

# THE BARRIERS TO, AND ENABLERS OF TREE PLANTING IN SOUTH AFRICAN LOW-COST HOUSING SUBURBS







Nanamhla Gwedla<sup>1\*</sup>; Charlie Shackleton<sup>1</sup> & Lausanne Olvitt<sup>2</sup>

<sup>1</sup>Department of Environmental Science; <sup>2</sup>Environmental Learning Research Centre (ELRC) Rhodes University



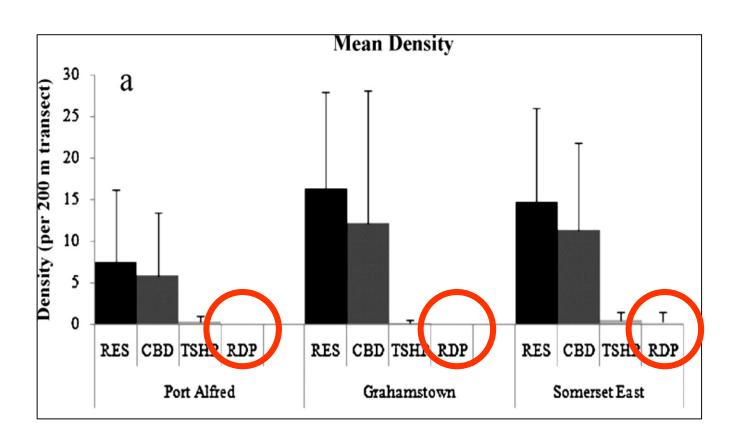


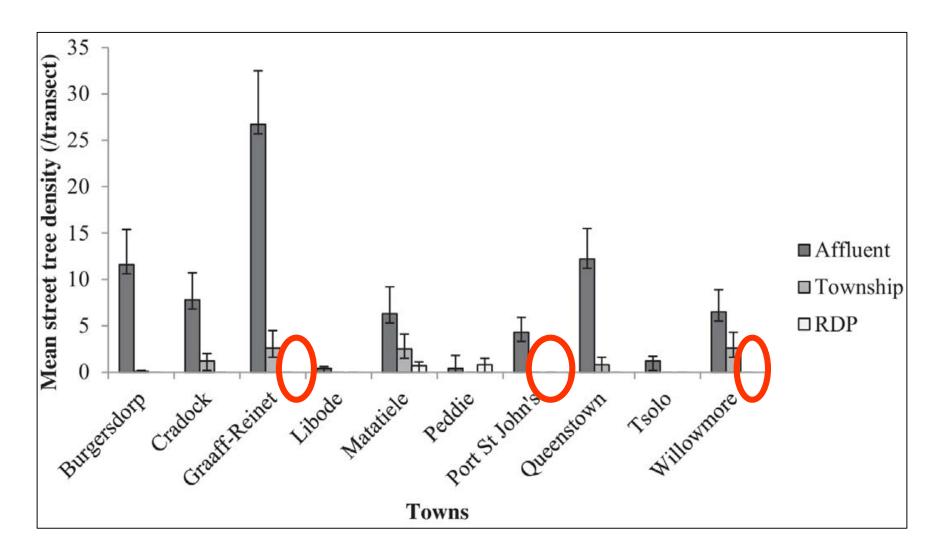




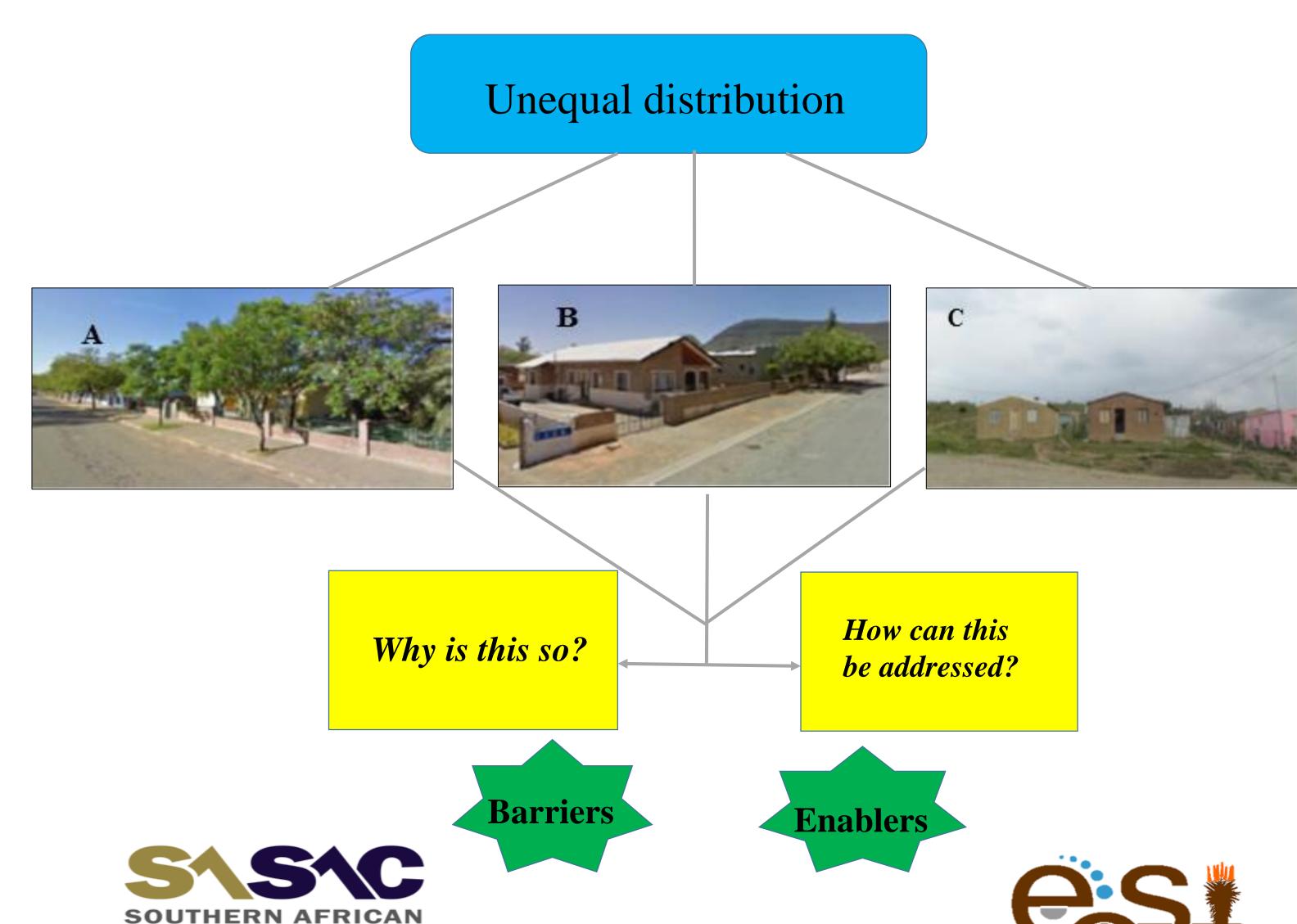
#### Background

SYSTEMS ANALYSIS CENTRE



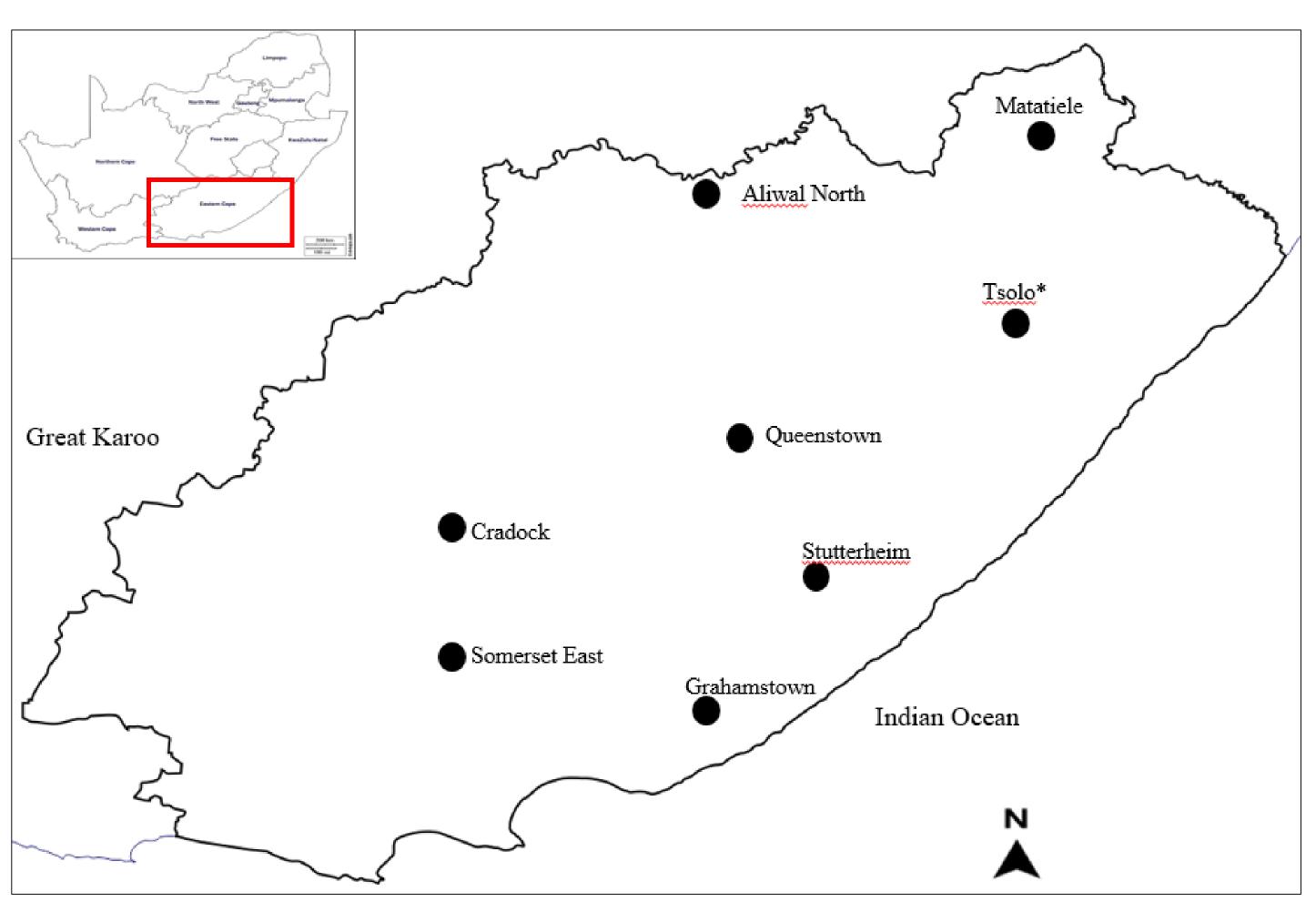








#### Study Site & Methods







8 Towns; 8 Municipal
Officials
2 LCH areas/town (old & new)
100 Households (50 & 50)

#### **Instruments**

Observation (public space)
Household surveys: Trees planted/removed in private space; Barriers to & enablers of tree planting

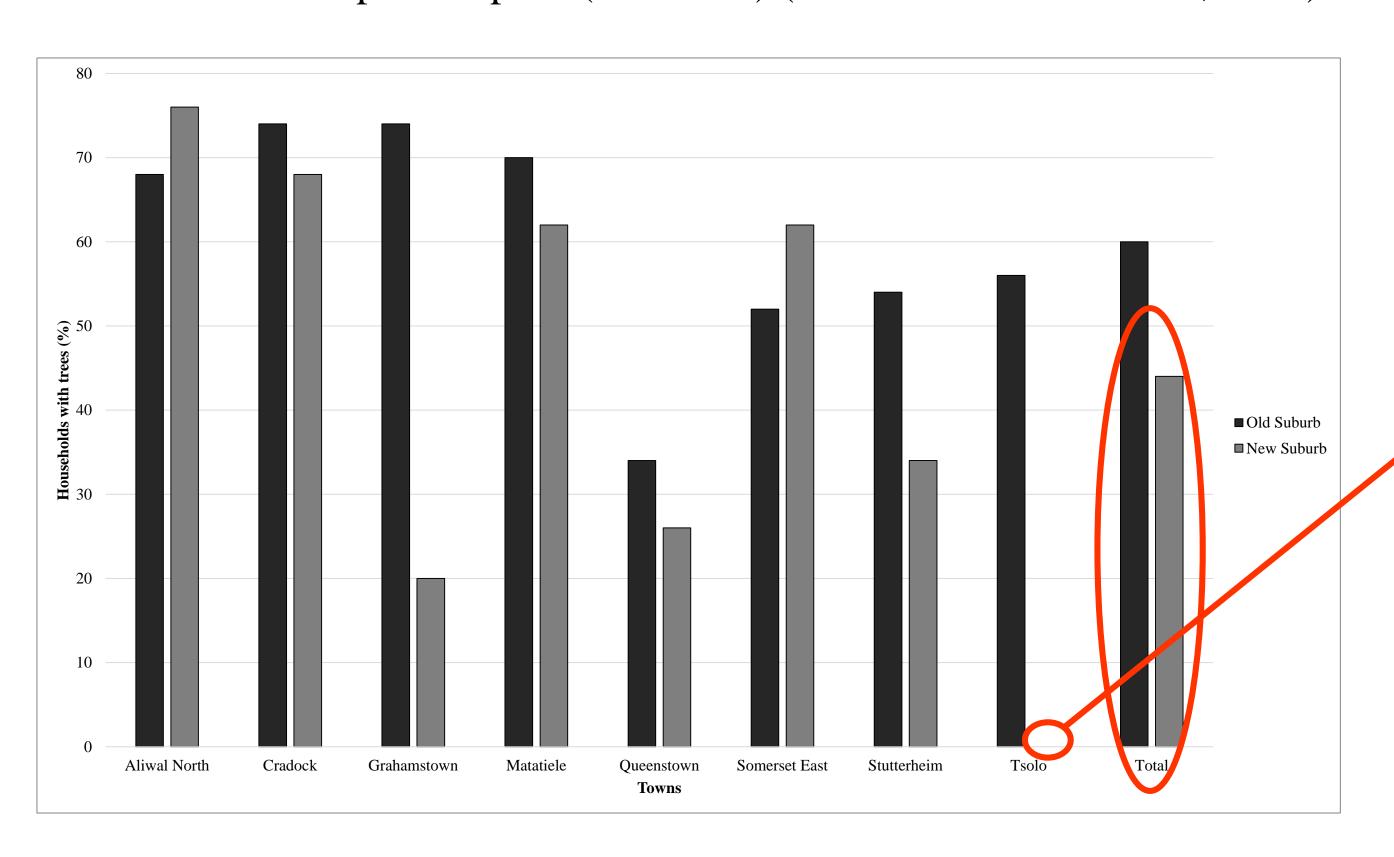
Key informant interviews: Barriers to & enablers of tree planting between suburbs





# Key Finding 1 (Urban trees)

• Two trees in the public space (Matatiele) (Gwedla and Shackleton, 2017)





Picture: New RDP area in Tsolo; no trees present in private spaces (Photo by Researcher)









# Key Finding 2 (Public space)

<b>Identified Barriers</b>	Number of mentions <sup>1</sup> by Suburb Type		Mean±SE
	Old (n=400)	New (n=400)	N=800
Limited Space	167	154	0.40±0.2
Municipal	219	220	0.55±0.02
Incompetence			
Crime	111	60	0.21±0.01
Other	77	89	0.21±0.01
Mean number of barriers per household	2.30±0.04	2.14±0.04	2.20±0.03

Suggested Enabler	Number of mentions <sup>1</sup> by Suburb Type		Mean±SE
	Old (n=400)	New (n=400)	N=800
Allocation of space	143	118	0.33±0.02
<b>Enlisting of community skills set</b>	311	303	0.77±0.01
Attitude towards trees	137	136	0.34±0.02
Other	24	49	0.10±0.01
Mean number of enablers per household	2.60±0.04	2.60±0.04	2.60±0.03

Limited
Financial
Resources

Lack of
Infrastructure
Development

Vandalism

Environmental Management Plans Financial Injections

Interdepartmental
Collaborations &
Partnerships







# World Forum on Urban Forests Mantova 2018 Key Finding 3 (Private Space)

<b>Identified Barriers</b>	Number of mentions <sup>1</sup> by Suburb Type		Mean±SE	
	Old (n=400)	New (n=400)	N=800	
<b>Limited Space</b>	218	247	0.60±0.02	
Insufficient Funds	121	171	0.40±0.02	
Vandalism	120	155	0.34±0.02	
Other	49	54	0.13±0.01	
Mean barriers per household	2.20±0.04	2.90±0.05	2.52±0.04	

Financial Resources Space

Knowledge

Suggested Enabler	Number of mentions <sup>1</sup> by Suburb Type		Mean±SE
	Old (n=400)	New (n=400)	N=800
Availability of space	123	131	0.32±0.02
<b>Availability of funds</b>	177	181	0.50±0.02
Attitude towards trees	82	95	0.22±0.01
Other	82	80	0.20±0.01
Mean number of enablers per household	2.60±0.04	2.60±0.03	1.73±0.02

Residents'
Attitudes

Enforcement of By-laws

Demarcation of Property Boundaries









## Moving Forward





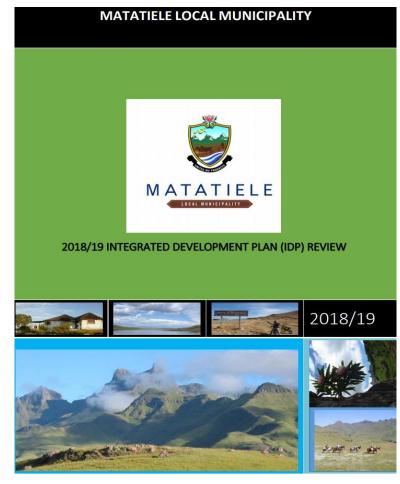






Thursday, 14 June 2018





Holistic Engagement

Education +Awareness

Enhancement of Enablers

Partnerships

Community Participation + Consultation

Volunteering



















### Acknowledgements

DST/NRF SARCHI Chair: Interdisciplinary Science in Land & Natural Resource Use for Sustainable Livelihoods





NRF/IIASA Southern African Systems Analysis Centre (SASAC)



Residents, ward councillors & committees, and municipal officials from the following municipalities:













