

*(E)valuating spatial adaptation strategies in response
to changes in water availability due to climate change
in coastal zones*



Jeroen Veraart

Objectives

- To develop an approach that enables natural resource managers/spatial planners to identify the effectiveness of adaptation strategies in order to cope with increased summer drought risks in the context of climate change
- Better presentation of uncertainties regarding future changes in water supply on landscape level in CBA and risk assessments on regional level by use of indicators.

Definition of this PHD research

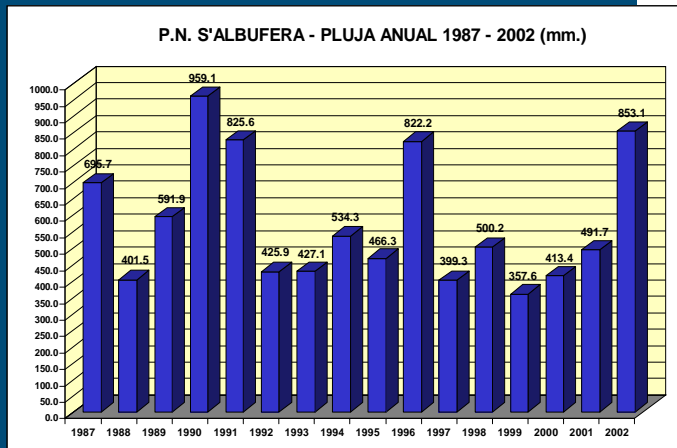
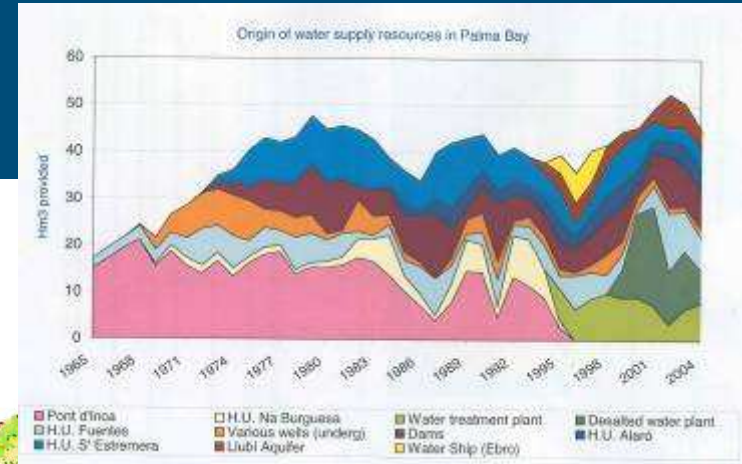
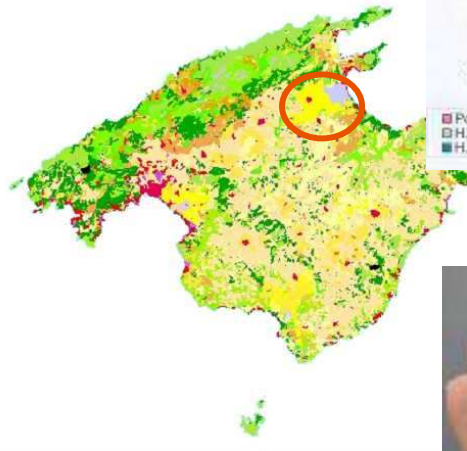
- Regional/spatial multi-sectoral approach of adaptation to water scarcity
- Focus (ecosystem services): water supply, biodiversity
- To be used in **existing** decision support tools (o.a. CBA).
- 2 - 4 case study areas (Coastal zones) in different climatic zones and different institutional settings (2 in Spain and 2 in the Netherlands).
- Social science (embedding in policy, perceptions) & a natural science (presentation of uncertainties, transparency)

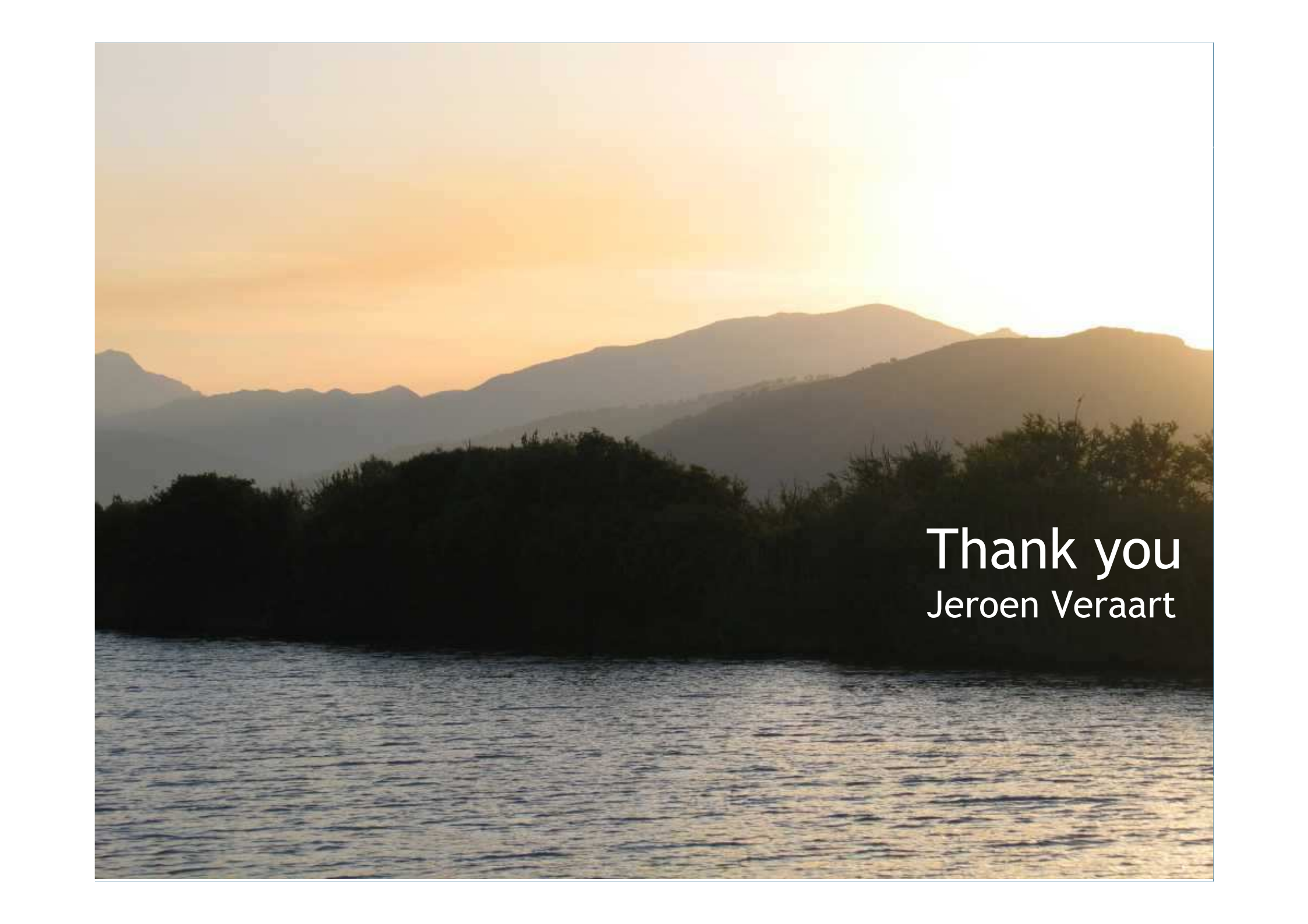
Method:

Step 1: Analysis of 1/2 case studies where the decision making process is **completed**. How were scientific information/indicators used and valued regarding water supply & biodiversity) functions (grey documentation, interviews)

Step 2: Analysis of 1/2 case studies where the decision making process is **not yet completed**. **We** test new ways of presenting uncertainties for ecosystem service values (water supply, biodiversity) in a simplified model to be used in existing DSS and we test new ways to use these indicators in the science-policy interface (workshops)

Possible case in Mediterranean: Albufera





Thank you
Jeroen Veraart