

Action Report for Working Group on Representation of Developing Countries (WGRDC), IAHS

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Since Working Group on Representation of Developing Countries (WGRDC), IAHS, was developed during 26th IUGG General Assembly, Prague, in June22-July 2, 2025, the WGRDC, collaborated with Working Group of Panta Rhei, has made good actions and progresses. Major actions, particular 2016-2017, are summarized as follows:

1. Development of IAHS- Panta Rhei in African:

Participating continually in 15th-18th WaterNet/WARFSA/GWP-SA Symposium on ***Integrated Water Resources Management: Water Security, Sustainability and Development in Eastern and Southern Africa***, Jointly convened with the International Association of Hydrological Sciences (IAHS) and local Universities and organizations. Under the supports of IAHS, particular the President of IAHS, Prof. H.H.G.Savenije, Secretary General of IAHS, Prof. C. Cudennec, and the WGRDC organized successfully IAHS Special Section, namely ***hydrological sciences and practice in a rapidly changing world: "Panta Rhei", which*** addressed as follows:

"Panta Rhei is the new research initiative of IAHS for the decade 2013-2022. It is the main vehicle of the hydrological community to further hydrologic sciences for the benefit of society in a rapidly changing world. This session will focus on hydrological science and practice for developing countries, with a special focus on Africa. We aim to bring together scientists from different disciplines that share a common interest in addressing the challenges of understanding and managing hydrological systems. IAHS wants to partner with the scientists of WaterNet to forge a network of innovative scientists who want to address the main challenges of the sustainable development goals in a rapidly changing environment. Panta Rhei has three main research foci: (1) to understand the mechanisms of hydrological change in human-water systems; (2) to try and predict how these interactions may develop in the future; and (3) to translate this knowledge into practical instruments for water managers. Welcome contributions to any of these three foci, and we would like to use this opportunity to form a network of scientists who are interested to participate in this important international initiative.

Through joint and leading of section and communication with African peoples who do the jobs on water management, water education and learning, more IAHS member was developed. Closed relationship on IAHS action was developed.



2. Development of IAHS- Panta Rhei in Asia:

Asia is a major region in the world to suffer natural disaster and environmental issue such as floods and droughts in most developing countries. Major actions for Working Group on Representation of Developing Countries (WGRDC), IAHS, involves the organizations of national office of IAHS Panta Rhei and regional workshop related hydrological issue in developing countries in the world, particular in China, a big developing countries.

For instance, *International Conference on Hydrological Knowledge Innovation and its Practices in Developing Countries*, was successfully organized by Prof. J.Xia and Prof. J.G. Liu in Shenzhen during November 13-15, 2016, supported by NSFC, IAHS, IWRA and others. The main goal for this workshop is try to understanding major water challenges in developing countries in a coupled nature-human system; demonstrating current hydrological knowledge of models, tools and case studies to deal with water problems e.g. water scarcity, water-related disasters, groundwater depletion, water-related poverty and wars; Identifying demand for hydrological innovation to meet the grand water challenges in different regions; and developing a multi-national and multi-disciplinary cooperation framework and statement with a concrete working plan in order to provide capacity building, monitoring equipment, remote sensing techniques, and free software packages for developing countries, and to expand Panta Rhei as well as IAHS through establishing national committees and regional networks and increasing members in these counties.

There are more than 100 participators from different regions in the world, particular from developing countries, such as South Africa, Zimbabwe, Iran, and Russia and so on.

After Shenzhen IAHS Workshop, Wuhan Workshop, namely *Launching Meeting of Chinese Working Committee for the IAHS-Panta Rhei*, was also successfully organized on 16th Nov., 2016, Wuhan of China. China National Offices of IAHS Panta Rhei was built up in Beijing and Wuhan, separately. This platform provides opportunities to implement IAHS Panta Rhei. Major action plans are summarized as follows:

- (1) Based on different sources supported by IAHS-CNC, NSFC, MOST, CAS and the Global Strategy for One Belt & One Road in China, encouraging Chinese hydrologist to carry on Socoi-Hydrology research under the water system framework in changing environment.
- (2) Facing to China national demands on water security, carrying our more practices & application on solution of water sustainable utilization & management, also promoting international cooperation through Working Group on Representation of Developing Countries (WGRDC) of IAHS, and IWRA and others.
- (3) Organizing International Workshops or special sections and publications to strengthen multiple cooperation of IAHS with Chinese communities and international, such as WaterNet in Africa and other network to promote IAHS Pante Rhei Programme.

International Conference on Hydrological Knowledge Innovation and its Practices in Developing Countries
November 13-15, 2016 Shenzhen, China





3. Short Introduction on the WGPDC

The Working Group on Representation of Developing Countries (WGPDC) will have the following tasks:

- a) To encourage and facilitate participation of hydrologists from Developing Countries in IAHS meetings and conferences
- b) To find ways of enhancing the membership of developing countries to IUGG and thereby becoming member countries of IAHS
- c) To help set-up National Committees for Hydrology in developing countries, who would become the National Representatives of IAHS.
- d) To stimulate the networking in developing countries in order to become the basis for National Committees or National Hydrological Associations that connect to IAHS.
- e) To help build capacity in developing countries to strengthen such national and regional networks.
- f) To build on existing networks and initiatives in developing regions, such as WaterNet, to assist these networks in their effort to strengthen regional capacities.
- g) To build cooperation and connection of WGPDC with Panta Rhei to strengthen new task and implement of Panta Rhei in developing world.
- h) To make maximum use of existing national and regional institutions for education and capacity building and to find ways of strengthening these.

These activities have been numbered from the general to the specific, but the logical line of approach would be in reverse order. It is important to build on existing national and regional initiatives, to strengthen these initiatives and from there to try and enhance the participation in IAHS's commissions and activities.

Members of the Working Group:

- Prof. Xia Jun (Chair)
- Dr. Eric Servat (Vice-President, IAHS)
- Dr. Elango Lakshmanan (Vice-President, IAHS)
- Prof. Denis Hughes (Former V-P, IAHS)
- Prof. Graham Jewitt (Liaison with WaterNet)
- Prof. Hubert Savenije (Past President, IAHS)
- Prof. Gunter Blöschl (President, IAHS)

4. Coming years programme on IAHS- Panta Rhei in developing countries

- *China - Sri Lanka Symposium on Climate Change Adaption, Environment and Health. July 4-7. Beijing*
- *The Second IAHS Panta Rhei International Workshop on Water System Knowledge Innovation and its Practices in Developing Countries, November 20-22, 2017, Gorgan, Iran*
- *18th WaterNet/WARFSA/GWP-SA Symposium in Namibia, 2017*
- *The Third IAHS Panta Rhei International Workshop on Water System Knowledge Innovation and its Practices in Developing Countries, June 16-17, 2018, Xian, China*