# Facilitating Sustainable Community-Based Urban Commons Governance Systems

## THE PROBLEM

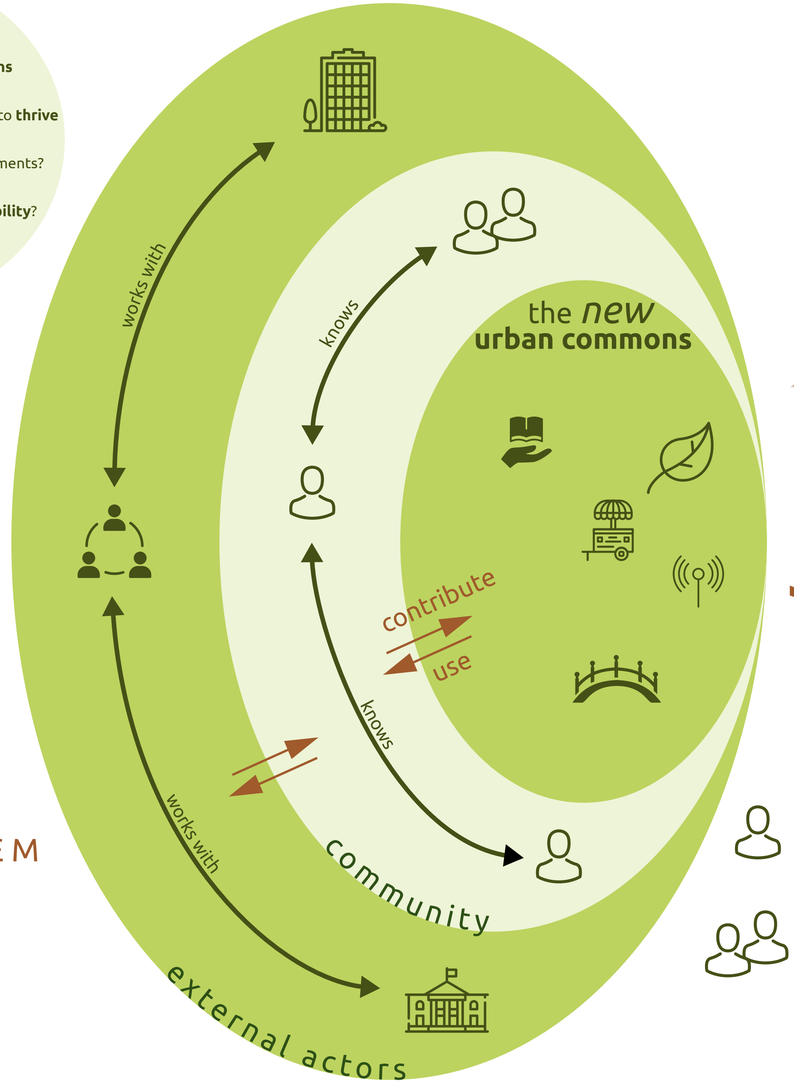
unclear definition of **urban commons**

difficulty for community governance syst. to **thrive**

role of **polycentric** governance arrangements?

impact on urban **resilience** & **sustainability**?

## THE SYSTEM




EXTERNAL INSTITUTIONS

INTERNAL INSTITUTIONS

THREATS

OPPORTUNITIES

WEAKNESSES

STRENGTHS

evaluates own beliefs → attitude

evaluates normative beliefs → subjective norm

BEHAVIOUR

## NARRATIVE MODEL OF AN *AGENT-BASED MODEL*

Ostrom's *Design Principles (DPs)* for robust governance systems (Ostrom 2005)

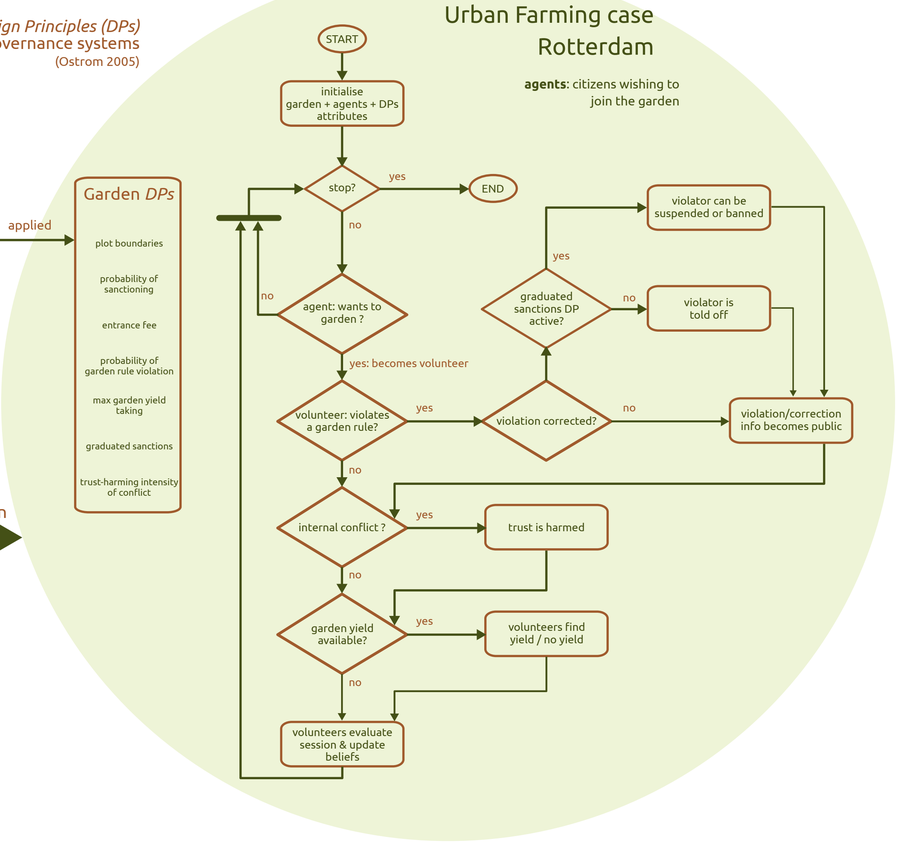
applied

Garden *DPs*

- plot boundaries
- probability of sanctioning
- entrance fee
- probability of garden rule violation
- max garden yield taking
- graduated sanctions
- trust-harming intensity of conflict

conceptualisation

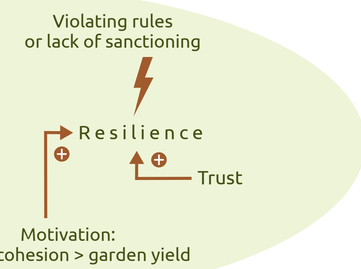
IAD framework (Ostrom 2011)




## FINDINGS

(Hooijschuur, Feinberg & Ghorbani 2018, in progress)

the **combination** of Design Principles institutions matters more than individual principles




ENGINEERING SOCIAL TECHNOLOGIES FOR A RESPONSIBLE DIGITAL FUTURE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