MTIM / MEM / MPM SYMPOSIUM

Transforming Informal Settlements Into Sustainable Communities: A Systems Thinking Perspective

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Introduction

- Rapid urbanisation has led to a persistent formation of informal settlements.

- Informal settlements encompass a range of issues, including overcrowding and unemployment.

- Contribute to social, economic, and environmental challenges.

- Urgent need to transform these informal settlements into sustainable communities

  - ❖ Mitigate marginalisation

  - ❖ Promote inclusivity

Research Objectives

- Policy development framework
- Identify issues and drivers impeding the transformation of informal settlements into sustainable communities.
- Use Systems Thinking tools to analyse behavioural patterns and understand the dynamic complexities of informal settlements

Research Questions

1. What framework would support the development of suitable policies to support the transformation of informal settlements into sustainable communities?

2. What are the policy drivers and issues impeding the transformation of informal settlements into sustainable communities?

Wicked and Messy Problems

- Interconnected and interdependent
- Symptoms of another problem
- No clear solutions and stopping points
- Require engagement with various stakeholders

Sustainable Communities (SDG 11)

- Decent and affordable homes
- Diverse and Inclusive
- Access to jobs and services for all
- Safe, well-planned, built, and run
- Offer equal opportunity

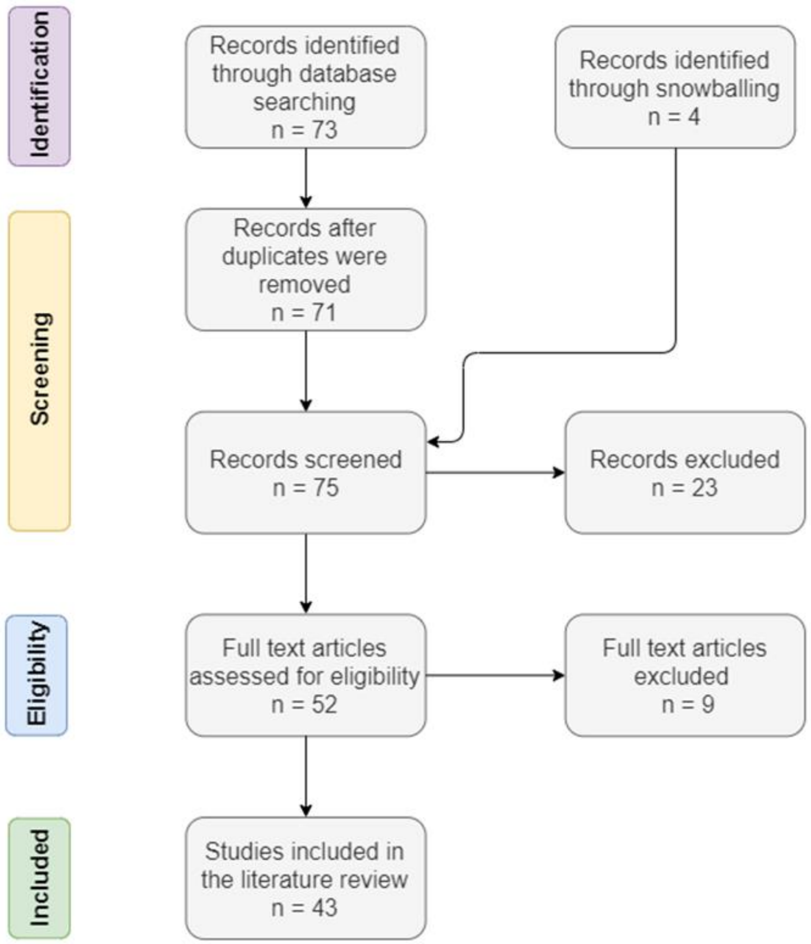
Policies

- Play a pivotal role in fostering sustainable development
- Powerful tools for shaping social, economic, and environmental outcomes
- Alignment and integration of policies across different government departments

Participatory Systems Mapping

- A form of system dynamics that helps maximise stakeholder engagement
- Used to conduct research in sustainable development
- Helps bridge the gap between research and policy

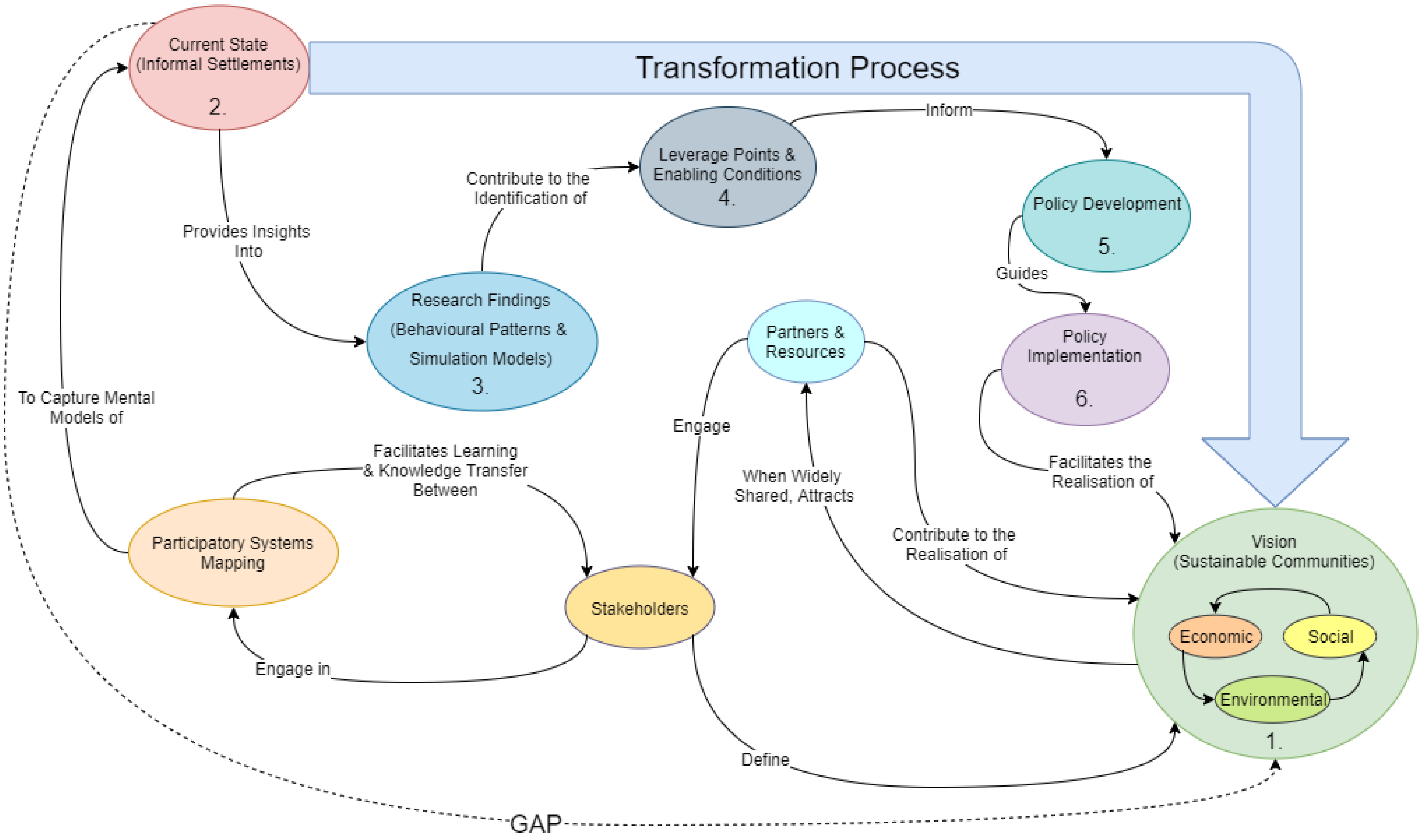
Research Methodology: Systematic Literature Review



Data Analysis Method

- Grounded Theory Analysis

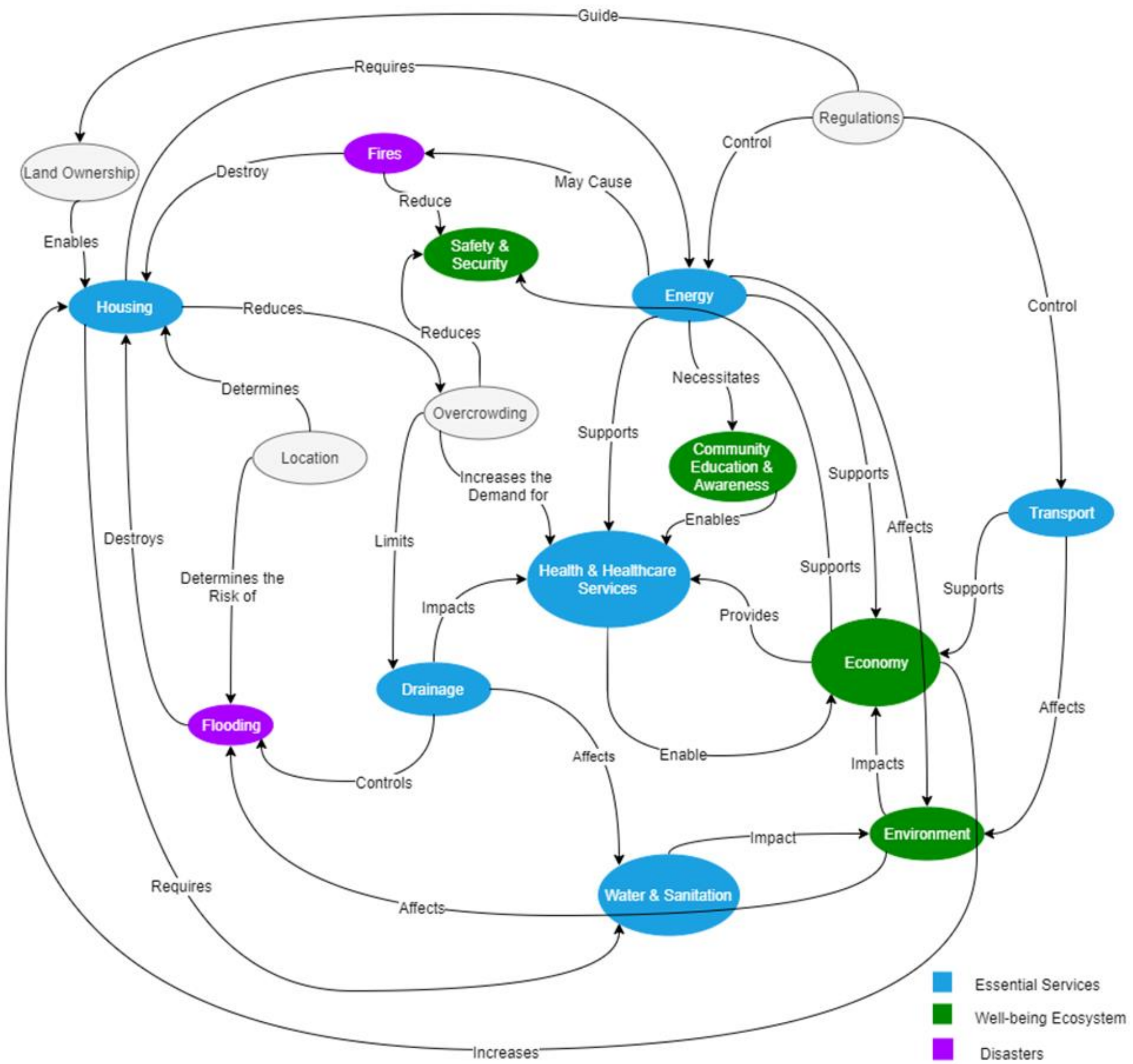
Initial Framework for Policy Development



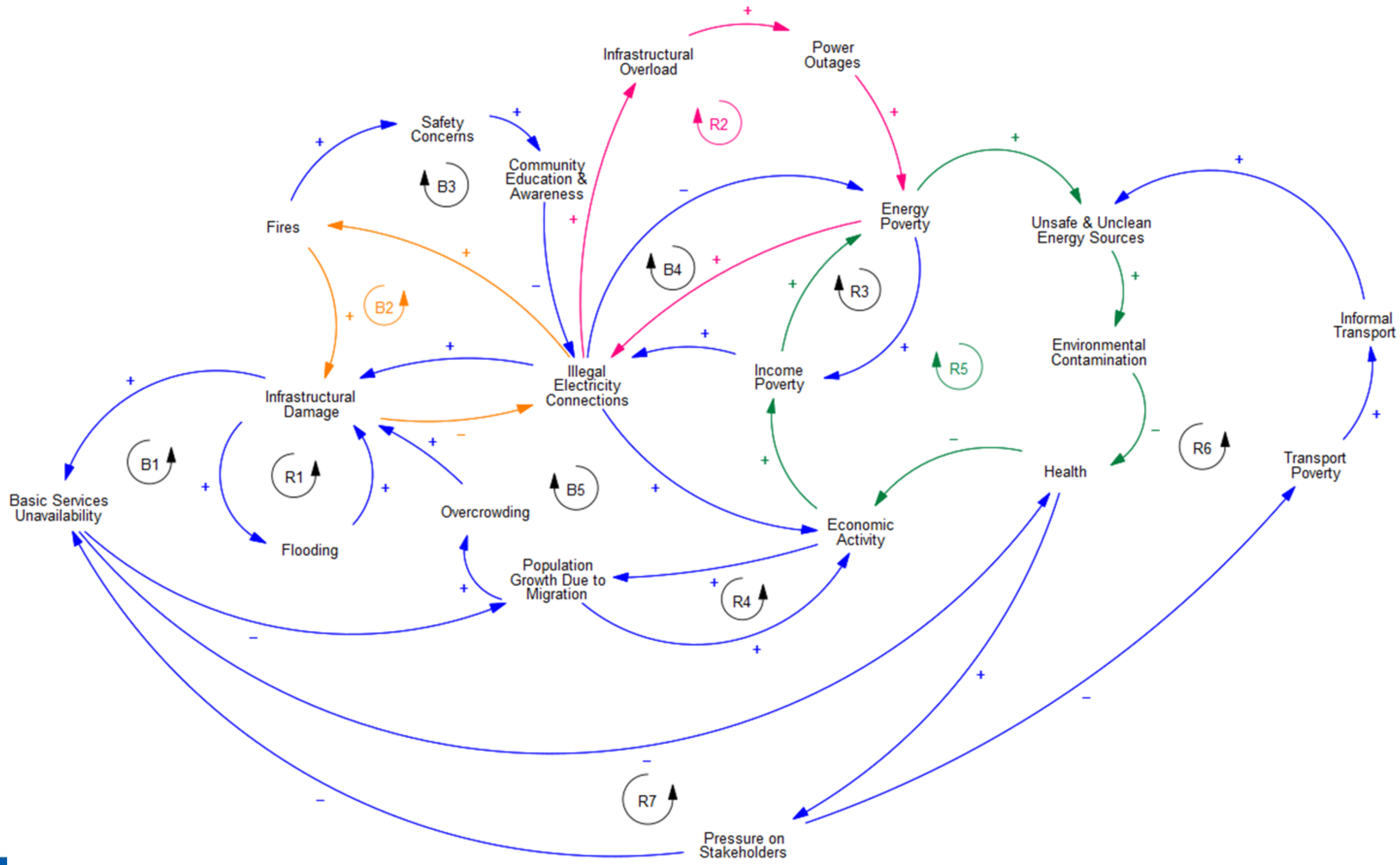
Policy Drivers and Issues

- Energy
- Water and Sanitation
- Flooding and Drainage
- Housing
- Health
- Transport
- Economic Activity

Systemic Relationships Between Drivers and Issues



Initial Causal Loop Diagram



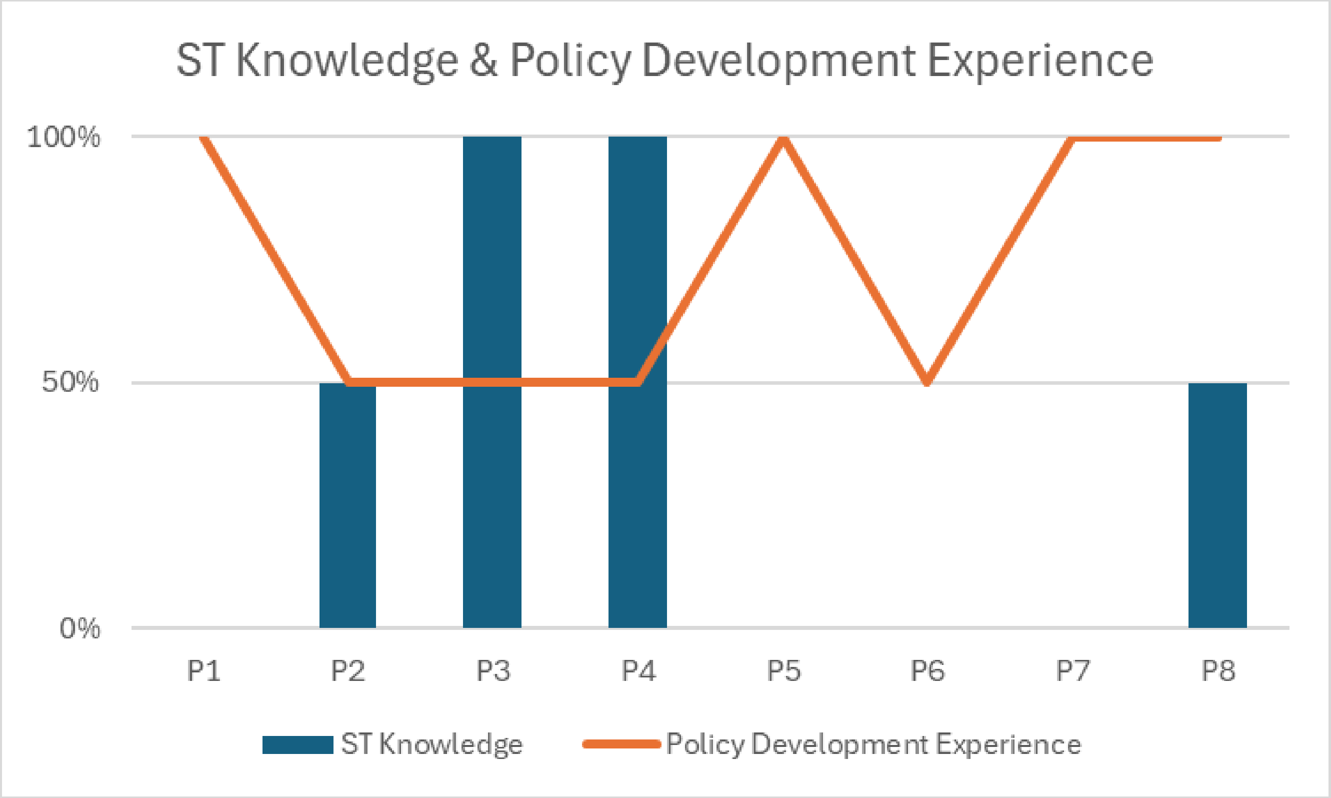
Research Methodology: Primary Research

Focus Group

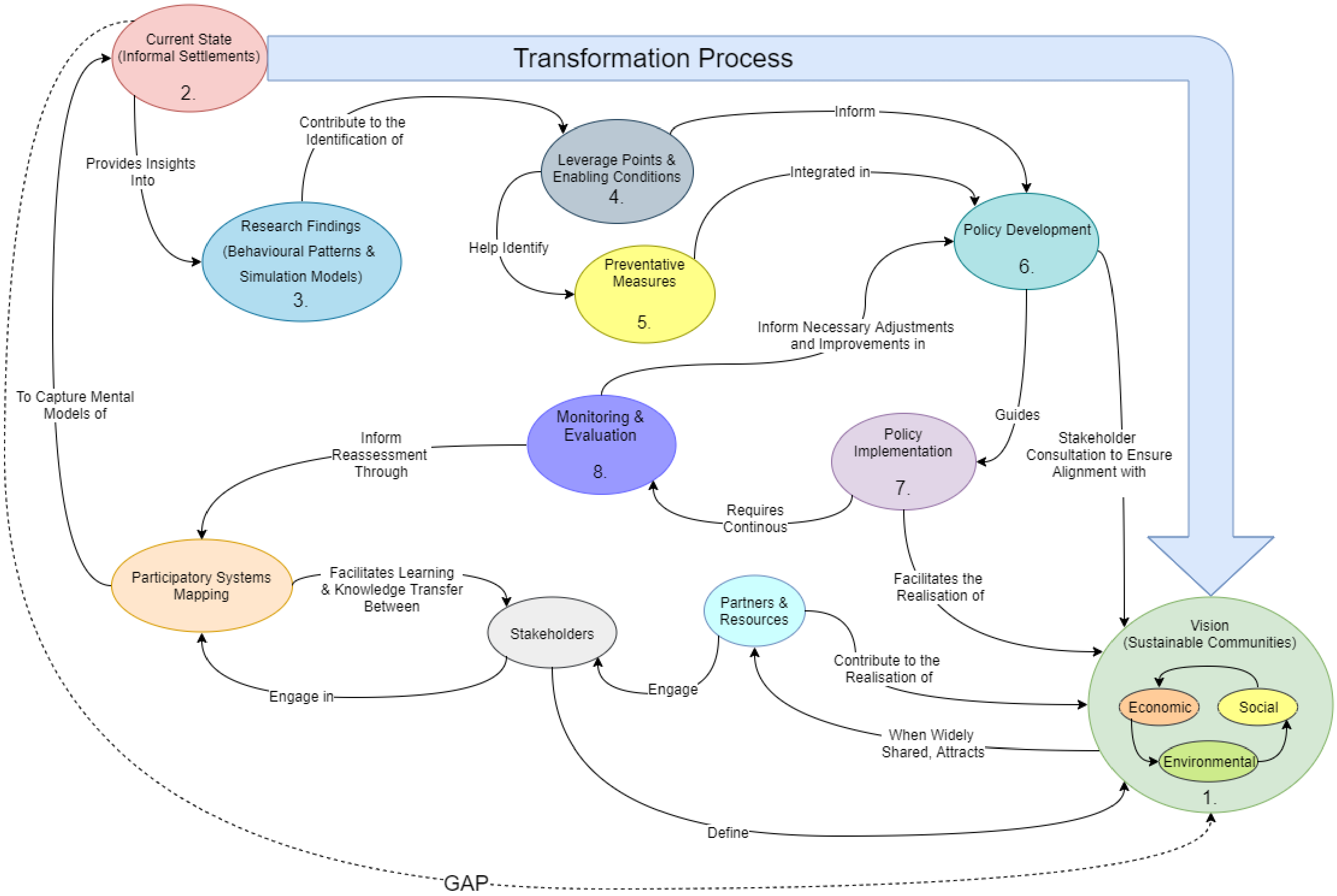
- Eight Participants

Research Philosophy

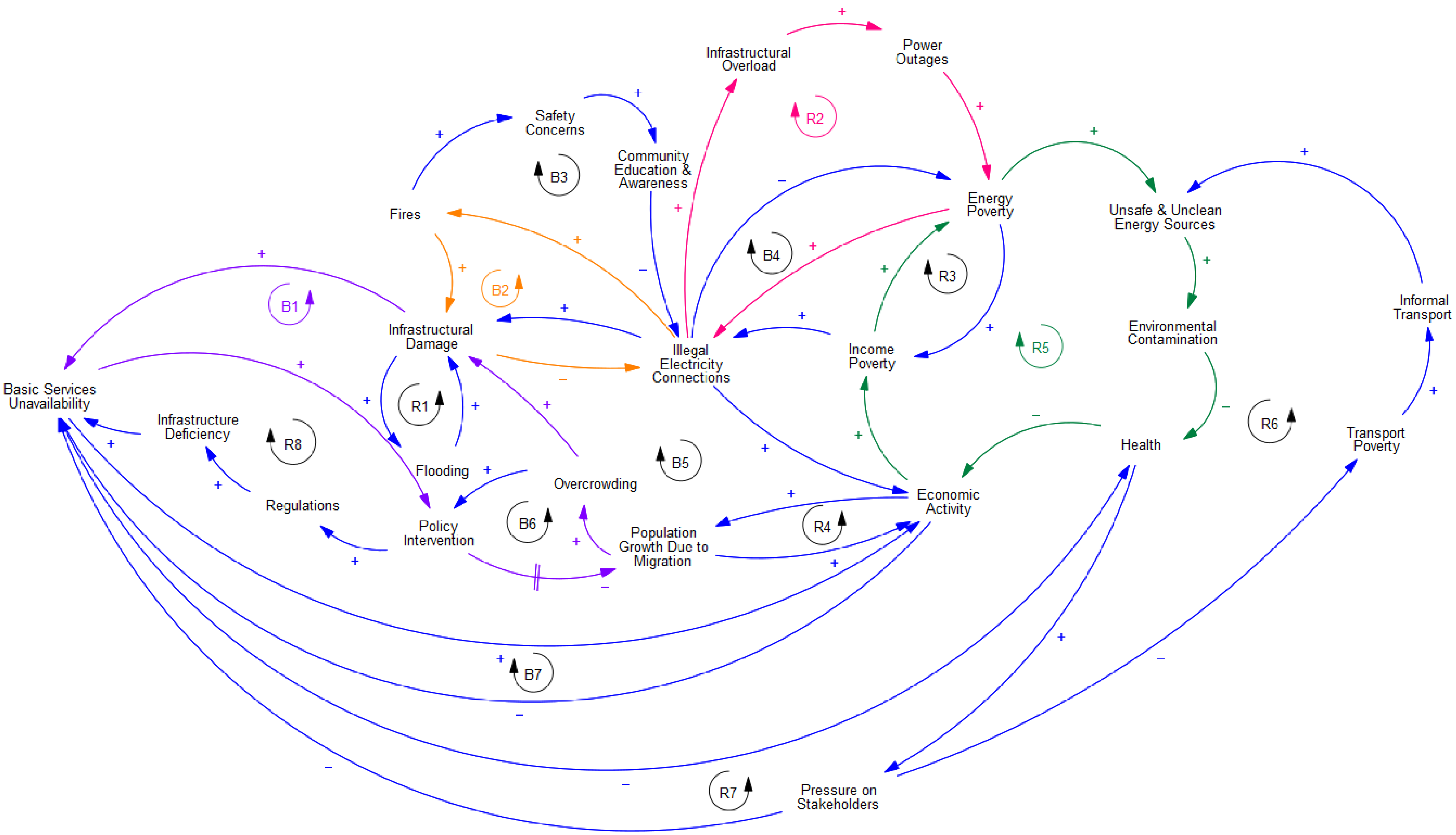
- Grounded Theory Analysis
- Constructivism
- Applied Research.



Refined Framework for Policy Development



Refined Causal Loop Diagram



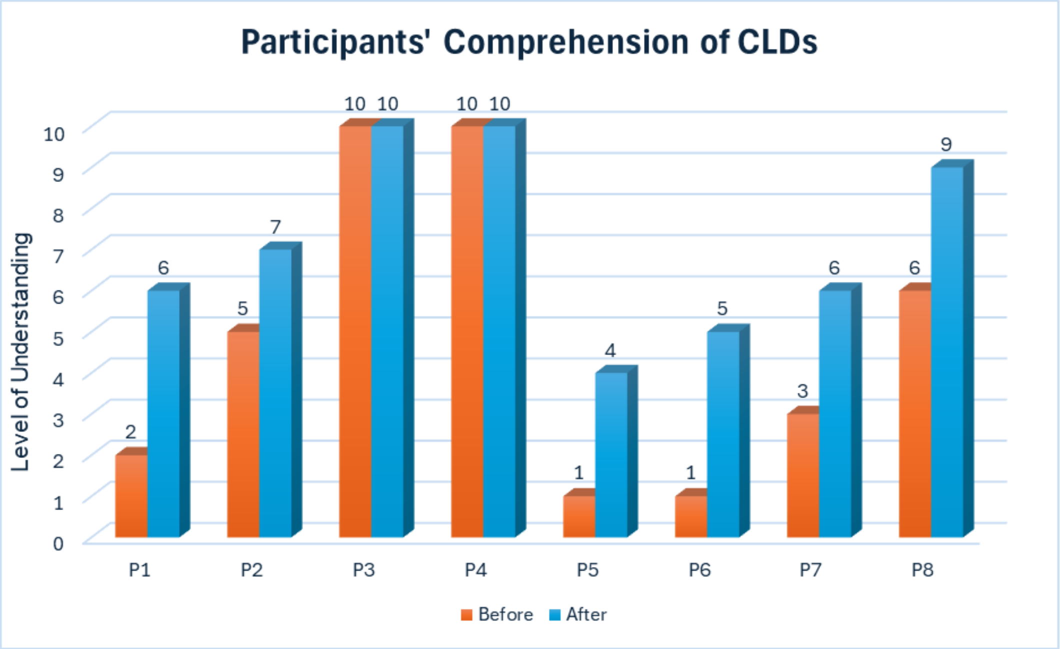
Results

Framework Refinement

- Stakeholder Consultation post-policy development
- Continuous Monitoring & Evaluation
- Risk Mitigation / Preventative Measures

Causal Loop Diagram

- Sufficient time to be allocated for information sessions on ST tools.
- Colour coding of different loops for ease of comprehensibility
- CLD to be adaptive and flexible



Conclusion

- Development and refinement of a policy development Framework
- Identification of drivers and issues impeding the transformation
- Implementation of the framework by demonstrating the outcome of the PSM process
- Time frames to be established for the transformation process.

Future Work

- Implementation strategies using Systems Thinking
- Continuous Monitoring and Evaluation Strategies
- Stakeholder Collaborative Strategies

QUESTIONS?