DEWFORA news

Issue 01/ 2012

Prosperous 2012 to all!

Dove from the Nile basin

Dear Reader,

Welcome to this first issue of the DEWFORA newsletter.

For those unfamiliar with the project, the full title from which the acronym has been derived can help understand what the project is all about: improved Drought Early Warning and FORecasting to strengthen preparedness and adaptation to droughts in Africa. The principal aim of this EU-FP7 project is thus to develop a framework for early warning and response through drought impact mitigation for Africa. After this first year the project is now well under way, and initial results are starting to be established. These include analyses of current drought capabilities and drought response across Africa, as well as an assessment of the ability to predict meaningful drought indicators at seasonal time scales. It is these and other results that will be discussed at the forthcoming second General Assembly in Sharm-El-Sheikh, Egypt. The project advisory board, consisting of lead scientists in the field will join the discussion. This meeting will be held at a crucial stage in the project, the start of the second year of the project.

We sincerely hope that this newsletter provides an interesting update on where the project currently stands, and we look forward to updating you on its progress in forthcoming issues of this newsletter.

Micha Werner & Sophie Vermooten (Project Coordinators)

Picture Showing drying water point


Basin Updates

Limpopo

The Limpopo Basin is one of the areas in Southern Africa that has succumbed to the effects of droughts; rendering it as one of the drought prone areas in the region. Shared by South Africa, Botswana, Zimbabwe and Mozambique, the basin is home to approximately 14 Millions souls.

The DEWFORA project in this region of the world will focus on the flow of information during drought early warning. The Limpopo is therefore anticipated to pilot the application of DEWFORA's drought early warning framework. Hence, in close collaboration with other stakeholders in the region, improvements in the institutional framework and procedures will be suggested and implemented, building on the technical developments.

In 2011, several activities were conducted as part of the DEWFORA project in the Limpopo basin that include the inception meeting of the Limpopo case study that was held in Gaborone, Botswana. The meeting brought together partners from JRC, GFZ, UEM, WaterNet, and WRNA. The gathering paved a way for the finalisation of the Limpopo inception report. During the year, WaterNet presented the DEWFORA project to a number of partners including the SADC meetings of Ministers, the Challenge Programme on Water and Food family as well as COP 17 delegates. 2012 is set to be even more eventful as the piloting phase is scheduled in the basin.

Niger

The Niger River is the third longest river in Africa (4180 km) and its basin (2,117,700 km2) encompasses nine countries in West and Central Africa. About 30% of the basin is located in Mali, one of the poorest countries in the world. The main economic activities in Mali are agriculture and fishing. The agricultural sector employs about 80% of the work force, even though less than two percent of the land is arable. For this reason, livelihood and welfare in Mali depends largely on the timely onset and intensity of the annual monsoon. The aim of this case study is to provide a climate projection for the region to strengthen preparedness to droughts and in this way improve future food security .

The particular activities in this case study will be:

Application of a mesoscale distributed eco-hydrological model combining hydrology and agriculture (and other vegetation types).

Pilot the drought preparedness by predicting future hydrological and agricultural drought risk through climate projections. The drought risk will be identified using the vulnerability maps and climate predictions of meteorological and hydrological drought hazard using model outputs.

Basin Updates

Nile

The Nile is one of the world's great assets. Throughout history, the river has nourished livelihoods, an array of ecosystems, and a rich diversity of cultures. It is widely known that water management in the basin has historically been a controversial issue and cause of tensions between the countries. The DEWFORA project will focus on the eastern part of the basin that account for about 70% of the water reaching the delta. As one of the case studies of the project, the area will provide and test ground for the improved tools for droughts warning and prediction of the effect of climate change on drought risk in the region.

In the first year of the project (2011) there were some delays due to the political situation in the area. Nonetheless, the inception report for the Blue Nile area has been submitted which has included the description, drought management practices, detailed case study approach and methodology and the proposed activities and workplan for the Eastern Nile basin. In the second year (2012) three main activities have been planned; the first one starts in January and needs about 6 months to test the available drought forecasting methods at the NFC, so as to ascertain whether they are meteorological or hydrological. The second activity will be to use the improved indicators from the project's third workpackage, to evaluate the chosen method(s). The third activity is to pilot this method(s) to identify the effects of climate change on drought risk and this activity is expected to start in the last quarter of the year.

Oum Er Rbia

With 14% of the total population of Morocco, the Oum Er Rbia is of strategic importance. Economic activities in industrial hubs like Tadla, Doukala and the inshore zone of Casablanca-Safi rely heavily on water from this basin. The Oum Er Rbia basin with its 15 dams for a surface storage of about 5 billion m^3 account for more than 30% of the total national storage. The basin is home to other activities that include irrigated and rainfed agriculture, mining, agro-food processing, hydro-power generation and numerous large manufacturing industries.

2011 saw most of the DEWFORA project activities mainly oriented toward the review of historical drought episodes; drought warning actions, mitigation and adaptation strategies.

And the review of existing hydrological, meteorological, agricultural and socio-economic data, data from remote-sensing.

Hence, an inception report for the basin was drafted with the baseline information that will inform the other work packages for a smooth implementation of the DEWFORA project in the basin.

Worth mentioning was also the establishment of a stakeholder platform through visits, discussions and continuous contact with the relevant ministries, the Oum Er Rbia basin agency (ABHOER), the national institute of Agronomic Research as well as the provincial directorates of Agriculture. It is anticipated that 2012 will yield even greater results for the DEWFORA.

Events and Announcements

DEWFORA

Management Team ,Advisory board meetings and General Assembly, 6-10 February, 2012, Sharm El-Sheikh, Egypt.

Management Team meeting, August 2012, Delft, The Netherlands.

General assembly, Management Team meeting, February 2013, Gauteng, South-Africa.

Others

Third GEOSS African Water Cycle Symposium , 27-29 February, Libreville, Gabon.

6th World water Forum, 12-17 March 2012, Marseille, France.

Planet under pressure, New knowledge towards solutions, 26-29, March 2012, London, UK.

EGU-General Assembly, 22-27 April 2012, Vienna, Austria.

Others

Earth summit, Rio+20, 20-22 June, 2012, Rio de Janeiro, Brazil.

World Water Week, 26-31 August 2012, Stockholm, Sweden.

FANRPAN dialogue, September 2012, Dar Es Salaam, Tanzania.

Discover the DEWFORA consortium: for each issue of the Newsletter 2 partners will be presented

Partners Profile 1: DELTARES (The Netherlands)

The DEWFORA project is coordinated by Deltares. Deltares is an independent, institute for applied research in the field of water, subsurface and infrastructure. Throughout the world, they work on smart solutions, innovations and applications for people, environment and society. Their main focus is on deltas, coastal regions and river basins . All Deltares contracts and projects, whether financed privately or from strategic research budgets, contribute to the consolidation of our knowledge base.

In close relationships with 3 partners, one in Europe (UNESCO-IHE), one in Northern Africa (NBCBN), and one in Southern Africa (WRNA) Deltares leads the coordination team. URL : www.deltares.nl

Deltares
Enabling Delta Life

Partners Profile 2: CSIR (South Africa)

The CSIR is one of the leading scientific and technology research, development and implementation organisations in Africa. Science and technology services and solutions are provided in support of various stakeholders, and opportunities are identified where new technologies can be further developed and exploited in the private and public sectors for commercial and social benefit.

CSIR brings extensive experience in climate research to the consortium, particularly research in climate impacts.

More info on www.csir.co.za

CSIR
our future through science

SADC Southern African Development Community – Towards a common future
WATERnet
Building capacity for Water Resources Management in Southern Africa

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