



Building Capacity for Water Resources Management in Southern Africa

5th Progress Report Phase II: 2005-2009

July – December 2007



A strategic programme of the
SADC Water Sector

May 2008



Building Capacity for Water Resources Management in Southern Africa

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Phase II: 2005-2009

1 July 2007 - 31 December 2007

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Highlights

8th AGM

The 8th WaterNet AGM was held on 2 November 2007 in Lusaka, Zambia. The AGM approved the work plan and budget for 2008.

WaterNet Membership Grows

WaterNet membership has grown since being established in Victoria Falls, Zimbabwe in March 2000 by 18 institutions from 9 countries in Southern and Eastern Africa to a broad network with 56 members in 15 countries in November 2007. Four new institutions were accepted as Members at the 8th WaterNet AGM held in Lusaka, Zambia *viz.* Department of Scientific Services, Gorongosa National park – Chitengo, Mozambique, Department of Chemistry, Chancellor College, University of Malawi – Zomba, Malawi, Land Use and Mechanisation Department, Faculty of Agriculture, University of Swaziland - Manzini, Swaziland, Faculty of Applied Science, National University of Rwanda – Butare, Rwanda.

Dr Wapumuluka Mulwafu Re-elected as a Member of the Board of Trustees

The 4-year term of office of Dr Wapumuluka Mulwafu as Steering Committee/Board of Trustee member expired during the 8th AGM. He was nominated for a second term and being the only nominee he was duly elected for a second consecutive term.

Induction and Training Workshop of the WaterNet Board of Trustees and 2nd WaterNet Board of Trustees Meeting

The induction and training workshop was held on 4-5 October 2007 in Gaborone Botswana and the meeting was facilitated by the WaterNet lawyer from Molathlegi and Associates and accounting experts from KPMG, Botswana. The meeting was followed by the 2nd WaterNet Board of Trustees Meeting.

2nd Management Board Meeting and 3rd WaterNet Board of Trustees Meeting

The meeting was held on 29-30 October 2007 in Lusaka, Zambia. The meeting was preceded by the 3rd WaterNet Board of Trustees Meeting.

KPMG Appointed as Interim Fund Management Firm for WaterNet

The WaterNet Board of Trustees recommended the appointment of KPMG as the preferred accounting firm to provide fund management services for the WaterNet Trust at their 2nd meeting held in Gaborone, Botswana on 5 October 2007.

Coordinators of the Masters Programme Meeting

The 3rd Meeting of the Coordinators of the Masters Programme was held on 29-30 October 2007 in Lusaka, Zambia. These meetings are meant to consolidate the Masters Degree programme and to ensure that implementing member institutions take responsibility and ownership in the planning and coordination of the programme.

Cancellation of Management Agreement Between Sida and IWSD for

WARFSA

Regrettably during the reporting period WaterNet and other collaborating partners were informed that the management agreement between Sida and IWSD regarding WARFSA had been terminated as of Friday the 29th of June 2007. This meant that IWSD had ceased to act as the Managing Agency for the WARFSA. The termination of the agreement has resulted in a number of disruptions and uncertainties regarding the future of WARFSA, as it has paralysed a number of activities related to IWRM research and outreach. WaterNet and other regional partners are optimistic that a solution would be established as soon as possible.

Masters Programme 2006 Intake

Thirty eight students from 11 countries (27 Male and 11 Female) graduated this year from the core host institutions the highest number ever attained in the WaterNet Masters Programme. Two students dropped out mid-way from the University of Zimbabwe (UZ) group and one failed some course and would attend supplementary examinations in 2008. Of the thirty eight graduates 10 students from University of Dar es Saalam group were funded from elsewhere.

Masters Programme 2007 Intake

The programme for the 2007-2008 intake started on 12 February 2007 with a total of 44 students with the University of Zimbabwe (UZ) enrolling 16 students (9 female and 7 male) and at the University of Dar es Salaam (UDSM) enrolling 28 students (11 female and 17 male). The students completed the taught part of the programme after attending their specialisations and embarked on their dissertation research during the reporting period.

Masters Programme 2008 Intake

The pres-selection exercise for the 2008 IWRM Masters students was conducted on 15-16 October 2007 in Harare, Zimbabwe at the WaterNet Secretariat Offices. The task was to short-list candidates out of the 170 applications received (47 Female and 123 Male) from 15 countries down to 50 best candidates. The two core host institutions were expected to finalise enrolment in early January 2008 with the programme due to start on 11 February 2008.

WaterNet and Partners Present Three Regional Short Courses

During the reporting period WaterNet and various partners organised, facilitated and participated in the following courses attended by over 70 participants from all over sub-Saharan Africa and beyond: International Training Programme in Integrated Water Resources Management for the Zambezi Riparian Countries (IWRM-Zambezi) 2007-2008, where participants completed the first part of the phase 2 training in Sweden from 24 September to 12 October 2007; Economic and Financial Instruments for IWRM, 27-31 August 2007, Pretoria; Strategies for Resilience Building for Water Related Disasters, 16-18 October 2007, Maputo, Mozambique.

WaterNet Phase IIb (1 April 2008 to 31 March 2011)

The project document for the three year WaterNet Phase IIb was submitted to Sida and DGIS requesting for a total subsidy of **3.39 Million Euro (2.86 Million Euro from DGIS and 0.53 Million from Sida)**.

The total budget for Phase IIb is **5.24 Million Euro** and the amount requested is based on the assumption that the balance of the Sida subsidy for WaterNet Phase IIa project (estimated at **1.85 Million Euro** as of December 2007) would be available to the WaterNet Trust.

Appointment of Accounting Firm

The WaterNet Board of Trustees recommended the appointment of KPMG, Botswana as the preferred accounting firm to provide fund management services for the WaterNet Trust at their 2nd meeting held in Gaborone, Botswana on 5 October 2007. The firm will initially be engaged through a contract with UNESCO-IHE for period of 2 months and the main activity being establishment of start-up financial management systems in Gaborone, Botswana including facilitating the opening of Bank Accounts for the Trust.

Professorial Chairs

The University of Dar es Salaam appointed Prof Felix Mtalo for the SADC waternet Professorial Chair position with effect from 1 December 2007.

Prof Damas Mashauri attended an interview for the Professorial Chair at the University of Zimbabwe on 16 October 2007. The interviewing panel found him suitable for the position and formal appointment procedures were initiated by the University.

Advertisement for the three other Chairs earmarked for the University of Malawi, Polytechnic of Namibia and University of the Western Cape are expected to be finalised during the end of the year and hopefully all the three position would be occupied before the mid of 2008.

WaterNet, Cap-Net, SIWI, Water Integrity and Accountability Mapping Study in Southern Africa

Mr Anton Earle of the African Centre for Water Research and Mr Goodwill Lungu of Transparency International Zambia were contracted by the collaborating partners to carry out a study of mapping water integrity practices in the region. The intended outputs of the study include development of training programmes in the region and topics to feed into the WaterNet Masters Programme.

The Challenge Program on Water and Food

The Project Scientific Workshop and Management Meeting was held in Midrand, South Africa, 8–10 October 2007 and was attended by 30 researchers and students. Scientific results were presented and discussed under the theme “Building evidence that IWRM improves rural livelihoods”.

Smallholder Systems Innovation in Watershed Management (SSI)

During this period three new researchers started their research, on institutions and policies related to smallholder system innovations with main focus on Tanzania, spatial mapping of system innovations in both the Thukela and Pangani.

8th WaterNet/WARFSA/GWP-SA Symposium

The 8th WaterNet/WARFSA/GWP-SA Symposium with the theme “*Integrated Water Resources Management - from Concept to Practice*” was successfully hosted by the Zambia Country Water Partnership from 31 October to 2 November 2007. A total of 288 abstracts were received of which 10 were rejected. A total of 150 full papers were received by the time of the Symposium. A total of 256 participants from 25 countries attended the Symposium of which 75 were female representing 29% of the total number.

9th WaterNet/WARFSA/GWP-SA Symposium

It was confirmed during the reporting period that the 9th WaterNet/WARFSA/GWP-SA Symposium would be organised to include the biennial Symposium of the International Commission on Water Resources Systems (ICWRS) of the International Association on Hydrological Sciences (IAHS). This means that the Symposium would be global in nature and having a regional flavour with participants drawn from all continents. The venue would be Johannesburg, South Africa on 29-31 October 2008.

Physics and Chemistry of the Earth Journal

The 2007 edition of the *Physics and Chemistry of the Earth Journal* Volume 32, Issues 15-18 entitled “*Mainstreaming integrated water resources management in the development process*” was published and distributed to members.

Launch of the WaterNet Alumni Association

With a growing population of more than 200 graduates from the Master Programmes in IWRM and Water Resources Engineering and Management at the University of Zimbabwe and University of Dar es Salaam, WaterNet alumni have been calling for the establishment of a formalised Alumni Association and the support of WaterNet to do this. From the foregoing, the Secretariat took the 2007 Symposium as an opportune time for Alumni to come together and discuss how the association would be organised and steered. The Launch event of the WaterNet Alumni association was held on 1 November 2007 during the 8th Symposium.

WaterNet News

Two issues of the WaterNet newsletter (WaterNet News Volume 3 issues 1 and 2) were released during the reporting period.

World Water Week in Stockholm

The World Water Week in Stockholm was held on 12-18 August 2007. WaterNet was present and participated in two seminars: Bridging the Gap in Research and Education: Addressing Issues in Countries with a Vulnerable Scientific Environment; and Groundwater Capacity Building Initiative in Africa: Outcomes and Way Forward. The Water Week was also attended by the winners of last year’s “Young Scientist Award” recipients who made presentations in various sessions.

Dissolution of Trust Registered in Zimbabwe

The WaterNet Secretariat as advised by the Law firm that registered WaterNet in Zimbabwe, Coghlan Welsh and Guest (David John Lewis) on 3 April 2003 initiated the termination of the Deed of Trust through a Dissolution Resolution to be signed

by the four Trustees.

Appointment of WaterNet Research Leader

Dr Bongani Ncube accepted appointment for the position of Research Leader and assumed duty as from 15 August 2007. To allow for hand-over-take-over of duties from the Research Advisor Dr Washington Nyabeze's part-time contract was extended to end of October 2007.

Appointment of Symposium Intern

On 5 July 2007, WaterNet Secretariat welcomed Ms Joanna Fatch on an 8-month Symposium Internship. Joana has been the face behind the symposium08@waternetonline.org address. She worked diligently for the preparations of the 8th Symposium held in Lusaka, Zambia. Her position is jointly managed and funded by WaterNet, WARFSA and GWP-SA.

Water for Local Needs - the Contribution of Local Governments to IWRM Symposium

WaterNet participated in the symposium 'Water for Local Needs - the Contribution of Local Governments to Integrated Water Resources Management (IWRM)' held in Benoni, Ekurhuleni Metropolitan Municipality, South Africa on 9 - 10 July 2007. The symposium was a forum for local governments and relevant stakeholders in the Southern African Development Community (SADC) Region to identify the benefits of IWRM application for local governments as well as the ways and means to advance their involvement. The conclusions derived from the debates formed the basis for the development of a regional IWRM initiative aiming at encouraging local governments to adopt the principles of IWRM in their policies and actions.

1 INTRODUCTION

1.1 BASIC DATA

Country:	Southern Africa Development Community (SADC)
Project name:	WaterNet Strategy Phase II, 2005-2009: Building Capacity for Water Resources Management in Southern Africa
Sida contribution number	73000564
DGIS activity number:	11763/DMW0051164
Executing organisations	
Coordinating Institute:	UNESCO-IHE Institute for Water Education, Delft, The Netherlands
Host Institute:	University of Zimbabwe, Harare, Zimbabwe
Project period:	1 April 2005 - 31 March 2010
Progress Report No.:	5
Reporting period:	1 July 2007 – 31 December 2007

1.2 CONTEXT

This document is the fifth progress report of WaterNet Phase II (2005-2009) covering the period 1 July 2007 - 31 December 2007. The first report covered the period 1 April 2005 - 31 December 2005 and was submitted in March 2006, the second report covered the period 1 January 2006 – 30 June 2006 and was submitted in January 2007, the third report covered the period 1 July 2006 – 31 December 2006 and was submitted in July 2007, whilst the fourth report covered the period 1 January 2007 – 30 June 2007 and was submitted in February 2008.

WaterNet, a network of tertiary education and research institutions in Southern Africa, was established in year 2000. By the end of December 2007 WaterNet membership consisted of 56 institutions and five supporting members.

1.3 PROGRAMME OBJECTIVES

The vision of WaterNet is a future in which the SADC region has the institutional and human capacity to educate its own water managers, capable to contribute to the equitable sharing and sustainable utilisation of water resources for poverty alleviation, economic development (livelihood security) and environmental security.

The mission of WaterNet (long-term development objective) is to enhance institutional and human capacity in Southern Africa in the field of Integrated Water Resources Management (IWRM) through training, education, and research by harnessing the complementary strengths of institutions in the region. The enhanced capacity should enable the peoples of Southern Africa to manage their water resources in a more efficient, equitable and sustainable manner.

The immediate objectives of WaterNet are fivefold:

1. To forge a strong, demand driven and sustainable network of universities and research institutions in Southern Africa in the field of IWRM.
2. To deliver and strengthen the jointly owned regional Master degree programme in IWRM
3. To develop and deliver demand-driven training and education for practicing water sector professionals in Southern Africa.
4. To stimulate, regionalise and strengthen the research in the field of IWRM in Southern Africa.
5. To raise awareness and understanding of IWRM and its implementation at local, national and trans-boundary scale.

The immediate objectives are interlinked as they depend on each other and also benefit each other.

2 PROGRAMME TARGETS

2.1 PLANNED ACTIVITIES JANUARY TO DECEMBER 2007

The following activities were planned to be addressed during the reporting period (as amended and approved at the 7th WaterNet Annual General Meeting, held in Lilongwe, Malawi on 3 November 2006).

Work Plan January to December 2007

OUTPUT 1 To forge a strong, demand driven and sustainable network

- Activity 1.1 Establish WaterNet PCN 23: WaterNet to become the implementing agent for SADC's human capacity building priorities in IWRM. Develop a long-term (15 year) Strategy for WaterNet taking into cognisance the HIV/AIDS and Gender aspects in 1.7.
- Activity 1.2 Promote member ownership of Network: WaterNet will put a particular emphasis to invite members from Angola and Madagascar. Revise criteria and advertise for the Nodal Strengthening Fund (NDF), Staff Development Fund (SDF) and Staff Exchange Fund (SEF). Award at least 5 NDF, 3 SDF, and 28 SEF. Establish membership guidelines.
- Activity 1.3 Fully staffed WaterNet Secretariat: The secretariat is expanded with a Research Leader in January 2007.
- Activity 1.4 Professional financial management achieved: Manage the WaterNet Funds in a professional and transparent manner. Establish an effective financial administration by the first quarter of 2007, able to receive and disburse external funds according to international auditing requirements. Harmonise procurement and financial management manuals.
- Activity 1.5 WaterNet Legal Status established: Ensure that the WaterNet Trust is registered in Botswana. Operationalise the WaterNet Trust. Harmonise AGM regulations and protocol, Management Board and Trust regulations. Normalise WaterNet's operations as per the "Guidelines Governing Relations between SADC and Organisations executing SADC Programmes and Projects Under the Principle of Subsidiarity.
- Activity 1.6 Financial sustainability through income generation and contributed funds: The aim is to generate contributed project funding and external income of up to at least 25 % of the overall WaterNet budget
- Activity 1.7 Monitoring, evaluation and reporting procedures in place: Ensure that the necessary review/updating of the IWRM capacity building agendas (awareness, education, training and research). Implement the recommendations from the Impact Assessment Report. Refine and implement WaterNet Gender and HIV/AIDS strategies

OUTPUT 2 To deliver and strengthen the jointly owned regional master degree programme in IWRM

- Activity 2.1 Deliver the Masters programme at two core host institutions
- Activity 2.2 Offer 6 Specialisations in Water Resources Management, Water and Environment, Water for People, Hydrology, Water and Land and Water and Society
- Activity 2.3 Fellowship Fund established: The WaterNet Fellowship Fund to offer 32 fellowships for the Master programme for 2007 (30 from current funding and 2 additional fellowships from the EU-ACP Water Facility)
- Activity 2.4 Establish Review procedure and quality control system for WaterNet Masters programme: Comprehensive review of the curriculum of the Master Degree Programme, including a proposal for general Regulations
- Activity 2.5 Establish with WARFSA the WaterNet MSc Dissertation Fund: Operationalise with WARFSA the WaterNet MSc Dissertation Fund

OUTPUT 3 To develop and deliver demand driven training and education for practicing water sector professionals from the Southern African region

- Activity 3.1 Launch the WaterNet Professional Training programme: In collaboration with Global water Partnership Southern Africa (GWP-SA) and SADC Directorate for Infrastructure and Services, Water Division, offer 6 regional professional and short courses in IWRM 2 of which will be funded through the EU-ACP Water Facility grant.
- Activity 3.2 Appoint on an ad-hoc basis Professional Training Officer(s) to coordinate the WaterNet professional training programme
- Activity 3.3 Establish catchment partnership for demonstration and learning on translating IWRM principles to management jointly with Global Water Partnership Southern Africa (GWP-SA) and through the Danida Regional Programme Support for Environmental Assistance to the Southern Africa Region on Integrated Water Resources Management.
- Activity 3.4 Offer the English for Water Managers Course targeting professionals from Democratic Republic of Congo, Madagascar, Mozambique, and Angola. Offer writing and communication skills training to IWRM Masters students.

OUTPUT 4 To stimulate, regionalise and strengthen research in the field of IWRM in the Southern Africa Region

- Activity 4.1 Research capacity building (training and mentoring) together with WARFSA
- Activity 4.2 WaterNet a partner in integrated IWRM research: Support and facilitate multi-disciplinary research initiatives among WaterNet member institutions (Challenge Program on Water and Food in the Limpopo Basin (PN 17), Smallholder Systems Innovation Research Project.
- Activity 4.3 Seek funding for new research activities, WaterNet facilitating role
- Activity 4.4 Appoint the two WaterNet - SADC Professorial Chairs in IWRM in January 2007 and advertise for two additional positions by May 2007.

OUTPUT 5 To raise awareness and understanding of IWRM and its implementation at catchments and transboundary scale

- Activity 5.1 Develop and implement WaterNet Outreach activities: Develop and implement WaterNet communication strategy. WaterNet to consolidate the knowledge base from its post-graduate education programmes, its involvement in research advancement and the strengths of its members on IWRM. Carry out a synthesis review of the Physics and Chemistry of the Earth Journal papers so as to inform policy and IWRM on the ground.
- Activity 5.2 Hold the 8th WaterNet/WARFSA/GWP-SA Symposium in Zimbabwe. Initiate planning for the combined 9th WaterNet/WARFSA/GWP-SA International Association of Hydrological Sciences (IAHS) tentatively scheduled for Johannesburg, South Africa.
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3 ACHIEVEMENTS

The WaterNet Phase Iib Project (1 April 2008 to 30 March 2011) document was submitted to the Cooperating Partners on 18 December 2007 requesting for a total subsidy of **3.39 Million Euro (2.86 Million Euro from DGIS and 0.53 Million from Sida)**.

The total budget for Phase Iib being **5.24 Million Euro**. The amount requested was based on the assumption that the balance of the Sida subsidy for WaterNet Phase II project (estimated at **1.85 Million Euro** as of December 2007) would be integral transferred from UNESCO-IHE to the WaterNet Trust in early 2008. The requested budgets from both DGIS and Sida were slightly higher than originally requested for Phase Iib due to the extension of the project by half a year i.e. the project document is for a 3-year period as opposed to the 2.5-years originally planned and some increases in the Management Fund.

It is expected that the project document would be reviewed by the Cooperating Partners during the early part of 2008 and that a decision would be made to in time for the start of the project.

The requested funding from DGIS and Sida for WaterNet Phase Iib is based on the revised budget for Phase II presented in **Annex 1** and **Annex 16**. The budget is shown in **Table 3.1**.

Table 3.1 Summary of requested budget for Phase Iib

Funding Agency	Original budgeted Phase II document [Euro]	Proposed budget [Euro]
DGIS	2.4 million	2.86 million
Sida	1.3 million ¹	2.38 million
Total	3.7 million	5.24 million

It is proposed to maintain the same budget allocations and structure for Phase Iib as provided in the Strategy document for Phase II. This means that funding for the Fellowship Fund, the MSc dissertation Fund and the Professorial Chair Fund will be requested from Sida, while the other Funds will be dedicated to DGIS. However, minor changes in the budget allocations are proposed. More it is suggested to establish a new fund during Phase Iib, namely the Alumni Association Fund.

The Alumni Association Fund has a budget allocation of 50,000 Euro in total. During the 8th WaterNet/WARFSA Symposium in November 2007 in Lusaka, Zambia, the WaterNet Alumni Association was launched and this budget is meant to facilitate an active alumni community. Start up and general operational costs for the Alumni Association will be funded by this Fund, including costs for alumni meetings, workshops and limited honorarium of the Alumni Association Board members and other members involved in drafting the constitution, statutes, rules and regulations for membership. The costs per Alumni activity and for organising and facilitation the workshops are based on experience with similar activities.

¹ Figure based on the assumption that half of the original requested (2.6 Million Euro) has been spent in Phase Iia. However, under spending on the Sida budget during Phase Iia is foreseen with an estimate of total expenditure of 0.75 Million Euro (December 2007). Hence a budget increase of 0.53 Million Euro is requested to cover the additional 6 months.

The implementation of the activities under Phase IIa started in April 2005 and the progress up to the end of this reporting period is summarised in **Table 3.2**. More detailed information on the progress during Phase IIa can be found in the previous bi-annual progress reports.

With the establishment of the WaterNet Trust as a legal entity the remaining activities defined for Phase II will be implemented through the Trust. The transition in management from UNESCO-IHE to the WaterNet Trust will earmark the start of WaterNet Phase IIb, which is planned to start in April 2008 and run until March 2011. The priorities for Phase IIb directly relate to the progress made in Phase IIa in order to meet the objectives defined for the full Phase II period. Therefore, the main focus of Phase IIb will be on further strengthening of on-going developments and initiating activities not yet implemented during Phase IIa.

Table 3.2 Overview of achievements in Phase IIa

Outputs	Activities	Progress Phase IIa
1. To forge a strong, demand driven and sustainable network	1.1 Establish WaterNet PCN23	On-going, progress satisfactory
	1.2 Promote member ownership	On-going, progress satisfactory
	1.3 Fully staffed WaterNet Secretariat	Target achieved
	1.4 Professional financial management	On-going, progress moderate
	1.5 WaterNet legal status	Target achieved
	1.6 Financial sustainability	On-going, progress moderate
	1.7 Monitoring, Evaluation	On-going, progress moderate
2. Deliver and strengthen the jointly owned WaterNet Master programme in IWRM.	2.1 Deliver Programme at 2 host institutions	Target achieved, on-going activity
	2.2 Offer 6 specialisations	Target achieved, on-going activity
	2.3 Fellowship fund	Target achieved
	2.4 Review procedure Masters programme	On-going, progress moderate
	2.5 Dissertation Research Fund	Target achieved
3. Professional training and education.	3.1 WaterNet professional training programme	Target achieved, on-going activity
	3.2 WaterNet professional training officer	Deviated to Research Leader
	3.3 Catchment partnerships	On-going, process slow
	3.4 English for Water Managers	On-going, demand less than expected
4. Research capacity building	4.1 Research capacity building	On-going through, disruptions within WARFSA
	4.2 WaterNet partner in IWRM research	On-going, progress satisfactory
	4.3 Funding new research activities	On-going, progress moderate
	4.4 Appoint 5 WaterNet Professorial Chairs IWRM	On-going, one appointed, progress slow
5. Raise awareness and understanding of IWRM	5.1 Develop and implement WaterNet Outreach activities	On-going, progress satisfactory
	5.2 Hold WaterNet/WARFSA Symposia	Target achieved, on-going activity

WaterNet's long-term development objective is to enhance institutional and human capacity in Southern Africa in the field of Integrated Water Resources Management (IWRM) through training, education, and research by harnessing the complementary strengths of institutions in the region. The enhanced capacity should enable the peoples of Southern Africa to manage their water resources in a more efficient, equitable and sustainable manner.

To effectively achieve this objective WaterNet requires a longer term strategy that makes it possible to plan effectively for the financial, institutional development and management purposes to ensure sustainability of the organisation. The strategy should consider not only the financial sustainability of the programme but also the human resource in terms of expertise required to continue providing such capacity building efforts. It is clear that so far WaterNet has had commendable and vital outputs but at the same time the human and

institutional capacity short-comings are still apparent within the water sector in the region. Therefore a number of key issues need to be explored and incorporated into the long-term strategy document. These include the prospect of continued external support, fundraising and financial support within the region, the retention and maintenance of developed capacity.

Besides the institutional aspects the long term strategy also has to capture regional developmental trends and should be amenable to updating on a continual basis taking into account the regional challenges like:

- the HIV/AIDS scourge
- water related disasters like droughts and floods
- poverty alleviation and improvement of livelihoods
- environmental protection and climate change

The strategy will also provide a framework of measuring or mapping the impact of the capacity building efforts.

To develop the comprehensive and holistic long-term strategy WaterNet has considered establishing a task team. This Team would be attracted from member institutions or externally, however, it is important that the Team is familiar with WaterNet set-up and has good relations with its key-stakeholders (e.g. SADC, GWP-SA, WARFSA, UNESCO-IHE).

The Terms of Reference for the Team were discussed at the 2nd Management Board Meeting and they included the following:

- Facilitate a long-term strategic visioning exercise for WaterNet with partners towards ensuring WaterNet is still relevant in the next 5-10 years:
 - Consider WaterNet's current and likely future roles in the SADC region taking into cognizance the WaterNet's new status and relationship with supporting members and other organizations.
 - Comment on changes in strategic focus areas of WaterNet since inception and how the current strategy may evolve into a future strategic direction for the next 5-10 years.
- Develop Financial Plan and Strategy:
 - Develop the WaterNet Financial plan (indicating expected expenses and sources of funds) for the period 2008 – 2018;
 - Identify ways in which WaterNet can increase and diversify its funding (in the event of greatly reduced foreign donor support and changing trends in funding priorities). Consider financial contributions by members and ways of sourcing income from different WaterNet activities. Propose a process to create a mechanism that would generate sufficient funding for WaterNet to plan and sustain its activities to meet the overall long-term objective.
 - Suggest various marketing approaches to address the recommended financial plan and strategy above.
 - Develop a consolidated Strategy document taking into account the existing strategies and guideline papers e.g. Gender and HIV/AIDS, Impact assessment of the WaterNet programme, Professional courses strategy.

- Network and human resources:
 - Assess the current network and involvement of partners. Identify strength and weaknesses of the network and recommend on ways of improvement for the involvement of members and the balance of the network in terms of type of members, regional spread and future potential developments.
 - Assess the organizational structure of WaterNet, how it contributes to the performance of the network and it effectively adds to achieving the organizational goals.
 - Identify and recommend on the essential functions and skills required for the Board of Trustees and Secretariat staff members for the period 2008 – 2018.
- Monitoring and Evaluation:
 - Develop a monitoring and evaluation framework that assesses ‘impact or change’ in the region and the network. Outcome mapping should be considered in the WaterNet context at regional level as well as national level, considering the roles of different members in the IWRM capacity building process.

WaterNet intends to embark on the development of its long-term strategy before the end of the Phase IIa project.

The following of the planned activities were undertaken during the reporting period.

3.1 FORGING A STRONG, DEMAND DRIVEN AND SUSTAINABLE NETWORK

3.1.1 Establishing WaterNet PCN 23

During the reporting period WaterNet delivered on a number of activities through collaboration with other regional and international capacity building initiatives in-line with the objectives of WaterNet PCN23. The details are presented in **section 3.3**.

3.1.2 Promote member ownership of the network

The 8th WaterNet AGM was held on 2 November 2007 in Lusaka, Zambia. The AGM approved the work plan and budget for 2008 (**Annex 1**).

The 4-year term of office of Dr Wapu Mulwafu as Steering Committee/Board of Trustee Member expired during the 8th AGM. He was nominated for a second term and being the only nominee he was duly elected for a second consecutive.

WaterNet membership has grown since being established in Victoria Falls, Zimbabwe in March 2000 by 18 institutions from 9 countries in Southern and Eastern Africa to a broad network with 56 members in 15 countries in November 2007.

Four new institutions were accepted as Members at the 8th WaterNet AGM held in Lusaka, Zambia. The new entrants are listed hereunder:

1. Department of Scientific Services, Gorongosa National park – Chitengo, Mozambique
2. Department of Chemistry, Chancellor College, University of Malawi – Zomba, Malawi
3. Land Use and Mechanisation Department, Faculty of Agriculture, University of Swaziland - Manzini, Swaziland
4. Faculty of Applied Science, National University of Rwanda – Butare, Rwanda (as an Associate Member)

At the 1st Management Board meeting held in Gaborone, Botswana it was resolved that WaterNet should continue accepting new members since some members were not active. The Secretariat was encouraged to make good use of the annual report from members to try and evaluate members the effectiveness of the network and to inform its strategic direction of the in terms of membership.

Out of the 52 network members by November 2006, thirty one submitted the first reports for the reporting period 1 July 2006 to 30 June 2007. The member reports have been synthesised to gauge the membership drive and participation in the network. This meant to provide an indicator of the effectiveness of the network. The following section gives a summary of major issues extracted from member reports for the period 1 July 2006 to 30 June 2007 based on four main headings which describe the core activities of WaterNet, namely Education, Training, Research and Outreach.

Participation in the IWRM Masters programme

Eighteen network members participated in the IWRM masters program. This number includes the six institutions that host the core programme and the specialisations. Ten of these institutions participated in the teaching of the programme and nine of them were involved in reviewing the teaching modules. Only the host institutions were

involved in quality control of the programme modules. Most of the reports echoed a need to increase participation of members in the delivery of the Masters programme.

Professional Training Courses

Of the members who responded, twelve participated in the professional courses. Most contributed either as participants or facilitators. Fewer members were involved as facilitators as hosts (4) and/or in the preparation of course materials (4).

Participation in Research Activities

Seven members were involved in the Challenge Program on Water and Food (CPW&F PN 17) and the Smallholder Systems Innovations (SSI) research projects. Participation was mainly through incorporating Masters students as part of their dissertation research. It is also encouraging to note that eight of the members were also involved in one way or another in the development of research proposals under WaterNet.

Outreach

Almost all members attended the 7th WaterNet/WARFSA/GWP-SA Symposium and 7th AGM in Malawi. Considering that all institutions had to support their representatives with daily subsistence allowances, this shows a keen interest in the multiple objectives of the Symposium and the AGM (WaterNet governance, and scientific outreach).

It is anticipated the response rate will increase in subsequent years particularly in view of the adoption of the 'Rules Governing WaterNet Membership' during the 8th AGM. The Secretariat would remind each member to complete the reporting form for the following year and submit before end of August 2008. Members with outstanding reports will also be requested to submit them during this time.

At the 2nd WaterNet Management Board meeting, 29-30 October 2007 held in Lusaka, Zambia considered and debated the findings of the Committee on Guidelines for WaterNet Membership (Dr Mazvimavi and Dr Mulwafu). Their terms of reference for the Committee included the assessment of WaterNet membership (classes), developing guidelines for continued membership and level of admission, determining the ideal size of the network, whilst considering diversity and effectiveness.

The Committee report consisted of the following recommendations:

- Four classes of membership were suggested namely core, supporting, corporate and associate.
- Only representatives of core member institutions would be eligible to vote and election to the Board of Trustees
- Membership should be considered for applicants from all over the world but Africa should be a priority.
- Corporate members would not have access to Nodal Strengthening Fund as detailed in the adopted 'Rules Governing Corporate Members of WaterNet'.
- Corporate members' staff would be precluded from other funds that core members have access to but they can involve themselves into other structures.
- Associate members can not apply directly to access WaterNet funds namely: Nodal Strengthening Fund, Symposium Fund, Fellowship Fund; Professorial Chair Fund,

Language Course Fund and Staff Development Fund. Associate members could access the Staff Exchange Fund through partnering with a Core member.

- Associate members could benefit through collaboration in teaching, research, information sharing and capacity building.
- Members from a university institution should be admitted at the Faculty or equivalent level. Departments/units within the same faculty can be encouraged to submit a joint application for membership.
- New applicants to membership should specify contributions to WaterNet, resources available to enable them to contribute to WaterNet's activities and a supporting letter from the Head of the Institution.
- A member should be warned in the event of not submitting an annual report and should not be eligible to accessing Symposium Funds. If the report has not been submitted for two consecutive years, access to funding shall be suspended by the AGM and non submission for 3 years, the member should be expelled from WaterNet.
- An expelled member could reapply for membership after two years from the date of expulsion.

Comments and discussions included the following:

- Should the recommendations be adopted at the 8th AGM there would be a need to modify the rules guiding corporate members which were passed the previous year.
- There was need to think about the consequence if the whole world was admitted to the WaterNet membership particularly in relation to the Cooperating Partners' interests and continued support.
- Corporate members could be nominated to the Management Board on an ad-hoc basis and only core members could be elected to the Board Trustees.
- The membership should also contribute to the network instead of just getting benefits.
- WaterNet is a SADC network and focus should not be diverted.
- There was need to be careful not to accept too many weak members as there was need to expand on capacity.
- The issue of benefits for members should be clear as benefits were not just financial.
- The Staff Exchange Fund should support linkage with Associate and Corporate members as long as a Core member is involved.
- The Symposium Fund should support Core members only.
- The Publications Fund should support SADC institutions and for courses within the SADC region.
- There was a need to come up with different application forms for Associate and Corporate members.
- There was need to be very strict with members who do not participate and they should be excluded from funding.
- Corporate members could be elected to the Board of Trustees but can be limited to one.

It was finally resolved that:

- A member should be warned after one year of not participating and can be suspended after two consecutive years of non participation. The third year would be expulsion. Communication should be sent to a senior person at the institution.
- Associate members should not be elected to the Board of Trustees. They can participate at the AGM but will have no voting rights.

- Clarification should be sought from the Lawyer on whether and how the Deed of Trust could be amended to accommodate all classes of membership.
- The draft Guidelines discussed should be revised and presented at the 8th WaterNet AGM scheduled for 2 November 2007 for consideration and possible adoption.

The 8th WaterNet AGM adopted the ‘Revised Guidelines for WaterNet Membership’ after a number of changes were suggested (see **Annex 2**).

The procedures and criteria for accessing WaterNet Funds by members were revised and updated at the 2nd WaterNet Management Board meeting. The procedures and criteria for the award of the Professional Training Fund were discussed by the Board for the first time. The Secretariat also intended to formulate procedures and criteria for the Alumni Fund. The new and the revised criteria were going to be presented at the 9th WaterNet AGM for approval and adoption.

The procedures and criteria for accessing WaterNet Funds by members are important and fundamental to the network activities i.e. for accountability, transparency and fairness. These will be incorporated as part of the ‘Procurement Procedures Manual’ guiding the WaterNet Trust.

The Board agreed on the following:

- The criteria and procedures should be more binding with a clear budget which should be put as a condition for accounting purposes. The beneficiaries should submit reports and any deviations from the agreement should be explained. WaterNet should have a right to investigate and donors should have confidence that funds were being managed properly.
- The materials produced through WaterNet sponsorship should be owned by WaterNet and available to the region at no cost.
- The applications can be reviewed by the Secretariat and the Chairman can approve through e-mail and the Board would ratify.
- The Secretariat should come up with a plan on call for applications and how often the funds would be paid out for all WaterNet Funds.
- The criteria and procedures should indicate the need to submit a sustainability plan in the case of the Nodal Strengthening Fund, and that subsequent applications could be considered after 2 years after receiving such funds except in exceptional cases.

The following funds were disbursed during the reporting period.

Staff Development Fund (SDF): Ms Bloodless Dzvairo from Institute of Water and Sanitation Development as partial sponsorship to attend a course on ‘Ecological alternatives in sanitation’ in Sweden.

Professional Training Fund (PTF): For Ms Tshepo Setlhogile from the Centre for Applied Research, Botswana to enable her to attend the short course on ‘Financing and economic instruments for IWRM’ held in Pretoria, South Africa.

Professional Training Fund (PTF): For attendance of the WaterNet-GWP-SA course on ‘Strategies on resilience building on water related disasters’ course in Maputo, the following individuals were offered full Professional Training Fund:

- Ms Faith Love from Dept of Geology ,University of Zimbabwe
- Mr Makada Tumbo from Institute of Resources Assessment, University of Dar es Salaam
- Mr Andries Jordaan from Disaster Risk Management Training and Education Centre for Africa (DiMTEC), University of the Free State Bloemfontein in South Africa.

Staff Exchange Fund (SEF): Dr Richard Owen of Geology Department, University of Zimbabwe for participation in a ‘Hydrology research planning workshop’ at Gorongosa Research Centre in Mozambique.

3.1.3 Fully staffed WaterNet Secretariat

Dr Bongani Ncube accepted appointment for the position of Research Leader and assumed duty as from 15 August 2007. To allow for hand-over-take-over of duties Dr Washington Nyabeze’s part-time contract as the Research Advisor was extended up to end of October 2007. Dr Nyabeze was also the lead guest editor of the *‘Physics and Chemistry of the Earth Journal*.

WaterNet Secretariat also welcomed Ms Joanna Fatch on 5 July 2007, on an 8 month long Symposium Internship post. Ms Fatch is a graduate of the University of Malawi Chancellor College. Her position is managed and funded through the three collaborating partners i.e. WaterNet, WARFSA and GWP-SA.

During the reporting period the WaterNet Secretariat requested for the services of Ms Jeltsje Kemerink from the UNESCO-IHE Project Office from 6-28 October 2007 to assist and advise the Manager and Secretariat on the following:

- Developing of Memorandum of Understanding (MoU) for UNESCO-IHE and WaterNet Trust
- Formulation of WaterNet Phase IIb Strategy
- Formulation of conditions of service and engagement of human resources firm.
- Formulating a contract for the appointment of accounting firm following the resolution made by the Board of Trustees
- Assistance in reviewing WaterNet criteria for accessing funds
- General assistance with preparations and logistics for 8th Symposium

WaterNet staff members working at the Secretariat are either employed at the hosting institution (University of Zimbabwe) or seconded to WaterNet or they have a consultancy contract with one of the member institutions with the assignment to support WaterNet. With the legal establishment of the WaterNet Trust the staff members of the Secretariat will get an employee-employer relationship contract with the Trust. This means that current contracts have to be revised from consultancy short-term contracts to employment contracts taking into account the labour policies and laws of Botswana.

Where previously short term competitive salary consultancy contracts were awarded it might be considered to award longer-term employment contracts with competitive salaries for regional positions and additional benefits (e.g. health insurance, tax, pension schedules). It is advisable to assess the most favourable contract format for all parties involved and to pay specific attention to limit the risk for the WaterNet Trust as employer in employments conflicts. Moreover, the WaterNet Trust has to develop coherent and sound policies for staff

appointment and staff dismissal in line with the existing legislation in Botswana to protect itself from potential suits from employees.

The new role of the WaterNet Trust as employer also means that the WaterNet Trust becomes responsible for staff development and staff appraisal. For the well-functioning of the WaterNet Secretariat it is of utmost importance to continuously train and develop the individual staff members and to encourage their performance with sufficient incentives. Therefore, the WaterNet Trust has to introduce a suitable staff evaluation system in which work performance is assessed based on pre-defined tasks belonging to the function the employee is appointed to.

Various evaluation systems are used by similar organisations and assessment of the existing systems is advisable. A potentially suitable system could be based on job based salary scales in which the salary steps are pre-defined based on the skills and expertise reasonably expected from the employee fulfilling the job (including risks & responsibilities) and the years of experience. In this system it means normal performance will be awarded with increase of one salary step per year, good performance with two steps etc. with possibilities for awarding of additional bonuses in case of extreme good performance (e.g. additional risks/responsibilities taken) or performance under difficult circumstances. The staff evaluation system could then have the following design.

Task Setting Meeting (January 2008):

To define concrete tasks based on the terms of reference of the job and new challenges for the up-coming year and to agree on training and staff development opportunities for coming year.

Mid-term review meeting (June 2008):

To assess developments influencing the performance of staff and review the task set at the beginning of the year with potential adjustment of tasks (e.g. delete tasks, change tasks, add tasks).

Evaluation meeting (December 2008):

To assess developments influencing the performance of staff and to evaluate the performance of the staff based on the tasks defined in the previous meetings. Based on this meeting salary for next year will be negotiated based in the salary step in the salary scale defined for the specific job and/or bonuses will be awarded.

From all above-mentioned meetings a short output based report will be produced by the employee, signed by both employer and employee and kept in the personal staff file. The Chairperson of the WaterNet Trust would have the meetings with the WaterNet Manager, while the WaterNet Manager could have the meetings with the other staff members at the Secretariat and forward his advice on the salary and bonuses for the Secretariat staff for approval to the WaterNet Trust. However, with this kind of evaluation system it is very important that an independent body exists to which both parties can turn to in case of disagreement on the procedure (normally a Human Resources Officer, a role which could potentially be fulfilled by one of the members of the WaterNet Board of Trustees).

At the 2nd WaterNet Management Board meeting it was agreed that the Secretariat should prepare terms of reference for hiring a human resources consultant domiciled in Botswana to assess and develop the employment contracts, to advice on the most suitable staff evaluation

system for the WaterNet Trust and to support the Trust with the development of human resources policies. The Secretariat would develop the terms of reference for the consultant and also seek advice from the Accounting Firm (KPMG, Botswana) and the WaterNet Lawyers (Molatlhegi and Associates).

3.1.4 Professional financial management achieved

The WaterNet Board of Trustees recommended the appointment of KPMG, Botswana as the preferred accounting firm to provide fund management services for the WaterNet Trust at their 2nd meeting held in Gaborone, Botswana on 5 October 2007.

The Board further recommended that UNESCO-IHE Institute for Water Education should arrange for the appointment of KPMG, Botswana as the fund managers during the transition Phase of WaterNet Phase IIa and IIb projects as per the memorandum of agreement entered into between the WaterNet Trust and UNESCO-IHE Institute for Water Education on 13 June 2007.

Expressions of interest were solicited from three international accounting firms domiciled in Botswana *viz.* KPMG, Price Water House Coopers and Deloitte and Touche. Deloitte and Touche declined to offer accounting services on the grounds that they had no capacity to offer the services.

The choice of KPMG over Price Water House Coopers being based on the following considerations:

- KPMG demonstrated enthusiasm and willingness to take up the assignment from the onset
- KPMG submitted a more thorough and comprehensive expression of interest indicating a clear understanding and appreciation of WaterNet business and governance structures
- KPMG expression of interest demonstrated a better understating of the terms of reference for financial hosting and has the relevant (similar initiative) experience
- KPMG also included in their submission both senior and junior staff in the proposal - indicating that they appreciate the day to day fund management functions requiring junior staff as well as the occasional functions requiring top management consultation
- KPMG revised monthly quote for the fees of Botswana Pula 22 500.00 (USD 3 629.00) was comparable to that of the revised quote from Price Water House Coopers of Botswana Pula 18 300.00 (USD 2 952.00)
- KPMG submitted a more comprehensive breakdown of the basis of their fee structure indicating the time envisaged to be spent under each cost area as per the terms of reference sent to them

The opening of WaterNet Trust Bank accounts in Gaborone was still pending at the end of the reporting period. Consideration was being given to four banks which operated regionally and internationally, namely:

- Standard Bank (Stanbic)
- Barclays Bank
- Standard Chartered Bank
- First National Bank

The opening of bank accounts will be facilitated through the terms of reference and contract between UNESCO-IHE and KPMG for WaterNet Phase IIa and IIb transition period.

3.1.5 WaterNet legal status established

The WaterNet Deed of Trust was lodged at the Botswana Deeds Office and was duly registered on 29 December 2006 under number MA810/2006.

One of the post-registration activities following registration has been for WaterNet to become a SADC Institution within the subsidiarity principles defined by SADC at the Windhoek, Namibia Summit in 2002. The registration as a Trust has facilitated the recognition of WaterNet as an organisation executing SADC programmes and generally the Notarial Deed of Trust meets the requirements of the SADC “Guidelines Governing Relations between SADC and Organisations Executing SADC Programmes and Projects”.

The law firm Molatlhegi and Associates were requested during the reporting period to draw up a Memorandum of Understanding (MoU) with SADC and a letter of application for SADC subsidiarity status. The MoU and the application letter had not been concluded by the end of the reporting period.

The 2nd Management Board meeting also considered draft MoU’s with two WaterNet supporting members *viz.* UNESCO-IHE Institute for Water Education and Global Water Partnership Southern Africa (GWP-SA). It was agreed that it was necessary to clearly define the relationship between the WaterNet Trust and its supporting members. The MoU’s will require alignment with the new status of WaterNet.

It was noted that an MoU with UNESCO-IHE would avoid going through procurement procedures involving tendering for the scientific backstopping of there were instances where some urgent backstopping was required by WaterNet from UNESCO-IHE. The MoU will define the joint activities expected whilst at the same time underscoring the sound historical relationship between WaterNet and UNESCO-IHE.

3.1.6 Financial sustainability through income generation and contributed funds

Refer to the beginning of **section 3** of this report.

3.1.7 Monitoring, evaluation and reporting procedures in place

WaterNet Secretariat embarked on a mapping exercise to streamline the reporting requirements of the network to the various stakeholders. It is expected that this exercise will be completed before the start of WaterNet Phase IIb project.

3.2 DELIVER AND STRENGTHEN THE REGIONAL MASTERS PROGRAMME

3.2.1 Deliver the masters programme at two host institutions

Thirty eight (38) students of the 2006-2007 intake to graduated during the reporting period highest number ever attained in the WaterNet Masters Programme. Two students dropped out mid-way from the University of Zimbabwe group.

The summarised statistics of the graduates are as follows:

- 27 Male and 11 Female
- From the University of Zimbabwe group; 1 Botswana, 3 Malawi, 1 Tanzania, 2 Zambia, 5 Zimbabwe
- From the University of Dar es Salaam group; 1 Ethiopia, 3 Kenya, 1 Lesotho, 2 Malawi, 1 Rwanda, 1 Swaziland, 10 Tanzania, 3 Uganda, 2 Zimbabwe
- 10 students from University of Dar es Saalam were funded from elsewhere

It also worth noting that for the first time all the students dissertation were submitted in electronic form and these were made available on a CD to all WaterNet member institutions and other participants during the 8th WaterNet/WARFSA/GWP-SA Symposium held in Lusaka, Zambia. The full list of WaterNet Masters graduates to date and their dissertation topics is presented in **Annex 3**.

WaterNet advertised for the 2008-2009 intake in three languages, English, French and Portuguese and also introduced a standard form for application to simplify the processing and pre-selection exercise of the best candidates. The adverts where circulated widely electronically and in hard copies through WaterNet member institutions and partner networks. The advert appeared in the May–June 2007 issue of the Water Wheel Magazine published by the Water Research Commission of South Africa. The adverts are also available in poster and brochure form. These were distributed in Maputo, Mozambique during the Regional Water Dialogue held on 16-18 May 2007.

The deadline date for receipt of applications was set at 31 August 2007. The pres-selection exercise for the 2008 IWRM Masters students was conducted on 15-16 October 2007 in Harare, Zimbabwe at the WaterNet Secretariat Offices. The task team consisted of:

- The WaterNet Manager, Dr Bekithemba Gumbo
- Prof Damas Mashauri of the University of Dar es Salaam
- Dr Sheppard Misi, University of Zimbabwe
- Ms Lucy Chipeta of the University of Malawi

The task was to pre-select or short-list candidates out of the 170 applications received. Of the 170 applicants received for the 2008-2009 intake, the majority were from Zimbabwe, Tanzania and Malawi (in that order). The following **Tables 3.3, 3.4 and 3.5** provide a profile of the applicants by country and gender, by specialisation and by age, respectively.

Table 3.3 Applicants by Country

Country	No	Female	Male
Botswana	5	3	2
DRC	7	0	7
Kenya	1	0	1
Lesotho	5	3	2
Madagascar	4	0	4
Malawi	31	6	25
Mozambique	2	0	2
Namibia	3	0	3
Nepal	1	0	1
South Africa	3	0	3
Swaziland	6	1	5
Tanzania	32	12	20
Uganda	15	3	12
Zambia	4	2	2
Zimbabwe	51	17	34
Total	170	47	123

Table 3.4 Applicants by Choice of Specialisation

Specialisation	1 ST	2 ND
Hydrology	12	10
Water & Environment	36	39
Water & Land	25	25
Water & Society	18	32
Water For People	31	27
Water Resources Management	46	35
Not specified	2	2

Table 3.5 Applicants by Age

Age Group in Years	No
Less than 25 yrs	30
25 - 30	83
31-35	32
36-40	18
41-45	4
Above 45	2
Not specified	1

Forty two candidates were pre-selected using the following criteria and guidelines:

- Students should be admissible on merit. A minimum of an acceptable undergraduate degree or its equivalent was recommended. Generally, the applicant should have graduated before 2007.
- Relevant employment and experience (generally two or more years) was an added advantage.
- A general age limit of 35 years was applied, but exceptions were made where necessary.
- Candidates whose ages were closer to 35 (e.g. 33 years) were selected in preference to those of lower age, since the latter group could re-apply in future without exceeding the age limit.
- The selection process tried to ensure geographical equity (i.e. not more than 6 participants the total at UDSM and UZ to be drawn from any one country).

- In order to address historical imbalances, the selection process favoured those countries which traditionally have had few participants enrolled on the IWRM Masters Degree programme.
- The selection process aimed to achieve gender equity (i.e. 50-50 male-females)
- Not more than 6 and no less than 4 applicants were to be recommended per specialisation
- UDSM and UZ were each to enrol not more than 15 students funded through the WaterNet Fellowship and MSc dissertation Fund on the IWRM Programme.
- Candidates from Uganda and Kenya were to be enrolled at UDSM as a cost saving measure (since UZ charges high fees for non-SADC students).

The programme for the 2008-2009 intake was scheduled to start on 11 February 2008 and the final list of the students selected would be confirmed in January 2008.

3.2.2 Offer six specialisations

As per the approved 2007 Workplan, WaterNet successfully offered the six specialisations for the 2007-2008 intake hosted as follows:

- Water Resources Management, University of Zimbabwe
- Water for People, Polytechnic of Namibia
- Water and society, University of the Western Cape
- Water and Environment, University of Malawi
- Hydrology, University of Dar es Salaam
- Water and Land, University of Botswana

Table 3.6 Shows the list of students and the specialisations they undertook.

3.2.3 Fellowship Fund established

The 8th AGM approved granting of 30 fellowships from the Fellowship Fund to deserving candidates as per the Work plan of 2008.

3.2.4 Establish review procedure and quality control system for the Masters programme

The review process of the Masters programme led by Prof Graham Jewitt of the University of KwaZulu Natal Department of Bio-resources Engineering and Environmental Hydrology continued during the reporting period. Prof Jewitt attended the 3rd Coordinators of the Masters programme meeting held on 29-30 October 2007 in Lusaka, Zambia as part of the preparatory work. The review process is scheduled to last for about six months i.e. the final report is expected at the end of April 2008.

Table 3.6 List of IWRM students for the 2007-2008 intake

Surname	First name	Gender	Nationality	Specialization
<i>University of Zimbabwe, Department of Civil Engineering</i>				
1 Chimpanthenga	Mavuto	M	Malawi	WfP
2 Chioreso	Rennie	F	Zimbabwe	W&S
3 Chisanga	Siwale	M	Zambia	WRM
4 Dias	Jacqueline	F	Malawi	WRM
5 Kamtukule	Sydney	M	Malawi	Hyd
6 Kimey	Victor	M	Tanzania	WfP
7 Masvopo	Taurai	M	Zimbabwe	WRM
8 Matsebula	Tenele	F	Swaziland	WRM
9 Mbanguka	Rene	M	Tanzania	Hyd
10 Mlowoka	Chimango	F	Malawi	W&L
11 Mpande	Hazel	F	Zambia	WfP
12 Nkuli	Grace	F	Tanzania	W&E
13 Pawaringira	Regina	F	Zimbabwe	W&E
14 Shuuya	Matheus	M	Namibia	W&E
15 Tlali	Mahlalele	F	Lesotho	W&S
16 Tsiko	Callister	F	Zimbabwe	W&L
<i>University of Dar es Salaam, Department of Water Resources Engineering</i>				
1 Baboloki	Autlwetse	M	Botswana	WfP
2 Busingye	Evelyne	F	Uganda	WRM
3 Chimunhu	Tendayi	M	Zimbabwe	WRM
4 Chimpopo	Mukalula	M	Zambia	W&S
5 Gobry	Josephine	F	Tanzania	W&L
6 Gondwe	Douglas	M	Malawi	Hyd
7 John	Albina	F	Tanzania	W&L
8 Kanyiginya	Violet	F	Uganda	W&L
9 Khumbo	Kalulu	M	Malawi	WfP
10 Kilungu	Halima	F	Tanzania	W&E
11 Madobi	Rejoice	F	Zimbabwe	Hyd
12 Masaka	Tebogo	M	Botswana	W&S
13 Sakuringwa	Saniso	F	Botswana	W&E
14 Simon	Byera	F	Tanzania	WfP
15 Weransari	Moses	M	Tanzania	W&S
<i>University of Dar es Salaam, Externally Funded</i>				
1 Bawketu	Endale	M	Ethiopia	Hyd
2 Enock	Emmanuel	M	Tanzania	Hyd
3 Hussein	Nasra	F	Tanzania	WfP
4 Kayitesi	Marcelline	F	Rwanda	WfP
5 Lubang	Benedict	M	Uganda	Hyd
6 Magoma	Deusedith	M	Tanzania	Hyd
7 Mdalangwila	Peter	M	Tanzania	WRM
8 Mpingi	Abdallah	M	Tanzania	WRM
9 Nauwima	Dieudonne	M	Burundi	W&L
10 Schohsky	Horst	M	German	N/A
11 Stephano	Bulili	M	Tanzania	Hyd
12 Teku	Sisay	M	Ethiopia	Hyd
13 Umubyeyi	Naila	F	Rwanda	W&E

Specialisation Key:

W&E Water and Environment

WfP Water for People

WRM Water Resources Management

Hyd Hydrology

N/A Not applicable as the candidate registered as an occasional student

3.2.5 Establish with WARFSA the WaterNet MSc Dissertation Fund

WaterNet and WARFSA intend to enhance their collaboration not only on joint activities like the Symposium, but also in terms of preparing joint strategies, enhancing effective communication and collaboration within the governance structures. It is believed that this will provide coherence in the delivery of the two programmes at regional level (**refer to section 3.4.1**).

3.3 DEVELOP AND DELIVER PROFESSIONAL TRAINING

3.3.1 Launch WaterNet professional training programme

A first draft of the Professional Training Strategy was produced for review by members and the Secretariat during the reporting period. The draft Strategy was presented at the 2nd Management Board meeting and the 8th WaterNet AGM held in Lusaka, Zambia. The major focus of the strategy is on quality control process in the delivery of short courses. The final strategy is expected to be produced after comments have been received from the WaterNet members.

Professional courses have improved accessibility of training to water professionals who are both members and non members. The courses have also maintained high participation by different members who either provide facilitation, scientific backstopping or hosting, administration and course management roles. During the reporting period WaterNet and various partners organised, facilitated and participated in the following courses:

Economic and Financial Instruments for IWRM, 27-31 August 2007, Pretoria

The course was successfully convened by Cap-Net, WaterNet, and GWP-SA. The National University of Lesotho (NUL) coordinated the facilitation and logistics. The participants' and facilitators' expectations were analysed and grouped into three main thematic areas: exposure or strengthening of knowledge on financial and economic instruments and their application to IWRM; networking and; getting participants' feedback on the draft Training Manual.

The course was divided into the following main issues: Principles and Concepts; Water Issues and Economic Instruments; Water Values and Financing; Instruments; Planning for IWRM and; Financing Strategies. During a review at the end of the course, facilitators and organisers proposed reducing the length of time allocated to general IWRM introductory lectures in this and other courses as most of the participants were already exposed to the subject. Case studies were presented mainly from South Africa and two from Zambia and Swaziland. The cases highlighted the main practical issues in financing water development including pricing, political intervention; and managing risk.

Twenty participants from the Africa region attended the course (**Annex 4**) with most of them from Southern Africa. Representation was as follows: Swaziland-3, Zambia-4, Malawi-3, Mozambique-3 Namibia-1 Botswana-1 Tanzania-1, Ghana-1, Sudan-1, Burkina Faso-1, and Cameroon-1. The main facilitators were drawn from WaterNet and LA-WETnet in South America. The course brochure and announcement is given in **Annex 4**.

International Training Programme in Integrated Water Resources Management for the Zambezi Riparian Countries (IWRM-Zambezi) 2007-2008

The 2007-2008 programme was circulated to members. Three Participants from Mozambique were recommended by the WaterNet Secretariat and they completed the Phase 1 training in Sweden from 24 September to 12 October, 2007. This phase included: case studies on different aspects of IWRM, strategic communication processes, the design of individual projects and formation of thematic groups for

networking during and after the course. The current period is for developing individual projects participants' home countries.

Strategies for Resilience Building for Water Related Disasters, 16-18 October 2007, Maputo, Mozambique

The course was convened in collaboration with GWP-SA and aimed to develop the capacity of water managers, researchers, trainers and policy makers to develop strategies for resilience to floods and drought and climate change. The course included the following main topics: climatological and meteorological aspects of water related disasters; strategies for developing resilience to climate change effects; floods risk assessment; strategies for developing resilience towards floods and; drought Risk Assessment. **Annex 5** shows list of participants and the course brochure respectively.

WaterNet, Cap-Net, SIWI Water Integrity and Accountability Mapping Study in Southern Africa

The Management Board at its 2nd meeting noted that the study was as a result of initiation by Sida and WaterNet, Cap-Net and the UNDP Water Governance Facility at Stockholm International Water Institute (SIWI) undertook to carry out the study during the WaterNet Donors meeting held in Delft, The Netherlands on 19 March 2007. It was agreed then that a team consisting of water experts and international anti-corruption experts would be involved and the mapping exercise. The exercise was meant to guide the development of educational and training material to be used as a capacity building intervention.

The Board agreed that there was need for transparency and accountability within the water sector in the region and sensitivity to anti-corruption interventions; however it was advisable to concentrate on ethics, accountability and integrity rather than on corruption.

Mr Anton Earle of the African Centre for Water Research and Mr Goodwill Lungu of Transparency International-Zambia were contracted by WaterNet, Cap-Net and SIWI to carry out the mapping study from 25 September 2007 to 31 December 2007. The consultants made a presentation entitled "Mapping of integrity and accountability in water activities and relevant capacities in the SADC-region" at the 8th Symposium. They allowed for discussion, distributed a flyer (**Annex 6**) and raised awareness on the objectives and intended outputs of the study which include development of training programmes on the topic in the region and incorporating the finding into the Masters programme curriculum. The report of the mapping exercise is expected in early 2008.

3.3.2 WaterNet Professional Training Officer

A decision was made at the 7th AGM to employ a WaterNet Research Leader in lieu of the Network Professional Training Officer (see section 3.1.3).

3.3.3 Catchment partnership on translating IWRM principles to management

This activity is on-going in collaboration with GWP-SA. WaterNet will continue to focus on those catchments where there is active research e.g. Limpopo Basin for the Challenge Program on Water and Food and the Thukela and Pangani Basins for the SSI project.

3.3.4 English for water managers course

Africa University, Faculty of Humanities and Social Sciences presented a portfolio of short courses that could be offered to IWRM students not only for career professional growth but for self development. This was necessitated by the limited number of non-Anglophone candidates applying or enrolling for the Masters Degree programme. The following short courses were suggested:

- Enhancing speaking skills – focus on public speaking
- Communication and negotiation skills
- Inter-cultural communication and ethics
- Academic writing
- Developing and enhancing scientific and technical writing skills
- Research methods
- Guide to dissertation and thesis writing
- English/French/Portuguese for beginners and as foreign language
- English/French/Portuguese for specific purposes
- Translations (English, French, Portuguese)
- Gender mainstreaming in IWRM – training the trainers

Two supplementary courses as part of the WaterNet Master Degree programme were conducted during the reporting period at the two core host institutions for the Masters programme *viz.* ‘Communication and negotiation skills’ at the University of Dar es Salaam 25-29 June 2007 and ‘The discourse of research: Research methods and the scientific and technical text’ at the University of Zimbabwe from 12-16 November 2007.

Developed the training material and facilitated both courses and delivered to the WaterNet Secretariat a fully developed training manual consisting of all material used on the relevant course(s), including PowerPoint presentations a narrative and an evaluation report on the outcomes.

3.4 REGIONALISE AND STRENGTHEN RESEARCH IN IWRM

3.4.1 Research capacity building

This is an ongoing activity which executed jointly through WARFSA and WaterNet. Regrettably during the reporting period WaterNet and other collaborating partners were informed that the management agreement between Sida and IWSD regarding WARFSA had been terminated as of Friday the 29th of June 2007. This meant that IWSD had ceased to act as the Managing Agency for the WARFSA.

The termination of the agreement resulted in a number of disruptions and uncertainties regarding the future of WARFSA, as it paralysed a number of activities related to IWRM research and outreach. These include:

- No further disbursements of WARFSA funds to researchers
- WARFSA Scientific Research Board became non-functional
- Support for the WaterNet/WARFSA/GWP-SA Symposium 2007
- Support of the Symposium Intern from Malawi
- Support to the prize winner for the “*Young Scientist Award*” to attend the Stockholm International Water Week
- Contribution to the *Physics and Chemistry of the Earth Journal*

The impacts of freezing WARFSA during the reporting period were not only financial but operational and organisational. By the end of the reporting period it was not clear whether WARFSA would be resuscitated through expeditiously establishing a new managing agency. The symbiotic relationship between WaterNet and WARFSA is crucial and was identified at the inception stage of both programmes and hence a non-functional WARFSA will have negative impacts on the WaterNet programme. In the IWRM knowledge generation locus the link between research, education, training and outreach is important and should be maintained at all times.

At the 2nd WaterNet Management Board Meeting the revival of WARFSA was discussed. It was highlighted that the problems of WARFSA emanated from limited ownership and governance and that finding a new host institution would not simply solve the problem. It was suggested that by allowing WARFSA to function through WaterNet structures the problem of ownership could be solved whilst at the same time ensuring that WARFSA remained independent particularly with regard to the functions of its ‘Scientific Research Board’.

The At the 8th WaterNet AGM there were further discussions on the fate of WARFSA and it was agreed unanimously by the members that WaterNet through its Management Board and Secretariat should do whatever possible to ensure that WARFSA is back in operation. It was also the feeling of the WaterNet members present that the longer it takes to find a solution, the longer it will take to revive WARFSA particularly the research interest and enthusiasm which has been mobilised in the region.

During the reporting period the WaterNet Secretariat had initiated some discussions with Sida, representatives, SADC Water division, IWSD staff, some members of the WARFSA Scientific Research Board to find a speedy solution which involved a phased approach i.e. coming up with an interim arrangement coordinated (hosted) through WaterNet (Secretariat

and Management structures) and then working out a long term solution or modalities which will ensure that the WARFSA activities are not disrupted further.

The discussions were expected to continue into the next reporting period and hopefully a solution would be arrived at in early 2008.

Meanwhile Sida agreed to settle the Symposium costs through the Sida contribution to WaterNet so as to meet the financial commitments made thus far (see section 3.5.2)

3.4.2 IWRM research

WaterNet is involved in two collaborative research programmes *viz.* the Challenge Program on Water and Food, where WaterNet is coordinating an IWRM research programme in the Limpopo Basin with 19 partner institutions and the Smallholder System Innovation Watershed Management (SSI Programme) which involves 5 partners (4 WaterNet members) who conduct research in river basins in Tanzania (Pangani) and South Africa (Thukela).

The WaterNet Challenge Program on Water and Food (CPW&F) Project Number 17 (PN17) is a trans-institutional inter-disciplinary project within the Consultative Group on International Agricultural Research (CGIAR). The WaterNet project takes on the challenge of developing a framework for new IWRM based water governance from village to basin scale in the Limpopo Basin, which integrates green and blue water management for improved rural livelihoods. The project goal is to contribute to improved rural livelihoods of poor smallholder farmers through the development of an IWRM framework for increased productive use of green and blue water flows and risk management for drought and dry-spell mitigation at all scales in the Limpopo basin.

The major highlight of the reporting period was the 2007-2008 field season. In the period under review, 11 students completed their dissertations and graduated, bringing the total to 27 since the project started (including 5 female students and 15 students from national agricultural or water management research institutes). Three students are currently engaged in fieldwork.

All 5 PhD candidates are now registered and have started their fieldwork. Two additional PhD candidates have been identified by project partners who have allocated project research funding to the new projects (see Annex 7).

Project outputs achieved to date (see Annex 7) include 39 project activity reports (12 of these are draft final reports, currently being reviewed), 9 journal articles, 8 institutional working papers, 44 conference papers, 27 masters dissertations and 12 bachelors dissertations. Researchers and students from the project presented a total of 14 papers at the WaterNet/WARFSA-GWP-SA 8th Symposium in Lusaka, Zambia and a special session was held at the Symposium, in partnership with the SSI Project.

The Project Scientific Workshop was held in Midrand, South Africa, 8 – 10 October 2007 and was attended by 30 researchers and students. Scientific results were presented and discussed under the theme “Building evidence that IWRM improves rural livelihoods”.

A meeting of the Project Executive Committee and all Project partners, which sought to establish partners’ commitment to the new workplan, was held in October 2007 in Midrand,

South Africa. The meeting was attended by 18 partner representatives and staff and discussed each project activity, necessary changes and implementation.

The Research Leader, Research Coordinator and two PhD students participated in a CPW&F meeting on 'Impact pathways' in Johannesburg, South Africa, in 15-17 November 2007. During this meeting, discussions were held with the CPW&F Project Manager, Dr Lalith Dassenaik, and Theme Leader, Dr Nancy Johnson. The Project was supposed to officially end on 31 August 2008. However, CPW&F management approved a no-cost extension of one year to the project, and a letter confirming the extension has been received. The extension was necessitated by the slow start of the Project and the need to complete field work, policy briefs and guidelines.

Relations with the project Managing Centre (to which WaterNet reports) have been good during the period under review, with a visit from the CPWF Theme Leader in November 2007. The progress report for the period September 2006 to August 2007 has been approved by the CPWF Theme Leader. The Secretariat is closely monitoring partners' progress, with some activities to be reallocated or cancelled. **Table 3.7** shows the status of the accounts at the end of the reporting period.

Table 3.7 Expenditure statement PN17

Total project budget	\$1,678,436.00
Funds received to date	\$783,441.00
Total expenditure to date	\$777,097.00
Balance of funds received remaining	\$6,344.00
Balance of project budget remaining	\$894,995.00

The Smallholder System Innovations in Integrated Watershed Management (SSI), Strategies of water for food and environmental security in drought prone tropical and subtropical agro-ecosystems (Project period: 1 July 2003 – 30 June 2008) is an associated WaterNet research project and is thematically linked to WaterNet CPW&F PN17.

Fieldwork both in the Thukela and Pangani continued during the second half of 2007 and Ms Elin Enfors and Mr Job Rotich spent considerable time in the field. In addition, all three new researchers (Mrs Jayashree Pachpute, Mr Hans Komakech and Ms Jeltsje Kemerink) have collected data from the field and their research is progressing as planned. Mr Hodson Makurira has carried out an outreach workshop for farmers in the Pangani Basin and will go for an additional field period beginning of 2008. Mr Victor Kongo, Ms Marloes Mul and Mr Kenneth Masuki have finished their data collection and are focusing on data analysis and writing of their thesis.

During the reporting period 3 papers were accepted for publication in peer-reviewed journals, namely:

- Analyzing resilience in dryland agro-ecosystems: a case study of the Makanya catchment in Tanzania over the past 50 years (Enfors and Gordon, *Land Degradation and Development*)
- Evaluation of community driven smallholder irrigation in dry land South Pare Mountains, Tanzania (Makurira *et al.*, *Physics and Chemistry of the Earth*)
- Understanding soil moisture balances using geo-physical techniques (Makurira *et al.*, *IAHS Redbook*)

Seven researchers presented their research findings at the 8th WaterNet/WARFSA/GWP-SA Symposium held in Lusaka, Zambia and Mr Hodson Makurira presented his work at the International Symposium ‘Sustainable Solutions, Focus on Africa’ of the Technical University of Delft, The Netherlands, which was simultaneously broadcasted at the WaterNet/WARFSA/GWP-SA Symposium through video-conferencing (see section 3.5.2). Besides the individual research project the integration of the different research fields in SSI has started. One of such activities is joint data analysis on spatial rainfall variability and its impact on the vulnerability of farmers. A joint paper is expected to be submitted in early 2008. The research team also works on the development of key-messages from the research, which will be used for dissemination purposes.

The 5th SSI annual scientific meeting is scheduled to take place in Same, Tanzania, at the end of January 2008. With SSI nearing its official end in September 2008 the meeting will focus, besides reporting on the progress of the research, on the development a proposal for SSI phase II. Besides a large contingency of the partner institutions representatives from WaterNet (CPW&F PN17), Stockholm Environment Institute (SEI) and Sida are also expected to attend the meeting.

Find more on: www.unesco-ihe.org/ssi.

3.4.3 Funding for new research activities

WaterNet was approached during the reporting period by the EcoSanRes (Ecological Sanitation Research) managed by the Stockholm Environment Institute (SEI) to host the regional knowledge management node on ecological sanitation. In the event that WaterNet is successful this will add an important research theme under WaterNet focusing on water supply and sanitation which is currently lacking.

3.4.4 WaterNet-SADC Professorial Chairs in IWRM

The University of Dar es Salaam offered the position for the SADC WaterNet Professorial Chair to Prof Felix Mtalo with effect from 1 December 2007.

Interviews were conducted for the University of Zimbabwe Chair on 16 October 2007. There were two candidates who had applied Prof Damas Mashauri and Dr Paramu Mafongoya. The interviewing panel found Dr Mafongoya not suitable for the position and hence decided to proceed to interview Prof Mashauri who was found to be appointable. The University of Zimbabwe will make an offer to Prof Mashauri and it was expected that he would resume duty in early 2008.

The University of Malawi, Polytechnic of Namibia and the University of Western Cape had made some progress in the process of establishing the Chair at the respective institutions.

The Management Board agreed at its 2nd meeting that the Chairman of the Board the WaterNet Manager should visit the University of the Western Cape, Polytechnic of Namibia and University of Malawi and make sure they understood the conditions for setting up the Chairs and to gather some level of commitment. It was further agreed that SADC Water division could be called upon to assist. There was also a suggestion that consideration could be given to advertise for the sixth and seventh Chairs at Eduardo Mondlane University and the University of Botswana.

3.5 RAISE AWARENESS AND UNDERSTANDING IN IWRM

3.5.1 WaterNet outreach activities

Raising awareness of IWRM has up to the present primarily been pursued through the annual WaterNet/WARFSA/GWP-SA Symposium and participation in other regional and international fora and meetings.

During the reporting period WaterNet participated in the following events:

World Water Week in Stockholm

The World Water Week in Stockholm was held on 12-18 August 2007. WaterNet was present and participated in two seminars (see **Annex 8**):

- Bridging the Gap in Research and Education: Addressing Issues in Countries with a Vulnerable Scientific Environment: The Convenors were International Foundation for Science (IFS), UNESCO-IHE Institute for Water Education (UNESCO-IHE), Centre Régional pour l'Eau Potable et l'Assainissement à faible coût (CREPA), Capacity Building for Integrated Water Resources Management (Cap-Net), and Bangladesh Centre of Advanced Studies (BCAS) and WaterNet. This session has resulted in further discussions with IFS on possible collaboration with WaterNet.
- Groundwater Capacity Building Initiative Africa: Outcomes and Way Forward: The Convenors being the Federal Institute for Geosciences and Natural Resources, Germany (BGR), Capacity Building for Integrated Water Resource Management (Cap-Net), WaterNet and West Africa Capacity Building Network (WA-Net). A follow up implementation plan is being formulated by WaterNet and has been presented during the 8th Symposium by Dr Richard Owen.

The WaterNet Manager and Chairman of the Board held separate meetings with representatives from Sida namely Ms Koeti Serodio, Dr Therese Sjomander-Magnusson and Ms Emilie Göransson and also with DGIS representative Mr Durk Adema. The discussions centred mostly on the WaterNet as a new entity and also the project document for Phase IIb. The WaterNet Manager also attended the Cap-Net Board meeting scheduled during this time.

The Water Week was also attended by the winners of last year's "Young Scientist Award" recipients who made presentations in various sessions; namely:

- Ms Clarence Mazambani (Namibia)
- Ms Zainab Birungi (Uganda)
- Mr Emilio Magaia (Mozambique)

First Ideas Generating Meeting for the SADC Communication Strategy, Pretoria, South Africa: 28 to 29 June, 2007

The objective of the meeting was to ascertain communication needs, agree on the Conceptual Framework of a SADC IWRM Communications Strategy and brainstorm on its content. WaterNet attended to explore the linkages between the communication strategy and ongoing WaterNet activities. Specifically, to (i) highlight current outreach activities such as the symposium and possible synergies with the strategy and

(ii) brainstorm on how the strategy could tackle the issues of research and capacity building. The meeting generated many ideas to be synthesised by a working group responsible for formulating the communication strategy.

Key issues relevant for WaterNet addressed at the meeting:

- The rationale and contextual background of the meeting given by Mr Phera Ramoeli from the SADC Water Division highlighted that there was a general lack of awareness in the region of the of ongoing water initiatives and activities, WaterNet included.
- The Chairperson of the SADC National Media Coordinators highlighted SADC's commitment to communication in general and that SADC National Media Coordinators were an avenue that Water Projects and Programmes could pursue for efficient communication. WaterNet could possibly use these avenues for communicating WaterNet activities and results.
- A Draft Conceptual Framework for the Communication Strategy was presented which identified key issues in the region where communication messages were urgent as:
 - Water Supply, Sanitation and Hygiene
 - The IWRM concept
 - Transboundary Water Resources Management
 - Water Demand Management
 - Climate Change Phenomenon
 - Regional Instruments and Interventions
 - Water Resources Development, Socio-Economic Development and Environmental Aspects

WaterNet could contribute to developing these key messages since it has been involved in research and training that addresses the above topics. The Symposium also provided a forum for discussing these issues during the main and special sessions.

The following recommendations were made:

- Establishing a forum of government communicators or strengthening a similar one for information sharing and dissemination and building capacity of the forum members for better communication of water science.
- The need to carry out an inventory of water research (on-going and past research) and compile best practices for the issues in (3) above from which key messages could be derived.
- As part of the research formulation process, researchers should identify the audiences or target groups where research outputs can achieve change and format the research accordingly (for example, media articles, policy briefs, newsletters etcetera).
- The media's reports are not necessarily based on scientific publications but other simplified publications. There is need either for (i) some other publications that simplify and summarize scientific publications or for (ii) scientists to make scientific publications more "customer oriented". In both cases there should be an emphasis on results.

Zambezi Basin Stakeholder Dialogue, 27-29 November 2007, Victoria Falls

The main purpose for attending was to strengthen linkages with river basin organisations and showcase the opportunities for capacity building offered by the network.

The Zambezi Action Plan Project 6, Phase II (ZACPRO 6.2) in partnership with the World Conservation Union's Regional Office for Southern Africa (IUCN-ROSA), GWP SA, SADC/DANIDA, the Southern African Research and Documentation Centre (SARDC) and the Institute for Water and Sanitation Development (IWSD) convened the third Zambezi Basin-wide Stakeholders Forum to discuss IWRM issues in the Zambezi river basin. The theme of the meeting was "Towards an IWRM Strategy for the Zambezi River Basin" and it included an IWRM exhibition.

Highlights for WaterNet included:

- Exhibition of Master Programme posters, general WaterNet brochures and Challenge Program CDs all of which were collected. Participants especially found the CD packaging attractive.
- Brief informal meetings were held with two WaterNet members' representatives, Dr Mazvimavi of Harry Oppenheimer Okavango Research Centre and Dr Richard Beilfuss of Gorongosa National Park. They were briefed on progress of activities.
- Ms Katharine Cross of IUCN headquarters gave a presentation on the Environmental Flows Network (e-flows) in which she expressed collaborating with WaterNet as partner for capacity building in the recently formed global environmental flows network. In a follow up meeting with her, she was keen to see WaterNet identifying a champion for a regional flows network and advertising their training materials to the world through e-flows if deemed appropriate.
- The Programme attended two sessions, Water Quality Management (and met potential reviewers for the Water for People symposium theme) and Financing Water Resources Development. Participants were informed that a training manual is being developed with partners (Cap-Net and GWP-SA and LA-WETnet).

Water for Local Needs - the Contribution of Local Governments to IWRM Symposium

WaterNet participated in the Symposium 'Water for Local Needs - the Contribution of Local Governments to Integrated Water Resources Management (IWRM)' held in Benoni, Ekurhuleni Metropolitan Municipality, South Africa on 9 - 10 July 2007. The symposium was a forum for local governments and relevant stakeholders in the Southern African Development Community (SADC) Region to identify the benefits of IWRM application for local governments as well as the ways and means to advance their involvement. The conclusions derived from the debates formed the basis for the development of a regional IWRM initiative aiming at encouraging local governments to adopt the principles of IWRM in their policies and actions.

The Symposium was also the final event of the LoGo Water project (see **Annex 9**). The event allowed participants to receive a draft of the "IWRM Package for Local Governments" produced in the framework of the project.

During the reporting period two issues of the WaterNet newsletter (WaterNet News Volume 3 Issue 2 and 3) were produced and circulated (see **Annex 10**). The newsletter has been useful as a quick method of sharing information on WaterNet activities and also on other information relevant to members and collaborative partners.

3.5.2 WaterNet/ WARFSA/ GWP-SA Symposium

The 8th WaterNet/WARFSA/GWP-SA Symposium with the theme “*Integrated Water Resources Management - from Concept to Practice*” was successfully hosted by the Zambia Country Water Partnership from 31 October to 2 November 2007 (**Annex 11**).

Planning and organising the 8th WaterNet/WARFSA/GWP-SA Symposium without the participation of the Water Research Fund for Southern Africa (WARFSA) one of the key regional collaborating partners resulted in unprecedented extra duties being exerted on WaterNet and GWP-SA Secretariat staff.

Sida granted a no objections to WaterNet budget change to meet WARFSA commitments for the 8th WaterNet/WARFSA/GWP-SA Symposium

The costs items to be covered included:

- Symposium Registration Fees – as per the Memorandum of Agreement between the Local Organising Committee and the three collaborating partners to cover Symposium registration fees for the group of 13 Principal Investigators.
- Symposium Attendance – for the Principal Investigators
- Support of the Symposium Intern - Ms Joanna Fatch
- Physics and Chemistry of the Earth Journal – to meet the production costs and courier charges for 40 (forty) copies requested by WARFSA earlier in the year.

Highlights of the 8th Symposium included:

- An increase in the number of accepted abstracts (278) in comparison to the 7th Symposium (239) - (see **Annex 12**)
- An increase in the numbers of full papers received (150 compared to 91 for previous Symposium)
- Greater participation by reviewers from the host country (Zambian based scientists)
- Video conferencing between participants in Lusaka with a parallel Symposium on ‘Sustainable Solutions, Focus on Africa’ beamed from Delft Technical University, Delft, the Netherlands
- GWP-SA, IRC, IWMI, SADC-DANIDA convened a session titled ‘Communicating Research Results’. This session was an effort towards improving research information sharing within the SADC region, Africa and beyond
- More than 250 participants attended the Symposium
- A Symposium evaluation form was designed by the WaterNet Secretariat and was used for the first time this year to evaluate the Symposium (see **Annex 13**).
- A Symposium Intern was taken on an 8 months contract from 8 July 2007 to assist in the general organisation of the Symposium. This helped in easing the Symposium workload at the WaterNet Secretariat.

The organisation experienced some challenges including:

- Little adherence to deadlines by both reviewers and authors. This resulted in delays in other Symposium processes that needed their inputs.
- In spite of the increasing importance accorded to water supply and sanitation and hygiene, there were very few reviewers for the Water for People sub-theme in comparison with other sub-themes. For example, the Hydrology sub-theme which had the least number of abstracts submitted had more reviewers than Water for People sub-theme.
- Delays in preparation that resulted from changes in the venue. The collaborating partners and Local Organising Committee (LOC) had to start negotiations late in the year.

The Management Board at its 2nd meeting noted the growing importance of the Symposium in the region and the need for high quality personnel to organise and manage the event. It was suggested that the three collaborating partners should explore engaging an events management company while a Local Organising Committee should concentrate on protocol, fundraising and other higher level issues.

The total number of abstracts received was 288 of which 10 were rejected. One of the challenges faced was the enforcement of deadlines with both authors and reviewers creating problems with finalisation of the programme and other logistical arrangements. **Table 3.8** and **3.9** below give an indication of the abstracts and papers received and reviewed.

Table 3.8 Distribution of reviewed abstracts by sub-theme

Sub-theme	Oral	No of abstracts received			Total
		Poster (Standby Oral)	Poster	Rejected	
Hydrology	8	4	22	1	35
Water and Environment	17	9	32	3	61
Water and Land	17	9	29	0	55
Water for People	10	5	27	2	44
Water and Society	15	7	20	2	44
Water Resources Management	16	9	22	2	49
Total	83	43	152	10	288

Table 3.9 Full papers received by sub-theme

Sub-theme	No
Hydrology	18
Water and Environment	33
Water and Land	29
Water for People	15
Water and Society	25
Water Resources Management	30
Total	150

The Scientific Committee made some observations on the review and synthesis process for abstracts. There were great disparities in the scoring system used to review the abstracts to the extent that certain authors had both papers in oral and poster sessions. The Hydrology theme was ranked as having comparatively better quality abstracts according to the reviewers scoring.

A total of 256 participants attended the Symposium compared to the 201 participants who attended the 7th Symposium held in Lilongwe, Malawi. There were 75 female participants

representing 29% of the total number. **Annex 14** gives the list of participants and distribution by country and by sponsor.

A landmark event during the Symposium was the two hour video link conference between the Symposium participants and Delft Technical University, The Netherlands Conference on ‘Sustainable Development in Africa’ held on 1 November 2007 (see **Annex 11**). The joint session consisted of two oral presentations through simultaneous PowerPoint presentations on both sides i.e. one beamed from Delft and the other from Lusaka, namely;

- Eng Hodson Makurira: “The effectiveness of On-farm techniques for improved crop productivity in Rain-fed systems”
- Prof Nick van der Giesen, Prof Hubert Savenije and Dr Bekithemba Gumbo: “The Sustainable Village”

The oral presentations were followed by a live discussion over video link between the participants in Delft and Lusaka. The discussion was led by Prof L. de Quelerij from Delft and Prof P. Van der Zaag in Lusaka on technological challenges for Sustainable Development in Africa.

For the first time ever WaterNet conducted an evaluation exercise of the Symposium through a dedicated one-page questionnaire. Participants to the Symposium were given an evaluation questionnaire (see **Annex 13**) to answer. The questionnaire was handed out during the scientific sessions and breaks on the second day of the Symposium. The majority of the responses were collected in boxes placed in breakaway rooms and a few were handed in during the closing ceremony.

A total of 80 participants (31% of the total 256 attendants) completed the evaluation questionnaire. The overall rating of the symposium was good with 80 % of participants rating it between good and excellent.

Most of the respondents attended the Symposium to make a presentation or to share ideas and experiences. Most participants mentioned the collaborating partners or their organisations (most of which are part of the collaborating partners’ networks) as the source of information about the Symposium.

The aspects of the Symposium that were rated most highly (good to excellent) and also had the most satisfied participants (excellent rating) were the networking opportunities and the scientific value of the Symposium. The video link conference between the Symposium and Delft Technical University in the Netherlands made quite an impact and was described as a “great experience”.

The management of parallel sessions and registration had the lowest rating with 46% and 42% of participants, respectively rating these from low to poor. The aspect with highest number of unsatisfied participants (14% rated it poor) was logistics. To illustrate this, a participant described registration as “chaotic” and another commented on the wait for the Minister in the opening session as a “nightmare” while the management of parallel sessions was described as ‘disastrous’ because the programme was “impossible to follow”.

It was suggested to have a full time person handling the audio visual equipment and computers and to make a provisional programme available online well before the event.

Better management of poster sessions was also spelt out. In general, participants felt there were insufficient announcements provided during the event about the changes in the programme and who to approach for information. The presence of policy makers was questioned by many participants. They were also unable to predict the future policy impact of the scientific sessions. Thirty six percent (36%) ranked the policy value of the Symposium as fair to poor.

Just below half of participants gained “many insights” in IWRM. The other half gained “some insights”. Just over half of the participants thought there were some issues that were insufficiently explored. The issues raised included those related to climate change, groundwater, dams, economics and conflicts.

In relation to overall recommendations four main aspects noted were:

- Oral presentations should be given more time
- Parallel sessions should be managed better
- Information sharing and networking should be improved before and during the event
- A larger venue is necessary to improve networking running of parallel sessions

It was confirmed during the reporting period that the 9th WaterNet/WARFSA/GWP-SA Symposium would be organised to include the biennial Symposium of the International Commission on Water Resources Systems (ICWRS) of the International Association on Hydrological Sciences (IAHS). This means that the Symposium would be global in nature and having a regional flavour with participants drawn from all continents. The venue would be Johannesburg, South Africa on 29-31 October 2008.

3.5.3 Alumni Association

During the 8th WaterNet/WARFSA Symposium in November 2007 in Lusaka, Zambia, the WaterNet Alumni Association was launched. The WaterNet Alumni Association aims to further impact society by translating lessons, knowledge, experiences and expertise of alumni into actions at all level of water resources management. Over 200 Alumni of the WaterNet Masters programme or WaterNet funded graduates have been produced since the inception of the programme and more than 50 have attended WaterNet organised or facilitated short professional training courses.

WaterNet Alumni have been funded previously to participate in WaterNet activities including refresher courses and the symposium. Some have also been awarded support to attend the World Water Week in Stockholm under the Symposium’s Young Scientist’s Award.

A tracer survey was initiated in 2006 with the multiple aims *inter alia* to (i) initiate an impact monitoring mechanism, (ii) gather updated contact information on alumni and, (iii) gauge the interest levels of alumni in formalising the relationship they have built through their education at WaterNet. Alumni have been calling for the establishment of a formalised Alumni Association and the support of WaterNet to do this.

From the foregoing, the Secretariat took the 2007 Symposium as an opportune time for Alumni to come together and discuss how the association shall be organised and steered. Support was awarded to the Alumni shown in **Table 3.10** to be the main conveners of the launch of the WaterNet Alumni association on 1 November 2007 at the 8th Symposium. A

flyer was developed and distributed showing all alumni and current students as a way to publicise the graduates between each other, to the region and beyond (**Annex 15**).

Table 3.10 Sponsored participants to initiate the WaterNet Alumni Association at the 8th Symposium

Name	Sex	Country
Jean-Marie Kileshye Onema	Male	DRC
Nicollete Mhlanga	Female	Swaziland
Zainab Birungi	Female	Uganda
Tendai Sawunyama	Male	Zimbabwe

The WaterNet Management Board observed this important milestone and agreed on formalised financial support particularly in the WaterNet Phase IIb project. The WaterNet Alumni have a critical role in the network among other things as: lifetime ambassadors that can improve the visibility of the organisation; a means for monitoring impact and; a potential political, technical, networking, teaching and financial resource in the future.

The Alumni Association will also provide a platform for the members to give back to the programme that changed your lives and also for them to be organised and be able to act as front line “Ambassadors” to the region and the world in terms of IWRM. WaterNet will encourage all its Alumni to partake in the network’s aims and activities so as to broaden, deepen and strengthen the IWRM cause in the region.

4 DEVIATION FROM PLANNED ACTIVITIES

During the reporting period there were no deviations from the planned activities:

Harare, May 2008



Bekithemba Gumbo, PhD, MSc
WaterNet Manager

Delft, May 2008



Pieter van der Zaag, PhD, MSc
WaterNet Project Director, UNESCO-IHE