

**HSRC Conference**

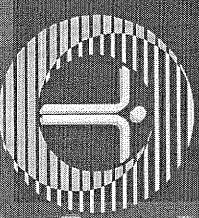
**July 2003**

**A framework for analysing  
poverty and inequality in  
GIS**

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**Chief GIS Specialist**

**HSRC GIS Centre  
Pretoria**



HSRC RESEARCH OUTPUTS  
3071

## HSRC Conference

# A framework for analysing poverty and inequality in GIS

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## Outline

### **Measuring poverty and solutions**

#### **Multi-dimensional facets of poverty**

- Urbanisation
- Migration
- Welfare
- Poverty
- Development funding
- Environment

#### **Concluding remarks**





# Measuring poverty

## Economic

- Lack of income

## Social

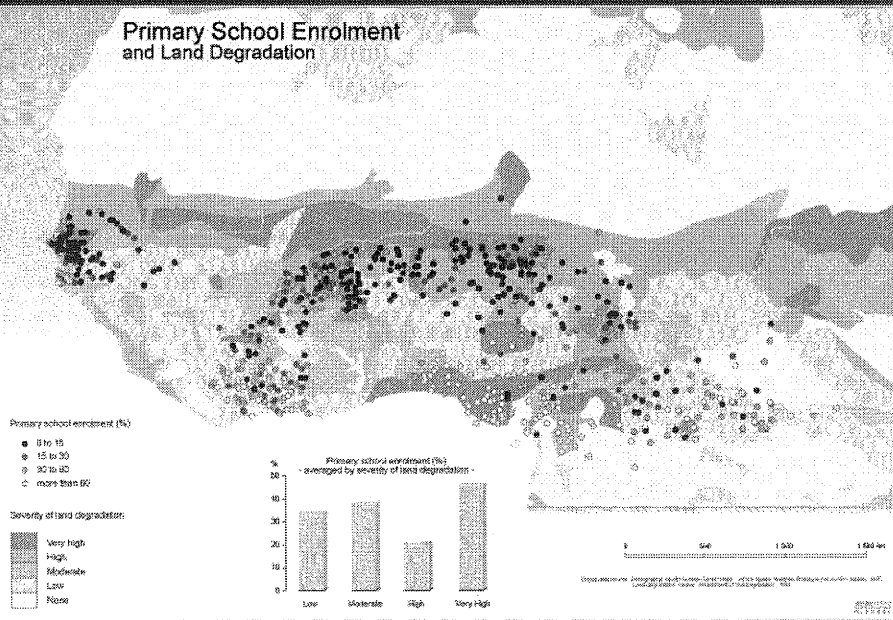
- Lack of nutrition
- Urbanisation
- Lack of sanitation
- Lack of access to education

## Environment

- Lack of access to opportunities



## Primary School Enrolment and Land Degradation



## Why poverty maps?

- Displays geographic variance
- Identifies geographic factors influencing poverty
- Improves targeting of resources and interventions
- Communicates information about poverty
- Acts as policy development tool
- Aids as research tool



## Urbanisation

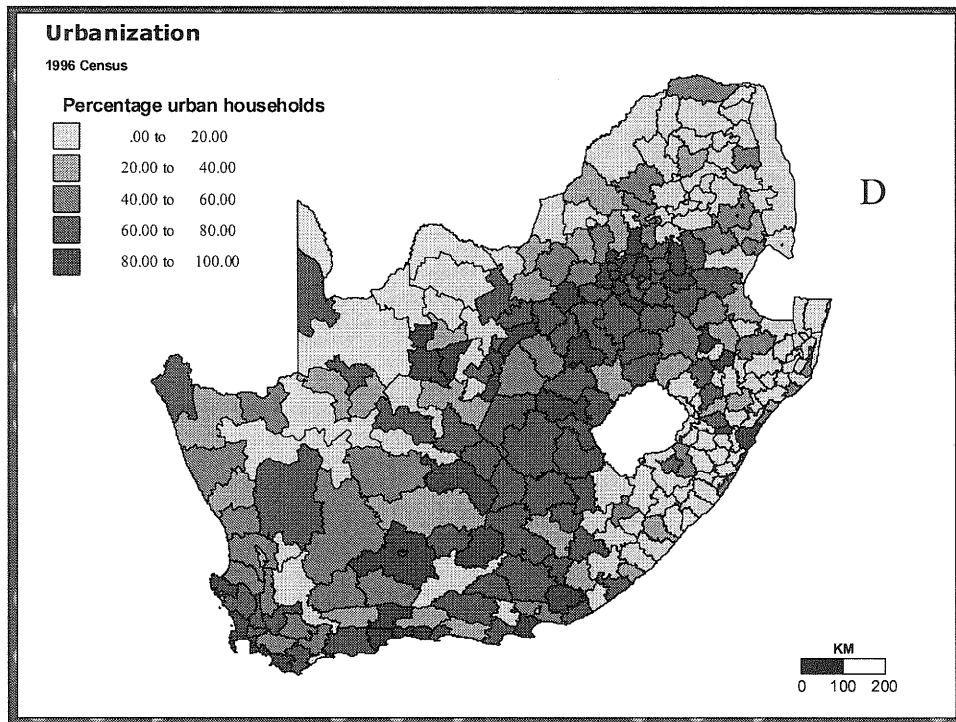
### Characteristics

- Loss of fertile soil
- Pollution of water bodies (dumping)
- Unplanned settlements
- Improper waste/sewerage disposal
- Vehicle emissions/ Influx of people
- Impact on human health and living conditions

### Requirements to address it

- Detailed data on a local level
- Data on population, land availability, new developments, accessibility, etc.





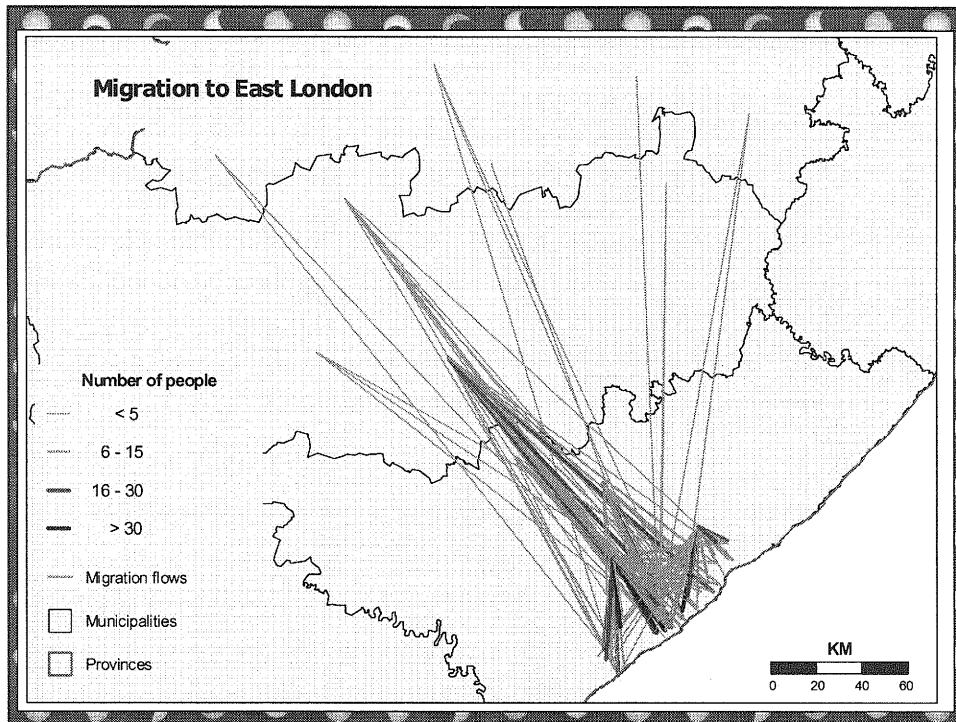
## Migration

**People movements:**

- Job opportunities
- Refugees (forced to immigrate)
- Exiles (displaced within own country)
- Access to education
- Access to infrastructure
- Political restructuring







## Social Development

**National level indicators**

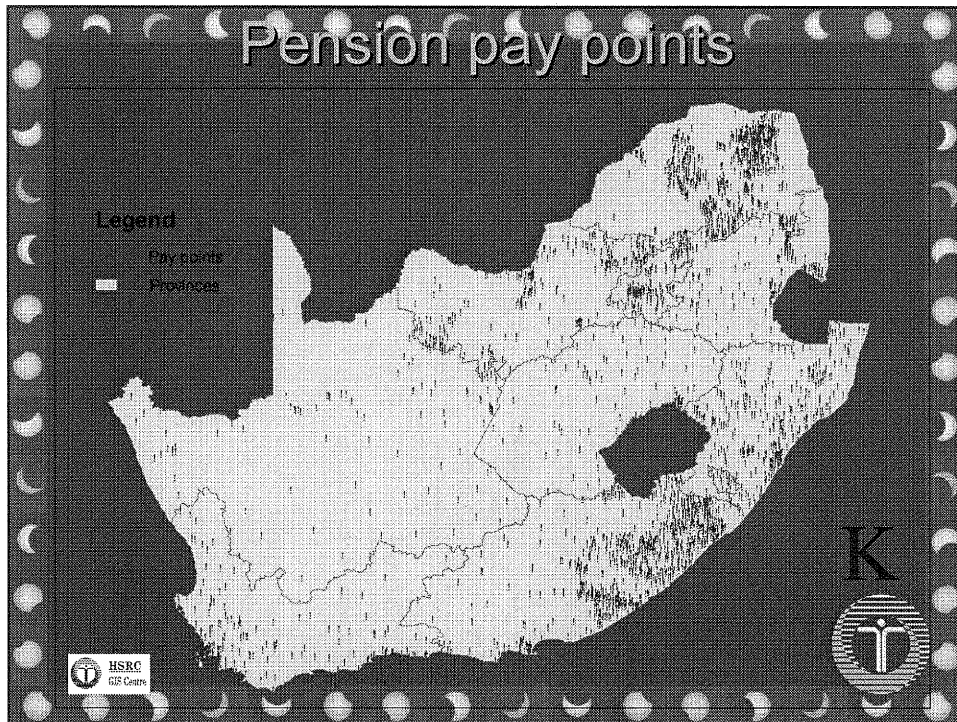
**Subsidies and intervention schemes**

**Location and number of beneficiaries**

**Reduce payments to non-poor people**

**Efficiency**





## Poverty

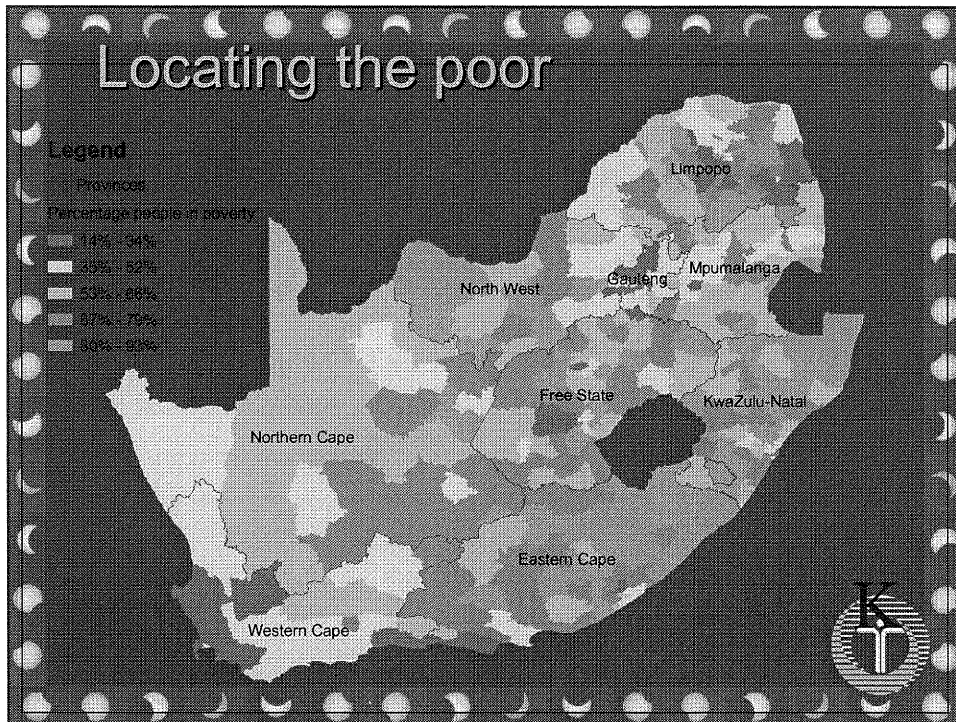
**Visual comparison to identify spatial clusters or trends**

**Detailed data required at local level**

**Mapping as research tool**

- Individualistic explanations
- Structural explanations

The slide features a decorative border of alternating circles and crescent moons. In the bottom-right corner, there is a logo with the letter "I" above a stylized figure.



## Development funding

**Funding for development**

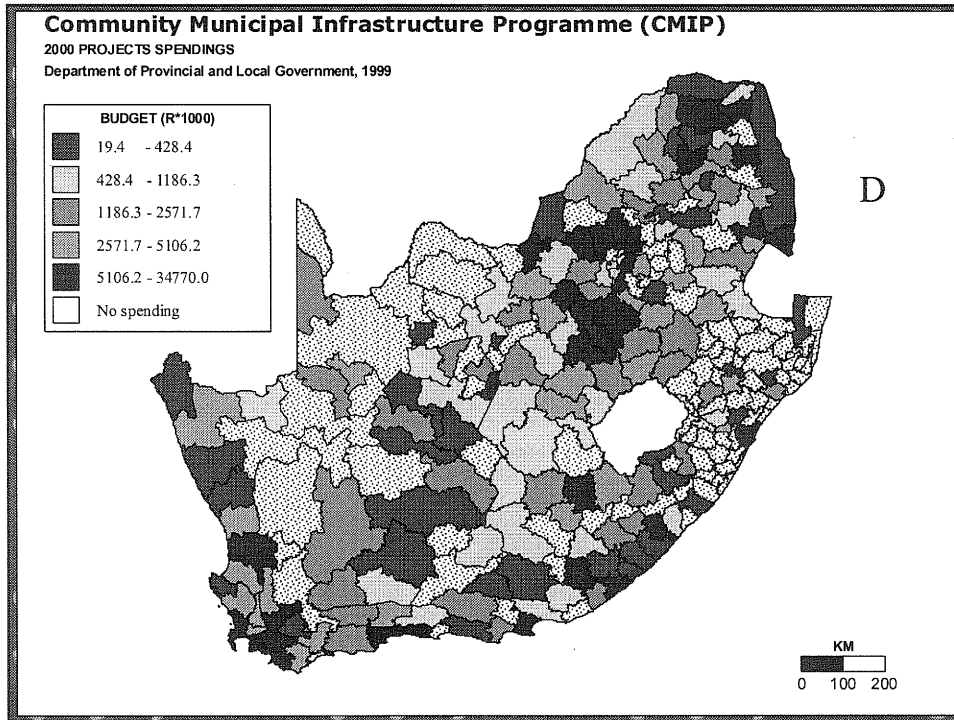
**Different levels of government**

**Identify:**

- Amount
- Purpose
- Financial year
- Donour
- Source

**Compare at same spatial level**





## Conclusion

- Identify inputs to data set
- Database design
- Update data
- Interpret data
- Data dissemination