

Nile IWRM-Net



**REPORT TRAINING WORKSHOP ON CONCEPTS AND
PRINCIPLES OF INTEGRATED WATER RESOURCES
MANAGEMENT (IWRM)**

**Under the Hospice of Kigali Institute of Science and Technology in
Close Collaboration with the Rwanda Ministry of Natural
Resources**



KIST 14-18 JULY 2008

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ABSTRACT

The National Training workshop on concepts and principles that took place in Rwanda from 14th to 18th July 2008 brought together 27 participants from Rwanda and 2 from Burundi. The women representation was about 27% that is 8 women out of 29 participants. The main objective of the training course was to build capacities of local actors and professionals to ensure effective management of water resources. The participants' expectations were full understanding of concepts and principles of IWRM.

The approaches used were participatory approaches where participants were given an opportunity to apply gained knowledge by analysing case studies and conflict resolution of complicated cases. The field visit, video show and role play were employed expose participants to real cases of implementation of IWRM to solve conflicts and ensure stakeholder involvement.

The overall performance of training workshop was good because the expectations of participants and facilitators were met. This is shown by the results of training workshop evaluation where participants expressed the relevance and usefulness of the course. The recommendations from participants put emphasis on the organization of detailed training workshop instead of concepts and principles. Therefore, it shows to which extent, the training workshop has been appreciated by all participants.

The Report was prepared by the Training Workshop Organizing Committee

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1. INTRODUCTION

Research and practical experience demonstrate that effective, equitable and sustainable management of water resources is only achieved when all stakeholders are equally involved in consultation processes, in the management and implementation of water resource and water sector programmes. IWRM offers a conceptual framework with a goal of sustainable management and development of water resources. IWRM requires the large and organized platform to allow different stakeholders to come together as a team having the same point of view in terms of Integrated Water Resources Management (IWRM). Based on Dublin Principles, all key players must know that water basins encompass all aspects of the environment, weather, air quality and availability. Capacity building for the implementation of integrated water resources management (IWRM) is vital to enhance cooperation and management process among key players. It is in this context that Nile IWRM-Net, Rwanda chapter organized the kick off training workshop on concepts and principles of integrated water resources management (IWRM). The implementation was made possible with financial and human resources contributions of Cap-Net, GWA and SNV Rwanda.

The overall objective of short course was to build capacity of local institutions, water managers as well as water professionals to ensure sustainable water resources management and integrated water sector programmes across the country. This course intended to build capacities of Rwandans and share experiences with Regional participants. This course was a tool to boost effective management of water resources in Rwanda.

The expected outputs were to enhance the knowledge and understanding of participants on concepts and principles of IWRM to be able to plan and manage water resources in an integrated manner. Partnership with GWA ensured the integration of gender issues with all sessions during the workshop

A good number of participants attended the National Training workshop on concepts and principles that took place in Rwanda from 14th to 18th July 2008. The workshop brought together 27 participants from Rwanda and 2 from Burundi. The women representation was about 27%, that is, 8 women out of 29 participants. The workshop was a kick off training workshop in Rwanda organized by Nile-IWRM-Net, Rwanda chapter.

2. COURSE EXPECTATIONS

The expected out come were based on basic skills, enhanced coordination and sustainable management of water resources and joint planning of water resources activities:

1. Better practical and theoretical knowledge of IWRM and ability to articulate the implications of adopting IWRM principles within different sectors and planning levels,
2. Participants to gain sustainable water management skills and be able to integrate IWRM in their daily activities,
3. National joint management mechanism and co-ordination of water resource management activities,
4. Local management systems strengthened and capacity built at national level in terms of IWRM
5. Outreach of decision makers and water sector planners: Adequate Institutional Arrangement and River Basin Organizations
6. Better planning, organization and facilitation Skills in IWRM at the national level.
7. In addition, all participants were expected full understanding of concepts and principles of IWRM at the end of training workshop

3. TRAINING WORKSHOP APPROACH

The 5 days training workshop was based on participatory approach where the participants were given an opportunity to express their expectations at the beginning of the course. The expectations from participants helped the facilitators to review the course timetable in order to meet participants' expectations.

To allow participation of participants, different cases of IWRM have been described by facilitators and worked out by participants by applying the IWRM skills acquired. The field visit organized on the fourth day, towards the end of training workshop, aimed to show the participants how IWRM is being applied in Rwanda to solve water conflicts on YANZE River basin, which is the main source of drinking water in Kigali city.

The river basin was being degraded by agricultural activities where the huge amount of water was used for irrigation. To this end, Kigali city that was depending on water from YANZE River started suffering from water scarcity and high turbidity due to agricultural activities. Participants, who had an opportunity to work out this complicated case study, were happy with the resolutions undertaken by actors concerned because it was the same resolution reached by participants during role play in the previous day.

Moreover, to motivate participants to follow carefully the training workshop, the facilitators decided to pick randomly two participants at the end of the day to prepare the recapitulation of the previous day. It was one way to attract the attention of training workshop audience.

4. TRAINING WORKSHOP ORGANIZATION

To ensure proper management and arrangement of training workshop, KIST as host institution of training workshop, appointed the organizing committee composed of four members to prepare and lead the training workshop activities. The appointed members are:

1. Training workshop coordinator and Trainer: Eugene DISINGIZUMUREMYI
2. Public Relation Officer and Trainer: Coletha U. RUHAMYA
3. Finance Officer: Grace UMUTESI and
4. IT Officer: Didier HAGUMA

The above organizing committee has been given the mandate to organize the training workshop to ensure its success and efficiency.

5. TRAINING WORKSHOP ACTIVITIES

The training workshop was launched on Monday by the Honourable Minister of State, Prof. MUNYANGANIZI Bikoro, in charge of water, mines and environment in the Ministry of Natural Resources. The Rector of KIST, Prof. Chrysologue KARANGWA delivered the welcome speech to all participants and finally, welcomed honourable Minister to open the training workshop.

During his speech, honourable Minister, Prof. MUNYANGANIZI BIKORO reminded all participants the different sources of conflicts resulting from poor management of water resources worldwide. Moreover, he put emphasis on the role of IWRM by specifying that water management should be managed efficiently to ensure equity and efficiency.

Actually, the first day was characterised by opening ceremonies and basic of IWRM including concepts and principles of IWRM, Introduction and concept of Gender Mainstreaming in IWRM, legal and institutional framework in IWRM. The first day ended with the presentation of the case of Rwanda on water policy and law. The subsequent days were specifically for indoor presentations, group discussions, role play and field visit as indicated below (p.4) in the training workshop modules. The last day of training workshop included the last two modules and ended by closing ceremonies by V/rector Academics as guest of honour, Representative of SNV-Rwanda and the Vice Rector in charge of administration and finance. Academic Vice-Rector and Representative of SNV-Rwanda awarded the certificates for participants. For more details, refer to annex 2: Training Workshop Programme. The facilitators who were involved are categorised in free categories, that is, full time facilitators, part time facilitators and field visit tour guide.

CAT I: Full time Facilitators

1. Dr. Richard KIMWAGA, University of Dar es Salaam (Tanzania)
2. Mrs. Margriet REINDERS, Gender and Water Alliance, Ghana-The Netherlands
3. Mrs. Coletha RUHAMYA, KIST, Kigali-Rwanda
4. Mr. Eugene DUSINGIZUMUREMYI, KIST, Kigali-Rwanda

CAT II: Part Time Facilitators

1. Mr. Jean Marie MUSHINZIMANA, Rwanda Ministry of Natural Resources (MINIRENA), Kigali-Rwanda
2. Mrs. Beatrice MUKASINE, SNV-Rwanda, Kigali-Rwanda

CAT III: Field Visit Tour Guide

1. Jean Pierre NKERAMIHIGO, Water Utility, ELECTROGAZ- Rwanda, Kigali-Rwanda

6. TRAINING WORKSHOP MODULES

DAY ONE

- Module 1: Concepts and Principles of IWRM
- Module 2: Reflections on IWRM Applications
- Module 3: Concepts and Introduction to Strategy of Gender mainstreaming in IWRM
- Module 4: Legal frameworks and Institutional Arrangement
- Module 5: Case of Rwanda: Water Policy and Institutional Arrangement

DAY TWO

- Module 6: Benefits of IWRM to Agriculture and Hydropower Sectors
- Module 7: Benefits of IWRM to water Supply and Sanitation
- Module 8: Benefits of IWRM to the Environment
- Module 9: Stakeholder Participation & management
- Module 10: Plenary Session and Experience on Gender and Stakeholder Involvement

DAY THREE

- Module 11: Implementation of IWRM
- Module 12: IWRM Planning Cycle
- Module 13: Tools of gender mainstreaming in IWRM planning cycle
- Module 14: Role Play on participation of end-users and stakeholders
- Module 15: Video show on Flood Control and Reflections on Video Show

DAY FOUR

- Module 16: Initiating and Preparation of IWRM Strategic Plans
- Module 17: Follow up Assignments on the Preparation Strategic Plan of Sub-River Basin at National Level
- Module 18: Application of water value chain to National policy aspects
- Module 19: Field Visit, Conflict Resolution Measures in Yanze River Basin

DAY FIVE

- Module 19: Partnership Management in IWRM
- Module 20: IWRM Capacity Building Need Assessment and Training Workshop Evaluation
- Module 21: Closing Ceremonies and Award of Certificates to Participants

7. PERFORMANCE OF TRAINING WORKSHOP

The overall performance of training workshop was good based on the results of evaluation by participants. Refer to annex 3 for more information of training workshop output and recommendations from participants. The training workshop was attended by 27 participants from Rwanda Ministry of Natural Resources, Prime Minister Office, National women Council, Members of Gender and Water Alliance, Clients of SNV-Rwanda from districts, Private Sector, water and Sanitation Programme/World Bank and civil society. Moreover, 2 participants from Burundi joined the national training course to share experiences in the Nile Region. Only 25 participants out of 29 contributed to the training workshop evaluation by filling in the evaluation forms. Afterwards, the forms have been analysed and the detailed results of training workshop are shown in the annex one. The last day of the training workshop was also an opportunity to carry out a short survey on capacity building needs in Rwanda. The results show that Rwanda needs IWRM capacity building at all levels to ensure equity and efficiency in water resources management. Refer to annex 4, for more information about the results of capacity building assessment and recommendations from participants. To ensure full understanding and applications of acquired skills, the participants were given a follow up assigned where they have to apply acquired skills on real case study.

CONCLUDING REMARKS AND RECOMMENDATIONS

In general, the kick off training workshop of concepts and principles of IWRM found to relevant and useful to participants. The top 5 topics that were found to be most relevant and useful for participants are:

1. Partnership management in IWRM
2. Concepts and Principles of IWRM
3. Tools of gender mainstreaming in IWRM planning cycle
4. Initiating and Preparation of IWRM Strategic Plans and
5. Benefits of IWRM to water Supply and Sanitation Sector

As recommendation, participants did recommend to organize detailed courses with enough time allocation to allow participants to participate. In addition, participants did suggest follow up to find out how participants are applying knowledge gained during the training workshop.

As the English was the training workshop language, the participants did suggest bringing in simultaneous translation because most of participants were French speakers and it was hard for them to get the training workshop message. The translation of the course can boost participation and interaction between facilitators and trainees.

Annex 1: Gallery-Photos of Training Workshop





Annex 2: IWRM Training Workshop Programme: KIST, 14th to 18th July 2008

Time	Day 1: Monday	Day 2: Tuesday	Day 3: Wednesday	Day 4: Thursday	Day 5: Friday
9:00–9:30	REGISTRATION	RECAPITULATION OF PREVIOUS DAY	RECAP	RECAP	RECAP
9:30–10:30	Opening Remarks and Presentation of Participants (KIST/MINIRENA) Guest of Honour	Benefits of IWRM to Agriculture and Hydropower Sectors (Nile IWRM-Net/GWA) Dr. Richard/Margriet	Implementation of IWRM (Nile IWRM-Net) Dr. Richard	Initiating and Preparation of IWRM Strategic Plans (Nile IWRM-Net) Dr. Richard	Partnership management in IWRM (Nile IWRM-Net) Dr. Richard
10:30–11:00	Tea/ Coffee	Tea/ Coffee	Tea/ Coffee	Tea/ Coffee	Tea/ Coffee
11:00–12:00	Concept and Principles of IWRM Reflections on IWRM Applications (Nile IWRM-Net) Dr. Richard/ Mr. Eugene	Benefits of IWRM to water Supply and Sanitation Sector (Nile IWRM-net/GWA) Mr. Eugene/Mrs.Margriet	IWRM Planning Cycle, (Nile IWRM-Net/GWA) Mrs. Coletha/Mrs. Margriet	Application of Water Value Chain to National Policy Aspects (SNV/KIST) Mrs. Bea/Mr. Eugene	IWRM and Capacity Building Need and Training Evaluation All Facilitators Leader: Mrs. Coletha
12:00– 13:00		Benefits of IWRM to the Environment (Nile IWRM-Net/GWA) Mrs. Coletha/Margriet	Group Exercise: IWRM Implementation (Nile IWRM-Net) Dr. Richard	Follow up Assignments on the Preparation Strategic Plan of Sub-River Basin at National Level All Facilitators Leader: Dr. Richard	Closing Ceremony and Accreditation of Nile IWRM-Net, Rwanda Chapter (KIST/MINIRENA) Guest of Honour
13:00–14:00	Lunch	Lunch	Lunch	Lunch	Lunch
14:00– 15:00	Concepts and Introduction to Strategy of Gender mainstreaming in IWRM (GWA) Mrs. Margriet	Stakeholder Participation & Management (Nile IWRM-Net)/ Dr. Richard	Tools of gender mainstreaming in IWRM planning cycle (GWA) Mrs. Margriet	FIELD VISIT (ELECTROGAZ,) Jean Pierre	FAREWELL
15:00-16:00	Legal Frameworks and Institutional Arrangement in IWRM (Nile IWRM-Net) Mrs. Coletha	Plenary Session and Experience on Gender and Stakeholder Involvement (GWA/Nile IWRM-Net) Mrs. Margriet	Role Play on participation of end-users and stakeholders (GWA/Nile IWRM-Net) Mrs. Margriet/ Mrs. Coletha		
16:00- 16:30	Tea/Coffee	Tea/Coffee	Tea/Coffee		
16:30– 17:30	Case of Rwanda: Water Policy and Institutional Arrangement (MINIRENA) Mr. Jean Marie	Video show on Flood Control and Reflections on Video Show (Nile IWRM-Net)/ Mr. Eugene/Margriet	Role Play: Continues		

Annex 3: Results of Training Workshop Evaluation

INTEGRATED WATER RESOURCES MANAGEMENT CONCEPTS AND PRINCIPLES TRAINING COURSE

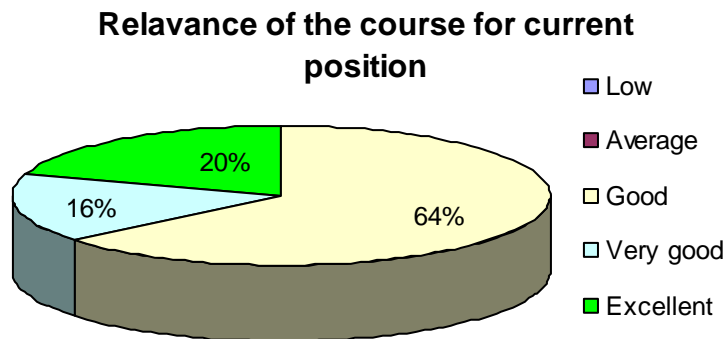
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Results of survey done at the end of the training

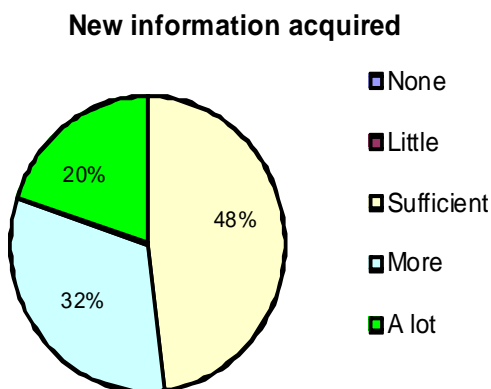
On the last day of the workshop, participants were given a questionnaire with 15 questions, in order to know what they felt after one week of training workshop, what they gained from the and the way forward.

Among 29 people who participated in the workshop 25 returned the questionnaires, which mean the result of the survey is quite reliable. The results are presented in form of charts for a good visualization of the survey outcome.

1. Relevance of course for your current work position.

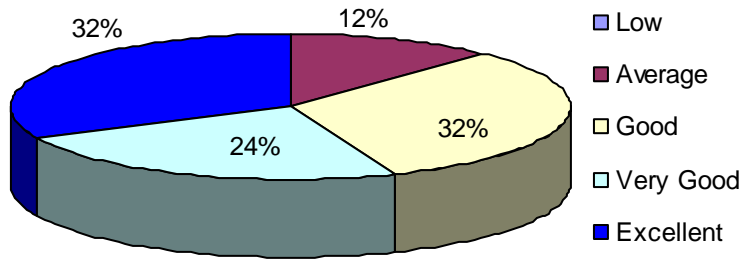


2. How much new information did you acquire?



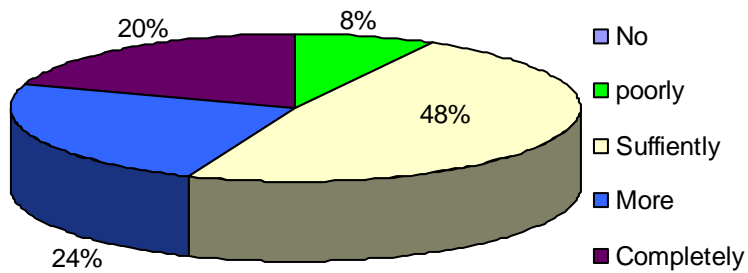
3. Usefulness of this new information.

Usefulness of new information



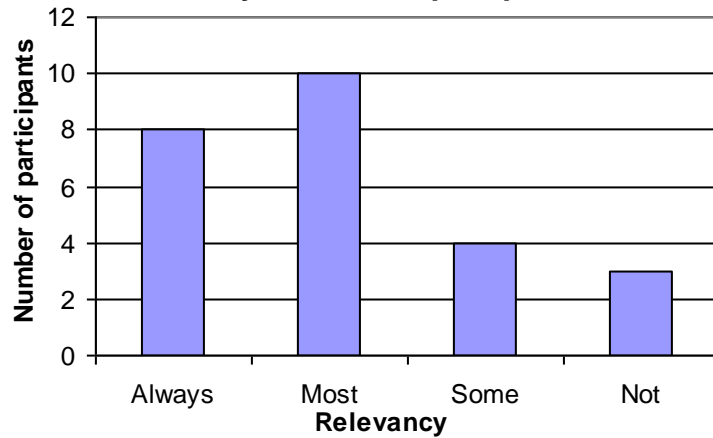
4. Did the course content meet your expectations?

Course content and expectation

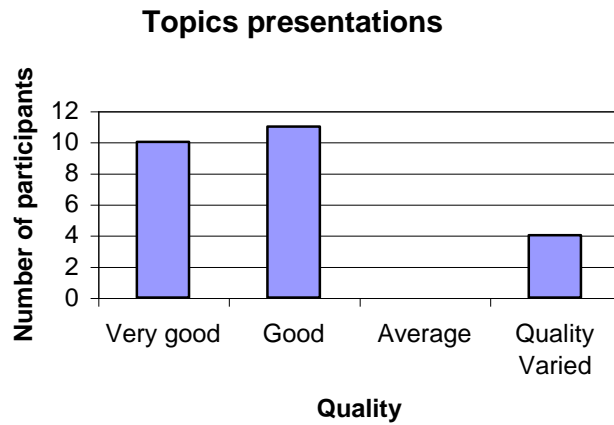


5. Considering the approach that IWRM promotes, topics presented were:

Relevancy of IWRM topics presented



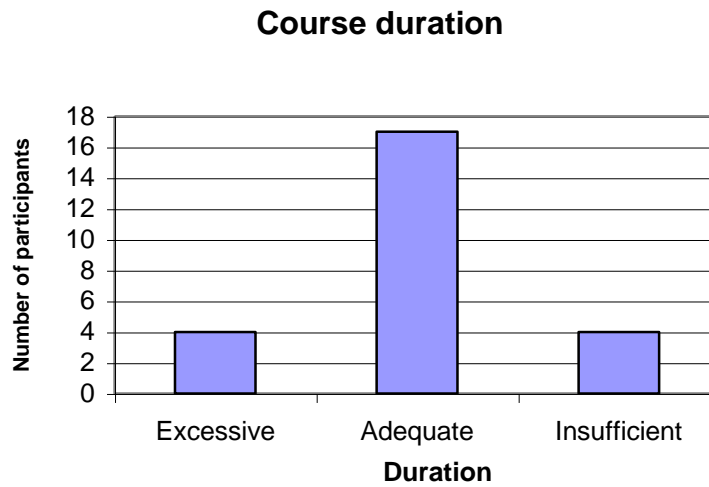
6. Topics presentations were:



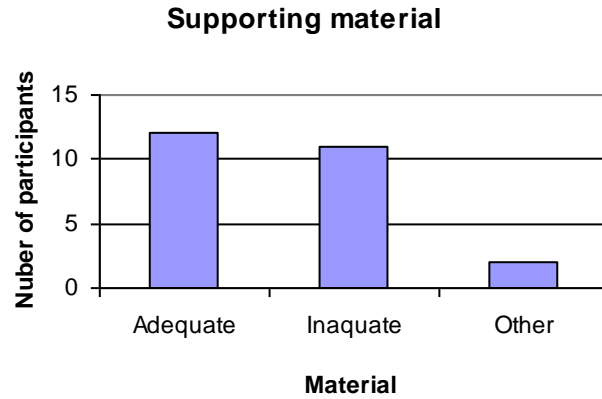
7. Possibilities to participate during sessions were:



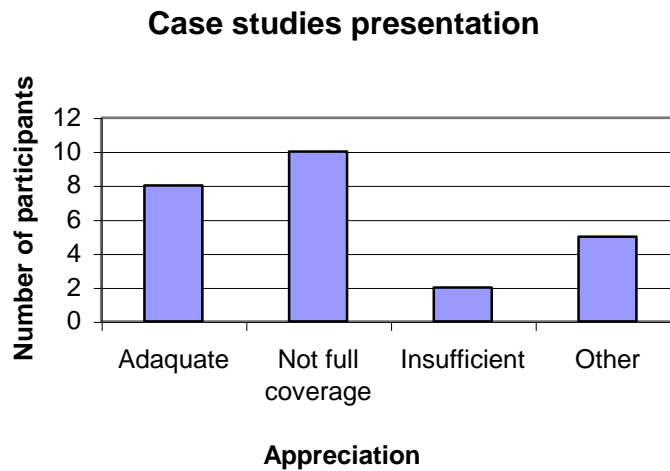
8. The course duration in relation to the programmed activities was:



9. The session supporting material was:



10. The presentation of case studies allowed appreciating and better understanding the applicability of economic and financial instruments for IWRM and its associated problems:

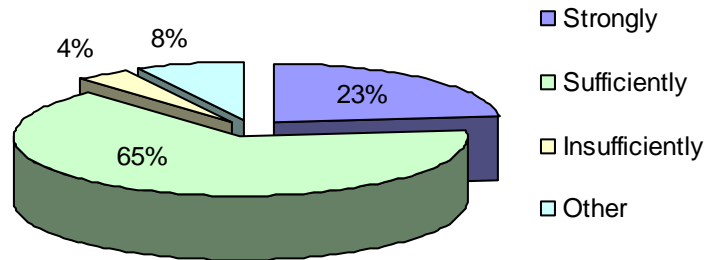


11. The class exercises and group work was:



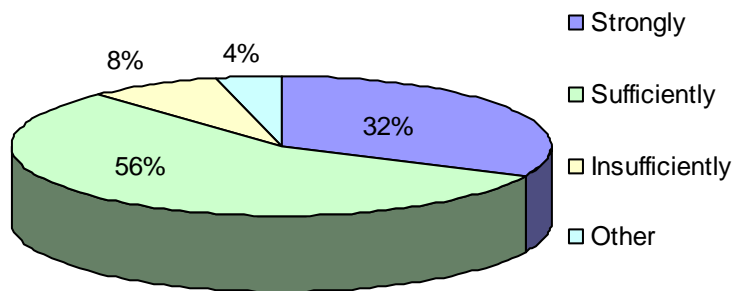
12. The activities carried out during the week contributed to improve the vision I have of IWRM and its implementation:

Improvement of IWRM vision



13. The course provided a better understanding of the important role of networking in the promotion of IWRM capacity building:

Role of networking for IWRM promotion



14. What aspects of the course resulted most useful to you?

The top ranking topics that many participants found to be useful are

6. Partnership management in IWRM
7. Concepts and Principles of IWRM
8. Tools of gender mainstreaming in IWRM planning cycle
9. Initiating and Preparation of IWRM Strategic Plans
10. Benefits of IWRM to water Supply and Sanitation Sector

What aspects of the course resulted less useful to you?

This question did not get any answers

15. What actions are you planning to undertake as a result of your participation in the course?

Most of participants stated that they would:

- Bring knowledge gained back to their work place
- Sensitize the use IWRM and mobilization of population
- Use IWRM in planning water projects in their catchments
- Use knowledge to assess application of IWRM in their work
- Train others
- Change behavior in use the of water

Other comments and suggestions:

- More training on IWRM should be organized
- Language was a problem, because many participants do not master the training language, which is English
- Enough time should be allocated to the workshop, because some course were large
- Rwanda case studies are important
- Training at local level
- There is a need of follow up in order to check if participants use the knowledge gained in the workshop

Annex 4: Results of Capacity Building Need Assessment

INTEGRATED WATER RESOURCES MANAGEMENT CONCEPTS AND PRINCIPLES TRAINING COURSE

14 – 18 July 2008 Kigali, Rwanda

CAPACITY BUILDING NEEDS ASSESSMENT IN RWANDA: RESULTS FROM PARTICIPANTS, 18 July 2008

25 Participants out of 29 did respond to this pressing need survey.

SN	Area of Capacity Building	Target Group	Levels
1	Rain Water and IWRM	Local Inhabitants	Local (Rural)
2	Sensitization on IWRM and Sanitation		
3	Gender Mainstreaming in IWRM		Local (Rural)
4	IWRM and Leadership		Central
5	IWRM and Wetland Management		Local
	IWRM Planning	Water Professional and Practitioners	Central and Local
6	ToT on Concepts and Principles of IWRM	Water Professionals	Central
7	IWRM Linkage with Irrigation and Environment	Researchers and Academia	
8	Catchment Protection and Management		
9	Partnership in IWRM		
10	Legal and Institutional Framework in IWRM		
11	Implementation of IWRM		
12	IWRM Sensitization Campaign at the Local Level	Decentralized Officials	Local
13	Soil Protection and IWRM	Central Officials	Central
	Agro-forestry and IRWM	Central and Decentralized Officials	Central and Local
14	Mines and IWRM		
15	Water Quality and IWRM		
16	IWRM Budgeting		
17	Private Sector and IWRM	Private Sector Operators and Public Official, NGOs	All
18	Sanitation and IWRM	Central and Local Official	Local and Central Levels
19	Decentralized Training on Gender		Local

	and IWRM		
20	Gender and IWRM Planning		Central and Local
21	Integration of IWRM in University Syllabus		
22	IWRM Project Development and Financing		
23	Data Management and IWRM		
24	Public Private Partnership and IWRM		
25	Monitoring and Evaluation in IWRM		
26	Sector Wider Approach (SWAP) and IWRM		
27	Successful Cases Studies of IWRM Projects		
28	Water Quantity and IWRM		
29	Partnership Management in IWRM		
30	Ground Water and IWRM		
31	Wastewater and IWRM		Civil Society, Local and Central
32	Investment Planning and IWRM		

Recommendations from Participants:

1. IWRM Sensitization programs at all levels especially in at the local level. It very important to plan public awareness and mindset at high and low level.
2. Training programs of water and sanitation sector officials are vital to ensure proper implementation of IWRM at all levels,
3. Training of local leaders is vital because they are the ones to implement IWRM plans and programs.
4. Training of significant number of women on water saving is vital all over the country because they are the ones to deal with domestic activities and agriculture
5. Excursion where IWRM projects have succeeded is vital to encourage IWRM implementation
6. Encourage local associations dealing with water Management by offering IWRM awards
7. Sustainable financial support to IWRM strategic Plans
8. Financial support for women water related projects
9. Universities should integrate in different courses IWRM.