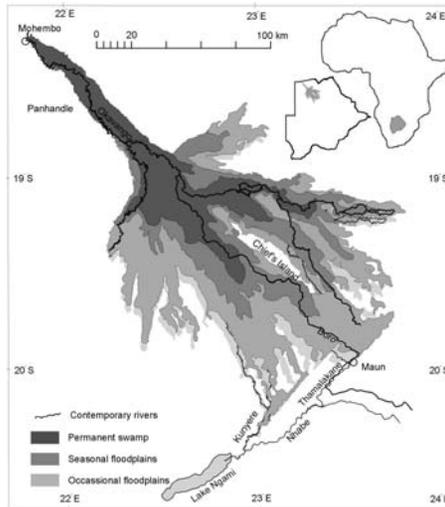




FACT SHEET No. 1

WATERS OF THE OKAVANGO



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Introduction

One of the most important features of the Okavango Delta is its water. During the dry winter season, flood waters originating from Angola bring water to the Delta. In the summer, rains replenish the Delta.

Water supports life in the Delta and facilitates the transport of sediments, nutrients and organic matter. This role is very important for food web interactions. Plants, animals and humans rely on the waters of the Okavango Delta.

Water moves very slowly through this low gradient system. The annual flood arrives during the dry season and flood waters can take up to six months to cross the entire Delta.

River Channels

The Okavango River has its source from the Cuito and Cubango Rivers in Angola. The Okavango River flows uninterrupted through Namibia into Botswana and discharges an average of 10 billion cubic meters a year of water to the Delta.

The Okavango River is confined in the panhandle of the Delta and widens in the permanent swamp areas where it splits into three (3) major river systems:

- Ngoga-Maunachira-Khwai
- Jao-Boro, and
- Thaoge (drying up)

During the annual flood, water flows through these river systems into the seasonal swamps.

River channels in the Delta are highly dynamic and continuously influenced by tectonics, sedimentation, vegetation growth and blockages, fire, and even hippo and termite activity.



Hippo in water

Ground water

Although the surface waters are pure enough to drink, the ground waters of the Delta are typically very saline. After water makes its way into the ground, plants pull the water up through their roots, leaving behind minerals that were dissolved in the water. These minerals accumulate in the ground water and give it its salty taste.

The most saline ground waters are found towards an island's interior. That is why you find more salt tolerant vegetation, such as grasses and wild sage, near the centre of islands, and less salt-tolerant vegetation, such as woodland trees and Phoenix palms, near the outer margins of islands.

Lagoons

Lagoons often form in the meanders of stream channels. When the channel changes course and dries up, water remains in the deepest areas, and a lagoon is created. Another type of a lagoon is found in the active stream channels. In contrast to the inactive lagoon, these tend to be quite shallow and have short lifetimes because of the inflow of sediments.

Seasonal Floodplains

When flooded, seasonal floodplains are areas of shallow water, located toward the fringe of the Delta. These areas receive water only during the rainy season or when the flood waters arrive. When flood waters inundate the grassy floodplains, fresh and decaying vegetation is flushed into the water.

FREQUENTLY ASKED QUESTIONS

- **Is the water safe to drink?**

Considering the size of the Delta and large amounts of water, there is little pollution to worry about in this system. The vegetation and sands of the Okavango Delta do a good job for cleaning the water.



School Children drinking from
Thamalakane river

HOWEVER, in any fresh water system, there is no guarantee that the water will not make you sick. Avoid drinking water from stagnant pools, near animal waste, and downstream of human settlements.

- **Why is the water red/brown/murky?**

Dissolved organic matter in the water is responsible for the color of the water. Much of the coloured organic matter originates from decaying vegetation and is flushed into the pools and channels during annual flood.



- **Are there large amounts of minerals in the water?**

No, in fact, mineral concentrations in the flood waters are quite low compared to other river systems around the world. However, when dry land areas in the Delta are flooded, minerals are dissolved and flushed into the river system.

- **The Delta is nutrient-poor; why is this important?**

Nutrient levels in the Delta are extremely low. The plants are adapted to low nutrient concentrations and these low levels keep the Delta in its current pristine state. Human activities, such as the introduction of the wastewater or fertiliser to the water, have the potential to upset this delicate balance.

