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## Innovation and knowledge exchange systems for sustainability: The case of urban agriculture in Maputo, Mozambique

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# Overview

- Context of the study
- Purpose of the study and research questions
- Main concepts and literature review
- Methodological Approach
- First results
- Discussion and next steps



Source: Schelchen 2016

# Why Urban Agriculture and Food Security?

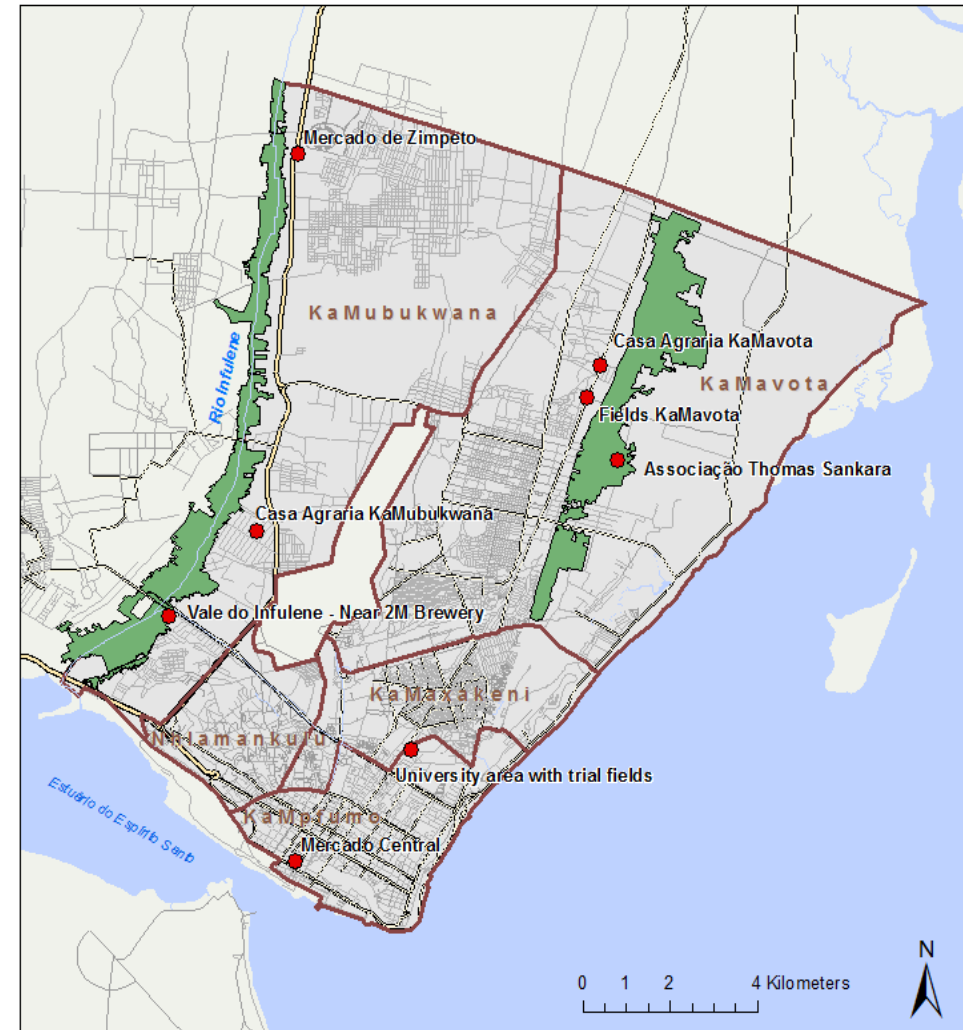
- „Zero Hunger“ is one priority in the global commitment of achieving the **Sustainable Development Goals (SDGs)**
- **Cities are growing fast** but economically highly **unequal** and access to safe and healthy food remains a challenge for the urban disadvantaged population
- Many cities in the world acknowledge the **potential of Urban Agriculture (UA)** and has been become a popular response in contributing to income generation and food and nutrition security
- Also, UA has come into the **focus of scientific research, spatial planning and policies**
- UA can have a potential but **must be adopted adequately** to meet the requirements for being sustainable



# Urban Agriculture in Maputo



Source: CIA 2016



Source: Remagen et al. 2016

Urban Agriculture for Food Security and Income Generation in South Africa and Mozambique

# Urban Agriculture in Maputo



Source: UFISAMO 2016



# Main concepts and literature review

- Urban Agriculture (UA)

...describes various forms of plant and livestock production in a variety of production systems in urban and peri-urban areas, (re-)using largely human and material resources, products and services found in and around that urban area (*Mougeot 2001*). It complements rural agriculture and increases the efficiency of national food systems (*van Veenhuizen, 2006*).

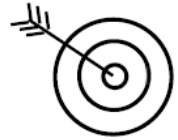
- Innovation system approach

...investigates dissemination channels and knowledge exchange mechanisms for innovations and looks to the whole system in which innovations occur. According to recent studies, interlinkages actors are media, NGOs, Extension Services besides the farmer itself. Without an adequate political environment, adoption of innovations tend to fail. Studies focussing on rural areas rather than on the urban space (*Rogers 2003, Gildemacher & Mur 2013, Gildemacher & Wongtschowski, 2013*).



**Innovations** within the Urban Agriculture System refers to **organic cultivation methods** to contribute to a more **sustainable production** and **sustainable city**

# Purpose and main research questions



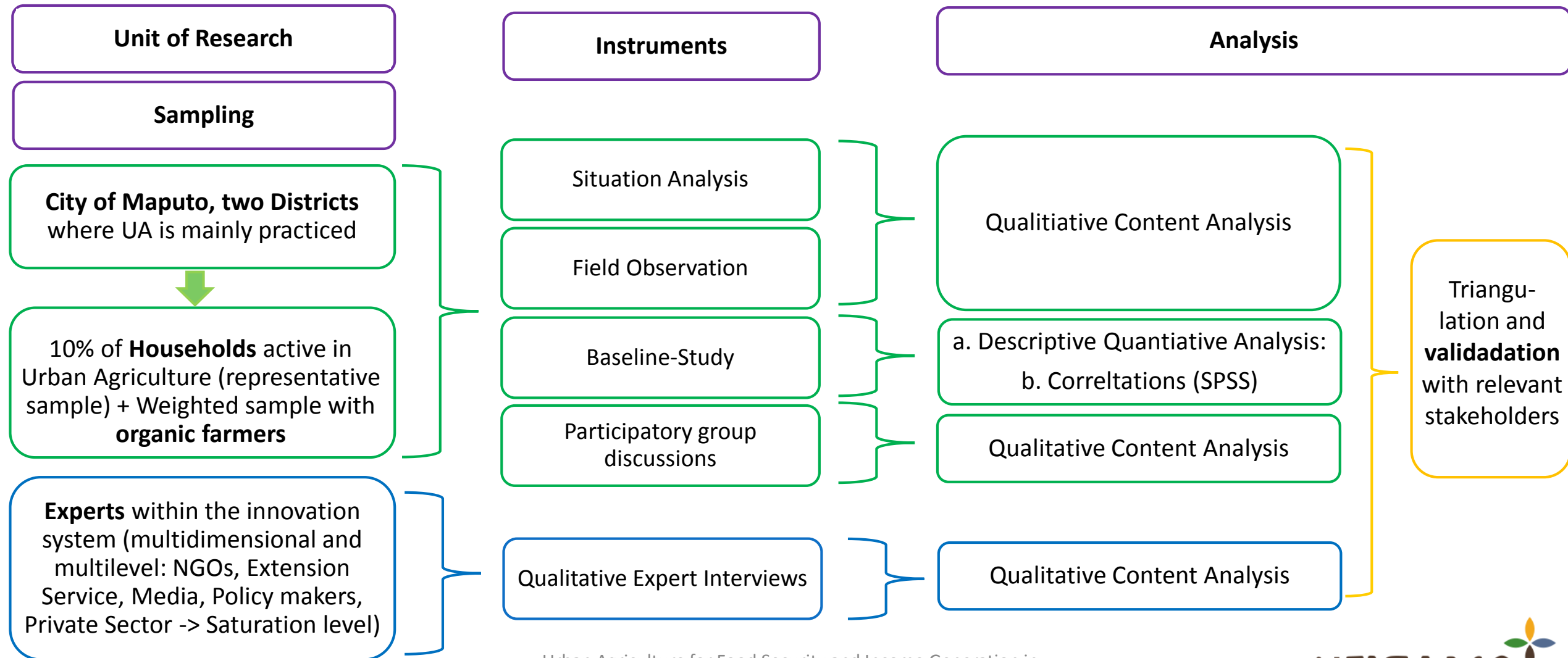
## Purpose

The aim of this study is to investigate innovation and knowledge exchange systems to identify successful ways of dissemination for organic cultivation methods

## ?? Research Questions ??

- How does the urban agricultural innovation system (organic cultivation) in Maputo look like?
- Who are the main Stakeholders, what are their roles and networks?
- What are motives and reasons for urban farmers to adopt innovations?
- How can they be disseminated?

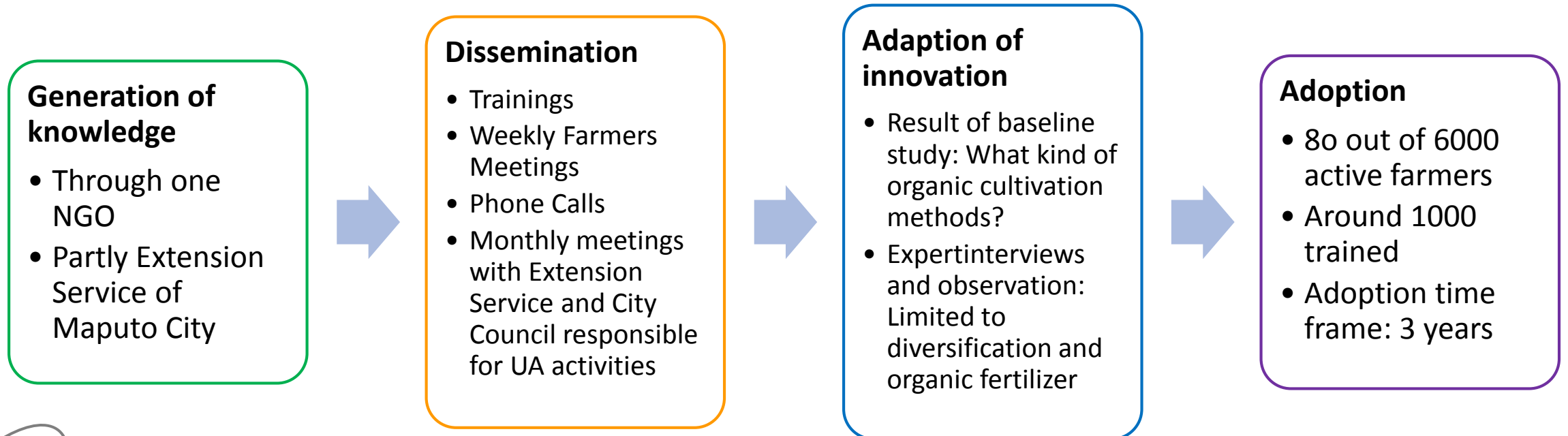
# Mixed-Method Approach





# First Findings

...from explorative situation analysis, field observation and expert interviews



Further questions

Media?  
Face to face?  
Other relevant forms?

Target Group  
Specific? Networks?  
No access to further information material

Motives?

Drivers and barriers?  
Role of policy level?

# Discussion

- First findings show that important interlinkages actors are under represented within the innovation system
- Especially, extension service and media as major interlinkages actors for knowledge generation and dissemination within the innovation systems remains weak
- This hinders a successful adaption and adoption of organic cultivation methods, what is mostly confirmed by recent studies
- Knowledge exchange mechanisms do not meet target groups needs, one major driver for farmers to adopt innovations
- Open question:
  - What are the drivers and barriers and target group specific dissemination channels?
  - How to sensitize different stakeholders for sustainable solutions?
  - What is special on the urban innovation system? What role of urban planners as new paradigm in the innovation system approach?



Source, Schelchen, Schmidt 2016

# Next steps

## Analysis of Baseline study

- Sociodemographic determinants
- Reason why/why not being more organic
- Knowledge exchange mechanism between farmers

## Participatory group discussions

- Identifying motives, drivers, barriers and good practices

## Triangulation of qualitative and quantitative data

## Validation of data with relevant stakeholders

- Deriving recommendations
- Elaborating a strategy for dissemination (multilevel and -dimensional)



Source: Schelchen 2016



**Thank you very much!**

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Source: Schelchen 2016