

**Action in the Upper East Volta!**  
By Marc Andreini

The Volta Basin is now enjoying a lot of attention. It is part of the IUCN initiative to foster good governance of the water resources in the basin, a GEF Project on Integrated Management of the Volta River Basin, and one of the most active benchmark basins in three international research programs: our Water and Food Challenge Program, the Comprehensive Assessment on Water in Agriculture and the combined Niger/Volta European Water Initiative.

The Upper East part of the basin will be the site for: (a) ongoing work by the GLOWA Volta Project (GVP); (b) two of the Challenge Program Water and Food projects—the Small Multi-purpose Reservoir Ensemble Project (SRP), and the IFPRI/ZEF Integrating Governance and Modeling Project; and (c) the Ghana Water Resources Commission's White Volta Pilot Study. Personnel from all four projects will all be working in the Upper East simultaneously and in collaboration with each other. The information and insights gained on district-level integrated management of water will be communicated to the participants in these allied activities as all four projects proceed. Therefore, the projects are well placed for dissemination of results and future impacts on policy.



**Portrait of the SRP Project Leader: Marc Andreini**

Marc Andreini proposed, and is now leading, the Small Multi-purpose Reservoir Ensemble Project. He is an American citizen with over 24 years experience as an engineer and planner. He has gained experience in the United States as well as Morocco, Ghana, Tanzania, Zimbabwe and Botswana. In California, he did test tank work for the Ocean Thermal Energy Conversion Project and worked as a geotechnical engineer. He also conducted research in solute movement in New York and earned his PhD in hydrology from Cornell University in upstate New York. Marc has worked on water projects in Morocco and Botswana and done shallow groundwater irrigation research in Zimbabwe. He was also at one time a physical planner with the UNHCR helping NGO's to establish refugee camps in Western Tanzania. In his free time Marc restores old motor cycles—we are told by close colleagues in Ghana that parts of several bikes can be found all over his house. With typical modesty though, Marc did not want us to tell you about his motor cycle passion, because he thinks other people (such as Hugh Turrall) are the real motor cycle experts... (since Hugh also likes racing them!).

Marc came to the Volta as the Ghana Coordinator of the GLOWA Volta Project, working for the Development Research Center of the University of Bonn (ZEF). The GLOWA Volta Project (GVP) is developing a science based Decision Support System (DSS) for the management of the water in the Volta Basin ([www.GLOWA-Volta.de](http://www.GLOWA-Volta.de)). The GVP is working closely with the Water Resources Commission of Ghana to provide science-based decision support to the WRC's White Volta Pilot Study. After IWMI became a partner in the GVP, Marc moved from ZEF to IWMI, where he is still managing the GVP and now also the SRP project.



**The SRP Project (CPWF project # 46)**

The Small Reservoirs Project (SRP) begins in the Volta, Limpopo, and Sao Francisco Basins where groundwater supplies are often severely limited and pumping costs are prohibitive. Despite the stigma often attached to dams, the importance of small reservoirs as the only technically viable form of distributed storage in many areas of the world is now increasingly appreciated. In Africa, thousands of poor communities rely on small reservoirs for reliable water supply and improved food security. The SRP will develop a design manual, or tool box for the design and use of small reservoir ensembles. Guidelines and design methods will be presented to help planners assess impacts of density and connectivity on small reservoir systems. Hydrological, economic, institutional, health, and ecological factors will be considered. A new website [www.smallreservoirs.org](http://www.smallreservoirs.org) is up and running, and will be developed more fully as the project proceeds. As a first output, the project hopes to produce a manual for assessing the number and storage capacity of small reservoirs using satellite imagery later this year.



## CPWF Newsletter Issue 5 - July 2004, p.4 and 5

### News from the Sao Francisco Basin

At a meeting in Brasilia at the Embrapa headquarters, directors and key researchers of six Embrapa National Research Centers involved in the Sao Francisco basin met to discuss the way forward for CPWF SF Basin Activities. Sebastiao Barbosa, Embrapa International Cooperation Coordinator told us, *"We hope to see broader participation of Embrapa in the CP activities very soon—partly as a result of the new committee's action and also as a result of stakeholders engaged during the CPWF SC visit to Brazil in March."*

Ricardo Brito, SF Basin Coordinator informed us that important decisions were made at the meeting. Firstly, a six-member Committee was created to help/support the SF basin coordination in the CPWF (the composition of the Committee includes researchers from six EMBRAPA research centers, considered relevant to the SF basin), they are:

Camilo L. T. Andrade (EMBRAPA Maize & Sorghum)  
Lineu Rodrigues (EMBRAPA Cerrados)  
Luis H. Bassoi (EMBRAPA Semi Arid)  
Heitor L. C. Coutinho (EMBRAPA Soils)  
Claudio C. Buschinelli (EMBRAPA Environment)  
Luis C. Galindo de Bassoi (EMBRAPA Coastal Flats)

Secondly, a Deputy/Associate Coordinator was named—Dr. Luis H. Bassoi ([lhbassoi@cpatsa.embrapa.br](mailto:lhbassoi@cpatsa.embrapa.br)), to help the Coordinator in his work. The newly appointed Committee will work together with the Coordinator.

### New IDIS prototype ready for testing

By Pierre Marchand



A lot has happened since the last contribution of the Integrated Database Information System (IDIS) Team to the CPWF Newsletter. In early May key findings from the online, anonymous data management survey were circulated and approved by users two weeks later. This survey covered the following domains: data and data exploration, metadata, GIS and remote sensing, mapping, modeling, support and administration. Key findings were formatted as a prioritized list of requirements sorted by an agreement percentage between users. For example, 100% agreement for statement A meant that 100% of the respondents identified statement A as "essential" or "very essential". Through this survey, users clearly called for an easy to use, reliable, exhaustive, updated, well protected and well supported information system. Although such requirements generally apply to most information systems, the prioritized list of requirements resulting from the survey clearly established priorities for specific components of the system. For example users called for access through Internet, i.e., not Local Area Networks (LAN), the ability to download and upload GIS vector data in multiple formats instead of a single format. They also do not want outputs of model runs to be directly available as data in the system. As no such survey had been carried out earlier this was a great opportunity to build an agreement between users over the core requirements of the system that they wanted. These requirements were used as constraints to design and implement a data sharing infrastructure fully dedicated to satisfying users.

## CPWF Newsletter Issue 5 - July 2004, p.4 and 5

As the IDIS team is following an iterative system development approach the first implementation step is to translate these requirements into a prototype to be evaluated by users. A prototype is a "proof-of-concept" demonstration model used to prove feasibility and adequacy of a proposed architecture. Its goal is to validate the implementation of the users' requirements into a technological solution. A prototype is not a production system and should never be perceived as the 'final' system that users will have to use. Prototypes usually feature only a core set of functions and a reduced dataset. It is typically assumed that users don't need all the functions and all of the data to approve or disapprove the prototype. Since March 2004 the IDIS team spent 80% of its time preparing a rainfall dataset for the upcoming prototype evaluation by users. We integrated 700 plus files of daily and monthly rainfall data coming from 30 plus sources featuring rainfall data in 5 different units and 2 calendar references to deliver over 10 million records of rainfall data corresponding to more than 2,000 stations worldwide. Eight hundred thousand of those records were submitted by the Sao Francisco and Mekong basins as participation in the prototype. The aim of this dataset is to provide a consolidated dataset across basins and countries as well as demonstrating that such efficient and adequate integration is scalable. In the next issue of the CP Newsletter the IDIS team will invite you to participate in the prototype evaluation and explain its architecture.

### Swiss ReSource award for sustainable watershed management

Swiss RE, the reinsurance company, is inviting applications for the US\$100,000 ReSource Award for Sustainable Watershed Management. NGOs, private, scientific or public institutions and similar bodies are invited to participate in the tender. In order to qualify, they are asked to provide a proven track record in sustainability and project planning and/or management in a specific field of water and source management. The ReSource Award is worth US\$100,000 in total and is granted to one or several projects selected by an international jury. The prize money is to be used exclusively for project implementation.

For more information visit: <http://www.swissre.com/resource>

### CPWF participation

Stockholm Water Week is almost here! See what's happening there on Water-Food-Environment and the CPWF (below) and look out for more in the next issue.

#### World Water Week Events on Water-Food-Environment

##### Sunday, August 15

- Environmental Conflict Resolution in Andean Watersheds
- Integrated Water Resource Management for Livelihood Improvement in the Indo-Gangetic Basin
- Lessons Learned from the Dialogue on Water, Food and Environment
- Keeping the Yellow River Healthy

##### Tuesday, August 17

- Green/Blue Water Management Options for Crop Production in Semi-Arid Tropics (Workshop 4)

##### Wednesday, August 18

- Cascading and Effective Water Use in Catchment Systems (WS 5)
- Water for Efficient, Sustainable Fisheries and Aquaculture (WS 6)

##### Thursday, August 19

- The Comprehensive Assessment (CA): Identifying Opportunities in the Water-Food-Environment Nexus

##### Friday, August 20

- Investing in Africa's Water Future

##### Saturday, August 21

- SIWI/CA Seminar – Balancing Food and Environmental Security: Finding Opportunities for Improving Livelihoods



**ENVIRONMENTAL CONFLICT RESOLUTION IN ANDEAN WATERSHEDS**

- 10:00 Regional Overview: Challenges Facing Water Resources Management in the Andean Basins. *Hector Cisneros*  
10:30 Environmental Conflict Resolution Through Collective Action and the Use of Spatial Information. *Jorge Rubiano*  
11:00 Opening up the Dialogue: Balancing Indigenous Water Rights, Environmental Needs and Urban Demands. *Juan Carlos Alurralde*  
11:30 Panel Discussion  
12:00 Lunch

**INTEGRATED WATER RESOURCES MANAGEMENT FOR LIVELIHOOD IMPROVEMENT IN THE INDO-GANGETIC BASIN**

- 13:00 Land and Water Management for Sustainable Production in Upper Catchments of Indo-Gangetic Basin. *J.S. Samra*  
13:30 Ground Water Management and the Energy Water Nexus for Sustainable Development in Indo-Gangetic Plains. *Christopher A Scott*  
14:00 Management of Salinity in the Indus Plains. *Asad Qureshi*  
14:30 Policy, Institutional and Governance Issues of Ground Water and Livelihoods: A Case Study of North Bengal. *Tusbaat Shah*  
15:00 Exploring Options of Participatory Water Management for Livelihood Improvements in Indo-Gangetic Basin. *Alok K Sikka*  
15:30 Management of Flooded and Flood Prone Eco-systems in Lower Indo-Gangetic Plains. *Khabir Ahmed*  
16:00 Water Supply and Food Security – Alternative Scenarios for the Indo-Gangetic River Basin. *Claudia Ringler*  
16:30 End of Seminar

For more details visit <http://www.siwi.org/> and click on *World Water Week/Symposium*.

## Secretariat news

### Feedback from participants in the first competitive call of the CPWF

The CPWF Steering Committee (CPSC) asked the CPWF management team (CPMT) to evaluate the experience of the project proponents in the first competitive call. The management team did this through a survey that was mailed to all people that had submitted Concept Notes (CNs) and Full Proposals (FPs). The survey was prepared and conducted by Kim Geheb with inputs from the other CPMT members and presented to the CPSC meeting in Brazil in March 2004. Replies were received from 74 participants in the first call. A summary of the results of the survey is presented in table 1. As an overall conclusion it was noted that the satisfaction among NARES participants, and to some extent in ARIs (advanced research institutions), was considerably higher than among CGIAR participants. The reasons for this are being discussed with CGIAR colleagues - expectations about the new funding may have been very high in the CGIAR. The CPWF management team and steering committee put a major effort into procedures for full proposal evaluation, so we are disappointed that this was perceived as less fair than the evaluation of concept notes and will continue to strive for improvements. The survey provided other suggestions too that will help us run a good second call, maintaining what was appreciated (including secretariat responses to questions and a project preparation workshop), and improving the rest.1

One factor in the relatively low satisfaction of the respondents is likely to have been the disappointing level of funding that was available immediately after the first call was concluded

## CPWF Newsletter Issue 5 - July 2004, p.4 and 5

(and when the survey was held). Of the 99 CNs that were invited to prepare a Full Proposal, fifty were approved by the CPWF steering committee as of fundable quality, but immediate core funding was available for only the first eighteen to start negotiations to initiate the projects.

**Table 1: Summary of results of a satisfaction survey of participants in the first CPWF competitive call.**

Questions	CGIAR respondents	NARES respondents	ARI respondents
Intend to participate in future calls	62%	100%	55%
Good experience with the CP	29%	80%	64%
CN submission procedures straightforward	17%	70%	73%
FP submission procedures straightforward	22%	50%	33%
CN evaluation fair	57%	89%	82%
FP evaluation fair	32%	62%	33%
FP reviewers' comments useful or moderately useful	61%	77%	60%
No. of projects allocated funds was as expected	31%	36%	17%

Currently 25 projects have been funded from core funds, 2 more through restricted grants, and 5 more are under consideration for restricted grants (for a total of about 32 out of the 50 approved projects that are now funded). The CPWF target of funding at least 35 projects from the first call now appears achievable. In fact we hope to be able to go well beyond that!

The full report of the survey is available at the cp website [www.waterforfood.org](http://www.waterforfood.org). A group of IWMI staff members did additional survey work and analysis of the perceptions of the CPWF within IWMI. This will be summarized in next month's newsletter.

**Photo credit:** All photos, except Yellow River, Sanjini de Silva.