



# Nurturing agroforestry systems in Flanders: An AIS approach

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# Introduction: Background



Flanders, 1960's:  
naturally integrated land  
use systems



Flanders, 2010-2016:  
Renewed interest in AF,  
Efforts to give incentives to  
farmers to start with AF



Flanders, 2000:  
trees and hedgerows on and between  
agricultural parcels have largely  
disappeared



# Introduction: Problem statement

Current efforts to promote agroforestry:

- Subsidy program
- Eligibility as Ecological Focus Area
- AF-project
  - Support to AF pioneers
  - AF study days
  - Articles in farmer magazines

➔ occur very close to the farmer = the decision maker

BUT the **social, technical and ecological environment** affects which farming systems thrive and stay a niche

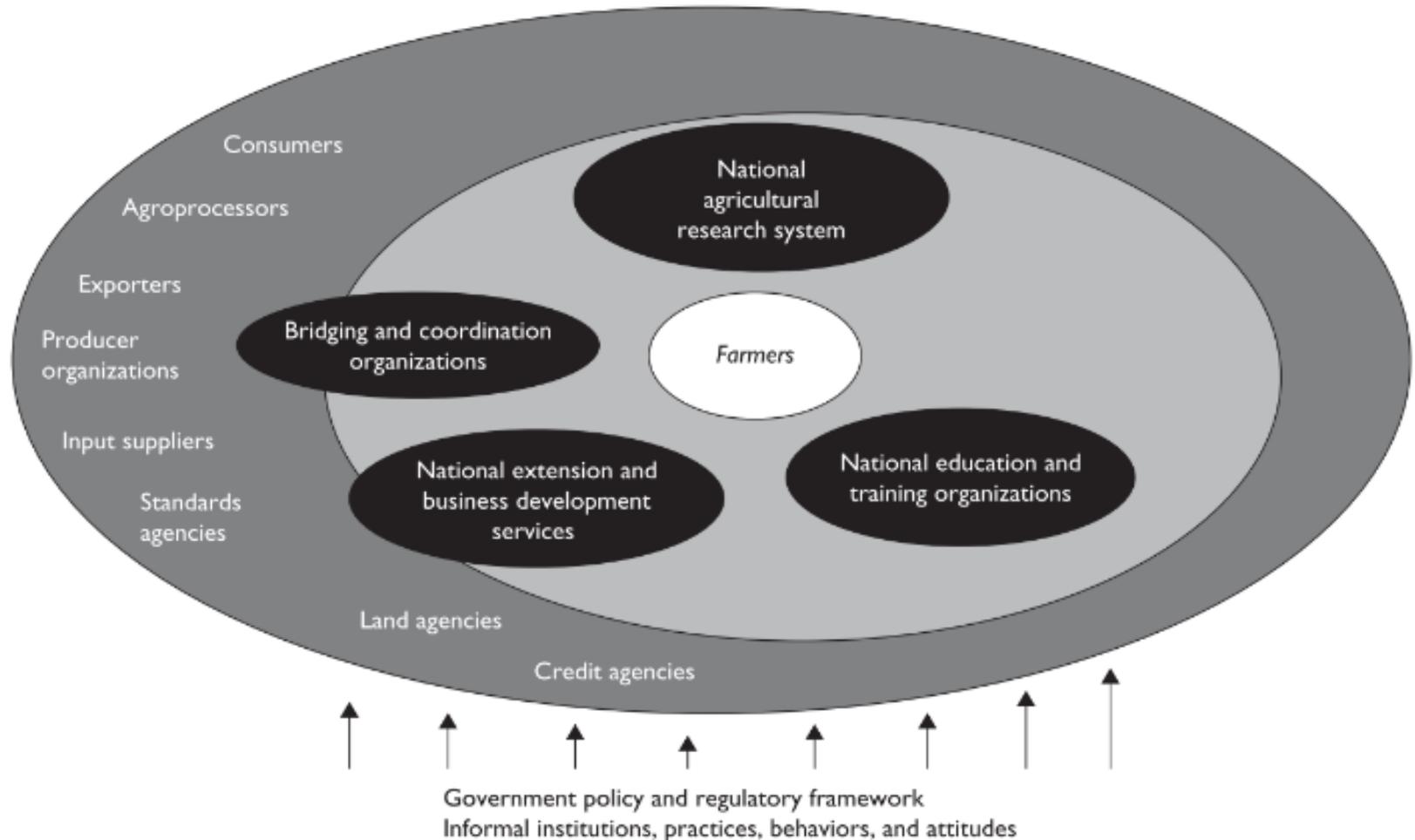
➔ To design policies: focus not only on farmers, but also on the **broader context and the variety of actors** determining this context

# Concept and method: conceptual framework

- AIS = Agricultural Innovation System
  - Definition Hall et al, 2006
    - “a **network of organizations, enterprises, and individuals** focused on bringing **new products, new processes and new forms of organization** into economic use together with the **institutions and policies** that effect the way different agents interact, share, access, exchange and use knowledge”
  - Basic ideas of AIS:
    - **Research, education and extension** are **not sufficient** to bring knowledge, technologies and services to the farmer
    - Innovation requires an **interactive, dynamic and flexible process** which includes a **variety of actors** dealing with **different conditions and complementary activities**

# Concept and method: Conceptual framework

- Shift in theoretical perspectives:
  - '70s and '80s: Early farming systems research
  - '90s: Agricultural Knowledge and Information Systems (AKIS)
  - 2000s: Agricultural Innovation Systems (AIS)

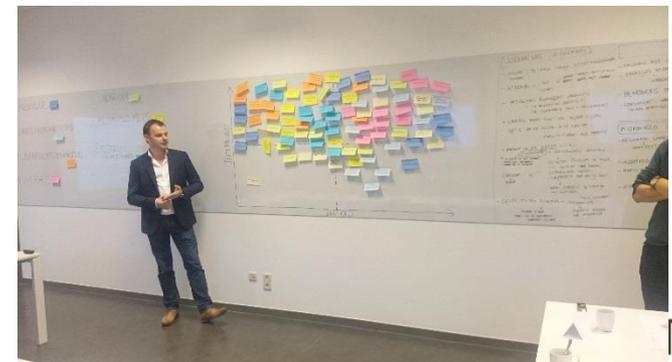
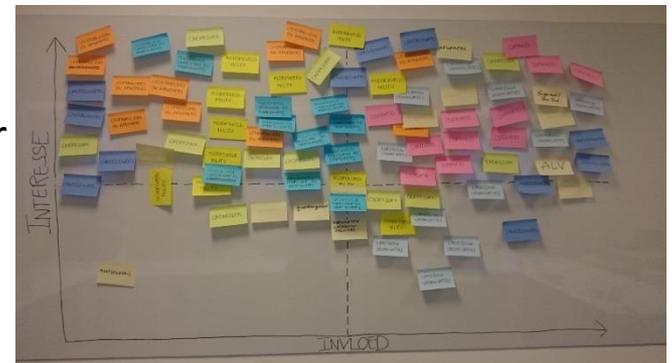


# Concept and method: Conceptual framework

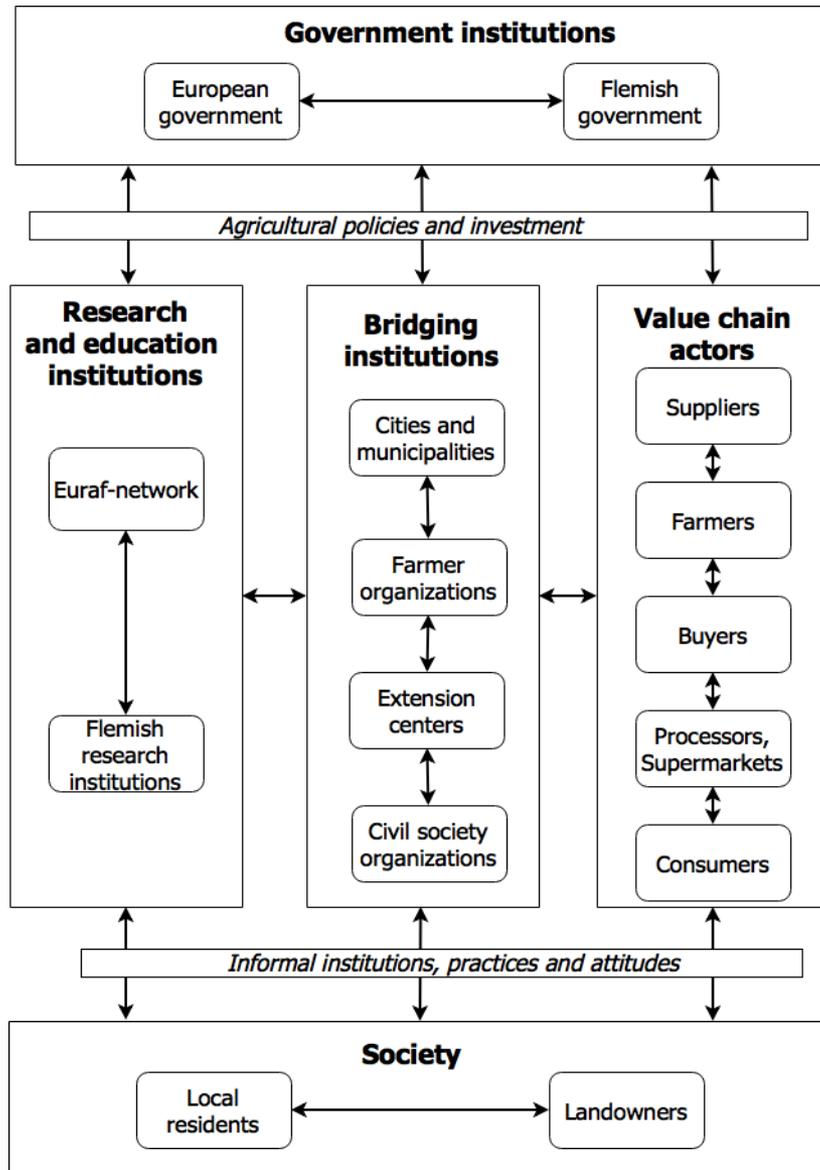
- Framework of analysis:
  1. Key actors and their role
    - Who are the relevant actors and stakeholders?
    - What is their link with AF?
  2. Attitudes and practices of the main actors
    - What are stakeholders' views on AF?
    - How can stakeholders through their practices influence AF development?
    - What is the impact of AF on a stakeholder?
  3. The patterns of interaction
    - Which partnerships and networks exist between stakeholders?
  4. The enabling environment
    - How do policies and infrastructure create a more or less favourable environment for AF development?

# Concept and method: Data collection and analysis

- Between July and November 2015
- Selection of respondents:
  - Participation in previous AF activities
  - Snowball sampling technique
- **25 interviews**
  - Structured around 5 themes:
    - Knowledge, feasibility and desirability of AF
    - Barriers and enabling factors of AF
    - Impact of AF development on the stakeholder
    - Influence of the stakeholder on AF development
    - Other important stakeholders and their characteristics
- **2 focus groups**
  - 16 participants, as diverse as possible
  - Goal: explore stakeholders thoughts and opinions about AF more in depth
  - Making use of the interest-influence diagram

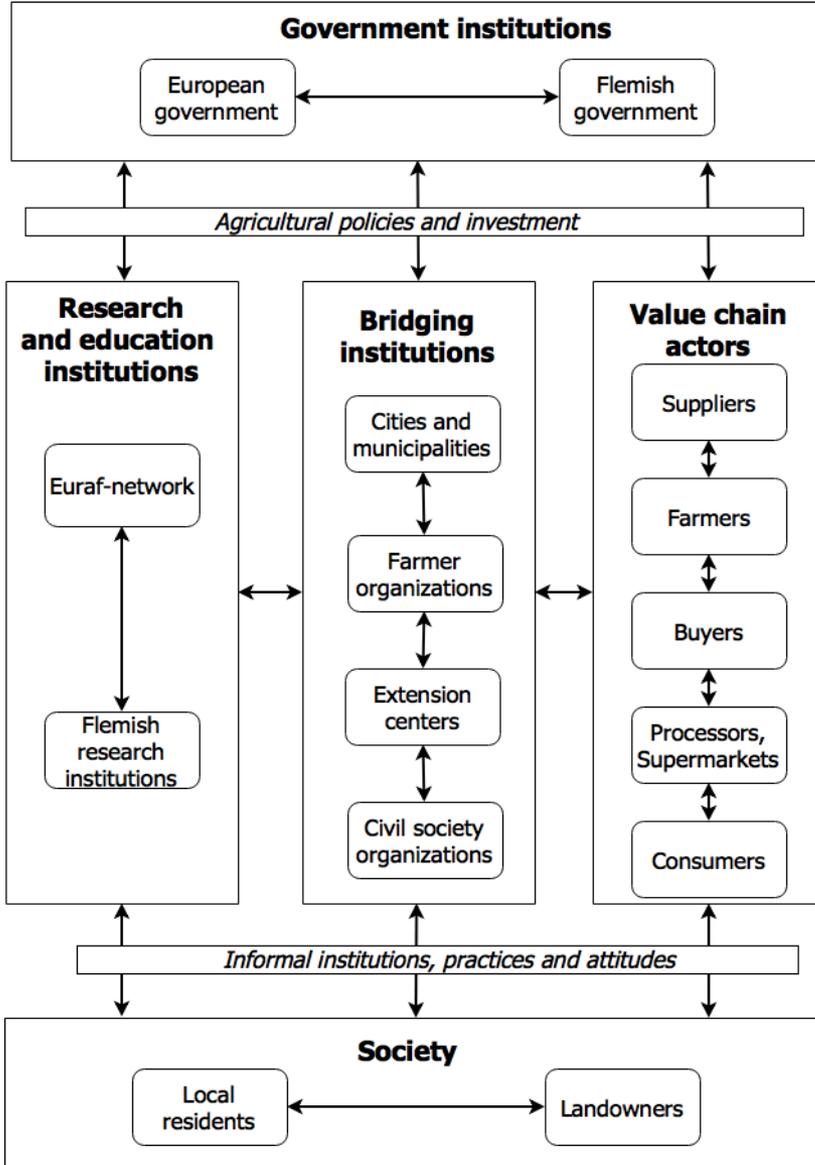


# Results



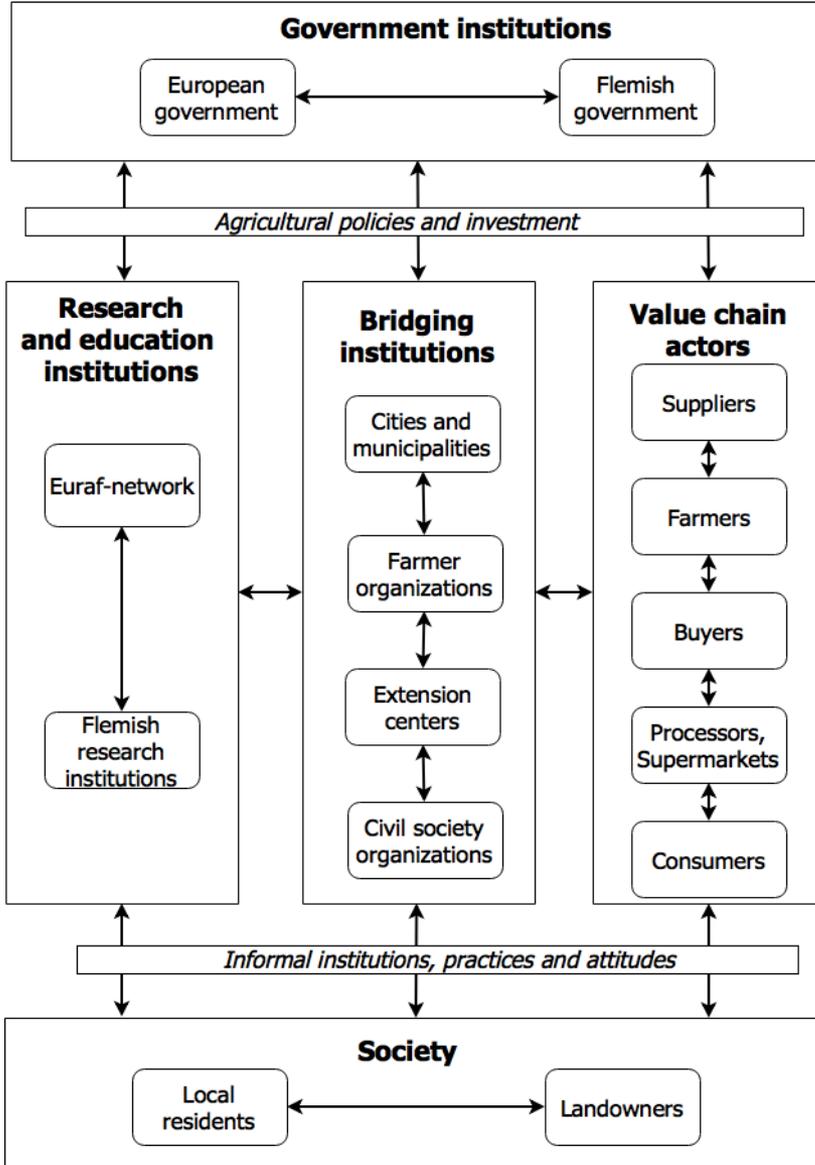
- 15 stakeholder groups
- 5 domains
- AIS mapped according to the conceptual diagram presented by Arnold & Bell (2001) and adapted by Spielman & Birner (2008)

# Domain 1: Research and education institutions



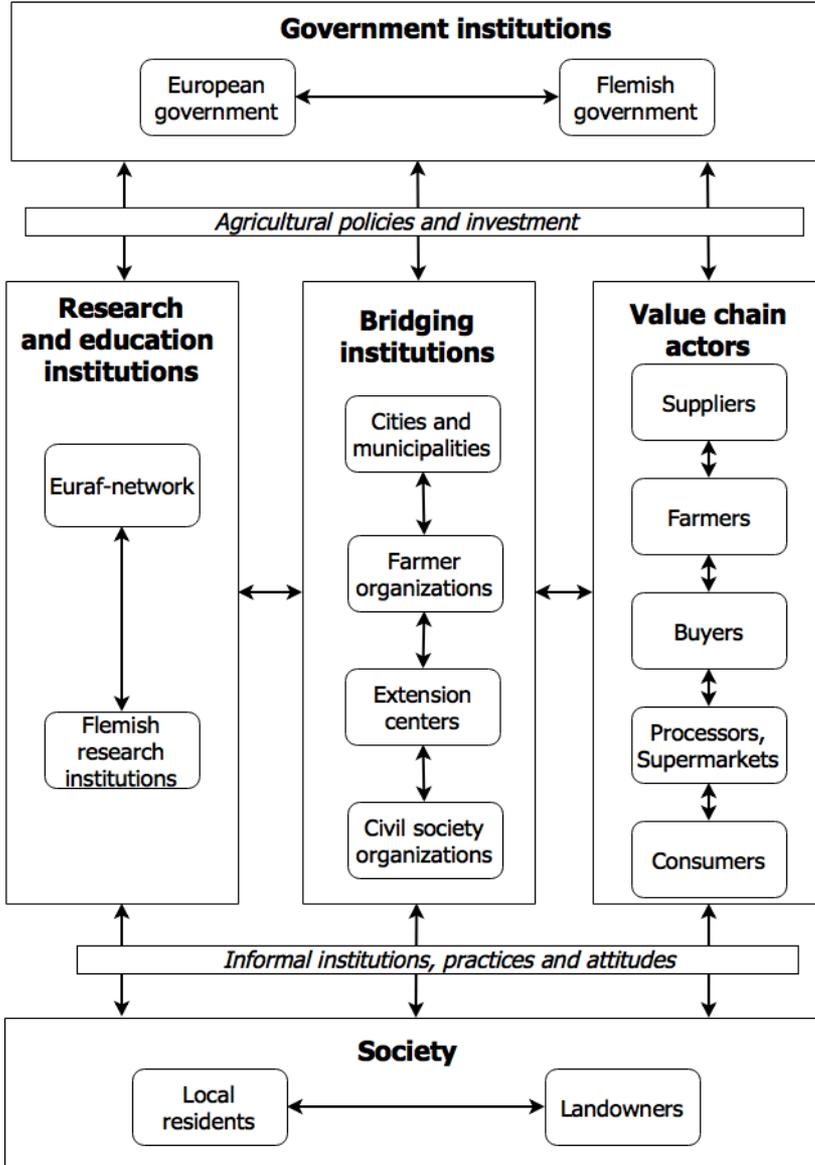
- **Flemish research organizations**
  - Very important: great need for more (local) scientific data on AF-performance
  - Start to take up the theme of agroforestry
- **Euraf-network**
  - Important because of their experience with AF-research

# Domain 2: Value chain actors



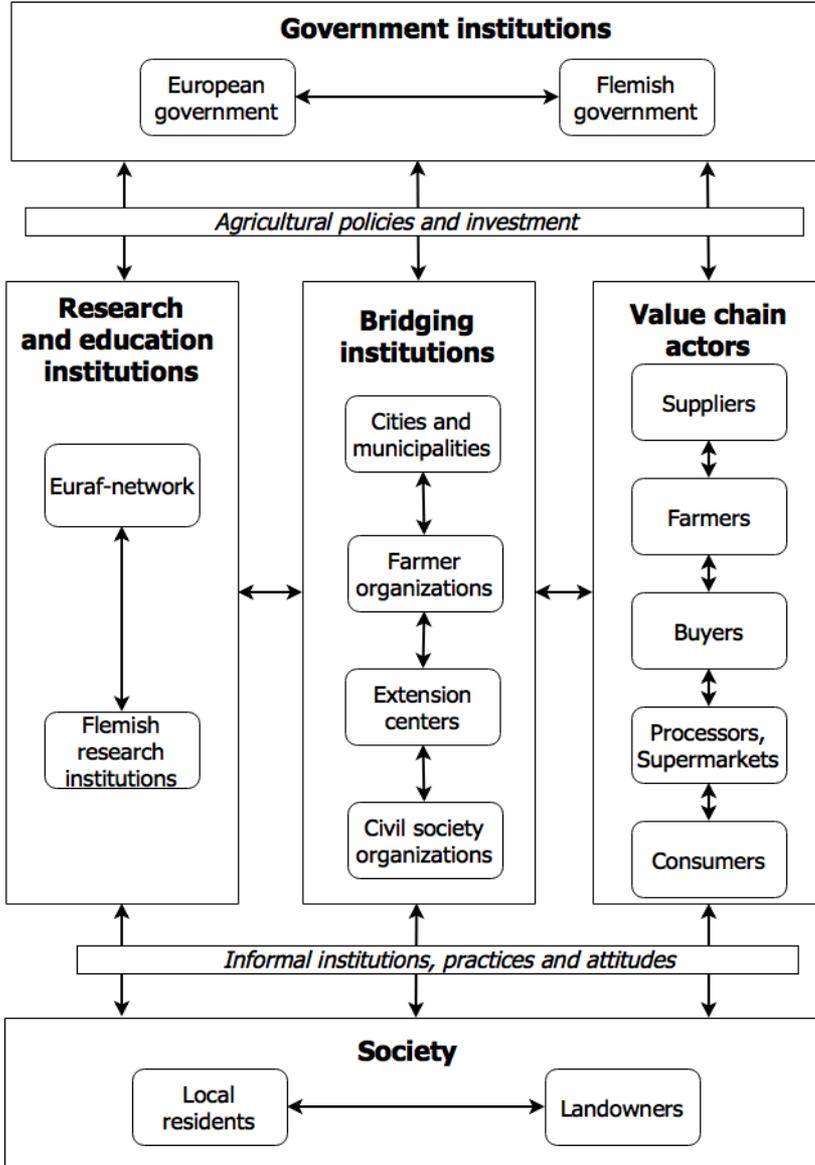
- **Farmers:**
  - Center of the decision making process
  - Low interests:
    - Legal uncertainty
    - Economic uncertainty
    - Assumed extra labor and complexity
- **Value chain actors**
  - If we want AF to be more widely implemented, it has to become an economic story
  - Don't know about AF at the moment, especially more down the value chain
    - Too far into the future

# Domain 3: Bridging institutions



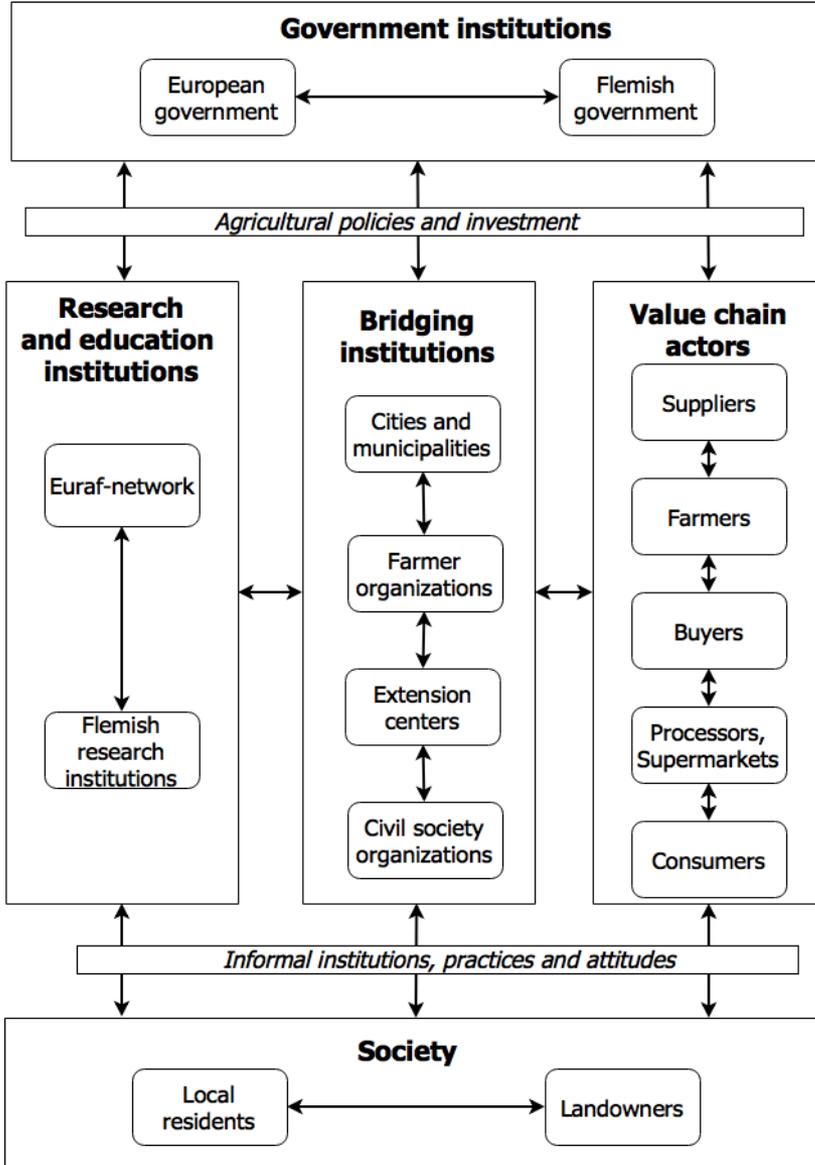
- **Farmer organizations**
  - Lobby and influence agricultural policy
  - Help, advise and inform farmers
- **Civil society organizations**
  - Create a platform and a support base
- **Extension centers**
  - Translate scientific information into practical implications
- **Cities and municipalities**
  - Closest contact with the farmer himself
  - Issue logging permits

# Domain 4: Government institutions



- **Flemish government:**
  - Are considered very influential:
    - Solve current legal uncertainties with respect to AF
    - Provide incentives for AF adoption
    - Provide funding for research
- **European government**
  - Is steering Flemish policy
  - Provide funding for research

# Domain 5: Society



- **Local residents:**
  - In general in favor of more varied landscape
  - BUT AF may impact negatively on open views
    - May lead to resistance of neighbors and residents
- **Landowners:**
  - Need to give permission to farmers to implement AF
  - Fear that trees will lead to a devaluation of their farmland

# Discussion



- **Economic challenges**

- A lot of questions with respect to profitability

- **Research institutions** have to investigate in detail the productivity and financial viability of AF systems
- **Research institutions** can explore new marketing schemes in collaboration with the **actors of the value chain** and **civil society organizations**

- **Technical challenges**

- Negative impact of AF on farm management

- **Research institutions and extension services** can demonstrate that tree rows can be spaced at widths suited for existing machinery
- **Farmer organizations** can try to come up with new farm management models and provide additional support

# Discussion



- **Legal challenges**

- Trees in the agricultural landscape are protected through different laws
- Landowners have to give permission
  - **Government institutions** should implement a more steady policy and clarify the place of AF in the existing legislation

- **Social challenges**

- In general: people are in favor of a more varied landscape
- BUT Agroforestry is not always desired by everyone
  - **Research and government institutions** should monitor the impact of AF on biodiversity, landscape and compliance with the historical character of a region
  - **Government and civil society organizations** should create more awareness about the value of trees on farms

Thank you for your attention

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