

BACKGROUND READER OKAVANGO RIVER BASIN – SHIRLEY BETHUNE

1. INTRODUCTION

The Okavango River Basin extends across three countries: Angola, Namibia and Botswana, covering an area of some 700 000 km². Yet, the section that contributes actively to surface flows, that is the hydrologically active part of the basin only covers an area of about 192,500 km² (Mendlesohn and El Obied 2004). In Angola the river is called the Rio Cubango, flows southwards in a series of parallel tributaries and falls mainly within the Kuando Kubango Province. The main tributary is the Rio Cuito. In Namibia, the Okavango River is often referred to as the Kavango River, it flows eastwards through the Kavango Region for some 415 km before turning abruptly southwards at Mukwe from where it forms the border with the Caprivi Region for the next 55km, until it enters Botswana at Mohembo (Bethune 1991). In Botswana, it forms the world famous Okavango Delta in Ngamiland. The Okavango Delta covers 22 000 km² and can be divided into four main regions, the panhandle, the permanent swamp in the upper section of the alluvial fan, the seasonal swamps in the lower section of the alluvial fan and several large islands such as Chief's Island and the sandveld peninsulas that extend from the mainland into the delta as found in the eastern part of the Moremi Wildlife Reserve (Ellery and Ellery 1997). The altitude varies from over 1500m above sea level at the source, to 1000m for most of the Namibian section to 940 m ASL at Maun.

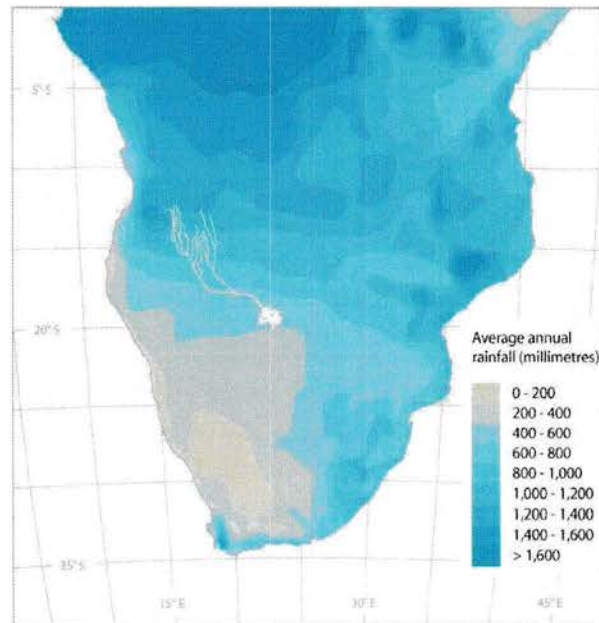
Map of the riparian countries showing the position of the active portion of the Okavango River Basin – by John Mendelsohn of RAISON



1.1 Water Resources

Rainfall decreases markedly from north to south. The annual average precipitation is over 1200mm in the Angolan Highlands, whereas at Maun, situated at the distal end of the Delta in Botswana, it is only 850mm.

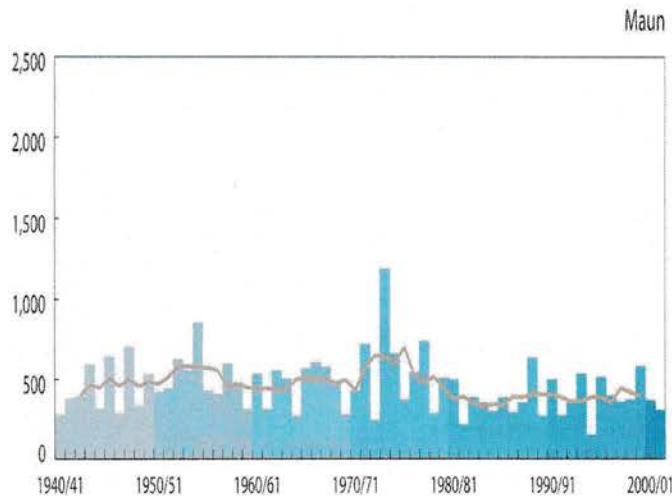
Map of southern Africa showing average annual rainfall in mm and the position of the Okavango River Basin from Mendlesohn and el Obied 2004.



As a result of this disparity in rainfall, almost two thirds of the water entering the system originates in Angola. The Rio Cubango sub-catchment (88 700km²) contributes about 55% and the Rio Cuito sub-catchment (60 000 km²) 45%, of the 9 000 -10 000 Million m³ of water that passes the gauging station at Mohembo on the Botswana border each year. Although several fossil river channels drain towards the Okavango River in Namibia, they do not provide any real runoff to the river. The largest of these tributaries is the Omuramba Omatako, which has no flowed beyond Kanovlei in living memory. A further 6 000 Million m³ is contributed by rainfall directly onto the Delta in Botswana. The lowest flow ever measured at Mohembo was 6 000 Million m³ for the 1992/93 season and the highest flow recorded was ten years later in the 1983/84 season when 13 640 Million m³ was recorded, more than twice as much (Bethune and Van Wyk 2004).

Rainfall, particularly in the southern half of the basin, is variable. The figure below shows how rainfall in Maun varies from year to year, from as little as 151mm in a very dry year to 1186 mm in a very wet season, 1973/74. This natural variation in rainfall, contributes to the vulnerability of the water resources of the Okavango River Basin.

Graph showing total annual rainfall recorded at Maun over a sixty year period – 1921/22 to 2001/02 from Mendelsohn and Obied 2004.



As rainfall decreases, with distance downstream, the climate changes from tropical and humid to semi-arid and evaporation rates increase. In the drier southern portion of the catchment the river provides water to an otherwise dry environment and has attracted dense settlement both in Namibia and in the panhandle section in Botswana. The further south, the more variable the rainfall and it becomes increasingly difficult to predict where, when and how much rain to expect. As a result the area is vulnerable to droughts and floods and farming is marginal at best and often a risky venture.

A further drawback to crop farming in the area, is the thick, infertile Kalahari Sand that overlies much of the basin (Mendlesohn and el Obied 2003, 2004). Yet, in countries as arid and Namibia and Botswana, the natural wetland resources provided by large perennial rivers such as the Okavango, contributes positively to the livelihoods, particularly of the rural poor living alongside these rivers. Although not yet calculated for the Okavango River, wetland resource accounting for the nearby Zambezi River wetlands in Namibia and Botswana, show substantial contributions. For example, the fish harvested is worth over six million rands a year whilst the reeds and papyrus used are worth a million rands each to the inhabitants of the wetland as a whole. The estimated value of fish per household was about R 1 800 a year at 1999 values (Turpie *et al* 1999).

One advantage of the very sandy substrate is the excellent water quality. Okavango River water is typically clean, clear and low in nutrients (Bethune 1991). This nutrient-poor water favours the growth of papyrus, so important in maintaining the dynamics of the Delta ecosystem. Fertilizers used in agriculture alongside the wetlands upstream of the delta pose a threat to this water purity. Care must be taken in the proposed expansion of irrigated agriculture in Namibia and Angola to avoid contamination by chemicals, both fertilizers and pesticides. Already DDT, a known bio-accumulator, used to control malaria in Namibia, can be detected in fish tissues and is known to soften egg shells thus reducing the breeding success of fish eating birds. A further threat to water quality is increased siltation caused by erosion as a result of bank clearing alongside the river in Namibia and by deforestation as the upper catchment in Angola is resettled. Conversely, cutting off sediment transport downstream poses an even greater threat as the dynamics of the delta depend on a regular input of sediment. Long term studies in the Delta and more recent studies on a proposed hydro-power development at Popa in Namibia have highlighted the dire consequences of cutting off sediment inputs (McCarthy 1992, NamPower 2004).

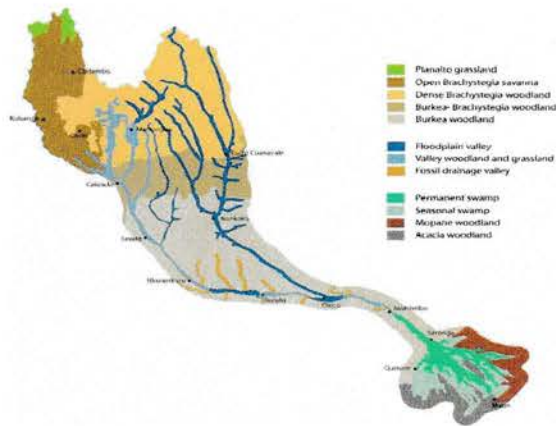
1.2 *The Natural Environment*

The Okavango River system is a dynamic system, dependent on seasonal floods. The seasonal floodplains in the middle section of the river in Namibia and Angola and the seasonal swamps, in the lower alluvial fan in Botswana, typically alternate between annual dry and wet periods. In the dry season, these seasonal floodplains provide grazing and fertile soils for molopo farming. When inundated by the annual floods they provide shallow, safe, well-vegetated breeding and nursery areas for fish, amphibians, birds and other aquatic animals and support a diverse flora. (Barnard *et al* 1998). Any alternation in the timing, intensity or duration of the flood will disrupt the ecological functioning of the system (Bruton and Merron 1985).

Within the Delta section, it is not only the seasonal water inputs that are essential, but also regular sediment input that drives the longer term switching of channels, the mechanism by which salination is controlled. This renewal is made possible by the papyrus plants that fringe the channels in the permanent swamp. The papyrus holds back the sand that enters as sediments but allows the water to leak through into the surrounding swamp. As more and more sand accumulates, the channels are gradually elevated above the surrounding area until they are cut off from further inflows and die. With time, the peat that accumulated when the channel was active, dries out and burns, releasing nutrients that in turn supports grazing for wildlife and cattle. New channels form over time and the cycle is repeated, effectively removing the accumulated salts (Ellery and Ellery 1997).

As may be expected, vegetation cover reflects the changing rainfall patterns and the diversity of habitats supported by the seasonal flooding of the river. Much of the catchment supports open or dense woodlands of mixed tree species. In Angola the highland area is called the *Planalto* grasslands (Mendelsohn and el Obied 2004), a boggy area where the river has its source. The numerous tributaries are mostly well-defined, swift flowing, sometimes rocky streams flowing through the miombo, *Brachystegia* and *Burkea* woodlands, with some quieter meandering sections with large floodplains. The Namibian section includes extensive, annually inundated floodplain areas as well as some of the most species rich riparian woodlands in the country (Curtis and Mannheimer 2005). Habitats vary from; the deep, swift flowing, open river, with reed fringed banks, to the well-vegetated floodplains, more permanent swamp at the Cuito confluence, to the islands and rocky rapids of the section downstream of Mukwe (Bethune 1991). The Okavango in Botswana first forms a defined panhandle fringed by woodlands, reeds, papyrus and grasses and then an alluvial fan or inland delta of permanently and seasonally flooded areas of papyrus and reed fringed channels and well-vegetated backwaters or lagoons as well as islands that may be fringed with sedges or riparian trees and support a diversity of trees such as fan palms, mangosteens and water figs, to the east are so called "sandveld tongues" of Mopane woodland, whilst the seasonal swamp to the west of the delta is typically *Acacia* woodland (Ellery and Ellery 1997).

Map showing the broad vegetation types associated with the Okavango River Basin from Mendelsohn and Obied 2004.



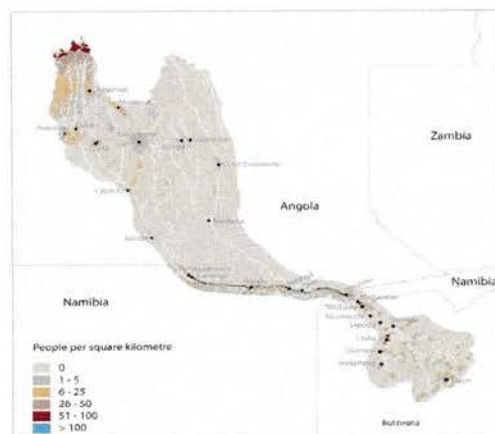
According to Mendlesohn and Obied (2004), wildlife numbers are low in most of the Angolan and Namibian portions, yet high in protected areas such as the Muhango and Moremi parks and in much of the Delta in Botswana. The dense settlement and increasing clearing in the Namibian portion accounts for this paucity of game, yet the overall species richness along the Okavango River in Namibia is considered high for molluscs, insects, fish, frogs and birds (Curtis *et al* 1998). The high productivity in both the floodplain areas and the delta is due partly to the deposition of nutrients from upstream and partly to the rich diversity of habitats.

Thus, the Okavango River Basin is rich in renewable natural resources. Yet, two factors make these resources vulnerable: the variability of rainfall particularly in the lower, drier portions, making water supply unpredictable and droughts more likely, and; the high dependence of the Delta dynamics on seasonal inputs of sediment from upstream (Bethune *et al* in press).

1.3 Socio-economics

The Okavango River Basin is home to some 600,000 people. As can be seen in the map below their distribution is uneven. About 350 000 (58%) live in Angola, 163 000 (27%) in Namibia and 88 000 (15%) in Botswana. Urban centres, Menongue, Cuito Cuanavale, Rundu and Maun account for 30% of the basin population. The highest rural concentrations are at the source of the Cubango in Angola, along the south bank in Namibia and in the panhandle area in Botswana (Mendlesohn and el Obied 2004).

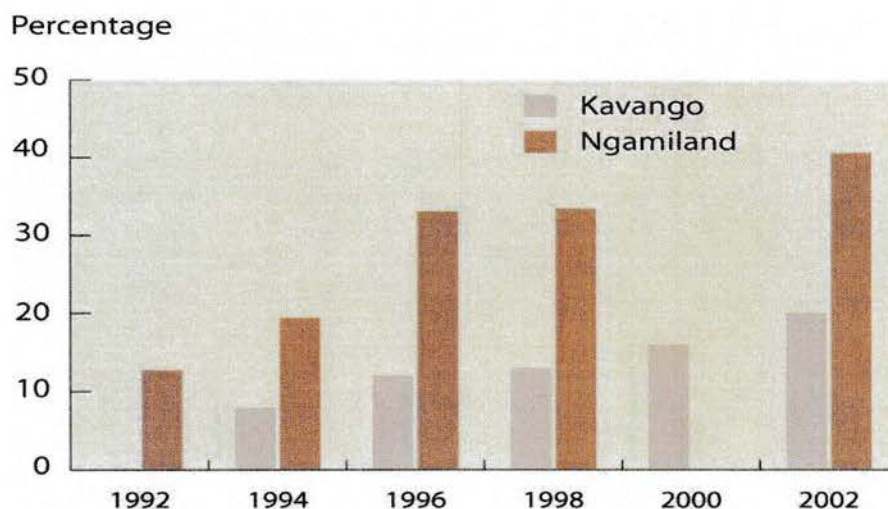
Map showing population densities in the Okavango River Basin by Mendelsohn and el Obied 2004.



The populations in Kavango, in Namibia, and in Ngamiland, in Botswana, are dominated by young people, where more than half are children younger than 15. Population numbers in both these areas have increased markedly from 1961 – 2001. In Namibia the increase was particularly marked, averaging a rate 5,2% per year. Much of this was due to in migration particularly from across the river during the conflict in Angola. In both countries improved health services have also contributed (Mendelsohn and el Obied, 2003, 2004).

Yet, the high incidence of HIV/Aids is altering this. By 2002, 40% and 20% of the pregnant women tested in Ngamiland and Kavango, respectively, were HIV positive There are no reliable figures for Angola and health services remain poor (Mendelsohn and el Obied 2004).

Graph showing the increase in HIV infection over a decade from 1992 in Kavango and Ngamiland from Mendelsohn and el Obied 2004.



Despite the relatively good natural resource base, Mendelsohn and el Obied (2003/ 2004) argue that the agricultural potential over most of the area remains poor, and that as a result over all rural densities are low and much of the area is still undeveloped and relatively pristine. The high urbanization rates are due to people seeking better lives in towns. Urban settlements in the basin have grown rapidly in recent years as a result.

The lack of development along the Okavango has allowed the river to remain comparatively pristine. This can be attributed to: years of conflict in Angola, the fact that in all three countries the basin is remote, there are no mineral resources, population numbers are relatively low, poor soils and because much of the area has been designated as communal land. In recent years several national developments have been proposed but vetoed due to the sensitivity of the Okavango Delta to any alternations in the upstream flow regime.

Although the Portuguese considered hydro-electric schemes on several headwater tributaries in the 1960's, there are now plans to implement any major hydro-electric or water supply schemes at present. Currently Namibia uses less than 0.2% of the river water, to supply Rundu and a few irrigation schemes alongside the river. Namibia plans to expand this irrigation substantially, possibly including areas on the Angolan side of the river and has investigated the potential of augmenting the water supply to the central area and for small scale hydropower. Botswana uses only about 0.1% of the river flow to supply towns mainly

in the panhandle section and one irrigation scheme near Shakawe. The main use of the water in Botswana is to maintain the world-famous Okavango Delta, now the largest Ramsar site in the world, a major source of foreign revenue through tourism. Much of the success of tourism as an industry in the Okavango Delta is firmly based on good environmental management of the natural resources of the Okavango River and the realization that good conservation practices promote a viable eco-tourism industry. Botswana has more to lose than its upstream neighbours if the flow of Okavango is altered. Not surprisingly, environmental groups in Botswana react with alarm at new proposals for upstream use of Okavango River water.

2. INTERGOVERNMENTAL CO-OPERATION

Intergovernmental co-operation within the Okavango River Basin started long before the formal signing of the SADC Revised Protocol on Shared Watercourses in 2000. Initial co-operation between Namibia and Botswana was fostered by SARCCUS, the Southern African Regional Commission for the Conservation and Utilisation of the Soil, formed in Pretoria in 1950. The Departments of Water Affairs in both countries actively participated in the standing committee for Hydrology and the sub-committee on aquatic weeds. For several decades this allowed exchange of information on matters related to shared river systems and rather clandestine, cross-border visits, to gauging stations (Taylor and Bethune 1999). Namibian independence in 1991, paved the way for more formal cooperation through the Joint Permanent Water Commission (JPWC) between Namibia and Botswana and the Permanent Joint Technical Commission (PJTC) between Namibia and Angola. At the first meeting of the JPWC in Gaborone in November 1991, a proposal for a basin-wide, multi-disciplinary environmental assessment of the Okavango River Basin was tabled and agreement reached to investigate this further. Both commissions independently discussed the need to establish a tri-partite water commission for the Okavango River Basin. The result was the establishment of the Permanent Okavango River Basin Water Commission (OKACOM) in September 1994, its founder members drawn from the JPWC and the PJTC (Taylor and Bethune 1999).

2.1 Integrated River Basin Management

River Basin Management Committees (BMC):

The River Basin Management Committee concept integrates resource management and planning. The objectives of BMCs are set out in the new Water Resources Management Act No 24 of 2004 and aim to ensure equitable access to and sustainable use of water resources without detriment to the environment nor to the functioning of the water cycle. Namibia has 24 hydrological river basins, which have been rearranged into 12 water management units or basins; of which Okavango/Omatako Basin is one. Each of these River Basins will need its' formally established Basin Management Committee. A useful guidebook on the "Basin Management Approach" has been printed by GTZ to give a better understanding of Basin Management and how to establish a BMC. Basin Management Committees have specific functions to carry out that include recognising basin water policies and legislation, monitoring and reporting on the health of the River, resolving natural resources conflicts, developing an appropriate water research agenda, liaising with water resource managers and educating water users, communities, schools, etc. on water issues. The membership of BMC should be representative of all the stakeholders in the basin. These will differ from basin to basin but include both direct stakeholders who make use of the land, wetland and water resources, those who manage and care for these resources such as the line government ministries (MAWF, MFMR, MET, MRLGHRD, MLRR, MME), their departments (DWAF, DRWS, DEES) and the para-statals (NamWater, NamPower), those under whose jurisdiction the basin falls such as the Regional councils, Local and Traditional authorities, the people living in the basin, be it within towns, villages, conservancies or as commercial and communal farmers as well as

the NGOs and private sector enterprises (Tourism, Mining, Chambers of Commerce) active in the basin.

At present there are two established BMCs in Namibia, the Kuiseb BMC and the Iishana Sub-Basin MC established in 2003 and 2005 respectively. Emerging or upcoming basins include the Omaruru, Fish, Ugab, and the Karst Water Management Body in the Tsumeb Area. Some of the challenges faced by these BMCs are funding, representation, involvement of key stakeholders and the difficulty of seeing direct benefits. In 2005 the Department of Water Affairs together with stakeholders in the basin established a national inter-sectoral committee for the Okavango Basin, which is essentially a stakeholder forum for the section of the river basin in Namibia.

2.2 *The OKACOM*

The OKACOM is now recognized as the highest-level, regional institutional body for the Okavango River Basin. Its main objective is to advise the respective Governments on the conservation, development and utilization of the water resources of the Okavango River Basin (Okacom 1994). It is mandated to give advice on:

- o Measures to determine the long term safe yield of the available water resources
- o Reasonable water demands of stakeholders in the basin
- o Suitable criteria for conservation, equitable allocation and sustainable water use
- o National and regional investigations to do with the development of the resources
- o Pollution prevention and the control of aquatic weeds
- o Short-term measures to alleviate water shortages due to droughts, taking into account the availability of stored water supplies and national water needs

Three OKACOM commissioners are all high ranking officials within the water and environment sectors appointed by cabinet and are assisted by senior technical staff members in each country who serve on the Okavango Basin Steering Committee (OBSC). A permanent secretariat for the commission has been established in Maun on World Wetland Day 2008.

To date, the OKACOM has focused mainly on developing the regional environmental assessment project first proposed to the JPWC in 1991, and later revised to include the development of a strategic management plan for the Okavango River Basin. After several years of negotiations with the Global Environmental Facility, this regional project was finally launched as the UNDP/FAO project "Environmental Protection and Sustainable Management of the Okavango River Basin" (EPSMO) in 2004. The project office is currently in Luanda and national co-ordination units in each country are intended to allow basin-wide stakeholder participation in the process.

There are several recent national and regional projects that aim to improve sustainable use and joint management of the water resources of the Okavango River Basin. Currently, the Integrated River Basin Management Project funded by USAID, is building on an earlier project called Shared Waters to help strengthen OKACOM mainly by assisting Sida with setting up a permanent secretariat for OKACOM in Maun, and by improving hydrological monitoring and stakeholder participation in Angola. The Every River project has been working with a variety of stakeholders, particularly at local community level, since 1999.

2.3 *The legislative framework*

Water sector reforms in all three riparian countries have recently brought about the review and revision of national water policies and legislation, for example, the review in Namibia that led to the National Water Policy (2000) and Water Resources Management Act (2004). In all three countries opportunities were seized to incorporate international water management concepts like Integrated Water Resources Management, Water Demand Management, Polluter Pays, Environmental Flow Requirements and a basin-wide approach to water resources management. Stakeholder participation has been promoted and recognition given to national obligations on shared waters. All three countries are signatories of the Ramsar Convention, and both Namibia and Botswana have recently drafted their National Wetland Policies (Bethune 2004, Bethune *et al* 2005).

These national policies and laws, together with regional protocols and international water laws such as the Helsinki Rules on the Uses of the Waters of International Rivers (1966) and the UN Convention on the Law of the Non-navigational uses of international watercourses (1991), the International Convention on Wetlands (1971) and the Dublin Principles all guide the activities of OKACOM.

3. STAKEHOLDER PARTICIPATION AND INTERACTION WITH OKACOM

At its annual meeting held in Maun in 1999, OKACOM approved and endorsed the Every River has its People project, requesting Sida and regional partners to assist OKACOM by developing the capacity of local communities within the basin to enable them to participate more fully in future decision making. Initially the project worked only with communities in Namibia and Botswana, but expanded into Kuando Kubango province in Angola as soon as peace was restored there (Namibia Nature Foundation 2003). The project works through existing community organizations such as conservancies, trusts, and fishermen's associations to build peoples' confidence in managing their own natural resources and by allowing communication with other stakeholders in the basin. One of the most important achievements of the project is the establishment of the Basin-wide Forum (BWF). The BWF is a regional committee of local authority representatives of the basin. The BWF was officially introduced to OKACOM in 2003 and has since participated in several important projects including the Okavango Delta Management Plan (Every River has Its People 2004).

Perhaps the most important change in recent years is that stakeholders in the three countries have been able to exchange visits, using these opportunities to see different parts of the basin, gain a better understanding of how the system functions and to share ideas. For the first time, OKACOM members, i.e. Government officials from Luanda, Windhoek and Gaborone have been able to speak to local community members living alongside the river, not only in their own countries but in neighbouring countries too.

The Every River has its People Project:

The Okavango River Basin already has a distinct advantage over other emerging river basin committees in the Sida funded Every River Project that, for the past 6 years have been actively working with all the stakeholders on the ground to share their experience in river basin management. The Every River has its People project, to use the full title was initiated and endorsed by Okacom in 1999 to drive sound stakeholder involvement in the Okavango River Basin in all three countries. This trans-boundary project is implemented by NNF in Namibia and Kalahari Conservation Society in Botswana and focuses on promoting the

participation of stakeholders, especially local communities in decision-making, capacity building for sustainable Natural Resource Management at local level and promoting shared River Basin Management through stakeholders' involvement. They work directly with local communities because they are the custodians of the river basin resources and have established a Basin Wide Forum (BWF) with representatives of all the local authorities in the basin. Coordination between all three countries is essential so that the activities of one nation should not negatively impact on the activities of the other and all share the river and thus the responsibility for caring for it. capacity building, good governance, and good stakeholder consultation, as well the engagement of women to participate in the basin activities. Communities benefit directly through the institutions established by ERP e.g. conservancies, aquaculture projects, training and exchange visits.

The Integrated River Basin Management Project (IRBM):

The Integrated River Basin Management project (IRBM), is a 3 year transboundary project between Angola, Namibia and Botswana, funded by USAID and will end in September 2008. Achievements over the past three years have included the installation of Hydromet stations in Angola; the establishment of an OKACOM Secretariat in Maun, launched on 2nd February 2008 (World Wetlands Day), with Dr Eben Chonguica as the Executive Secretary; biodiversity surveys on trees and mammals in Angola as well as training in Advanced Participation Methods (APM), tree and mammal identification, hydrology and elephant protection: successful community IWRM projects in Menogue and the formation of OBSC hydrology, biodiversity and institutional task forces with members from all three countries sharing technical experiences. Ten student interns from the Polytechnic of Namibia have also benefited each working on different natural resource related, six-month project on the Okavango River in Namibia.

Proposed Okavango River Basin Management co-ordination Unit:

The need for a small Okavango Basin Co-ordination Unit (OBCU), based in Rundu, to drive the establishment of an Okavango Basin Management Committee has been clearly identified by both the National Inter-sectoral Committee for the Okavango Basin and the Every River Project. On 20 November 2007, the Every River Project, held a meeting to establish an "Okavango Basin Management Association" and elected an executive board chaired by Mr S Gabriel, with Mr F van der Westhuizen as vice-chair and Ms D Wamunyima as secretary. Broad membership and aims of the national inter-sectoral committee and the Okavango Basin Management Association largely overlaps and it is proposed that these two organizations be merged.

It will be essential for the proposed OBCU to be in Rundu and to include or be lead by someone with experience from the Every River Project as well as a national coordinator and someone to assist them. One of the tasks of the unit will be liaison between the broader stakeholder forum or association and ERP and OKACOM, as well as across borders, sectors and hierarchies. The unit should drive the process to establish an OBMC and assist with national level co-ordination of international projects such as GEF/EPSSMO.

Way Forward to insure integrated river basin management in the Okavango Basin in Namibia:

The session at the end of this Healthy River Basin's conference will explore the way forward. As the stakeholders and aims of the existing inter-sectoral committee and the association are the same, it is proposed that:

- They be merged,
- A Okavango Basin co-ordination unit be established under Ms D Wamunyima of ERP,

- GTZ be approached to fund a co-ordinator to work within this co-ordination unit
- Funding for an assistant be sought through the NNF.
- Office space be secured for the co-ordination unit in Rundu (in kind Government contribution MAWF)
- Funding for a vehicle be sought possibly through the Swedish river basin twinning project

Your input for this session will be greatly appreciated and will hopefully give the stakeholders the mandate to go ahead and establish an effective Okavango Basin Management Committee that can serve as an example to all other basins in the country and elsewhere.

4. LESSONS' LEARNT

Two booklets have been published on the lessons' learnt from the experiences gained through the Every River has its People Project (Namibia Nature Foundation 2003, Every River has its People 2004). These identify 15 practices that worked to promote more effective Stakeholder participation within the Okavango River Basin under the particular circumstances and at the time of the first phase of the ERP from 1999 – 2004. The basic approach was to promote good governance for shared river basin management. It is recommended that following practices be part of a flexible, responsive approach geared towards tangible products.

- *Legitimacy and trust*
It is necessary to gain approval from the appropriate institutions at all levels, to work through existing institutions and to align the project aims with those of the existing basin authorities and to keep them informed of project activities and progress
- *Stakeholder role definition and links*
The role of each stakeholder must be clear, both at community and technical level and be in line with their normal functions.
- *Consensus building*
All the stakeholders must agree on a common understanding of shared basin management and see advantages in a joint approach.
- *Early consolidation and dissemination of information*
Available information on the basin should be made available to all stakeholders when the project is initiated, to give a base-line for the development of a common understanding. It provides a tangible product and clear start to the process.
- *Open-ended and flexible process approach*
Activities should not be planned in detail, but rather allow the opportunity to evolve in response to the needs of the stakeholders as they arise and allow a flexible approach to better handle unforeseen complications.
- *“Pay full price” of community participation*
The project must allow communities to precede at a pace comfortable to themselves, as the primary resource users they should be afforded full participation.
- *Equitable involvement of basin states*

Allow regular opportunities for communication between countries at all levels and be sensitive to communication problems seeking innovative ways to solve these.

- *Understanding community perspectives and early consensus building*
Use PRA and RRA tools to ascertain the community point of view and create early opportunities to bring together different levels of stakeholders and develop a common understanding of shared issues.
- *Community capacity building*
In the spirit of information exchange, share knowledge with communities and other stakeholders, to better understand each others points of view and share best practices.
- *Information for planning and decision-making*
Compile and integrate information on the ecological, hydrological, social, economic and political aspects of the river basin, publish it in a style suited to the layman and disseminate widely to share as much available information as widely as possible.
- *Accessible and shared information*
Make sure that existing and new information is shared by all stakeholders by making it available through the most appropriate media to each level, from local language radio through resources for teachers, to government reports and international websites.
- *Community involvement*
Through approaches such as community-based natural resource management (CBNRM) make sure that effective links are established between community organizations and decision making forums at all levels and booster their legitimacy to act on behalf of their members, whilst fostering an understanding of community needs in decision makers be they at district, national or regional level.
- *Policy review and reform*
Although, recent policy reforms in Namibia and Botswana favour community involvement in natural resource management and promote regional co-operation it may be necessary to review and propose revision in other basin countries.
- *Facilitate horizontal and vertical links in the basin*
There is a need to facilitate communication between communities, between different government sectors and between countries as well as to improve the vertical links from communities to local authorities, to district level, to national level and to the level of basin commissions.
- *Staff retention strategy and institutional performance safeguard.*
Provide incentives for project staff to remain “on board” for the entire duration of a project, to maintain trust and ensure smooth implementation, and have an institutional “shadow structure” in place to step in if a staff member should have to leave.

These experiences gained through the ongoing implementation of the Every River has its People project in the Okavango River Basin should prove valuable to any organization attempting to promote stakeholder participation in other shared watercourse systems in Southern Africa.

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