

# Transforming Local Socio–Political Relations through Citizen Science in South Africa

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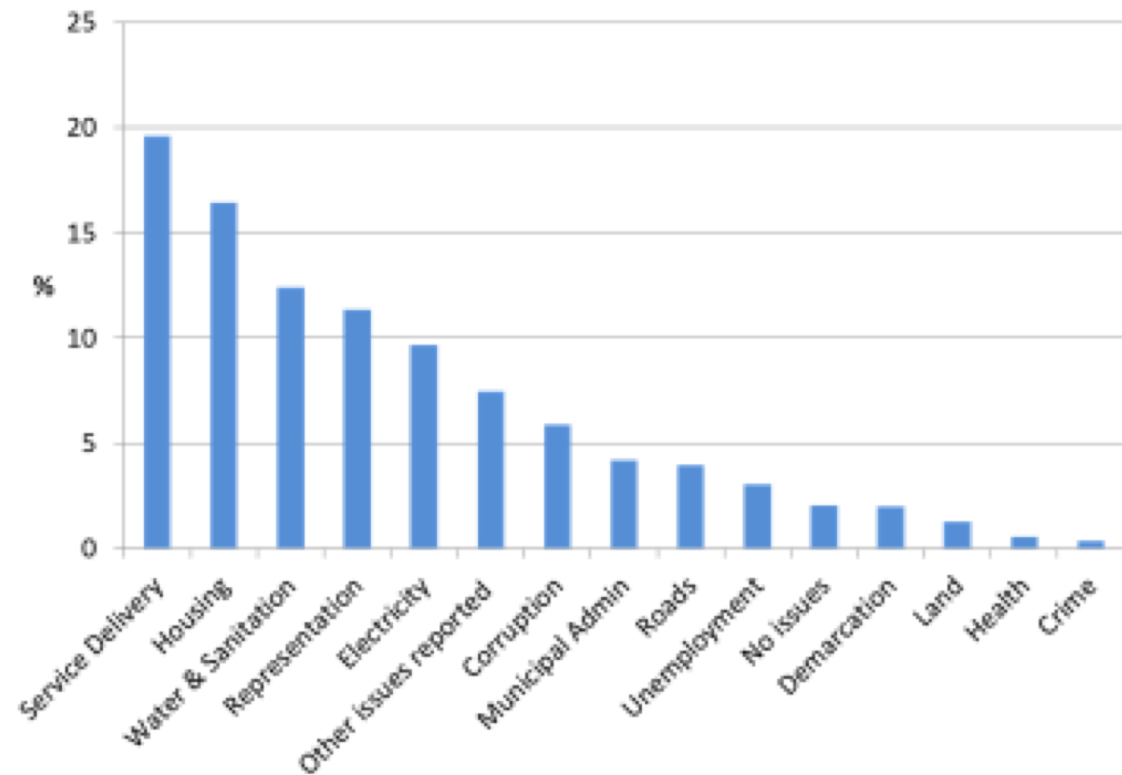
# State of the local state



# Service Delivery/ “Community” Protests

- About service delivery, but also accountability and corruption
- 22% of all protests are community protests (most other protests are labour related)
- Number of community protests doubled from 2004 to 2013, from 700 per year to 1400 per year

## Grievances cited by protesters 2004-2013



# Citizen science as an alternative form of protest?

- Protest results from failure of existing channels.
- Protests have become common place in South Africa. They draw attention to unacceptable services and governance, but they may not result in local changes.
- Citizen science offers a creative form of engagement
- There are different approaches to citizen science, but all include data gathering and use of data to take up environmental problems.
- This study is interested in the “social change” type of citizen science

# A continuum of citizen science approaches

Approaches to citizen science vary according to:

- Citizen role in formulating plans to use citizen science
- Citizen role in data gathering
- Role of citizens in using data
- Ownership of citizens in deciding and driving the process in which data is used.
- Nature of organization funding/ supporting citizen science initiative

# Types of Citizen Science

- Technocratic:
  - citizens not involved in planning or deciding how citizen science will be used, they gather data that is used by the organization.
  - There is good engagement with government and with the community.
  - They are empowered but will not challenge power
- Social change advocacy:
  - central role for community and use of data in advocacy, whether civil or uncivil.
  - Poor engagement with government
  - Influenced by funding
  - Crossing race/class barriers



# Local socio-political transformation

While citizen science can protect natural resources, such as water, there are cases in which it is being used as part of a more **transformative agenda**

Depends on:

- the type of citizen science
- BUT also depends on local socio-political realities (barriers and openings)

# Case study of Citizen Science and the water quality of the Vaal river

## Background

- Based on key informant interviews with the organization and citizens, as well as observation as an activist over the past five years.

## Description of water problems in the Vaal

- one of South Africa's largest rivers that is in crisis
- The biggest problem that is facing the Vaal River System comes from different pollution sources such as untreated sewage from non-functioning municipal Waste Water Treatment Works, industrial effluents, Acid Mine Drainage

## Description of VEJA

VEJA: an environmental Justice Alliance established in 2004. Has 13 affiliates organizations from surrounding areas such as Sebokeng, Bophelong, Sasolburg, Evaton, Boipatong and Sharpeville. Only about 3-4 paid staff but most work as volunteers. Funding challenges.



# Crossing boundaries

- Veja and SAVE
- Two different organisations
- dramatically different class and racial backgrounds
- interests of the two groups interact and transform each other as they work together around a common aim—to protect their water resources.
- using citizen science across class and race, instrumentally for advocacy aim.

# Challenge

- Is funding deciding the direction being taken?
- VEJA now funded by some big donors (will it be dependent?)
- Does the community want to involve Save or is it VEJA leaders
- Do Save and VEJA aims contradict?