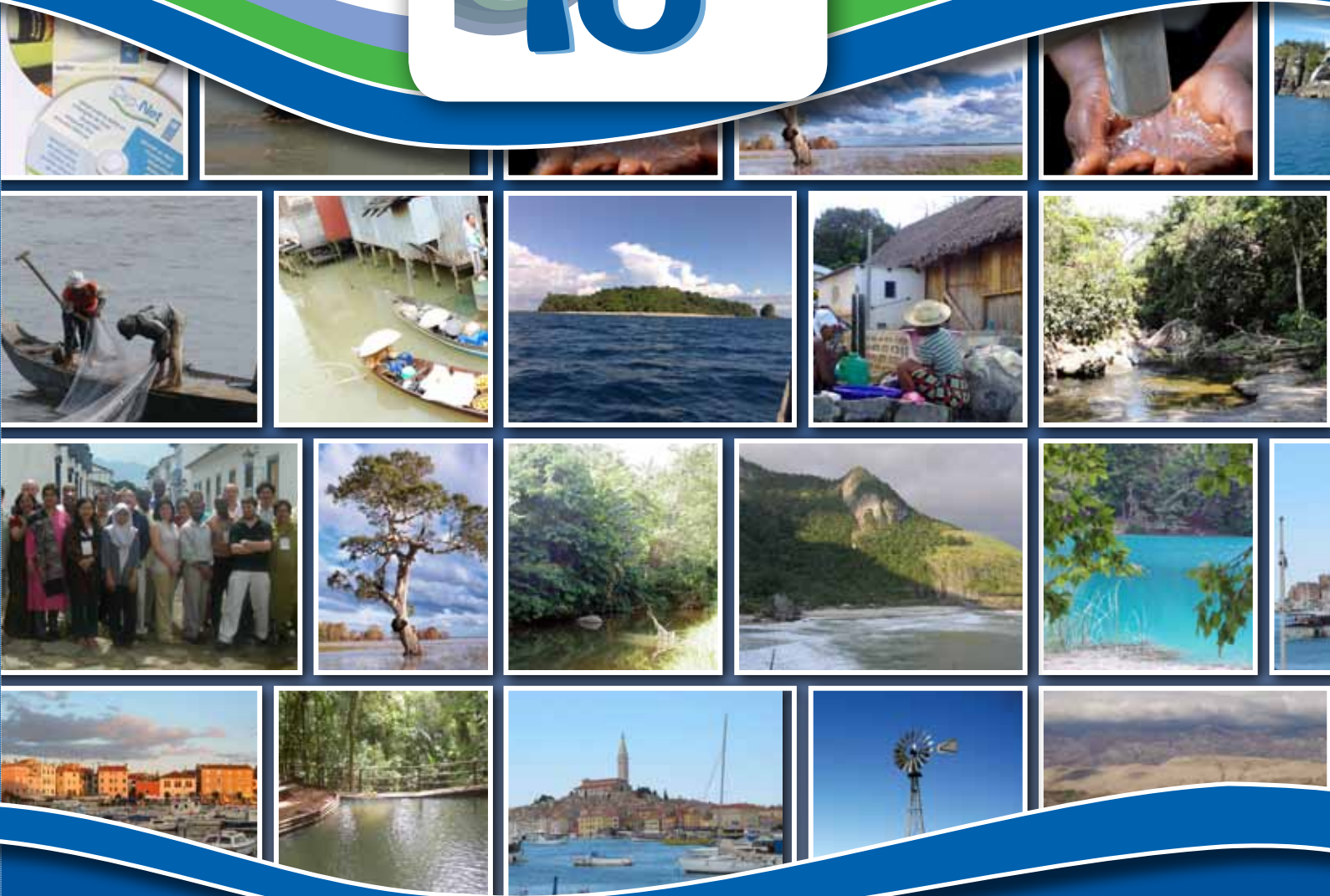


Cap-Net @10



Empowered lives.
Resilient nations.

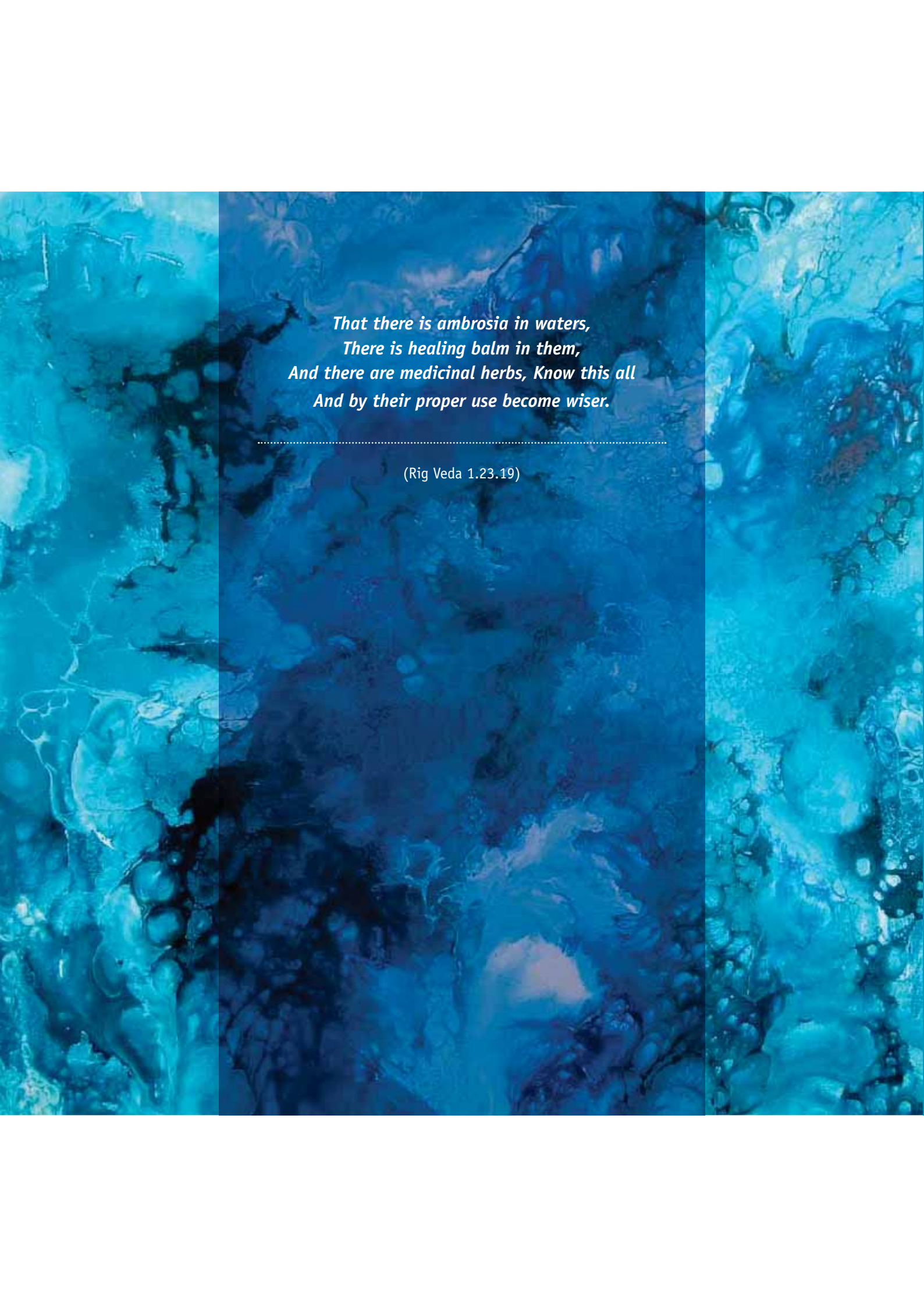


10 Years of Capacity Development in Sustainable Water Management



10 Years of Capacity Development in Sustainable Water Management

With contributions from Cap-Net associated networks, partners,
and thousands of capacity development participants from around the world



*That there is ambrosia in waters,
There is healing balm in them,
And there are medicinal herbs, Know this all
And by their proper use become wiser.*

(Rig Veda 1.23.19)

Cap-Net was conceived at the 2nd UNDP Symposium on Water Capacity Development in 1996. Six years later, in 2002, the United Nations Development Programme (UNDP) and IHE (now UNESCO-IHE Institute for Water Education) launched Cap-Net with funding from the Dutch Government. Since then Cap-Net has rapidly grown into a global hub for capacity development and networking in sustainable water management.

Cap-Net's strengths are its extensive outreach to capacity development institutions and its broad client base. Currently embracing 23 regional and country-level capacity development networks with memberships of hundreds of organisations, Cap-Net trains and educates water professionals in Asia, Africa, Latin America and the Caribbean. Partnerships with international organisations and global thematic networks ensure that comprehensive training packages and accessible training manuals bring together the best available knowledge for state-of-the-art capacity development. Cap-Net, together with partner organisations and networks, has developed 13 programmes on sustainable water management, on topics ranging from groundwater management, basin planning, flood and drought management, economic instruments to climate change adaptation. More programmes are planned.

Cap-Net rigorously adheres to the principles of local ownership of capacity development processes, working with partners and responding to demand. Guided by the needs

of countries and regions, in its first 10 years, Cap-Net has built a vibrant community of partners and networks working to develop capacity in water management.

Cap-Net's 10th anniversary is an opportunity to reflect on achievements and to look forward to meeting the new challenges that have emerged in the water sector. To address these challenges, Cap-Net is revising its strategy. The new strategy will focus on strengthening partner networks and meeting regional and national needs for capacity development. Cap-Net will engage in new areas making use of state of the art technology ensuring a large outreach to water professionals and capacity developers worldwide. Cap-Net's ultimate goal is to educate, train and share knowledge on water management at all levels.

This book gives a bird's eye view on ten years of capacity development in sustainable water management. It has been composed of contributions from all networks and their members, and our partner organisations.

An important basis of IWRM is that the many different uses of finite water resources are interdependent and should be considered together. The International Conference on Water and Environment in Dublin, Ireland in 1992 gave rise to four principles that have been the basis for much of the subsequent water sector reform and IWRM strategies.





Dublin Principles

Freshwater is a finite and vulnerable resource, essential to sustain life, development and the environment.

Water development and management should be based on a participatory approach, involving users, planners and policy makers at all levels.

Women play a central role in the provision, management and safeguarding of water.

Water has an economic value in all its competing uses and should be recognised as an economic good and a social good.

The first 10 Years

2002

- Cap-Net launched with funding from the Dutch Ministry of Foreign Affairs (DGIS)
- Hosted at IHE (now UNESCO-IHE Institute for Water Education)
- First network managers meeting held in Kuala Lumpur

2003

- Co-organised Water, Education and Capacity Building at the Third World Water Forum, Kyoto

2004

- Organised a workshop at the Commission on Sustainable Development 12, New York

2005

- Cap-Net Phase I ends with the number of geographic networks affiliated to Cap-Net at 21 and the reach of activities at 800 participants
- Organised a workshop at the Commission on Sustainable Development 13, New York

2006

- Cap-Net Phase II launched: government of Norway provided bridging funds; DGIS recommitted; and Sida joined
- European Union funded a three-year programme on capacity building in integrated water resources management (IWRM) in Africa and the Caribbean
- Cap-Net organised short courses at the Fourth World Water Forum, Mexico City
- Cap-Net organised the first Partners and Networks Market Place, Delft, The Netherlands

“Water is critical for sustainable development, including environmental integrity and the eradication of poverty and hunger, and is indispensable for human health and well-being.”

UN General Assembly Resolution 58/217, 9 February 2004, establishing the International Decade for Action, Water for Life, 2005–2015

2007

Secretariat moved to Pretoria, South Africa, hosted by the Water Research Commission (WRC)

2008

Network peer reviews and mid-term external evaluation showed that Cap-Net was on the right track

2009

European Union funded programme completed

2010

Cap-Net Phase III launched with Sida funding; DGIS recommitted in 2011

2011

First Cap-Net director, Paul Taylor, retired and Themba Gumbo appointed director

2012

Cap-Net organised an event on water law at Rio+20, Rio de Janeiro

Cap-Net strategy revised and linked to UNDP Water and Ocean Governance Programme



Harnessing the power of **networks**

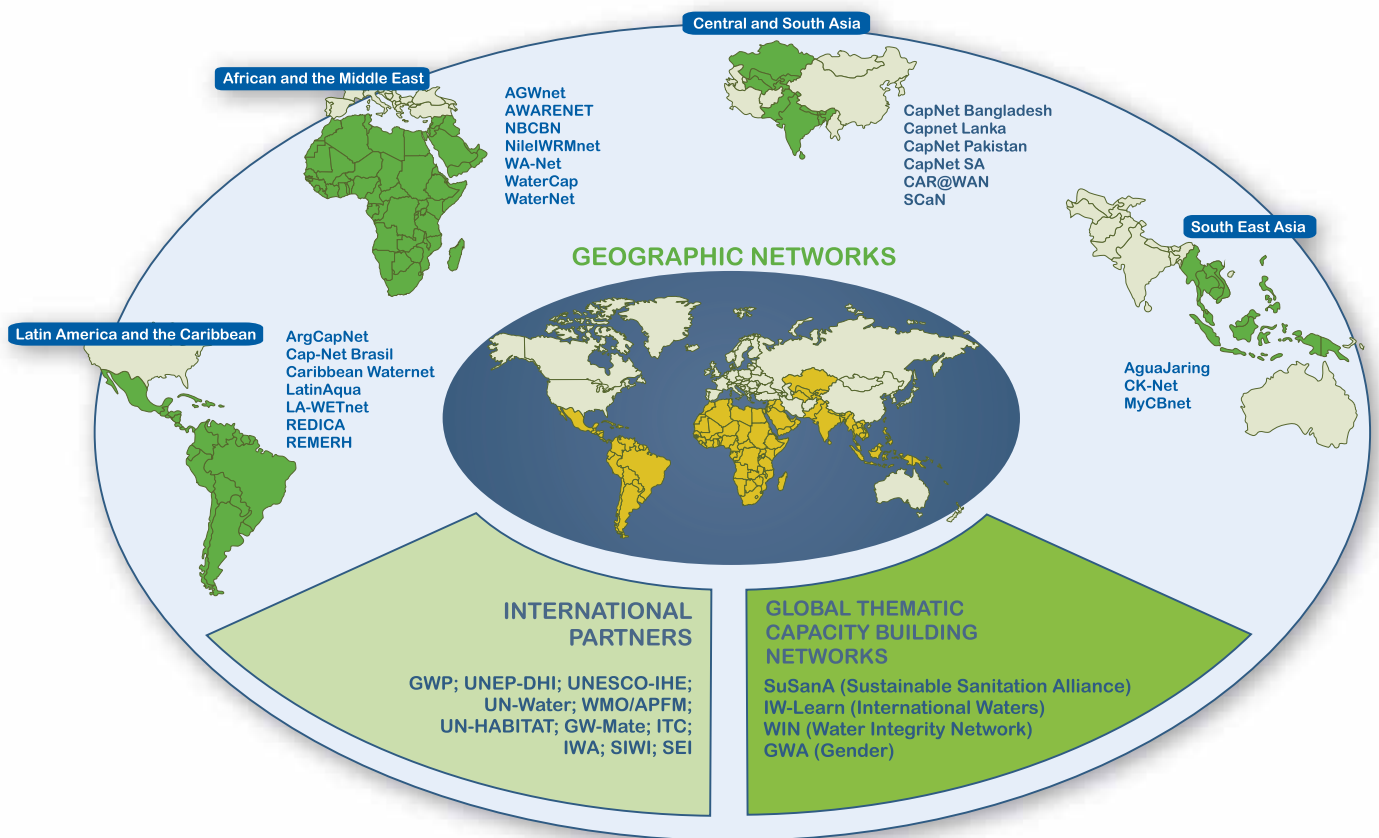
O water! You should certainly give us strength and
pleasure to face struggles.

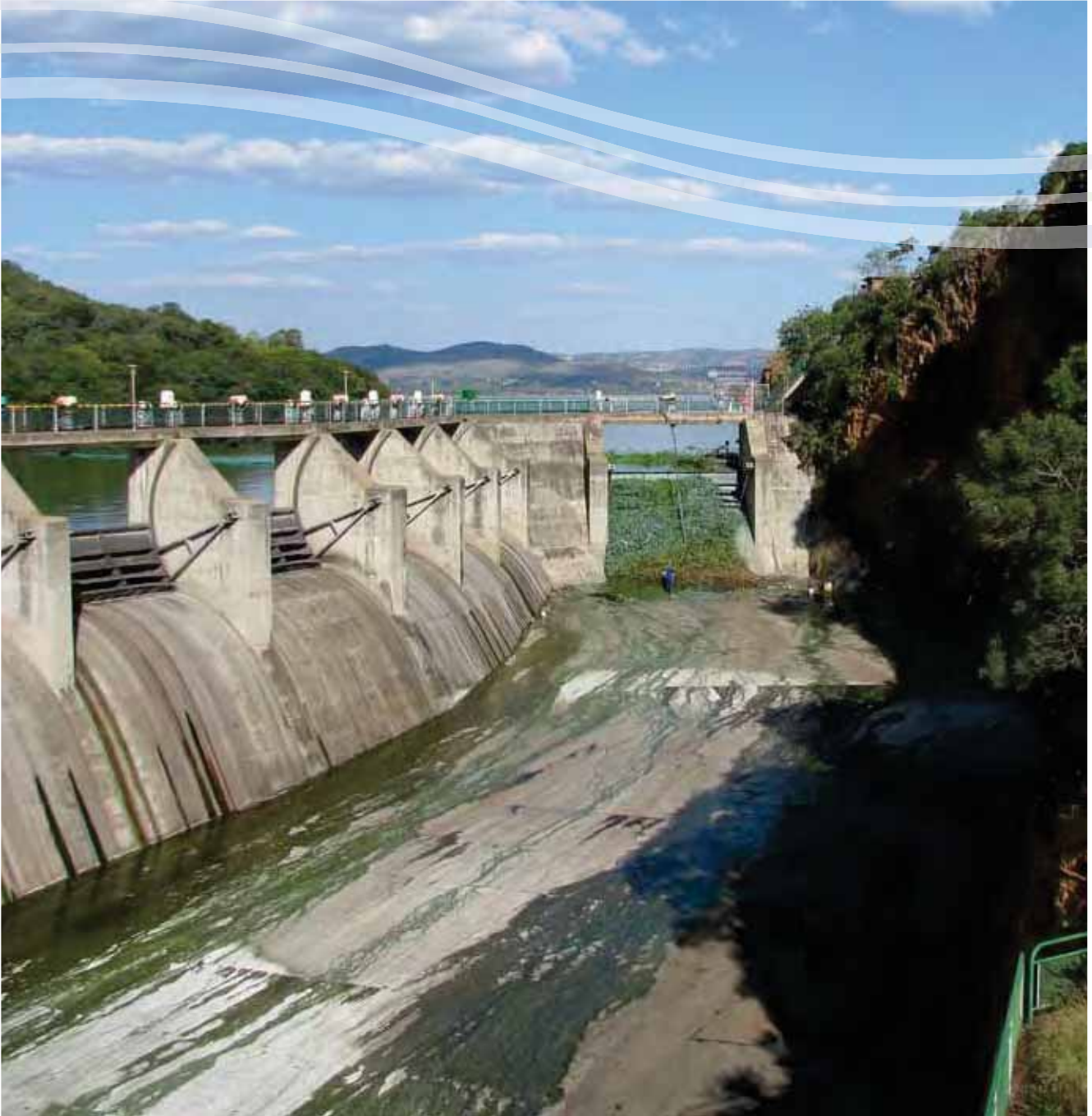
Please let me share your essence of welfare,
Like mothers feed their sons.

O water! We have come to you for same essence of
life for which your existence is there and through
which you have protected us.”

Atharva Veda 1.5.1-3

Cap-Net Global Network





Responding to demand for local ownership and home-grown development

Cap-Net works with networks across the world to develop capacity in sustainable water management. The programme provides support for managing, establishing and operating networks, and trains trainers to build the capacity of network members.

Networks are important in delivering capacity development for three reasons. They:

- Assemble skills and knowledge from many different disciplines and across disciplines;
- Build a critical mass of skills, enabling people to take action; and
- Rapidly develop, adapt and transfer knowledge.

Networks are widely recognised by both local and international stakeholders as important partners in capacity development. As they have a wide, multi-disciplinary membership they are able to identify capacity development needs, and to lead planning and fundraising, meaning that capacity development can be fully decentralised.

By 2012, 22 regional and country networks, and four thematic global networks had become affiliated to Cap-Net. The networks most recently affiliated are:

- LatinAqua, Latin America;
- SaciWATERs Cap-Net Network (SCaN), South Asia; and
- WaterCap, Kenya.

Another new network, CAR@WAN, Central Asia, was expected to join Cap-Net in late 2012.

Networks

Africa and the Arab Region:	Asia:	Latin America and the Caribbean:
AGWnet	AguaJaring	ArgCapNet
Awarenet	Cap-Net BD	Cap-Net Brasil
NBCBN	Cap-Net Lanka	Caribbean Waternet
NileIWRMnet	Cap-Net Pakistan	LatinAqua
WA-Net	Cap-Net SA	LA-WETnet
WaterCap	CAR@WAN	REDICA
WaterNet	CKNet	REMERH
	MyCBNet	
	SCaN	

“Capacity development starts from the principle that people are best empowered to realise their full potential when the means of development are sustainable, home-grown, long-term, and generated and managed collectively by those who stand to benefit.”



Africa and the Arab region

“Water can make an immense difference to Africa’s development if it is managed well and used wisely. Given clear policies and strategies and real commitments to implementation, we can use water to help eradicate poverty, reduce water-related diseases and achieve sustainable development.”

UN-Water/Africa, African Water Vision, 2001





Africa Groundwater Network (AGW-Net)

The AGW-Net was established to increase awareness of the potential and value of groundwater across the African continent, and to contribute to capacity development in the groundwater sector in Africa.

AGW-Net is an open, membership-based forum allowing groundwater scientists and other water sector professionals across Africa to interact

and promote capacity development and awareness of groundwater within the framework of IWRM. An assessment by AGW-Net determined needs for groundwater capacity development in Africa transboundary river basin organisations. Network members have been instrumental in developing training materials and rolling out training on groundwater and IWRM.

“The Africa Groundwater Network has become the meeting place for the African groundwater community. Wonderful opportunities arise from this type of networking, and we must work together to realise them.”

Richard Owen,
Groundwater Network

Arab Integrated Water Resources Management Network (AWARENET)

AWARENET members include over 80 leading water-related institutions in 18 Arab countries. Regional organisations, such as the United Nations Educational, Scientific and Cultural Organization-Cairo (UNESCO-Cairo), United Nations Development Programme Sub-Regional Resource Facility (UNDP-SURF), the United Nations Environment Programme, Regional Office for West Asia (UNEP-ROWA), the German Federal Institute

for Geosciences and Natural Resources, (BGR), and global networks such as Cap-Net and the Global Water Partnership (GWP) endorse AWARENET. The network pursues four thematic priorities: adapting to climate change in the water sector; protecting water resources from pollution; water efficiency (especially in the agricultural sector); and sharing water resources.



Nile Basin Capacity Building Network (NBCBN)

The NBCBN is a knowledge network that supports communities of practice in the Nile Basin, maintains a basin-wide water management knowledge base, and supports members to generate and implement joint research leading to tangible outputs.

NBCBN maintains a very robust knowledge map of water organisations, experts and communities of practice in the Nile region. One of the key themes of NBCBN research is improving forecasting and early warning systems to strengthen preparedness and adaptation to drought in Africa.



Supporting collaborative research in the Nile Basin

Over the last 10 years, a unique network has emerged in the Nile Basin that supports collaborative research among Nile water professionals. The Nile Basin Capacity Building Network for River Engineering is coordinated by the NBCBN Secretariat, with support from UNESCO-IHE and the Hydraulics Research Institute, Egypt. The network allows formerly isolated water professionals to collaborate. Such collaboration is unique in a region characterised by political tension, poverty and growing water scarcity, Agreement on use of the water resources of the River Nile will promote stable economic growth.

Source: NBCBN website

Nile IWRM Net

Nile IWRM Net has country chapters in eight of its 10 member countries in the Nile Basin. Most members are academic institutions or government water-use and management agencies. Other members include river basin organisations, water utilities, private companies and non-government organisations (NGOs). One of the strengths of the network is in basin

management.

“Networking under Nile IWRM Net leverages available capacity in the Nile Basin to promote IWRM for sustainable water resources planning, management and development.” Callist Tindimugaya, Nile IWRM Net

In 2007, Nile IWRM Net produced the Study on the Performance and

Capacity of River Basin Organisations: Tana River Basin Case Study, as part of a series of case studies for a global capacity development programme targeting river basin organisations. Later in 2011, Nile IWRM Net helped train staff in the Lake Tanganyika Authority to identify actions for adapting to climate change in the Lake Tanganyika Basin.

Improving the performance of utilities through water safety plans

Water utilities provide a good example of how working through institutions can quickly bring changes in water management. In 2009, Cap-Net, UN-Habitat, the International Water Association (IWA) and Rand Water trained water utility staff from Ethiopia, Ghana, Kenya, Malawi, Namibia, Uganda and Zambia in the Water Safety Plan (WSP) approach developed by the World Health Organization (WHO) and IWA. Teams of three staff were trained to form nuclei for action in nine water utilities.

Maalim Abdi works for the Mombasa Water and Sewerage Company Ltd, Kenya, which serves around a million people. As a result of lessons learned from the WSP training, he identified water sales points and water prices as potential health hazards. "We are improving their organisation to make the places where water is sold more hygienic...and to ensure that the operators pass the benefits of tariff subsidies to consumers. Without control, retail prices would be excessively high and would lead to the intended beneficiaries, most of whom are poor, opting for unsafe sources of water."



Southern Africa Network for Capacity Building in IWRM (WaterNet)

Among other things, WaterNet is well-known for a master programme in IWRM. From 2003, when the programme was first launched, up to 2011, over 250 students from 18 African countries graduated. Of these graduates more than 90% are still professionally active in the region, the majority being employed in government institutions and parastatals.

Watershed management agencies have asked WaterNet to do a significant amount of postgraduate research. The findings of this research have influenced the development of watershed management plans, for example management plans for the Lower Manyame River Basin and Mzingwane River Basin in Zimbabwe, and the Disaster Management Plan for the Limpopo River Basin.



WaterCap

WaterCap is a network that was established in 2010 to develop capacity in water resources management in Kenya. WaterCap works with local capacity development professionals and institutions, and draws on the expertise of members and their institutions to deliver capacity development activities.

One of WaterCap's main areas of work is developing capacity in river basin management. Activities aim to strengthen institutions that manage river basins by developing their

capacity to effectively use knowledge for sustainable, beneficial and equitable management. This includes enhancing participation in water management, objectively measuring the effectiveness of water management and encouraging the exchange of experience between peers. Working with the Water Resources Management Authority in Kenya, WaterCap has helped sub-catchment agencies to improve their operational plans, and to develop and apply IWRM indicators at the basin level.

West Africa Capacity Building Network (WA-Net)

WA-Net has 65 members in both Francophone and Anglophone West Africa. WA-Net has supported Global Water Partnership (GWP) projects by providing capacity development and facilitation for development of IWRM plans in five West African countries.

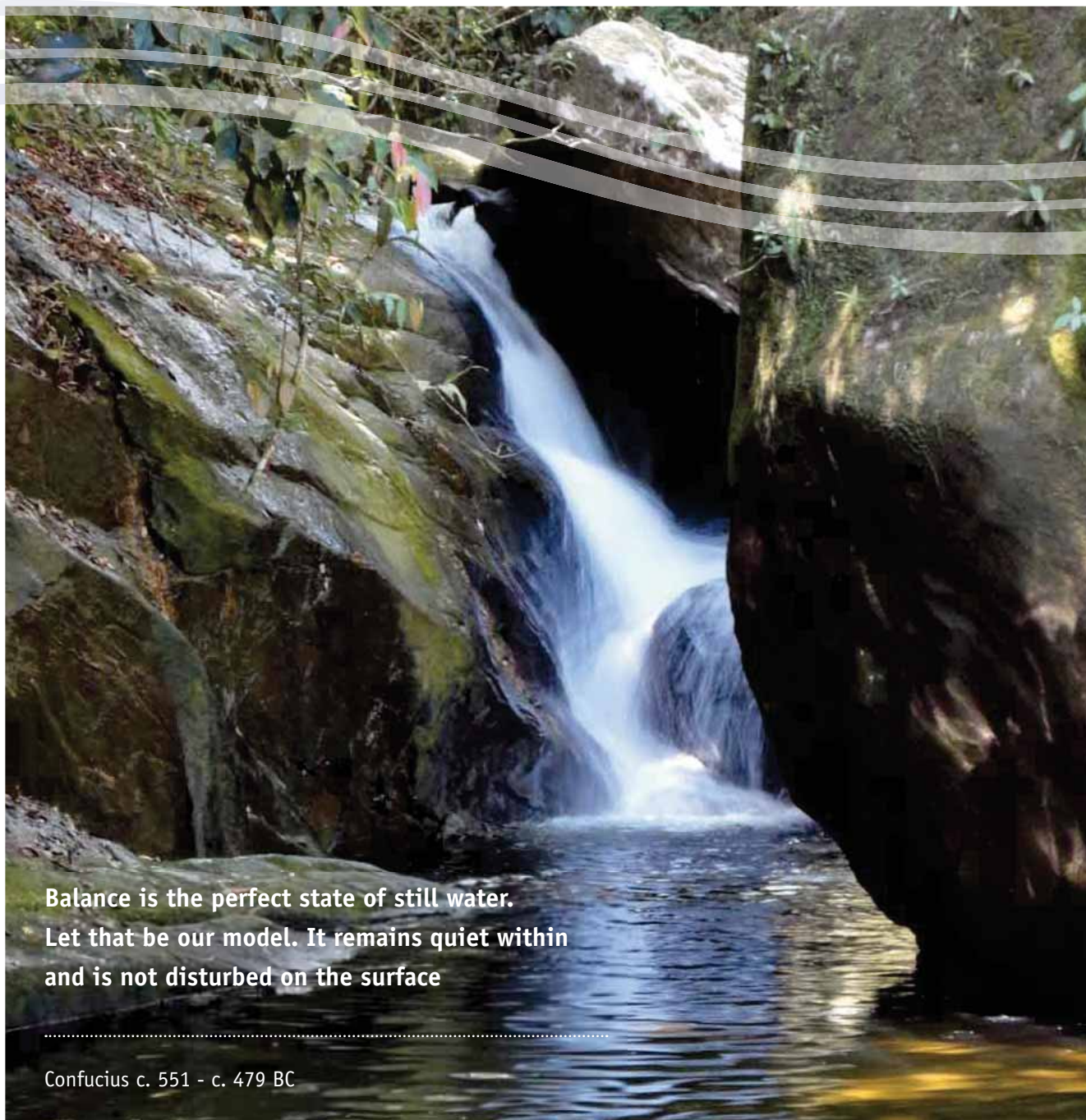
"Just as aquifers do not have political boundaries, neither do networks! To better understand aquifer systems, and indeed water resources management, we should tap into knowledge networks to effectively and safely manage world water resources." Martin Edivie, WA-NET

The network provides technical training for members of the Economic Community of West African States

(ECOWAS). Working with GWP and the UNEP-DHI Centre for Water and Environment, WA-Net is part of the capacity development programme helping seven countries in the ECOWAS region to incorporate climate change into national IWRM planning processes.

"The hydrology course at the University of The Gambia has been revised to incorporate not only the principles of IWRM, but Cap-Net's economic and financial techniques as well. This semester, all 20 students passed the course." Akpojevbe Omasanjuwa, University of The Gambia





Balance is the perfect state of still water.
Let that be our model. It remains quiet within
and is not disturbed on the surface

Confucius c. 551 - c. 479 BC





Asia

“One of the most exciting things about the global network is that it plays a vital role as the platform for feeding indigenous and community knowledge, local and national, into international knowledge systems. This helps the rapid dissemination of lessons and learning from one ecosystem to another.”

Golam Rabbani, Cap-Net Bangladesh





Bangladesh Capacity Building Network (Cap-Net Bangladesh)

Bangladesh is at risk of hydro-climatic disasters such as floods, flash floods, tidal surges, cyclones, droughts, intrusion of saline water into aquifers and rises in sea level. Cap-Net Bangladesh has, therefore, been active in developing the capacity of water managers to enable them to respond to these disasters, and has built a wealth of knowledge on climate change and water-related disasters in Bangladesh.

Two recent case studies are notable. One, a study on the impacts of Cyclone Sidr on water supply and sanitation services in the coastal districts of Bangladesh, highlighted the crises in drinking water and sanitation crises

resulting from water-related disasters.

Another study on community vulnerability showed that although women are affected more severely by disasters than men they have little influence on reducing the risk of disaster or on decisions about responses.

Cap-Net Bangladesh has taken the lessons from studies forward, and is working with national and district members of the Disaster Management Committee and the Climate Change Development Forum, a network of around 30 NGOs working on climate change issues in Bangladesh.

“To my knowledge, Cap-Net is one of the most active platforms making a long-term contribution to capacity development of professionals towards sustainable water resources management in Bangladesh.”

Mohammad Alamgir, Senior Research Officer in Water Resources Planning Organization (WARPO), Ministry of Water Resources, Bangladesh

“I shared what I had learned with our management and submitted a report. Management advised me to include the idea in every training session. ...the community set up two pond-sand-filters with technical assistance from the Department of Public Health Engineering (DPHE) and the United Nations Children’s Fund (UNICEF), and we distributed arsenic removal filters to households.”

Moshi Mondol, Manager, Water and Sanitation Programme, Health, Education & Economic Development (HEED), Bangladesh

Cap-Net Pakistan

Cap-Net Pakistan partners include local water partnerships and organisations. The Cap-Net Pakistan capacity development programme establishes and trains multi-stakeholder groups at local government level on IWRM

principles and planning. Working with local water authorities, these groups then advocate for the IWRM approach within their communities. Demand from towns, cities and rural government authorities, means that

much network activity focuses on scaling up this work country-wide. The demand for training in IWRM principles and planning continues, and is being adapted to local contexts and target groups.

“Apart from sharing what I learned with my students and other people in the organisation, I also used my new knowledge and the training materials to solve a problem of urban drainage.”

Mukhsan Putra, Lecturer,
University Hasanudin Sulawesi



Collaborative Knowledge Network Indonesia (CKNet-INA)

The mandate of CKNet-INA is to develop capacity and network collaboratively on infrastructure, water and environmental management. Network members include universities and research institutes working in the field of infrastructure, water and

environmental management.

Areas of expertise include river basin management and integrated flood management. The network has been instrumental in developing a training package on integrated flood management.

Malaysian Water Partnership Capacity Building Network (MyCBNet)

The Malaysian Water Partnership (MyWP) was founded on the recommendation of a national consultation workshop on IWRM held in Kuala Lumpur in 1997. MyWP is an NGO, legally registered as a Malaysian society, with a mission to support

Malaysia in implementing IWRM.

MyCBNet has developed a masters degree course in IWRM in collaboration with the Open University of Malaysia. The network has also organised a number of capacity

development workshops on IWRM for government and civil society stakeholders. MyCBNet works with the Department of Irrigation and Drainage in supporting the implementation of IWRM policy in Malaysia.

“The most important advantage of working in a global network like Cap-Net is the assurance that we can draw on the rich experiences of all the countries in the world in building our individual national capacity with respect to sound water resources management”.

Lim Chow Hock, MyCBNet, Malaysia



Empowered to lead! Training women in water user associations (WUAs) in Maharashtra State, India

“For us the main objective was to facilitate effective participation of women in WUAs. To do this we designed a training programme around gender and equity, irrigation law and practice, the canal system, and dialogue with functionaries of WUAs and government officials. We hoped this training would help women challenge and question the system rather than simply integrate themselves into it.” Seema Kulkarni, SCaN

“We were made to speak out in the meetings. Initially we were scared, but then we did not stop, our confidence went up.” Lata

“I would now make it a point to go to the WUA meetings and speak out about our problems.” Subhadrabai, Jalalpur

“I will go to the meetings and I will sign on any paper only after I have understood what I am signing.” Anjana Solvankar, Sidhatek

“I resolve to use all the information to fight our case and get water to our canal.” Gabgubai

“I will make sure that all the people get water. I will make sure that all pay water charges to the Irrigation Department. If needed, I will meet senior level officers. Once our office space is ready, all of us women will meet to discuss these matters.” Sitabai

“The most exciting part is that the global network...represents the convergence of the various social contacts...the approach is essentially relational.... This is most exciting precisely because many different types of relations...form these network configurations and are useful to a broad range of action-oriented work in the water sector.”

Anjal Prakash, SaciWATeRs



SaciWATeRs-Cap-Net Network (SCaN)

SaciWATeRs, through its flagship project Crossing Boundaries, strengthens integrated and gender-sensitive water resources management, policy and practice in South Asia through higher education, research, developing a knowledge base and advocacy.

SaciWATeRs joined the Cap-Net global network in 2010 as one of its South Asian networks, forming the SaciWATeRs-Cap-Net Network (SCaN). SCaN's vision is to strengthen human and institutional capacity to adopt an integrated approach in the water sector in South Asia.



**“I disseminate information gained from the training programme to farmers in my village.
I organised a Shramadana campaign to clean the water resources of my village as
a commitment to IWRM.”**

R Weerasinghe, CP/Katu/Marathugoda Central College, Sri Lanka, Teacher



South-East Asia Regional Network for Capacity Building in IWRM (AguaJaring)

AguaJaring ('agua' is Filipino for 'water' and 'jaring' is Malay for 'net') was officially launched in 2007 as an independent regional network to facilitate capacity development in IWRM in Southeast Asia. MyIWRM – What Can I Do? is AguaJaring's ongoing research project to develop capacity in practical implementation of IWRM in Malaysia. Based on the findings of the research, AguaJaring has developed training materials and case studies on practical implementation adapted to four different target groups: academics,

NGO workers, the private sector and government officers.

AguaJaring has collaborated with organisations such as the Economic and Social Commission for Asia and the Pacific (ESCAP) and the Global Water Partnership Southeast Asia (GWP-SEA) in supporting capacity development programmes for many government water agencies, including the Department of Water Resources (DWR), Thailand, the Cambodia National Mekong Commission, and the Irrigation Department in Myanmar.

"Our concept of flood drainage management used to lack any consideration of the environment. The Cap-Net course has made me realise that there are better ways to handle floods."

Triyono Surmanto, consultant,
PT Cipta Surya Wahana, Indonesia

Sri Lanka Capacity Building Network for IWRM (Cap-Net Lanka)

Cap-Net Lanka was launched by the President of Sri Lanka Jalani, the Sri Lanka National Water Partnership, in October 2003, at the Postgraduate Institute of Agriculture, University of Peradeniya.

The 39 members of the network deliver capacity development to policy makers, decision makers, middle-level managers, end users, school students, and link national, regional and global networks. The network has raised awareness of the importance of

gender mainstreaming for national and local government water professionals. Cap-Net Lanka, together with the Network of Women Water Professionals (NetWwater) and the Sri Lanka Water Partnership, organises gender and water dialogue workshops.

"Working in a global network provides challenges, opportunities and international experiences which are essential for the sustainability of local and/or regional networks."

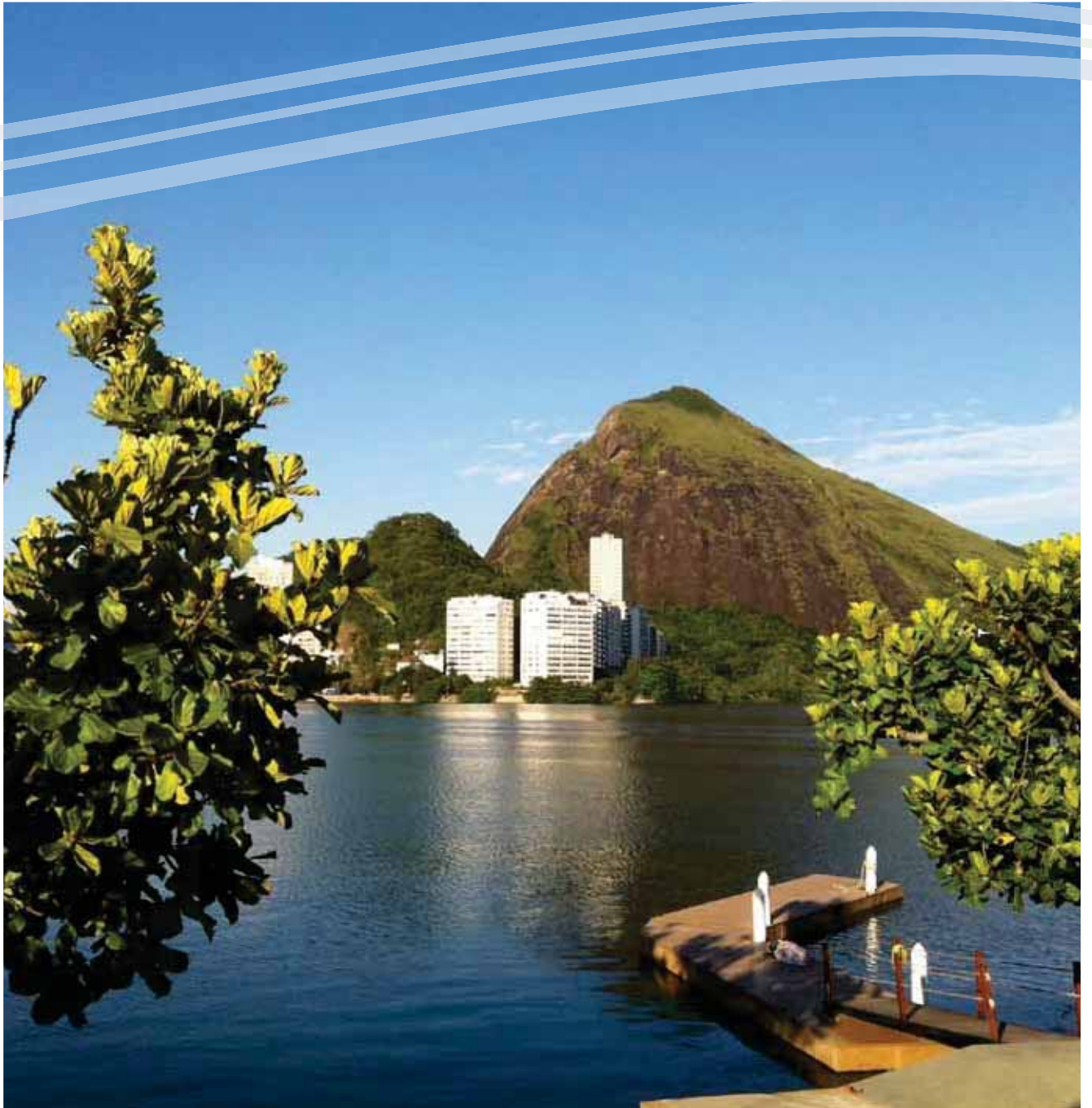
Lakshman W. Galagedara, Cap-Net Lanka



Latin America and the Caribbean

“I applied what I learned to concrete cases, such as creating a basin committee in the Province of Santa Fe, where the interests of the different parties had to be reconciled and take account of the draft laws (Water Law and Right of Way Law).”

Participant at a course on negotiation tools and approaches for IWRM





Argentine Water Education and Capacity Building Network (ArgCapNet)

Established in 2000, ArgCapNet, members are mainly universities, and provincial and local water planning institutions. A notable achievement of the network was securing national accreditation for the ArgCapNet postgraduate programme in IWRM. The masters degree, developed as a result of a study of stakeholder needs in 2003 that found that stakeholders wanted formal education in IWRM, was accredited by the National University Evaluation and Accreditation Commission (CONEAU).

Participants in the masters programme include professional engineers (civil, mechanical, water resources), lawyers, biologists, biochemists, systems analysts and economists involved in water management in environment and health agencies, universities, municipalities, and NGOs from Argentina and other Latin American countries.



Cap-Net Brasil

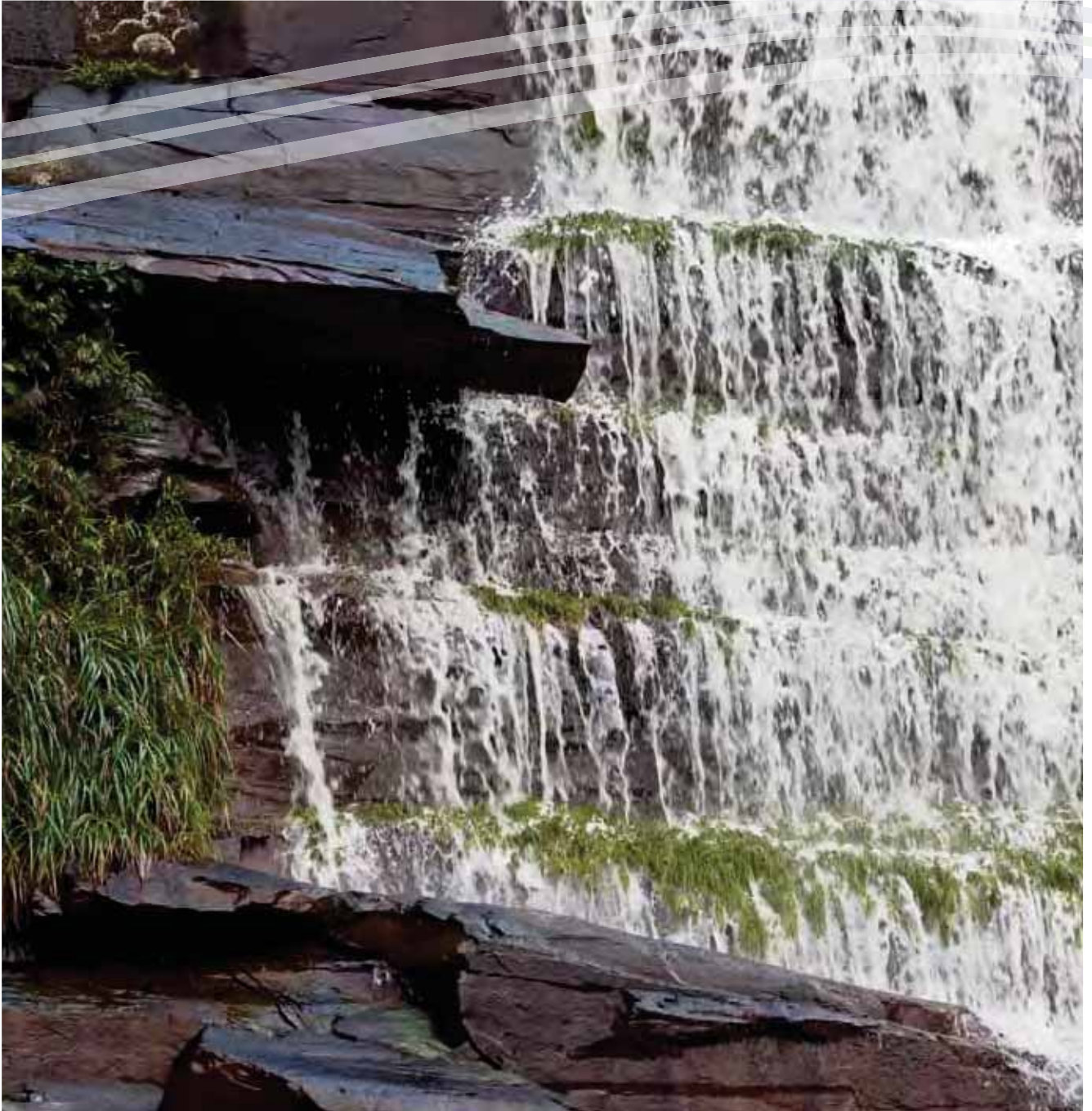
Cap-Net Brasil was set up to meet the growing demand for IWRM training in Brazil and Portuguese-speaking countries. Cap-Net Brasil operates in countries that speak Portuguese and cooperates with regional networks in Latin America, especially the Latin America Water, Education and Training Network (LA-WETnet). Cap-Net Brasil also cooperates closely and actively with the Gender and Water Alliance.

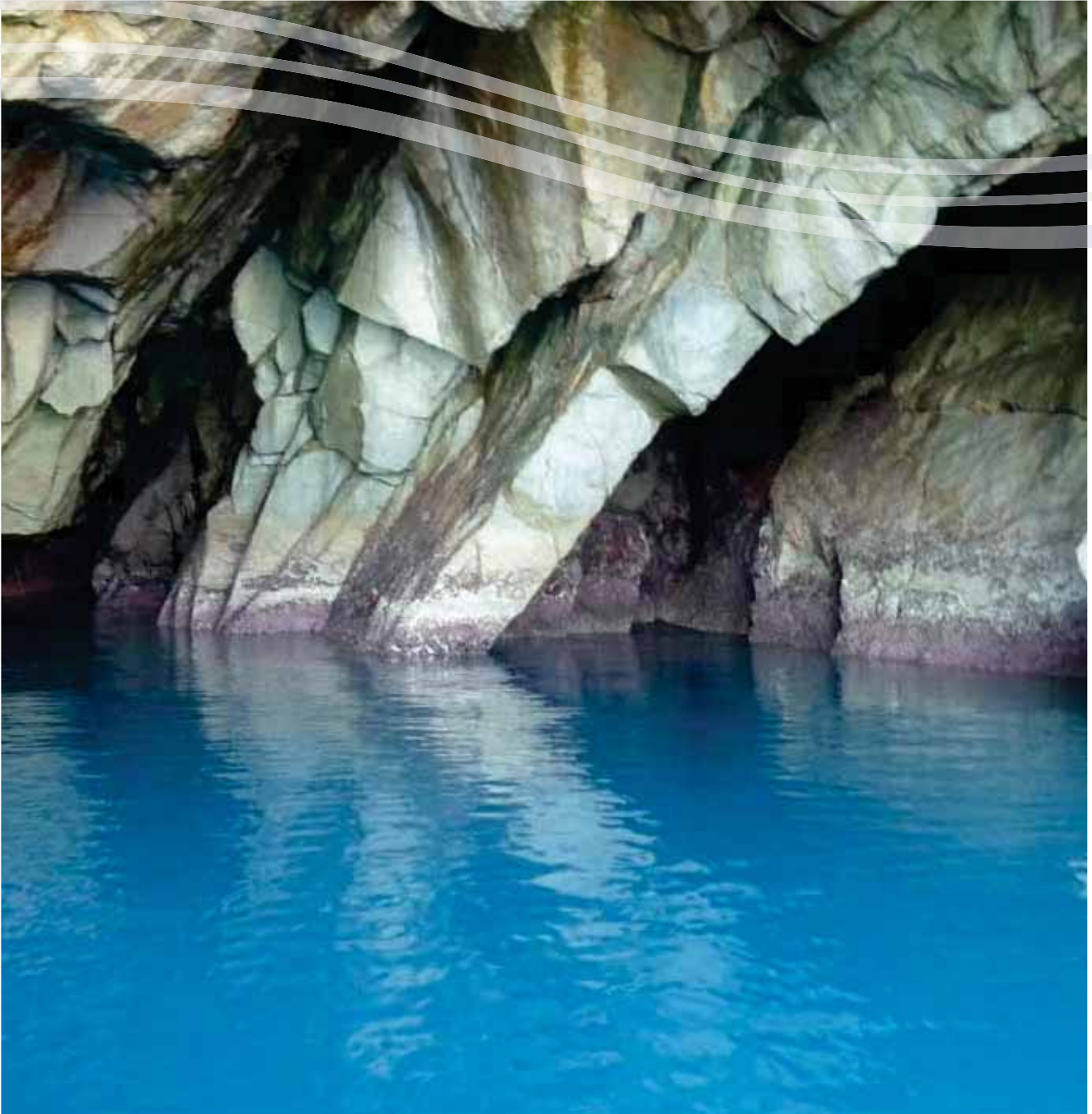
In recent times Cap-Net Brasil has supported capacity development in Lusophone countries in partnership

with GWP and WaterNet (a southern Africa network). Working with partners, Cap-Net Brasil has trained officials involved in the management of the Guarani Aquifer System, a transboundary groundwater reservoir spanning Argentina, Brazil, Uruguay and Paraguay. Another key strength of the network is in integrated urban flood management and Cap-Net Brasil has been influential in the development of training materials and a global training programme on this topic.

“The course was excellent and the professional quality of the facilitator outstanding. I am a sanitation engineer and have applied what I learned to develop water resources plans, such as the plan for the Doce River watershed and Verde Grande watershed.”

José Nelson de Almeida Machado, Coordinator Technical Committee on Planning for Velhas Watershed Committee







Caribbean Water Network (Caribbean Waternet)

Caribbean Waternet provides technical support and resources to develop IWRM capacity in the Caribbean to turn around the lack of integrated water management across the region. The network has 54 members across the 15 Caribbean states

and has trained water managers at the request of the Caribbean Community (CARICOM), through its partnership with GWP-Caribbean and the Consortium of CARICOM water institutions.

Central American Network of Educational Institutions (REDICA)

REDICA mobilises regional and national capacity through cooperation. Using experiences from its members in various aspects of ecosystem-based

management, the network is a leader in training programmes on managing water for ecosystem resilience and coastal zone management.

“We are now promoting and leading the process of implementing IWRM, have incorporated an IWRM approach to territorial planning and management, and incorporated management at the river basin level.”

Participant of a LA-WETnet IWRM planning course

“There is more and better stakeholder participation, creating a solid vision with respect to management of human resources and watersheds.”

Participant at an LA-WETnet course on river basin organisations

Faces of Cap-Net







Latin America Water, Education and Training Network (LA-WETnet)

LA-WETnet is an open network of people and institutions dedicated to capacity development and water management. Its mission is to develop IWRM capacity in Latin America and increase access to drinking water and sanitation, while contributing to health, poverty alleviation and poverty reduction.

One of LA-WETnet's flagship activities is Hora Agua, an IWRM training programme for school teachers. Since it was launched in 2007, the programme has become firmly embedded in the Education for Sustainability Program of the Universidad de San Andrés in Buenos Aires. In 2011, the programme was recognised by UNESCO for excellence in sustainability education. In 2011, 11 of the 14 participating schools had introduced multi-disciplinary perspectives on water. Thirty of the teachers trained in the programme had trained a further 131 of their colleagues, and had developed projects involving around 2,500 school students. The number of people reached is likely to be many more as school children convey what they have learned to their families.



Cooperating in capacity development in Latin America

When LA-WETnet, the Latin American Water, Education and Training Network was launched, 36 participants representing knowledge centres in the region committed to “contribute to capacity development for the effective management of water resources and water services in the Latin American Region”.

In 10 years, working with 77 partners, LA-WETnet delivered more than 47 capacity development courses in 13 different subjects related to IWRM in 12 countries, reaching more than 1,900 participants.

One of the factors leading to this wide reach was that, LA-WETnet cooperated with other networks – ArgCap-Net, Cap-Net Brasil, REDICA and REMERH.

“Knowledge of improper practices that may occur during procurement, and mechanisms to avoid them, has enabled us to improve and make stricter technical conditions and specifications in our contracts.”

Participant of a LA-WETnet water integrity and transparency course

LatinAqua

LatinAqua is a network of water researchers in Latin America and the Caribbean that works to spread knowledge and encourage technical cooperation for development of water resources. Since 2011, LatinAqua has

organised various academic exchange activities.

“Nowadays the increase in available information makes the development of networks the most important tool for

linking people and information, and connecting to regional problems and possible solutions.” Gerald Augusto Corzo Perez, LatinAqua

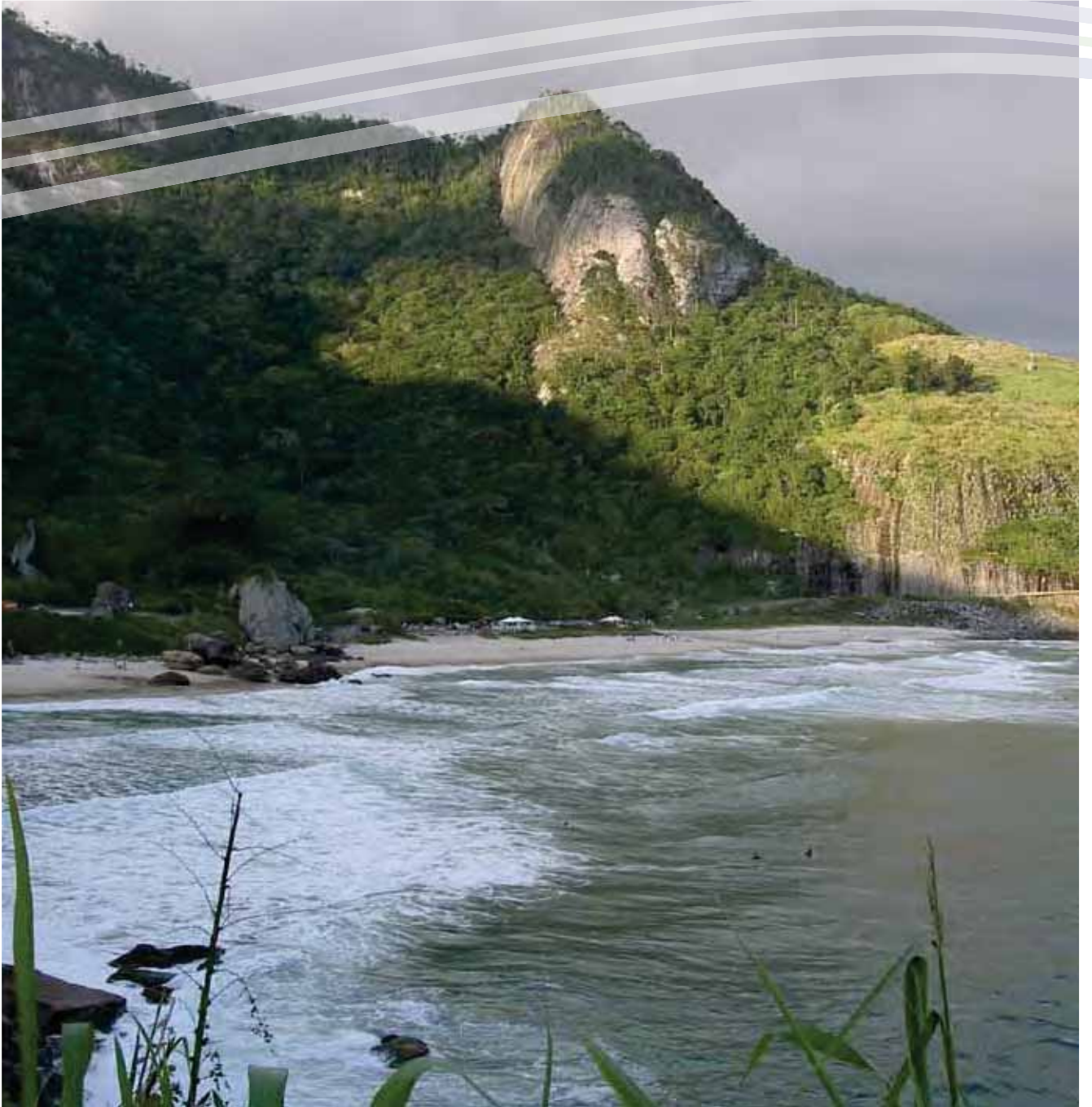
Better accountability and information in Mexico

Elena Gutiérrez Díaz works for the Guadalupe Dam Basin Commission in Mexico. In August 2010, the Commission was suspended for six months due to irregularities in the recruitment process. There had also been complaints from the public about voting processes. Elena attended a course on transparency and integrity in the water sector, organised by LA-WETnet, in May 2011. Using knowledge gained from the course, Elena improved transparency in decision-making and accountability at the Commission, and created channels for the public to access information about how the Commission worked. Since then, 65 queries have been presented to the Commission, and many have been resolved. Stakeholders now report greater confidence in the Commission.

Red Mexicana de Recursos Hídricos-MexCapNet (REMERH-MexCapNet)

REMER-MexCapNet members are expert in various areas of water management, particularly hydrology, modelling and drought management. Recent

activities include training on climate adaptation and helping develop IWRM training materials on drought management.



Network and student attachments

Over the last 10 years Cap-Net has provided opportunities for graduate students and young professionals from Cap-Net affiliated networks to gain hands-on experience in network management and capacity development through attachments to the secretariat. The specific assignments given to the attachments allowed them to strengthen their home-networks and their experience in network establishment and work planning. Both network and student attachments have contributed significantly to Cap-Net's work in many ways whilst gaining valuable work experience at the secretariat.







A flavour of partners

“Networking is the most democratic way of working with diverse groups. The most exciting thing about working in the Cap-Net global network is having the right to be creative.”

Lilliana Arrieta, REDICA

Cap-Net draws on the expert knowledge and support of partners to develop training programmes and materials that combine hands-on experience and international best practice. Partners are therefore a key element of the Cap-Net global network.

A marketplace for networks and partners

"I attended the last network meeting in December in Hyderabad as an onlooker from a partner organisation and was very impressed with the calibre and accomplishments of network managers and their organisations. The marketplace where partners and networks could interact to develop new collaborations and projects was very impressive and is the sort of thing that needs to be further developed at specialist or sector conferences."

Arno Rosemarin, Stockholm Environment Institute

Cooperation between international partners and capacity development networks allows relevant IWRM training programmes to be delivered to a wide range of target groups around the globe.

IWRM as a tool for adapting to climate change

"The challenge is not to implement a course, but to design a package – a manual and slides – that can be used by other trainers as well. And for that you need patience, and someone who is willing every now and then to kindly remind you of the contribution that you promised to submit. Here, I see a very important role for the Cap-Net secretariat. Not only to launch ideas for new courses, but also to be responsible for turning these ideas

into open-access training packages in different languages.

The course on IWRM as a tool for adaptation to climate change is a good example. We organised pilot train-the-trainer courses and intensive writing sessions with contributors. The result was a training manual that has been translated into five languages. But there was additional spinoff. IWRM proved to be a very useful framework for addressing how to adapt

water management to climate change. This really helped me to structure both the online and classroom courses on climate change adaptation now offered by UNESCO-IHE and there are plans to develop a practical toolkit.

However, there is more to come. We are developing a course along the same lines on ecosystem functions and services in IWRM."

Erik de Ruyter van Steveninck, UNESCO-IHE Institute for Water Education

Cap-Net provides international partners with opportunities to extend their outreach and impact through the many capacity development institutions that are part of the network. International partners can draw on Cap-Net expertise in tailoring knowledge for capacity development programmes and materials to specific groups to improve their effectiveness and impact on the ground.

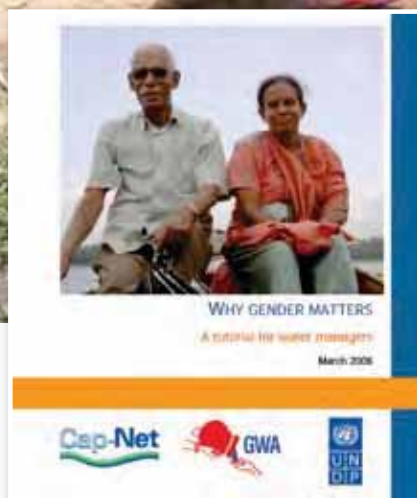
Gender and Water Alliance (GWA)


Just two years after the birth of GWA, a new network Cap-Net, joined the growing group of water organisations. Both were housed in the UNESCO-IHE building in Delft, the Netherlands. What we remember especially from those days is the welcome we found up there and the importance of being able to reflect together about water issues – IWRM, sanitation, capacity development and the many actors in the water scene worldwide. We are still grateful for that regular contact and miss it now that we are no longer co-located.

Ten years is a long time and a lot of work has been done in capacity development in water management – on the part of GWA to mainstream social perspectives in technical programmes, and on the part of Cap-Net in wide-ranging capacity development related to water management. More people are now aware – and also more knowledgeable – of important water issues and potential solutions. Cap-Net has contributed a lot to that and, as such, to much improved water management worldwide.

At the global level GWA and Cap-Net have worked together on a number of activities, such as the international training-of-trainers workshops, and to develop materials. Cap-Net supported the development of the Resource Guide for Gender in Water Management which has been translated into eight languages and downloaded many tens of thousands of times. Another shared effort was producing the interactive tutorial for water managers and professionals, *Why Gender Matters*, which has been handed out to thousands on CD.

GWA congratulates Cap-Net on its first decade and looks forward to cooperation in the next 10 years!





National and regional capacity development networks, for their part, gain access to international knowledge, resources and opportunities for partnership.

Examples of Cap-Net partnerships across the globe

World Meteorological Organisation - Associated Programme on Flood Management

- Flood management
- Climate change adaptation

Global Water Partnership

- Joint delivery of capacity development on the ground
- IWRM and IWRM planning
- Economic and financial instruments

UNESCO-IHE

- Climate change adaptation

- Ecosystem functions and services in IWRM
- Capacity development of river basin organisations

Stockholm International Water Institute (SIWI) and the UNDP Water Governance Facility

- Water governance
- Water integrity

UN-Habitat, International Water Association (IWA)

- Water safety plans for utilities
- Water demand management

The Sustainable Sanitation Alliance (SuSanA)

- Sustainable sanitation

Gender and Water Alliance (GWA)

- Gender mainstreaming

UNEP and the UNEP-DHI Centre for Water and Environment

- Ecosystem functions and services
- Pollution management

MetaMeta

- Multimedia training and education tools



“I work in the media, and Cap-Net has helped me to present more informed news items. It was very useful when I was asked to report on the proposed increase in rates by the National Water and Sewerage Authority.”

Odette Campbell, manager of news and current affairs,
Grenada Broadcasting Network

Developing IWRM awareness in the media

The media is an important channel to communicate water management messages to politicians, decision makers and civil society. CKNet-INA organised a training programme exclusively for the media to explain

the basic concepts of floods and sanitation. The media was also invited to participate in certain short courses, exercises and group discussions to better prepare and equip them to report on water issues.





**"It is easy to throw anything
into the river, but difficult to
take it out again."**

South Asian proverb



Poised for greater **impact**

**“...capacity development and ownership of
national development strategies are essential for
the achievement of the Millennium Development
Goals”**

Paragraph 25, United Nations General Assembly Resolution
59/250, December 2004





Capacity development in the water sector is a high priority and requires a coordinated response. The Cap-Net global network provides this coordination, linking international action with action on the ground across much of the developing world. Cap-Net capacity development reached over 11,000 people from 113 countries – over 40% of them female – in its first 10 years.

As a network dedicated to capacity development, Cap-Net links centres of local knowledge and local experts, strengthening their knowledge base and supporting sustained delivery of capacity development services through local institutions.

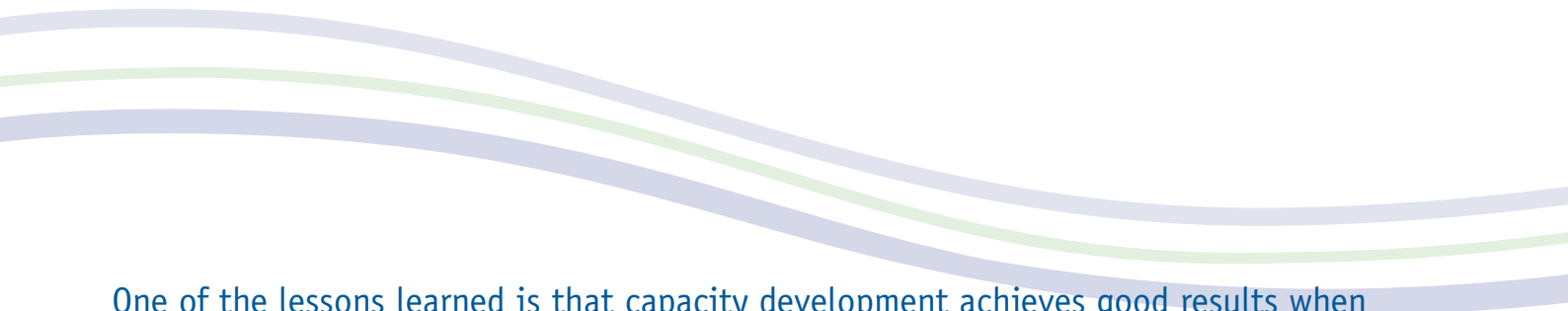
An important outcome is strengthening the knowledge base in national knowledge institutions and

sharing on-the-ground experiences that can be applied in other countries and regions.

Typically, Cap-Net leverages support and cooperation from organisations on the ground, thus embedding capacity development at the local level. Cap-Net's work with capacity developers catalyses on-the-ground activities.

"A number of stakeholders from different sectors took part in the workshop so we had a holistic view of the problem and could consider an integrated approach to a solution. As an academician, we usually lack experience in meeting stakeholders and this particular experience could help us improve teaching on topics such as water resource management."

.....
Sirajul Islam, Present Chair of the Department of Environmental Science and Management, North South University



One of the lessons learned is that capacity development achieves good results when targeted and focused on specific water management organisations such as river basin organisations and water utilities.

Safer rural drinking water in Guinea

Hamidou Barry works at the Service National d'Aménagement des Points d'Eau in Guinea, the national office for water supply. The focus of his work changed following a Cap-Net training course on groundwater and IWRM.

“Before the course, the most important thing in my work was drilling in rural villages. Pollution prevention took second

place. One of my work sites has gold mines with tailings that contain arsenic. The groundwater training course helped me to understand the risks this poses to water quality.”

A formal agreement is now being drawn up for regularly monitoring water points and rivers in all areas of Guinea where gold is mined.





Access to the best of international **knowledge**

Education is the most powerful weapon which
you can use to change the world.

Nelson Mandela





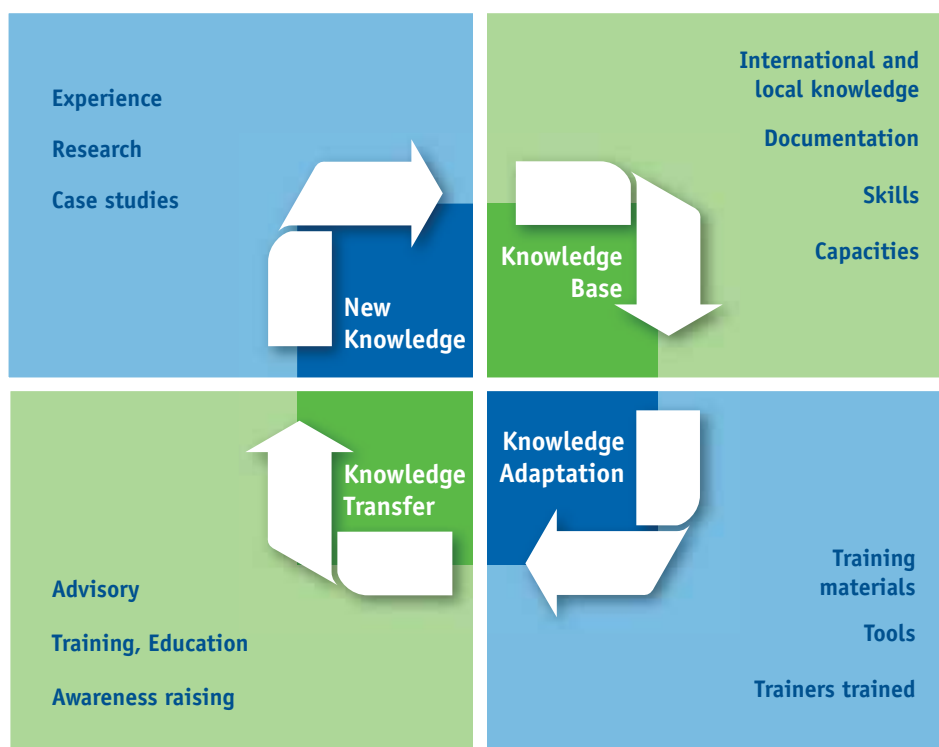
Managing knowledge

Cap-Net has taken a step-by-step approach to capacity development, first putting in place an enabling environment then progressing to actual delivery. Access to existing knowledge at local level has been achieved through local and regional capacity development network partners. International partners provide access to international

knowledge and experience. Knowledge from local, regional and international sources is adapted to local realities during training-of-trainers and as training materials are developed. Transferring knowledge is a central part of Cap-Net projects and is done through training and educating individuals and strengthening institutions.

New knowledge is generated in several ways. Applied research is important in collecting information on experiences and practices to inform the development of training materials. As IWRM itself is in many ways a new concept, capacity development for IWRM requires new knowledge and the application of existing knowledge in different ways.

Knowledge management system. Conceptualising the flow and management of knowledge in the context of capacity development and the strategy of the Cap-Net programme.



Training materials

Cap-Net, along with its partners, has developed training materials to introduce general IWRM concepts and their practical application. New training materials have catalysed partnerships with international agencies and stimulated training activities in local and regional networks. The external evaluation of Cap-Net noted that the uptake of training materials by various institutions was a demonstration of their quality and that downloads from the Cap-Net website indicated that the materials have a wider

application than can be accurately measured. Access to training materials by developing countries has been enhanced by distributing hard copies and CDs at training programmes, through partner networks and on request. Materials are used by course participants and also by capacity builders as resources for short courses on IWRM and related themes. Manuals both instruct and inform. The target groups for most courses are primarily water managers and policy makers. Cap-Net publishes materials in English, French, Portuguese and

Spanish, and capacity development networks and trainers have translated them into other languages, including Arabic, Russian, Chinese, Bahasa, Farsi, Urdu, Hindi, Khmer and Sinhala.

Identifying training needs has not always led to action, as sometimes training materials are not available. Only by developing new materials is it possible to deliver training that responds to demands. An encouraging sign is that some networks have developed training materials that relate and appeal to very local, national or regional needs.

Training materials and tools developed by the Cap-Net global network

- Integrated water resource management for river basin organisations
- Conflict resolution and negotiation skills for IWRM
- Economics in sustainable water management
- IWRM as a tool for adaptation to climate change
- Online and offline self learning tutorial-IWRM as a tool for adaptation to climate change
- Streams of law: water legislation and legal reform for IWRM
- Groundwater management in IWRM
- Integrated urban flood management
- Water integrity and accountability
- Hydro-climatic disasters in water resources management
- IWRM tutorial
- Why gender matters: a tutorial for water managers
- Sustainable sanitation and water management toolbox
- Integrated water resources management plans
- Course book on water safety plans
- Network management tools







**In rivers, the water that you touch is the last
of what has passed and the first of that which
comes; so with present time.**

Leonardo da Vinci



“The Earth contains rivers common to all, Moving on all sides, flowing day and night. May she pour on us riches in many forms and endow us with lustre.”

Atharva Veda12.1.9



Cap-Net website

The Cap-Net website, available in Spanish and English, is a resource for partners and those seeking information on capacity development in IWRM. In 2011, the website had over 62,500 visitors. Cap-Net is a partner in TheWaterChannel, a website hosting over 1,200 water videos and web-based water management seminars. DVDs with water videos from the TheWaterChannel site and tutorials on how to use them for training were developed with MetaMeta,

GWP, UNESCO-IHE, the UNDP Water Governance Facility, the International Fund for Agricultural Development (IFAD) and the Rainwater Harvesting Implementation Network.

Engagement with partners through the website, online tools and social media complement each other, and provide partners with news and technical content as self-learning tutorials on IWRM and climate change.

Training materials downloaded from the Cap-Net website 2011

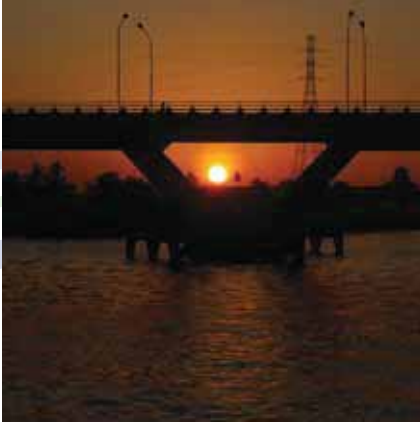
	English	Spanish	French	Portuguese	Other languages	Total
IWRM as a tool for adaptation to climate change	832	172	108	129	Chinese 4	1245
Conflict resolution and negotiation skills for IWRM	1608	267	49			1924
Economics in sustainable water management	687	96	55	13		851
IWRM for river basin organisations	858	661	62	82	Indonesian 831	2494
IWRM plans	827	209	242	208	Russian 112	1598
Why gender matters	227	17				244
Hydro-climatic disasters in water resources management	98					98
Water integrity	586					586
Streams of law	465					465
Groundwater in IWRM	1419					1419
Water resources assessment in sub-Saharan Africa (course reader)	14					14
TOTAL	7621	1422	516	432	112	10,938



The next decade

**“If human development is the ‘what’ of UNDP’s
mandate, then capacity development is
essentially the ‘how’”.**

Supporting capacity development the UNDP approach, UNDP 2008

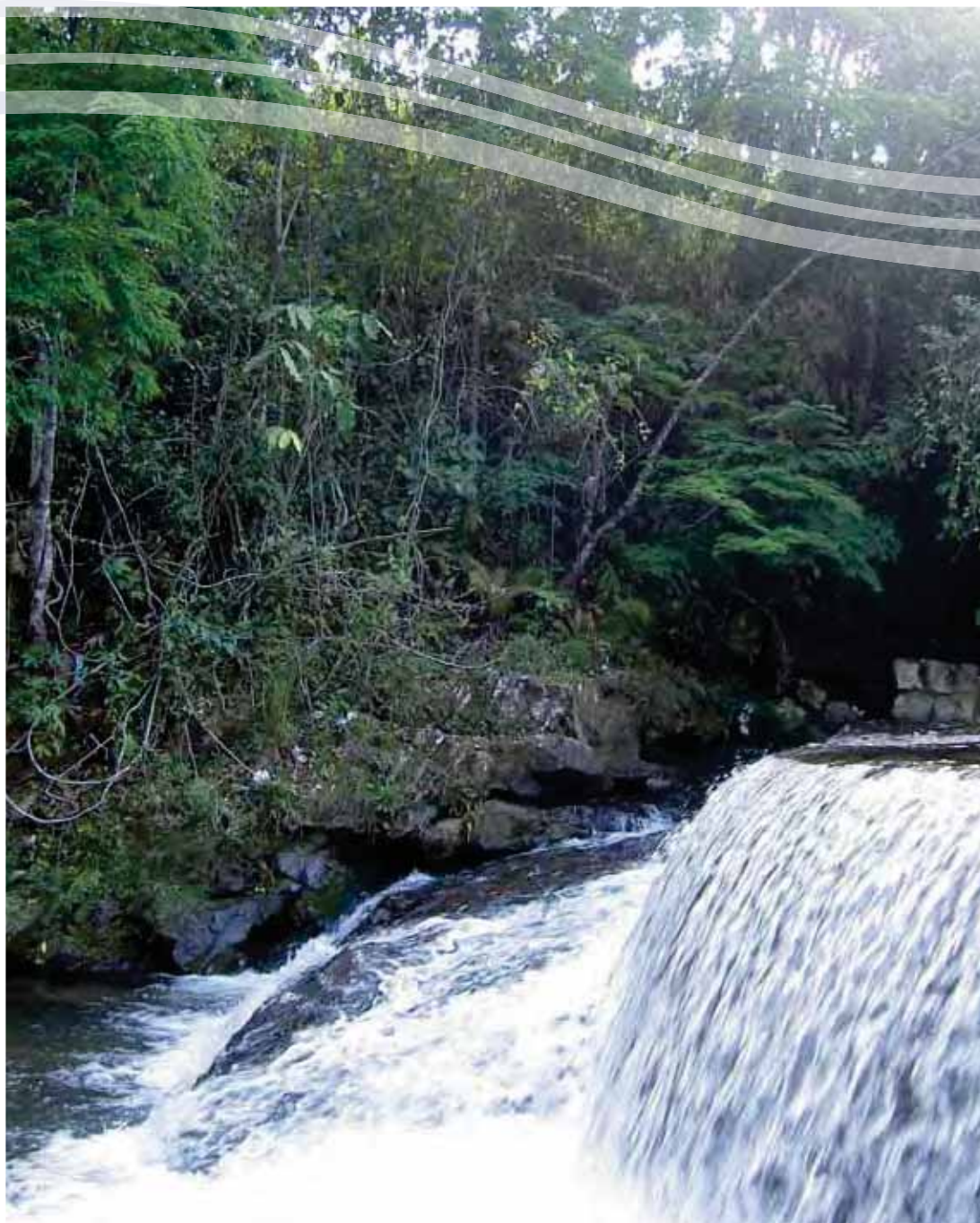


Numerous immediate challenges face the water sector and need urgent action. Many of these relate to the impact of climate change on water resources and water management. Cap-Net is poised to engage in addressing these challenges over the next 10 years.

Cap-Net has already developed programmes on how to use IWRM tools and instruments for adapting to climate change, and in managing floods and droughts. The global programme is well established as a focal point for capacity development in sustainable water management. International partners, partner networks and specialist organisations value Cap-Net's wide, client-based outreach, and the global network has become a vehicle for collaboration to deliver quality training programmes and materials and ultimately effective capacity development.

Looking ahead, Cap-Net UNDP will build on a sound foundation of quality capacity development programmes. This will mean working with partners on new initiatives, on topics such as IWRM and agriculture, earth observation and geographic information systems (GIS) for water management, sustainable water footprints, water in the green economy, water management in coastal areas and human rights-based approaches to water management.

Cap-Net's new strategy will address the needs and expectations coming from the ground as expressed by members





of partner networks. It will have a stronger regional and local emphasis, ensuring demand responsiveness and strengthening local ownership of the capacity development process. The new strategy will also emphasise further development of partner networks, particularly as regards strengthening management, as they deliver capacity development to local and regional organisations.

Cap-Net UNDP will explore and make use of new media – social media and other platforms – for capacity development. This will involve developing a virtual campus that makes use of the wealth of materials developed by Cap-Net and partners over the years and taps into the extensive pool of facilitators in partner networks. Network members from Universities will pursue accreditation of courses based on Cap-Net programmes and materials that have been developed by network member organisations while

continuing to encourage staff and student exchanges. More partnering with the private sector will be pursued, not only for financial support but also to leverage private sector water management capacity.

While cherishing good relations with funding partners who have provided support over the last decade, Cap-Net will also explore as yet untapped sources of funding at local and international levels. The strategy of co-funding for delivery of capacity development has leveraged impressive support from local and regional organisations. This will continue and be further developed in the future. At the international level, support from governments of upcoming economies, such as those of the BRICS (Brazil, Russia, India, China and South Africa), will be sought, in pursuit of effective, client-oriented capacity development that addresses the priorities and needs of the water sector on the ground.

Capacity development and social capital: 10 years networking, sharing, learning, and growing. Thank You!

Acknowledgements

The following people and organisations have contributed to the success of Cap-Net over the last 10 years. We count on your contributions for the next decade.

Cap-Net founders

UNDP: Frank Hartveld, Ingvar Andersson
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DGIS: Bert Diphoorn

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Supporting organisations

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United Nations Office for Project Services–International Waters Cluster

Networks

Africa and the Arab Region:

AGWnet
Awarenet
NBCBN
NileIWRMnet
WA-Net
WaterCap
WaterNet

Asia:

AguaJaring
Cap-Net BD
Cap-Net Lanka
Cap-Net Pakistan
Cap-Net SA
CAR@WAN
CKNet
MyCBNet
SCaN

Latin America and the Caribbean:

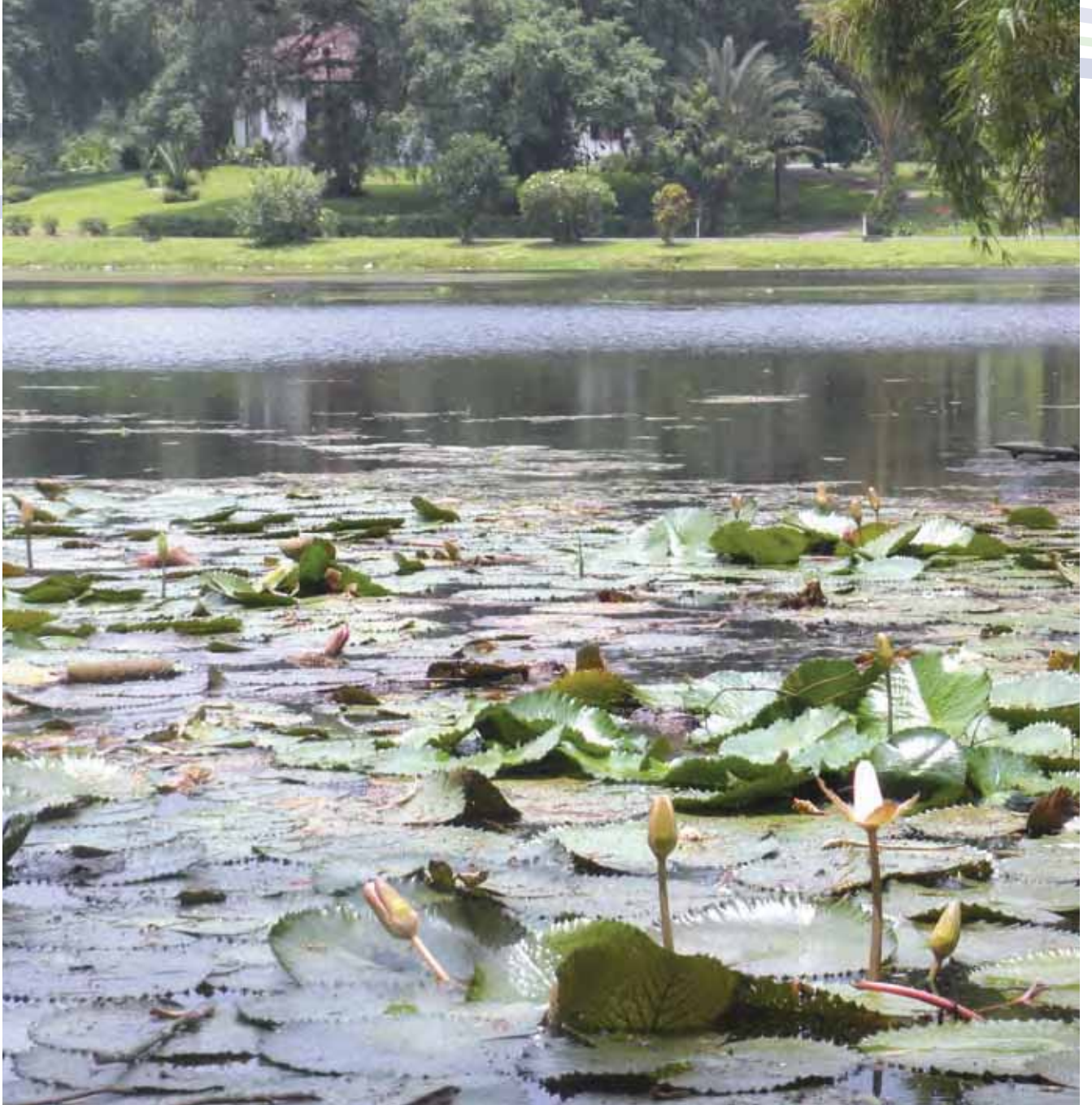
ArgCapNet
Cap-Net Brasil
Caribbean
Waternet
LatinAqua
LA-WETnet
REDICA
REMERH

Partners

UNEP-DHI
UNESCO-IHE
UN Water
WMO/APFM
UN-HABITAT
UNDP WGF
UNEP
BGR

GW-Mate
ITC
IWA
SIWI
SEI
Seecon
MetaMeta
WRC

SuSanA
IW-LEARN
WIN
GWA
IRC
UNU INWEH
UN DPC
UNW DPAC



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