BASE BOTTOM-UP CLIMATE ADAPTATION STRATEGIES TOWARDS A SUSTAINABLE EUROPE

SEVENTH FRAMEWORK PROGRAMME

Obstacles and Challenges in Developing Adaptation Responses to Climate Changes: The Case of the Czech Republic

CzechGlobe

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Introduction

In the context of the projected climate change impacts, national and regional adaptation plans and strategies gain increasingly more importance. In response to the international actions (UNFCCC, Kyoto Protocol), EU documents such as Green Paper and subsequent White Paper on adaptation reinforced the need for coordination of adaptation planning at national level. We provide an overview of national adaptation strategies (NAS) and approaches that have already been developed and adopted in selected European countries during past decade, with particular focus on Finland, Germany and The Netherlands (see Table below) in order to identify obstacles and challenges and provide recommendations for the Czech NAS.

Finland **First NAS among EU countries, adopted in 2005, reviewed and updated 2012-13.**	
Strengths	Comprehensive approach, vulnerability assessment, defined responsibility of sectoral ministries implementing NAS through action plans, formal procedures put in place for reviewing and monitoring, research program
Challenges	Links to regional and local level adaptation activities
Priority sectors	Water management, flood protection, in total 15 sectors
Germany **NAS adopted in 2008, followed by Adaptation Action Plan in 2011. Federal States also formulate Sub-national Adaptation Strategies.**	
Strengths	Vulnerability assessment, stakeholder involvement in development of NAS, platform for science-policy interface (scientific input to support political process), monitoring and review procedures
Challenges	Focused on federal level, multi-level governance strategy missing
Priority sectors	No explicit prioritization, 15 sectors
The Netherlands **NAS adopted in 2008, action plans realized by nationwide Delta programme.**	
Strengths	National climate adaptation research program, pioneering cross-sectoral and multi-level communication and cooperation
Challenges	Not fully determined responsibility in adaptation implementation
Priority sectors	Water and spatial planning

In the Czech Republic, the NAS is currently being prepared. By Resolution no. 1452 of 30 November 2009, the Czech Government requested preparation of the NAS that is planned to be submitted to the Government during 2013. The preparation of strategy is mainly top-down approach, takes place on Ministerial level, led by the Ministry of Environment. Proposed adaptation measures cover variety of sectors, with priority in water management, agriculture, forestry and health. The adaptation responses include so-called grey, green and soft measures, however on general level only (see Figure 1 for overview of adaptation measures in agricultural sector as an example).

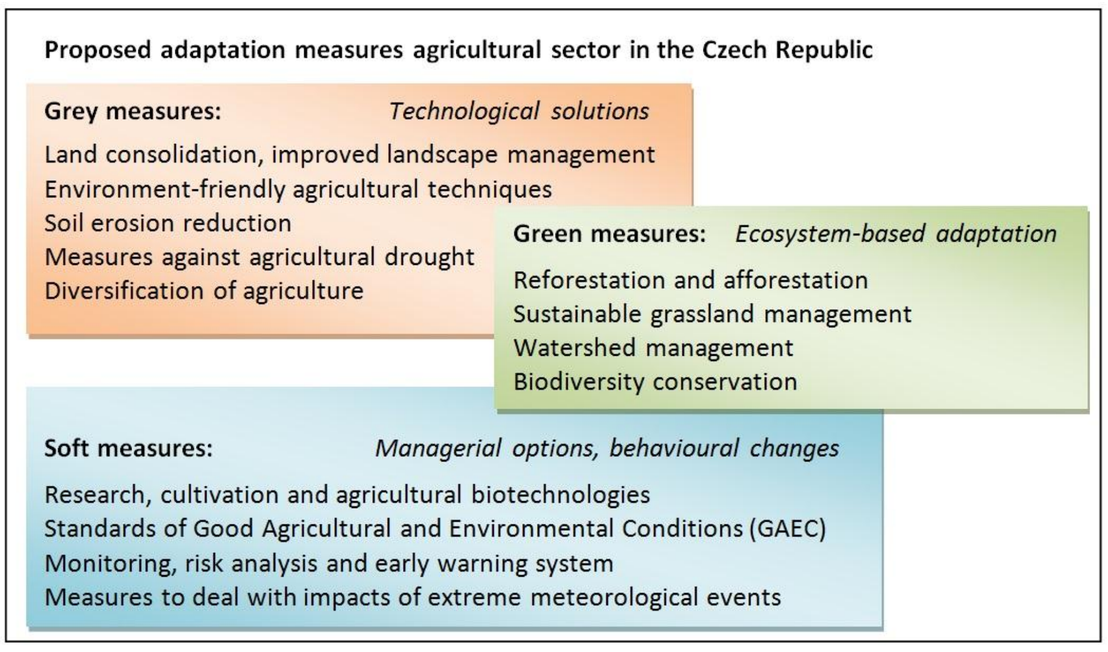

Figure 1: Overview of adaptation measures in Czech agricultural sector

Based on the analysis of adaptation strategies and literature review, we formulated obstacle and challenges faced during the preparation and implementation of national adaptation strategies.

Obstacles and Challenges:

- Integrated NAS require extensive coordination and cooperation on adaptation between multiple government levels, sectors and actors.
- Often there is limited science base, knowledge, understanding.
- Often deficient political will or leadership (for adaptation).
- Funding specifically addressing climate change adaptation is limited.
- There is a need for bottom-up approach, capacity building and maintenance, stakeholder involvement.
- Institutional multi-level governance and policy integration may be greater challenge than finding technical solutions.
- Most adaptation strategies still lack tangible plans to enhance adaptive capacity, implementation of adaptive measures and ensuring policy integration.

Applied as 'lessons to be learnt', we formulate recommendations relevant for the development of the Czech Adaptation Strategy.

'Lessons to be learnt'

- Ensuring adaptation to be context and location specific poses a key challenge for effective implementation.
- Better knowledge about future changes in climate risks to provide suitable adaptation options.
- Exchange of experiences and results of adaptation practices (such as innovative strategies, adaptation approaches and measures) between countries can be very useful.
- Adaptation cannot be isolated action, it requires to be integrated and mainstreamed into relevant policies to ensure that measures and strategies are suitable as the climate changes.
- Effective coordination is needed to avoid overlaps and conflicts among entities.
- Clear definition of responsibilities of different authorities and stakeholders is necessary.

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