

Transboundary Water Cooperation Agreements, Institutions and Activities and their Alignment with the Water Convention

BY

Dr. Kobamelo Dikgola

Deputy Director

Department of Water and Sanitation

Minister of Lands and Water Affairs, BOTSWANA



Outline

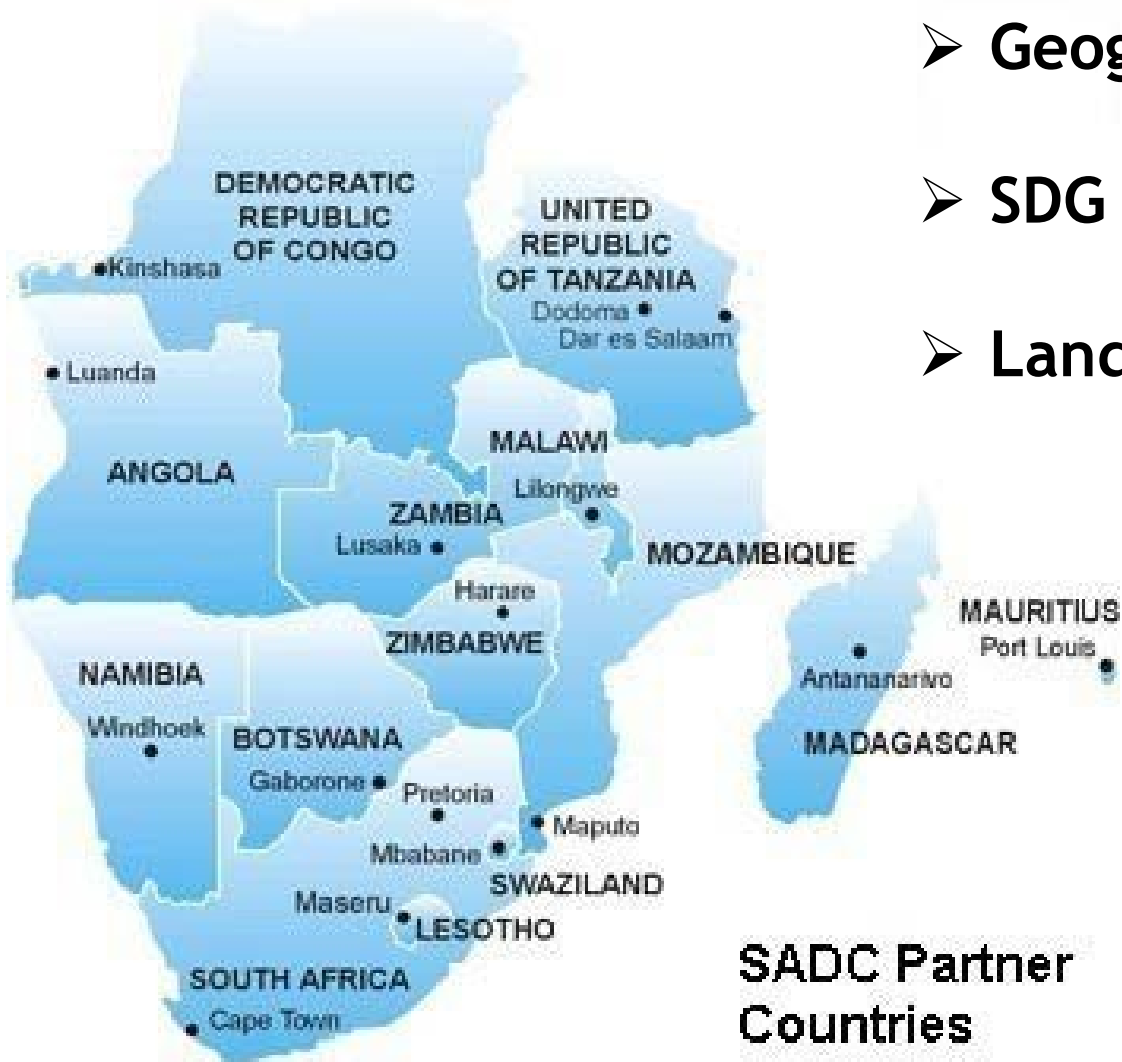
1. Background
2. Botswana Water Situation
3. Water Governance in Botswana
4. Tranboundary Water Cooperation and Alignment with UN Water Convention
5. Key International Cooperation



BACKGROUND

BOTSWANA-Geographic Location

- Geographical region: Sub-Saharan Africa, Africa
- SDG region: SDG Sub-Saharan Africa
- Land Locked Developing Country
- Botswana is topographically flat, with approximately 70 percent of its territory being the Kalahari Desert.
- It is bordered by South Africa to the south and southeast, Namibia to the west and north, Zambia and Zimbabwe to the northeast. .



BACKGROUND

BOTSWANA-Population

- Total population: 2,351,625 people
- Botswana is one of the most sparsely populated countries in the world.
- Population density: 4 people per km²
- Urbanisation: 71% lives in urban areas and 29% lives in rural areas
- 90% of the population has access to clean water, education, and health care.
- 40% of the population lives below the poverty line, and 97% of all poor people live in rural areas.



BOTSWANA-Water Situation

- Botswana has low rainfall, high evaporation rates, and is prone to drought, making it one of the most water-scarce countries in southern Africa
- The country has four major drainage basins (Limpopo, Molopo/Nossop, Chobe/Zambezi, Okavango and Okhwa/Makgadikgadi) and the Okavango Delta, which has about 6000 km² of permanent swamp and between 7000 km² and 12,000 km² of seasonal swampland in northwestern part of the country
- The Okavango Delta and the Chobe and Linyati rivers, which form the northern border with Namibia, account for 95% of the country's surface water
- The total renewable water resources available to the country are in the order of 12.2 kilometres squared per year, of which the total internal renewable water resources are estimated at only 2.4 kilometres squared per year. **Of this, the internal renewable surface water resources are estimated at only 0.8 kilometres squared per year**
- Groundwater resources, which supply two-thirds of water consumed, are used for domestic watering, livestock, and small areas of irrigation. Dams provide urban water supplies.



BOTSWANA-Water Situation

Table: Total renewable water resources by country

Country	Total renewable water resources- km ³ /year	Country	Total renewable water resources km ³ /year
Botswana	12.24	Angola	148
South Africa	51.4	Madagascar	336
Zimbabwe	20	Tanzania	96.27
Zambia	107.5	Kenya	29
Lesotho	3.02	Rwanda	9.5
Namibia	17.72	Australia	492
Mozambique	226	Israel	1.78
Malawi	16.8		

This entry provides the long-term average water availability for a country in cubic kilometres from precipitation, groundwater recharge, and surface inflows from surrounding countries



BOTSWANA-Water Situation

- Human settlements are consuming an increasing percentage of water, equaling the percentage used for irrigation and livestock. Mining and industrial needs consume the balance.
- 97% of the population has access to clean drinking water .
- Botswana's susceptibility to drought threatens groundwater levels and river basins and limits the availability of water for human and livestock consumption, agriculture, and industry.
- Water pollution is an increasing problem: pit latrines and livestock excrement pollute groundwater, and industrial runoff and human settlements pollute surface water.



WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The Water Convention is a unique international legal instrument and intergovernmental platform which aims to ensure sustainable use of transboundary water resources by facilitating cooperation. It is based on and fully in line with customary international law and its three-pillar normative structure includes:

- The obligation to prevent, control and reduce significant transboundary impacts (the so called “no-harm rule”);
- The equitable and reasonable utilization principle; and
- The principle of cooperation.



WATER GOVERNMENT IN BOTSWANA

Policies, Legislative Framework and Strategies

- **The Water Act, 1968**, which is under revision defines water use rights and pollution controls and penalties.
- **The Borehole Act, 1956**, governs borehole creation and operations.
- **The Waterworks Act, 1962**, governs the establishment of water authorities in townships and their responsibility for supplying water and waterworks (e.g., reservoirs, dams, tanks, pipes, etc.)
- **The Aquatic Weeds Control Act 1986**, An Act to provide for the Control of Aquatic Weeds Importation and movement of aquatic weeds prohibited, Declaration of invested waters, Regulations on import action and movement of aquatic weeds prohibited and promoting eradication of aquatic weeds and Protection from liability for acts done in good faith
- **Water Utilities Corporation Act (1972)**, An Act to provide for the establishment of a Corporation to be known as the Water Utilities Corporation for the supply and distribution of water

NB: 1968 The Water Act, and its related pieces of legislation is under revision



WATER GOVERNMENT IN BOTSWANA

Policies, Legislative Framework and Strategies

- **The National Water Policy of 2016;** facilitate access to water of suitable quality and standards for the citizenry and provide the foundations for sustainable development of water resources in support of economic growth, diversification and poverty eradication. The policy promotes; Protection, conservation and restoration of the nation's water resources; effective, sustainable management of water resources; equitable and efficient use of water resources; reduction of the subsidies associated with water supply; assurance of access and affordability of water for all; protection and restoration of the environment and productive uses of water
- **The Integrated Water Resources Management and Water Efficiency Plan (IWRM-WE) was developed in 2013** with the overall goal of improving people's livelihoods and welfare and contribute to sustained economic growth, economic diversification, social justice and poverty eradication through efficient, equitable and sustainable water resources management.
- **The National Water Master Plan review of 2006 and NWMP Update 2018:** recommended future water resources management to be dominated water resources stewardship and water demand management rather than capital development works.
- **The Botswana climate policy** sets the tone by aiming to mainstream sustainability and climate change into development planning and in so doing, enhance Botswana's resilience and capacity to respond to existing and anticipated climate change impacts.



WATER GOVERNMENT IN BOTSWANA

Policies, Legislative Framework and Strategies

- **Raw Water Abstraction and Pricing Strategy:** raw water abstraction and pricing framework for all forms of raw waters excluding raw water from outside the country through transfer schemes
- **Water Conservation and Demand Management Strategy**
- **Catchment Management Approach- Establishment of Catchment Committees**



TRANBOUNDARY WATER GOVERNANCE AND BENEFITS

2000 Revised SADC Protocol on Shared Watercourse stresses the importance of taking a basin-wide approach to water management and not only emphasizing the principle of territory sovereignty, and thus promoting Regional Integration and Poverty Alleviation.

Botswana shares most of the river systems with riparian countries and maintaining international water relations remains the important element in ensuring water security as well as building mutual cooperation. Botswana collaborate with neighbour countries particularly those related to shared watercourses under the auspices of

- **The Permanent Okavango River Basin Commission (OKACOM)** shared between Angola, Botswana and Namibia; The Permanent Okavango River Basin Water Commission (OKACOM) is a River Basin Organization (RBO) established through the OKACOM Agreement of 1994
- **Orange-Senqu River Basin Commission (ORASECOM)**, shared between Botswana, Lesotho, Namibia and South Africa; The agreement to formally establish the Orange-Senqu River Commission (ORASECOM) was signed on 3 November 2000 in Windhoek, Namibia, by the Ministers responsible for Water Affairs in the four basin states.
- **Zambezi River Basin Commission (ZAMCOM)** shared by Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia and Zimbabwe; the agreement to establish ZAMCOM was signed three months later on 13th July 2004.
- **Limpopo Watercourse Commission (LIMCOM)**, shared by Botswana, Mozambique, South Africa, Zimbabwe; The riparian states of the Limpopo river basin signed the Agreement for the Establishment of the Limpopo Watercourse Commission (LIMCOM) in 2003





OKACOM

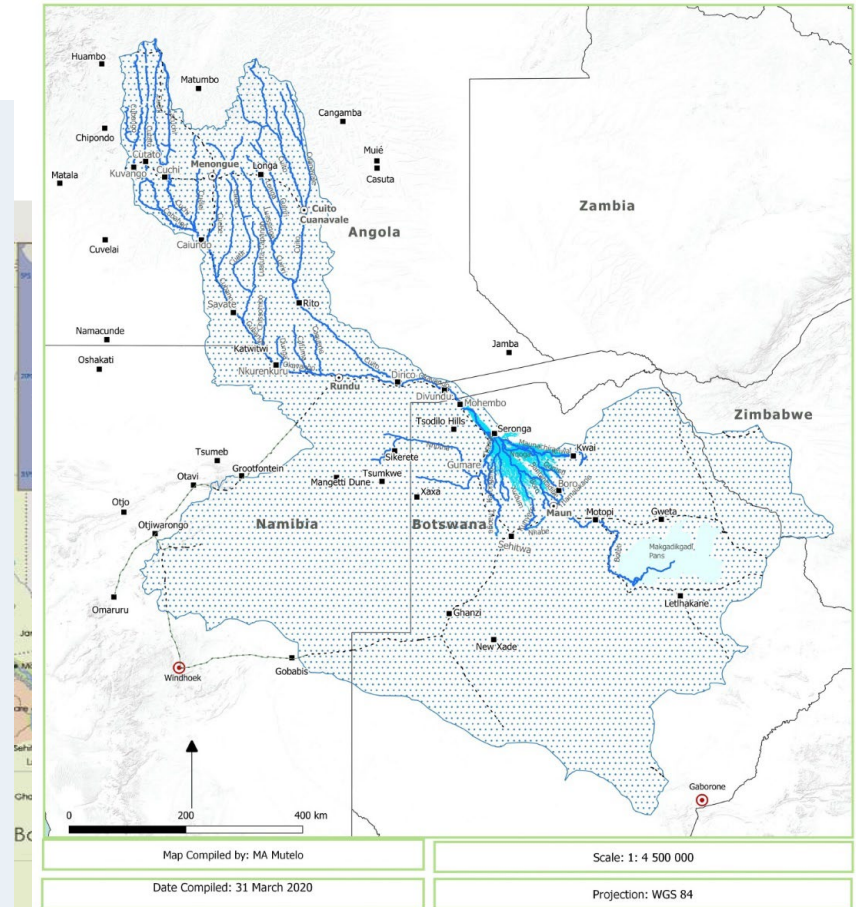
The Permanent Okavango River Basin Water Commission
Comissão Permanente das Águas da Bacia Hidrográfica do Rio Okavango



TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The OKACOM

- **Vision:** is to promote and strengthen the integrated and sustainable management, use and development of the Cubango-Okavango River Basin at national and transboundary levels according to internationally recognized best practices, so as to protect biodiversity.
- **Objectives:** To act as the technical advisor to the countries on matters relating to the conservation, development and utilisation of the water resources in the Okavango-Cubango River Basin
- **Role:** To develop and monitor a coherent approach to manage the basin under the following guiding principles: equitable allocation, sustainable utilization, sound environmental, management and sharing of benefits
- **Intervention approach:** anticipating and reducing unintended, unacceptable and often unnecessary impacts to the resources of the basin





OKACOM

The Permanent Okavango River Basin Water Commission
Comissão Permanente das Águas da Bacia Hidrográfica do Rio Okavango



TRANBOUNDARY WATER GOVERNANCE AND BENEFITS OKAVANGO-CUBANGO RIVER BASIN

- **Environmental Protection and Sustainable Management of the Cubango-Okavango River Basin (EPSMO):** collaborative management of the naturally integrated land and water resources of the Cubango-Okavango River Basin. The objective of the project was to prepare a transboundary diagnostic analysis (TDA). The TDA was the scientific basis for the compilation of the OKACOM Strategic Action Plan (SAP)
 - TDA areas of Concern and Drivers**
 - *of concern*; variation and reduction of hydrological flow, changes in sediment dynamics, changes in water quality, changes in the abundance and distribution of biota
 - *driven by*: population dynamics; land use change, poverty, climate change
- **Multi-Sector Investment Opportunities Analysis (MSIOA):** part of a systematic strategy by OKACOM to assist the Member States to achieve socially just, economically prosperous, and environmentally healthy development of the Cubango-Okavango River Basin.
- **Cubango-Okavango River Basin Fund (CORB Fund)** is a fully independent hybrid fund that aims to enhance livelihoods, improve ecosystem resilience and provide equitable benefits to the riparian states of Angola, Botswana and Namibia, in the shared river basin. Registered on 11 December 2019, in Gaborone Botswana, the Fund is designed to be a sustainable, accountable, independent and transparent financing mechanism to contribute towards the riparian states' ability to directly tackle social, economic, and ecological threats facing the CORB ecosystem.

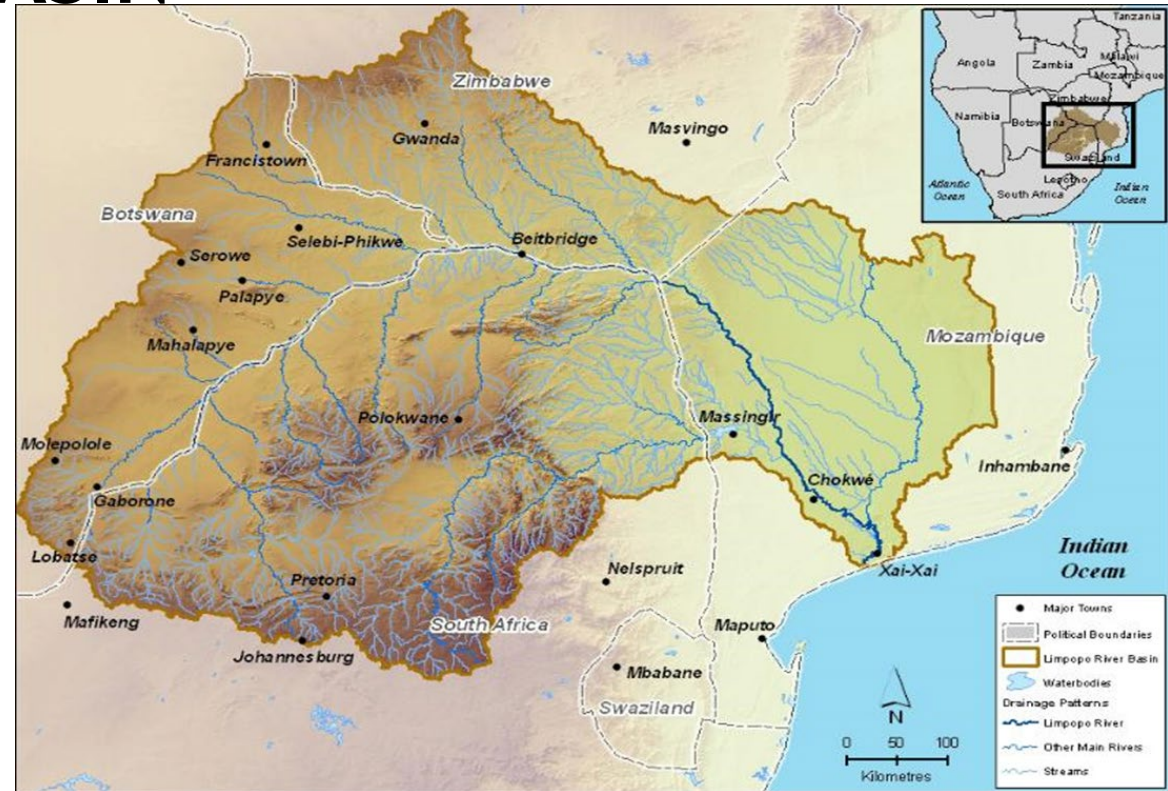


TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION LIMPOPO RIVER BASIN



➤ The Limpopo River is one of the largest Rivers in the SADC Region, having as co-basin States Botswana, Mozambique, South Africa and Zimbabwe.

➤ **Housing Botswana's major water supply dams**



TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The LIMCOM



- The objectives of the Commission is to advise the Contracting Parties and provide recommendations on the uses of the Limpopo, its tributaries and its waters for purposes and measures of protection, preservation and management of the Limpopo River System.

- The commission aims to achieve the following in line with the SADC Protocol
 - a) Sustainable development;
 - b) Intergeneration equity principle;
 - c) Prevention principle;
 - d) Transboundary impact assessment principle.



TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The LIMCOM



- Equitable sharing of resources including pollution prevention of the river basin.
- Sharing of expertise in joint transboundary water resources management.
- LIMCOM is currently embarking on a project entitled “Integrated Transboundary River Basin Management for the Sustainable Development of the Limpopo River Basin”.

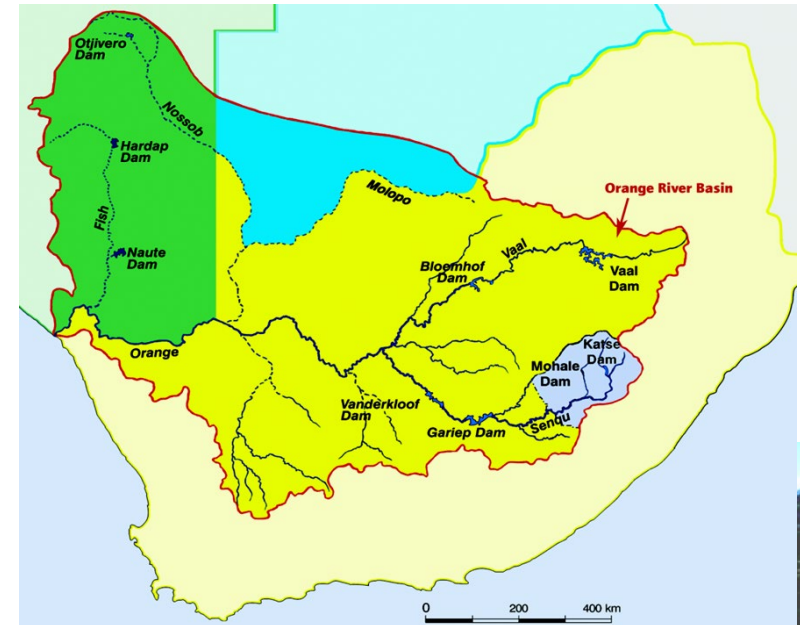


TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The ORASECOM



- It is the Orange-Senqu River Commission (ORASECOM) established in 2000 between Botswana, Lesotho, Namibia and South Africa aligned with the Revised Protocol for Shared Watercourse Systems of the Southern African Development Community (SADC).
- ORASECOM symbolises parties' commitment to realising principles of equitable and reasonable utilisation, as well as sustainable development with regard to the Orange-Senqu River System.



TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION ORASECOM ACHIEVEMENTS



- Setting up management structures for various new donor sponsored projects. E.g PMO for Botswana-Lesotho Water Transfer project.
- Capacity building for Member States
- Stakeholder initiative and agreement on stakeholder participation.
- Development of Transboundary Diagnostic analysis (TDA)
- Strategic Action Plan (SAP) and National Action Plan (NAPS)
- Basin-wide IWRM Plan



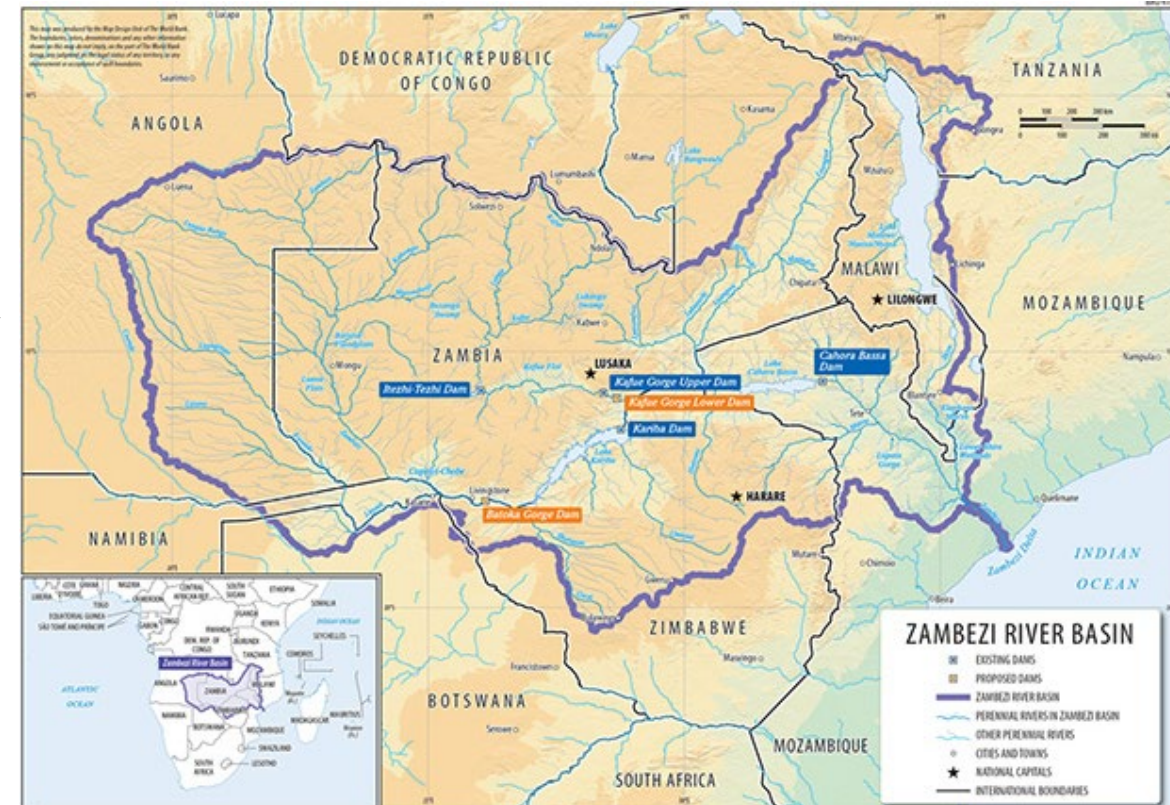
TRANBOUNDARY WATER GOVERNANCE AND ALIGNMENT TO UN WATER CONVENTION

The ZAMCOM



ZAMCOM

- The Zambezi Watercourse Commission (ZAMCOM) is a major river basin organization in Africa.
- Implementation of the Strategic Plan for the Zambezi Watercourse (ZSP) through development of the Programme for Integrated Development and Adaptation to Climate Change in the Zambezi Watercourse (PIDACC Zambezi).
- Collection, evaluation and dissemination of all data and information on the Zambezi Watercourse facilitated by through the Zambezi Water Resources Information System (ZAMWIS)



NB: The implementation of the Chobe-Zambezi Water Transfer Scheme facilitated under ZAMCOM framework: Development of the Operating Rules



OTHER INTERNATIONAL COOPERATION

- Bilateral MOU Between THE REPUBLIC OF BOTSWANA and THE REPUBLIC OF NAMIBIA for cross border water cooperation and facilitate the implementation of water transfer from the Atlantic Ocean through Namibia into Botswana
- An MOA was signed by the three countries in 2013 of ORASECOM to facilitate the implementation of The Lesotho-Botswana Water Transfer Project
- Cooperation WITH WORLD BANK through a loan to address water supply and efficiency in drought prone areas and for institutional reforms and capacity building
- Cooperation between THE REPUBLIC OF BOTSWANA and THE REPUBLIC OF SOUTH KOREA: MOU to facilitate smart water management approach and development of a Total Water Management System
- Bilateral- Revised TSWASA Agreement between Botswana and South Africa to facilitate transfer of water from Molatedi Dam for water supply in Greater Gaborone



Thank You

