

Tourism Development and Conservation nexus along Lake Victoria shores in Uganda: A Sustainable Tourism Planning Approach

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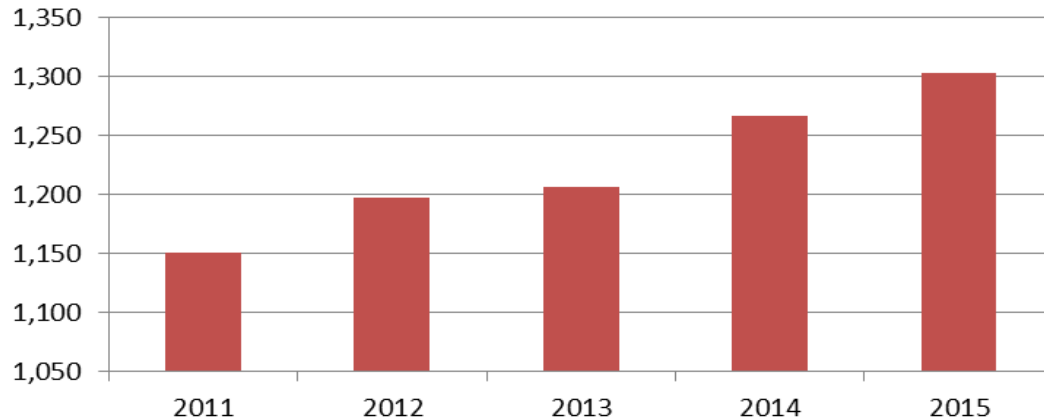
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Introduction

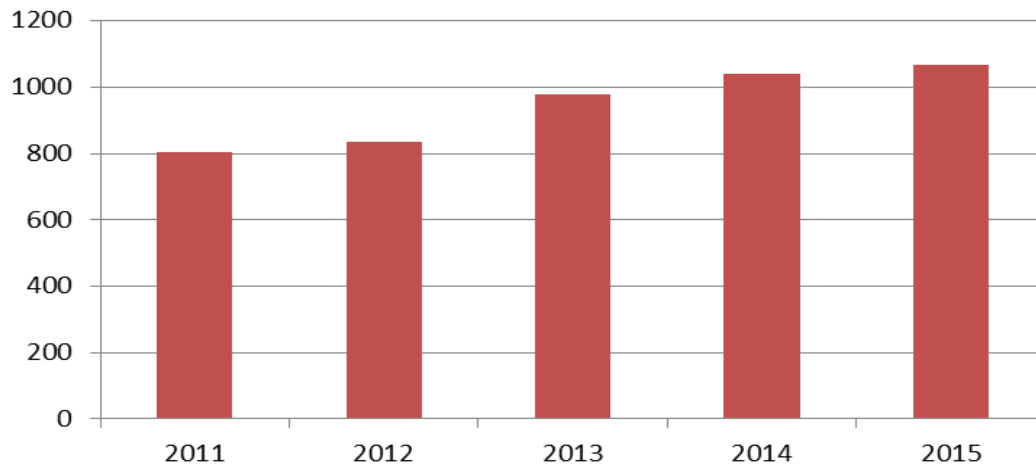
- Tourism **fastest growing sector** globally – 1.2 billion international travels – 53 million travel in **Africa (5%)** (UNWTO 2016)
- Developing countries grappling with the **challenge** of fostering **sustainable tourism** development
- Tourism identified as a **vehicle to achieve** **SDG's**
- Need for **sustainable tourism planning** – emphasis on protecting resource base

Tourism in Uganda

International Tourists Arrivals in Uganda ('000)



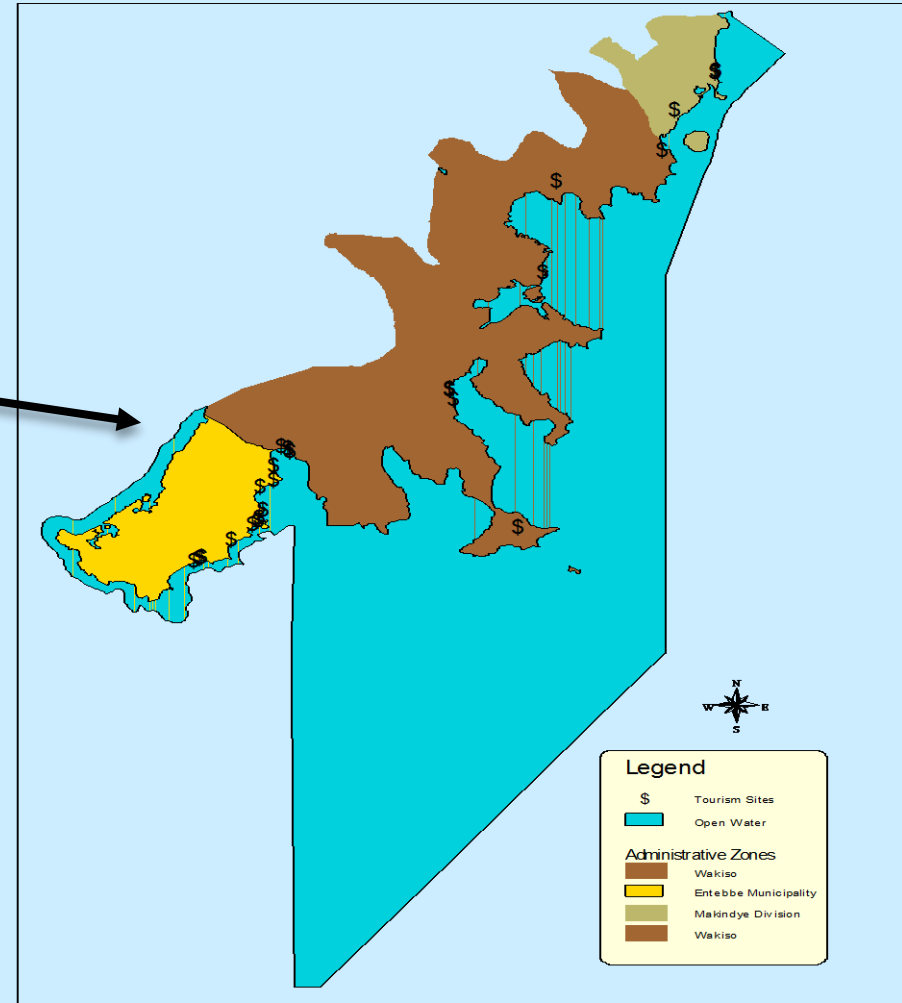
Tourism Receipts (USD Million)



- Increasing tourist arrivals and receipts
- Increasing tourism establishments developed
- Resources under increasing pressure from tourism development



Study Area



- Ecological **sensitive** region
- **Competing** Land uses
- Popular **beach tourism** destination
- **Limited** tourism **Planning**

An aerial photograph showing a lush green landscape. In the lower-left quadrant, there is a rectangular swimming pool with a blue roof. To its right, a small building with a thatched roof is visible. The background features a large body of water under a clear sky.

Environmental

- **Performance?**
- **Monitoring?**
- **Planning?**



Key focus

- **Tourism sites?** – Categories: Beach Hotels; Beach resorts-with accommodation; Beach resorts-without accommodation; Conservation Areas
- **Performance of tourism sites?**
 - Contribution to conservation
 - Solid waste management
 - Sewage management
 - Development control
 - Water quality control
- **Nature and level of tourism planning along the lakeshores?**
- **Development of Tourism planning approach?**

Methodology

- **Performance assessment** - respondents rated specific environmental variable statements using a likert scale (ranging from Strongly agree to Strongly disagree)
- Site Managers (n=12), and planning and environment officials (n=6), Local residents (n=109) and visitors (n=119) at 24 sites - assessed the performance of sites by **evaluation statements**
- **Qualitative and quantitative analysis** techniques - including Correlation and Regression analytical techniques – ANOVA, Factor Analysis, Linear Regression

Contribution to Nature Conservation



- Minimal deliberate contribution by tourism
- No conservation guidelines /policy
- Limited monitoring



Solid Waste Management

- On-site management - burning (also plastics)
- No waste management guidelines/policy
- 54% evidence of beach litter



Sewage/Waste water Management

- On-site management - 83% septic tanks
- 71 % sites storm water run-off into lake
- Limited approval and monitoring

Development Control

- New lakeshore land use zone
- 75% within 200m lakeshore protection zone
- 83% sites without proof of NEMA approval

Water Quality

- Within pollution "hot spots"
- No recreation water quality standards
- Good water quality in dry season, poor quality in wet season



Overall Performance

Respondent category performance assessment -ANOVA (one way) test (**Significant at 0.01)

| Category respondents | N | Mean | df | F | Sig. |
|----------------------|-----|------|----|---------|------|
| Site managers | 12 | 4.00 | 2 | 6.009** | .003 |
| Visitors | 199 | 2.82 | | | |
| Local residents | 109 | 2.65 | | | |
| Total | 320 | 2.81 | | | |

| Category of sites | N | Mean | df | F | Sig. |
|--------------------------------|-----|------|----|----------|------|
| Beach Hotels | 19 | 1.35 | 3 | 21.156** | .000 |
| Beach resorts- accommodation | 68 | 2.55 | | | |
| Beach resorts-no accommodation | 126 | 3.12 | | | |
| Conservation Area | 107 | 4.09 | | | |
| Total | 320 | 2.79 | | | |

Indicator reliability of site performance - Factor analysis (0.5>)

| Components | Eigen values | % variance explained | Reliability coefficient (α) |
|-------------------------------------|--------------|----------------------|--------------------------------------|
| Contribution to nature conservation | 68.394 | 36.038 | .694 |
| Solid waste management | 8.129 | 26.829 | .586 |
| Sewage management | 4.805 | 9.031 | .577 |
| Development control | 2.295 | 5.293 | .571 |
| Maintenance | 1.599 | 3.935 | .566 |
| Water quality | 1.465 | 1.854 | .562 |

Site Performance Vs Planning - Linear Regression based Planning Approach

| Dependent variable | Independent variables | Sub-components of the independent variables | Standardized coefficients | | Sig. |
|--------------------|-----------------------|---|---------------------------|--------------|-------------|
| | | | Beta | t | |
| Planning | Site Performance | | .389 | 6.136 | .000 |
| | | -Nature conservation | .112 | 1.195 | .002 |
| | | -Solid waste management | .055 | .870 | .038 |
| | | -Sewage management | .065 | .811 | .045 |
| | | -Development control | .116 | 1.918 | .037 |
| | | -Water quality control | .086 | 1.318 | .020 |

- Model determines how variable(s) can be used to predict the others (Veal 2006)
- Site performance variables contribute to STD planning
- Significant relationship between planning and sites performance
- Ranking of variables significance to planning - development control, nature conservation, water quality, sewage management, solid waste management

Incremental tourism planning approach - Linear Regression based -

- Incremental planning – **piece meal approach** - all ‘options’ cannot be explored at the same time (Mitchell 2002)
- linear regression provides the ‘**options**’ from which incremental planning can choose from
- Incremental tourism planning centred on linear regression coefficients to identify **sequence** of addressing environmental variables
- **Sequence variables** according to significance/contribution to **planning** - 1. development control, 2. nature conservation, 3. water quality, 4. sewage management, 5. solid waste management

Applicability of Incremental tourism planning approach

- Sequence of key **environmental variables to be addressed** are identified – development control – nature conservation etc
- Category of **sites that require priority in planning** are identifies - emphasis on Hotels, beach with accommodation etc
- Sets framework for measuring and monitoring tourism **site performance**
- Enable planners and government (local and Central) efficiently deploy **limited financial and human resources** available
- Contributes to **bridging gap** between tourism **planning and implementation** in struggle to achieve STD

Recommendations

Development Control

- Bridge gap between central and local planning
- Enhance tourism planning/monitoring capacity at local/site level
- Design lakeshore tourism development standards and monitoring guidelines

Nature conservation

- Conservation guidelines
- Monitoring mechanisms
- Enforcement of conservation laws

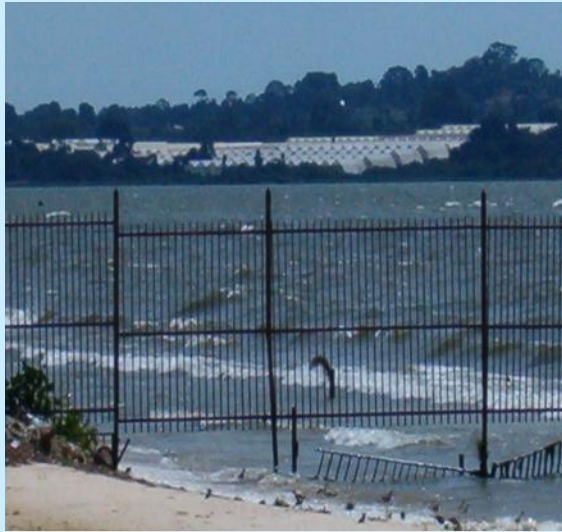
Water Quality

- Recreation standards and monitoring mechanism
- Runoff/waste water control
- Control pollution from other sources

Sewage & Solid waste Management

- Improve on collection management and disposal
- Monitoring mechanism
- Reduction and Recycling mechanism

Conclusion



- Linear regression based incremental tourism planning approach offers a viable planning framework
- Monitoring site performance is key for attaining STD
- Planning focus on;
 - Development control and conservation
 - Hotels, beach with accommodation

Thank you



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