

# Differences in environmental attitudes by population groups and spatial areas in Gauteng

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1 October 2018



# Introduction

- Spatial variations in peoples' environmental attitudes are complex, and so are the determinants of environmental attitudes and place attachment
- Various studies have been conducted to examine the intricate relationship between environmental attitudes and attachment, for different land-use patterns, activities and geo-types
- Environmental values have also been closely linked to attitudes and place attachment.



# Problem statements

- Relationship between environmental perceptions, attitudes and place attachment remains understudied, especially in developing economies
- Studies mainly concentrated in Western and Eastern societies
- The relative importance and the major determinants of environmental perceptions, attitudes and place attachment need further examination, especially for a socio-economically and demographically diverse area like Gauteng
- Literature attests to intricate relationship between these factors. Causal link not always apparent, hence the need to test this in an environment like Gauteng
- Environmental perceptions, attitudes and attachment not spatially characterised over time and space



# Aim and Objective

## Aim

- To spatially characterise peoples' environmental attitudes and place attachment

## Objective

- To assess peoples' environmental attitudes and their attachment to place based on **population groups** and **spatial areas** in Gauteng Province, South Africa

# Environmental attitudes and place attachment



- **Environmental attitudes**

For purposes of this research, a generic approach to 'environmental attitudes' is adopted, environmental attitudes being the feelings, negative or positive, one develops towards one's surroundings. They are also expressed as perceptions and awareness to the environment

- **Place attachment**

Place attachment is defined as the feelings we develop towards places that are highly familiar to us, i.e., places we belong to. Thus, attachment to a natural area represents both an individual's internalized perceptions of the natural area (i.e., identity), as well as the extent to which he or she feels that visiting the natural area will fulfil motivational goals (i.e., dependence).

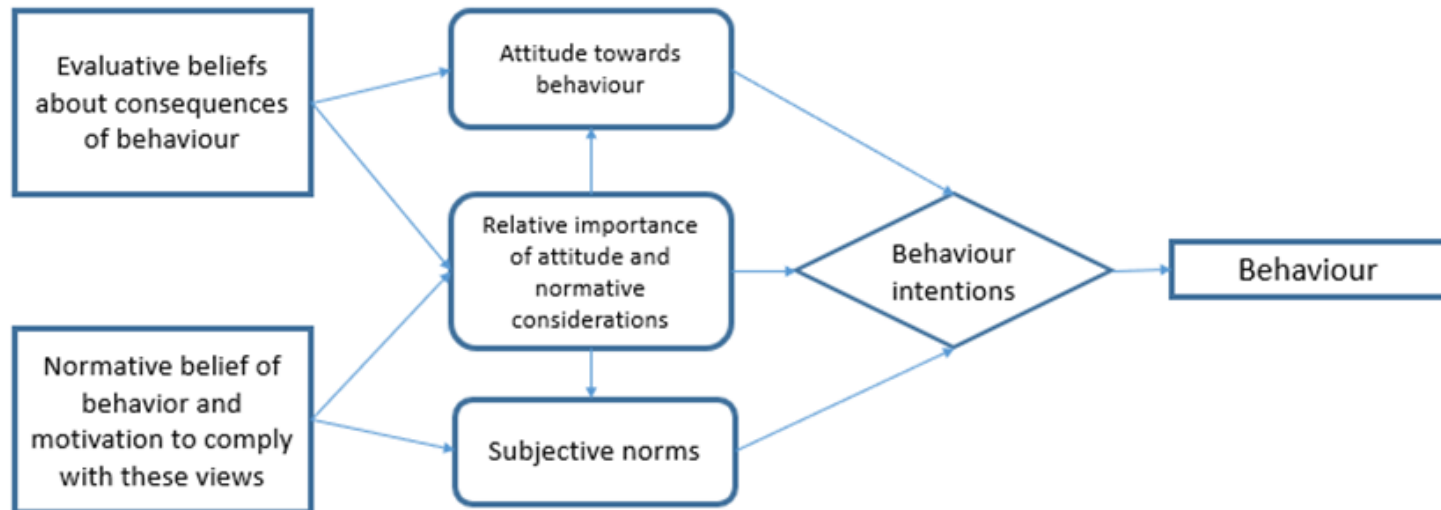
- **Environmentally responsible behaviour**

This is behaviour that consciously seeks to minimize the negative impact of one's actions on the environment (e.g. minimise resource and energy consumption, use of non-toxic substances, reduce waste production).

# Attitudes, attachment and environmental behaviour



- These have been explained by the Theory of Reasoned Action (by Ajzen & Fishbein, 1980).



# Study area

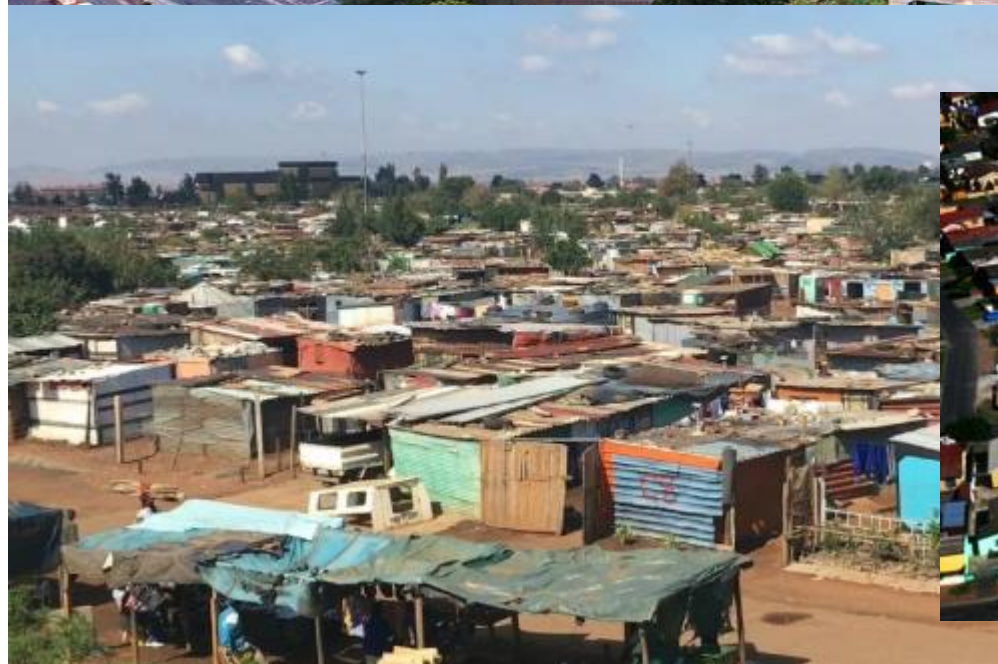


- Gauteng comprises 74.1% Black Africans, 19.1% Whites, 3.5% Coloured and 2.6% Indian or Asian
- Gauteng is rich in diversity as it draws in migrants from within and outside the country (Fiedeldey et al, 1998).
- The rich mixture of the eastern, western and African groupings within the Gauteng Province is likely to contribute to a mosaic of ways in which people relate to the environment





# A tale of 2 cities?



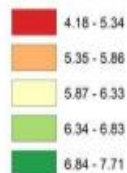




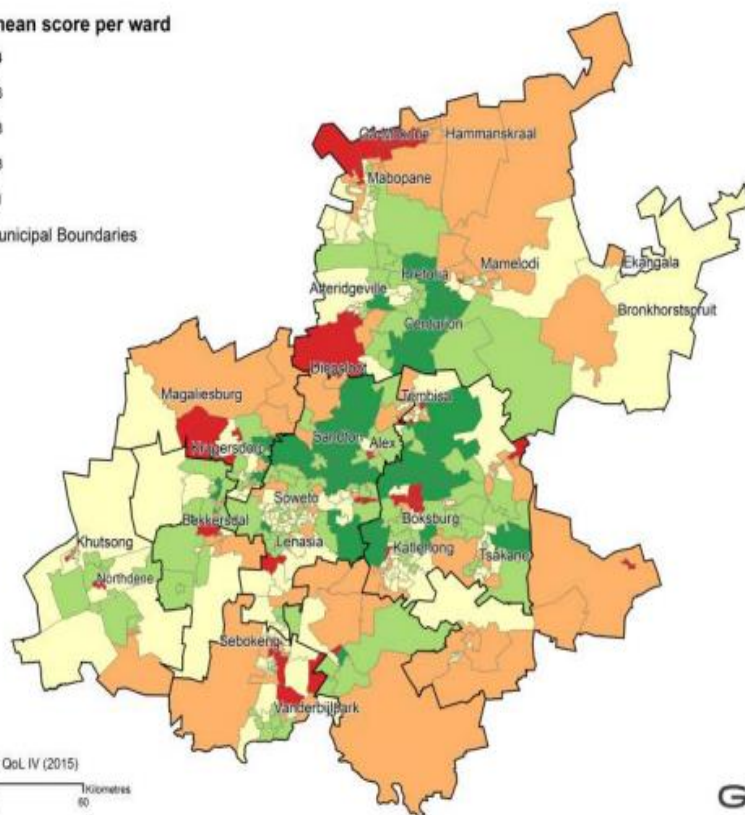
# Provincial disparities

## Quality of life index by Province

QoL Index: mean score per ward



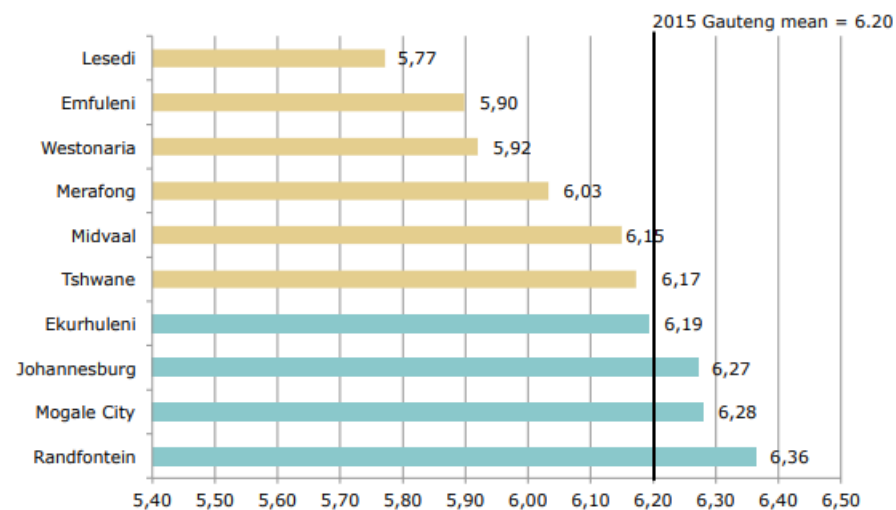
Local Municipal Boundaries



Data source: GCRQ QoL IV (2015)

0 15 30 60 Kilometres

## Quality of life index by municipalities



GCRQ | Gauteng City Region Observatory

GCRQ | Gauteng City Region Observatory

# Data and methods



- Data from the Gauteng City Region Observatory is used in this research
- The GCRO has biennially conducted QoL surveys in Gauteng since 2009 at ward level and setting indicators and benchmarks to spatially measure resident satisfaction levels
- The GCRO assembles mainly primary information into innovative data and products, using Geographic Information Systems (GIS) and statistical methods to spatially characterise resident satisfaction levels.
- A sample of 30 000 Gauteng residents aged 18 years and older, and spread across all 508 wards in the Province was drawn (2015)
- For this survey, the population of adults was sorted by wards, and then, within wards by dominant population group. Only the wards in Gauteng were sampled for the survey



# Data and methods cont.

- Survey data was extracted from the 2015 QoL questionnaires to determine environmental attitudes and place attachment

Environmental attitude	
Attribute	Response options
Have you seen an improvement or deterioration in this community or suburb in the last 12 months?	Improvement Deterioration No Change
What is the biggest (environmental) problem facing your community?	Air pollution Litter or dirt Noise Water pollution Other
I am worried about climate change	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
Gauteng is the best Province and I'd rather live here than anywhere else	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
I would emigrate tomorrow if I could	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
How satisfied are you with the area or neighbourhood where you live now?	Very satisfied Satisfied Neither satisfied nor dissatisfied Dissatisfied Very dissatisfied

# Results



Peoples' perceptions of biggest environmental problems in their area

Race group	Air pollution	Litter or dirt	Noise	Water pollution
African	1.8%	0.9%	0.9%	0.2%
Coloured	1.3%	0.5%	0.8%	0.2%
Asian/Indian	1.6%	2.4%	1.8%	0.1%
White	2.0%	2.0%	2.4%	0.2%

% of respondents on whether they are worried about climate change

Race group	Agree	Neither Agree nor Disagree	Disagree
African	60,1%	20,8%	19,1%
Coloured	64,7%	16,7%	18,6%
Indian/Asia	41,3%	16,7%	17,8%
White	64,6%	17,3%	18,0%

# Results cont.



Perceptions on improvement in community over past 12 months

Race Group	Improvement	Deterioration	No Change
African	28.9%	15.1%	56.0%
Coloured	31.3%	20.3%	48.4%
White	40.0%	17.3%	42.6%
Indian/Asian	36.6%	19.1%	44.4%

Distributions of respondents on satisfaction: about neighbourhoods they live in

Race Group	Satisfied	Neither satisfied nor dissatisfied	Dissatisfied
African	67,6%	14%	18,5%
Coloured	72,7%	12.9%	14,4%
Indian/Asia	83,5%	9.7%	6,8%
White	87,4%	8,80%	3,9%



# Is Gauteng the best place to live in, or would you rather emigrate?



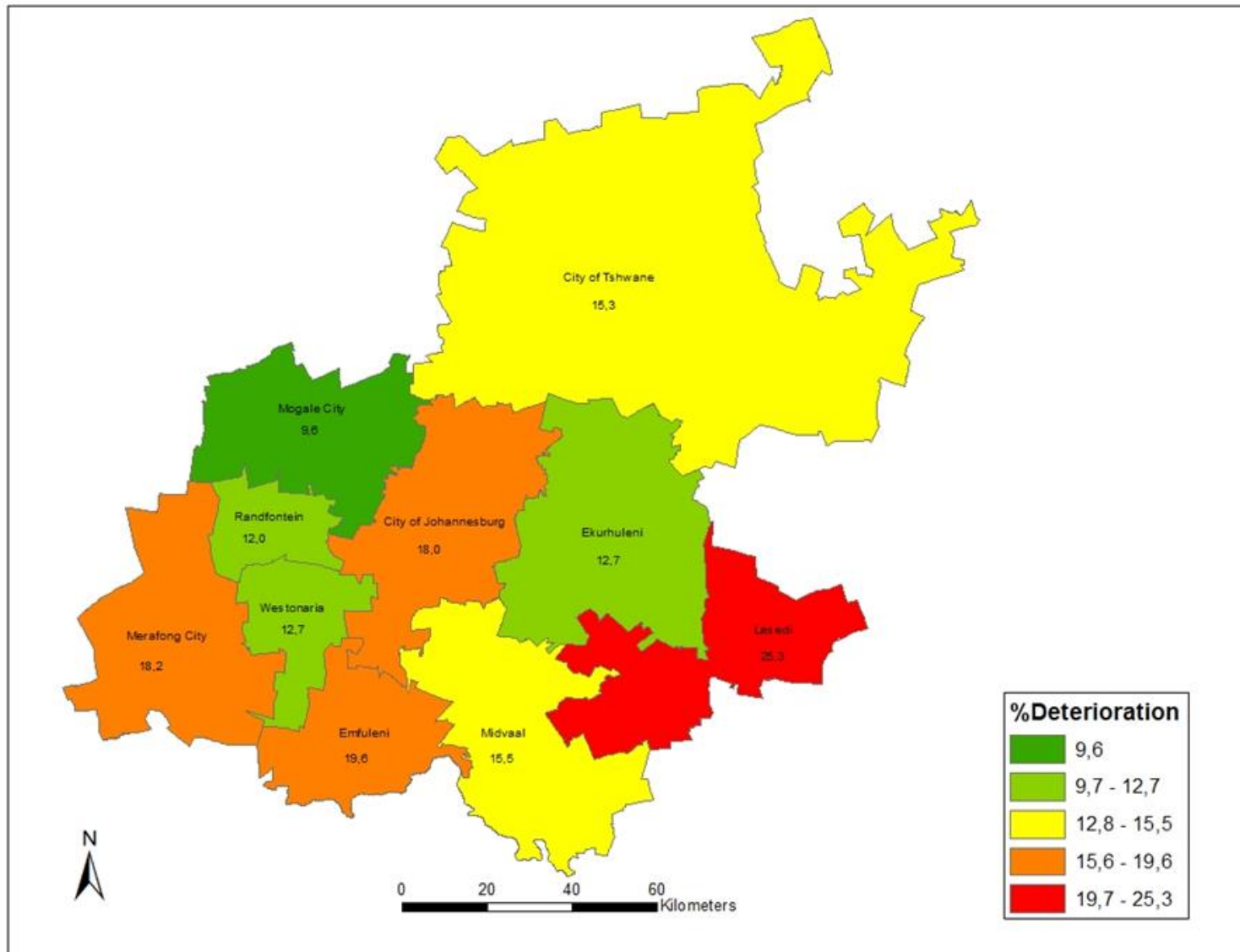
Race group	Agree	Neither agree nor disagree	Disagree
African	32,4	18,3	49,3
Coloured	28,9	19,9	41,1
Indian	31	23,1	45,8
White	30,6	18,4	51

Would you rather emigrate from the province?

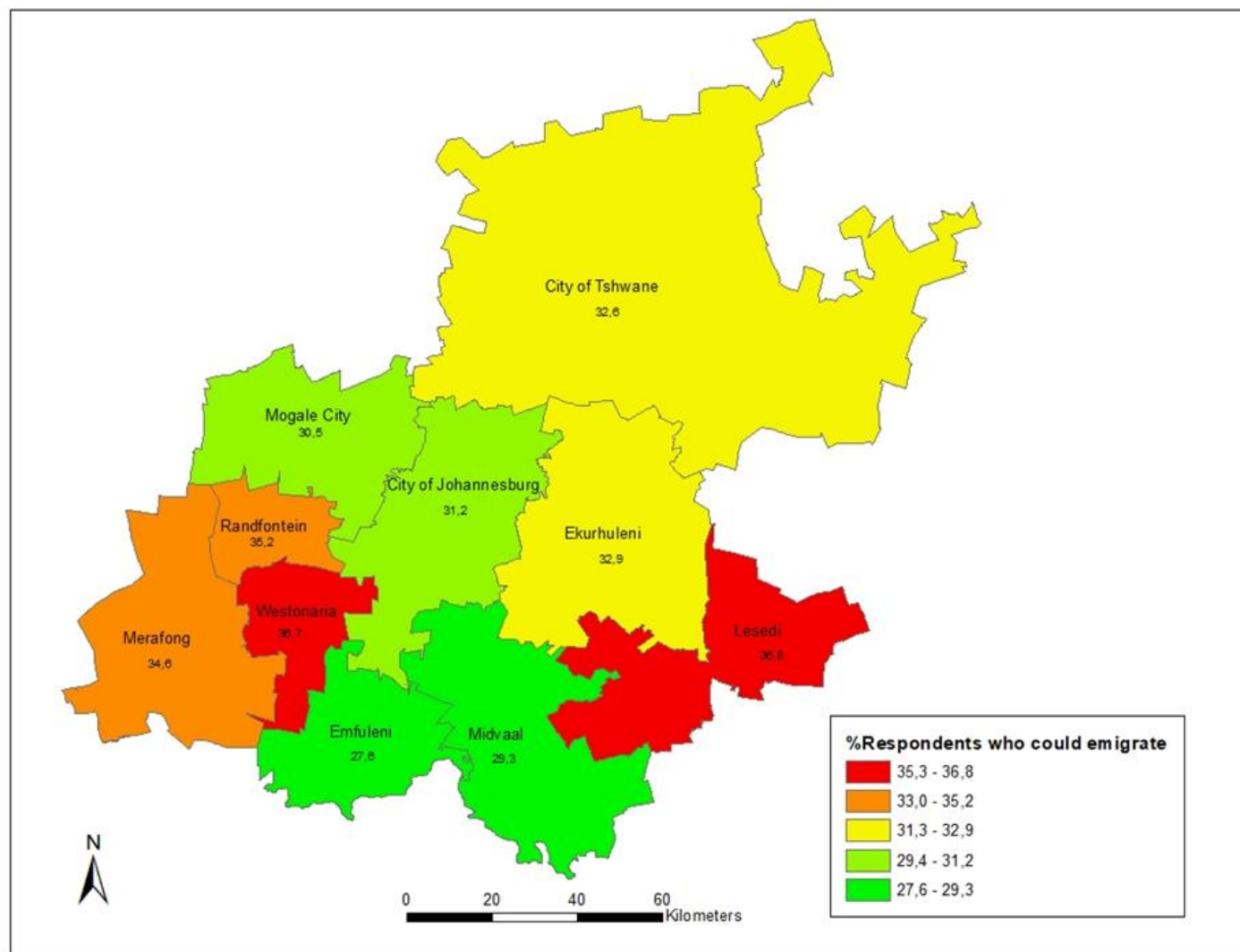
Municipality	Cumulative % residents saying Gauteng Best Province
Johannesburg	64.8
Tshwane	64.1
Ekurhuleni	64.2
Emfuleni	63.9
Lesedi	57.8
Midvaal	63.8
Merafong	61.4
Mogale City	67.9
Randfontein	78.5
Westonaria	58.1

Is Gauteng the best province to live in?

# % of respondents who feel there has been deterioration in environment



# % of People who would rather emigrate



# Conclusions



- Even though some population groups expressed feelings of happiness about their environment, they still felt that they would rather emigrate from the Province (e.g Indians/Asians) – low place attachment
- Similarly, even Black people felt they has been deterioration in their environment, they would stay rather than emigrate – higher place attachment
- Lesedi residents seem the most dissatisfied, as they felt Gauteng is not the best province to live in, and that they would rather emigrate, and that there has been a deterioration in their environment – negative environmental attitude

# Conclusions cont..



- Ekurhuleni and Randfontein showed more positive attitudes to their environment and the Province in general
- Further research should ideally link service delivery attributes like satisfaction with sanitation services and provision of other essential municipal services to environmental attitudes and population group
- Other relevant attributes may be socio-economic factors like levels of education and income, length of stay and migration status within the Province. This study is an on-going research and will explore this angle further

END





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