

Cubango-Okavango River Basin Workshop

Assessing the benefits of transboundary water cooperation in the CORB

CORB Benefits Analysis

Windhoek, Namibia
10 May 2017





Agenda


Draft Report

- Rationale (Eben Chungica)
- Conceptual Framework and Approach (Eben Chungica)
- National perceptions of cooperation in the Okavango-Cubango River Basin (Rute Saraiva)
- Basin perceptions in Okavango-Cubango River Basin (Roberto Martin-Hurtado)
- Conclusions and Recommendations (Roberto Martin-Hurtado)



 **OKACOM** Cubango-Okavango River Basin
Benefit Assessment – Draft Report



 **WORLD BANK GROUP**
Water



- **The process and methodology**
- **Benefit assessment – Angola**
- **Benefit assessment – Botswana**
- **Benefit assessment - Namibia**



Process and Methodology

- Based on UNECE* typology (with appropriate adaptations)
- Range of national consultations
- Consider direct and indirect benefits
- Mainly qualitative approach, with stakeholders participation
- Diversified range of stakeholders
- Stakeholder Net Map
- Include different level of analysis: local, national, basin, regional and global

* United Nations Economic Commission for Europe



Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p> <ul style="list-style-type: none"> ○ Expanded activity and productivity in economic sectors ○ Reduced cost of carrying out productive activities ○ Reduced economic impacts of water-related hazards (floods, droughts) ○ Increased value of property 	<p>Social and Environmental Benefits</p> <ul style="list-style-type: none"> ○ Health impacts ○ Employment and reduced poverty impacts ○ Improved access to services (such as electricity and water supply) ○ Improved satisfaction due to preservation of cultural resources or access to recreational opportunities. ○ Avoided/reduced habitat degradation and biodiversity loss
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p> <ul style="list-style-type: none"> ○ Development of regional markets for goods, services and labour ○ Increase in cross-border investments ○ Development of transnational infrastructure networks 	<p>Peace and Security Benefits</p> <ul style="list-style-type: none"> ○ Strengthening of international law ○ Increased geopolitical stability ○ Reduced risk and avoided cost of conflict ○ Savings from reduced military spending



Indicator	Angola	Botswana	Namibia
GDP	US\$92 billion	US\$11 billion	US\$10 billion
Total population	nearly 26 million	just over 2 million	roughly 2.5 million
GDP per capita	US\$ 7,249	US\$ 15,845	U\$ 10,754
Gini coefficient	0.427	0.605	0.613
Population within the basin	3.2% 75% living at “livelihood level”	7.1% 54% living at “livelihood level”	9.2% 60% living at “livelihood level”
Vision documents for the country	<ul style="list-style-type: none"> • Angola 2025 • National Development Plan 2013-2017 	<ul style="list-style-type: none"> • Vision 2016 • National Development Plan 	<ul style="list-style-type: none"> • Vision 2030 • National Development Plan • Harambee Prosperity
Context	<ul style="list-style-type: none"> • War/ reconstruction • Growth/ development 	<ul style="list-style-type: none"> • Sustained development, rapid economic growth, economic independence and social justice 	<ul style="list-style-type: none"> • sustained economic growth, increased income equality, employment creation



ANGOLA





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p style="text-align: center;">Economic Benefits</p> <ul style="list-style-type: none"> • Projects in the fields of energy, irrigation and water for Angola (small-scale hydro plants) – national plans • Project for agriculture development – national plans • Family production/ income • Accommodation offer ○ Ecotourism offer development ○ Development of aquaculture ○ Land use improvement ○ Increase in local revenues ○ Increase employment offer ○ Decrease in water price 	<p style="text-align: center;">Social and Environmental Benefits</p>

- Achieved or realised to date
- Potential and not yet realised





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p>	<p>Social and Environmental Benefits</p> <ul style="list-style-type: none"> • Improvement of the potable water supply • Development of basic water infrastructure • Community cohesion • Reduction human pressure on the river ○ Ensure species reproduction ○ Normalization of flow rates (upstream) ○ Combat hunger and reduce poverty ○ Food and nutritional security ○ Reduction of mortality and increase of life expectancy ○ Rise in families' income

- Achieved or realised to date
- Potential and not yet realised





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p> <ul style="list-style-type: none"> ○ Common fund for investment ○ Increase commercialization of produced goods (trans border commercial trade) ○ Cross-border accessibility ○ Namibia and Botswana expertise in <ul style="list-style-type: none"> i) Management of hydraulic resources /biodiversity ii) Sustainable tourism iii) Agro-livestock and fishing business iv) Vaccination (e.g. cattle immunization) v) Environmental education 	<p>Peace and Security Benefits</p>

- Achieved or realised to date
- Potential and not yet realised





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Enhanced Trust	Regional Economic Cooperation Benefits	Peace and Security Benefits <ul style="list-style-type: none"> • Scientific investigations (joint) • Information sharing • Regional cooperation/ integration ○ Harmonisation of water management and fishing law ○ Hydrological network data (integration) ○ Rapid alert systems (e.g. flood) ○ Stakeholders involvement (communication strategy): environmental impacts, water management ○ Best practices (e.g. sustainable tourism) ○ Control of deforestation ○ Waste management optimization / pollution control ○ Border surveillance ○ Social support (situations of vulnerability; drought / floods)

- Achieved or realised to date
- Potential and not yet realised



BOTSWANA



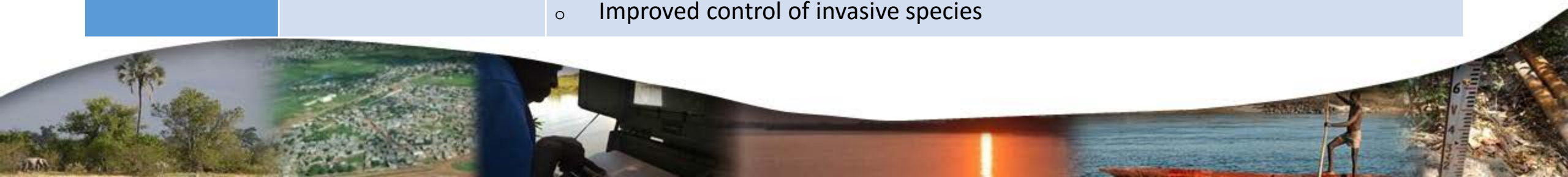


Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p style="text-align: center;">Economic Benefits</p> <ul style="list-style-type: none"> ○ Strong expansion of tourism sector with increased income & business opportunities ○ Modest expansion of agricultural activities, particularly fishing ○ Foreign exchange from tourism sector ○ Reduced costs of natural disasters due to early warning ○ Increased value of plots along the river front 	<p style="text-align: center;">Social and Environmental Benefits</p>





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	Economic Benefits	<p style="text-align: center;">Social and Environmental Benefits</p> <p><u>Social benefits:</u></p> <ul style="list-style-type: none"> ○ Employment creation in tourism & related sectors ○ Improved livelihoods and poverty reduction for those who benefit directly or indirectly from tourism and other river-based activities ○ Water transport & recreation benefits (e.g. pan handle) ○ Improved public services, including water reticulation ○ Exposure to and appreciation of cultures in other member states ○ Raised awareness about the importance of ecosystem integrity conservation by communities <p><u>Environmental benefits:</u></p> <ul style="list-style-type: none"> ○ Conservation of biodiversity & Delta ecosystem ○ Maintenance of good water quality in the delta ○ More collaborative natural resource management (basin-wide) ○ Protection of upstream environment and river flow ○ More basin wide environmental research, monitoring & data collection ○ Improved control of invasive species





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Enhanced Trust	<p style="text-align: center;">Regional Economic Cooperation Benefits</p> <ul style="list-style-type: none"> ○ Investments in research and road infrastructure ○ Limited transboundary tourism ○ Enhancement of bilateral relationships with the other MS 	<p style="text-align: center;">Peace and Security Benefits</p>

Note: employment and poverty are categorised under social issues in the UNECE matrix, but are also important economic issues.





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p>	<p>Peace and Security Benefits</p> <ul style="list-style-type: none"> ○ Avoidance of conflicts ○ Increased collaboration in anti-poaching, border controls ○ Support from other MS for World Heritage Site Declaration Okavango Delta. ○ Cultural exchange visits ○ Agreement about a shared vision based on a shared identity.

Note: employment and poverty are categorised under social issues in the UNECE matrix, but are also important economic issues.



NAMIBIA



Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p> <ul style="list-style-type: none"> ▪ Expanded activity and productivity in economic sectors ▪ Reduced cost of carrying out productive activities ▪ Reduced economic impacts of water-related hazards (floods, ...) ▪ Increased value of property 	<p>Social and Environmental Benefits</p>
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p>	<p>Peace and Security Benefits</p>





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p>	<p>Social and Environmental Benefits</p> <ul style="list-style-type: none"> ▪ Health impacts ▪ Employment and reduced poverty impacts ▪ Improved access to services (such as electricity and water supply) ▪ Improved satisfaction due to preservation of cultural resources or access to recreational opportunities
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p>	<p>Peace and Security Benefits</p>



Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p>	<p>Social and Environmental Benefits</p>
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p> <ul style="list-style-type: none"> ▪ Development of regional markets for goods, services, ... ▪ Increase in cross-border investments ▪ Development of transnational infrastructures networks 	<p>Peace and Security Benefits</p>





Origin of Benefits	Benefits for Economic Activities	Benefits Beyond Economic Activities
Improved water Management	<p>Economic Benefits</p>	<p>Social and Environmental Benefits</p>
Enhanced Trust	<p>Regional Economic Cooperation Benefits</p>	<p>Peace and Security Benefits</p> <ul style="list-style-type: none"> ▪ Strengthening of international law ▪ Increased geopolitical stability ▪ Reduced risk and avoided cost of conflict ▪ Savings from reduced military spending



- **Conclusions from a basin perspective, methodological lessons, and recommendations (preliminary)**



Cooperation in the CORB has generated a range of economic, social and environmental benefits ... that vary across countries and scales

- Improved communication and coordination has provided foundation for better water management
- CORB countries have benefited in different ways
 - Angola - knowledge for decision-making
 - Namibia - revenue generation in agriculture
 - Botswana - tourism
- CORB countries have benefited in different degrees (more downstream)
- The benefits varies between:
 - local (N-poverty alleviation, B-water quality)
 - national (environmental quality, revenue generation) and
 - global levels (preservation of unique habitats)

Cooperation in the CORB has also generated peace and security benefits for all countries, and more are expected

- Relationships between the countries have improved dramatically, generating peace and security benefits through avoidance of conflicts (framework to negotiate developments)
- There are also examples of realised and potential security benefits from positive action: adaptation to extreme events, disease control



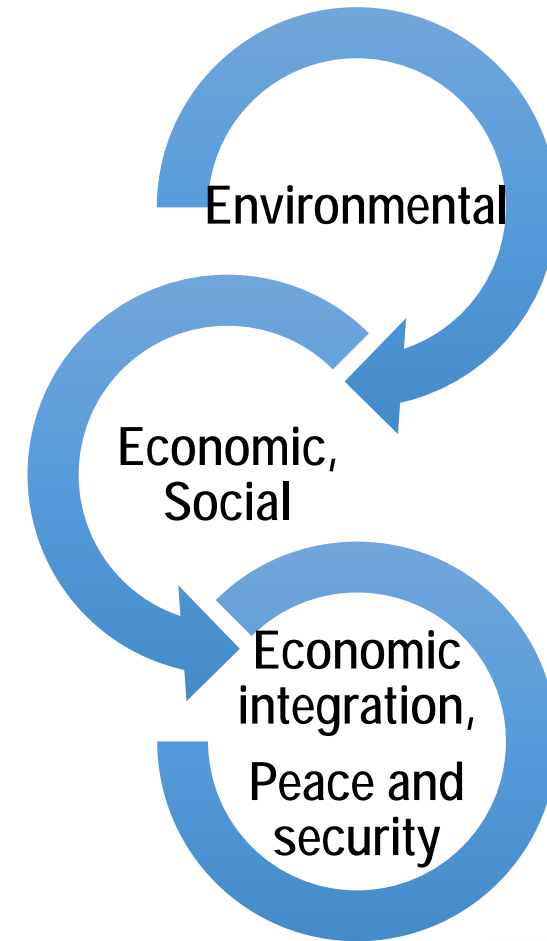
There are many additional potential benefits, mostly related to regional economic integration

- Opportunities to realise economic benefits (e.g. Angola: irrigation, hydropower, tourism)
- Large potential for regional economic cooperation benefits
 - Trade of goods
 - Investments in sectors (cross-border, knowledge exchange, joint projects)
 - Transnational infrastructure (e.g. rescoping Mucundi Dam, roads)



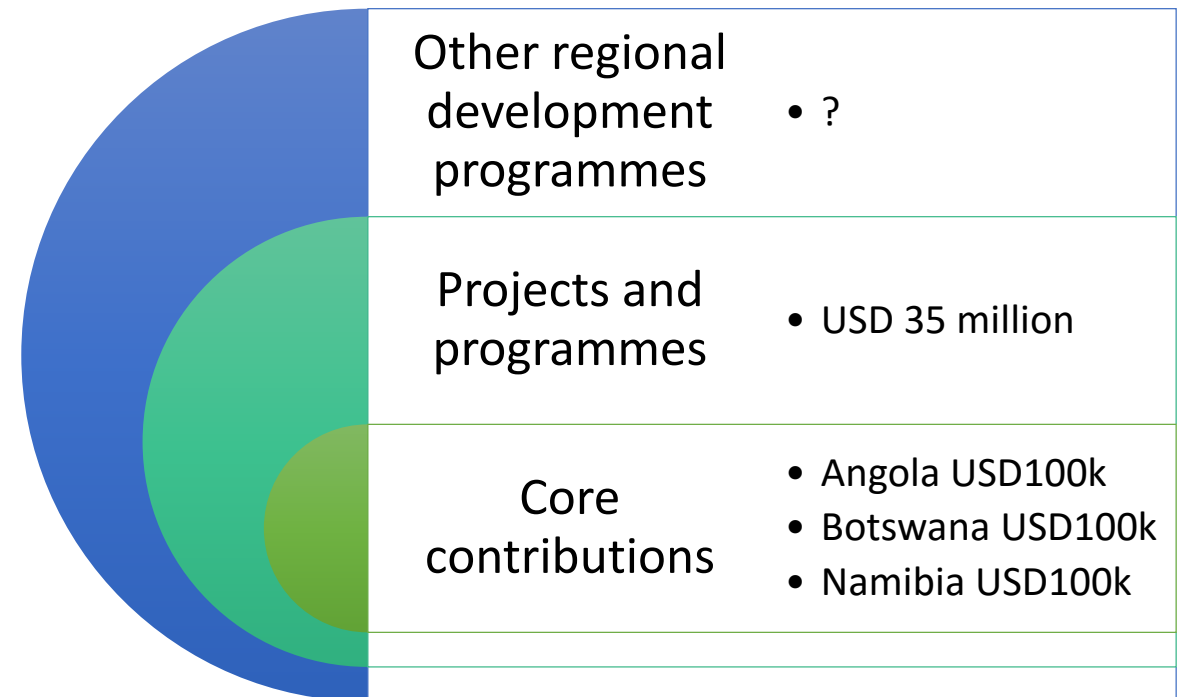
Cooperation is generating benefits in a cascade

- The basin's characteristics have led to early cooperation focused on environmental benefits
- Securing them requires realising economic and social benefits
- The trust built working together has generated peace and security benefits, and paves way for regional economic integration benefits



The existence of OKACOM as a platform for cooperation is key to realize benefits

- OKACOM has helped to raise the profile of the basin and the development challenges that it faces
- It has attracted resources that otherwise would not have been available
- Through knowledge generation and trust building, it has accelerated success and facilitated a process of maturity (TDA, MSIOA) that can unlock increasingly valuable benefits
- Does OKACOM need to evolve to realize regional economic integration benefits?



Methodological lessons from the CORB assessment process

- It is possible to identify a large range of outcome benefits of transboundary water cooperation.
- Process benefits are often difficult to disentangle from outcome benefits, while they are key to realise regional economic integration benefits.
- It is useful to elicit perceptions of stakeholders, to look at the historical evolution of benefits, and to consider the counter-factual (what would be the current situation without past cooperation?)
- A qualitative assessment is “good enough”, a quantitative assessment would be incomplete and maybe counter-productive.
- Expectations of future benefits tend to be optimistic, and a benefit assessment provides a useful baseline against to which benchmark the future evolution of benefits.

Preliminary recommendations

- Link the cooperative process to national development strategies
- Consider expanding the mandate of OKACOM to include other government ministries and agencies (in particular finance, planning and economic development)
- Communicate the benefits of cooperation at different scales (national-level stakeholders, basin populations,...)

