

https://dspace.org/

Informal settlement intervention and green infrastructure: exploring just sustainability in Kya Sands, Ruimsig and Cosmo city in Johannesburg

Adegun, Olumuyiwa Bayode

2016

http://hdl.handle.net/10539/22349

Adegun, Olumuyiwa Bayode (2016) Informal settlement intervention and green infrastructure: exploring just sustainability in Kya Sands, Ruimsig and Cosmo city in Johannesburg, University of Witwatersrand, Johannesburg, < http://wiredspace.wits.ac.za/handle/10539/22349>

Downloaded from a DSpace repository. https://dspace.org/

ABSTRACT

This thesis is concerned with the relationship between informal settlements and green infrastructure. It uses the concept of just sustainability to explore the ways green infrastructure can contribute to more just and sustainable informal settlement interventions.

The study draws on a case study design, with three low-income areas in Johannesburg serving as case studies. The first, Kya Sands, is an informal settlement that has not experienced substantive intervention. The second, Ruimsig, is an informal settlement that has experienced *in situ* intervention through reblocking. The third, Cosmo City, is a green-field housing development where households from informal settlements were relocated. The thesis utilised qualitative methods (semi-structured interviews, transect walks, focus group discussion) for data collection across the case studies. These were supplemented by a quantitative component for data collection in an individual case and in-depth interviews with purposively selected key informants.

The three cases reveal how the low-income residents in these areas derive a range of ecosystem services from natural ecosystems. A range of ecosystem disservices also came to the fore. In Ruimsig settlement, reblocking involved spatial reconfiguration that created opportunities for greening. Co-producing the *in situ* intervention involved some processes and outcomes related to equity and inclusion but also included situations that were exclusionary. Relocation from informal settlements into a new housing environment in Cosmo City formally created spatial opportunities for greening and reduced dependency on the natural ecosystem for certain basic resources. However, the course of events leading up to relocation and post-occupancy trajectory of green spaces reveal shortfalls in relation to justice and incognisance on socio-ecological and socio-economic realities at the planning stage. Juxtaposition between the cases of Ruismig and Cosmo City shows that *in situ* intervention can fulfill more principles of just sustainability in comparison with relocation.

This thesis argues that careful assessment of the relationship between poor households living in informal settlements and green infrastructure — their interaction with natural ecosystems should influence the approach to informal settlement interventions. The cases reveal that achieving just sustainability in relation to green infrastructure in informal settlement intervention is not straight-forward, but not impossible. Progress towards just sustainability in the form of improvement in quality of life and in the environment requires navigating (with foresight rather than hindsight) the intricacies and dynamics obtainable in contexts into which informal settlements are embedded.