



50th Source Bulletin and IRC publications CD ROM - *Bridging the knowledge gap*

Please find enclosed in this 50th Source Bulletin a copy of the CD ROM with all the electronic IRC publications in Adobe Acrobat (PDF-format) that IRC has published since 1998. You can print titles of your choice from your personal computer.

We hope you can make use of these publications and share it with colleagues. Let us know if you use it, which titles and what for. If you cannot use the CD we hope you can pass it on to a colleague who can.

Although this is costly we are distributing the CD for a number of reasons.

1. In response to the signals from many readers in the developing world that downloading titles from the Internet is not possible, too complicated and costing too much.
2. This is the 50th Source Bulletin since we started in October 1998.
3. Next year we celebrate our 40th anniversary of information and knowledge sharing on WASH.
4. From 19-21 November, 2008, we will be hosting a symposium on sanitation, with an 'IRC at 40' party at the end.

15 September 2007 was another special occasion for me, when I celebrated 25 years of working at IRC. This has included writing hundreds of IRC newsletters with a variety of names and in different formats. My colleagues surprised me with a nice party and a special internal Source (Dick's) Bulletin.

Are there readers out there who can write to me or e-mail information about what Source Bulletin (or certain articles) have done for their work? If we get enough reactions, we might bring out a special readers' edition of Source Bulletin next year.

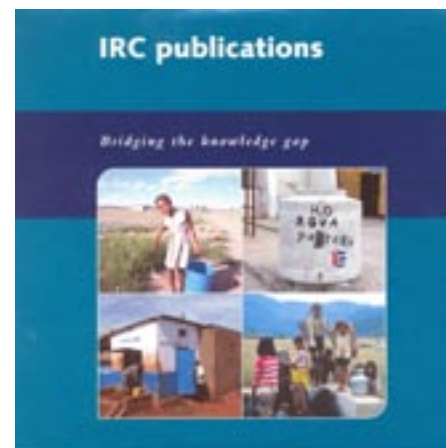
Editor, Dick de Jong, jong@irc.nl

Effectiveness of Indian incentives for rural sanitation questioned

It is vital to establish effective district level mechanisms to eliminate the practice of open defecation in India. In 2006-2007, a record number of 9,746 Gram Panchayats applied for selection under the Government of India's Nirmal Gram Puraskar incentive-based sanitation promotion award programme. However, fewer than half - 4,437 (45.5%) of GPs - were selected, the majority - 5,309 (54.5%) - being rejected during the verification process for not meeting the eligibility standards. "This huge number is a matter of concern", writes Action for Food Production (AFPRO) in a report to the Ministry of Rural Development on whose behalf they assessed applications

from villages in Satara and Nanded Districts of Maharashtra for 2006. AFPRO had deployed five multidisciplinary teams from its Ahmednagar office in Maharashtra to assess the applications.

Since the launch of Nirmal Gram Puraskar in 2003, central government provides incentives of between Rs. 50,000 (€865) to Rs. 50 lakh (€86,500) depending on population size, to local government agencies at state level – Gram Panchayats, Panchayat Samitis, and Zilla Panchayats – as well as to individuals and institutions for making sustained efforts towards achieving total sanitation.



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Criteria

The following can receive the Nirmal Gram Puraskar incentive:

- 1. Gram Panchayats, Blocks and Districts**, which achieve 100% sanitation coverage in terms of a. 100% sanitation coverage of individual households, b. 100% school sanitation coverage c. free from open defecation and d. clean environment maintenance.
- 2. Individuals and organizations**, who have been the driving force for effecting full sanitation coverage in the respective geographical area.

Not leading to sustainability

AFPRO questions the consistency of the whole initiative, which if unchecked would be limited to achieving short-term gains without leading to sustainability. Facilitating institutions, including district and block level bodies and local groups/organisations, have to take responsibility for such a large number of applications being rejected during the verification process.

The incentives should not be seen as a short term gain, but as a motivational instrument for all the institutions involved in promoting the total sanitation campaign. The States can also take appropriate measures at the district levels to check the applications from Panchayats, to avoid the high rate of rejection and loss of enthusiasm among communities, as well as the huge costs involved in the process.

"The day everyone of us gets a toilet to use, I shall know that our country has reached the pinnacle of progress."

Jawaharlal Nehru

The programme can be boosted by proper facilitation awareness raising at local level, promoting appropriate technological options and financial arrangement.

Emphasis should always be on achieving behavioural change rather than on the creation of infrastructures to gain the opportunity to achieve sustainability offered by the awards.

Key challenges

AFPRO identified the following challenges for the Central Government:

- Incentives to the Zilla Panchayats and Blocks are not being effectively used, requiring better coordinated efforts by officials of the district and block teams with elected representatives to facilitate effective community processes.
- Although the approach is successful in creating the demand for better sanitation in communities, there is a need to introduce credit facilities at local level to meet demand from poor families. The role of credit societies in the Satara District in extending support to individual households to construct sanitation options of their choice is a model worth replication.
- A serious matter of concern is the small percentage of economically weakest population left out of the process due to their inability to meet the cost of toilet construction.
- Disposal of garbage and animal waste, and maintaining cleanliness around water sources, especially near hand pumps/wells, should be given equal importance in deciding on Nirmal villages.
- Sanitation interventions beyond human excreta management also need attention. Unless animal excreta management, solid and liquid waste management are taken care of, environmental sanitation conditions cannot be improved.
- Garbage bins are being used at a few households in the villages visited, but by and large, garbage is being dumped on public land.



Nirmal Gram Puraskar awards ceremony, Photo: DDWS, India

- It is observed that constructing drains is the preferred option for liquid waste disposal, over other options such as kitchen gardens or soak pits. However, the treatment of wastewater collected through the networks of drains is not being given importance. Promoting kitchen gardens or plantations at these terminal points could add value.
- Proper water facilities are not available in the sanitary blocks of many schools, and as a result, hygienic conditions are not maintained in these schools.

In May 2007 the Minister for Rural Development announced that his ministry is formulating a similar incentive scheme for the rural communities for "Saving and Conserving Water" by rain water harvesting, water recharge and waste water management.

For more details: http://www.wesnetindia.org/fileadmin/newsletter_pdf/June07/Note_on_NGP.pdf

Contact: S.C.Jain, Programme Coordinator, AFPRO - Action for Food Production, 25/1A Institutional area, Pankha Road, D- Block, Janakpuri, New Delhi - 110058 INDIA, tel: 28525452, 28525412, 28522575 e-mail: scjain@afpro.org

Further details on the Nirmal Gram Puraskar visit the web site http://www.ddws.nic.in/tsc-nic/html/nirmal_gram.htm, e-mail: nirmalgrampuraskar@nic.in

Offline services aim to bridge cost and bandwidth e-gap

Many efforts aim to provide the water and sanitation community with free and open source resources on the World Wide Web. Internet water wikis abound, covering working knowledge, collaborative

communities, microfinance and a marketplace. We reported on eight such sites in our electronic Source Weekly (no 13 on 4 October 2007). Yet seven out of eight people worldwide are not able

to access the Internet, according to Cliff Missen, director of the University of Iowa's WiderNet Project.

Open source or open design-related initiatives

Most of the sites mentioned here focus on technologies, tools and projects. Only CD3WD is based in the developing world:

- www.akvo.org - Wikipedia and eBay for water, under development
- www.appropedia.org/Portal:Water - Appropedia
- <http://en.wikipedia.org/wiki/Portal:Water> - Wikipedia
- http://water.wikia.com/wiki/Main_Page - Waterwiki
- www.watsan.org/
- www.watsanweb.ch
- www.lifewater.ca/
- www.surrey.ac.uk/water-e/ - slow sand filtration
- www.irc.nl/page/30906 - CD3WD, offline wiki

In an editorial in the World Health Bulletin no. 85, April 2007 <http://www.who.int/bulletin/volumes/85/4/07-041475/en/index.html> Cliff Missen and Thomas Cook two scientists from the University of Iowa give a number of important arguments that need to be considered by everyone involved in bridging the digital divide in the Water, Sanitation and Hygiene sector.

"The costs of Internet connectivity in Africa can be hundreds of times higher than those in Europe or the United States of America. For "free" information on the Internet, institutions in developing countries must often buy larger-capacity connections than they can realistically afford. For example, some universities in Africa are spending as much as the equivalent of 20 full-time faculty salaries for a 2-megabit Internet connection that is then distributed to 500 to 600 computers, resulting in a costly and painfully slow connection for everyone."

African speeds 500 to 600 times slower than in Europe and US

Even where institutions and individuals have Internet access, the connection often has little practical value for more than a few elite users, Missen and Cook write. Their tests of actual Internet speeds indicate that, while users at large European or American universities enjoy Internet connections which deliver 17 million bits per second, users at African institutions operate at speeds that are 500 to 600 times slower (~30 thousand bits per second). They routinely test hundreds of Internet servers at African institutions and find that the typical server is online only about six hours per day and has frequent disconnects lasting days or weeks. As a result, it is impractical for instructors at these institutions to require students to search for information on the Internet. These instructors also rarely use resources like video, audio and multimedia tutorials because downloading these items is expensive, slow and unreliable.

Given all these circumstances, it seems wise to focus on technologies that work under current conditions, that make the best use of limited resources, and that can have immediate impacts where information is most urgently needed, Missen and Cook argue. They provided two examples that are part of the Global Health Campus Initiative being developed by the University of Iowa, WHO and other partner organisations.

Internet in a box, but at a cost

The E-Granary Digital Library uses a single hard drive to store and deliver over 700 CDs worth of Web pages and other digital educational resources (<http://www.eGranary.org>). This "Internet in a box" requires no external connection and provides users with the look and feel of the Internet, including a powerful search engine. The WiderNet Project currently has over 150 E-Granary Digital Libraries installed at institutions throughout Africa and Bangladesh, Haiti and India. Many of these devices are working over local area networks that are extremely fast and virtually free – capable of serving thousands of simultaneous information-seekers at speeds many times faster than even the best universities in developed countries.

The grants that helped develop and beta test the E-Granary Digital Library came to a close on January 1, 2006. The "Internet in a Box" is now offered at various cost options including one year of e-mail/Web-based technical support and subscription to the E-Granary Digital Library Update Service:

- a portable, stand-alone version for US\$ 750;
- a refurbished Pentium III eGranary Appliance hard disk for US\$ 1,000;
- a new Pentium4 server for US\$ 2,800 to users for a pre-existing LAN or as a stand-alone unit.

CD3WD, an offline wiki for the developing world

An example from the developing world is CD3WD "helping the 3rd world to help itself" which provides access to more than 800 free online publications both online and offline via CD-ROMs. CD3WD contains information on appropriate technology, soil and water, health, water and sanitation, and many more. The material includes OCW (open coursework) material from MIT, Johns Hopkins, and electronic downloads from GTZ, Germany, ITDG/Practical Action UK and Development Technology Unit (DTU), Warwick University UK. All the authoring and mastering is done by Alex Weir in Zimbabwe. CD3WD is in need of content contributors and of funding. See their web site: <http://www.cd3wd.com/CD3WD/>

"CD3WD has zero funds for airmailing CDs, and anyway airmailing from Zimbabwe is unbelievably expensive",

Weir writes. "If you do not have the bandwidth to download, then find someone who does and beg, borrow, cajole, threaten or bribe them to download for you.... Every capital city in every third world country has an ISP (Interwater Service Provider) and/or a cybercafe with enough bandwidth to nicely download CD3WD."

Both the E-Granary Digital Library and CD3WD are used by teachers in the developing world.

Barriers to online health information resources

A recent study in Zambia¹ showed that the health sector is suffering from the same barriers to Internet access. As there is no connection to the Internet in the RHCs (Rural Health Centres), online information resources are irrelevant at present. [...] Unless there are bridging projects that can translate access to information from the central level to the rural health workers, the benefits from these information access initiatives [HINARI, PERI etc] will be limited to the central level.

Bridging the access gap to vital information in the developing world, be it on Internet, CD ROM or on paper is a must. However, it costs more money for technology and local capacity strengthening to use information than the rich world currently makes available.

Contacts: E-Granary: University of Iowa, Library Service, 300 Plaza Centre One, Suite 371, Iowa City, Iowa 52242-2500

Cliff Missen at [missenc@wider.net.org](mailto:missenc@wider.net). The project also has web pages at www.wider.net and www.eGranary.org.

CD3WD, Alex Weir, e-mail: alexweir1949@yahoo.com, International Roaming Number: tel: +44 7923 387 396 (mobile - good for sms)

1. Current access to health information in Zambia: a survey of selected health institutions. Health Information and Libraries Journal. 2007; 24(4): 245-255 <http://dx.doi.org/10.1111/j.1471-1842.2007.00728.x> . Joost Hoppenbrouwer, Independent HIV/ Aids Consultant, the Netherlands & Christine Wamunyima Kanyengo, Medical Library, School of Medicine, University of Zambia, Lusaka, Zambia.

Dick de Jong

From the GWA Secretariat

Although I feel as if 2007 has just begun, it is already coming to an end, and it is time to wish the readers of Source Bulletin an enjoyable break at the end of December and the very best wishes for 2008. I hope that in the New Year we will all actively contribute to the improvement of the water situation of poor women, men and children!

Since the previous issue of Source, a lot has happened. The Water Week in Stockholm was a true networking event. This has also been true for the Regional Planning Workshops, where we always ensure the presence of a GWA staff member. In September it was Anglophone West Africa's turn, with a very big group of 70 participants meeting in Lagos, Nigeria. It was organised by PAVE, with Anthony Akpan in charge. Another highlight was the Central African ToT organised by Drocella Mugorewera in Kigali, Rwanda, with participants from Burundi, DR Congo, Cameroun and Rwanda. Here too the participants were very committed. Stanislas Bineli from Cameroun, was appointed as Regional Focal Point for Francophone Africa.

Other activities completed since the last issue have been the ToT for the Arab Region in Tunis, together with CAWTAR, the 4th International Conference on Environmental Education in Ahmedabad, India, The Cap-Net meeting in Brazil, and much more. All this can be found on our website: www.genderandwater.org.

The International Year of Sanitation was launched on 21 November in New York, and is about to begin. There is still massive work to be done, to make sure that the efforts of governments related to toilets and solid waste management will be effective. So there is no time to sit back. With the support of our members, GWA is ready for the extra efforts!

Joke Muylwijk, Executive Director.

Flowing upstream: The challenge of mainstreaming gender in water governance

On 6 September 2007, the Steering Committee of the Gender and Water Alliance elected Sara Ahmed as the new Chairperson of GWA. Here she outlines the challenges ahead.

I would like to begin by thanking all of you for your messages of support and letting you know how honoured I am to take over the position of GWA Chairperson from Ethne Davey. Ethne has shown us that leadership is not about power or position, but about being inclusive, listening to the voices of the quiet majority and above all being accountable to our members, partners and the larger constituency of poor women, men and children that we serve. Thank you Ethne for helping the GWA build a principled foundation.

As the GWA grows in size and scope of work, demonstrating that more equitable and gender-sensitive IWRM is not only possible but desirable, we continue to face several challenges. Let me outline some of these challenges on which I hope our work over the next few years will focus:

1. The challenge of understanding gender, and by extension gender mainstreaming, as not simply a question of numbers (women on water committees, for example) but of transforming, indeed setting the agenda for, our water policies bureaucracies and agencies.
2. The challenge of access to low-cost and culturally appropriate water and sanitation facilities, particularly for poor women and girls, in rapidly growing urban environments and emerging peri-urban centres.
3. The challenge of understanding climate change or variability and what it means for our water resources, food security and for the adaptive strategies of the poor and vulnerable, living in areas prone to increasingly intensive floods, pervasive drought or coastal surges and storms.
4. The challenge of HIV/AIDS and how it continues to devastate poor families, women and community water supplies, especially in the African continent.
5. The challenge of good water governance which is accountable

to poor women and men, ensures transparent decision-making processes and provides genuine space for the powerless to participate, voice their concerns and build empowered and sustainable community institutions.

As gender advocates, we work at many institutional levels with a very clear mandate that gender for us is more than simply the social relationships of power between women and men, but also encompasses a broader understanding of diversity and social inclusion. We bring a range of skills and experiences to our strategies on capacity building, knowledge management and policy advocacy, learning from each other in enabling environments that facilitate collaboration and partnerships. However, it is the silent majority around the world, the individuals, households and communities that we work with and to some extent 'represent', where I personally feel that the challenge of mainstreaming gender-equitable and sustainable water management lies.

As we move ahead in our goals, the GWA looks for your continuing support, for new and innovative ideas to take forward our agenda and for strengthening both our global and regional processes of water advocacy and community practice.

We hope that you will continue to engage in dialogue with us through our web-site, our listserv or by e-mail.

Thank you for your support.

Contact: Sara Ahmed, GWA Chairperson:
e-mail: sara.ahmed1981@gmail.com



Sara Ahmed

Tonga: Participatory approaches for rainwater harvesting

For many low-lying Pacific Islands, rainwater is the primary, and in some cases only source of freshwater. Very often the amount of water available for use is limited by the amount of storage and the quality of water is compromised by a lack of knowledge and understanding of how to operate and maintain rainwater harvesting systems.

In 2004 a Rainwater Harvesting Demonstration project was implemented by the Pacific Islands Applied Geoscience Commission (SOPAC) in collaboration with the Tonga Community Development Trust (TCDT) in Vava'u, Tonga. It aimed to improve the availability of safe water through the construction of storage tanks in the villages of Utungake and Matamaka through their Village Women's Development Programme (VWDP).

Before construction began, social and technical surveys including household questionnaires were carried out in the communities. The social survey executed through the VWDP allowed the programme to identify issues and constraints of using rainwater harvesting for the domestic use of water, while the technical survey assisted in deciding on appropriate designs and size of new tanks, and in defining the components for water quality testing and operation and maintenance.

Why use a participatory approach?

The social survey showed that the tasks of women and men differed significantly related to the management of their domestic water supply. Whereas the men were almost exclusively responsible for repairing tanks, gutters and buying and installing equipment, the women were in charge of the tank's surroundings (including, for instance, gardening) and of paying bills. Tasks undertaken by both women and men included the collection and transportation of water, laundry and cooking.

Local partners involved in the implementation of the demonstration project indicated that the focus of earlier Rainwater Harvesting programmes was very often restricted to the hardware of tanks and gutters with little attention paid to long-term sustainability. As many cases

in the Pacific have shown, providing only technical information does not lead to well maintained rainwater harvesting systems, nor does it ensure behavioural change. By contrast, the demonstration project decided to use a participatory approach.

What was done?

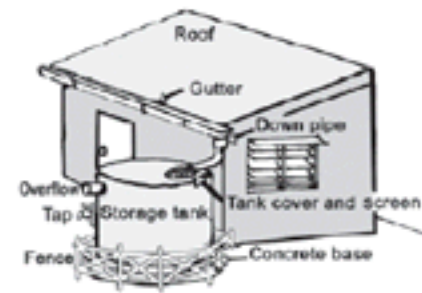
A Training of Trainers workshop was organised with TCDT and VWDP extension officers to strengthen their capacity to apply participatory approaches in the implementation of the Rainwater Harvesting programme. Participatory workshops were then organised in both villages. These assisted community members and the NGO to address both technical and social factors, recognising the importance of tapping into the existing knowledge, expertise and skills of men, women and youth.

Through participatory exercises, participants examined the different tasks and responsibilities of women, men and children in relation to water, something that had not often been considered before. The important connection between water safety and health was another new component in the rainwater harvesting programme.

The participatory approach, which included brainstorming sessions and role play, empowered the community in two important ways. It enabled women to participate in water resources planning and decision-making, with the result that both women and men were involved in learning by doing. Secondly community members (both women and men) were able to undertake the analysis, decision-making and problem solving themselves. This led to community members starting to make the link between the operation and maintenance of the rainwater harvesting systems, the resulting water quality and the health of community members.

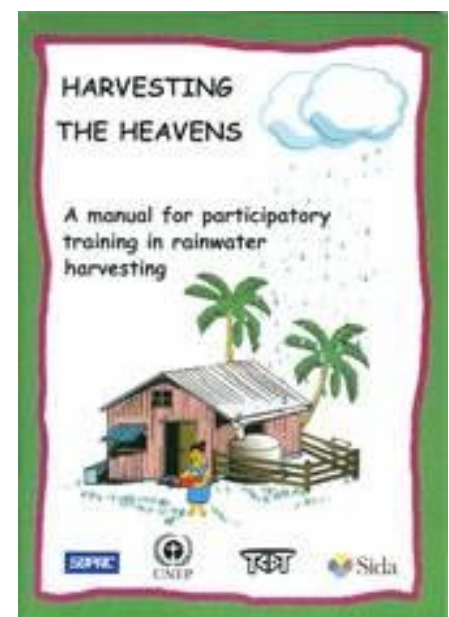
Results

After the construction of rainwater harvesting tanks in both villages, a participatory evaluation of the programme found that residents of both villages felt that a burden had been lifted from them as they no longer had to worry so much about where to get water. They also felt that the general health of the



community had improved and activities such as cooking, washing, cleaning and gardening had been made easier. Some families reported being able to expand their vegetable gardens and to raise more animals.

As a demonstration project, an important focus was to capture lessons learnt and to develop training manuals and guidelines. This information is being disseminated throughout the Pacific region with the aim of promoting rainwater harvesting as an option for domestic water supply and to make these systems sustainable. The Training of Trainers workshop and the resulting DVD, manual and guidelines "Harvesting the Heavens" was a very initial step in this process. Additional experiences should be carefully monitored. The project outcomes from this rainwater harvesting demonstration project including the Guidelines and Manual can be found at the following website: <http://www.sopac.org/tiki/tiki-index.php?page=CLP+Rainwater+Harvesting>



Author and Contact: Kamal Khatri, Water Sanitation and Hygiene Officer, SOPAC, e-mail: kamal@sopac.org

Impressions from WASH Practitioners' Marketplace

Streams of Knowledge, NETWAS and partners organised a Water Supply, Sanitation and Hygiene (WASH) knowledge fair in Mombasa, Kenya from 26 to 28 September 2007. The fair brought together some 150 WASH practitioners to discuss knowledge and capacity building needs. It was an opportunity for Cap-Net to link up with potential partners for WASH capacity building and at the same time bringing in network members from the region.

This first international WASH fair provided a unique opportunity for practitioners to explore creative solutions in dealing with the water and sanitation delivery challenges. We caught up with Eugene Dusingizumuremyi, from the Kigali Institute of Science and Technology (KIST) who attended on behalf of Nile-IWRM-net.

Eugene presented "Enhanced Education, Training and WASH to meet Millennium Development Goals (MDGs)" in a session to about 94 participants from America, Europe, Asia and Africa.

He said that the best thing about the Fair was that it "brought to light some challenges and opportunities in WASH programmes via exchange of knowledge, experiences and case studies from different countries". As a first time participant to such an event, "it was beyond my expectations", he said. In response to what benefits attending this activity brought for KIST and Nile IWRM-Net he said: "A very interesting question. It was an opportunity to build network and partnership in WASH. It is very important because whatever is done via partnership and network is likely to succeed without any difficulty."

Eugene suggested that an annual event of this kind would be useful since it will give participants the opportunity to "exchange progress in WASH and to learn from each other via success and failures in different countries or continents".

Eugene felt comfortable with the participants who attended this event but proposes that the list of invitations should



Eugene Dusingizumuremyi

be extended to include government representatives, especially policy makers. "Governmental institutions involved in WASH should be part of this important event."

He said that the biggest challenge for WASH would be to deal with "cultural behaviour and lack of education." Eugene proposes to deal with these challenges through the implementation of "focused capacity building and behaviour change education".

Nile countries groundwater capacity building explored

Capacity building activities in Integrated Water Resources Management have largely focused on the development and exploitation of surface water resources despite the fact that most people in Africa depend on groundwater. Recognising this, Cap-Net has already supported investigations into the groundwater capacity building needs in West and Southern Africa.

Now, hot off the presses, comes a third study undertaken by the Nile IWRM-Net in

partnership with Cap-Net and the Federal Institute for Geosciences and Natural Resources (BGR).

This short-term consultancy, exploring the Capacity Actions in Groundwater Management Issues as an aspect of IWRM for the Nile Region, was led by Dr Muna Mirghani, a groundwater specialist based at the University of Khartoum's School of Rural Extension, Education & Development (REED). She worked closely with experts

in Burundi, Democratic Republic of the Congo, Ethiopia, Rwanda, Sudan and Uganda in the collection of data in each of these study sites.

Key areas of investigation were groundwater governance - policies, institutional and legal frameworks; development, operation and maintenance; and

analytical tools - resources exploration, assessment, prediction.

The research found that capacity building actions planned in the context of groundwater and IWRM must consider the enabling environment, enhancing sustainable water delivery in the groundwater sector and moving beyond individual to organisational capacity development.

Case studies suggest however, that activities ought to be more focused at the programme level. It was recommended that interventions should start or continue with local "capacity building institutions, communities, local government and groundwater sector users".

This is a good baseline to guide the capacity building activities of the Nile IWRM-net, although implementation would have to be based on national requirements at each research site.

For additional information on the report, contact Dr Muna Mirghani, e-mail: munamirghani@yahoo.de or info@cap-net.org.



Flood management partnership strengthens resilience

Floods have been part of people's lives throughout the ages. Besides being a destructive force of nature, they at the same time replenish water resources, wetlands and groundwater whilst often providing floodplain areas with rich soil and helping to maintain biodiversity.

Climate variability and change, with their consequences on the frequency and magnitude of hydrological events such as floods and droughts, pose great challenges. Governments have to assess and address this issue through their policies and strategies, while communities that are directly affected have to manage the impacts. Locally applicable adaptation strategies can strengthen the resilience of a community to these extreme hydrological events.

Cap-Net, partnering with the Associated Programme on Flood Management



(APFM), is implementing a series of capacity building activities for decision makers, local authorities and local communities responsible for managing rural and urban flood-prone areas. Their focus is on

addressing the issue of floods within the context of sustainable development and Integrated Water Resources Management (IWRM).

APFM (www.apfm.info) is a joint initiative of the World Meteorological Organisation (WMO) and the Global Water Partnership (GWP). Activities developed under the collaborative work programme between Cap-Net and APFM include training municipal authorities in Latin America in urban flood management, raising flood-management awareness amongst decision makers in Bolivia, India and the Nile Basin, and building community resilience to floods in rural Bangladesh. Capacity building materials related to these activities are being developed.

For more information contact: Joachim Saalmueller, APFM, e-mail: JSaalmueller@wmo.int or Kees Leendentse, Cap-Net, e-mail: kees.leendentse@cap-net.org.

Capacity building weeks for the Guaraní Aquifer

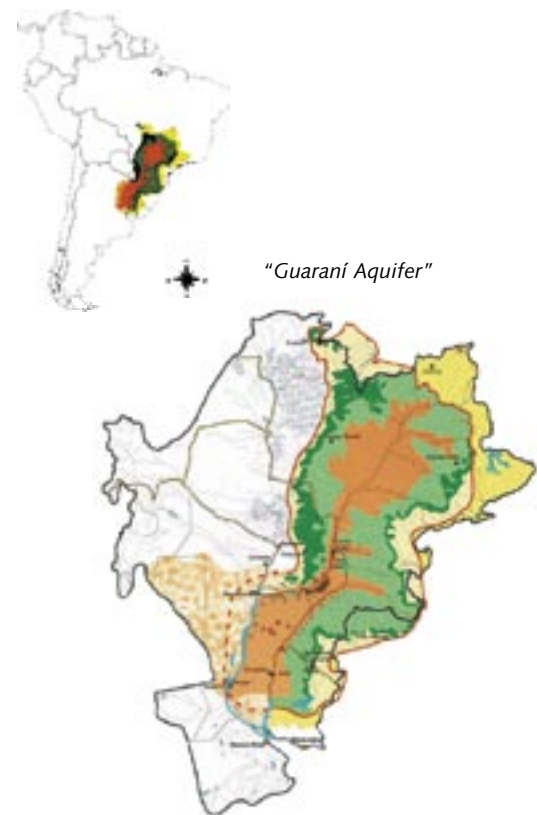
The Guaraní Aquifer is a huge underground water body of an estimated 1,200,000 km² shared between Argentina, Brazil, Paraguay and Uruguay. It is named after the indigenous population that inhabited the region. The Environmental Protection and Sustainable Development of the Guaraní Aquifer System Project (PSAG) aims to increase the knowledge on the resource and proposes a technical, legal and institutional framework for the coordinated management among the four countries while at the same time seeking the aquifer's preservation.

A joint programme between Cap-Net and PSAG results today in a series of capacity building weeks for people involved in management of this groundwater resource shared between Argentina, Brazil, Paraguay and Uruguay. Trainers of the networks in the region, LA-WETnet, CapNet-Brasil and ArgCapNet have developed training

materials on the relation between IWRM and groundwater management.

The tailor made capacity building weeks consist of training workshops for "agents of change" at the professional level, a short course for operators, an awareness event for the general public and a one day course for decision makers. Six of these events are planned, one each in Paraguay and Uruguay and two in Brazil and Argentina. It is expected that in total around a 1000 people will have benefited from the events.

Damian Indij, coordinator of LA-WETnet, says: "the Cap-Net contribution in this programme has resulted in a very positive response from the side of the GEF Guaraní Project (PSAG), and the leverage effect has been substantial. Not only is there a commitment from the participating projects but the outreach through the project's pilot areas is having a strong multiplier effect."



Communication tools freely available online

Cap-Net together with MetaMeta Communications has developed a resource web site on water related training and education communication materials. The site is freely accessible and filled with useful tips for presentations, communication tools, tutorials for the use of common

media and software, a picture database, etc. It aims to be a base for communication resource materials for organisations that provide training or knowledge transfer in water management, or become involved in water awareness activities. Although initially developed by Cap-Net and MetaMeta

in partnership, involvement, support and content contributions are welcome from other partners.

Have a look at the site at www.knowwiththeflow.org, and let us know what you think.

Water and Sanitation Resource Centre established in Uganda

The Resource Centre of Uganda idea was born in 2002 with support from IRC. It was first hosted by SNV (Netherlands Development Organisation), then UWASNET (Uganda Water and Sanitation NGO Network) and is now being supported by a consortium hosted by Network for Water and Sanitation (NETWAS) Uganda. The consortium also comprises UWASNET, Uganda Rainwater Association (URWA) and WaterAid.

The consortium has a vested interest in contributing to products and services of the Resource Centre to generate and disseminate information and knowledge for all sector players. It has a steering committee of 15 members who represent the interests of sector stakeholders and guides the development of the resource centre. The WATSAN Resource Centre will therefore serve as the central information and knowledge management hub for the sector.

Support from SNV

The Resource Centre consortium members have asked SNV to support the shaping

and formalisation of the structure and roles of the consortium including a binding mechanism to achieve:

- A representative resource centre for the sector backed by an appropriate structure and an effective business plan;
- Clearer role definition amongst the stakeholders in the consortium and steering committee;
- Increased participation and contribution of stakeholders to the resource centre.

SNV with its aim of strengthening the capacity of local organisations to fulfil their mandate more effectively and efficiently, had already given assistance in setting up the Resource Centre, promoting activities, developing its business plan, facilitating steering committee meetings and brokering knowledge and contacts. SNV has pledged financial support for a six month pilot as the Resource Centre sets out to become the central information and knowledge management hub for the sector.

On the 26th of July 2007 at SNV offices in Bugolobi, a Memorandum of Understanding was signed between SNV and the four consortium member organisations. In particular SNV will support:

- Revision and update of the business plan 2006-2008;
- Clarifying Resource Centre governance structures and mechanisms;
- Compiling and finalising the business plan and governance agreement.

The expected outputs of this support are:

- Enhanced relevance;
- Greater participation and contribution by key stakeholders;
- Clearer roles and responsibilities for consortium members, including the development of a Consortium Management Team;
- Enhanced information sharing with districts and grassroots organisations to enhance access to clean water and sanitation.

Achiro Brenda, NETWAS-Uganda, Plot No.1 Norfolk Gardens, Lower Kyambogo, P.O. Box 40223, Kampala, Uganda, www.netwas.org

Honduras: MoU signed for networking for knowledge management on WASH

RAS-HON (Red de Agua y Saneamiento Honduras) and IRC have signed a Memorandum of Understanding for a five-year programme of increased collaboration to disseminate good practice and for advocacy and institutional strengthening. This is a result of an earlier high-level commitment in the country for knowledge management to increase the sustainability of water, sanitation and hygiene services (see <http://www.irc.nl/page/30678>). This collaboration is part of IRC's focused regional work for 2007-2011.

RAS-HON is a national network with 70 members at the national level and seven decentralised chapters. It is a well recognised network with a strong institutional base and ample representation from public, civil society and international cooperation sectors. The strength and level of consolidation of the regional chapters varies - some have only recently started.

RAS-HON has three strategies: the promotion of information management and dissemination of good practices, advocacy and institutional strengthening. An RAS-HON committee is responsible for implementing the information management strategy and has a good track record in elaboration and disseminating information products through its website, newsletter (with regional versions) and regional workshops that inform the sector about modernisation and a new institutional framework for WASH.

RAS-HON approached IRC in 2005 to support them with the Resource Centre concept. The network is piloting a decentralised Resource Centre in the Litoral Atlantic region with the aim of supporting capacity development for communities and local service providers. Existing knowledge and information needs are being assessed to identify information gaps in a systematic manner, so that an agenda can be developed to make information and knowledge better accessible and to develop new local knowledge where needed.

Regional sharing and learning

RAS-HON is collaborating regionally with national institutions in Guatemala, Nicaragua, Honduras, and El Salvador and development agencies in the Red Regional de Agua y Saneamiento de Centro América (RRAS-CA). One of the objectives of RRAS-CA is to facilitate the exchange of information on approaches and technologies for better access to WASH services.

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Support activities October 2007

IRC support work to the Honduras network in October 2007 included:

- A regional workshop in La Ceiba on local WASH governance and capacity development in the Litoral Atlantic region.
- Following-up with RAS-HON and the Recourse Centre on ongoing activities and implementation of the joint action plan.
- Supporting RAS-HON in hosting a national seminar on Governance in WASH.
- Supporting RAS-HON in documenting and systematising results from the local WASH governance and capacity development workshop and the national seminar.
- Detailed planning for future activities including following up a process documentation workshop in Poland.
- Discussing and supporting RAS-HON in finalising a request to NUFFIC (the Netherlands Organisation for International Cooperation) for support in implementing tailor made courses.

A joint evaluation of RRAS-CA and PAS in 2006 by the Water and Sanitation Program (WSP) and the Swiss Development Cooperation (SDC) revealed that these networks have been successful in sharing lessons for better sector performance. To some extent, the national networks act as a national clearinghouse for the sector and they also validate information. The national networks are frontrunners in testing websites, video- and e-conferences, for better exchange of lessons learned. Important drivers for the information management and knowledge management functions of these networks are the increased demand

for innovative approaches and for better access to information about the sector by government and development agencies.

Right now, the regional RRAS-CA is going through a critical time as both SDC and CASCADE are ending financial support. National water and sanitation networks cannot see any added value for RRAC-CA in addition to their own activities. The regional WSP will fund a consultancy to help RRAS-CA re-engineer their set-up and formulate three bankable programme proposals. They have requested IRC support for the information management and knowledge management components.

IRC symposium 2008: Governance and partnerships for sanitation of urban poor

Urban sanitation faces many challenges such as extreme poverty, high unemployment, high population (and housing) densities, water scarcity and lack of infrastructure. These are compounded by opaque and ineffective urban planning mechanisms, lack of legal land tenure, inadequate finance, technological challenges, poor governance, and so on. IRC is planning to address these issues during a three-day symposium from 19-21 November 2008 linking its 40th anniversary with the International Year of Sanitation. The title is **Governance and Partnerships for Sanitation and Hygiene in Informal Settlements and Peri-Urban Areas**.

The IRC Symposium 2008 will explore the challenges around urban sanitation for the poor and will present good practice examples, with an emphasis on partnerships and governance.

Focus and objectives

The focus of the symposium will be on innovative governance and partnership solutions to address the challenges of sanitation delivery in informal settlements.

The objectives of the IRC symposium 2008 are two-fold:

- It will provide a platform to share good practices in the field of improved urban sanitation for the poor through partnerships and/or improved governance. The symposium will focus on approaches that have been tried at scale or show strong potential for scaling up. The symposium will seek to identify factors that contribute to scaling up.
- The symposium will formally close the International Year of Sanitation 2008 for the Dutch water and sanitation sector and will synthesise experiences

News in Brief

Sanitation: high return on investment says WaterAid report

The global return on investing in low-cost sanitation is projected at roughly US\$ 9 for every US\$ 1 spent, with even higher returns for universal coverage, says a report¹ launched on 1 October 2007 by the University of California, Los Angeles (UCLA) and WaterAid. Failure to implement the Millennium Development Goal (MDG) targets for water and sanitation would have an economic cost of around US\$ 38 billion (EUR 26 billion) per year, with sanitation accounting for 92% of this value, the report adds.

The above figures are drawn from earlier work published by the World Health Organization. The Water Aid report suggests that further research on economic impact should include wider sensitivity analysis, considering different choices of technology, further investigation of the role of convenience time, and other important indirect benefits such as girls' school participation and environmental effects.

1. Kemeny, T. (2007). Sanitation and economic development: making the case for the MDG orphan. London, UK, WaterAid, 47-49 Durham Street, London SE11 5JD, UK

Burkina Faso: sanitation shambles

In Bobo-Dioulasso and Ouagadougou sanitation and poverty are clearly linked according to Mahamadi Porgo, a community leader. "We can easily see that medical bills are higher among those who live in a filthy environment". The government says it lacks the money to provide proper sanitation systems to deal with household and industrial waste.

The government has started subsidising latrines for households. Despite the state covering nearly 50 per cent of the cost, the price, between 100,000 and 200,000 CFA francs (EUR 150-EUR 300), remains high for the majority. Six months ago the National Authority for Water and Sanitation (ONEA) has started a sanitation programme in a few districts in Bobo-Dioulasso, and since then the situation has improved for the households living in those areas.

A 4 billion CFA franc (EUR 6 million) treatment station is under construction to collect all liquid waste from households, administrative and industrial units and to use the treated water for agriculture.

Source: IRIN, 26 Oct 2007

Handwashing: new water-saving technology introduced in Rwanda

Minisante, the Ministry of Health of Rwanda, is promoting the Canacla, a new individual and public hand-washing technology. It comprises of a small pot that is fitted with a water flushing mechanism similar to that used in indoor toilets. The user lifts a self-closing lever with their wrists, thus eliminating contamination that can occur when using taps and also saving water. For a single hand wash using an ordinary tap, a person can easily use 2 litres of water, compared to 0.03 litres when using the Canacla.

The Canacla was chosen for a trial in 2004 in Minisante after consulting with experts from the World Health Organization (WHO). Ministry employees also started using the Canacla at home. The results were so encouraging that Minisante is distributing a

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from the year, looking ahead towards further action to bring about change.

Target Audience

The target audience for the symposium will be practitioners and researchers, some of them existing IRC partners who have actual experience in the field of urban sanitation, and will include participants from the Dutch water sector.

Set up

The duration of the symposium will be three days with the final afternoon specially dedicated to the closure of the International Year of Sanitation in the Netherlands.

After an introduction of selected high quality keynote presentations, parallel case study based sessions will address conceptual issues that have been identified in a background paper. During the morning of day three, factors for scaling up will be identified and discussed.

A red thread through the symposium will be the urban poor, their lives, their problems, their hopes and dreams.

Background paper

To enrich the background paper, six leading specialists will be invited to produce an essay around a theme or issue that is deemed to be relevant for urban sanitation for the poor. The following themes have been identified:

1. *Local urban governance* - the intermediate level is of crucial importance for the delivery of sustainable sanitation services to the urban poor. Good governance is needed to ensure accountability, coordination, planning, gender and

social equity and so on. This essay will seek to answer questions such as: Who are the urban poor? Which stakeholders play key roles in ensuring good governance for the poor? What is their potential to contribute to appropriate and sustainable sanitation services? What are their limitations?

2. *Partnerships for sanitation for the urban poor* – urban authorities are unlikely to provide urban sanitation services at scale to the urban poor. Partnerships with small-scale service providers and communities show promise. However, partnerships and contractual arrangements are linked to the policy and legislative environment in general. The essay will focus on the question of how to formalise and regulate informal partnerships for service delivery, engage citizens, give equal chances to poor women who for practical and strategic reasons need employment near to their homes, and how to put by-laws and regulations in place and enforce them. Government has a key regulatory role to play. How successfully have they shifted from being providers to enablers and regulators, what instruments, approaches and mechanisms have been used and what can we learn from these?

3. *Dynamics of urban settlements* – poor urban settlements are not static but changing continuously. People seem to move in and out in apparent chaos. However, hidden underneath are strong structures, including institutions and processes and a culture of patronage that link different groups of slum dwellers to their leaders, the urban administration, and local politicians. This essay will describe the socio-political, demographical and geo-environmental processes behind the dynamics of urban settlements, and explore how these dynamics can hamper or enhance the delivery of urban sanitation services to the poor, and what could be done better.

4. *Innovative finance* – decentralisation of budgets is mostly lagging behind the decentralisation of authority and responsibilities. Small and medium cities struggle with financial crises on a routine basis. Given the low priority that is given to sanitation to the urban poor, innovative finance mechanisms are needed to mobilise the financial resources to provide them with sanitation services. This essay will outline the components that need to be financed in delivering urban sanitation

services to the poor, estimate the costs involved and argue for innovative finance mechanisms to mobilise resources. It will also address ways to identify the very poor, the kinds of assistance that they need for services to be sustained and examine the related issues of solidarity, equity and accountability. Corruption in sanitation programmes and ways to reduce it will also be covered.

5. *Urban sanitation technologies* – urban sanitation services for the urban poor demand technical innovations that are appropriate and affordable for different types of users and can be scaled up. Special attention will be paid to the lowest cost technologies, upgrading and self-build, with alternatives for those who cannot do their own construction. Different groups respond best to different technologies and designs and different information channels are needed to reach them. Amongst the problems that influence technology designs are high water tables, unstable soil conditions and lack of space. Toilets also need to be suitable for elderly and disabled people, for use by young children, and by women and adolescent girls. Eco-sanitation looks promising, especially in connection with urban agriculture, poverty reduction and environmental protection, but there have been many cases of resistance to scaling up this technology. This essay will describe the technical challenges of sanitation for the urban poor and give an overview of promising technical innovations and lessons learned on testing, piloting and scaling-up.

6. *The urban poor* are at the heart of this symposium, but often their needs, hopes and dreams remain hidden behind dry academic papers. We will invite four or five young people from the South to share their image of the urban poor and the needs, demands and approaches for the different kinds of poor people in terms of age, sex, location etc. in their own way.

7. There is room for one more topic – who has ideas? Partnerships, the urban periphery, legislation, gender and equity, etc.

Contact: Joep Verhagen, e-mail: verhagen@irc.nl



Villagers, district and central water professionals at learning workshop, Awassa, Ethiopia.
Photo: Dick de Jong

Jean de la Harpe : New local governance specialist at IRC

Jean de la Harpe is a South African who joined IRC as Senior Programme Officer on local governance for water, sanitation and hygiene (WASH) services. She is also leading IRC's Southern Africa Regional Programme. She has a Masters Degree in Management (Policy and Development Management) with distinction where she specialised in Environmental Management Governance frameworks. She is an institutional and strategic planning specialist who has provided policy and capacity building services to various agencies and institutions over the past 20 years, and to the water sector in South Africa in particular, over the past ten years.

Ms de la Harpe acted as a water services policy and institutional consultant to Department of Water Affairs and Forestry (DWAF), with an emphasis on decentralization, the provision of sustainable services, institutional arrangements for integrated water resource management, and the sector wide approach (SWAP).

She has worked intensively on water services local governance aspects since 1999 when she assisted the DWAF to define the governance role of municipalities in water and sanitation services. Over the years she has developed various tools to support local governments to assess their water and sanitation governance functions and to achieve a set of governance indicators.

Two new IRC books

T.H. Thomas and D.B. Martinson (2007). *Roofwater Harvesting: A Handbook for Practitioners*

Water professionals are becoming increasingly worried about water scarcity. The UN World Water Development Report of 2003 suggests that population growth, pollution and climate change are likely to produce a drastic decline in the amount of water available per person in many parts of the developing world. Domestic Roofwater Harvesting (DRWH) provides an additional source from which to meet local water needs. In recent years, DRWH systems have become cheaper and more predictable in performance.

The handbook is primarily focused on 'low-cost' DRWH in the 'humid tropics'. It



Jean has also developed sustainability guidelines for scaling up water and sanitation infrastructure and services (in both South Africa and Mozambique) as well as managed capacity building programmes to support the implementation of capital projects and programmes.

She has worked directly with municipalities, their peer networks and provided strategic support to the South African Local Government Association in identifying local government needs and support programmes.

She is the author of various publications, including financial accountability, water and sanitation services, water resource management and municipal infrastructure.

In 2007 she was awarded the Women in Water Award for Policy and Management by the Department of Water Affairs and Forestry (South Africa).

is deliberately specialised in geographical scope and target group, and more prescriptive than the good review of rainwater harvesting practice contained in John Gould and Erik Nissen-Petersen's 1999 book: *Rainwater Catchment Systems*

Free download: http://www.irc.nl/content/download/128067/348520/file/TP49Roofwater_07.pdf,
Price hardcopy: € 23.00

IRC (2007). *Towards Effective Programming for WASH in Schools: a manual on scaling up programmes for water, sanitation and hygiene in schools*

This manual deals with school water, sanitation and hygiene education. It describes many of the elements needed for scaling up programmes for water,

News in Brief continued

hundred Canacla samples to hospitals around the country. Minisante also plans to launch a media campaign to promote the method. At the same time the ministry wants to bring down the cost of the Canacla, from the present RWF 10,000 (EUR 12.80) for the conventional clay model, to RWF 1,000 (EUR 1.28). There is already a plastic version available for RWF 2,000 (EUR 2.56)

The Canacla was invented by Vanhercke, son of Dr Ben Vanhercke, a Belgian doctor in Dakar, Senegal, where it was first used. The Belgian NGO Courants N/S Solidaires is supporting the production of the Canacla in Morocco.

Contact: Courants Solidaires, Clos de la Jeunesse 13, 1340 OTTIGNIES-LLN, Belgium, Philbert Ciza, Ministry of Health, Rwanda, e-mail info@moh.gov.rw

Local governance: new research programme on water conflicts and cooperation in rural areas

The Danish Institute for International Studies (DIIS) is coordinating a new research programme on Conflict and Cooperation in Local Water Governance. It will focus on what the consequences are for the poor of increased water competition in the rural areas of developing countries. Danida's Research Unit for Development Research has approved funding of DKK 10 million (EUR 1.3 million) for a new research programme which during the next three years (2007 – 2010) will map conflicts and cooperation about water in five countries in Latin America, Africa and Asia, and analyse their consequences for the poor. The programme will be coordinated by senior researcher Helle Munk Ravnborg, DIIS. The research will be undertaken in collaboration with Danish as well as national and international partners in Bolivia, Nicaragua, Mali, Zambia and Vietnam. Research in Tanzania will also be coordinated with the programme.

Contact: Dr. Helle Munk Ravnborg, Head, Research Unit on Natural Resources and Poverty, DIIS, Denmark, hmr@diis.dk, <http://www.diis.dk/sw6255.asp>

Hygiene behaviours: insights from school children in Senegal

A recent field note¹ summarises formative research that looked at motivating factors underlying hygiene behaviours of Senegalese primary school children. Specifically, the research by the Hygiene Centre of the London School of Hygiene and Tropical Medicine looked at what motivates children in this age group to adopt hygienic hand-washing and toilet practices, and how this understanding can inform the design of simple yet effective sanitation and hygiene programmes in schools. Whilst school sanitation and hygiene programmes have existed for a long time, there has been no common route to designing programmes that have a lasting impact on hygiene behaviour both for children and their homes.

The researchers discovered some of the children's reasons for not doing what adults expect of them. We see how essential it is to systematically explore the child's point of view if we are to design effective hygiene and sanitation interventions for schools, and we explore how this can be done simply and cheaply.

1. Sidibe, M. and Curtis, V. (2007). Can hygiene be cool and fun? : insights from school children in Senegal. Nairobi, Kenya, Water and Sanitation Program - Africa (WSP-AF)

Contact: London School of Hygiene & Tropical Medicine, UK, Myriam Sidibe, myriam.sidibe@lshtm.ac.uk

sanitation and hygiene in schools while ensuring quality and sustainability. It is meant for government, UNICEF and other NGO staff responsible for programming WASH in Schools.

The manual is an update of the earlier, popular manual entitled Towards Better

Programming: A manual on school sanitation and hygiene education, published by UNICEF and the IRC in 1998. It contains many examples, most of which are drawn from a UNICEF-IRC pilot study for School Sanitation and Hygiene Education (SSHE) carried out in six

countries (Burkina Faso, Colombia, Nepal, Nicaragua, Vietnam, and Zambia).

Free download: http://www.irc.nl/content/download/128071/348559/file/TP%2048%20WASH%20Schools_07.pdf,
Price hardcopy: € 19.00

Resources and Events

Course

Good Governance for Sustainable and Pro Poor WASH Services. Delft, The Netherlands, 04-13 February 2008, Organised by: IRC International Water and Sanitation Centre

Purpose: This course provides a broad overview of local governance for sustainable water, sanitation and hygiene (WASH) services. It examines the different components of WASH services and what it means to operationalise local governance across these components.

The course is tailored to the needs of those facing implementation and capacity challenges in scaling up service provision to achieve full coverage. It applies the principles of good governance in the context of the interface between WASH services and water resources management, addressing the needs of the poor through multiple uses, and the challenges of sustainable services. The course intends to augment the understanding and skills of senior water sector officials and practitioners so that they are better able to achieve both good governance and sustainable WASH services.

Target audience: The programme is geared to those responsible for making WASH local governance work at a senior level, including policy makers, water services providers, local government officials, councilors, those providing planning and capacity support, project implementers, and other sector officials that interface with water services.

Course Fee: The course fee of EUR 1,800 includes tuition, lunch on training days, a one-day field trip, a multi-media package on CD-Rom containing all course materials, a file for course handouts and individual assignments, 2 relevant IRC publications and the Certificate of Completion.

Accommodation: Half-board (bed and breakfast) accommodation reservations have been secured at Hotel Leeuwenbrug

in Delft near to the training venue at an additional cost of EUR 72.00 or EUR 78.00 per night on a first come first serve basis. IRC can assist with bookings at this venue. However, this is optional and participants are welcome to arrange their own accommodation. The advised daily subsistence allowance in the Netherlands is EUR 125.00 per day to cover hotel accommodation and evening meals.

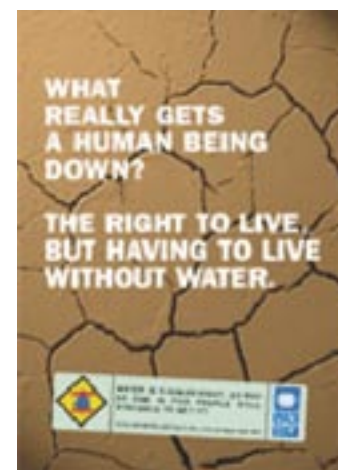
Contact: IRC

Publications

- Ferron, S.; Morgan, J. and O'Reilly, M. (2006). *Hygiene promotion : a practical manual for relief and development*. 2nd ed. Warwickshire, UK, Practical Action Publishing. 256 p. ISBN 9781853396410 Price: GBP 14.36 (EUR 20.57)
Order information: Development Bookshop, fax: +44 (0)1926 634502, or send an email: publishinginfo@practicalaction.org.uk

- Fonseca, C. (ed.); Adank, M.D. (ed.); Casella, D. (ed.); Jeths, M. (ed.); Linde, P. van der (ed.) and Dijkshoorn, B. (ed.) (2007). *Microfinance for water, sanitation and hygiene : an introduction*. Delft, The Netherlands, Netherlands Water Partnership (NWP)/ IRC

NWP, Westvest 7, Postbus 3015, 2601 DA Delft, Netherlands



- Sohail, M. and S. Cavill, S. (2007). *Partnering to combat corruption in infrastructure services : a toolkit*. (Partnering to combat corruption series / WEDC). Loughborough, UK, WEDC, Loughborough University of Technology. 228p. ISBN 978-1-84380-125-2. Price: GBP 19.95 (EUR 28.58)

WEDC, John Pickford Building, Loughborough University, Leicestershire, LE11 3TUUK, fax: +44 (0) 1509 211079, e-mail: WEDC@lboro.ac.uk

Conferences

The Sanitation Challenge: An International Conference on New Sanitation Concepts and Models of Governance. Wageningen, The Netherlands, 19-21 May 2008. Organised by: Environmental Policy Group and the Sub-Department of Environmental Technology of Wageningen University, in cooperation with Wetsus and LeAF, and the International Water Association (IWA).

Contact: Congress Secretariat, Lettinga Associates Foundation (LeAF), leaf@wur.nl

SOURCE Bulletin is published quarterly by IRC International Water and Sanitation Centre.
Editor: Dick de Jong (jong@irc.nl)

Contributors: Cor Dietvorst (dietvorst@irc.nl); René van Lieshout (Lieshout@irc.nl); Joep Verhagen (verhagen@irc.nl); Esther de Jong (estherdejong@gwalliance.org); Kees Leendertse (info@cap-net.org); Peter McIntyre (petermcintyre@btconnect.com).

IRC International Water and Sanitation Centre
P.O. Box 2869, 2601 CW Delft, The Netherlands

Tel. +31-15 2192939, fax +31-15 2190955, e-mail: general@irc.nl. Internet: <http://www.irc.nl>
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