

Final Report of 3rd Asian G-WADI Network Meeting

17 July 2010, Beijing China



Asian G-WADI Network Coordination Meeting Report

List of Participants

Manat Agzam, Kazakhstan	Otgonbayar Jamiyan, Mongolia
Obid Bokiev, Tajikistan	Soroosh Sorooshian, G-WADI Committee
Tashbaeva Saadat, Kyrgyzstan	Xin Li, Asian G-WADI Secretariat
Nooruddin M.shaker, Afghanistan	Zhuotong Nan, Asian G-WADI Secretariat
Lutfullah Amarkhail, Afghanistan	Xiaoduo Pan, Asian G-WADI Secretariat
Ali Bahzad Sheikh, Pakistan	Bhanu Neupane, UNESCO Office in New Delhi
SHAUKAT ALI, Pakistan	Anil Mishra, UNESCO-IHP Paris
Ms Sedighe Torabi-Palatkaleh, Iran	Lama Al-Masalha, UNESCO Office in Amman
Mr Hamid Reza Moradi, Iran	Yelena Yerzakovich, UNESCO Office in Almaty
Mr Mohammad Reza Khoshnami, Iran	Jayakumar Ramasamy, UNESCO Office in Beijing
Yam Prasad Dhital, Nepal	Liu Ke, UNESCO Office in Beijing
Ranjan Mallick, Indian	Marita Muller, UNESCO Office in Beijing
Peiling Yang, China	
Baasansuren Sandir, Mongolia	

Introduction

1. The Asian G-WADI Network meeting was held on Saturday the 17th July 2010 at the Chinese Academy of Sciences Office in Beijing. The meeting was preceded by the 2nd *Summer School on Land Surface Observing, Modeling and Data Assimilation* which ran from Tuesday 13th July to Friday 16th July. Many of the attendees also attended the Summer School.
2. The purpose of the meeting was to discuss the way forward for the Asian G-WADI group and to update members on country progress in G-WADI pilot basins.

Opening

3. Anil Mishra welcomed the participants by thanking Cold and Arid Regions Environment and Engineering Research Institute (CAREERI), Chinese Academy of Sciences (CAS) on their generosity to host the meeting of the Asian G- WADI Network.
4. The participants briefly introduced themselves.

Overview of G-WADI by Prof S. Sorooshian

5. Soroosh Sorooshian presented a keynote speech to elucidate the objectives and scope of G-WADI, including its genesis, cooperation and linkages with various institutions including SAHRA-GWADI and CHRS-GWADI. He also presented on the role of the Asian G-WADI Network:
 - a. What should be the main contribution of the G-WADI pilot basins?
 - b. What distinguishes G-WADI pilot basin from others (e.g. HELP)?
 - c. What should be a set of minimum criteria for considering and designating G-WADI basins?
 - d. How will we be able to evaluate these criteria to check that objectives are met?
6. Soroosh Sorooshian invited that the group spend time discussing the points noted above and come up with a few concrete proposals to advance G-WADI mandates in Asia. Global G-WADI has been trying to improve on the knowledge of global precipitation through the CHRS/G-WADI geo-server and information tools developed to facilitate the use of the geo-server.

Introduction to the Asian G-WADI meeting

7. Anil Mishra gave a brief introduction to Asian G-WADI and the objectives that UNESCO wanted to achieve through the network. Jayakumar and Bhanu Neupane provided an account of the origin of the Asian G-WADI and provided more information on the core objectives of the Network to: jointly work on research, communication and application of research, capacity building and knowledge management. They highlighted that the objective of the meeting was to discuss the status of the individual pilot projects.
8. Prof. Xin Li provided an update on the progress of Asian G-WADI.
 - a. Since 2008, the Asian G-WADI Network has been hosted by the Cold and Arid Regions Environmental and Engineering Research Institute, of the Chinese Academy of Sciences, and managed by a steering committee.
 - b. Asian G-WADI Web site: <http://asian-gwadi.westgis.ac.cn>, went online on 2007.

- c. The Asian G-WADI operates through a network of pilot basins in China, India, Iran, Kazakhstan and the Kyrgyz Republic. The network organizes joint activities to contribute to solving common problems in each of the pilot basins. The network has produced meeting materials, general publications from IHP, G-WADI, MAB, and other projects, proceedings, a CD-Rom, posters and brochures.
- d. The International G-WADI Modelling Workshop & the 1st regional meeting on 28th February - 5th March 2005, was held at the National Institute of Hydrology, Roorkee, India. At this meeting a panel of international experts provided state-of-the-art reviews, case studies and software demonstrations. An International Training Workshop on Groundwater Modeling for Arid and Semi-Arid Areas and The 2nd Asian G-WADI meeting, were held in Lanzhou, China, June 11th – 17th, 2007. A special two week training course for Afghan experts on “Application of GIS and RS in Hydrology”, was also held in Lanzhou/China, on the 21st Oct – 3rd Nov 2008. Training of Trainers Workshops on Climate Change and its Impacts on Water Resources Management, were held in Damascus, Syria, from 13th – 16th October 2008. These and the 2nd Summer School on Land Surface Observing, Modeling and Data Assimilation, which preceded the current meeting, were also key capacity building initiatives of the network.
- e. There have also been a series of activities organized by cluster offices of UNESCO within the framework of G-WADI.
- f. Prof. Xin Li noted new proposals:
 - i. A publication from all the selected pilot basins from Asia “Best practices of water management in arid and semi arid regions of Asia”;
 - ii. Seed fund for a pilot project;
 - iii. Seeking more funding to support a regional joint effort; and
 - iv. A Regional Center on Endorheic Basins in Arid and Semi-Arid Regions.
- g. Jayakumar noted that there is a need to change the name of the steering committee to ‘Advisory Committee’.
- h. Yelena Yerkovich noted to have a more clear direction to move forward within the network: What are the expectations of the member states and vice versa?
- i. Ranjan Mallick asked about the problem of ground-truthing and data verification. This was acknowledged as an issue but could not be further considered in this meeting due to time constraints.

- j. Ms. Sedighe asked about the modality of communication between the network members? How the problems to be noted and circulated amongst each other.
 - k. Shaukat Ali from Pakistan offered his services to update the website.
 - l. All participants felt the need for a communication strategy to communicate back and forth amongst the network members.
9. Dr. Zhuotong Nan presented the case of Hiehe River Basin. Dr. Zhuotong Nan provided the progress made in the past few years to address the water resource management problems in the basin. He noted several new research activities planned in the basin and progress achieved in the decision support development. The Hiehe Basin is embarking on an 'Integrated Ecohydrology Research Plan'.
10. Dr. Saighe Torabi-Pala presented a case study from Iran and provided a succinct account on how the country is facing a water resources crunch, both in terms of growing population and anthropogenic impacts as well as due to climate change impacts. She also officially noted Iran's willingness to host a G-WADI meeting in Iran in 2011 on the theme of "how to excite stakeholder participation in climate change adaptation in arid and semi arid regions".
11. Bhanu Neupane presented progress of the Indian G-WADI basin. He presented the progresses made in the Jasiemand and Krishna Godavari Basins. The research in both basins is progressing satisfactorily and several useful decision support tools have been developed as a result of this work.

Country Presentations

12. Mr. Laftullah Amarkhail from Afghanistan presented the Kabul river basin. Afghanistan needs capacity building and modeling support to further develop the basin that they have proposed under the G-WADI network. The government is beginning to apply integrated water resources management. He mentioned the data losses due to conflict and that progress has been slow to collect new data. Many data monitoring stations have been rebuilt since 2008. Environmental impacts from low environmental flows due to drought were also mentioned.
13. Dr. Peiling Yang provided a brief account on the Dalai Lake Basin of Inner Mongolia, China. Water quality in the lake system was highlighted as a key challenge for the region, due to inadequate treatment of sewage and non-point pollution source derived from agricultural activities in the basin. By participating the G-WADI meeting, it is expected that the Dalai Lake Basin would be included as a new member under UNESCO G-WADI.
14. Dr. Torabi provided a brief account of the Kashfroud and Taleghan Basins in Iran. The key challenges to more effective water resources management was listed as experience in

technical fields. The engagement of stakeholders was also highlighted as being a challenge to implementation of new water policies.

15. Ms. Lama Al-Masalha from Amman office presented the findings of the Spanish MDG fund activities in climate change impact on Zarqa River, Jordan. Key challenges were listed as being climate change adaptation, high rates of abstraction above the sustainable yield and water quality. The study currently being undertaken aims to collect data, analyze this (using water resource vulnerability mapping) and develop suitable management strategies to deal with these challenges.
16. Mr. Manat Agzam from Kazakhstan presented activities in the Balkash River Basin. Key challenges in the Basin included reductions in the volume of Lake Balkash due to runoff reduction in rivers feeding in the lake, and reductions in water quality (particularly salinization).
17. Ms. Saadat Tashbaeva presented a case study of Issyk-kul Lake in Kyrgyz Republic. Research support in new areas like groundwater, ecohydrology and glaciers' impact for water resource management. Key challenges are declining lake levels (due to natural and anthropogenic events), poor water supply systems, and excessive irrigation in the rivers leading to the lake resulting in low flow/recharge of lake and poor water quality.
18. Ms. Jamiyan Otgonbayar presented a brief account of the Tuul River Basin, Mongolia. An integrated river basin management plan is being prepared for the basin with Dutch technical assistance/funding. The key management issue is the management of mining impacts on water resources (in terms of availability and water quality), since mining and industry are the key water users in the basin. A master plan for integrated water resources management in Mongolia will be implemented in Mongolia with the support of UNESCO G-WADI.
19. Mr. Obit Bokiev presented a brief account of Bakhsh River Basin in Tajikistan. The basin would need capacity building and research support in water related disasters and to better understand water-energy nexus. Climate change impacts, poor water infrastructure, and land management practices for water quality are key concerns.
20. Pakistan would be offering a new basin and will need capacity building support, especially in the area of GIS and Remote Sensing.
21. Nepal would be initiating an action on the lee-ward side of the Himalaya in Kaligandaki river basin. The project is steered by the IHP national committee of Nepal.
22. Discussion:
 - a. Issues of continuity of the participation, and follow up activities after the meeting.
 - b. There is a blurred perception on what the network is supposed to achieve.

- c. There is a need to improve on existing communication between G-WADI Network members. For this there may be a need to make the website more dynamic and interactive. Hosting a web forum was discussed.
- d. Participants requested to make the website dynamic so that all information fed into the website would get communicated to all the members. Beijing office agreed to sit with the Secretariat to see what can be done to make the website more dynamic.
- e. There is a need to map activities of various countries, which may have international flavor and see if other countries in the network can participate.
 - i. From the global G-WADI
 - 1. Organization of Cairo meeting in September 2010
 - 2. Organization of Santiago meeting in December 2010
 - ii. UNESCO office in New Delhi
 - 1. Organize a 15 days training program for hydrologists at IISc.
 - iii. UNESCO Office in Almaty
 - 1. Country prepare IWRM Plan
 - 2. Research support in new areas like groundwater, ecohydrology and glaciers' impact for water resource management.
 - iv. UNESCO Office in Beijing
 - 1. Will work to facilitate the work of the Secretariat to improve upon the communication with Asian G-WADI Network members, which will include evaluation of the possibility to make the website dynamic, development of a newsletter, among others.

Summary of Actions Arising

The following actions were recorded at the meeting:

- 23. To change the name of the G-WADI Steering Committee to 'G-WADI Advisory Group' to reduce the formal nature of the group.
- 24. To develop a newsletter and web forum to increase communication between G-WADI members and allow for increased exchange of information. Advisory Group members were encouraged to bring issues to the G-WADI Secretariat or to raise them with UNESCO. They were also encouraged to work together to identify common problems.
- 25. G-WADI Advisory Group members to provide a brief report for each of the pilot basins discussed in their presentations to be included on the website

26. G-WADI Advisory Group members to encourage the IHP National Committees to play a more active role in the activities of the group – in particular ensuring continued representation of members where possible.
27. G-WADI Advisory Group members to provide a progress report for their G-WADI pilot basin and to clarify reasons why the pilot basins have been put forward to the group.
28. G-WADI Secretariat to publish all information on website as soon as practicable (noting the Secretariat is facilitating the website on a volunteer basis).
29. G-WADI Secretariat to enable automatically-generated emails to G-WADI Advisory Group members whenever the website is updated.
30. G-WADI secretariat housed in CAREERI-CAS is expecting enhanced communications with the EU group.

The following country-specific actions were also recorded:

31. Iran to send an official invitation to the G-WADI Secretariat for the hosting of the next meeting in Iran in 2011 in order to facilitate the negotiation of a suitable date for the meeting.
32. Iran to submit information on their recent Climate Change Study to the G-WADI Secretariat in order for it to be included on the website.
33. Afghanistan to provide information for pilot basin in template provided by G-WADI Secretariat.

Possible agenda items for next meeting:

34. Discussion around the development of a template for the sharing of information on project outcomes with other G-WADI members.
35. Discussion around criteria to be used for determining acceptable limits for human vs. environmental uses of water. Suggested by Iran.
36. DSS Analysis Support System – recommendation to coordinate with G-WADI – Iran to put formal request through.

ATTACHMENT 1

G-WADI Participant Contact Details

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G-WADI committee

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