

Adaptive capacities	Definitions	Examples from FRAMES pilots
1. Variety		
1.1 Variety of problem frames	Room for multiple frames of references, opinions and problem definitions	Engineers may think that flood risk can be reduced building dikes and spatial planners may think that flood risk can be reduced by doing compaters
1.2 Multi-actor, multi-level, multi-sector (stakeholders)	Involvement of different actors, levels and sectors in the governance process	Actors from spatial planning, water managers and crisis management are involved in the Wesermarsch pilot.
1.3 Diversity of solutions	Availability of a wide range of different solutions/pathways/actions to tackle a problem	Pilot projects result in a multiple FRM measures: improved flood preparedness, increase in emergency management, recovery guidelines.
1.4 Redundancy (duplication)	Presence of overlapping solutions/measures and back-up systems; not cost-effective. Redundancy in the short-term to promote the best solutions in the long-term	MCA of the adaptation measures for long term planning (adaptive planning, Denmark)
2. Learning capacity		
2.1 Trust	Presence of authorities patterns that promote mutual respect and trust	Trent River Trust had to gain the trust of farmers about the effectiveness of NFM interventions (Southwell). Electricity grid owners did not trust the Province in providing the geodata of the electricity grid assets.
2.2 Single loop learning	Ability of authorities patterns to learn from past experiences and improve their routines	Authorities asks themselves: "Are we doing what we do right?" This might lead, for instance, to improving the construction of a dyke. Pilots learnt from previous projects to do things different (Wesermarsch, Alblasserwaard)
2.3 Double loop learning	Evidence of changes in assumptions underlying authorities patterns (re-evaluates and reframes goals, values, etc.)	Authorities asks themselves: "Are we doing the right thing?" Learning outcomes would be, for example, changes in the organization's knowledge base, new objectives, or new policy frames. Majors understood the importance of combining emergency management with spatial planning and water management.
2.4 Discuss doubts	Authorities openness towards uncertainties (deal with uncertainties)	Discuss the uncertainties of climate change and the actions with all the stakeholders.
2.5 Institutional memory	Authorities provision of monitoring and evaluation processes of pathways/actions experiences	The total collected amount of knowledge possessed by a group of people. These can include concepts, experiences, facts, and so on. So how a government is supposed to run is an institutional memory that needs to be passed down to new members.
3. Room for autonomous change		
3.1 Continuous access to information	Accessibility of data within authorities memory and early warning systems to individuals	Provide access to information of MLS approach and the information generated as a result of the FRAMES pilots (local news, websites, social media).
3.2 Act according to a plan	Increasing the ability of individuals to act by providing plans and scripts for action, especially in case of disasters	The recovery guidelines (Roskilde) should be clear and accessible for citizens, municipalities and insurances in order to facilitate the recovery time in case of flooding.
3.3 Capacity to improvise	Increasing the capacity of individuals to self-organize and innovate; foster social capital	Provide information to stakeholders in order to increase their flood risk awareness which results in enhanced social capital (Ablasserwaard, Wesermarsch, Soutwell...)
4. Leadership		
4.1 Visionary	Room for long-term visions and reformist leaders	Include long term vision in the planning of the adaptation measures (adaptive planning, Assens and Vejle)
4.2 Entrepreneurial	Room for leaders that stimulate actions and undertakings; leadership by example	Stimulate and empower local groups to take action themselves and prepare in case of flooding (Southwell, Kent, Medway, Wesermarsch)
4.3 Collaborative	Room for leaders who encourage collaboration between different actors; adaptive co-management	All pilots collaborated with other stakeholders during the pilot process.
5. Resource		
5.1 Authority	Provision of accepted or legitimate forms of power; whether or not authorities rules/procedures are embedded in constitutional laws	The organisations involved in the pilot projects have the right responsibilities in crisis management, water management and spatial planning.
5.2 Human resources	Availability of expertise, knowledge and human labour	More knowledge was developed as a result of the FRAMES pilot: vulnerability of critical infrastructure to flooding, recovery guideline, flood preparedness of farmers and livestock in case of flooding...
5.3 Financial resources	Availability of financial resources to support measures and financial incentives	Financial resources are available to perform the pilot activities from the EU funds.
6. Fair governance		
6.1 Legitimacy	Whether there is public support for a specific authority	A government needs citizens to help decide priorities and make things happen. Legitimacy is the reservoir of support government requires to achieve public impact.
6.2 Equity	Whether or not authorities rules/procedures are fair	How do governments plan and invest for the protection of people, and property, from floods? According to which principles are the financial resources and institutional capacities being allocated to protect location X as compared with location Y?
6.3 Responsiveness	Whether or not authorities patterns show response to society	The actions taken respond to the needs of the society: the pilot projects were defined based on the actors needs in the area of the pilot
6.3 Accountability	Whether or not authorities patterns provide accountability procedures	This relates to stakeholder engagement for inclusive and transparent flood-related decision-making; regular use of monitoring, evaluation and enforcement mechanisms. Accountability in flood management tends to be predominantly limited to technical reporting and financial accounting to institutional superiors. The actors involved in the pilots know/ perform their responsibilities clearly in FRM.