

## CASE STUDY 2026

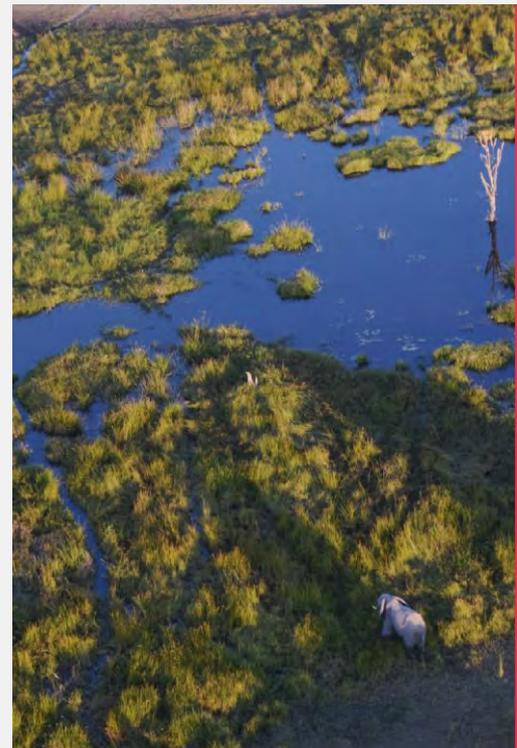
# Maun International Airport Gateway to the Okavango Delta

## Shaping the Future of Botswana's Aviation Hub Through Visionary Planning and Sustainable Design

**Nestled on the edge of the world-famous Okavango Delta, a UNESCO World Heritage Site and one of Africa's most iconic natural wonders, Maun International Airport played a vital role as the gateway to Botswana's safari heartland.**

While small in passenger volume compared to major international hubs, Maun recorded one of Africa's highest aircraft movement rates, serving as the lifeline for hundreds of charter flights connecting the Delta's remote lodges and airstrips with the rest of the world.

Recognising the airport's strategic importance, the Civil Aviation Authority of Botswana (CAAB) appointed Nurizon International Ltd to conduct a comprehensive Feasibility Study with a 25-year development outlook.



## Project Overview

The Feasibility Study — valued at BWP 7.5 million — aimed to create a future-ready aviation hub that balanced economic growth, tourism expansion, and environmental stewardship. The study evaluated Maun's existing airside and landside infrastructure, including the runway, taxiways, aprons, terminal facilities, fire and rescue operations, fuelling systems, and passenger access routes, while assessing future spatial, environmental, and economic demands.

### Nurizon's multi-disciplinary scope included:

- Status quo assessments of existing facilities and utilities
- Pavement Classification Number (PCN) and infrastructure condition analysis
- Aeronautical Ground Lighting (AGL), NAVAIDs, and ATC assessments
- ARFF, fuelling, and cargo operations reviews
- Expansion and redevelopment options for terminals, roads, and utilities
- Alternative site evaluations with conceptual masterplans for potential relocation
- Constraints and opportunities analysis integrating growth projections and sustainability



## Maun International Airport

### A Global Treasure in a Delicate Balance

Few airports in the world were as uniquely positioned as Maun International Airport — not only as a vital transport node but also as a gateway to a fragile ecosystem. The Okavango Delta's pristine wetlands ranked among the most sensitive and biodiverse landscapes on Earth. Every design decision carried weight — from managing noise and emissions to ensuring that water drainage and infrastructure expansion minimised ecological impact. Nurizon's team approached the project with a deep appreciation for this balance, blending technical excellence with environmental sensitivity and

ensuring that the airport's long-term growth supported both Botswana's tourism economy and the protection of its natural heritage.

### The Challenge

Planning for the next 25 years required anticipating future air traffic trends, regional connectivity needs, and climate resilience. Key challenges included forecasting flight growth from Ethiopia, South Africa, and Europe, accommodating charter operations safely, and aligning the airport's design with international aviation standards — all while operating within the environmental constraints of a UNESCO-listed ecosystem.



### Visionary Planning Sustainable Design

### The Solution

Through a collaborative, data-driven approach, Nurizon and its partners developed a strategic and sustainable master plan for Maun International Airport's growth. The solution integrated airport planning, aviation engineering, town planning, and transportation economics, ensuring that proposed infrastructure upgrades were technically sound, environmentally responsible, and future-proof. By connecting aviation strategy with regional development goals, the study positioned Maun as a model for sustainable airport evolution in Africa —

one that served people, protected nature, and supported Botswana's tourism-driven economy.

### Outcome

The Feasibility Study was successfully adopted by CAAB and formed the foundation for the next phase of Maun's transformation. It strengthened Botswana's aviation sector, enhanced regional connectivity, and supported the long-term prosperity of the Okavango region, ensuring that this vital gateway continued to welcome travellers to one of the world's most extraordinary destinations.

Engineering **Solutions**  
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