides urban water subjects which may challenge the future of human beings, it is planning to hold the

National Workshop on Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity, using AquaCrop.

The workshop main objective is to train participants with the practical applications of AquaCrop in order to improve their skills in strategic farm management practices toward increasing crop water productivity in rain fed and irrigated production systems. This workshop will be held in Kish island – Iran, 9-12 May 2010.

The workshop brochure is demonstrated in annex (13).

Worth noting that the Second National Workshop on Capacity Development for Farm Management Strategies to Improve Crop-Water Productivity, using AquaCrop is planned to be held in Kish – Iran, 9-12 October 2010.

### **5-3- Workshop on International Water Laws and Policies**

International water law adopts the primary substantive principle of "equitable and reasonable utilization", as embedded in the 1997 UN Watercourses Convention (UN Watercourses 1997, Wouters 1999a). This rule of law operates at two levels: setting the standard to be achieved, and, establishing the operational approach to determine that standard. Thus, a new or increased use of transboundary waters is "lawful" where it is determined to be "equitable and reasonable". Whether or not a use qualifies as being "equitable and reasonable" is determined on a case by case basis: "all relevant factors are to be considered together and a conclusion reached on the basis of the whole" (Art. 6(3) UN Watercourses Convention). This means that, consistent with integrated water resources management, States must take into account the interrelatedness of freshwater bodies, sectoral integration and multi-interest considerations.

While the notion of equity requires that these issues be reconciled, the notion of reasonableness implies a certain standard on how a transboundary watercourse is utilized. Given our present knowledge of the effects of economic development on the environment, it is extremely unlikely that a use, which endangers the long-term potential of renewable resources such as water, would be considered reasonable (Wouters 1999b).

In this concern, the Regional Centre on Urban Water Management in close cooperation with Dundee UNESCO Centre for Water Law, Policy and Sciences is planning to hold the International Water Law and Transboundary Freshwaters Symposium and workshop by presenting global, regional and national strategies for promoting security and sustainability within a rapidly changing world.

The main goal of this event is capacity development and the target group would be managers, decision makers and experts involved in water resources management.

During this workshop, general information on water laws by considering the participants level will be presented.

The expected outcome would be to enable the participants to promote their knowledge and apply these laws in their own countries by taking into account the requirements.

This workshop will be held in Dundee – Scotland, 21 – 24 June 2010.

The workshop brochure is presented in annex (14).

#### **5-4- 19<sup>th</sup> Session of the IHP Intergovernmental Council**

The 19<sup>th</sup> Session of the IHP Intergovernmental Council will be held in UNESCO, Paris, 5 – 9 July 2010. During this session, the Council will principally examine the relevant outcomes of the 35<sup>th</sup> session of UNESCO's General Conference, including the Organization's Programme and Budget for 2010 – 2011. The Council will also look into recent institutional developments in IHP, review progress on the implementation of the resolutions and other recommendations adopted by the 18<sup>th</sup> session of the IHP council (Paris, June 2008), examine the status of UNESCO's water-related category 1 institute and category 2 centres under its auspices, and report on the formulation of the Eighth Phase of IHP (IHP-VIII, 2014 – 2019), including the endorsement of the related concept paper.

The Regional Centre on Urban Water Management, (RCUWM- Tehran), as a category II centre under the auspices of UNESCO, is planning to actively participate in this session. As one of the items of the session's agenda is investigating international initiatives in the field of water, the Centre intends to establish the International Drought Initiative (IDI). In this concern, the Centre will propose the foundation of IDI under the Centre's supervision in this session to be approved by the representatives.

The details of the IDI is attached in the Clause 3.6.

#### **5-5- Training of Trainers Workshop on Integrated Urban Water Management**

The principal objectives of this document are to support efforts in solving water and sanitation problems in the region covered by the RCUWM and beyond in order to comply with Millennium Development Goals (MDGs) and Johannesburg Plan of Implementation (JPOI).

This broader objective will be met by several other objectives including the need for capacity building and development of strategies for training a critical mass of leading specialists in the countries of the region. These leading specialists will then serve as trainers of the core groups of national specialists in their countries. The immediate

goal is then to prepare a comprehensive Manual for Training of Trainers (ToT) on Integrated Urban Water Management which will provide the framework for these specific activities.

In this concern, RCUWM- Tehran, UNESCO, the Islamic Development Bank (IDB) and the Ministry of Water Economy and Land Reclamation of Republic of Tajikistan are planning to hold the training workshop on “Integrated Urban Water Management” in Dushanbe, Tajikistan, 2-5 August 2010. The participants of this workshop will be decision makers and senior experts from RCUWM member states including Iran, India, Germany, Oman, Syria, Egypt, Lebanon, Pakistan, Kuwait, Afghanistan, Tajikistan, Yemen, Bangladesh, Iraq and Bahrain.

The workshop concept paper is presented in annex (15).

## **5-6- Training Course on Application of GIS and RS in Water Resources Management**

Sustainable water resources development and management necessarily depends on proper planning, implementation, operation and maintenance. GIS and Remote Sensing techniques have to be effectively used to replace, complement and supplement ground data collection in various facets of different kinds of water resources projects. The synoptic large area repetitive coverage provided by satellite sensors when integrated with detailed time series information coming from ground sensors can provide appropriate data base which would lead to sustainable water resources development.

In this respect, the Regional Centre on Urban Water Management is planning to hold a 4-day training course on Application of GIS and RS in Water Resources Management during October 2010 in Kish. The participants of this workshop will be decision maker and experts in the field of water resources.

The main objective of this event would be to train the participants with practical applications of GIS and RS in WRM.

## **5-7- Other Activities**

### **5-7-1- National IHP Committee Meetings**

The director of the Centre regularly attends the Iranian IHP Committee Meetings which take place once a month in the Iranian NATCOM Headquarter.

Several issues are considered in the meetings’ agenda including the activities and achievements of Category II Centres of UNESO (Tehran and Yazd Centres),

presently new initiatives and programmes and following up relevant issues related to the seventh phase of UNESCO–IHP.

### **5-7-2- Paper Presentation in the World Water Forum 2010 Infra-Workshop**

In order to discuss and share innovative solutions for many water-related challenges that many cities are facing, including global warming, rapid growth of megacities, depletion and pollution of water resources and aging infrastructure, Incheon Metropolitan City, as one of 11 major “Water Champion” cities wants to act as a driver for preparing action plans to address such challenges in cooperation with water related organizations such as International Center for Water Hydroinformatics Research & Innovations (ICUH), Korea Water Forum (KWF) and so on.

The World City Water Forum Infra-Workshop will be held on 13-14<sup>th</sup> of July at AnvensiA in Incheon. The meeting aims to discuss challenges and build up ideas into future agenda for World City Water Forum 2011.

The director of the Centre will be presenting a scientific paper on the role of Qanats in supplying urban water management during this workshop,

### **5-7-3- OIC Advisory Panel Meeting on Water**

At the side line of the 5<sup>th</sup> World Water Forum held in Istanbul in 2009, the OIC General Secretariat organized a Meeting of Ministers of responsible for Water. The meeting recommended to prepare an OIC Water Vision, establish an OIC Water Council and to call for Islamic Conference of Ministers responsible for Water.

In this regard, the OIC General Secretariat is planning to hold an Advisory Panel of Experts on Water to prepare the draft OIC Water Vision. The Panel Meeting is scheduled to be held at the International Centre for Bio-saline Agriculture (ICBA), Dubai, UAE on 25–26 May 2010.

The 15-member panel is expected to meet twice in the course of 2010. The purpose of an OIC Advisory Panel Meeting on Water is to identify the priorities and framework of the future cooperation on water issue. The Advisory Panel Meeting will also discuss concept of the OIC Water Vision and the OIC Water Council as stipulated by the resolutions of the 36<sup>th</sup> CFM. International Centre for Bio-saline Agriculture (ICBA), Dubai, UAE will host the meeting and serve as panel secretariat. ICBA will finalize the draft OIC Water Vision document and the document will be approved by the Advisory Panel by consensus.

The director of the Centre will be participating as a member of the Advisory Panel of Experts on Water by presenting Iran’s proposal on establishing the Islamic Water Programme (IWP).

## **6- RCUWM – Tehran Estimated Costs and Budget for 2010**

### **6-1- Introduction**

In this section, the budget of the centre in 2010 has been prepared and presented in order to be reviewed, discussed and come up with required decisions during the Governing Board Meeting as follows:

- Estimation of the centre's running budget in 2010;
- Estimation of the costs of the projects in 2010.

### **6-2- The running costs of the centre**

Based on the reviews, by the financial affairs department of the centre, the running costs for the year 2010 have been estimated as demonstrated in table 11. It is worth noting that, a specific budget from the country's public resources has been allocated for supplying the running costs of the centre which goes back to the I.R. Iran's Government Commitments. This allocated approved budget plays a significant role in sustainable supply of the centre's running budget.

### **6-3- Budget Estimation of the Projects**

As it was mentioned in the previous section, the projects of the Centre can be classified into three main parts as follows:

- a) Projects for which their financial resources have been ensured from different resources and they have no constraints to be planned and implemented;
- b) Projects which have been recommended by the Centre's GB members, but so far no certain financial resources have been provided;
- c) Projects which have been recommended and approved by the 6<sup>th</sup> Governing Board Meeting, but there has been no certain financial resources.

The list of projects cited in item a. and activities along with the estimation of related costs and distribution of these costs between donors have been demonstrated in table 12.

### 11 – Running costs for the year 2010 (USD)

Employees' Salaries and wages	120000
Costs of the 7 <sup>th</sup> GBM of the Centre	100000
Publication, printing, transportation, utilities, etc.	15000
Amortization of properties	75000
Other costs	34000
<b>Total</b>	<b>344000</b>

**Table 12 - Costs of the Organizing Workshops, Training Courses and Projects included in 2010 Work plan (USD)**

Title	Costs	Shared Costs		
		RCUWM	UNESCO	Other
Participating in the Expo of the 3 <sup>rd</sup> National Water & Wastewater Conference on Demand Management - Tehran	3200	3200		
Contribution to the 3 <sup>rd</sup> National Water & Wastewater Conference on Demand Management - Tehran	2100	2100		
Seventh Governing Board Meeting of RCUWM, Tehran, 2-5 May 2010, Tehran	100000	70000		30000
First National Training Workshop on Application of AquaCrop Model in Agriculture, Kish, Iran, 9-12 May 2010	12000	4500		7500
International Workshop on Sustainable Water Use in Arid and Semi-arid Regions, in close cooperation with the Federal Ministry of Education and Research – Germany, planned to be held in Tehran, Mid 2010	35000	12000		23000
Training of Trainers Workshop on Integrated Urban Water Management in close cooperation with the Islamic Development Bank, Tajikistan, 2-5 August 2010	45000	10000	10000	25000
Workshop on International Water Laws and Policies, in close cooperation with Dundee UNESCO Centre for Water Law, Policy and Science and UNESCO, Dundee – Scotland, 21-24 June 2010	90000	40000		50000

Title	Costs	Shared Costs		
		RCUWM	UNESCO	Other
19 <sup>th</sup> Session of the IHP Intergovernmental Council, UNESCO, Paris, 5 – 9 July 2010	3000	3000		
Second National Training Workshop on Application of AquaCrop Model in Agriculture, Kish, Iran, October 2010	12000	4500		7500
Workshop on Applications of GIS and RS in Water Resources Management, Kish, Iran, 10-13 October 2010	12000	4500		7500
RCUWM Involvement in SWITCH in the Middle East (Studying Phase), Organizing a Workshop	50000	50000		
<b>Total</b>	<b>364300</b>	<b>203800</b>	<b>10000</b>	<b>150500</b>

**Table 13 - Summary of the budget, 2010 (USD)**

Title	Costs	Shared Cost Distribution (%)		
		Iran	UNESCO	Others
Running	344000	100	0	0
Projects	364300	56	2.7	41.3
Total	708300			

Note: I.R. Iran will cover 100% of the running costs as well as around 56% of the operation costs in 2010.