Environmental security assessment in the Czech Republic

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INTRODUCTION

Global environmental change and its interplay with social, political and economic changes may pose a significant security risk to human society and ecosystems.

This poster presents an ongoing project dealing with the integrated assessment of global change impacts on the environmental security in the Czech Republic.

OBJECTIVES

The four-year project *"Integrated assessment of global change impacts on environmental security of the Czech Republic" (EnviSec)* funded by the Czech Ministry of the Interior aims at **developing integrated approaches to the assessment of global change impact on the environmental security in the Czech Republic.**

The objective of this project is to to **develop integrated framework for environmental security assessment** in order to **evaluate the security risks for ecosystems and ecosystem services** that are particularly vulnerable to the changing trends in natural processes and human society**.**

Aerial picture of flooding in Grygov, the Czech Republic, April 2006. (Courtesy of Institute for Structural Policy)

The project identifies and classifies **significant environmental security risks** that pose threats to the environment and population in the Czech Republic, such as climate and land-use change, natural disasters, ecosystem services disruption and pollution. The project is contributing to **the implementation of GMES** (Global Monitoring for Environment and Security) **and GEOSS** (Global Earth Observing System of Systems) **services** in the Czech Republic and to **integration of different data sources** on extreme events, natural disasters and global change risks into a coherent information.

STRUCTURE

WORK PACKAGE 1 (2012):

International security risks and global environmental change

- Development of integrated framework of environmental security
- Creating database of sources on environmental risks and crisis
- Mapping of international environmental threats

WORK PACKAGE 2 (2012-2014):

Security risks for ecosystems in the Czech Republic

- Classification of significant environmental risks
- Setting security standards for ecosystems
- Identification of risk reducing strategies

WORK PACKAGE 3 (2012-2014):

Ecosystems monitoring to ensure environmental security

- Support and development of GEOSS and GMES services in the Czech Republic
- Development of the integrated system for monitoring of environmental security

WORK PACKAGE 4 (2014-2015):

Integrated assessment of ecosystem services and security scenarios

- Establishing the environmental security indicators and early warning systems
- Integrated assessment of ecosystem services security
- Development of software tools for environmental security assessment

WORK PACKAGE 5 (2015):

Results dissemination

- Developing information tools for local authorities, government and bodies of emergency management network

OUTCOMES

- Software tools for detecting and evaluating of environmental security risks and ecosystem services threats
- Manual for assessment of risks associated with ecosystem services disruption
- National map of security hotspots, areas with both high concentration of hazards and high vulnerability to identified risks.

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