

## **Waterproofing Data:**

*Towards engaging stakeholders in sustainable flood risk governance for urban resilience*

## **M'Boi Mirim Urban Field Station**

***Maria Alexandra Cunha***

***Fundação Getulio Vargas***

***Centre for Public Administration and Government Studies***

## Waterproofing Data Objectives

### Project Objectives



#### Project Objectives:

1. **Bring visibility to the way stakeholders** (citizens, local government authorities, etc.) involved in the management of water-related risks **engage with data** on flooding.
2. **Engage citizens to produce, circulate and embed data**, which incorporates and builds upon pre-existing flood memories and local knowledge of flood risk, **to increase community resilience**.
3. **Integrate citizen-generated data with other data sources**, such as environmental sensors, socio-demographics and risk mapping, **in ways that support decision-making and policy-making on flooding**.



## Academic partners:

**University of Warwick, UK:** Centre for Interdisciplinary Methodologies (Dr João Porto de Albuquerque/Urban Science, Dr Nathaniel Tkacz/New Media Studies, Dr Nerea Calvillo/Environmental Humanities), Politics and International Studies (Prof Jon Coaffee/Urban Geography), Centre for Policy and Cultural Media Studies (Dr Joanne Garde-Hansen)

**Escola de Administração de Empresas da Fundação Getúlio Vargas:** Centro de Estudos de Administração Pública e Governo (Prof Maria Alexandra Cunha/Prof Marlei Pozzebon).

**Heidelberg University, Germany:** Chair of Geoinformatics, Institute of Geography (Prof Alexander Zipf)

## Funding from:

Norface/Belmont Forum: ESRC (UK), FAPESP (BR), BMBF (DE)

## Cooperation Partners:

**Prefeitura Municipal de São Paulo e Secretaria Ambiental do Acre**

**Center for Natural Disaster Monitoring and Alert (Cemaden) :** Dr Liana Anderson (Environmental Science), Dr Giovanni Dorlif Neto (Metereology), Dr Victor Marchezini (Sociology), Dr Conrado Rudolf (Hydrology), Dr Rachel Trajber (Environmental Education/Citizen Engagement)

**Serviço Geológico do Brasil (CPRM), British Geological Survey, Environment Agency, UNSDR:** Scientific Advisory Board

# Waterproofing Data



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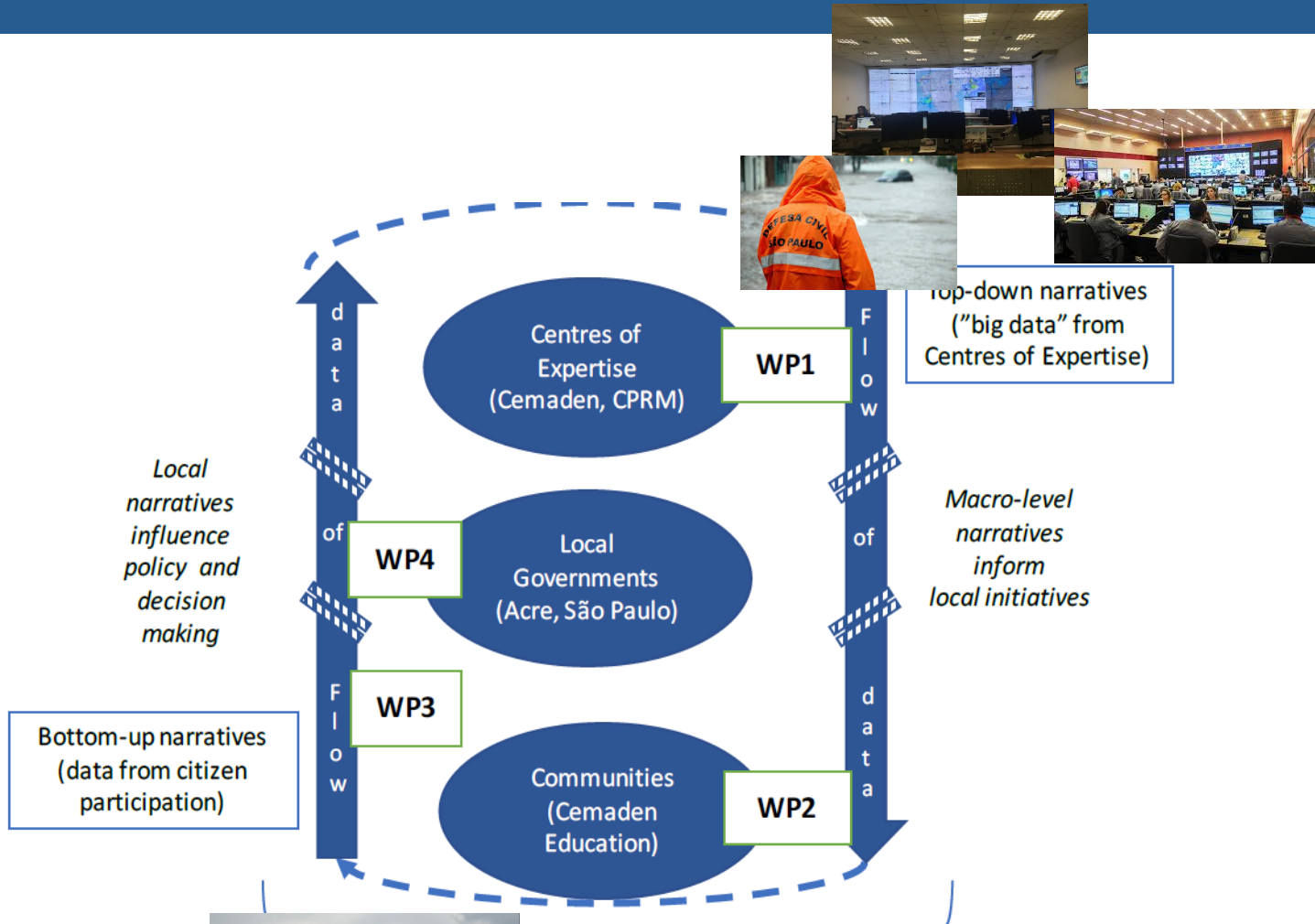
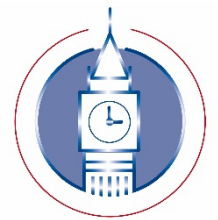


Figure 1. Scales and project



# Cases – State of Acre and City of Sao Paulo



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Rio Branco, State of Acre  
320.000 inhabitants

São Paulo, State of São Paulo  
12,11 million inhabitants



# Rio Branco



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Source: Google Earth



# Rio Branco – Flooded área (2015)



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Source: Cemaden



# Rio Branco



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Imagem mostra parte do Centro de Rio Branco durante a seca do Rio Acre este ano e no período da cheia histórica em 2015 (Foto: Edison Caetano/Arquivo Pessoal)

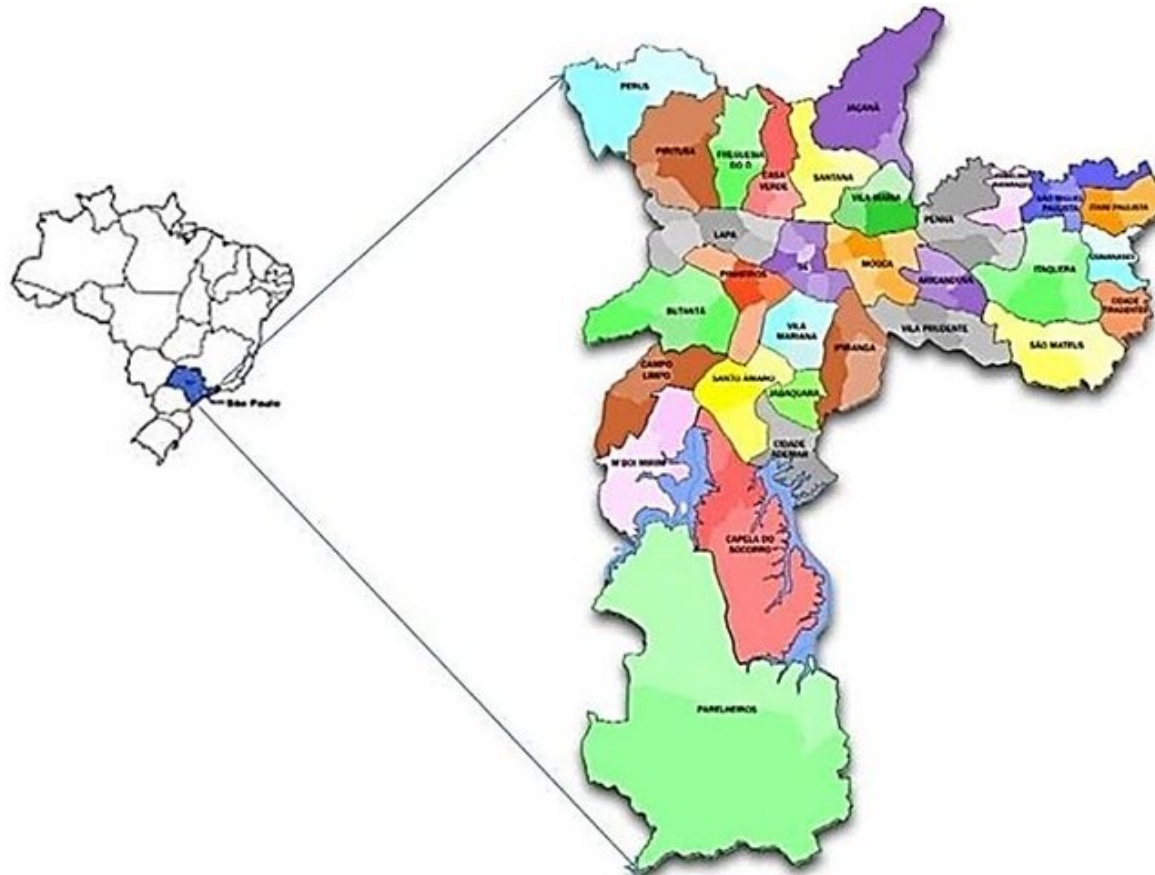




# M'Boi Mirim District in São Paulo



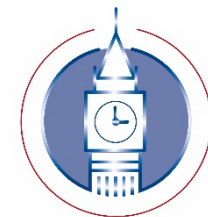
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Source: Nascimento Ana P. B.; Benchimol, Juliana F. ; Distribuição de Praças Públicas na Cidade de São Paulo in Sandra Medina Benini; Jeane Aparecida Rombo de Godoy Rosin (Ed.) Estudos Urbanos: uma abordagem interdisciplinar da cidade contemporânea. Tupa: ANAP, 2015



# M'Boi Mirim District



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Source: by Maria Alexandra Cunha



# Flooding



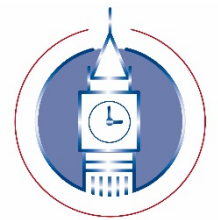
Source: <https://www.ceert.org.br/noticias/datas-eventos/7004/mais-de-100-artistas-da-america-latina-fazem-graffiti-contra-enchente-na-zona-sul>



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# Waterproofing Data



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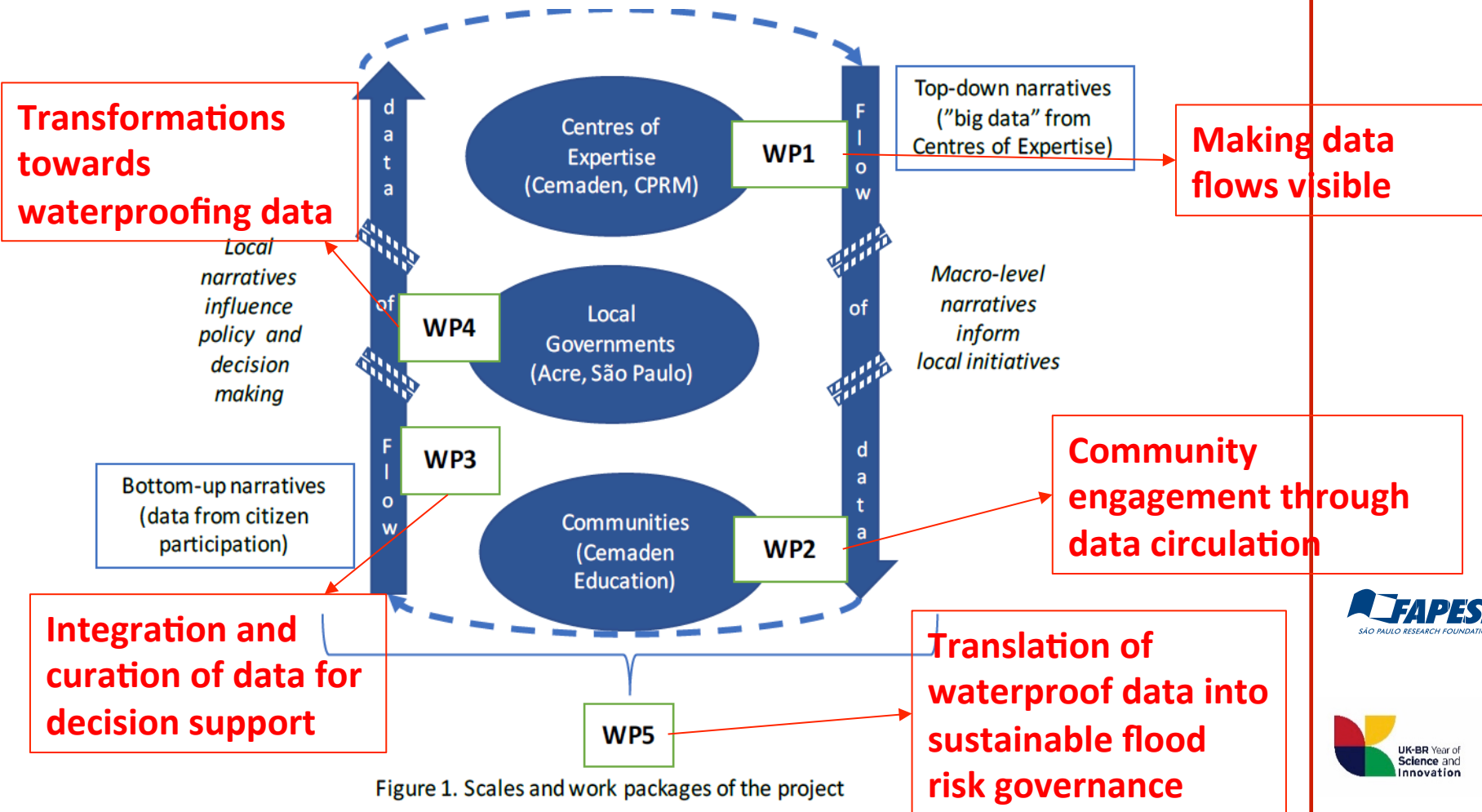


Figure 1. Scales and work packages of the project



The **M'Boi region** covers two of São Paulo's local districts making up the regional prefecture of M'Boi. It has a **population of 650,000**, packed densely into **70 square kilometres** on the periphery of the municipality with a significant **low income population** and **self built housing** with **semi-formal land titles**. It has the largest number of identified areas of **risk to water born hazards**, occupies part of a **key water catchment area**, suffers from **land invasion** and is **prone to acts of violence**.

- **Information platform and network** of over thirty research academics, undergraduate, postgraduate and post-doctoral students from four universities working on different urban themes loosely linked to the discussion of local social, economic and political development.
- Hosted by the FGV's Centre for Public Administration and Government Studies **it seeks to provide a single territorial focus for different research projects;** creating synergies between themes, building direct contacts with independent forums, activist groups and local organizations; making openly available studies, reports, maps and diagnoses about the region; responding to local demands for information and assuming a civic responsibility for research initiatives
- Maintains an **open access on-line library** with all reports and information gathered and produces a monthly bulletin focussing on specific topics and debates that concern the region ([www.fgv.br/ceapg](http://www.fgv.br/ceapg))

## M'Boi Mirim Urban Field Station – São Paulo

### Some projects

Some projects are:

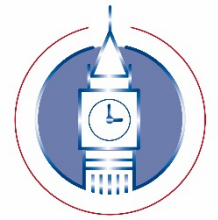
- Economic aspects of independent culture activities and cultural activism;
- Inter-organizational connectivity in local public service provision;
- Family based urban agriculture;
- Micro-finance and economic development;
- Social, material and institutional vulnerability;
- Urban youth in highly complex social settings;
- Adequate housing;
- Gender based questions of urban mobility with a specific focus on women;
- Case studies of activist groups, faith based organizations and multi-organizational forums;
- Strategies of social mobilization.

Five years of activity is showing that a territorial based multi-thematic approach, very different from traditional mono-thematic research programs, not only provides very different insights but can help to create a more engaged form of responsible scholarship.



Thank you!  
Questions?

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