

Learning Workshop on Forming Water User Associations



September 14th - 16th 2010

Morogoro, Tanzania

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1. Workshop opening and introductions

The workshop was held from September 14th to 16th 2010 in Morogoro, Tanzania and convened by Pangani River Basin Management Project¹ and IUCN. The workshop was attended by 60 participants from Basin Water Boards in Tanzania, Ministry of Water and Irrigation (Tanzania, Kenya and Uganda), Vice President's Office (Division of Environment) Tanzania, Integrated Water, Sanitation and Hygiene (iWASH), UNDP Tanzania Office, SNV Netherlands Development Organization, and IUCN. Other participants came from Ethiopia and Kenya. The workshop was facilitated by Mr. Leogard Haule of WWF Songe Project and Mr. Joel Kalagho of SNV, Arusha. The workshop programme is shown as Annex 1 and a list of participants as Annex 2.

The workshop opening and welcoming remarks were given by the Wami-Ruvu Basin Water Officer (Ms. Praxeda), the Regional Coordinator for Water and Wetlands of IUCN Eastern and Southern Africa Regional Office (Dr. Emmanuel Mwendera) and a representative of the Ministry of Water and Irrigation (Ms. Tumaini).

In her welcoming remarks, the Wami-Ruvu Basin Water Officer noted that the workshop was a milestone in the sense that participants will share their experiences and challenges pertaining to community participation in water resources management in the region and she mentioned that community involvement in water resources management through water user association is very important.

The IUCN Regional Coordinator for Water and Wetlands mentioned in his welcoming remarks that the workshop is important because it creates an opportunity for sharing experience about community involvement in water resources management. He noted that in the past much emphasis was on hydrology and the science of water resources management, but now the focus is shifting to community and water governance issues. He mentioned that in the region, IUCN is very active in providing technical assistance in natural resource management including water resources.

The representative from the Ministry of Water and Irrigation, Tanzania noted that her boss could not make it to the meeting because he was participating in the Water Sector Review Mission that was ongoing in the country at the same time. She mentioned that involving the local communities in water resources management, ensures that sustainability (which is very challenging, though important) is achieved since it is the community who are utilizing the resource. She mentioned that the Ministry was planning of organizing a similar workshop to share experiences on community participation in water resources management and for this reason she expressed gratitude to IUCN for having thought of such a workshop.

¹The Pangani River Basin Management Project is generating technical information and developing participatory forums to strengthen Integrated Water Resources Management in the Pangani Basin, including mainstreaming climate change, to support the equitable provision and wise governance of freshwater for livelihoods and environment for current and future generations. The Pangani Basin Water Board is implementing the project with technical assistance from IUCN (International Union for Conservation of Nature), the Netherlands Development Organization (SNV) and the local NGO PAMOJA. The project is financially supported by the IUCN Water & Nature Initiative, the Government of Tanzania, the European Commission through a grant from the EU-ACP Water Facility, and the Global Environment Facility through UNDP.

2. Workshop objectives and outputs

The workshop was convened to achieve the following objectives:

- a) To share experience and knowledge on community participation in water resources management in Tanzania (and East Africa including Ethiopia) on the following:
 - Lessons and challenges on establishment and/or operationalization of Water User Associations (WUAs),
 - Sustainability mechanisms of WUAs,
 - Relationships and/or interactions of WUAs with other institutions at the local level
- b) To develop recommendations (such as guidelines) on how to improve community participation in water resources management in Tanzania (and East Africa) including documenting the process, and thinking about ways to communicate; and
- c) To create a network in Tanzania (and East Africa) to continually share information on community participation and engagement around water user associations.

3 Communication and facilitation tips – how to get the message across about water resource management to WUAs, different techniques (PRA, O&OD) by Haule

This presentation was given by Mr. Haule who noted that communication is an important tool for achieving our goals as individuals or organizations; as well as in achieving objectives for Integrated Water Resources Management (IWRM) - IWRM is about people hence communication cannot be separated from it. However, communication is one of the most unrecognized tools – very often taken for granted. He mentioned that achieving the objectives of the water resources management in Tanzania largely depends on strong communications component. It is to this end that the Ministry of Water and Irrigation has subsequently developed a communication strategy He pointed out that objectives of water resources management in Tanzania are:

- to improve the management and conservation of ecosystems and wetlands;
- to promote integrated planning and management of water resources;
- to raise public awareness and broaden stakeholder participation in the planning and management of water resources;
- to ensure financial sustainability and autonomy of basin water boards;
- to develop equal and fair procedures in access and allocation of the water resources;
- to ensure that social and productive sectors, and the environment receive their adequate share of the water resources;
- to ensure effectiveness and efficiency of water resources utilization;
- to promote the management of water quality and conservation;

Communication includes all methods of conveying information, ideas and feelings between two or more people. Communication is a process of sharing with another person or persons, one's knowledge, interests, attitudes, opinions, feelings and ideas. It is a two way process which involves sending a message and receiving a feedback - a message can be verbal or non-verbal.

Facilitation is a process of enabling people to carry out their activities or perform tasks and use resources effectively in order to reach a desired outcome or goal. This includes empowering people, working closely with the people we are empowering, encouraging the people that have the potential to do it, sharing with community members on skills, experiences, approaches and opinions, and also thinking critically with the community members.

How does communication take place? The communicator (source) must have an idea to communicate to another person. The ideas must be put into a system of symbols or signals (encoding) which can be transferred through a channel to the receiver. The receiver reinterprets the coded message and assigns meaning (decoding) depending on his/her experience, knowledge, mood, perception etc. The receiver sends back a response (feedback) with words or actions which help the communicator to readjust the next message if necessary. The sender is not the only source sending messages to the receivers. There are other messages fighting for the listeners' attention (competing stimuli), such as noise or talk from other sources, mode of dressing etc.

There are some communication barriers including language, wrong media, wrong timing, taking too long, long channels, long distances, differences in status among players involved in communication, political differences, the fear of rejection of someone's opinion, too much information, intentionally deciding not to provide information, and intentionally deciding to misinterpret the message. The objective(s) of communication are basically four, namely: information sharing, behaviour change, awareness raising and education/capacity building. Communication has to be planned – it should not be random or adhoc. Firstly, identify the target audience – who are the people you want to talk to, this is because different audiences need different messages delivered differently. Secondly, carry out research on the audience i.e. get insights into the needs and motivation of different audiences, what do they think about?, Why do they think/feel that way – it is because of values, misconceptions, misinformation, ignorance, fear, lack of knowledge etc?, What are their expectations? Who/What do they listen to? Etc. Thirdly, create messages – what is your message and key elements you want to communicate to the different audiences? What are the behaviours/practices you want to change? What would trigger their behavior change? What language would you use? Etc. Fourthly, choose channels for communication – what do your audience listen to/read/watch?, Who do they listen to?, where are they, where do they go to and what do they do etc. The following are some examples of media channels: Direct communication (face to face) - home visits and demonstration; Mass media – TV, radio, newspapers, video, brochures, posters, stickers, banners etc; Community/group communication – workshops, seminars, site visits, newsletters, internet/websites, animators (play drama, songs, poems), competition, trade fairs and/or agricultural shows; Participatory Learning and Action (PLA) methodologies e.g. Participatory Rural Appraisal (PRA) and Opportunities and Obstacles to Development (O&OD). Participatory methodologies are powerful communication tools, facilitate learning and create dialogue among participants Fifth, monitor and evaluate.

In summary, communication if done correctly can improve buy-in, creates and promotes ownership of and commitment to interventions, can reduce the risk of conflict due to misperception and misinformation and finally help one to achieve his/her goal. For effective communication to be realized, the person communicating must have the right attitude towards the audience, courteous, sincere etc; adequate knowledge of the audience and the issues; good command of the language including vocabulary, correct grammar, figurative and non verbal messages; ability to get feedback from the audience and adjust accordingly; good listening abilities etc.

4. Water Resources Management Act, Regulations and Guidelines for forming WUAs by Sylvand Kamugisha

This presentation was supposed to be given by a representative from the Ministry of Water and Irrigation in Dar es Salaam Office, but due to other commitments, he could not attend the meeting, hence Sylvand Kamugisha, former Project Coordinator for Pangani River Basin Management Project was requested to make the presentation, which he kindly agreed to make.

In his presentation he pointed out that, in Tanzania, legislation governing water sector is divided into two regimes i.e. water resources and water supply and sanitation services. The Water Resources Management Act (WRMA) No.11/2009 and the Water Supply and Sanitation Act No.12/2009 were enacted recently to repeal and replace WUA Cap 331 and WWA Cap 272, respectively. Currently there is no specific legislation governing irrigation sector. The two pieces of Water Legislation are implemented in parallel with other related pieces of legislation in the country, such as Environmental Management Act (EMA) No. 20/2004, Land Act No. 4/1999, EWURA Act No.11/2001, Forest Act, Water Supply and Sanitation Act etc (*see the details on some of these Acts below*).

The Water Resources Management Act (WRMA) No.11/09 was passed by the National Assembly of the United Republic of Tanzania on 28th April 2009 and assented by the President on 12th May 2009. The Act came into operation on 1st August 2009 vide GN. No. 235 published on 10th July 2009.

The objective of WRMA is “to ensure that the nation’s water resources are protected, used, developed, conserved, managed and controlled to meet the basic human needs of present and future generations”. The issues it addresses include: institutional and legal framework; principles for water resources management; prevention and control of water pollution; establishment of National Water Boards, catchments and sub-catchments; and offences and penalties. The WRMA was enacted as a result of the 2002 National Water Policy (NAWAPO), which emphasizes the principle of involvement of water user organizations and private sector so as to attain equitable, efficient and sustainable water resources management. According to the WRMA and NAWAPO, every Tanzanian has a stake and duty to safeguard and protect water resources. The right to use water from any water source is vested with Minister for Water and the preference for water allocation is given in order of priority to: domestic uses; environmental reserve; and socio economic activities depending on the availability of water. Domestic uses may not require a permit and refers to abstraction of water without construction of any works; construction of a shallow hand dug well and use the water allowed subject to limitation of depth to be provided in regulations; harvest of rainwater for domestic purposes provided the constructed works for that purpose do not exceed the capacity to be prescribed by the Minister; and recognition of customary water rights as of equal status with granted right.

Other key provisions of the WRMA include: preparation of a National IWRM Plan (to include assessment and understanding of water balance, water demand, water availability etc) based on IWRMP prepared by boards and catchment water committees and shall be subject to consultation with all stakeholders before approval; Determination of reserve of each classified water resource; and Prohibition of human activities near water sources (The Minister may declare such a distance as beyond the 60 m from the water source as provided under the Environment Management Act); Establishment of protected zones (in consultation with institution responsible for land management) with a view to protecting water sources from pollution, erosion or adverse effects; Declaration of Groundwater Controlled Areas on

recommendation of BWB. Compensation shall be payable to owner or occupier of land in area declared protected zone.

WRMA makes provisions for the establishment of the National Water Board (NWB) to replace the Central Water Board. NWB is an advisory board to the minister on matters relating to multi-sectoral coordination in IWR planning and management as well as resolution of national and international water conflicts. The NWB consists of 11 members appointed by the Minister such as: The Chairman; 10 members from the following sectors/institutions as follows: agriculture, energy, industry, forestry, environment, livestock, wildlife, lands, mining, irrigation, fisheries and infrastructure. Others are: representatives from local government; BWBs; private sector; and NGOs.

In addition to the NWB, WRM Act makes provisions for the establishment of the Basin Water Boards (BWB) by the Minister by order in the Gazette. Upon its establishment, BWB becomes a body corporate capable of suing and being sued. Before WRM Act, BWBs had no capacity of suing and being sued. The BWB membership shall not exceed 10 and consists of Chairman – appointed by Minister; 1 representative of private sector (from industry, mining, agriculture, power); 3 representatives from catchment water committees; 2 representative from key water related sectors which are of importance in the basin (agriculture, energy, minerals, trade and industry, forestry, environment, natural resources, lands, livestock, fisheries, infrastructures); 1 representative from LGAs; 1 representative from water supply authorities; 1 representative from MoW&I. One third of the members shall be women. The members shall be involved in and have adequate knowledge and experience in water resources affairs in the respective BWB. The Basin Water Officer is the Secretary to the BWB.

A member of the Basin Water Board shall hold office for 3 years and shall be eligible for reappointment. Members of board shall elect 1 of its number as the Vice Chairperson for a term of 3 years. BWB shall ordinarily meet 4 times a year and may hold 2 extra ordinary meeting. Where no regulations published by the minister, BWB shall conduct its business in such manner as it shall determine.

Source of funds for the BWBs includes: fees and charges as may be collected from the issuance and operation of permits under WRMA (charges to be levied shall be published in the Gazette and charges shall base on a pricing strategy which will consider among others value of water by using economic parameters i.e. inflation rate, market values and opportunity costs of water); any other payment due to the BWB in respect of any other matter incidental to its functions; such sums as may be approved for BWB by the parliament; such donations, grants, bequests and loans as the BWB may, from time to time receive from any person or organization. The funds and resources of the BWB shall be applied in the exercise of the duties and powers of the BWB.

Catchment and sub-catchment water committee may be established by the Minister after consultation with BWB. The composition of the membership consists of not less than 3 and not more than 5 members from major private water users; representatives of water users association and local government authorities. Water user associations are formed by agreement of water users and registered by the BWB.

The WRMA Act also makes provision for the offences related to: use of water in excess of a water use permit; failure to obtain ground water permit; water pollution; assault, threaten, resist, hinder, delay an authorized officer; and making false statement in order to procure permits.

Other related pieces of legislation are as follows: Water Supply and Sanitation Act No. 12/2009. Section 44 establishes a National Water Investment Fund (NWIF), whose

objective is to provide investment support for water service provision and management of catchments areas serving water supply abstractions. The management of NWIF is vested in the Board of Trustees which consists of chairman and 4 members from Ministries responsible for finance, water and local government authority. The Minister will issue regulations prescribing the procedures for the performance of the trustees and use of the fund.

Environment Management Act (EMA) No. 20 of 2004 is a comprehensive legislation dealing with protection of environment from degradation. EMA is a multi-sectoral cross cutting legislation. It defines 'environment' to include air, land, water, the biological factors of animals and plants etc. Section 6 provides that "every person living in Tanzania shall have a stake and a duty to safeguard and enhance the environment and to inform the relevant authority of any activity and phenomenon that may affect the environment significantly".

EMA provides for the polluter pays principle which requires that any person causing adverse effect on the environment to pay in full social and environmental costs of avoiding, mitigating, and or remedying those adverse effects; each sector is required to oversee the implementation of EIA required for investments; a river, riverbank, lake or lakeshore and shoreline may be declared to be protected areas and as such prohibit human activities within 60 metres – activities which are likely to compromise or adversely affect conservation or the protection of ocean, natural lake, shoreline, riverbank, water dam or reservoir. EMA provisions prevail over any provision of any other written law in case of inconsistent.

Section 4 of the Land Act, 1999 No. 4 of 1999 (Cap. 113) states that all land in Tanzania is a Public land and is vested in the President as trustee for and on behalf of all citizens of Tanzania. For purposes of land management, Public land has been categorized into 3 categories:- General land; Village land; and Reserved land – that is "land parcel within a natural drainage system from which the water resource of the drainage basin originates".

The Forest Act No. 14 of 2002 deals with management of forests and one of its objectives is to ensure ecosystem stability through conservation of forest biodiversity, water catchments and soil fertility. The Minister for forest may declare in the Gazette any area of land to be national forests reserve or local authority forest reserve. The area could be a land covered by forest reserved or used principally for the purposes of protection of water sheds, soil conservation and the protection of wild plants. The EIA shall be done for any proposed development in a forest reserve, private forest or sensitive forest area including water sheds and an EIA report to be submitted to the Director of forest. A permit issued under the Forest Act does not prevent the permit holder from the requirement of any other written laws.

5. Formation, Achievements and Challenges of Water User Associations (WUA): The case of Ilonga Water User Association in Kilosa District, Tanzania by Laurent Kadeng`uka

Majority of the people in Ilonga depend on Ilonga River as a source of their livelihood in terms of agriculture, fishing and other domestic uses. However, there is minimum attention from the communities in managing the river resource base. As a result, the river is deteriorating both in terms of water quality and quantity. It is on this basis that a decision was arrived at to manage the river by involving the local communities. Water User Association was established as a vehicle through which communities would participate in the management of the river. WUA membership is drawn from the Water Unions and Committees from the villages in Ilonga. The WUA was rallied around the following two objectives: 1) To improve crop and livestock production through supervising water uses and ensuring that members adhered to the community by laws as far as water use (taking the

amount specified, following the calendar etc) by member; plant environmental friendly trees near the water sources as well as practicing conservation agriculture; knowing and keeping records of the water users in the villages; and establish and improve water harvesting infrastructures including earth dams etc. 2) To improve water quality through creating awareness to the community members.

As a result of implementing the above activities, the following have been realized: capacity for members of WUAs have been built and there exist strong linkages among members; WUA committee members have attended seminar and s study tour; establishment of water harvesting techniques such as earth dam at Ilonga; awareness raised on the need to improve water quality based on the stipulated laws and measures taken against those violating the guidelines and/or by-laws. With this awareness raising the number of cases of community members violating the water use by-laws has declined substantially. Conflicts between various users over access and/or use of water have also declined.

Various challenges have remained: water being regarded as a common good, ensuring that community pays for its use has been a challenge; lack of adequate water storage facilities; high demand for water for economic activities such as brick making, livestock watering, farming etc; limited financial resources in the villages to be used for purchasing and hiring materials and services that are important for supporting the community activities; implementation of some activities were challenged by limited knowledge on some areas such as financing and appropriate tree species/types to be planted.

6. Field trip to Mindu Dam and Tlai ponds

In the afternoon of the first day, participants visited two sites (Mindu Dam and Tanzania Leather and Associated Industries (TLAI) Ponds within Morogoro municipality to familiarize themselves with the water and environmental issues.

Mindu Dam is operated by the Morogoro Urban Water and Sewerage Authority (MORUWASA) for the purpose of supplying water to Morogoro Municipality. It is located 7 km south of Morogoro along the Iringa road and was constructed in 1983 and started operating in 1985. It is about 500 metres above sea level (masl); with a measured length of about 1.5 km while the surface area is about 508.4 ha. The deepest point ever measured during the rainy season was 12 metres. The dam structure is about 1.56 km long, 100 m wide and has un-gated type spillway with a discharge capacity of 710 m³/s. The full level of the reservoir is 507 m, the lowest drawdown level is 501.1 m and the highest water level before water spills out is 507.6 m masl. Participants were informed that there are three underground pipes from the intake point that draw water from the dam. There is a specific pipe to maintain the downstream environmental flows. Participants were informed that there has been no spillover for this season because of low level of water in the dam and very little water released for the environmental flows. The major rivers that feed the reservoir include the Mlali, Mgera, Lukulunge Ngerengere and Mzinga. Only the Ngerengere flows in and out both ends of the reservoir. The starting operation capacity of the dam was 20.70 million m³. The estimated current capacity of the reservoir is about 13 million m³ (11.28 million m³ is the active volume and 2.02 million m³ is the dead volume or storage normally not accessed for use. The reservoir reaches its lowest level during the dry season where reservoir reaches 50 % of its capacity due to the dry spells demand levels.

There have been several challenges since the Mindu dam came into operation. First, there is pollution of the reservoir from land use activities such as agriculture, small scale mining of gold, and human settlement in the catchment area. Pollution, mainly from fertilizers being used by farmers has led to the proliferation of water weeds in the dam. The Mindu dam is

demarcated 500 m from the banks, and 26 km has been demarcated. This means that people who are still living within these areas need to relocate. Apparently, those that have land in the demarcation zone have been compensated several times due to the construction of a Tazama pipeline, highway construction, electricity pylons, and the Mindu dam. As there is little enforcement, people keep moving back into the area or sell their land to someone else. Another major problem is the decline of reservoir storage capacity with time, the lifespan of the reservoir is 50 years, but 30% has been lost due to siltation. Another problem associated with the construction of the dam is the change in flow regime of the Ngerengere River downstream of the dam. Another problem is wild fires in the catchment and the Mindu dam reserve area, often set to clear land for agriculture, and the month of September is traditionally the month of burning. This results in siltation hence increased turbidity of the water and higher treatment costs of water before it is supplied to the municipality.

As a measure to control some of these destructive activities, a private security company has been put in place and the measure has controlled tree cutting which has been a major problem. Illegal fishing in the dam has been managed by issue of permits from the Ministry of Fisheries. A fishing plan has been made and people can fish in demarcated areas. In addition, Wami-Ruvu Basin Water Board is in the process of establishing three (3) Water User Associations along the Ngerengere River through the IUCN support. These will create opportunity for community involvement in the management of water and land related issues within the dam environment.

Tanzania Leather and Associated Industries Ponds are being used by three major industries (textile, canvas and leather). The ponds are non-functioning and the raw effluents are directly emitted into the Ngerengere River which people use for domestic purposes. These ponds were established as treatment facility by the government in 1960s when the government owned these industries. The industries collapsed in the 1970s and 1980s and were privatized in the 1990s, since then it has been unclear who the owner of these ponds is, who should then be responsible for their management. Ideally, the owner of the ponds should be Morogoro Water and Sewerage Authority (MORUWASA). Wami-Ruvu Basin Water Board (WRBWB) has initiated a dialogue between the industries and MORUWASA so that the ownership of the ponds is established with a view to ensuring that they are rehabilitated and/or maintained.

7. Status of Catchment based Water Resources Management in Uganda by Leo Mwembebezi

Uganda's surface area is 241,500 Km² and 15% of Uganda is open water with 3% permanent wetlands and 9.4% seasonal wetlands. The area of lakes shared between Uganda and neighbouring countries is 78, 596 Km². The area of lakes in Uganda is 34, 814 Km². Uganda has an annual rainfall of 600 – 2500 mm. The groundwater consists of fractured & non fractured aquifers.

Uganda adopted the principle of IWRM during preparation of Water Action Plan (WAP) in 1993-94. WAP detailed activities associated with water resources development and management. It defined problem of securing water of acceptable quality and quantity to sustain the health of the people of Uganda and for other economic activities. It expresses the need for an institutional framework within which priorities can be determined and optimal uses planned.

Uganda undertook a WRM reform study from 2003 to 2005 with the objective "To establish an effective framework for Water Resources Management in Uganda to ensure that water resources are managed in an integrated and sustainable manner". The Reform study led to

preparation of a WRM reform strategy and it recommended a paradigm shift in WRM from centralized to catchment/basin/zone management, and the zones proposed were/are: Victoria Water Management Zone; Kyoga Water Management Zone; Albert Water Management Zone; and Upper Nile Water Management Zone. The objective for decentralization was to maximise economic and social benefits for Ugandans from water/related resources. There are three levels of decentralization: Water Management Zones; Catchments (National catchments – e.g. Rwizi, L. George, etc, Trans-boundary catchments – e.g. Kagera, River, Sio-Malaba-Malakisi basins); and Districts.

The role of Water Management Zone are: Planning and coordination of implementation of WRM activities; Coordination of preparation and review of Integrated Water Resources Management Plan (IWRM) in the Water Management Zone in collaboration and liaison with other stakeholders; Support the catchment management committee (CMC) to prepare and implement IWRM Plans in their respective catchments; and Support CMC to monitor and enforce relevant bye-laws, guidelines, regulations, permits, plans, standards, etc.

At the catchment level, there is stakeholder forum and catchment management committee. The roles of stakeholder forum are: Policy initiation; represent interests of major stakeholders in the catchments; advise and provide information to CMC and the secretariat of catchment management organization (CMO); review relevant proposals, plans, projects, etc and initiate proposals, petitions and other actions. Members of the stakeholder forum are: Representation of District Councils, Farmers Groups, Sub-county Representation, Women Groups, Relevant Local Government technical staff (Environment committee, Natural resources Committee), NGOs, CBOs and other lead agencies, Registered Water User Associations and Water Supply and Sanitation operators in the CMO.

The Catchment Management Committee (CMC) is responsible for: advising the WMZ Manager on issues related to regulation of water use and management of water resources in the catchment; planning, implementation, monitoring & reporting on WRM and related activities in the CMO; conflict resolution; reviewing policy; and planing and providing guidance to the CMO Secretariat on implementation of IWRM interventions in the catchment. Members of the CMC are: Chairpersons Districts, Chief Administrative Officers, District technical staff (Natural Resources, water, community development, Production etc), Other Lead Agencies (NWSC, NGOs and Private sector), Relevant prominent organizations etc.

8. Water Users Associations in Ethiopia: Management and Functioning in Rift Valley and Borana Areas by Sintayehu Mesele and Sirage Hussein

In Ethiopia, the Ministry of Water Resources (MoWR) is responsible for the overall planning, development, management, utilization and protection of the country's water resources, as well as supervising all water development activities carried out by other institutions. Large-scale water supply is also handled by the ministry through its Water Supply and Sewerage Department. The Bureaus of Water, Mines and Energy (BoWME) and/or Bureaus of Water Resources Development (BoWRD) are responsible for small-scale irrigation and rural water supply as well as small-scale hydropower development.

The Ministry of Agriculture (MoA) is in charge of water management (irrigation extension), including water harvesting for smallholder irrigated and rain fed agriculture. The Environmental Protection Authority (EPA) is responsible for the preparation of environmental protection policy, laws and directives. It is also in charge of evaluating the impact of social and economic development projects, particularly irrigation and hydropower projects, on the environment and is further responsible for follow-up work. The Bureaus of Agriculture (BoA)

have similar functions at the regional scale as the MoA. Several NGOs are involved in the water sector, particularly in small-scale irrigation and rural water supply projects.

The water management of small-scale irrigation schemes is the responsibility of the farmers themselves, mainly through informal/traditional community groups. Some formal Water Users Associations (WUAs) have been established. Apart from the provision of extension and training services to the WUAs on the part of the MoA/BoA, no institution is directly involved in water management in small holding irrigated agriculture but maintenance remains within once the construction of irrigation schemes is completed, they are handed over to the regional governments.

Ethiopia has renewable freshwater water resources of 1,700 m³ per year per capita. Many of Ethiopia's rivers are trans-boundary in nature and have highly seasonal water availability: 70% of the total annual runoff is obtained during the period June-September. These four basins - Baro Akobo, Abbay, Tekeze and OmoGhibe account for 80–90% of the country's water resource. The country irrigation potential is about 3.6 million hectares, of which currently only about 8 % has been developed.

The capacity of farmers are being built through training on high value horticultural crops production, irrigation and water management; organizing farmers trial and demonstration site; and exchange visits. In addition, WUAs are being linked with the existing union, exporters and agro industries; organizing and strengthening water users association (self help group); cooperative development etc. However, the following challenges still remains to be addressed: lack of knowledge on use of modern irrigation technology; poor water and land management; poor input utilization; lack of post-harvest technologies; lack of market information and market access.

In Ethiopia, the traditional system of resource management in Borana has survived for many years - more than 500 years. Dug wells are the most important sources of water constituting a crucially important element of Borana, pastoralism. Surface water has been scarce in the Borana rangelands. Therefore, the wells, known as elas are important focal point of Borana social life. Wells are considered as the communal resource in Boranas for clan members and all members have equal right of use. Each water sources is subjected to a complex set of rules and regulations for its management. For example, the watering rotation at a well spans three days and the daily routines at the well are supervised by an officer known as Abba Herregaa appointed by the well council (cora eelaa) which is composed of the users of the well, the Well Council has the overall management authority of the well.

The traditional system of water management in Ethiopia has been sustainable compared to the NGO/Gov't initiated management regime. This is because it promotes ownership and community participation. However, the system is facing some challenges such as introduction of centralized government administration system; population pressure; ethnic conflict which lead to displacement of clan members; introduction of new culture and religion; and dependency syndrome due to aid and relief services as a result of recurrent drought in the region.

9. Water Resources User Associations (WRUAs) in Kenya by Daniel Wanyumu

In Kenya, the management of water resources is vested in Water Resources Management Authority (WRMA) as per the 2002 Water Act. The country is divided into six (6) catchment areas i.e. Lake Victoria North; Lake Victoria South; Athi; Ewaso Nyiro; Rift Valley and Tana. Tana Catchment Area has five (5) regions - Muranga, Meru, Kerogoya, Kitui and Garissa. Garissa region has five (5) sub regions i.e. Garissa, Tana River, Ijara, Lamu and part of Malindi.

WRMA identifies and classifies status of the sub catchment areas at the sub regional levels as Alarm, Alert and Satisfactory both in terms of water quality and quantity. Alarm areas are prioritized for WRUA formation. Water Resources Management Rules (2007) define a WRUA as an association of water users, riparian land owners, or other stakeholders who have formally and voluntarily associated for the purposes of cooperatively sharing, managing and conserving a common water resource. WRUA's objectives are to: conserve the water catchments; manage the resources properly; increase the availability of water resources; increase the usage of the water for economic and social improvements and develop sustainable and responsive institutions. WRUA's activities include: Exchange of information and ideas on the water resource use; Discuss potential projects and developments that may affect water usage with a view to obtaining the consent of other WRUA members and the public; Resolve conflicts on water use; Monitor water availability and use; Lobby for resources to improve availability, reliability, quality or other aspects of the water resources. WRUA's membership consists of riparian landowners, water abstractors etc.

The process of WRUA formation includes: identification of stakeholders within the common water resource including civic, religious and opinion leaders as well as institutions within the area; community mobilization (and awareness raising) through a public baraza with the assistance from Provincial Administration; interim committee is elected with the guidance of a community development officer in conjunction with WRMA (gender, zone and membership category representation); regular meetings are held to develop a constitution with the assistance from WRMA; registration of the WRUA with the Ministry of Culture and Social Services as well as with the Attorney General's Office under the Societies/Company Act; registration with WRMA; capacity building by WRMA; writing and signing of an MoU with WRMA; proposal writing for funding with assistance from WRMA; signing contract with funding organization; receiving funding for proposal; and implementation of the project activities.

The 2002 Water Act also makes provision for the formation of a sub catchment management plan (SCMP). SCMP seeks to address the following: Different uses & users (involvement of multi-stakeholders); Sustainable use and poverty alleviation; Ownership, Laws, Conflicts, Gender and Development of agreements; and Capacity building. The plan is developed through an 11-days workshop i.e. 3 days training on WRUA Development Cycle (WDC²); 5 days workshop on data collection for preparation of the plan; 2 days for compilation of the draft SCMP; and 1 day for ratification of the SCMP by all participants. The plan has the following 13 chapters: Introduction; Overview of the sub-catchment; Water resources problems in the sub-catchment; Management approach; Water balance; Water allocation; Resource protection; Catchment protection; Institutional development; Infrastructure development; Right based approach/poverty reduction; Monitoring and information management; and financing and implementation.

The guiding principles for SCMP are the National Water Resources Management Strategy (NWRMS) at the National level and the Catchment Management Strategy (CMS) at the Catchment Area. The objectives of SCMP are to: provides WRUA Members with a prioritized plan of action and budget; documents what is known about the sub-catchment; and provides a basis for proposals for funding. SCMP reflects an integrated way of planning for improved water resource management; reflects multi-stakeholder participation; provides clarifications of roles in support of common objectives; identifies key issues, problems, priorities and interventions; and supports a mid to long term work plan (3 – 5 years).

² This is a guideline for the formation and management of WRUAs

10. Status of Water Users Associations in the Tanzanian Basins

Community Development Officers from the Basins in Tanzania made presentations on the status of WUA formation in their respective basins, as presented below.

Internal Drainage Basin

Internal Drainage Basin (IDB) covers an area of about 143,100 sq km and is situated in the central and extends to the North-Eastern part of the country – covering parts of Arusha, Shinyanga, Manyara, Dodoma, Singida Tabora and Kilimanjaro Regions (about 26 Districts). It is the second largest Basin after Rufiji Basin. The Basin Office Headquarters are at Singida town with sub offices in Shinyanga, Arusha, Dodoma and one planned to be in Babati. The Internal Drainage Basin Water Office officially started its operations on the 29th October 2004 - thus the Basin Water Office is still at an infant stage (and needs strengthening) and most of its activities are yet to start.

The basin has both saline and fresh water lakes: Lakes Natron, Eyasi, Kitangiri, Kindai, Singidani and Manyara are saline. Babati, Basotu, Burunge and Tlawi are fresh water lakes. The major uses of water resources are domestic, livestock, irrigation, fishing and mining.

Currently IDB has not established any Water User Association. However, the basin has started an inventory process and information about 546 Water user groups has been collected and is being analyzed. The water user groups include irrigators, pastoralists, domestic users etc. These groups do not meet the requirements of WUAs as per guidelines No 11 of 2009 on WUA formation hence the need for them to be streamlined. IDB has a plan of forming 4 WUAs by 2012. These will be established in the following 4 catchments: Mang'ola (Karatu), Ngarenanyuki (Arumeru), Mto wa Mbu (Monduli) and Kiru (Babati). These catchments have been identified due to the fact that they are prone to conflicts over different uses of water, they are economically potential, they face threat of pollution as well as environmental degradation. IDB is currently establishing WUA at Mang'ola and so far 3 stakeholders' meetings have been held.

Lake Tanganyika Basin

Lake Tanganyika Basin covers an area of 151,000 sq.km with a population of about 4.9 million people and a rainfall between 800 – 1000 mm per year. Lake Tanganyika was established in 2004 and its first Board inaugurated in 2006. The basin is a trans-boundary Basin shared between Tanzania (41%), Burundi, DRC and Zambia. The Basin Water Board has initiated a process of forming WUAs as per the required guidelines. This is being done through creating awareness among communities of the requirement of the guidelines; involving communities in decision making, planning and managing water resources infrastructures; encouraging involvement of women in decision making and planning of water resources facilities. A number of challenges still remain, such as: limited financial resources; time consuming; community members use water for short term economic gains rather than for long term sustainability; increased population and human activities i.e. illegal fishing, agriculture, wild fires etc.

Pangani Basin

Pangani Basin Water Office was established in 1991. The basin covers an area of 56,300 sq. km with 5% being in Kenya and a population of about 3.8 million people. The areas the basin covers include: Arusha, Kilimanjaro, Manyara and Tanga Regions (18 Districts). Lakes Chala/Jipe and Uмба River are shared with Kenya. The roles and responsibilities of the Pangani Basin Water Board are: water resources monitoring and assessment; water allocation; strengthen community participation in WRM; coordinate water resources

planning; pollution control; and water use conflict management. The Board has followed the following steps in forming the WUAs: inventory studies (i.e. policy framework, organizational landscape, water availability and comparative experience); development of training modules on IWRM, Community Participation; Entrepreneurship and Financial management); Establishment of Catchment Facilitation Teams (CFT); Training of Trainers (ToT); Community consultation meetings (District, Ward & village level); Election of representatives from stakeholders to form interim management committee; Training of representatives; Draft of constitution; Comments/feedback on constitution; and Registration of WUA.

The current existing opportunities which could be exploited for WUA formation include: guideline No. 11 of 2009 as well as other related policies and laws such as Water and Environment Acts; the ongoing implementation of Water Sector Development Programme (WSDP); existing Dev. Partners (NGOs, Donors etc) among others. There are however, challenges that still remain, such as: water use conflicts; declining water quality; population growth vs available land and water; water sources pollution; uncoordinated plans; weak financial management (at associations/committee level); and farming along water sources etc.

Wami-Ruvu Basin

Wami-Ruvu Basin Water Board (WRBWB) was established in July 2002 and covers an area of 66,820 km² (Wami 43,946 km², Ruvu 18,078 km² and Coastal rivers 4,796 km²). All rivers in the basin drain into the Indian Ocean. According to the National Water Policy and WRMA No. 11 of 2009, WUAs are responsible for: mediation of disputes among users and between groups within their areas of jurisdiction; collection of various data and information; participate in the preparation of water utilization plans; conservation and protecting water sources, and catchment areas; efficient and effective water use and ensuring return flows; enforcement of the law and implementation of conditions of water rights, and control of pollution.

The process of forming a WUA in Wami-Ruvu basin entailed the following: forming a District Facilitation Team; conducting a baseline survey; convening a general assembly in each village; conduct workshop to prepare action plans and budget; and using O & OD to identify opportunities and obstacles. At the moment more than 50 informal institutions exist (not registers by WRBWB). The Board has so far established 7 WUAs in the basin – Ilonga, Lumuma, Miyombo, Msowero, Wami, Kisangata and Mkondoa. Water related organizations in the area that a WUA is working in are members of that particular WUA. Similarly, Local Government Authorities from District, Division Ward and Village level have a close working relationship with Water user Association; NGO's both international and local provide support to WUA activities e.g. IUCN, SNV, TCMP, iWASH etc.

Challenges still remaining include: more awareness campaign required for changing people's mindset towards water resources utilization; effective planning is needed to ensure all key stakeholders are involved in WUAs activities; water source encroachment, pollution is at a high rate; implementation of some activities is sometimes mixed up with politics; established WUA needs a lot of capacity building (technology, facilities, financial) to be able to succeed; to develop a best mechanism to form WUA; to ensure women are actively involved in WRM; inadequate water supply to meet population demand.

Lake Nyasa Basin

Lake Nyasa Basin is located in the South Western part of Tanzania and extends to parts of Mbeya, Iringa and Ruvuma regions (covering about 11 districts). The basin is shared between Malawi and Mozambique. The basin drains into the Indian Ocean via Shire River system in Mozambique. Thus, the Lake Nyasa Basin forms part of the Zambezi River Basin.

Lake Nyasa basin covers an area of 165,109 Km² (inclusive of lake waters) and has a population of about 2.2 million people. The major rivers that drain into Lake Nyasa are Ruhuhu (13,490 Km²), Songwe (3,550 Km²), Kiwira (1,660 Km²), Rufirio (1,350 Km²), and Lumbira (1,414 Km²).

A total number of about 76 District Facilitation Teams (DFTs) were trained in all the districts within Lake Nyasa Basin to facilitate the formation of Water User Associations. So far, the water office has carried out 3 baseline surveys in Mbinga, Songea and Mbozi districts in Luwaita, Lumecha and Songwe sub-catchments respectively.

Lake Victoria Basin

Lake Victoria Basin was established in year 2000 and covers an area of 115,400 km² covering areas such as Mwanza, Kagera, Mara regions and 4 (four) Districts of Shinyanga region which are Maswa, Kahama, Bukombe and Bariadi. It has a population of about 8 million people.

The formation of Water User Associations in Lake Victoria Basin was initiated by WWF when they were implementing the Mara River Catchment Environmental Conservation Project - 2006 to 2008, during which they managed to form 14 Water User Association at village level. Since 2008, Lake Victoria Basin Water Office also started to form Water User Associations as a part of WSDP. During a meeting held in Morogoro it was decided that all village Water User Associations should not be recognized as Water User Associations since Water User Associations should follow the hydrological boundaries - water streams and rivers as per the guideline. In 2010, Lake Victoria Basin Water Board managed to form two (2) Water Users Associations – Tigite River Water Users Association located in Tarime District and Tobora River Water Users Association which is located in Serengeti District. Tigite River Water Users Association consists of nine (9) villages while Tobora River Water Users Association consists of seventeen (17) villages

The formation of Water User Associations has been coordinated by the department which is in-charge of stakeholders Assessment training and awareness creation. During the PRA meetings community members elect a village water committee with not more than 15 members. The committee is charged with coordinating various tasks during the PRA processes such as mapping; transact walk; institutional analysis; environmental analysis to determine all social economic activities with environmental effect; water resources and environmental related problems identification and ranking; preparation of problems solution chart; preparation of Water Users Association implementation Plan to address the identified and/or ranked problems; preparation of Water Users Association constitution and its registration.

General comments

During the discussions, the following general comments were made for all the presentations on the status of WUA formation: Tanzanian government through Water Management Act Regulation No. 11 of 2009 provides guidelines for the formation and management of WUAs. This is an opportunity that the basin water offices through the community development officers should explore. The basins should ensure that as much as they assist with the formation of the WUAs, they should ensure that the community owns the process so as to ensure sustainability; the postings of community development officers in the basins is a recent event, hence most of the basins have just started the process of forming the WUAs; need for information sharing and learning on the process of forming and managing WUAs across the basins; WUAs are based on hydrological units and this sometimes is in conflict with how communities live in the villages (e.g. pastoralists), hence the need for flexibility in WUAs membership including allowing for dual membership; the basins that are trans-

boundary in nature are not effectively exploring community engagements across the boundaries using the opportunities provided by the inter-governmental organizations which are in place (e.g. Lake Victoria, Lake Tanganyika etc). The meeting noted that WUAs could be involved in trans-boundary water resources management for example through exchange visits; through trans-boundary projects etc; the government should respect the traditional systems of managing natural resources since some of them like gada in Ethiopia has successfully survived for over 500 years. Sustainability of WUAs is critical and this could be achieved through exploitation of traditional knowledge and skills, financing mechanisms such as proposal writing and the basin water boards to consider funding the WUAs to enable them do their work;. The Ministry of Water and Irrigation in Tanzania should encourage the documentation of experience so far generated on WUA – there are rich experience which needs to be documented and shared; WUAs could be involved in water monitoring through the use of simple system like is happening in Tana River – Garissa in Kenya; Registration of WUAs – could be by many organizations due to the nature of their work a part from being registered only by the basin.

11. Action plan on how to improve community participation in water resources management in Tanzania (and East Africa).

Participants in groups discussed and came up with action plans on how to improve community participation in water resources management in Tanzania (and East Africa) in particular in the following areas: standardized steps to be taken when forming water user associations; how to ensure financial sustainability of WUAs; how to ensure management sustainability of WUAs; how to manage internal relations within WUAs; how to manage external relations such as with local government authorities; how WUAs could articulate emerging issues to different stakeholders. The detail of the group deliberations are presented below.

Group 1: Steps in WUA formation

Step 1: Identify the Area of Operation.

Step 2: Carry out baseline survey to assess: resources available; socio-economic environment of the area; physical environment and climatic conditions of the area; and land use patterns.

Step 3: Analyze the stakeholders based on the sectors e.g. domestic, irrigation, agriculture, hydro-power, tourism, livestock etc.

Step 4: Mobilization and sensitization - get buy-in by LGAs; convene the General Meeting; selection of the interim committee (it should be democratic, the composition gender sensitive, mixed in nature (Old, young, Special groups etc)

Step 5: Participatory Assessment of Water Resources - problem identification; problem analysis; exploring solution; and action planning.

Step 6: Development of the WUA Constitution - use of the existing template as provided for by the guideline; convene workshop with the Interim Committee to input on the existing template; table the draft constitution to the General assembly and LGAs for more input; and ratification of the Constitution by the General Assembly (Note: the substantive committee to be elected and the interim committee ceases).

Step 7: Registration of WUA - the application for registration to be sent to the Basin Water Office. Note: important attachments required are: minutes of the general meeting, constitution, the minutes of the last meeting of the general assembly that ratified the constitution.

Step 8: Registration of the WUA at the Basin Water Office - registrar authorize the WUA constitution and provide the certificate of registration; a copy of the certificate remain at the Basin Office and another copy is given to WUA.

The group recommended that the Government of Tanzania should allocate funds for the process of formation of WUA. The Kenyan experience could be emulated.

General comments on group 1 presentation

- Inclusion of analysis of Water Acts/policies in the steps – provide the framework for WUA establishment and therefore it should not be a step!
- Baseline survey no. 2 should go hand in hand with step no. 5 then followed by no. 4.
- Capacity building
- Draft constitution to the general assembly and decision makers for more inputs
- For every step we need to identify clearly what happens, who does what and who is involved

Group 2: How to ensure financial sustainability of WUAs

Sources of Funds

1. Internal source of funds - Membership/entry fee; Annual/monthly contribution; Fine and penalties; Funds collected by operation of water facilities (e.g. cattle trough along the river, water point to communities etc); and income generating activities
2. External sources of funds - Support from the Basin such as remitting some percentage of collected water users fee; remitting some percentage of abstraction permit fees; remitting some percentage of effluent discharge permit fee. Support from the Local Government (LGA) such as allocating some funds in different departments of LGA; Village Saving Loans; Micro-finance Institutions.

Challenges	Opportunities	What needs to be done to overcome challenges and use opportunities	What resources are required to do this	Who needs to do this and be involved (stakeholders and responsibilities)	What will indicate that we are achieving the target
Inadequate financial management skills	Existence of Policies, and laws Development partners	Capacity building	Funds Skilled Personnel	Basins authorities in partnership with other development partners	Improved financial management skills (e.g. proper book keeping) No of users trained (who are in place)
Lack of financial institutional arrangement linking WUA and Basins		Lobbying for finding mechanism from LGAs and Basins to WUAs	Lobbying skills Funds	Incorporation of WUA activities in Basin and LGA annual plans	Annual work plans indicating WUA support
Lack of efficient mechanism to delegate fee collection to WUA		Establish the mechanisms (e.g. Role & responsibilities of parties, benefits to parties and how to collected etc)	Skilled personnel Funds	Basin should spear head and WUA to be consulted including LGAs	Collection mechanism in place and functioning Efficient and transparent collection
Weak monitoring and Evaluation system		Strengthening monitoring system	Skilled M & E	Basin water offices	M & E system operational

Lack of WUA credit schemes		Establish WUA credit schemes	Human resources, Funds	WUAs in collaboration with the basin and development partners	Credit schemes are in place and operational
Inadequate skills in resources mobilization		Capacity building to WUAs and Basin Officers	Financial resources, Human resources	Basin Water Offices	Numbers of proposal submitted to key development partners, reports of resources mobilizes

General comments on group 2 presentation

Revenue should not necessarily be limited to direct water but could include forests and parks.

The financial sustainability of the WUAs should also be the responsibility of the Basin and the basins could assist the WUAs by giving them funds to fund their activities.

Group 3: How to ensure management sustainability of WUAs

Challenges	Opportunities	Things to be done	Resources	Responsible parties	Indicators
Inadequate participatory process	Willingness of the people to participate The guidelines of WUA mgt (election of leaders, retention of leaders, giving voice to majority etc)	Awareness creation through group dynamics Capacity building/ training in leadership and mgt Frequent meetings Transparency in financial mgt Gender consideration	Funds, Resource personnel Training manuals and materials Evaluation tools	BWO, WUA leaders, LGAs	Minutes, payment of fees, transparency in financial mgt reports (audited), effective participation (gender sensitivity) through attending meetings
Transcending of WUA boundaries with administrative boundaries	Collaboration with respective leaders (VEO, WEO, BWOs)	Enhance effective collaboration between WUAs and Local leaders	Funds, stationeries, brochures, fliers and posters	WUAs mgt and all water users	Partnership meeting minutes, MOU between LGAs and WUAs
Inadequate linkage to poverty reduction	Good water governance vital for poverty reduction	Develop plans for productive use of water	HR, Financial resources and equipments	WUA members, Agricultural extension staff, CD extension workers and BWOs	Increased food security at household levels like 3 meals/day, farms and cattle troughs visibly standing 60 metres from the river, Dam or lake shores

General comments on group 3 presentation

- Management sustainability is important and strategy to ensure management sustainability is important
- Opportunities are external factors that could be exploited and needs to be clearly identified
- Strategies for linkages between WUAs, catchment/basin and LGAs to ensure sustainability
- Group dynamics/effective leadership
- Participatory processes
- Linking WUAs to poverty alleviation
- Effective mechanism for monitoring the progress of the activities of the WUAs

Group 4: How to manage internal relations within WUAs

Challenges	Opportunities	What needs to be done to overcome the challenges while using the opportunities available	Resources required	What will indicate you are achieving the target
Conflicts of interest among various users of water(pastoralist, farmers etc)	Policies in place, WUAs constitutions, Work plans,	Implementation of the Policies in place, WUAs constitutions, Work plans, Enforcement of the by-laws as spelt out in the WUA constitution Well defined time table for water allocation on what needs to be done	Funds, personnel, time, appropriate Institutional set up and commitment to enforce the law.	Reduced number of conflicts.
Gender imbalance	Policies and the act in place, WUAs constitutions,	Awareness creation on importance of women involvement in IWRM, laws, policies, the act etc	Funds, personnel, time, appropriate Institutional set up and commitment to enforce the law.	Increased representation and involvement of women in decision making and Water resource management.
Financial mismanagement	WUAs Constitutions and regulations,	Trainings on financial management, Enforcement of laws/constitutions, transparent and good financial management and auditing system in place	Funds, Personnel, etc	Reduced cases of financial mismanagement, well documented financial and audit reports
Inadequate participation of all members	Policies, Established WUAs,CDOs,CBOs, NGOs etc	Regular meetings and awareness creations through CDOs,CBOs,NGOs etc	Funds, Personnel, etc	Quantitative indicators (Number of people attending meetings and giving their views increased. -Improved protection of water sources and resources Qualitative (Mindset of peoples changed positively toward participation) -Increased membership in WUAs
Inequity in benefit sharing among members(trainings opportunities, financial support, equal allocation of water, field visit etc)	Policies and the act in place, WUAs constitutions,	Appropriate Monitoring and evaluation mechanism such as meetings, case studies, regular field visit	Funds, personnel, time, appropriate Institutional set up and commitment to enforce the law.	-Equitable sharing of resources -Reduced complaints and conflicts within WUAs members
Effective and democratically elected leadership is critical as far as group cohesion and relationship is concerned				

Group 5: How WUAs could manage external relations such as with local government authorities

Challenges	Opportunity	What needs to be done to overcome the barrier and use the opportunities available	What resources are required to do this	Who needs to do this and be involved (stakeholders & responsibilities)	What will indicate we are achieving the target (milestones)
Stakeholders and their interests may not be clearly known	1. Some are located in the basin itself 2. Ability to classify stakeholders 3. Existing legislation	Identify & analyse stakeholders (interests, strengths, weaknesses, importance, influence)	Funds, time & human resource	The WUA organizes, government & NGOs contribute funds. Govt directs the process	1. A stakeholder analysis forum held, 2. A clear stakeholder matrix that classifies them & indicates interests, strengths and weaknesses in place
Overlapping, & unclear roles and responsibilities, & conflicting interests	Existing legislation	Develop MoUs clarifying roles, responsibilities, tasks & linkages	Human resource, various documents (project docs, policies, laws)	BWO & LG coordinates & convenes meeting with stakeholders, who select a committee to draft MoUs	Functional & effective MoUs in place
Limited representation of stakeholders on boards & committees at higher levels	The policies and laws provide for representation	Affirmative action to ensure WUA representation on basin boards	Finances for lobbying, legal skills	WUAs to do the lobbying, NGOs provide financial support for legal aid	Basin boards with WUA representation, 2. Acts/regulations/adendums with provision for WUA representation on boards
The process to form WUAs sometimes excludes some stakeholders	Some external stakeholders have skills, financial resources, interest & mandate in WRM	Involve internal & external stakeholders in the process of forming WUAs	Funds, time & human resource, guidelines for WUA formation	Basin board lobby such stakeholders	Active participation of external stakeholders in WUA formation
Inadequate communication and coordination and lack of transparency	The laws provide for transparency; and some stakeholders are willing to share information	Ensure regular communication, coordination, consensus & team building activities	Funds, time & human resource, communication facilities	WUA takes lead, with active participation of other stakeholders	sharing plans & budgets, meetings
poor monitoring	Some external stakeholders have skills, financial resources, interest & mandate in WRM	Hold regular joint monitoring exercises (missions, meetings)	Funds, time & human resource, guidelines for WUA formation	WUA takes lead, with active participation of other stakeholders	number of monitoring exercise,

General comments on group 5 presentation

1. WUAs should develop external communication strategy and implement it.
2. WUAs are normally linked to and are part and parcel of the existing institutional framework of the water sector and this need to be explored and/or implemented.
3. WUAs represented as far high up in the institutional framework as possible.

Group 6: How WUAs can articulate emerging issues to different actors

No	Challenge	Opportunities	What needs to be done	Resources	Who needs to be involved	indicators
1	Inadequate capacity to contextualize issues (problem analysis)	Support from different actors (BWBs, NEMC, LGs, DPs, etc.)	Establish a clear communication strategy	HR, competent leaders, appropriate facilities & tools, funds.	WUAs, LG, NGOs, BWBs	Seeing actors work to pick up problems, higher number of meetings, more communication
2	Inadequate capacity to communicate	Linking with media, networks and other platforms.	Documentation of issues Link networks (make them work), Link WUA with other bodies.	Funds Operational guidelines Communication strategy	BWBs, WUAs, Media, DPs, LGAs	Media cuts Increased number of publications/ reports
3	Inadequate capacity to understand IWRM	Policies, guidelines that support IWRM Availability of stakeholders Platforms (maji week...)	Facilitate linkages (use opportunities) Facilitate training to understand policies Popularize/ translate policies and regulations	Funds Knowledge/ expertise	BWBs, WUAs, DPs, LGAs	Integrated action plans
4	Inadequate capacity to be transparent, credible, trustworthy, etc.	Constitution, bylaws, leadership and membership	Develop a system that has checks and balances Develop code of conduct Disseminate information	Human resources	WUAs, BWBs	Fewer conflicts reported Availability of reports Suggestion boxes

12. Networking and information sharing

Participants were asked to indicate how they would like to continue networking and sharing of information on community participation and the responses are herein presented below.

1. Periodical workshops, training and regular meetings to give out feedback on evaluating an adopted experience and knowledge.
2. Create a regional network that meets once a year and shares emails and prints. Establishing journal on water resources management in Africa
3. Continue with this kind of forum and share information and experience from different initiatives.
4. Formation of interrelation body for WUAs and Basin/catchment in each of the countries involved in the workshop and visit different stakeholders
5. Formation of WUAs Umbrella bodies for information sharing (for all countries involved in the workshop)
6. Formation of an Africa Basin/Catchment Association where information and ideas can be shared i.e. electronically or otherwise. Also having study visits
7. To form an Association of Water Resources experts
8. Documentation and sharing information through newsletters and document already available information, guidelines on formation of WUAs
9. More communication sharing between Basin to Basin
10. Bi – Annual reflection workshop
11. Group discussions and conduction forums at grass root levels.
12. Prepare a draft steps to follow including back and forth linkages in WUA formation etc; circulate it through email and follow comments to flow in, also share the same information through emailing groups i.e. Google, yahoo etc.
13. Through email, ask everyone to voice the major questions and challenges that were left open after this workshop. These can be inputs for a next – possibly slightly more open/ informal – forum needs based.
14. Create a regional body responsible for WUAs
15. Face to face communication, use of media e.g. magazine, TV Ad Radios to air IWRM issues.
16. Follow up meeting after 1 year to know where we are and where we are going in the WUA process.
17. Partnership meetings that involve representatives from Basins, CDOs. Exchange visits to those who have gone further. Exchange through internet, access the emails and websites. Opening up CDO's website ideals as well as challenges.
18. Conducting workshops on governance issues i.e. WRM
19. We need to make more and more studies from other countries
20. Create a web portal where all WUAs are connected/can access and each basin to active website where information can be posted.
21. Establish a news letter on the WUA information.

13. Workshop closing

Representatives made the following closing remarks: Leo from Uganda expressed gratitude and noted that as participants from Uganda they have learnt a lot from the workshop and will try to replicate what they have learnt back home as they embark on the process of establishing WUAs in Uganda. He thanked IUCN for organizing the workshop and noted that the Water Resources Department in Uganda will continue to work with IUCN Uganda Country Office in WUA establishment in one of the catchments in Uganda.

Daniel from Kenya thanked IUCN for organizing the workshop and reminded participants that all responsible for managing their various catchments hence the need to implement the lessons learnt back home.

Sintayehu from Ethiopia thanked the organizers of the workshop and Tanzanians for the warm welcome and courtesy given to them.

Pendo from Tanzania thanked IUCN for making the workshop possible. Thanked also the people coming from outside Tanzania (Kenya, Uganda and Ethiopia) and noted that the workshop created an opportunity for learning and sharing and mentioned that participants will use the knowledge acquired to ensure that effective community participation in WRM is realized.

Emmanuel from IUCN thanked the two facilitators (Joel and Haule) for the excellent facilitation. He also thanked those who provided administrative support (Felister, William and Rosemary etc) for the good job. He thanked Wami-Ruvu Basin Water Office for hosting the workshop as well as organizing the field trip. He thanked all the participants from Kenya, Uganda, Ethiopia and Tanzania for effective participation. He noted that during the deliberations, it came out clearly that some basins in Tanzania have established or are in the process of establishing WUAs while others are still grappling with the idea, some countries like Kenya have well established guidelines in WUA establishment including established financing mechanisms while some countries have programme based financing mechanisms all these provides lessons for learning. IUCN will continue to support such initiatives and more so in capacity building. He noted that the work plan developed should be implemented and reminded the participants to continue networking and sharing of the information.

Annex 1: Workshop Programme

<i>Time</i>	<i>Item</i>	<i>Who's responsible</i>
Day 1 (Tuesday, September 14th) – Workshop opening and background information. Field trip to understand what is happening in WUAs. What are the challenges and successes to date?		
8:30-9:00 am	Workshop opening Host Basin (Wami-Ruvu Basin Water Office) IUCN ESARO and Pangani Basin Ministry of Water and Irrigation – Tanzania <i>Introductions</i>	Facilitator (Joel)
9:00-9:15	Objectives and outputs of the workshop; Ground Rules Review of agenda	Katharine Facilitator (Joel)
9:15-10:15	Presentation on the Water Resource Management Act and the regulations and guidelines for forming WUAs - Question and Answer session (MoWI representatives)	Ministry of Water and Irrigation
10:15-10:45	Health Break	
10:45-11:45	Facilitation and communication tips – how to get the message across about water resource management to WUAs, different techniques (PRA, O&OD)	Leodgard Haule, WWF
11:45-12:15 pm	WRWB - introduces the Chairperson for Ilonga WUA Presentation from the Chairperson for Ilonga WUA, and questions and answers	WRBWB
12:15-12:30 pm	Brief on field sites and logistics	WRBWB
12:30-1:30	Lunch	
2:00-5:00 pm	Field trip	WRBWB
Day 2 (Wednesday, September 15th) - Sharing information on community participation between basins		
8:30-9:00 am	Debrief of first day, including presentations and field trip	Facilitator (Joel)
9:00-10:00 am	Presentations from Kenya, Uganda and Ethiopia on how they are forming water governance institutions (15 minutes each and 30-45 minutes Q&A at the end)	Facilitator (Haule)
9:00-9:15 am	Kenya – Daniel Gathima Wanyumu, Water Resource Management Authority, Kenya	
9:15 -9:30 am	Uganda – Leo Mwebembezi, Ministry of Water and Environment, Uganda	
9:30 –9:45 am	Ethiopia	
9:45-10:30am	Buzz groups (5 minutes) Q & A for all presenters (30 minutes)	
10:30-11:00 am	Health Break	
11:00-12:00	Presentations from Tanzanian basins on how they are forming water user associations and how they are using the guidelines (15 mins per basin) Pangani Basin -15 mins Wami Ruvu Basin -15 mins Internal Drainage – 15 mins Lake Rukwa Basin -15 mins	Facilitator (Haule) Basins (community development officers)

Time	Item	Who's responsible
12:00-12:30	Buzz groups (5 minutes) Q & A for all presenters (25 minutes)	Facilitator (Haule)
12:30-1:30	Lunch	
1:30-2:30	Presentations from Tanzanian basins on how they are forming water user associations and how they are using the guidelines (15 mins per basin) Lake Tanganyika Basin (TBC) – 15 mins Lake Nyasa Basin (TBC) – 15 mins Lake Victoria Basin (TBC) – 15 mins	Facilitator (Haule) Basins (community development officers)
2:30-3:00	Buzz groups (5 minutes) Q & A for all presenters (25 minutes)	Facilitator (Haule)
3:00-4:00	Action plan on how to improve community participation in water resources management in Tanzania (and East Africa). 1. What steps should be taken when forming water user associations? 2. How to ensure financial sustainability of WUAs? 3. How to ensure management sustainability of WUAs? 4. How to manage internal relations within WUAs? 5. How to manage external relations such as with local government authorities? 6. How can associations articulate emerging issues to different stakeholders?	Facilitator (Haule) IUCN (Katharine) Group work
4:00-4:30	Health break (taken during group work)	
4:30-5:00	Continue group work Closing for the day	
Day 3 (Thursday, September 16th) – Planning a way forward		
8:30-9:00	Review of previous day	Facilitator (Haule)
9:00-11:30	Group work continued Health break (taken during group work)	Groups
11:30-12:30	Presentations of group work action plans 15-20 minute per group including comments and questions	Facilitator (Haule)
12:30-1:30	Lunch	
1:30-3:00	Presentations of group work action plans 15 minute per group	Facilitator (Haule)
3:00-3:30	Presentation on different types of media for communication about WUAs, including networks to a wider audience How can we continue to share information on community participation?	IUCN
3:30-4:00	Workshop evaluation	Facilitator (Haule)
4:00-4:30	Health break (taken during group work)	
4:30-5:00	Workshop closing Basin Water Officer representatives	Facilitator (Joel)

Annex 2: List of Participants

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