

The Application of Qualitative Geographic Information Systems (Q- GIS) to the study of Community Decline in LaBrea, Trinidad

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OVERVIEW

1. Natural Resource Dependent Communities (NRDC's), Community Decline and Civil Society
2. LaBrea, Trinidad
3. Research Questions
4. Methodology
5. Findings
6. Recommendations

Community Decline, Natural Resource Dependent Communities (NRDC's) and Civil Society

- NRDC's- are driven by the activity of industries which extract or process any resource(s) found in the surrounding areas of the community (Smith, Krannich and Hunter 2001).
- Community Decline- a reversal of the gains the community attained as a result of this activity. (Grigsby and Corl 1983; Aalbers 2006).
- Civil Society in NRDC's emerge to ensure that residents benefit from natural resources and to counter the negative issues which may arise as a result of having natural resources.

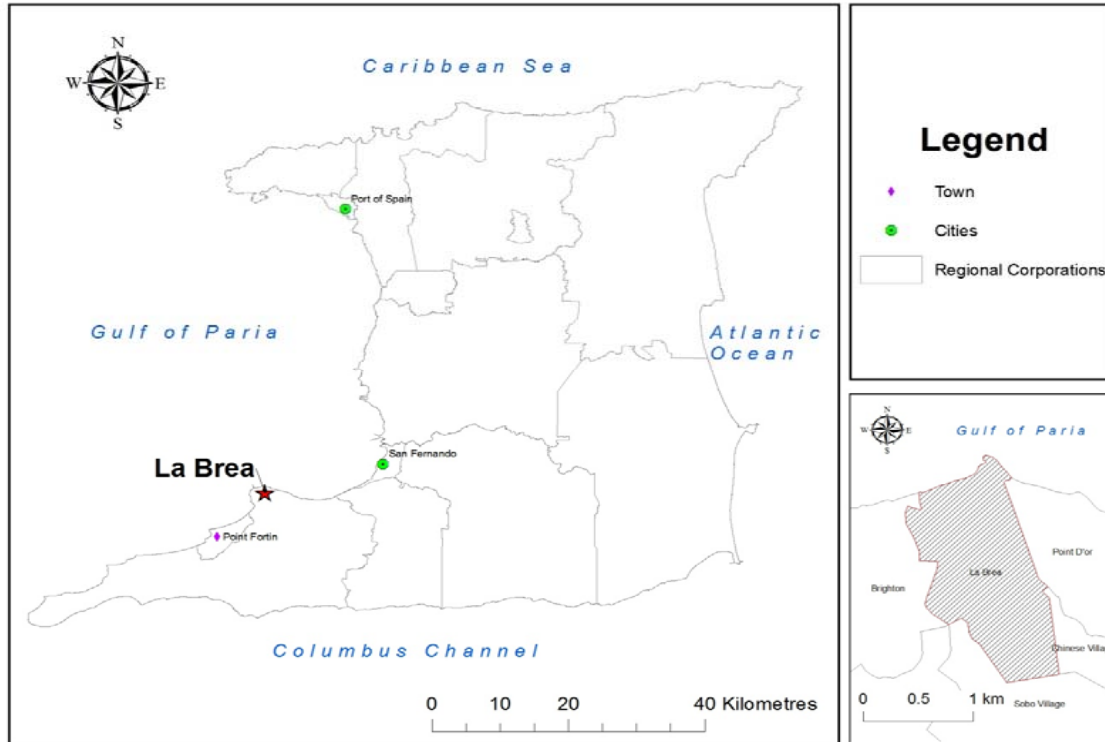


Figure 1.1: Map of Trinidad showing the location of La Brea

Major Research Questions

1. What insight(s) into community decline can the phenomenological approach to qualitative research provide?
2. What meanings do civil society leaders attach to the process of community decline?
3. How do people view their community spatially?
4. How different is the subjective versus the objective considerations of LaBrea as a geographical district?

METHODOLOGY

PHENOMENOLOGY

GEOGRAPHIC
INFORMATION SYSTEMS

Phase One
Descriptive

Phase Two
Interpretive

Phase Three
Action

Phase One
Base Map/
Geo Referencing

Phase Two
Digitizing

Phase Three
Building Tables of
Data and Symbols

Phase Four
Spatial Analysis

Temporal Analysis

Targeted Approach

Intensity Mapping

Sub Mapping

Spatial
Development
Strategies

PHENOMENOLOGY

DATA COLLECTION

- Purposive Sampling Method
- In-Depth Semi- Structured Interviews
- Phenomenological Interviewing Format (Schutz 1967; Seidman 1998; Rossman and Ralis 2003)

DATA ANALYSIS

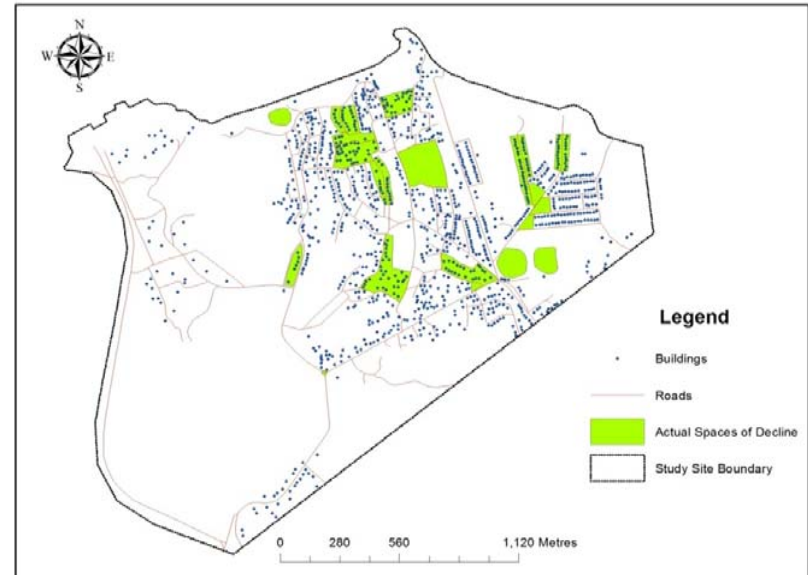
- Phenomenological Reduction (Creswell 2013) trimmed data to 88 Significant Statements
- 9 Clusters of Formulated Meanings.
- 4 Themes

Descriptive and Interpretive Phase

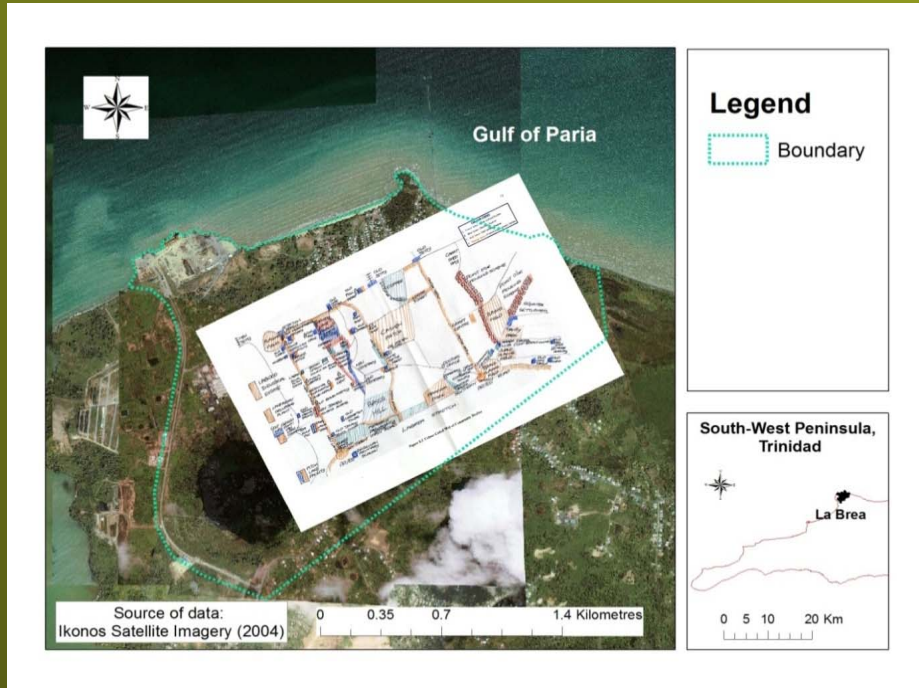
CLUSTERS OF SIGNIFICANT STATEMENTS	FORMULATED MEANINGS
History, Education, Employment and Land Tenure	“They still see us as slaves”
Corporate Social Responsibility	“Most residents do not benefit from the wealth extracted from our area”
Dispossession and Powerlessness	“It is too easy to take things away from us”
Protest, Migration, Disenchantment and Withdrawal	“Different Groups respond differently to Community Decline”
Poor Communication, Voting Patterns, Party Politics and Geographical Bias	“Good Governance is almost impossible”
Demographic Transition	“The elderly are dying without passing on their ways of living”
Livelihood and Long Term Development	“There is an absence of Sustainable Development Initiatives in LaBrea”
Co- optation, Infighting and Opportunity Hoarding	“Civil society must exist as an independent and empowered entity”

GEOGRAPHIC INFORMATION SYSTEMS

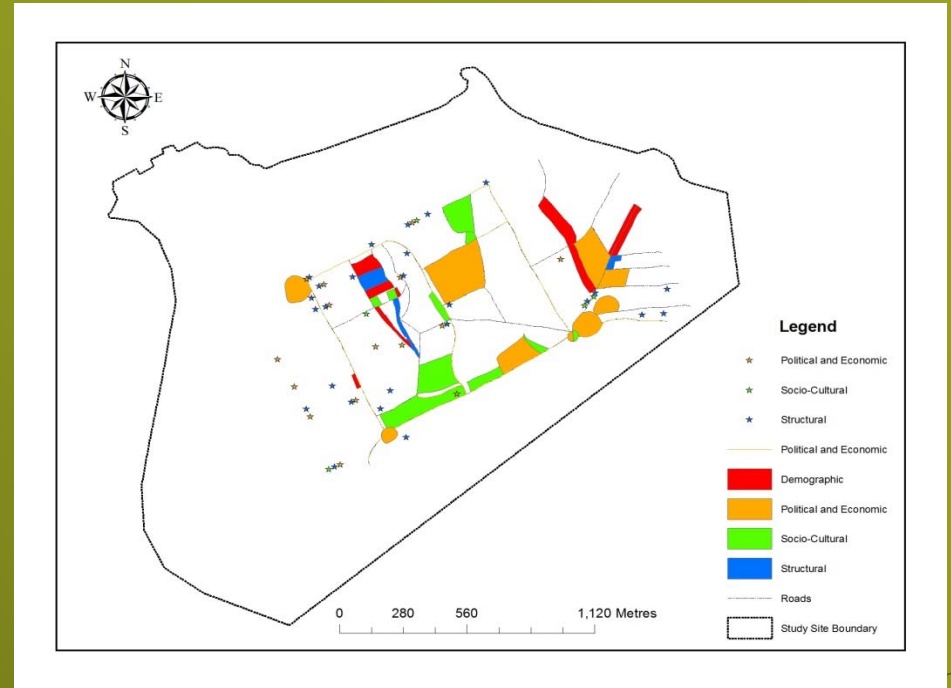
Phase One- Digitising of Satellite Image



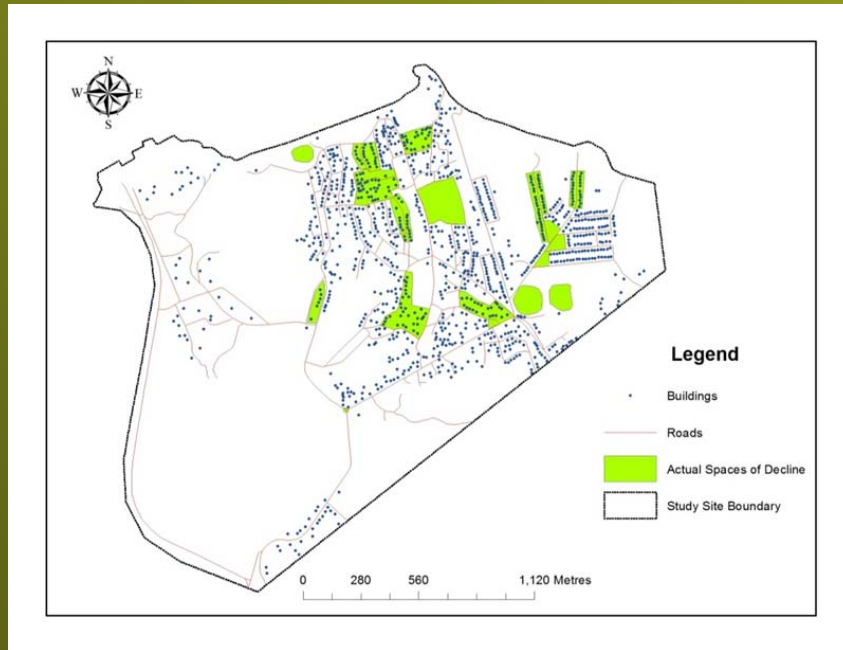
Phase Two Geo- Referencing



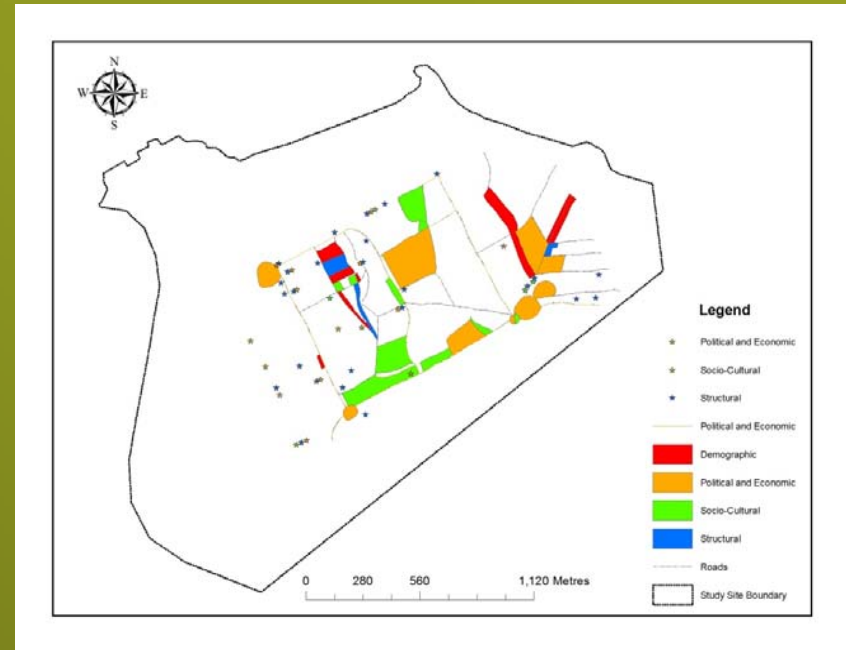
Phase Three Digitising of Sketch Maps



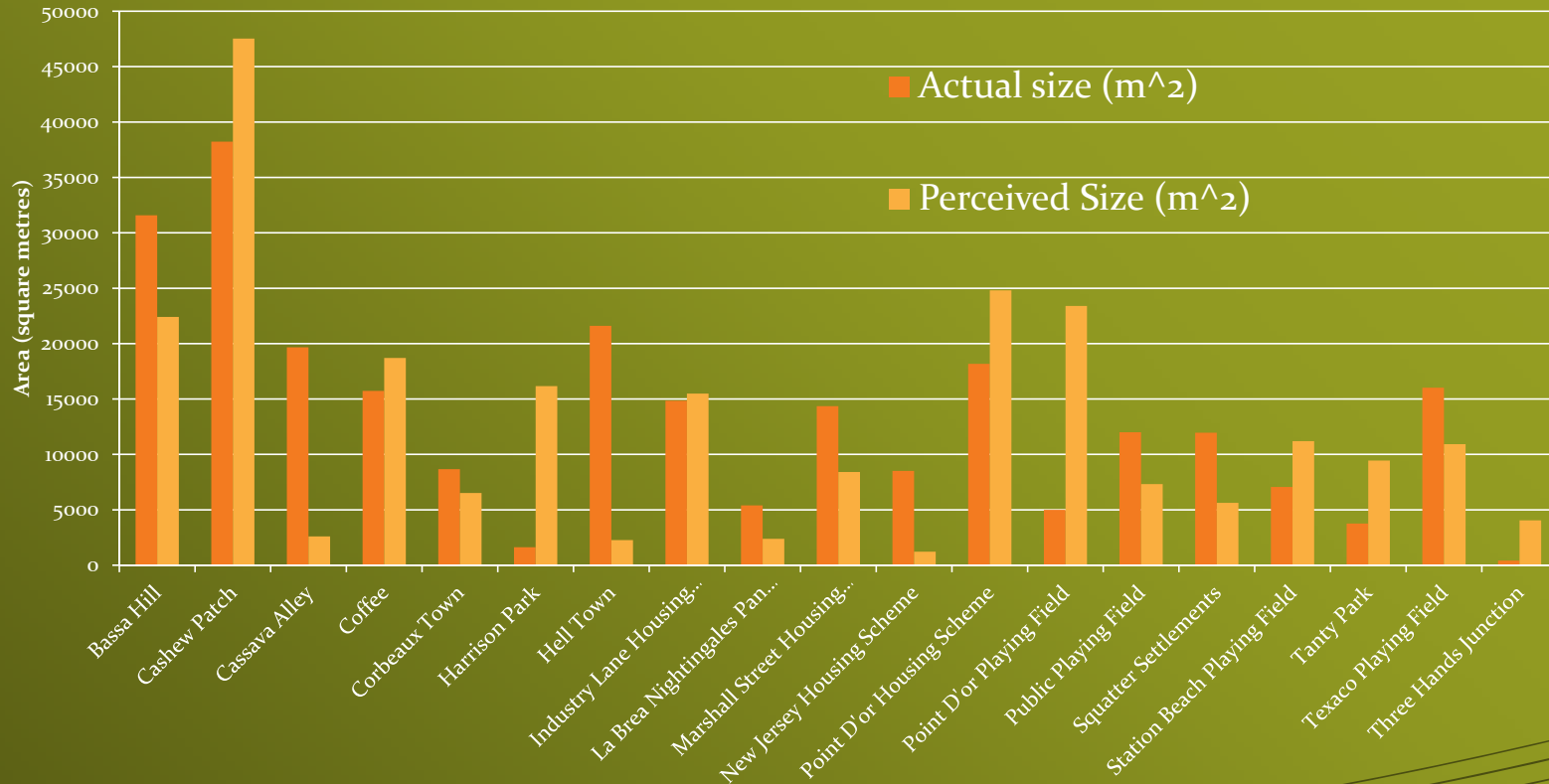
REALITY (SATELLITE)



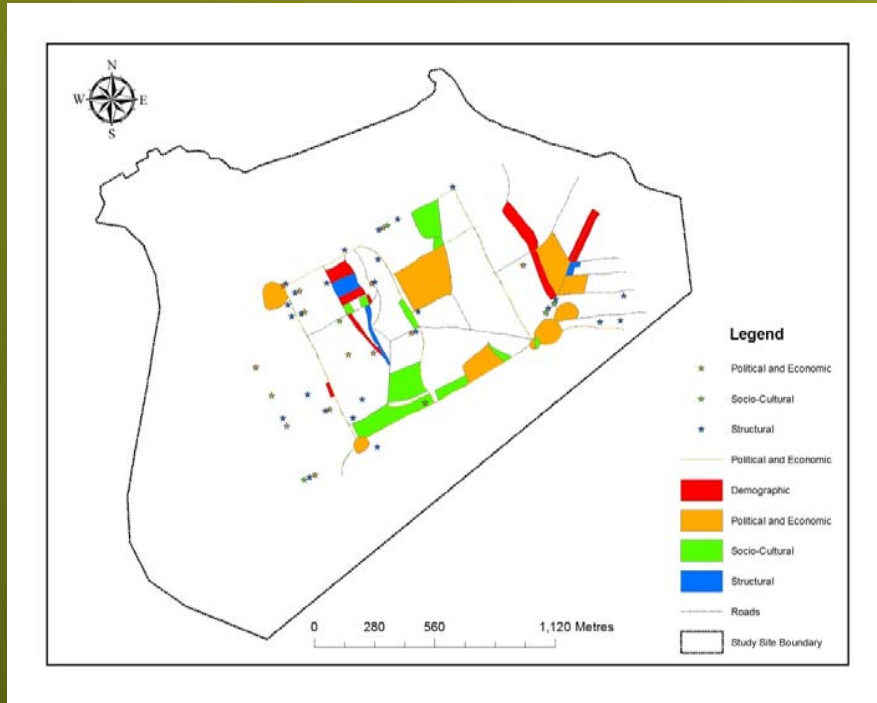
SUBJECTIVE (SKETCH MAPS)



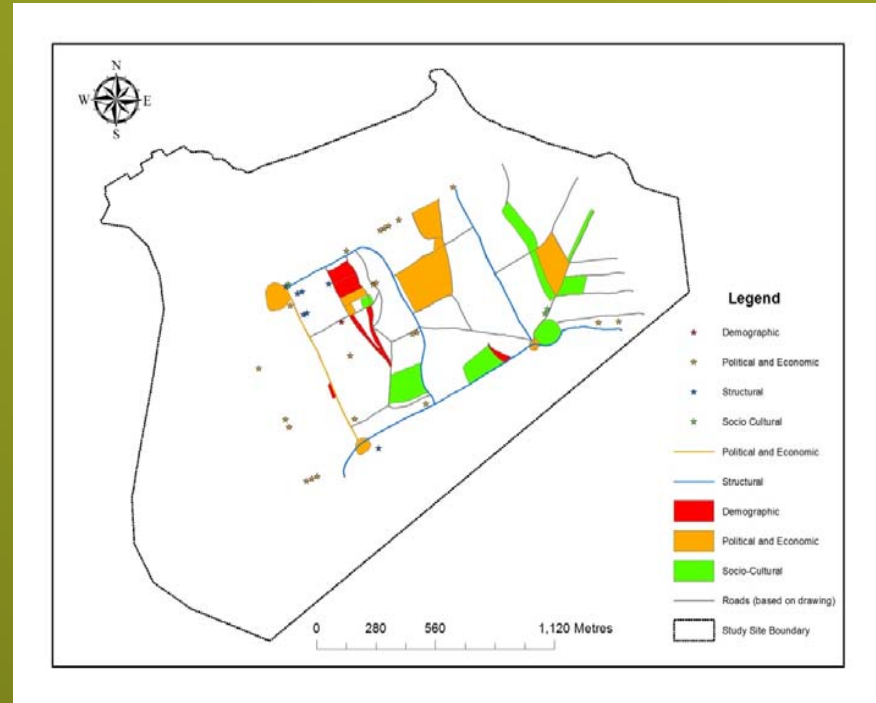
FINDINGS



FINDINGS

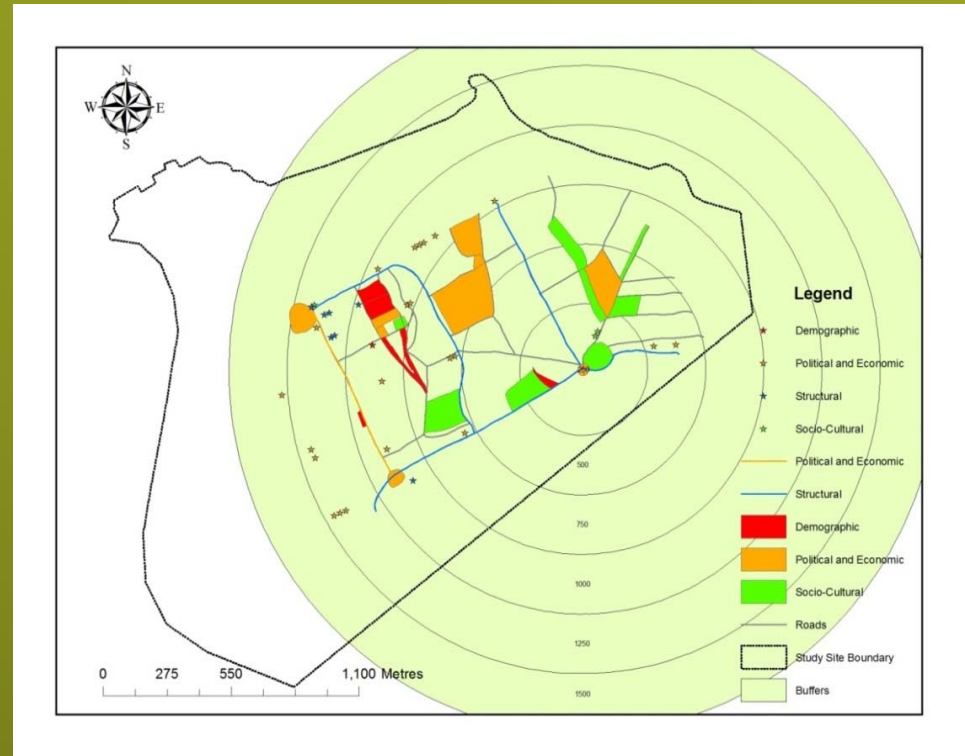
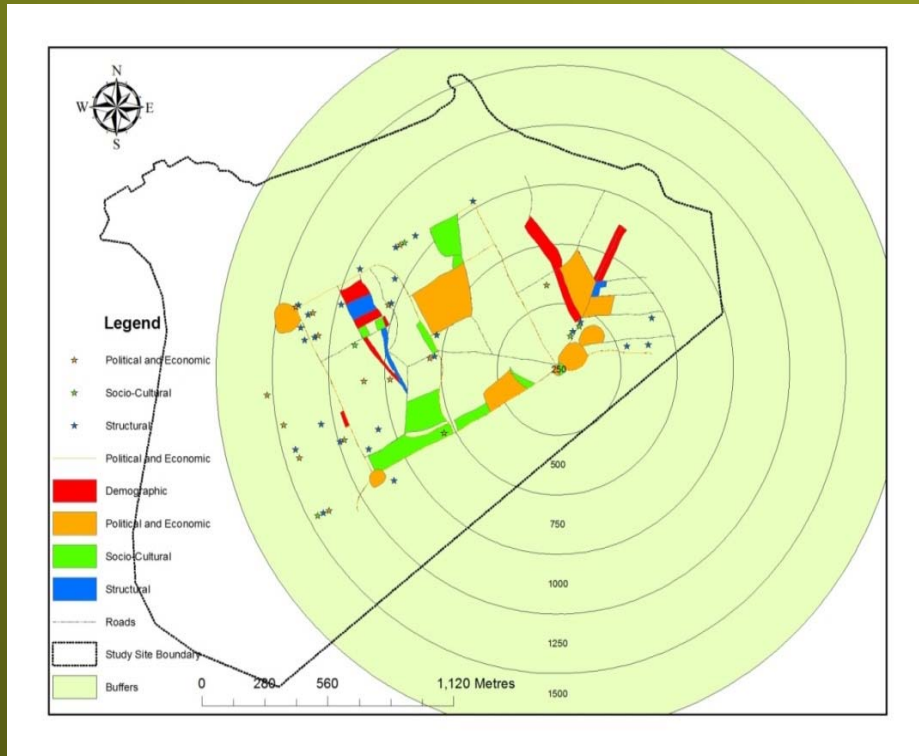


**SUBJECTIVE
{SKETCH MAPS}**



INTENSITY MAPS

FINDINGS- BUFFERS



RECOMMENDATIONS

- Planning and Development initiatives should involve an amalgamation of subjective maps, objective maps and the techniques of Q- GIS. Q-GIS can proven to be useful in creating a framework for bridging theory, spatial considerations and collaborative decision- making because of its potential in bridging the epistemological gap between subjective and objective data.
- Q- GIS can lead to a more targeted approach to community development and regeneration initiatives.

RECOMMENDATIONS

- Q-GIS can be used to broaden the scope of the recently instituted Civil Society Network and the Ministry of Planning and Sustainable Development's National Spatial Development Strategy for Trinidad and Tobago.
- Q- GIS allows for more of a **Grassroots or Bottom up approach** that is in keeping with the practice of people centred development.

THANK YOU

The background features a solid green upper section and an orange lower section. A series of thin, dark green wavy lines separate the two colors, curving from the bottom left towards the right. The orange area contains faint, stylized botanical illustrations, including leaves and what appears to be a cross-section of a fruit or vegetable.