



FORRISK

Cross-border risk management in forestry in consequence of bark beetle calamity (information on projekt Interreg ATCZ251)

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AUSTRIA

BOKU:

3 departments:

- Dpt. of Silviculture
- Dpt. of Forest Entomology, Pathology and Forest Protection
- Dpt. of Geomatics

The following models will be included into the development of early warning platform:

- Phenological model (PHENIPS) – for bark-beetle activity prediction
- Predisposition model (PAS) – site and stand exposure to disturbance factors
- Model for drought stress prediction (TDEF) – for prediction of transpiration deficiency of spruce forests

CZECH REPUBLIC

MENDELU:

4 departments:

- Dpt. of Silviculture
- Dpt. of Forest Protection and Wildlife Management
- Dpt. of Forest Management and Applied Geoinformatics
- Dpt. of Forest and Wood Products, Economics and Policy

The following databases and prediction web-portals will be used:

- Climatic data from CHMI
- FRGMI – bark-beetle and salvage cutting database in regions
- Actual situation in CR – www.kurovcoveinfo.cz and www.kurovcovamapa.cz
- INTERSUCHO – actual situation of drought and short-time prediction (CR, A)
- FIRERISK – fire risk predictions
- FRAMEADAPT – prediction of potentially available growing conditions for different tree species in CR (IPSL model)
- Statistics of departmental organizations, professional forestry associations, meetings of calamity staffs.

AUSTRIA

BAB (Federal Institute for Agriculture and Questions of Mountain Farmers):

- Collaboration with BOKU especially in area of economic questions – market development, impacts on the environment, changes and evaluation of agricultural policy

Strategic partners (without budget):

- Federal Ministry of Agriculture, Regions and Travel Movement
- Two Provincial Forest Administrations of Upper and Lower Austria
- Agricultural House of Upper and Lower Austria
- Microregion of Waldviertel Kernladn
- Forest Administration Foundation Altenburg
- Czernin-Kinsky Forest Administration Rosenhof
- Administration of Monastery forests Schlägl
- Austrian Federal Forests

CZECH REPUBLIC

Strategic partners (without budget):

- Forests of the Czech Republic (forest districts - Znojmo, Český Rudolec, Telč and Forest enterprise Židlochovice)
- Municipal Forests Volary
- Municipal Forests Dačice
- ProSilva Bohemica
- National park Šumava

Partners out of the project (signed letter of intent):

- Ministry of the Agriculture of CR
- Ministry of the Environment of CR
- Region of South Bohemia
- Region of Vysočina (upland area between SB and SM)
- Region of South Moravia

Example of data structure provided by strategic partners

- The occurrence of damaging factors in forest districts
- Development and structure of salvage felling
- The course of the bark beetles calamity in forest districts
- Development of the balance of clear-felled areas
- Planning the need for planting stock
- Development and state of raw timber reserves
- Changes in raw timber assortments

GOALS:

- Intensive collaboration among partners and associated partners of the project
- Dissemination of scientific knowledge to application sphere and state administration body and local autonomy using development of corporate tools, risk management plans and communication activities
- Support of cross-border professional education as a basic platform for relevant forest measures transfer into practice

PROJECT OUTPUTS:

- Harmonized and optimized system of adaptive forest management with target to minimize the risk at cross-border regions
- Reinforcement of knowledge level of competent forestry and public institutions
- Cross-border development tools for specific management and risks control in forestry enterprises
- Good-practice examples with implemented an adaptive management and preparation of cross-border manual about forestry adaptive management
- Building of cross-border network for supporting of information Exchange and communication among scientific institutions, administration organs and forest owners

PROJECT OUTPUTS:

1. IDENTIFICATION of COMMON PROBLEMS AND SYNTHESIS of GOOD-PRACTICE EXAMPLES in FORESTRY

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The following reports on the base of complex comparison of aggregated experiences in connection with ongoing crisis management will be introduced:

i) about activities of administrations, inn-group and enterprises during direct solutions of calamity events,

ii) about experiences in area of measures focused to forest protection (monitoring of bark-beetle population, risks evaluation),

iii) about current strategies and practical recommendations to forest management (regeneration, afforestation, reconstruction of forests).

and iv) about analysis and actualization of existing research and operation data about different strategy managements on the forest stand level and enterprise will be summarized in documentation „Examples of case studies of forest reconstruction“.



PROJECT OUTPUTS:

2. **MANUAL FOR MANAGEMENT of FUTURE RISKS and CRISIS in FORESTRY**

- Tools for development of alternative institutional and cross-border managements and risks controls.
- Appropriate strategy of risk management and recommended processes of decision-making in the following topics: :
 - Description and mapping of existing sites, temporally and spatially defined risk potential under different scenarios of management and climate development;
 - Thematic maps (sites, tree species, risk potential);
 - Evaluation of production, market and income risk;
 - Presentation of management alternatives for mitigation of abiotic and biotic risks in forestry;
 - Institutional cross-border development of risk alternatives and strategic risk management;
 - Tasks assessment, responsibilities and risk bearers; risk evaluation.

PROJECT OUTPUTS:

3. CROSS-BORDER NETWORK FOR KNOWLEDGE AND INFORMATION EXCHANGE

- these networks will be created:

- Join platform for early warning providing information in case of increasing potential of calamity events;
- Continuous enlargement of current demonstration and functional plots for forest reconstruction in cross-border regions and reliable two-side information and experience with these reconstructions;
- Tools for implementation of thematically oriented trainings and for tertial and professional education (for all forest institutions and companies).

Platform is realized through web pages of partners network

<https://www.at-cz.eu/forrisk>

KICK-OFF MEETING (WP management, Steering committee meeting) – **APRIL 8/9 2021**
(virtual excursion into the UFE ML Krtiny)

Meeting purpose:

- Start of the project life
- Preparation of thematic activities and project schedule
- Data collection for WP T1 activity

Participants:

- Project partners (PP) + associated (strategic) partners (AP)

Content:

- Project introduction
- **Working groups – PP and AP provide inputs (collection of current knowledge and information at each country) = supporting data for WP T1 activity = IDENTIFICATION of COMMON PROBLEMS and SYNTHESIS of GOOD-PRACTICE EXAMPLES in FORESTRY**

Can you join us?

Overview information about SP enterprises:

- 1) Introduction** information about forest estate/ enterprise – area, site conditions, tree species representation, allowable cut, amount and structure of unprescribed cut (salvage felling; sorted by factors- i.e. wind, bark beetle, emissions, etc),
- 2) Experiences** with a bark beetle calamity and its processing, balance of clear areas, monitoring of bark beetle swarming, accuracy of prediction of the first bark beetle swarming, amount of wood for processing etc.,
- 3) Development** of woody stock (timber/pulp-wood/fire-wood), bark beetle residuum, realization or demands for woody storage,
- 4) Planning** of afforestation, regeneration, ratio between natural and artificial regeneration