

# REVIEW OF GLOBAL FRIEND ACTIVITIES

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The FRIEND project now involves 100 countries world-wide, located in eight regional FRIEND groups in: Northern Europe, the Alpine and Mediterranean region (AMHY), Southern Africa, Nile Basin, West and Central Africa (AOC), the Hindu-Kush Himalayan region (HKH), Asian-Pacific region and the Caribbean (AMIGO). Each regional group is run independently within the framework of the International Hydrological Programme of UNESCO. The organisation of FRIEND conferences, global FRIEND publications and co-ordination between groups is organised by the FRIEND Intergroup Coordination Committee (FIGCC), which meets biannually. The Chairman is Eric Servat the coordinator of the AMHY FRIEND. The last meeting took place in Koblenz, Germany in July 2004 and the next meeting will be held in Cuba in December 2006. FRIEND continues to grow worldwide with interest shown in Central Asia and the Persian Gulf and Caspian Sea areas. A possible new Mesopotamia FRIEND group has been discussed. The South American region will join the Caribbean group to form a Latin American & Caribbean group. The AMHY FRIEND considers the present structure of the group inefficient and the benefits of forming a Mediterranean group and a Balkan and Black Sea group is being evaluated.

FRIEND research globally covers a diverse range of topics, including low flows, floods, variability of regimes, rainfall/runoff modelling, processes of streamflow generation, sediment transport, snow and glacier melt, climate change and land-use impacts. Research interests are developed at a regional level, in response to local issues and priorities. This has been achieved by establishing international hydrological databases of time series and spatial data and by establishing international project groups, which exchange models and techniques and apply a common approach to the analysis of data over different hydrological regions. Countries supply data to FRIEND on a voluntary basis, and all participants have free access to this data providing it is used for FRIEND research. Examples of recent activities amongst the regional FRIEND groups are listed below:

In Northern European FRIEND a major activity the last three years has been linked to the Low Flow group through the EC funded project ASTHyDA that has included two workshops, a study course and the publication of a text textbook on Hydrological Drought – Processes and estimation methods for groundwater and streamflow. Two courses on low flow and drought based on the results from the ASTHyDA project are planned for 2005 and 2006 and are

part of the education and dissemination programme of the Northern European FRIEND Low Flow group. These courses will be in partnership with the Asian Pacific and HKH FRIEND groups.

The main AMHY FRIEND activity in 2003 was the organisation of the international conference Hydrology of the Mediterranean and semi-arid regions in Montpellier. The international conference in Ohrid, Macedonia in May 2004, supported by AMHY FRIEND, re-launched the topic of eco-hydrology which could be taken up as an active topic in the AMHY group. HydroSciences Montpellier, with the support of UNESCO, will organize an International Seminar in Montpellier in November 2005, in the frame of the FRIEND program. Two research papers have been invited from each of the FRIEND groups and this will improve the understanding of the science and capacity building challenges in different regions of the world.

Western and Central Africa (AOC) FRIEND now has six projects coordinated by different institutions – low flows and the dynamics of groundwater, the dynamics of matters flux, variability of water resources, modelling and ungauged basins, eco-hydrology, and database and web-site. In the future, encouragement will be given for scientific exchange on the Internet, meetings will be organised for the coordination of themes and a document will be produced on the work of the AOC FRIEND group members.

Southern Africa FRIEND now has 12 members, of which Mauritius is the latest addition; it is hoped that Congo will be the next. A major report was published by UNESCO in 2004 on the second phase of the regions research and capacity building activities- Southern Africa FRIEND Phase II 2000-2203, Ed. Meigh J and Fry M, Technical Documents in Hydrology no 69.

The Nile FRIEND has been very active holding four training workshops in Tanzania; Ethiopia; Kenya and Egypt including low flow and drought analysis. It has been suggested that participants of the Nile low-flow group should take part in the training workshop in Bangkok in November to help the transfer of knowledge, teaching tools, etc. It is planned to hold a Nile FRIEND international conference in Egypt in November 2005.

The research groups of HKH-FRIEND are working on water resources, floods, deglaciation and water quality issues. There is also a growing interest in environmental flows and ecosystem health. A new HKH-FRIEND website has been established, which not only provides information about the group's activities but also is the internet platform for the Regional Hydrological Data Centre (RHDC). A major report on research and capacity building in the region was published by UNESCO in 2004: Hindu Kush – Himalayan FRIEND 2000-2003 Ed. Rees G, Technical Documents in Hydrology No 68. The current themes for the next phase of Asian Pacific FRIEND match the floods and low flows of other regions

A pilot project to share the implementation of FRIEND AMIGO, AMHY and AOC databases and web-sites has started. This is an initial collaboration of three groups. When the system is ready, other groups can add their databases. In parallel the web pages of these groups will be developed. Also, the development of a METADATA Catalogue of global FRIEND data by the Global Runoff Data Centre (GRDC) is planned. Publication of a 4th volume of a Catalogue of Rivers in Southeast Asia and the Pacific is planned.

Every four years international FRIEND conferences are convened to bring together international hydrologists working across the FRIEND programmed and scientists working in related fields. The Fifth International FRIEND Conference will take place in Havana, Cuba 27 November – 1 December 2006 and will provide an opportunity for a meeting of low flow project participants from all the FRIEND groups.