

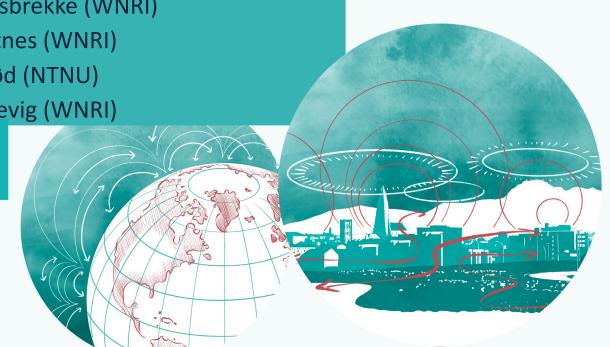
Marie Pontoppidan (NORCE)

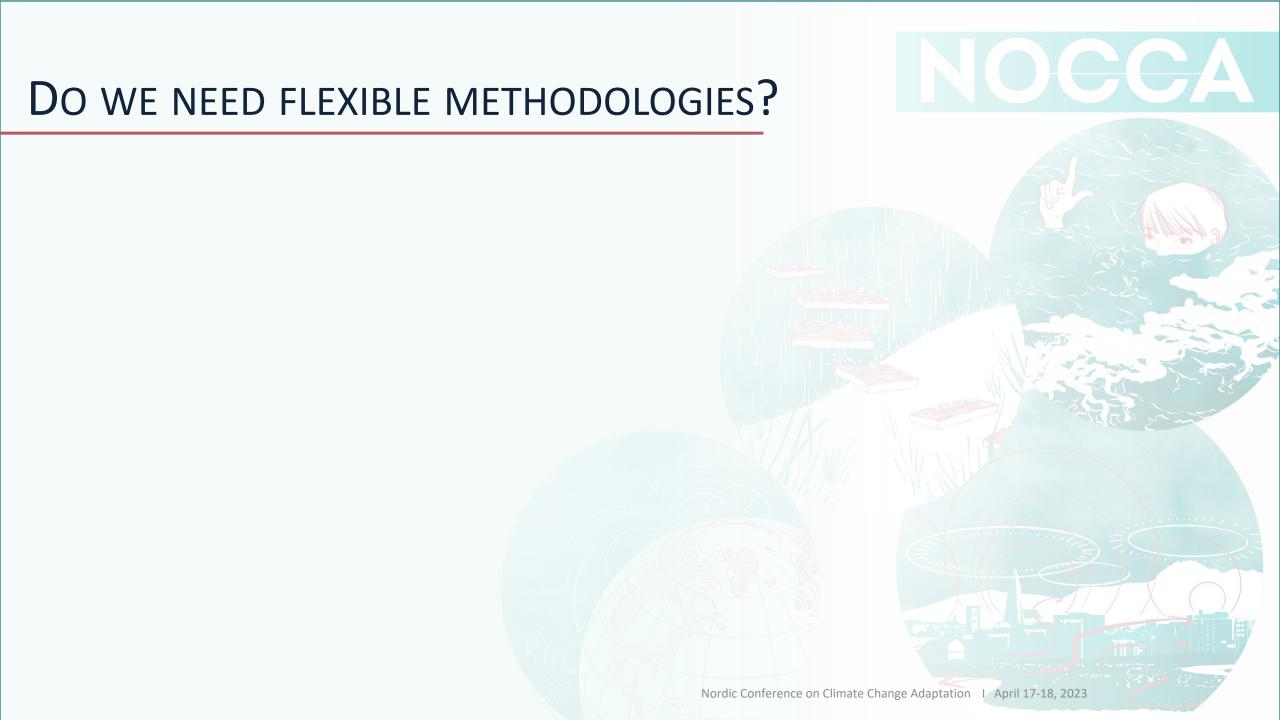
Mari Hansen Korsbrekke (WNRI)

Synnøve Beitnes (WNRI)

Jan Ketil Rød (NTNU)

Halvor Dannevig (WNRI)







Do we need flexible methodologies?

- Enable more social classes and groups in society to participate
- Strengthen engagement and commitment
- Enhance legitimacy of climate change adaptation (and mitigation)
- Ensure valuable knowledge is transferred in all directions





- Truls Folkestad (Sunnfjord municipality)
- Kaja Standal Moen (Kinn municipality)
- Wenche-Mari Bliksås (Osterøy municipality)
- Lene Omdahl (Vestland County Council)

PARTICIPATORY METHODS FOR SUSTAINABLE CLIMATE CHANGE ADAPTATION

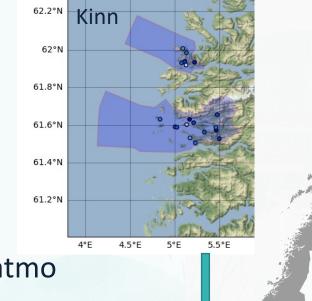
- Develop participatory methods to enhance the adaptation capacity in municipalities
- Develop citizen science methods to increase legitimacy and awareness to the knowledge-base for climate adaptation
- Enhance the ability of counties to assist the municipalities in their adaptation work
- Test participation methods to increase involvement in planning processes
- Develop visualization and communication methods that make the knowledge accessible and relevant to citizens and decision-makers

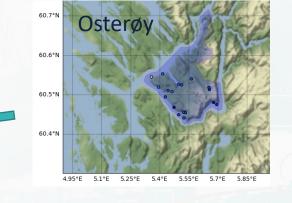
CITIZEN SCIENCE AND WORKSHOPS

- Sunnfjord municipality
- Osterøy municipality
- Kinn municipality

 Specific training workshops for Netatmo and CitizenSensing app

61.35°N





WORKSHOP AND SEMINARS

- Sunnfjord municipality
 - Flooding in Viksdalen
- Osterøy municipality
 - Renewal of the land-use part of the municipal master plan
- Kinn municipality
 - Adaptation in agriculture



CITIZENSENSING APP (ACTIVE CITIZEN SCIENCE)

- Report incidents in web application
- Pictures and position included
- Climate information tailored the municipalities





NETATMO RAIN GAUGE (PASSIVE CITIZEN SCIENCE)

- Automated weather station
- Volentary sharing of data online
- Reasonably priced
- Already fairly wide use in Europe
- Used in official weather forecast (yr.no)



WHY USE CITIZEN SCIENCE AS PARTICIPATION METHOD?

Researcher point of view:

- New, more, different data
- Higher frequency and spatial coverage of data
- Arena for trust building
- Enhance awareness and legitimacy in society
- Diversity in participation methods

Citizen point of view:

- Motivating to contribute
- Your competence and local knowledge is used



Photo: M. Pontoppidan

IDENTIFIED BARRIERS

- Resource-intensive work
- Language barriers must be overcome time
- Results can be difficult to visualize and verify
- Best method depends on problem to solve and personality to involved persons
- Ethics exposing conflict of interests
- Recruit and retain



DRIVERS

- Relevant and engaging theme
 - The feeling of contributing
- Flexible participation
 - Citizen science
 - Workshops
 - Interviews
- Trust and dialogue
 - Existing trust
 - Group composition



THANK YOU

NOCCA

Marie Pontoppidan

Research Director Regional Climate

mapo@norceresearch.no +47 56 10 75 47 Jahnebakken 5, 5007 Bergen, Norway









