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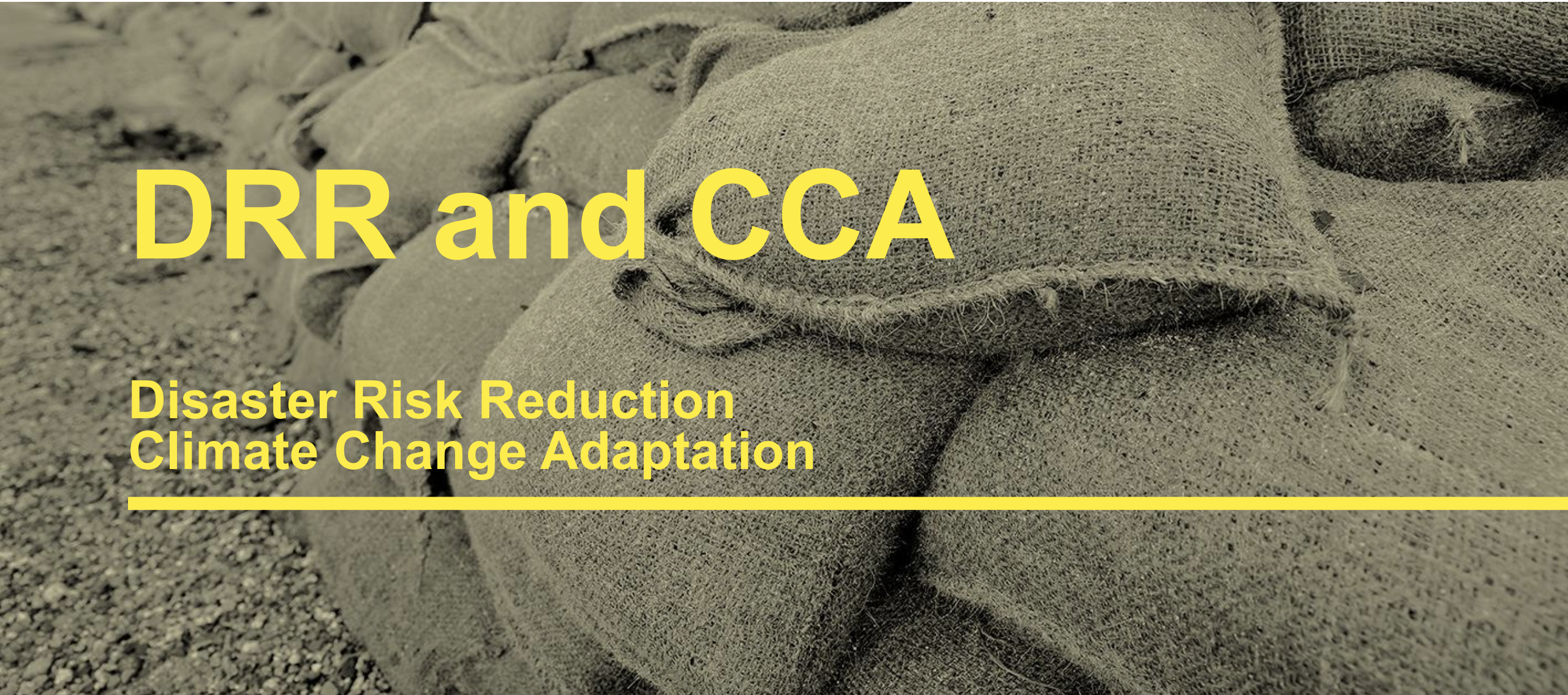

DRR and CCA

Disaster Risk Reduction
Climate Change Adaptation

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- Policy coherence
- Barriers to integration
- Sendai in the Baltic Sea Region

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LEARNING OUTCOMES

After this lesson you will:

- Understand the differences between Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR)
- Know that climate hazard is a part of the climate risks
- Be aware of the barriers to climate adaptation, with examples from BSR
- Know about the recommendations for strengthening the Sendai Framework in the BSR

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COMMONLY USED ABBREVIATIONS

BSR - Baltic Sea Region
CCA - Climate Change Adaptation

DRR - Disaster Risk Reduction

SFDRR 2015-2030 - Sendai Framework for Disaster Risk Reduction 2015-2030

UNFCCC - United Nations Framework Convention on Climate Change

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Policy coherence and practical overlap: DRR and CCA – two sides of the same coin

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CLIMATE CHANGE ADAPTATION (CCA) VS DISASTER RISK REDUCTION (DRR)?

CCR and DRR can be seen as synonymous risk management approaches. Still, there are conceptual differences.

Adaptation[1]

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects.

Incremental adaptation Adaptation actions where the central aim is to maintain the essence and integrity of a system or process at a given scale.[2]

Transformational adaptation Adaptation that changes the fundamental attributes of a system in response to climate and its effects.

Disaster Risk Reduction (DRR)

Denotes both a policy goal or objective, and the strategic and instrumental measures employed for anticipating future disaster risk; reducing existing exposure, hazard, or vulnerability; and improving resilience.

IPCC (2014). "Glossary" (PDF). Intergovernmental Panel on Climate Change.

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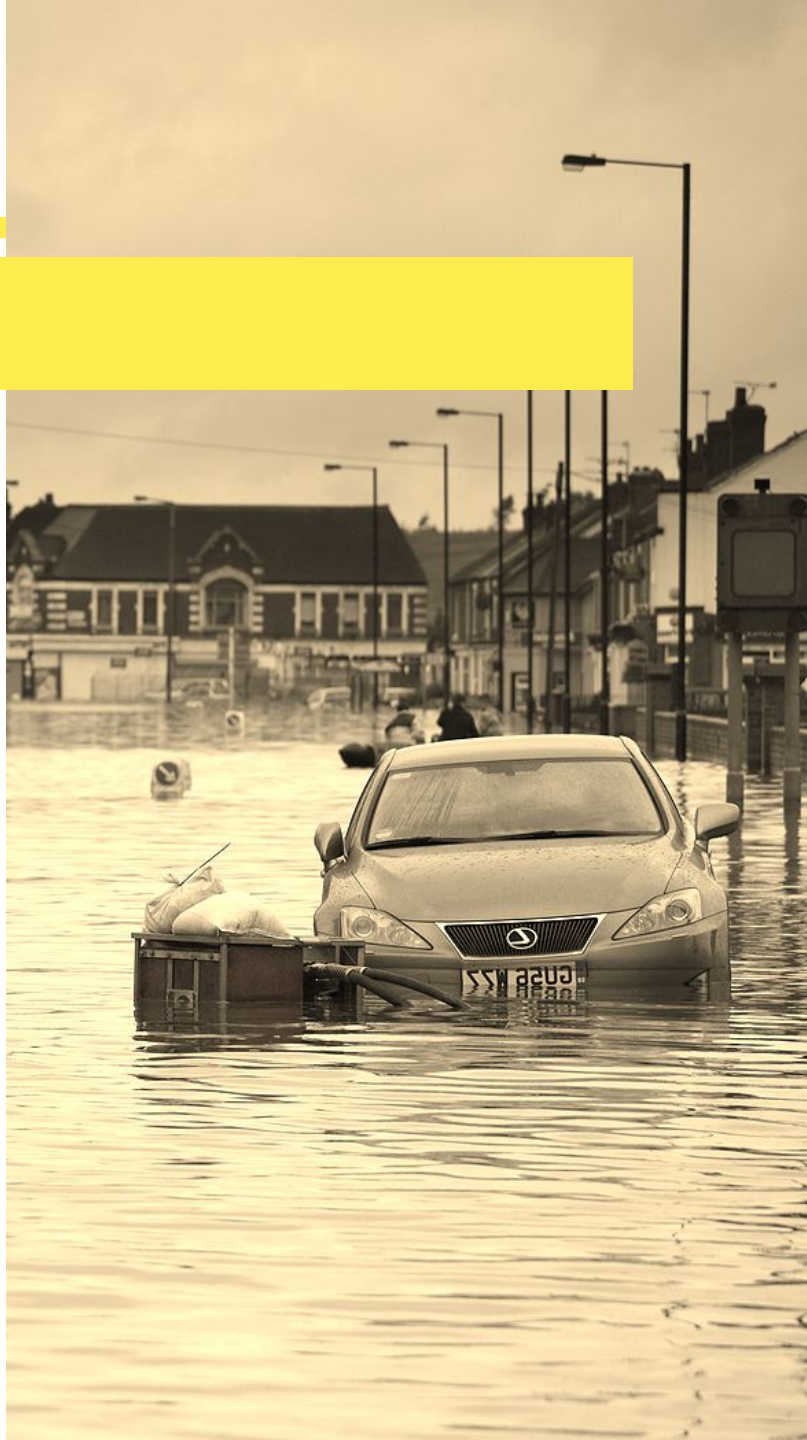
CCR VERSUS DRR (1/2)

Table 1.1 Objective and main differences between climate change adaptation and disaster risk reduction

CCA	DRR
Common objective	
Both CCA and DRR address prevention and reduction of risks of disasters by reducing vulnerability and increasing resilience of societies.	
Main differences	
Focus mainly on future and addressing uncertainty and new risks — CCA addresses climate change and climate variability, including changes in climate extremes, and focuses on reducing risks of present and future climate change.	**Focus on present and addressing existing risks —** DRR focuses on reducing risks based on previous experience and knowledge of the past, considers as stationary the probability of occurrence of extremes, and does not systematically consider climate change as a driver of risk.
Addressing mainly weather- and climate-related hazards — CCA addresses weather-related hazards (e.g. storm, heavy precipitation), climate-related hazards (e.g. heat wave, drought), and hydrological hazards (e.g. flood), which are sub-sets of the hazards covered by DRR.	**Addressing all hazard types** — DRR covers all hazard types including geophysical (e.g. earthquake, mass movement, volcanic activity, landslide, avalanche), hydro-meteorological (e.g. storm, extreme temperature, flood, wave action), climatological (e.g. drought, wildfire), biological (e.g. disease, insect infestation), and technological (e.g. oil and toxic spills, and industrial accidents).
In addition:	
Longer time scale — CCA also addresses impacts of slow onset changes (e.g. average temperature rise, sea level rise, drought, ice melting and loss of biodiversity).	

Table from “Climate Change Adaptation and Disaster Risk Reduction in Europe – enhancing the coherence of the knowledge base, policies and practices” European Environment Agency (EEA), Report No. 15, 2017



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CCR VERSUS DRR (2/2)

Table 1.1 Objective and main differences between climate change adaptation and disaster risk reduction

CCA	DRR
Common objective	
Both CCA and DRR address prevention and reduction of risks of disasters by reducing vulnerability and increasing resilience of societies.	
Main differences	
Origin and culture in scientific theory — CCA has been developed as the progress of understanding the threat of climate change has increased.	**Origin and culture in humanitarian assistance and civil protection** — in general DRR has a longer history and originated from civil protection and humanitarian action following disaster events.
Mainly actors in environment ministries and agencies — CCA is developed and managed mainly from governmental departments, ministries, and scientific institutions responsible for environment and climate.	**Mainly actors in civil protection ministries and agencies** — DRR is developed and managed mainly from governmental departments, ministries and agencies responsible for civil protection, national security, emergency management and humanitarian assistance.

Table from "Climate Change Adaptation and Disaster Risk Reduction in Europe – enhancing the coherence of the knowledge base, policies and practices" European Environment Agency (EEA), Report No. 15, 2017

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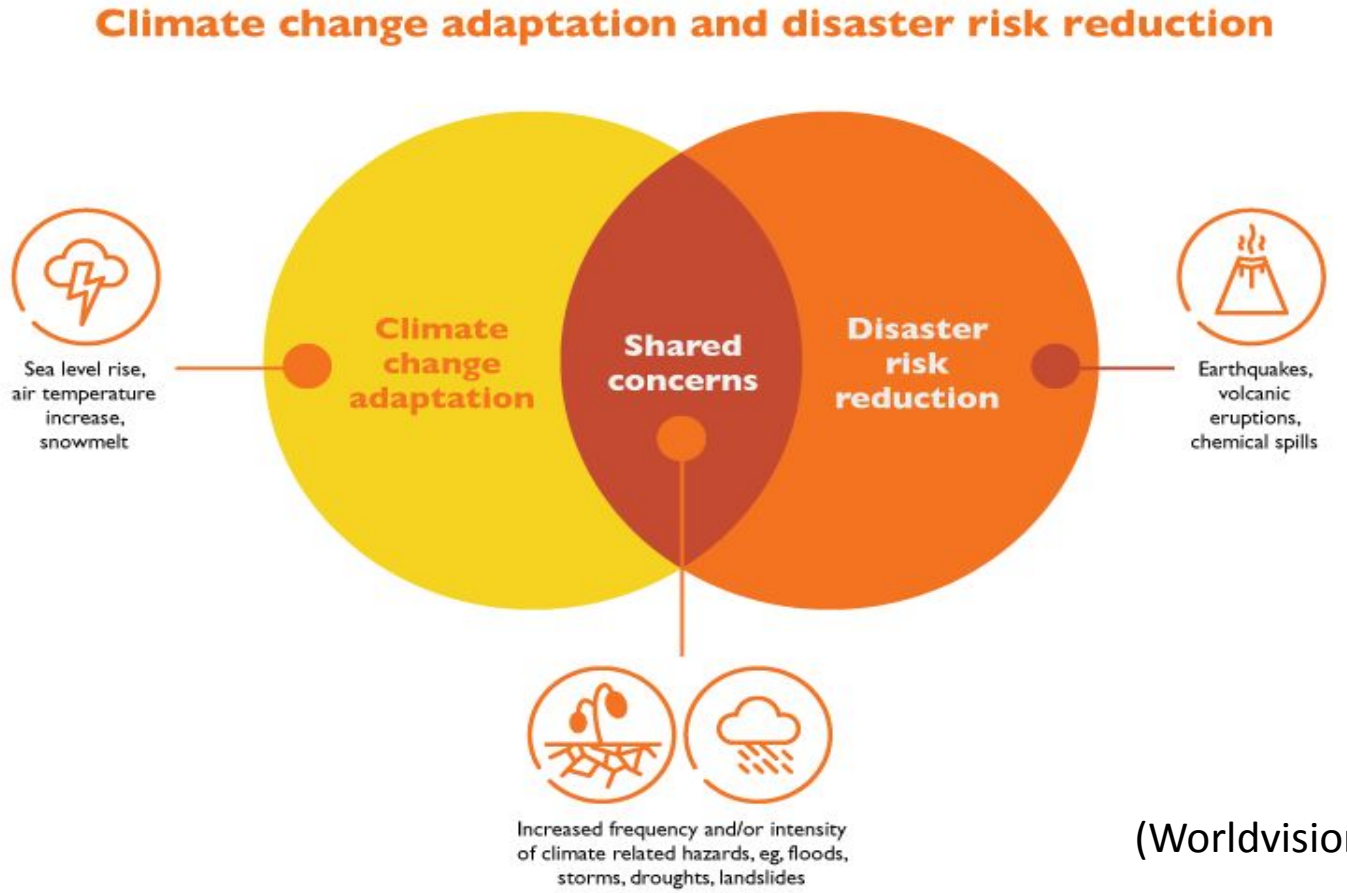
INTERLINKAGES TO GLOBAL POLICY FRAMEWORKS (1/2)

- Disasters and climate change have similar consequences for people's lives.
- Climate change will increase the frequency and/or intensity of climate-related hazards and effects.
- Populations already exposed to those hazards and effects will be at greater risk.



(Worldvision)

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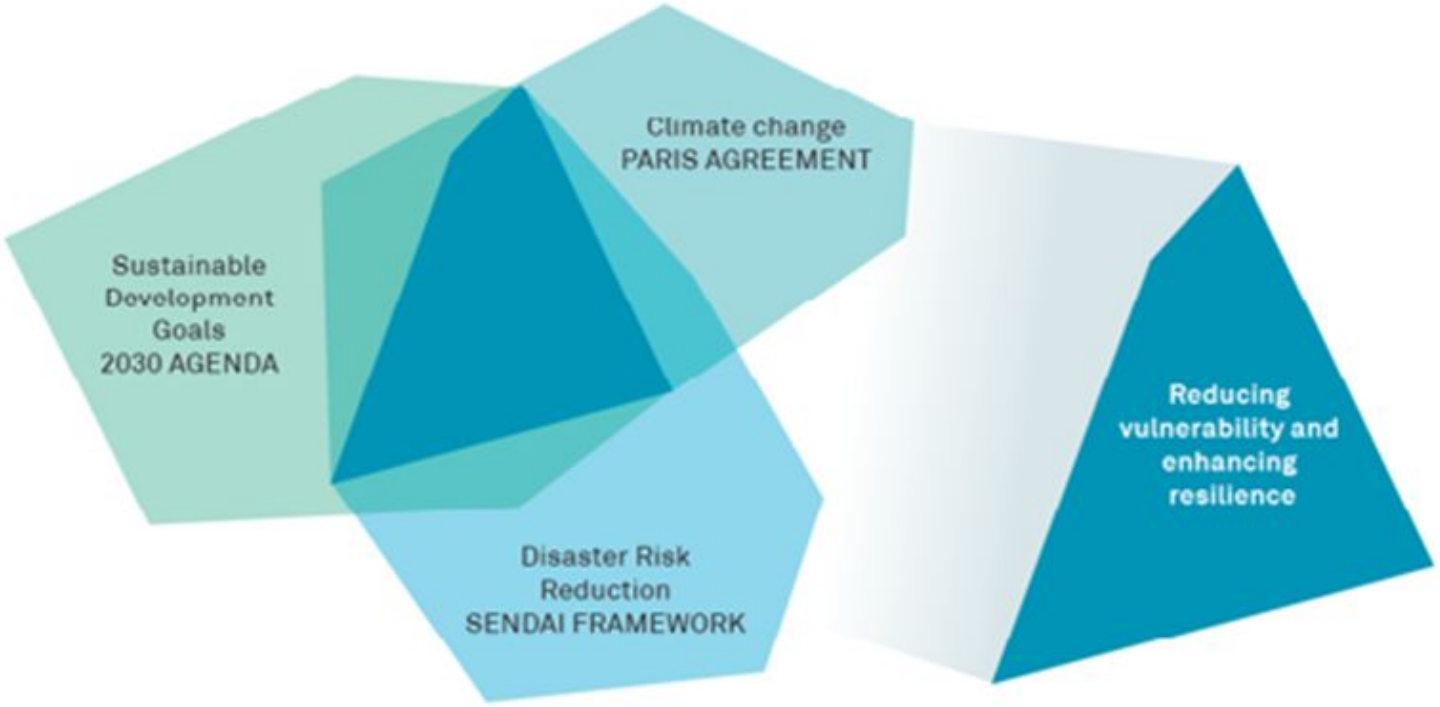
INTERLINKAGES TO GLOBAL POLICY FRAMEWORKS (2/2)

- Populations exposed to hazards may also experience stresses due to long-term changes in climate.
- This vulnerability and enhancing of resilience have a connection to the exciting policy frameworks.



(UNDRR, 2020)

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POLICIES, PLANS, STRATEGIES connected to CCA & DRR

Examples of policies, plans and strategies in different sectors, at different levels, where there are connections both to CCA and DRR.

- Climate Change Adaptation Strategies
- Resilience Strategies
- Disaster Risk Reduction Strategies
- Strategies for Spatial Planning
- Flood Risk Management Plans
- Emergency Preparedness and Response Plans
- Strategies for Sustainable Development (Agenda 2030 and SDGs)

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CCA & DRR AT WORK AT THE SAME TIME

Practical examples:

- What knowledge is needed for conducting holistic risk assessments, and holistic CCA and DRR strategies and plans?
- Who has that knowledge?

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Barriers to successful integrated climate risk assessment

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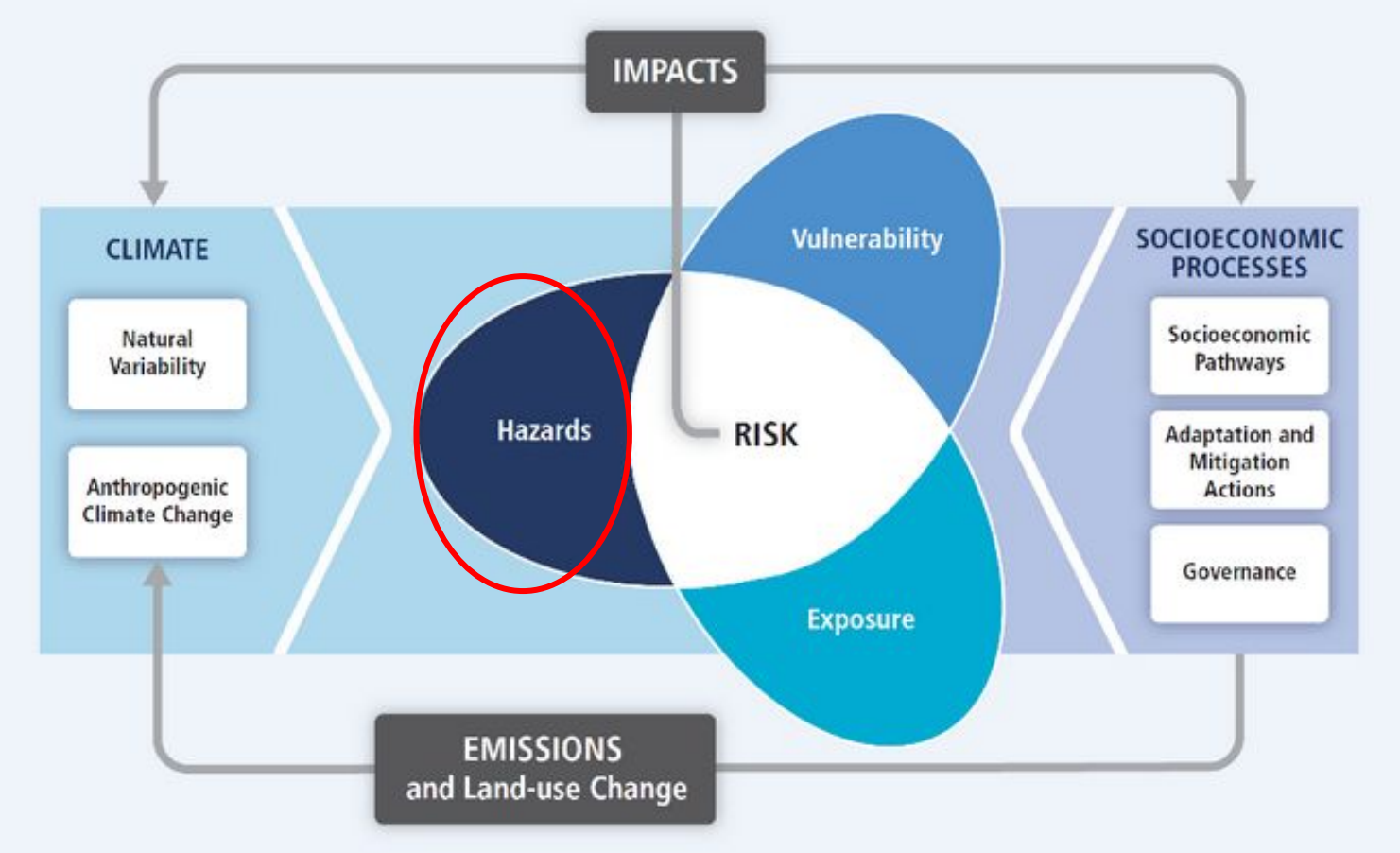
CLIMATE HAZARDS VS CLIMATE RISKS



Oppenheimer et al. 2014

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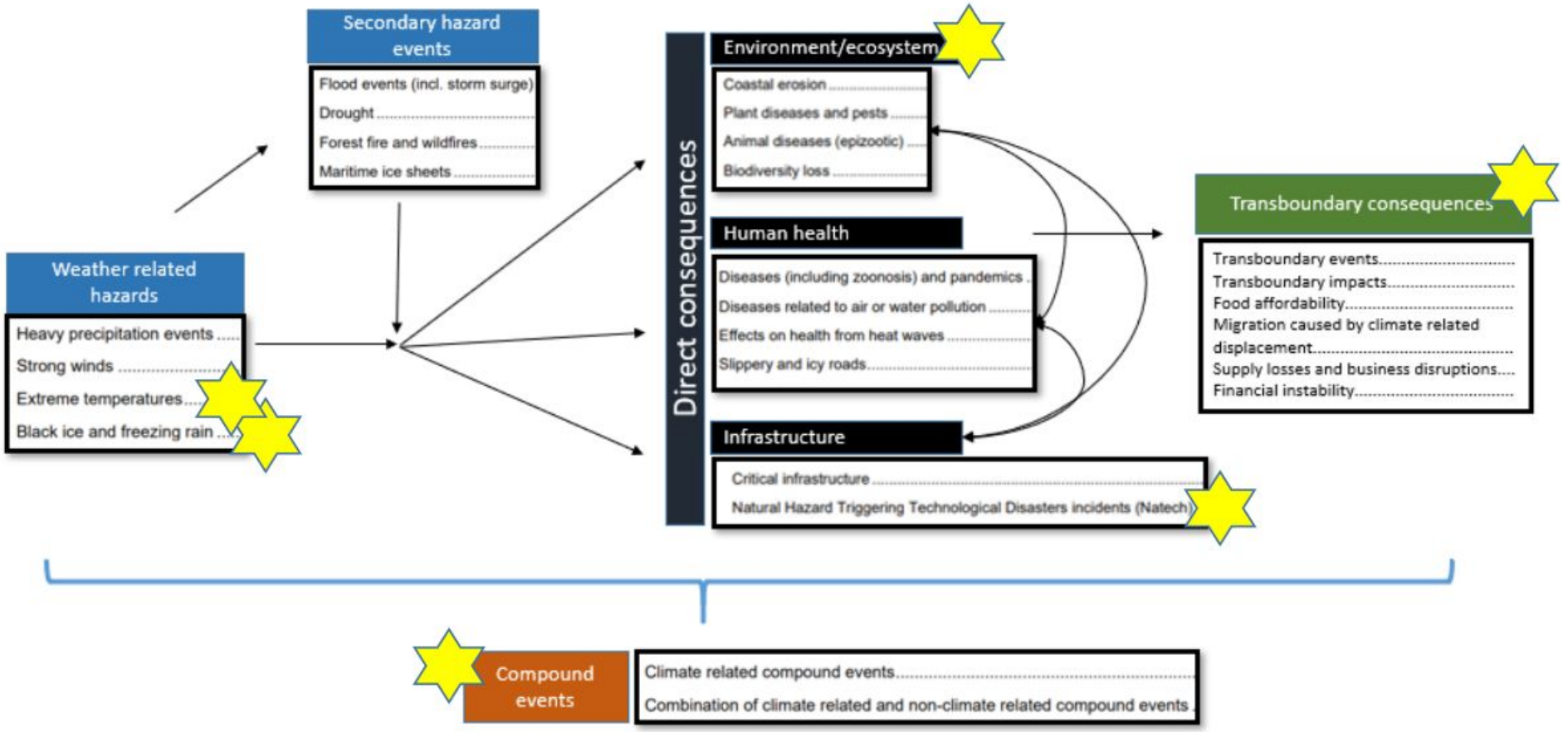
THE CONSEQUENCES OF CLIMATE HAZARDS



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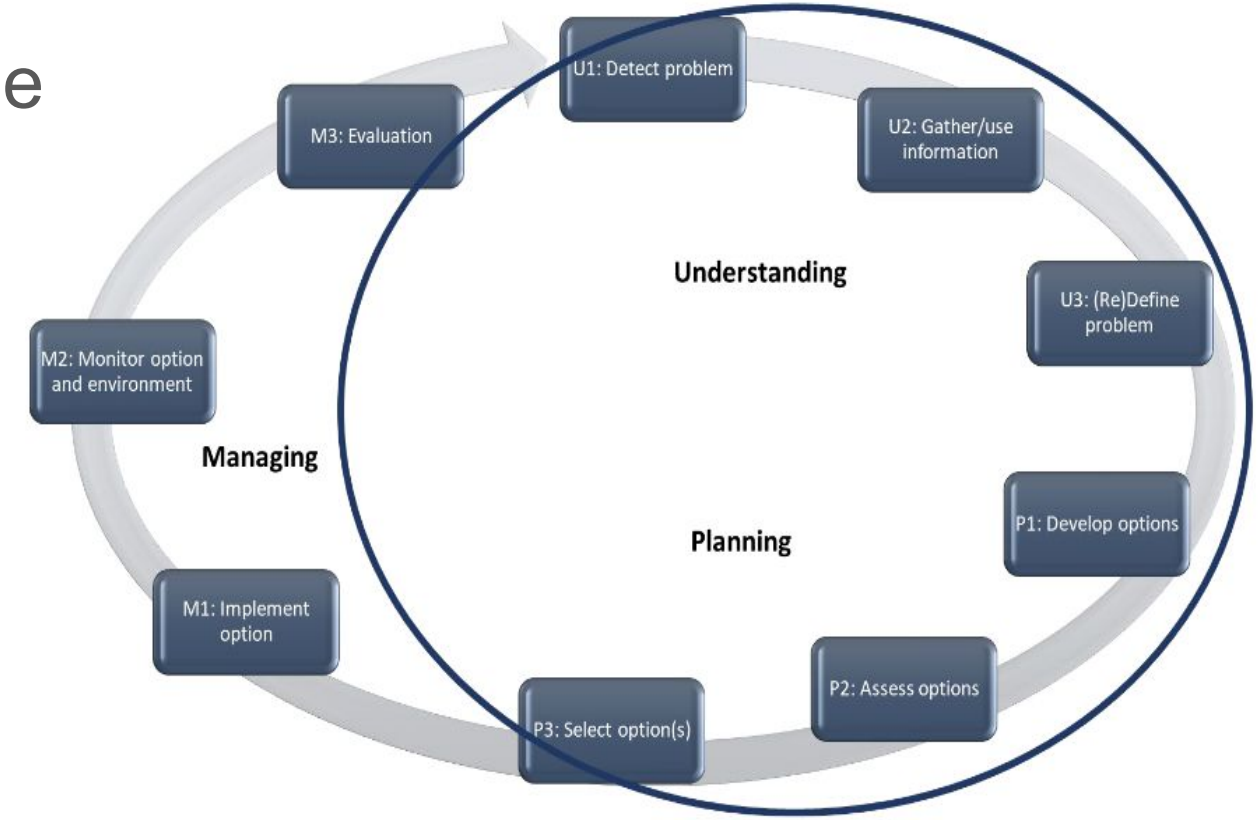
THE CLIMATE CHANGE ADAPTATION PROCESS

A continual management cycle

- 9 phases
- The understanding and planning are covered by the climate risk assessment process



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THE BARRIERS TO CLIMATE ADAPTATION

1. Conflicting timescales and conflicts of interest
2. Leadership
3. Resources
4. Scientific data and knowledge
5. Governance and institutional constraints
6. Lack of awareness and communication
7. Attitudes, values and motivations
8. Adaptation process

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EXAMPLES OF BARRIERS IN THE BSR

- Lack of financial resources
- Lack of expertise/technical skills and staff time
- Short term political cycles and lack of political will
- Lack of leaders steering the climate adaptation process forward
- Lack of capabilities for an adaptation process
- Lack of communication across sectors or silo-thinking
- Insufficient inclusion of different stakeholders, especially in the private sector

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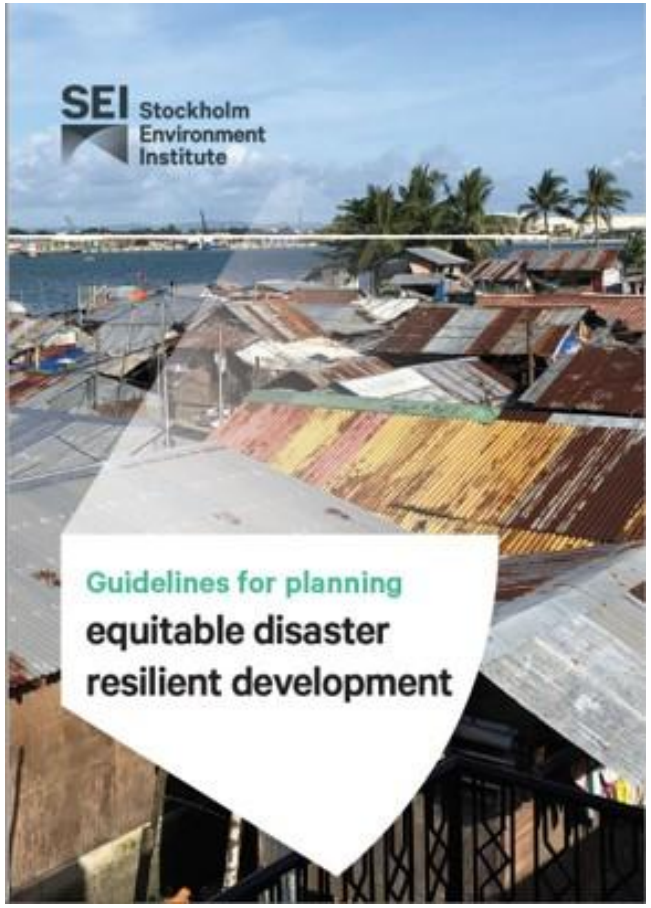
HOW TO OVERCOME THE BARRIERS



Play video clip (2:35 min):
http://on-urban-resilience.eu/index.html#Change_agents_can_take_adaptation_to_the_next_level

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THE SENDAI FRAMEWORK IN THE **BALTIC SEA REGION**

CHALLENGES – GOOD PRACTICES – WAY FORWARD

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DDR AND SENDAI FRAMEWORK IN THE BSR: NEEDS, CHALLENGES AND RECOMMENDATIONS

- What is the current state? How to strengthen implementation and cooperation? What are the needs? How to identify good practices?
- Cascade conducted a survey in spring 2019 for authorities involved in DRR in the BSR
- The main areas of focus:
  - National and local DRR strategies
  - International cooperation
  - Risk assessment and warning systems
  - The overall work with DRR in each country: structure, stakeholders involved, legislation and political support

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QUOTES FROM THE SURVEY:

"The biggest challenge is to advise the politicians that even though nothing large has happened yet because of climate change, this doesn't mean that the situation cannot change – we need to prepare today and not in 30 years' time"

"There isn´t one authority that has an overview, the work is very sector based – without one authority driving the process some issues fall between the cracks"

"There is a tendency to stick to the known risks that are related to cases we have already seen – we are starting to look more at climate change risks, but the time horizons are a bit challenging, that it is risks developing slowly over time"

"The change to preven-tion style thinking is slow – many people working in civil protection continue to focus on response rather than prevention"

"The municipalities are not using the Sendai Framework-language nor are they trying to reach the targets in the framework"

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MAIN CONCLUSIONS (1/2)

1. DRR is not a top political priority in the BSR – even though climate change issues are at the top of the agenda in some of the countries.
2. Making DRR a political priority or not determines how well-organised the work is with the implementation of the Sendai Framework.
3. The Sendai Framework is a global framework. All parts are not relevant for the countries in the BSR.
4. All countries recognize the need to work more actively with climate change risks, however they are lacking knowledge on integrating climate change into the relevant methodologies.
5. Difficult to distinguish between risk reduction and emergency preparedness.

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MAIN CONCLUSIONS (2/2)

6. Very limited awareness of the impact of prevention measures used, such as information campaigns.
7. Reporting to the UN Sendai Framework Monitor is time-consuming and difficult.
8. National Risk Assessments are conducted in all the BSR countries, however, collecting all necessary information for a thorough assessment is difficult.
9. International or regional cooperation is not commonly used to strengthen the national DRR capacities.
10. All the countries in the Baltic Sea Region have various early warning systems in place.

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RECOMMENDATIONS

How to strengthen the Sendai framework in the BSR?

1. The political and public support need to be sufficiently strong to enable efficient implementation. Incorporating climate change risks into the National Risk Assessments can become a tool to increase support.
2. The Sendai Framework needs to be tailored to the specific Baltic Sea Region context – to make national Sendai-related DRR efforts more relevant.
3. The multi-level and cross-sectoral cooperation should be strengthened to enable a common approach. DRR, CCA and Sustainable Development activities need coherence – in strategic planning, as well as in preparing and conducting the National Risk Assessments.
4. The coordination mechanisms need to be strengthened to enable the effective planning of implementation, cooperation and to manage the complex flows of information.

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KEY MESSAGES

- DRR ≠ CCA
- The connections and interlinkages between various global policy frameworks (Sendai, Agenda 2030 etc)
- What do climate hazards mean, and which are the consequences
- Which barriers, and clusters of barriers, can impact the climate adaptation
- What is important for a successful implementation of the Sendai framework in BSR