



Developing Ecotourism Destinations: Aligning ecotourism and Spatial Planning Approaches



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Ecotourism & Spatial Planning

Introduction

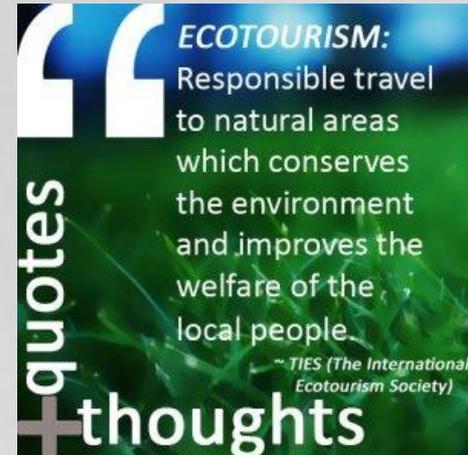
1

Introduction

Ecotourism theory suggests that economic development and natural resources conservation are compatible goals.



Cambodia

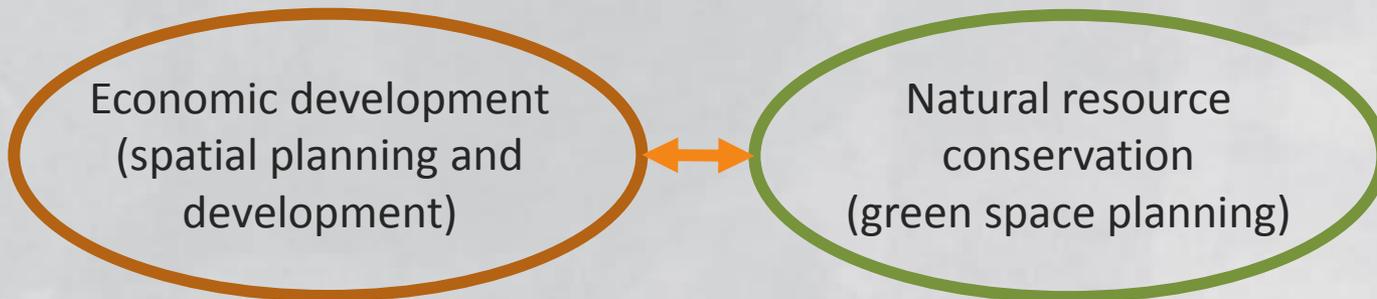


Ecotourism is often proposed as being able to minimize negative impacts, ensure environmental conservation while enabling economic benefits to accrue to the local communities.

1

Ecotourism and Spatial Planning

With such benefits in mind, one would expect that the development of ecotourism spaces (and most common denominator nature-based spaces), be prioritized as part of spatial planning approaches.



1

Urban planning realities

Several studies have indicated the importance of including the entire green infrastructure in Spatial Planning approaches to increase sustainability and resilience.

This identifies a need to **integrate** environmental management (green-driven) and spatial planning (development-driven).

1

However....

The value and importance of providing green spaces and ecotourism destinations are often neglected, due to limitations in budgets and human resources, inequities in terms of qualitative green space availability and political legacies of the past.

Current spatial planning approaches does not favour green space development and the planning and provision of green spaces are often perceived as a luxury and not a necessity.



1

Urban planning reality in South Africa

The current reality in South Africa suggest that green spaces (and the provision thereof) is **not prioritized** in planning approaches.

Green spaces are not value, which impacts on the:

- 1) planning and provision of green spaces (and ecotourism destinations)
- 2) usage of green spaces

This perceptions were tested in a local case study in Potchefstroom, determining the value of green spaces based on residential property values and the proximity principle.

Contrasting results were found



Case studies to value green

Potchefstroom findings

2

Urban planning reality in South Africa

South Africa is ranked as the globe's **third most biologically diverse country**. Local land-use planning procedures are increasingly being recognised as a strategic way to influence land transformation.

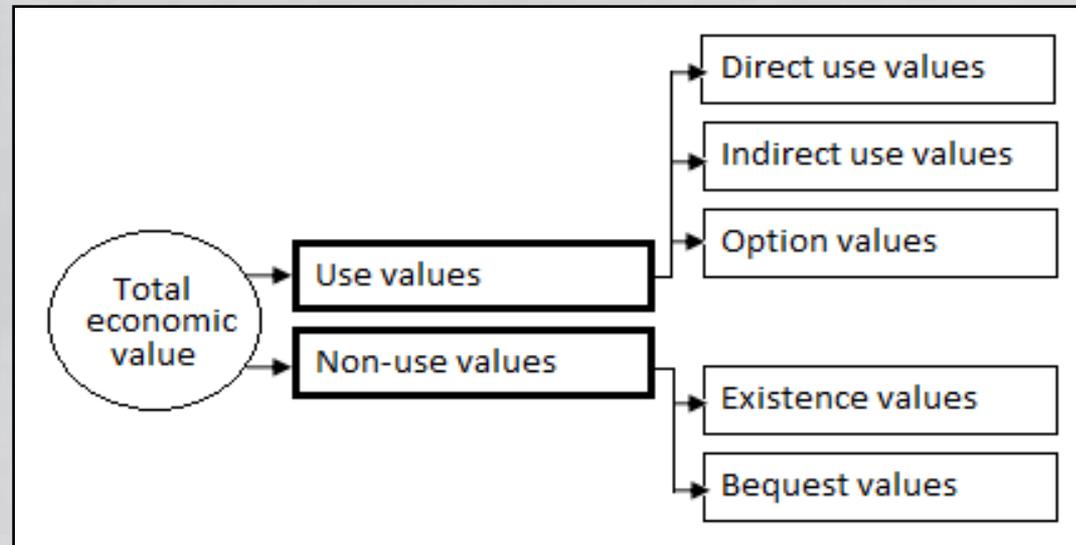
However, decision-making within the local authority structure takes place within a broad framework of stakeholders and several objectives have to be met, resulting in **green-spaces continuously competing** against other urban land-uses.

The extensive benefits humans are drawing from natural ecosystems and green spaces could assist decision-making if green spaces are valued (either **monetary or non-monetary**)

2

Methodology

The total economic value of green spaces and green infrastructure is defined differently in literature but consists mainly of two kinds of values, use value and non-use values



2

Methodology

In order to value green spaces and to be able to place it in a broader decision-making context, various environmental and resource economics methods were developed.

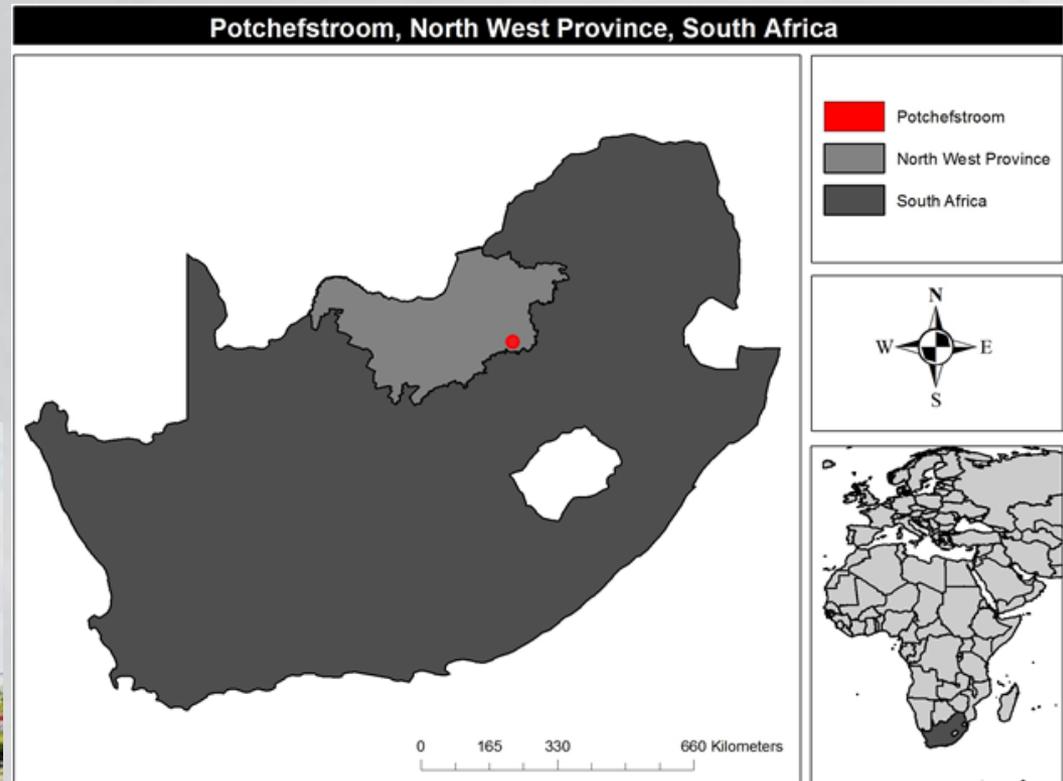
Method	Description
Market price method	This method is applicable to direct use values. The value is estimated from the price in commercial markets (law of supply and demand).
Replacement cost method	Applicable to indirect use values where the value can be estimated from the substitute cost.
Stated preference method	Value public goods and services in terms of willingness to pay for improvements, or willingness to accept damages to a resource.
Contingent choice method	Estimate values based on asking people to make tradeoffs among sets of ecosystem or environmental services.
Benefit transfer method	Value eco-system services and recreational uses in particular, by transferring existing benefit estimated from studies completed for another location or context.
Hedonic pricing method	Used when green space values influence the price of marketed goods, or for estimating the economic value of open space and recreation areas, which do not have a market value. Prices of properties are used to isolate the differential effect of environmental attributes on property values.

2

Potchefstroom case study

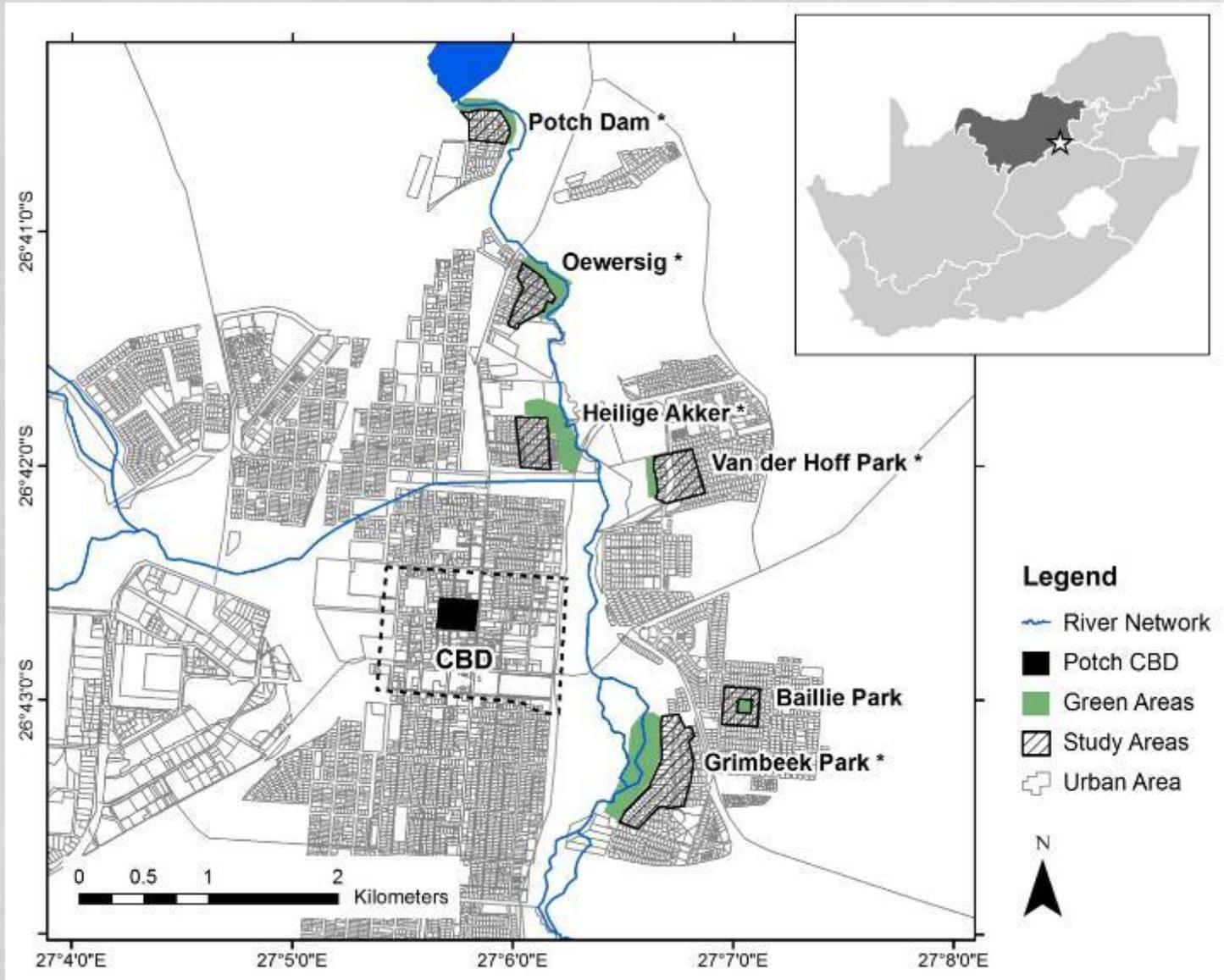
Potchefstroom ($26^{\circ} 42' 53''$ S; $27^{\circ} 05' 49''$ E) is situated in the North-West Province of South Africa and covers an area of 55 km² with a population of approximately 250 000.

Several urban ecological studies were conducted in Potchefstroom over the last decade focusing on urban biodiversity and ecosystem services.



2

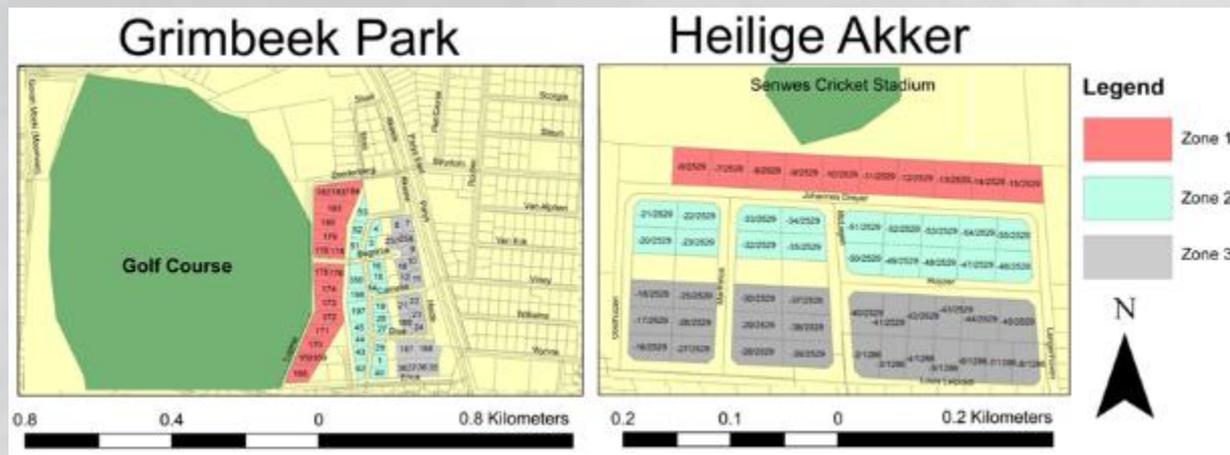
Potchefstroom case study



2

Potchefstroom case study

- Three zones within each of these areas were selected and sampled according to location and distance from the green space.
- The residential property prices were based on the municipal property valuations for the period 2009/2013, as provided by the Local Municipality.
- The price per square meter of each property was determined and compared and a mean value was determined for each zone.



Analysis of variance (ANOVA) and Kruskal-Wallis analysis was conducted

2

Potchefstroom case study: RESULTS

Neighbourhood value:

The impact of green spaces on the neighbourhood were thus evident, especially in cases where public had recreational opportunities in close proximity, and where the spaces were maintained, thus implying green spaces of function and use.

It seemed that the more uses and benefits a green space provide (collectively), the greater the positive impact on the neighbourhood will be.

Site value:

Proximity to green spaces did not enhance the property values, but most areas illustrated a decrease in property value per square meter.

Safety and security were found to be crucial in this regard



Way forward

Conclusions 

3

Findings

- ❑ Current planning approaches is inhibiting the provision and sustainability of ecotourism spaces.

- ❑ The value of green spaces should be enhanced in spatial planning:
 - Including value of green spaces and eco-tourism spaces as part of decision-making processes would entail identifying relevant benefits and translating it to a monetary value.

 - It could sensitise planners, policy makers and also the general public to realise the value of these areas

3

Findings

- ❑ Empirical findings illustrated that:
 - The Potchefstroom case study **contradicted** accepted international literature regarding proximity to green space and increased residential value
 - There are, however, **limited studies** conducted in South Africa following this approach, and more cities and methods needs to be tested in order to make reliable conclusions in this regard.
 - **Ecosystem disservices**, such as crime rates and noise should be taken into consideration when planning green spaces.

3

Future initiatives to plan ecotourism destinations

□ Future planning initiatives:

- (1) **Enhance green value:** Use valuation to determine potential economic benefit of green spaces, especially in local context.



- (2) **Change perceptions:** Social issues and ecosystem disservices need to be addressed in integrative spatial planning approaches



- (3) **Integrate:** Integrate environmental management (green-driven) and spatial planning (development-driven) in order to enhance the planning of ecotourism destinations



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Acknowledgements

This research (or parts thereof) was made possible by the financial contribution of the NRF (National Research Foundation) South Africa. Any opinion, findings and conclusions or recommendations expressed in this material are those of the author(s) and therefore the NRF does not accept any liability in regard thereto.

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