

Mid-Year Report - 2014

Submitted to

Cap-Net

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By

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On a contract

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1.0 Introduction

This annual report provides narrative details of the activities conducted in 2014. A list of activities under three major management areas have been identified as knowledge management, knowledge deliver and network strengthening namely.

Out of the 16 activities planned for 2014, 04 activities were implemented successfully. New collaboration have been established and strengthened. Network became stable and looks forward to take the next step towards sustainability and better management.

Activity 2.1 (Knowledge Management)	a. National Strategy for capacity building in the water sector in Sri Lanka b. Preparation of training manual for Low-Impact Development Design Strategies in Sinhala Language c. Translation of book ‘Ma Jala Binduwaknam’ into Tamil and English d. Catchment conservation awareness programme for school children e. Water Professionals’ Day – 2014 f. Urban Water Environment : Monitoring and Management
Activity 2.2 (Knowledge Delivery)	a. Training Workshop on Impact of Climate Change on Water, Food and Environment b. National TOT in IWRM c. TOT in Integrated Urban Flood Management d. Training programe on integrated management of land and water resources in upcountry of Sri Lanka e. TOT on preparation of Low Impact Development (LID) plans in relation to overland flow and urban storm water management f. Gender and water dialogues in Northern and Eastern provinces g. Training on Reduction of Non-revenue water (NRW) and water conservation
Activity 2.3 (Network Strengthening)	a. Web based database management in relation to IWRM aspectsfor the Nilwala Basin b. Website maintenance and update c. Network office support and MELP

However the activities planned ahead, due to the drastic budget revision of

2.0 Narrative details

Activity 9.1 Water Professionals’ day Symposium on water Resources in Sri Lanka

Water Professionals’ Day (WPD) is an annual event organized by Geo-Informatics Society of Sri Lanka (GISSL) on October 1st. The 7th WPD was conducted on 1st October 2009 at the Appadurai auditorium of the Faculty of Agriculture organized by Cap-Net Lanka and GISSL. The objective was to provide a common platform to the researchers, professionals and students in the water sector to present their research findings to a wider audience to have a fruitful discussion.

A Panel discussion on “Role of water related institutions for the future of water resources management in Sri Lanka” was organized in the morning session. Representatives from key

water related institutions were invited for the panel discussion to express their views on the following issues.

1. Mandate of the institution
2. Assigned functions
3. Constraints to continue the assigned functions
4. Present institutional arrangements coordinating mechanism

Representatives from Water Resources Board, National Water Supply and Drainage Board, National Aquatic Resources Research Agency and University of Peradeniya were participated in the discussion. The audience also raised questions to the panelists and expressed their views on the discussed issues.

In addition, fifteen research papers were presented in three technical sessions namely, Water quality, human health and the environment, Model predictions, socio-economic and policy issues related to water and the student session. Symposium proceedings were released on the same day and distributed to the participants for dissemination and sharing of knowledge.

Activity 9.2 Book on Water treatment for domestic water supply for school children

The final copy of the book (16 pages) with the illustration and description was circulated among the core group members for comments and suggestions as requested in the last core group meeting. Quotations have been called to print 5000 copies of the book. This book will be published in the first quarter of 2010.

Activity 9.3: Capacity building in IWRM in a selected watershed: Watershed conservation for sustainable water supply and sanitation in upper watersheds

Modules preparation: Ten modules have been developed for the above programme with a series of consultation with the resource persons and staff of the National Water Supply and Drainage Board (NWSDB) which is responsible for water supply in the central province. Current issues and problems in the upper watershed are elaborated in the modules with local cases and information.

ToT programme: The programme was held for 5 days from 23rd to 27th November 2009 with the collaboration of NWSDB and Crossing Boundaries Project, SaciWaters, in their Human resource development centre, Katugastota. Participants were selected by the Government Agent (GA) of the Kandy district considering their role in watershed conservation, water supply and sanitation. Mid-career professionals from Mahaweli Authority of Sri Lanka (04), Department of Local Government (08), Land Use Planning Department (06), Kandy Municipal Council (01), National Water Supply and Sanitation Services (11), Central Environmental Authority (06), Public health sector (2), Zonal education (4) were participated.

Time	23rd November	24th November	25th November	26th November	27th November
9.00	Inaugural Session and Introduction to the Program	Climate, rainfall and hydrology cycle Session Leader	Demand Management - 1 Session Leader Mr. M.A.M.S.L.	Water and Health Session Leader Dr. P.V.R.	Preparation of Action plan

		Dr. Punyawardena	Attanayeka	Kumarasiri	
10.45	Tea Break				
11.00	Introduction to Watershed Management Session Leader Prof. E.R.N. Gunawardena	Water pollution monitoring and control -2 Session Leader Dr. N.D.K. Dayawansa	Institutions, policy, laws and regulations Session Leader Prof. E.R.N. Gunawardena	Conflict Management Session Leader Dr. S. Pathmaraja	Preparation of Action plan
12.45	Lunch Break				
01.45	Land management and soil erosion control Session Leader Prof. E.R.N. Gunawardena	Wastewater Management-1 Session Leader Dr. M.I.M. Mowjood	Water and Sanitation - 1 Session Leader Mr. Danesh Gunathilaka	Teaching and training methodology I Session Leader Prof. C. Sivayoganathan	Closing Session
03.30	Tea Break				
03.45	Water pollution monitoring and control -1 Session Leader Dr. N.D.K. Dayawansa	Wastewater Management-2 and field visit Session Leader Dr. M.I.M. Mowjood	Water and Sanitation - 2 Session Leader Mr. Danesh Gunathilaka	Teaching and training methodology II Session Leader Prof. C. Sivayoganathan	

Several follow-up activities were proposed by the participants that can be implemented with their respective institutions. Assistance will be given to implement those activities and a one day meeting is suggested after 6 months to discuss the progress.

A training programme will be organised for grass root level officers by the participants. This programme will be expanded to other two provinces in 2010.

Activity: 9.4 Dialogue on National water policy: Towards a new initiative

A dialogue was held on the above activity with 80 participants, representing various institutions, professional bodies, government officials, international agencies, researchers and university students. Two sessions were held.

Session I: An over all view

Topic	Presenter
Overview of the water policy development and current trends	Prof. E.R.N. Gunawardena (University of Peradeniya)
Why the proposed policies contested?	Mr. Dileep Witharana, (Open University of Sri Lanka)

Constitutional constraints in implementing proposed draft policies	Mr. Kanchana de Silva (Attorney at Law)
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Session II: Institutional presentations (Mandate, issues in implementation and possible solutions)

Presenters	Institute
Mr. Nimal Wickramaratne	Head, Water Resources Secretariat, Mahaweli Authority of Sri Lanka
Mr. M.A.M.S.L. Attanayake	General Manager, (Central province) National Water Supply and Drainage Board
Mr. Harsha Suriyarachchi	General Manager, Water Resources Board
Mr. Ajith Silva	Director – Policy, Ministry of Environment and Natural Resources

At the end of the sessions, three group discussions and a general discussion were held with following suggestions.

- National level institution, Water Resources Board (WRB) should be strengthened to undertake the initiation & preparation of a new water policy in Sri Lanka.
- River basin management system should be implemented and other sector organizations and independent parties (neutral groups-academics, NGOs,) should also be co-operated with the WRB even though they are having different mandates.
- Coordination of different sectors should be done by WRB collecting sectoral policies and addressing different social realities.
- Water policy should go forward as a framework to answer the existing problems.

Write up from each institutions and the presentation are available. Papers and presentations will be compiled with the conclusions remarks and synthesis report.

Activity 9.5: Training on water conservation and sanitation in Peri-urban towns (1)

Peri-urban centers are becoming hot spots for untreated wastewater discharge into natural streams. The training workshops conducted during last two years on Effective wastewater management for industries and officers of Central Environmental Authority, Mahaweli Authority and health sector were very useful to fulfill their duties. Therefore, for the year 2009, training activities were targeted on people running restaurants and hotels in the selected peri-urban centers to educate them on the techniques for water conservation in their day to day work, sanitation and environmental conservation.

The first workshop of this nature “Wastewater Management Issues and Solutions for Semi-urban Areas” was held on 11th August 2009 at the Pussellawa Rest house, Pussellawa. Objectives of the workshop were to introduce compatible wastewater treatment technologies to the semi-urban community and to educate them on compatible water conservation techniques and encourage/guide them to implement good sanitation practices. Pussellawa town area was selected in order to minimize water pollution in Pussella Oya sub-catchment. Target Group consisted of semi urban community in Pussellawa Town, (hotel and restaurant owners, who are the major contributors for water pollution in Pussella Oya) and officials

from government and other institutions related to wastewater management issues in the area. There were 43 participants in the program.

Dr. D A N Dharmasena (Senior lecturer, Department of Agricultural Engineering, Faculty of Agriculture, University of Peradeniya) coordinated the training programme.

The following subject areas were discussed in the workshop:

- Present status of water pollution in the Pussellawa town area.
- Cleaner Production principles and applications for water pollution minimization.
- Pollution associated waterborne diseases.
- Constructed wetlands – Potential applications in wastewater management.
- Proposed centralized wastewater treatment techniques by the National Water Supply and Drainage Board.
- Compatible wastewater treatment technologies by following service providers;
- Bio-cells – Anton (St. Anthony’s Industries Group (pvt) Ltd.
- Bio-gas technology - Eco- Engineers

After the technical session, a panel discussion was conducted to share the problems of the participants and provide further information regarding wastewater issues in the small town area.

The main outcome of this workshop was to make the people aware on selecting compatible wastewater treatment technologies in order to minimize water pollution in Pussella Oya sub-catchment. Participants expressed their satisfaction regarding the workshop and the interest of the PGIA staff and the students regarding conservation of the environment at Pussellawa town. The participants requested three of the following programmes as follow up.

- Student training at the Buddhist temple: The Thero (Buddhist monk) requested to conduct the same programme for the children in the “Daham Schools” in the city.
- Village farmer training: The two Grama Niladaris (village officers) requested a programme for village farmers on water borne diseases as they are the most affected. The resource person, Dr. Khema Pelpolawatte agreed to conduct the programme whenever they request.
- Youth training: The Public Health Instructor together with Pradeshiya Sabha staff requested to conduct a similar programme to school children and other educated community in the pollution affected area.

The most interesting observation was the demand for waste treatment technology service providers; ANTON and Eco Engineers by the participants. We were able to establish official communication between participants and companies by exchanging contact details of both parties. The officers who approve building plans of the city have now access to recommend service personnel for their clients. A veterinary surgeon took the leadership in establishing linkages between farms, slaughterhouses and these service providers.

Activity 9.6: Gender and Water Dialogue

A two-days training programme was conducted on 20th and 21st October, 2009 in Kandy district at the NWSDB. NetWwater coordinated the programme in collaboration with NWSDB. Thirty four (29 females and 5 males) participants from different institutions have been trained on gender issues in landslides, water pollution and other issues in central province.

Activity 9.7: River Sand Mining Dialogue

Four community demand driven activities have been planned for this year on the above programme as the continuation of our previous activities in the last year.

Context specific IT advocacy skills enhancement for young environmental activist in River Sand Mining Area was held for 19 young environmentalists. They were educated on BLOG and trained to set up and run own BLOG to increase the awareness among the people on river sand mining.

Participants worked in four groups: Following blogs under preparation.

Group project	e-mail	Blog
Hamilton canal	Charles_vijan@yahoo.com	http://meenukaayantha.blogspot.com
Deduru Oya	prasadiusg@yahoo.com	www.deduroya.blogspot.com
Ma oya	Achinifernando58@yahoo.com	www.maoyariver.blogspot.com
Climate change	islawp@gmail.com	www.handsomeheshan.blogspot.com

River bank protection programme with Public and Media awareness programme was conducted in affected rivers (Kolamuna oya - Deduru oya) in Bingiriya on 22nd October 2009. Sixteen media (national and provincial) representatives have been participated. A Live broadcast was organized by the Sri Lanka Broadcasting Corporation (SLBC) for this activity. Good press coverage has achieved in the print and visual media. Local NGOs, the Sri Charana Foundation and the Deduru Oya Protection committee start up plant nurseries to provide material for the river bank restoration. The bank restoration program was started with all local stakeholders including the Police department. A video available in the CD format. Part of the video was also used to present a film to the Copenhagen competition and is available on Youtube (<http://www.youtube.com/watch?v=S3U4dwMPcsE>).

Activity 9.9: Training of Master Teachers (In-service advisors)

Three, 2 days training workshops were held at the National Institute of Education (NIE), Maharagama and 233 school teachers (131 female and 102 male) have been trained on IWRM. Selected school teachers from five provinces covered in the first two programmes in Sinhala language. Third programme was conducted for North and Eastern provinces in Tamil language. The objective of the training was to expand and update the knowledge in water management and introduce the concept of IWRM in order to use them in teaching of water related subjects for advanced level students.

“We are now able to think what were unable to think before” a participant stated. Others mentioned that the training programme cleared many issues and was useful in teaching; it helped them to think about the water resources management issues in a broader perspective. Also they stated that they need more training programmes on IWRM since it is a vast study area.

The programme was organized in collaboration with three partners, Department of Agriculture, National Institute of Education (NIE) and National Water Supply and Drainage Board (NWSDB). Dr. B.V.R. Punyawardena (Department of Agriculture, Peradeniya) and Mr. N.A. Goonawardena (NIE, Maharagama) were jointly coordinated the training

programme. Professor Lal Perera, Director General of National Institute of Education was the chief guest of the inaugural session. DSA for the teachers was given by National Institute of Education.

The following lectures were conducted.

Day 1:

- Basics of water resources in Sri Lanka – Dr. B. V. R. Punyawardena (Head, Climatology Division, Department of Agriculture)
- Watershed Management – Dr. (Ms) N. D. K. Dayawansa (Senior Lecturer, University of Peradeniya)
- Water Supply for Domestic Purpose – Eng. Mr. P.M.L.C. Wijekoon (District Engineer – Kandy North, NWSDB)
- Lecture on water pollution and Demonstration on Water Quality Testing – Mr. Asoka Jayawardena (Regional Chemist – Central Province, NWSDB),

The Day 2:

- Water for Agriculture – Dr. M. M. M. Najim (Senior Lecturer, University of Kelaniya)
- Water for Health and Sanitation – Dr. L.W. Galagedara (Senior Lecturer, University of Peradeniya), Dr. S. Pathmarajah (Senior Lecturer, University of Peradeniya)
- IWRM – Dr. M.I.M. Mowjood (Senior Lecturer, University of Peradeniya)
- Group work on Teaching Methodology – Mr. D. M. Keerthirathne, Director, Technical Education Department, NIE, Maharagama

Participants stated that the training programme was important in gaining knowledge & information for teaching the students and it helped them to think about the water resources management issues in a wider view in the assessment sheets given after each lecture. Also they stated that they need more training programmes on IWRM since it is a vast study area.

At the end of the training, participants were awarded with a certificate, as a mean of appreciating their participation and to motivate them to have more concern on Integrated Water Resources Management. The workshop served to successfully gain the knowledge on IWRM. The knowledge gained from the above lectures helped the participants to refresh their knowledge of various approaches and techniques which can be used in teaching the students on water related issues in the Advanced Level syllabus.

Activity 9.10: Meetings of Core group and Network members, Secretariat

Core group meeting was held on 6th June 2009. Work plan 2009 was discussed for effective implementation. Other management issues also discussed.

Activity 9.12: Office equipment

A computer has been purchased for Cap-Net office use.

3.0 Financial Report: August 2009

Expenditure for on going activity is partial and the total cost will be included in the final 32report.

No	Activity	Output	Expenditure
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			(US \$)
9.1	Water Professionals' day Symposium on water Resources in Sri Lanka	Symposium, Proceedings	2007.37
9.2	Book on Water treatment for domestic water supply for school children	-	-
9.3	Capacity building in IWRM in a selected watershed	10 modules, ToT programme 42 people trained	3878.32
9.4	Dialogue on National water policy: Towards a new initiative	One programme, Document	1985.55
9.5	Training on water conservation and sanitation in Peri-urban towns	One programme Awareness – 25 people	1182.34
9.6	Gender and Water Dialogue	One programme – 34 people trained	837.38
9.7	River Sand Mining activity	Awareness – public and media personals (16) CD document	2159.23
9.9	Training of Master teachers (In-service advisors) on IWRM	Three programme 233 teachers from all part of the country	3871.25
9.10	Meeting of CG members	One	125.61
9.11	Update website and maintenance	New look for the website	162.14
9.12	Office equipment	Computer	932.75
9.13	Network support		5284.66
	TOTAL		22,426.6

Dr. M.I.M. Mowjood - Country coordinator/Cap-Net Lanka