

## **Facilitating Cross-Border Dialogue**

### **The Case of Umba River Ecosystem in Kenya and Tanzania**

*Fred Simon Lerise*

Department of Urban and Regional Planning  
University College of Lands and Architectural Studies  
P.O. Box 35176, Dar es Salaam, Tanzania.  
E-mail: lerise@uccmail.co.tz

#### **Abstract**

Promoting cross-border collaboration for integrated management of Shared Trans-Boundary Ecosystems (STEs) is a critical issue in most African countries. This is because a significant number of rivers and lakes are trans-boundary. In Tanzania for example, at least 12 strategic water bodies are shared with other riparian nations. Out of these seven are shared with Kenya. Given this situation, Tanzania and Kenya as well as the East African Community have included the management of STEs in their policy strategies towards sustainable management of natural resources.

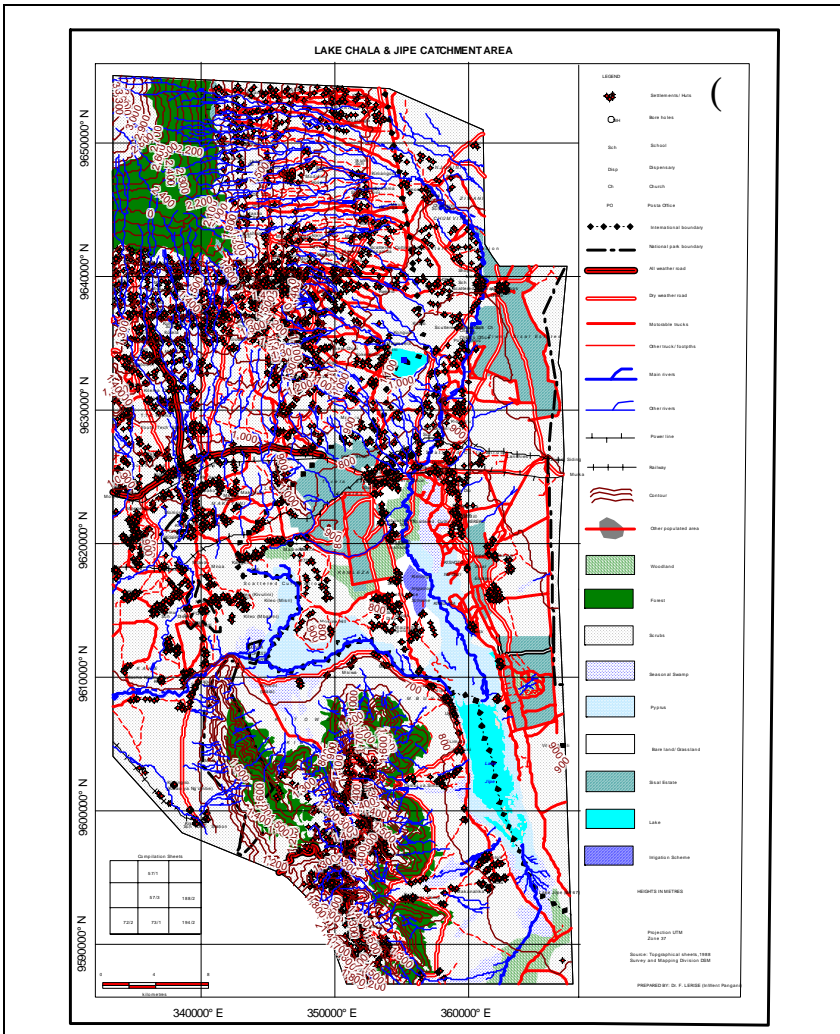
This article outlines a process through which the governments of Kenya and Tanzania are jointly developing an institutional framework to improve the management of their STEs and to include that of Umba River. The river originates from the Usambara Mountains in Tanzania and flows to the Indian Ocean through Vanga Town south of Mombasa in Kenya. Although the process towards the creation of a cross-border dialogue is at its initial stage, it is evident that while grassroots level resource users from the two countries are keen and willing to collaborate the districts and central government level institutions seem to have different mandates and the existing policies are yet to give them sufficient room for action. On the other hand the ongoing reforms in the water sector in both countries constitute an opportunity to the dialogue process. However, it appears that the reforms are preoccupied with central government level institutions leaving the lower level organisations that are closer to the resource users largely out of the process. By and large district councils in both countries are yet to become conversant with their roles in the new set-up.

## **Introduction**

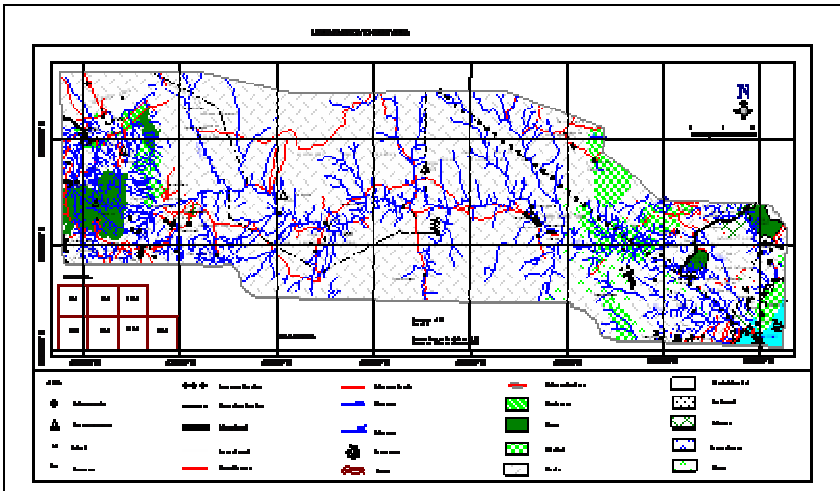
The need to forge a cross-border dialogue among the users and managers of the STEs in the Pangani Basin become more pronounced in the early 1990s due to increased threats to the ecosystem. The threats were caused by increasing poorly managed human activities in both countries. The first joint activity was carried out in 1996 where the assessment of management needs of the upper catchment of the Pangani Basin was carried out. That activity was followed by a planning workshop in 1999. The workshop was meant to facilitate development of a mechanism for collaborative management of the STE within the Pangani Basin. In a second workshop held in 2004 the management of the Challa-Jipe and Uмба River shared trans-boundary ecosystem was prioritised by the stakeholders. Map 1 shows the location and extent of the two shared trans-boundary ecosystems. This paper focuses on the Uмба River STE.

Uмба River is one of the trans-boundary river ecosystems along the north-eastern border of Tanzania and Kenya. It originates from a number of streams in the Usambara Mountains north of Tanzania and ends up in the Indian Ocean on the Kenyan coast south of Mombasa. The water in Uмба River is a critical resource not only in terms of support to livelihoods of the communities living around it but also for its use in large scale irrigation, domestic water supply, the environment, as well as for hydro power supply. Although policies are in place and central government level institutions have been established in both Kenya and Tanzania the day to day management of the Uмба River ecosystem is weak and thus calling for concerted efforts in developing mechanisms for strengthening the institutions towards effective coordination, collaboration and participation of the key stakeholders. Specifically, the different water users and managers need to be empowered to be able to practice integrated water resources management (IWRM). After realising the need for stakeholders in both Kenya and Tanzania to forge collaboration, efforts for joint management were initiated in early 1990s and have been on-going to date. In the following sections we summarise the steps taken so far and the challenges in establishing a dialogue process and forum in which IWRM can be introduced and practiced within the Uмба River

ecosystem. Before outlining the steps taken we provide an overview of the Uмба River ecosystem.



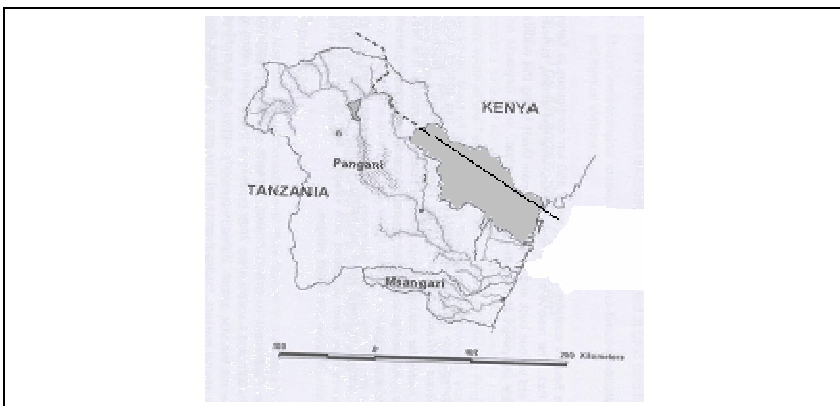
Map 1: The Pangani Basin in Tanzania and the Athi River Region: The Extent of Challa-Jipe and Uмба River Shared Trans-Boundary Ecosystems (*PAMOJA/INWENT, 2005*)



Map 2: Location and extent of Uмба River Ecosystem (*PAMOJA/INWENT, 2005*)

### The Physical and Administrative Set-Up of Uмба River Ecosystem

Uмба River ecosystem forms one of the sub-catchments of the greater Pangani Basin. The other sub-catchments are Msangazi, Zigi-Mkulumuzi and the Pangani itself (see Map 3).



Map 3: The Uмба River Ecosystem within the Greater Pangani in Kenya and Tanzania (*IUCN; 2003*)

As part of the Pangani Basin, Umba sub-catchment is administered through the Pangani Basin Water Office in Tanzania. The Coastal Development Authority (CDA) and the Ministry of Water Resources and Irrigation manage the Kenyan part. The river is made up of three main tributaries: Mbalamo, Bombo and Umba. These originate from several streams in the West Usambara Mountains in Lushoto Tanzania and flows into the Indian Ocean through South-East Kenya in the Kwale County Council. It is estimated that the Umba River sub-catchment covers about 8070 km<sup>2</sup> (IUCN, 2003). About 40 % of this lies in the Republic of Kenya, making the ecosystem one of the shared water resources between these two East African Countries. In both countries irrigation is one of the main activities around the river, with traditional irrigation practices being more dominant, especially in the fertile lands around its sources, thus calling for substantial investments in soil and water conservation. By and large small scale traditional irrigators have adopted soil and water conservation measures, but due to severe land shortage, and the fact that horticultural products have a fairly ready market, a substantial number of streams and river valleys within the Umba ecosystem, in Lushoto, have been converted into irrigated fields. There are cases where some streams have disappeared completely. In addition to land shortage, population increase upstream has led to an expansion of settlements along the stream, particularly the sources and thereby increasing risks associated with pollution and floods.

Modern irrigation, which is practiced on the lower parts, includes the Kitivo scheme commanding 1000 ha. Other schemes are; Mnazi, Kivingo Mnazi and Mwakijembe on the Tanzanian part. On the Kenyan side is the Vanga irrigation scheme on about 400 ha. (IUCN, 2003, p.96) and with potential for expansion. Apart from supporting crop production, irrigation activities form an important element of the Lushoto landscape which is a tourist attraction along with the Usambara Mountains. Other activities supported by the river are wildlife conservation in the North where Umba Game Reserve is located.



Photo 1: Typical natural landscape in the upper catchments of Uмба River in Lushoto (*InWent/Pamoja and PBWO, 2004*)



Photo 2: Poorly managed settlement expansion on the river vicinity – Mlalo Minor Settlement on Uмба River (*InWent/ Pamoja & PBWO, 2004*)



Photo 3: Integrated erosion control through afforestation, terracing & land husbandry contribute to IWRM (*InWent/Pamoja & PBWO, 2004*)



Photo 4: Uмба River after Kitivo scheme flowing from Lushoto (*InWent/Pamoja & PBWO, 2004*)

There are several risks associated with these largely uncoordinated development activities within the ecosystem: first, the unmanaged settlement expansion and densification converts crop and forest lands into housing areas and thus compounds the problem of sanitation in such a land stressed ecosystem to the extent that the river becomes both a solid and liquid waste dumping place and at the same time a source of domestic water for downstream settlements; second, frequent flooding of fields washes away tomatoes, maize and other crops; third, increased soil erosion since the runoff is not sufficiently controlled or canalised as some streams are blocked. Residents from Kwale district in Kenya have observed that the increased soil erosion in Lushoto contributes to frequent flooding and silting of the Umba River which threatens their lives, farms and properties. Fishing is one of those activities practiced on the lower parts of the river in Kenya, which is affected by silting. Pollution has also been cited as contributing to frequent occurrences of cholera in downstream settlement especially those in Kenya.

Despite these water use management problems in the ecosystem there have not been sufficient attempts to improve the situation, for instance, to coordinate the decisions of the upstream and down stream users. Only last year 2004, when a group of stakeholders with support from InWEnt-Germany, identified the need for cross-border collaboration in managing the Umba River. The steps taken so far towards that collaboration are outlined in the next sections of this paper. In order to provide a context to those steps, we outline the institutional framework within which the river is currently managed.

### **The Institutional Set-Up of the Umba River Ecosystem in Tanzania**

The Pangani Basin Water Office (PBWO) established in 1991 administers the Tanzanian part of the river. The PBWO reports to the Pangani Basin Water Board (PBWB) constituting ten members appointed by the Minister for Water and Livestock Development. The present board members are drawn from institutions that represent the



Government, the Private sector and NGOs.<sup>2</sup> The Pangani Basin Water office is the secretariat to the Board. The mandates of the PBWO include: allocation of water use rights and pollution monitoring and control. (URT, 1974)<sup>3</sup> That mandate has been widened by the National Water Policy (2002) to include coordination and planning, conflict resolution and cooperation with and coordination of other sectors and stakeholders. The PBWO is also expected to deal with technical aspects of trans-boundary issues within the basin. Although the mandate has been widened, resource allocation is yet to be reformed. The PBWO has rather a limited capacity to really foster integrated water resources management within the ecosystem. Because of that not much has been done on the Uмба River sub-catchment in terms of pollution monitoring and control or managing the water flow balance in the river system. Neither has there been any initiative from the PBWO with respect to land use restrictions in the sub-catchment. It is worth pointing out that, understandably, most of the PBWO's attention and therefore resources are provided to the main Pangani Basin which constitutes about 75 % of the greater Pangani ecosystem

In addition to these constraints, the PBWO and PBWB are also constrained by the weak relationship existing between them and Lushoto district council. Yet it is within the councils that most development decisions with implications to land use as well as water demand and or pollution are either made or approved. While it is clear that the PBWO is yet to be represented in the Lushoto district council, the Water Utilisation Act, 1974 does not provide the PBWO with any consultative role nor with mandate to attend District Council or Regional Consultative Committee meetings. (IUCN, 2003, p. 59) Recognising these limitations in the institutional framework, the Tanzania Water Policy (URT, 2002) has proposed a new institutional

---

<sup>2</sup> Board members are drawn from: Tanganyika Planting Company, Tanzania Electricity Supply Company, Representative from Hotels and Tourist Industry, Urban Water Supply Authorities, District Councils, Members of Parliament, Pamoja Trust for civil society groups, and the Ministry of Water and Livestock Development.

<sup>3</sup> URT, Water Utilisation Act. No. 42 of 1974 as amended in 1981 and 1989

set up with roles and responsibilities of the different actors clarified. Another important policy recommendation is the provision to establish sub-catchment committees with membership from public and private sector and from water user associations within the ecosystem. It is also clearly spelt out by the policy document that participation of legitimate representatives of water users is a responsibility of the PBWB as well as the respective district councils.

Focusing on the clarification of the institutional set up and roles for different actors in Tanzania, not much has been realised within the Umba River ecosystem. . Although it is only two years after the Water Policy was formulated, the PBWO and the PBWB have been established with an office and staff in place. The district councils are in place through the Tanzania Local Government laws. At the lowest level are some groups of water users who are not so well organised and most of them focus around irrigation issues (see Figure 1).

Once the water users are organised they can link up better with the district councils. But without the Umba catchment committee and office, there is no formal and effective link between the district and the PBWO, which is important for efficient functioning of the system. Without the Umba catchment committee in place not much coordinated management can be realised within the Umba River ecosystem in Tanzania.

This is because the PBWO do not seem to have sufficient human and financial resources to manage the Umba River ecosystem directly through the districts. The fact that Umba River ecosystem is also a cross-border resource adds more demands on the existing institutional framework. This is subject of discussion in the following sections.

### **The Institutional Set-Up in Kenya**

The part of the Umba River Ecosystem that is found on the Kenyan side is basically managed by two central government institutions. These are the Coastal Development Authority (CDA) covering the Coast region and the Water Resources Management Authority (WMRA) covering the recently established Athi river basin region. The CDA was established by Cap 449 as a state corporation under the Ministry of Regional Development. Its mandate is to provide for integrated development through planning, coordination and

implementation of programmes and projects within the Coast Region. The Uмба River ecosystem falls within this region.

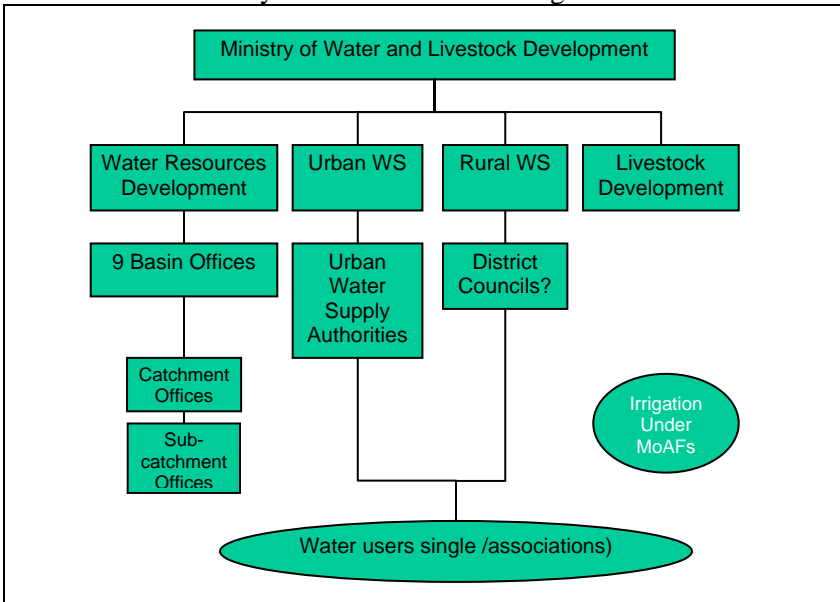


Figure 1: Institutional set-up -Tanzania

The rationale for the establishment of CDA was to carry out regional planning and effectively utilize the unique resources found in the region to address the social and economic problems experienced particularly unemployment and the decline in agricultural production. A multi-sectoral approach, which will consider all the related factors in sustainable utilization of natural resources, especially water, is therefore required to achieve rapid regional growth within the coastal region which accommodates 7 districts including Kwale. Among the recent plans under CDA within the water development in Uмба River ecosystem include:

- Establish and carry out integrated coastal natural resources management programme and projects within the Uмба delta under the Kenya Coastal Management Program and the Integrated Coastal Area Management Programme (ICAM) of CDA.

- The ICAM Programme in Vanga aims at addressing the trans-boundary fishing industry management problems.
- Rehabilitation of Irrigation projects within Umba River basin
- Construction of water conservation structures/reservoirs for flood control, irrigation and for domestic water supply.
- Carry out coastal resources management and environmental conservation initiatives within the Umba Delta

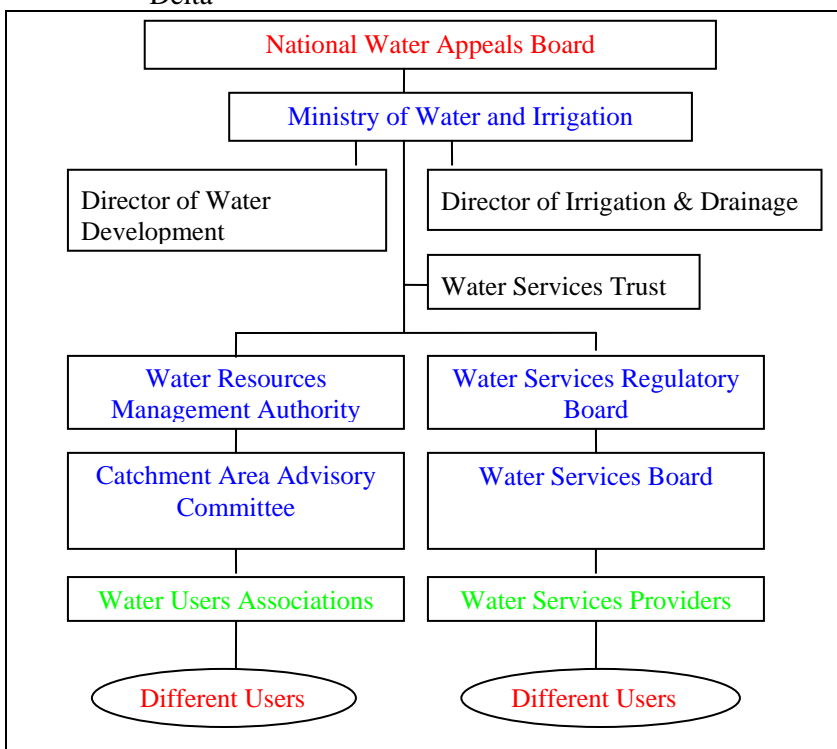


Figure 2: Institutional Setup

Unlike the CDA, the Athi River Water Resources Management Authority was recently established as a result of the water sector reforms in Kenya. The Kenya Water Act 2002 repealed cap 372 and has provided for Kenya’s strategy on IWRM under which Water

Resources Management Authority was established to manage the lakes and rivers in the country. The Strategy has also placed the management of water resources in Kenya to six catchment regions and sub catchments (Kinyua J, 2005). Figure 2 shows the way the institutional set is organised.

Umba River is one of the sub-catchments within the Athi river region; it is therefore the responsibility of the Athi River WRMA to manage that ecosystem. Among the statutory roles of the Authority are:

- Managing water allocation and use within its area of jurisdiction
- Protecting water catchments and the quality of water resources
- Gathering, maintaining and sharing information on water resources
- Liaising with other bodies and advising the Government for better regulations and management of water resources

Examining the institutional set up for water resources management in both Kenya and Tanzania, it is clear that on the Kenyan side the institutions have a much wider mandate as compared to PBWO which only limited to managing water allocation and handling water use related conflicts. This means the need for PBWO to collaborate with the respective district councils is much more pronounced. This is because PBWO does not have mandate to carry out development activities within its area of jurisdiction. The mandate for development lies with the district councils. We continue to elaborate issues related to the institutional set up and limitations in the following sections.

### **The Need to Forge a Cross-Border Dialogue Mechanism**

By the nature of Umba River, any adverse development in the upper reaches of the Umba River Basin, which is in Tanzania, may have significant impacts not only to envisaged developments and management programs and projects in Kenya and Tanzania but also the livelihoods of local communities in districts within the Basin. Both CDA, Athi River WRMA and PBWO are increasingly becoming aware of the need for cross-border collaboration. And after the revival of the East African Community, opportunities for establishing some form of a commission over shared water resources are much more

pronounced as provided for by relevant articles of the 1999 East African Community Treaty. For instance Article 12 of the Treaty deals with water resources management. It provides for partners states to cooperate in the management of shared water resources including the establishment of joint management mechanisms.

In realising the need and the opportunities available, the two authorities initiated a process towards a holistic approach that will address the entire greater Pangani catchment and the associated sub-catchments through collaboration and cooperation that will provide opportunities for both countries in the management and conservation of the natural resources in the Basin. In a stakeholders workshop that was held in Moshi Tanzania in 2004 Uмба River ecosystem was included as priority areas for cross-boarder dialogue.

During that workshop the following issues were identified by the workshop participants as potential cross-border issues in enhancing IWRM for Uмба River sub-basin.

- Most of the needed data is not collected because a significant number of the data collecting stations are out of order.
- There is increasing sedimentation, floods and water pollution resulting from inappropriate land use practices and poor management of human waste in the upstream settlements resulting to frequent cholera outbreak on the Kenyan side.
- There is a need to control the intensive use of valleys in the sources of Uмба River.
- There are notable negative implications on fisheries from sedimentation
- Watershed management practices are rather weak and they need to be enhanced.
- Need to improve the relationship between upstream and downstream users
- Conflicting laws and procedures between the two countries need to be harmonised and linkages between different sectors enhanced and at the same to formalise already existing cross-border collaborative activities.

- There is a need for water use balance especially considering the demands for irrigation
- Stakeholders' analysis is needed to facilitate community participation, gender mainstreaming, and identification of joint management issues.

### **Key Steps and Milestones in the Dialogue**

After identifying issues, which call for cross-border collaboration the workshop participants identified the following steps as their way forward towards mechanism for ensuring that Umba River ecosystem is managed jointly and effectively by the relevant institutions in both Kenya and Tanzania. It was therefore proposed to have the PBWO and the CDA as the dialogue process facilitators making sure that key stakeholders meet and contribute in the process. In order to manage the day-to-day activities, The CDA Managing Director, (through the Head of water department) and the PBWO's Water Officer were appointed as the focal persons in their respective institutions.

A regional committee made up three members from each country was established and charged with the task of further elaborating the way forward and to get the dialogue process started. Among the potential milestones in the dialogue process, as identified during the 2004 workshop, included the following:

- MoU – between CDA and PBWO to be prepared and used to facilitate joint activities between stakeholders in Kenya and Tanzania,
- Organisational and Institutional arrangement for dialogue need to be established for instance a Regional Secretariat that meets annually,
- Issue based working groups or subject interest groups formed and supported to work jointly with District councils and other stakeholders,
- Develop project proposal and an action plan based on principles of successful dialogue, to become a tool for mobilising resources for joint activities,

- Consultative workshop involving key technical level stakeholders should be organised to discuss the action plan and the proposed institutional framework for managing the dialogue, and
- Convene a policy meeting to deliberate and approve the MoU, the institutional framework and the action plan before its implementation.

### **What has been Achieved and What are the Main Challenges**

Up to the end of 2004, several consultations between CDA and PBWO staff have taken place. The Interim committee involving representatives from the two countries have had a three days meeting in Moshi. Among the key outputs from the meeting is the identification, collection and sharing of relevant documents among the committee members and their institutions. This is an important achievement considering that several researches on different aspects of water resources management have been carried out but are hardly neither known nor available for use by the primary stakeholders.

A process for developing a joint programme and plan of action was initiated and a draft plan is in place.

The need for strengthening the institutional set up especially at the sub-catchment and district level is another priority area of intervention towards building up the cross-border dialogue.

Although national level policies provide for the establishment of sub-basin, district and community level institutions, these are yet to be established and their capacities enhanced.

A workshop focusing on district and sub-district level stakeholders was organised in Lushoto, Tanzania in December 2004. Representatives of the stakeholders attended the workshop, which included field visits in various strategic locations on the Uмба River ecosystem, from Kenya and Tanzania. Among the key resolutions of the workshop was for each district to establish a committee, which will become responsible in mainstreaming the management of Uмба river ecosystem in the district development plans and budgets.

While CDA was proposed to be the focal point institution for Kwale district council, the District Agricultural and Livestock Development



Office in Lushoto is the counter part in Tanzania. The main role of the focal institutions is to spear head the dialogue process and to ensure that interventions toward IWRM that are within the mandate and the capacity of the district councils are implemented.

At present, the concerned districts are discussing the structure of the district committees to be formed. CDA is taking lead on the Kenyan side and are undertaking internal consultations in Kwale district. PBWO has already organized a visit of the Basin Board members to Muheza district and are planning to bring together representative of Lushoto and Muheza districts. It is hoped that in the first half of 2005 a committee comprised of members from both districts will be formed.

### **Challenges for Moving the Dialogue Ahead**

Several challenges need to be considered in order to successfully work with dialogue:

- i) Working with 'Dialogue' is a challenge because it involves a number of other key processes and trade offs. Dialogue is about 'give and take', negotiations, participation, and ultimately, stakeholder partnership that bring together the government, civil society and the private sector. After many years of 'government dominance' in resource management in both Kenya and Tanzania, there is lack of 'proactive' district level initiatives with regard to dialogue, the role of non-state actors notwithstanding.
- ii) Even where there is willingness for dialogue, the capacity of the local institutions is still low and inadequate to effectively streamline the processes. Although dialogue as a traditional concept is well embedded in the local cultures among the inhabitants in the districts, the demands that are currently exerted on the resources and the institutional arrangements that govern the same call for stepping up of the local capacity, to cope with the dynamics that accompany the present day realities of joint resource management at local level.
- iii) Another important challenge is the fact that this is a 'cross-border' discussion. Pursuing a dialogue process that involves two nation states, with own policies and legislations is a challenge by itself. It is clear that although PBWO and CDA

have a shared vision of the cross-border resources, their operations are of different nature and their mandates and responsibilities are not the same. An apparent challenge is therefore how to bring together the two governments, and harmonize their policy frameworks to suit the attainment of the common objectives. The East African Community Treaty provides the basis for this.

- iv) The practice of IWRM and collaborative planning and actions is still not fully known and accepted by some of the primary stakeholders. This means training in IWRM is highly demanded
- v) Poverty among the grassroots which threatens environmental management within the Umba River ecosystem
- vi) Poor information and management data base, calling for substantial resources to map and identify the key resources and development dynamics likely to threaten the sustainability of Umba River ecosystem.

### **Potentials Which May Foster the Dialogue Process**

#### *Commitment and Support from Other Stakeholders:*

Commitment among the CDA and PBWO and available support from other stakeholders like InWEnt, GTZ, IUCN as well as local and international research institutions.

#### *Ongoing Reforms in Kenya and Tanzania*

Reforms in institutional framework in both countries may provide better opportunities for dialogue as both policies have prioritised improved management of STEs. According to the Tanzania water policy, effective utilization of STEs can be realised through promotion of regional cooperation and integration with riparian states. It is the intention of the policy “to ensure participation of legitimate representatives of stakeholders so that the system of collaboration to be established is highly responsive” (URT, 2002, p. 24).

On the Kenyan side the move towards a consolidated policy on Land, Water and Forests is positive move toward not only IWRM but also facilitates trans-boundary dialogues. Section 2.4.5 of the National

Policy on Water Resources Management and Development (Republic of Kenya, 1991, p. 18) draws attention to the need to review the existing international treaties in relation to shared water resources in line with improving the framework for the management of STEs.

*Supportive Policy Environment from the East African Community*

The East African Community has through its environment and natural resources section identified a number of constraints facing the management of shared water resources in the region. And among the suggestions put forward is to foster regional cooperation and public participation in management of STEs. Specifically the EAC proposes the following actions that favour cross-border collaboration and dialogue

- Improve cooperation among national governments, private sector, the public, NGOs and others
- EAC and governments to exchange information on shared natural resources
- Establish appropriate fora for stakeholder involvement
- Involve key stakeholders in decision-making.

*Existing Experiences in Cross-Border Collaboration in Managing Shared Resources*

Existing experiences elsewhere, for instance the Nile Basin Initiative and the Protocol on Shared Watercourses in SADC countries may provide some ideas on how to push the dialogue forward taking into account the obtaining conditions on the ground.

## **References**

- CDA, PBWO, INWENT, PAMOJA AND GTZ (2004): *Cross-border Dialogue Between Kenya and Tanzania on Challa Jipe-Umba Ecosystem*. Workshop Report June 2004.
- CDA, PBWO, INWENT, AND PAMOJA (2004): *Cross-border Dialogue Between Kenya and Tanzania on Challa Jipe-Umba Ecosystem: Joint Interim Committee Report*, October 2004.

- CDA, PBWO, INWENT, AND PAMOJA (2004): *Cross-border Dialogue Between Kenya and Tanzania on Challa Jipe –Umba Ecosystem*. Lushoto Workshop Report, December 2004.
- KINYUA J. (2005): *Outline of the Water Resources Management Authority in Kenya*. Paper presented at a training workshop on Trans-boundary Integrated Water Resources Management in the Lake Challa–Jipe and Umba River Basin Ecosystems, Moshi, Tanzania. 13–15 June 2005.
- IUCN, (2003): *Pangani Basin A Situational Analysis*. IUCN Eastern Africa Programme.
- MINISTRY OF WATER RESOURCES, REPUBLIC OF KENYA (1999): *Sessional Paper No.1 of 1999 on national Policy on Water Resources Management and Development*. Printed by Kenyan Government.
- MINISTRY OF WATER AND LIVESTOCK DEVELOPMENT UNITED REPUBLIC OF TANZANIA (2002): *National Water Policy*. Printed by Tanzanian Government.
- MINISTRY OF WATER AND LIVESTOCK DEVELOPMENT, UNITED REPUBLIC OF TANZANIA (2004): *National Water Sector Development Strategy*. Circulation Draft and Printed by Tanzanian Government.
- UNITED REPUBLIC OF TANZANIA (1974): *Water Utilisation Act no. 42*, as amended in 1981 and 1989.