



Recent developments in collaborative modelling: Why here and why now?

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With the support:



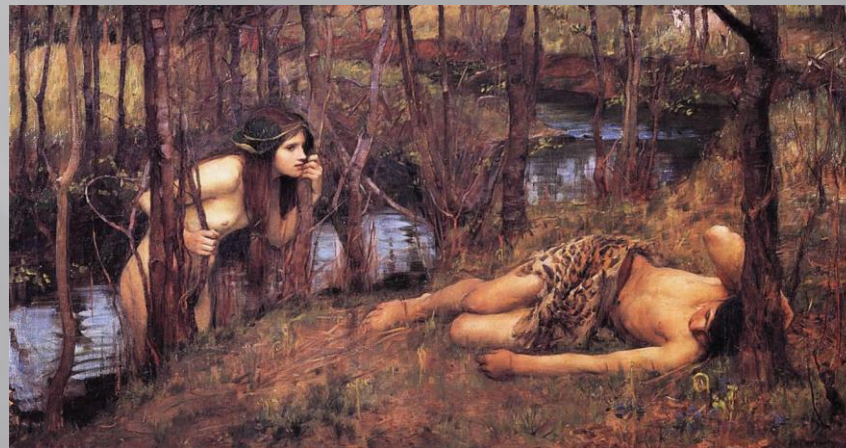
WORLD BANK GROUP



Plan of the Presentation

1. The NAIAD Project
2. Our case studies
3. Why collaborative modelling?

The NAIAD project



NAIAD'S Aim:

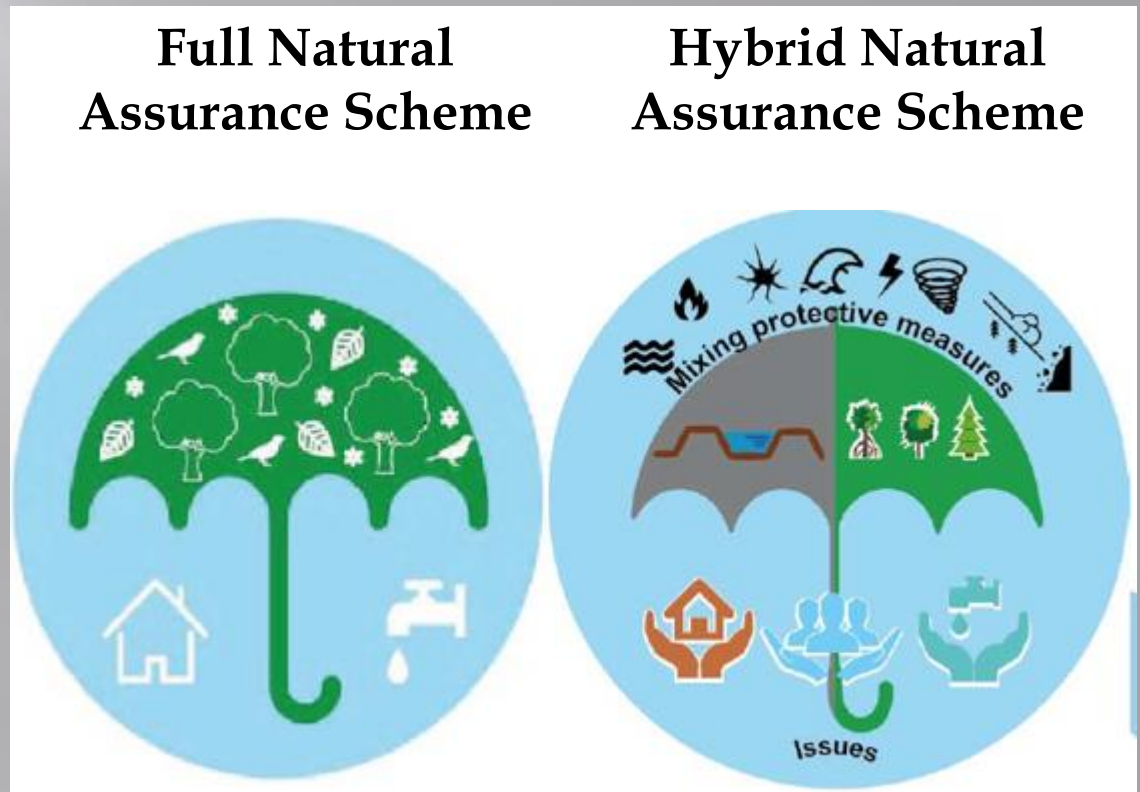
to demonstrate the insurance value of ecosystems
i.e. The role ecosystems play in reducing water
related risks (e.g. extreme events) -
"Natural Assurance Schemes" (NAS)



NAIAD'S Strategic Goals:

1. Develop NAS Assessment frame
2. Test NAS in 8 DEMOS
3. Co-produced with different stakeholders (policy makers, insurers, water users, etc)

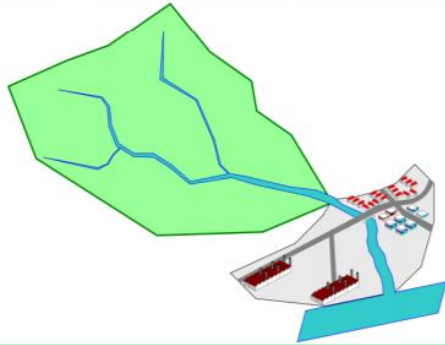
The Insurance Value of ecosystems



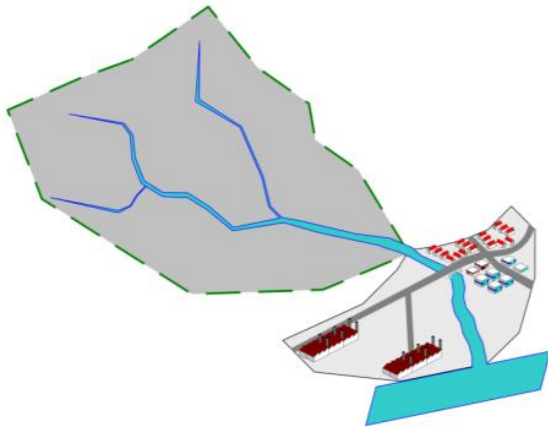
NOW

THE FUTURE?

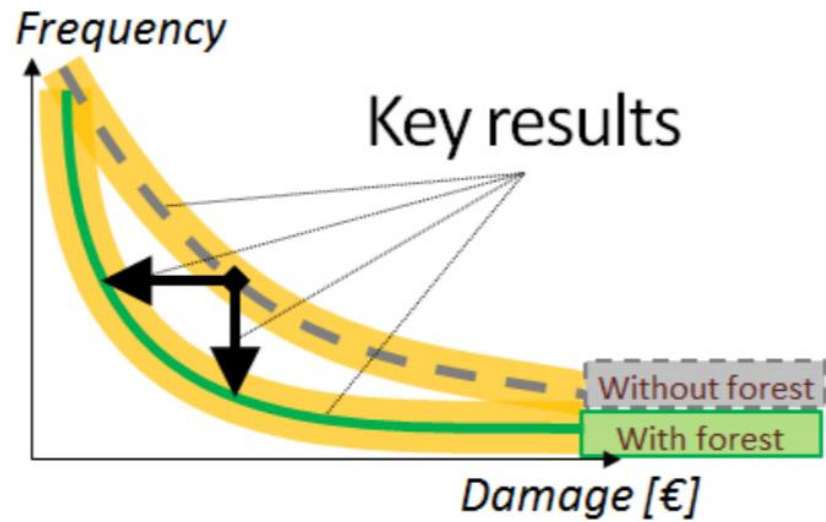




Forested catchment

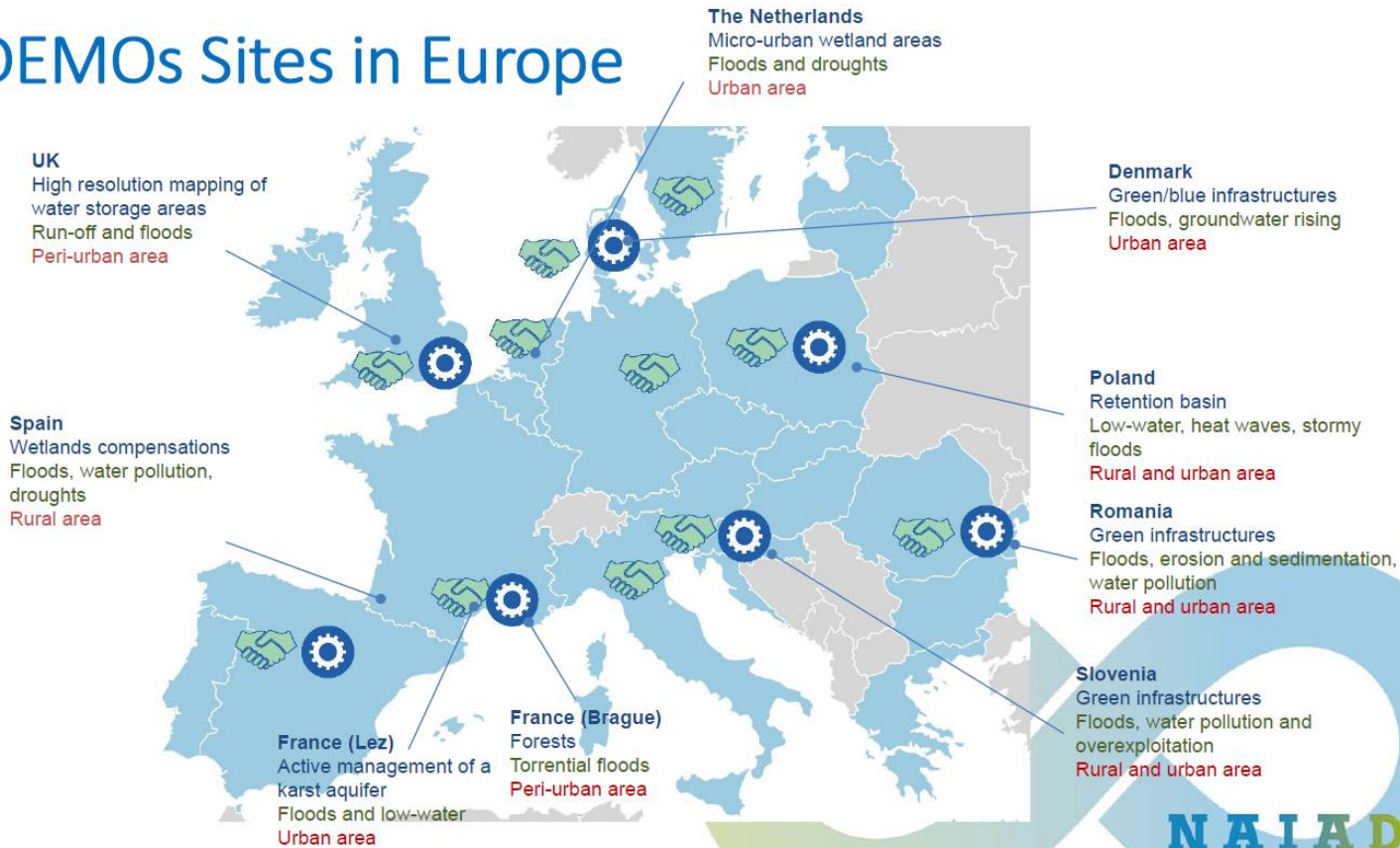


Unforested catchment



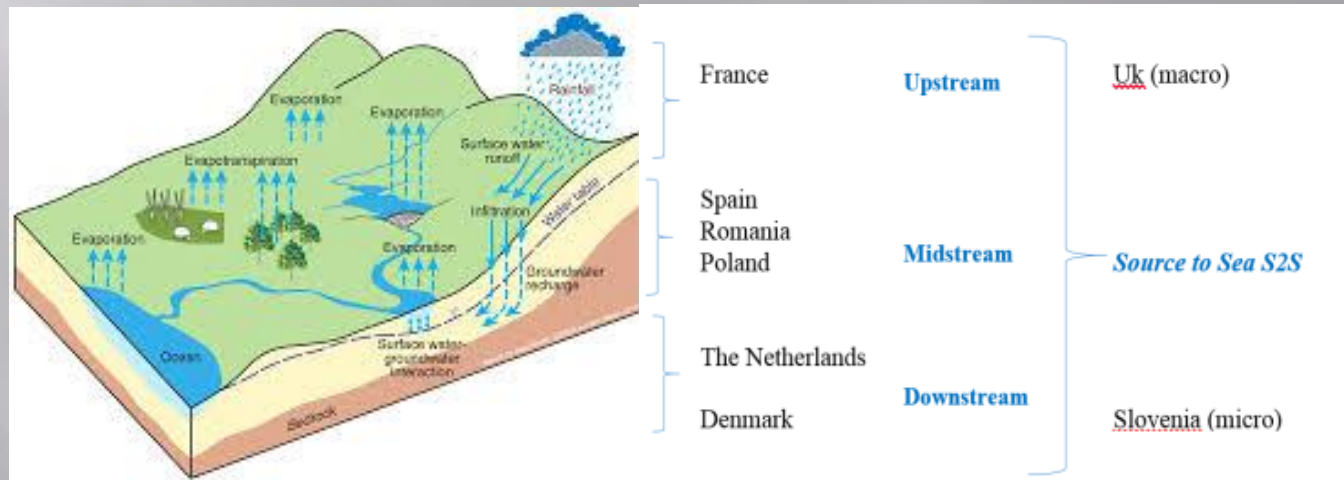
Case studies

9 DEMOs Sites in Europe



Multiscale + multihazard

- 3 micro (city- Copenhagen, Rotterdam and Lodz)
- 3 meso scale (Gliscinka, Slovenia and Nice and Montpellier)
- 3 large (Lower Danube, lower Thames and Medina aquifer)



Diverse stakeholders

Municipalities, farmers, NGOs, regional government, NGOs, national ministries, local universities, research centers

Medina del Campo

<https://youtu.be/IHMXg722ZJ0>

National public agencies

- MAPAMA
- CEDEX

Insurance and re-insurance companies:

- Consortio Nacional de Seguros
- Agro-seguros
- [Guy Carpenter](#)

Regional

- Regional government of Castile and Leon
- Provincial Council of Ávila
- Environmental dpt of Castille and Leon
- Consejeria Agricultura de Castilla-leon

Local public

- Municipal Council Medina del Campo
- Municipal Council Horcajo de las Torres
- Municipal Council Rágama

Farmers

- Irrigation Community Río Adaja
- UPA: Association of small farmers and stockbreeders (Unión de Pequeños Agricultores y Ganaderos).
- UCCL: Association of Young Farmers (Jóvenes Agricultores)

Public and Private Companies /SMEs

- ACUAES: Public Company in hydraulic infrastructures.

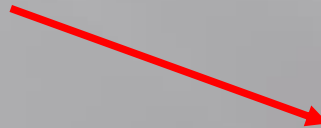
Academic/Research

- Water scientific research, technological development Center (CIDTA),
- University of de Salamanca. (Centro de Investigación y Desarrollo Tecnológico del Agua).

NGO

- Cultural Association: ALHONDIGA
- NGO WWF Spain
- NGO SEOBirdlife

From Black box to collaborative modelling



Why?

- High uncertainty
- Potential conflicts
- Problem perceptions
- Different Interests
- ...
- Complex systems

The Blind Men and the Elephant

An elephant one day wandered into a small village. In the village lived six blind men. The men could feel the earth trembling under their feet, and having never seen an elephant they decided to touch and feel the animal, to learn what it was. "Ah, this thing feels like a tree" said the first man embracing the elephant's leg. "I disagree, it feels more like a snake" the second man claimed after touching the trunk.

The third grabbed the tail uttering:

"This animal is like a rope."

"It feels like a big fan" said the fourth man pulling the ear.

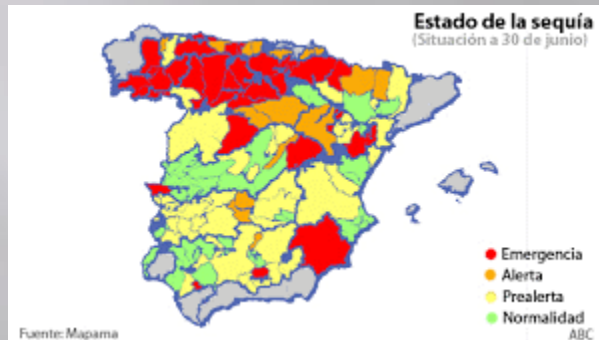
"The animal has got the shape and feel of a spear," said the fifth man with the tusk in his hand. The last man in the group examining the body said: "It is like a huge brick wall."

All clinging to their own experience and perception, the blind men debated as to who was right in describing the animal. A wise man happened to overhear them. He calmly said: "Each one of you is partly right; but each one of you is wrong. If you put your partial views together, you will get an idea of what an elephant looks like."



Why?

- ▣ Risk perceptions

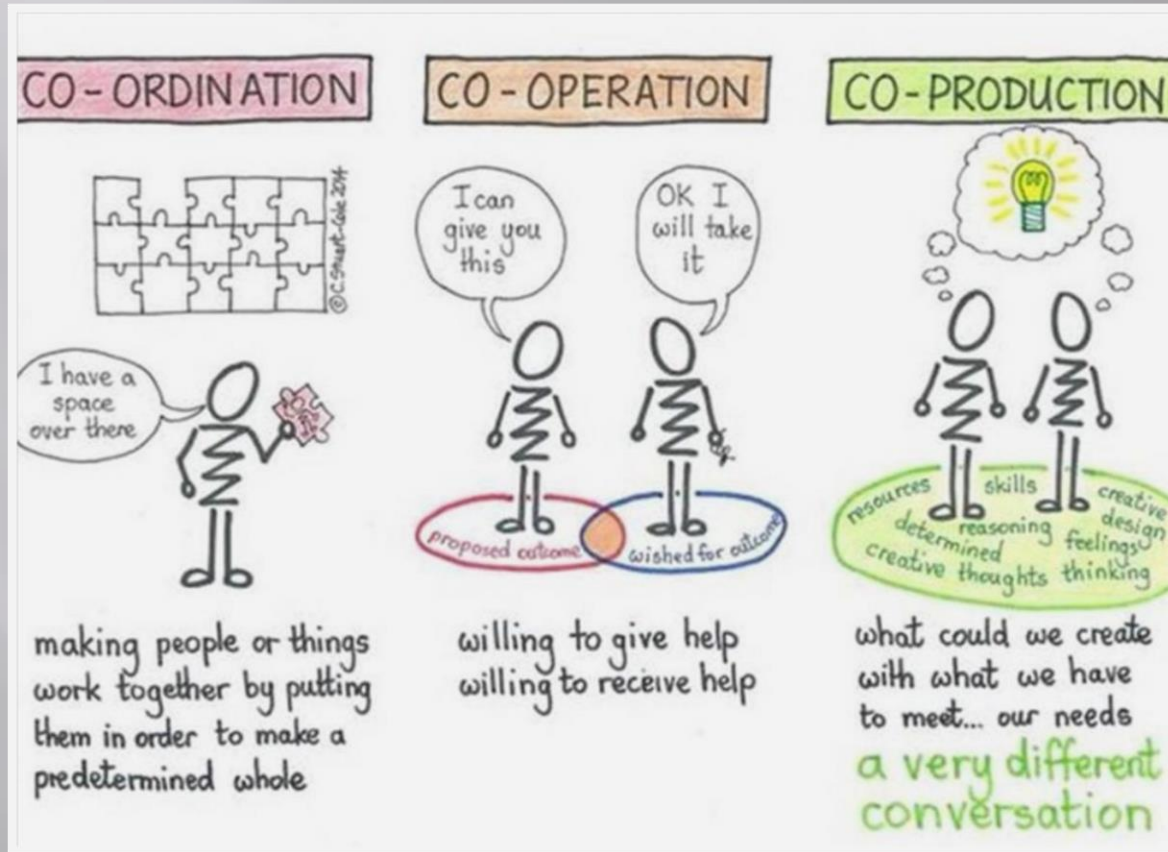


- ▣ Need for “mínimum viable agreements”?



$$1 + 1 = 4!$$

Building synergies



ies



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