Integrated Drought Management in Central and Eastern Europe

ACTIVITY LIST

1. BASIC INFORMATION

Number of Activity:	**Activity 5.1**
Title of the activity:	**Drought management by agricultural practices and measures-increasing soil water holding capacity**
Duration of the activity:	**July 2013 – December 2014**
Activity leader:	*Pavol Bielek (SK)*
Chairman of the CWP:	**Elena Fatulova** (elena.fatulova@gmail.com)

Description of the activity:

Main target of this experimental project is to demonstrate concrete measures to increase soil water holding capacity. At the first step the well-known methods will be assessed including their employment in farming technologies/techniques for better water infiltration into the soil profile. The case study will include field experiments with currently available machineries and technologies for sub-soiling and simultaneously respective farming practices. This case study will consist of two parts: theoretical and practical. The inventory of soil ability for identification of water retention capacity will be developed. This first phase will also include an identification of pilot areas in Slovakia, Poland, Czech Republic and Slovenia where compacted soils are present. The second part will be to conducting field experiments with sub-soiling technology and other farming measures (deep root plants cultivation, organic fertilizers use, carbonized biomass use, and others). Study will be documented by practical examples and transferred into a compendium of good practices (act. 7.1). The case study will be emphasized on an effective principles which can be used in farming practices (sub-soiling, new farming systems and technical approaches). They can be utilized on very large areas which needs, of course, broad support by national ministries of agriculture.

2. CONTRIBUTING ORGANIZATIONS / EXPERTS

Country	Organization	Contact
Czech	Research Institute for Soil and Water Conservation, Žabovřeská 250, 15627 Praha 5-Zbraslav, Czech Republic	Contact Jiri Hladik, director of Institute for Soil and Water Conservation Hladik.jiri@vumop.cz Tel. 420257921947 Contact for communications Taťana Vrabcová Tatana.vrabcova@seznam.cz Researchers Jan Vopravil vopravil.jan@vumop.cz tel.420257027350 Pavel Novak pnovak@vumop.cz tel.420257027283 Jan Srbek srbek.jan@vumop.cz tel.420257027334
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3. PLAN for IMPLEMENTATION of the activity

Name of the output	**Analysis and proposals of preventive measures as a tools for drought management in agricultural practices and technologies**
Type of the output (analysis, report, guideline, workshop, brochure, etc.):	*Report as the input for "Compendium of good agricultural practices" focused on water holding capacity increase of farming land and agricultural territories.*

Form (website, CD, printed, database, audio-visual, computer software, etc.):	*CD comprehensive article and presentation*
Purpose of the output:	*Needs of practical recommendations for farmers and for decision institutions including proposals for support systems in agriculture.*
Structure and description (contents, requirements for use, chapters, etc.)	*Introduction. Theoretical principles. Water content in soil (definition, description and factors). Practical examples of soil water holding capacity regulations (results from experimens demonstrated in this project mainly sub-soiling, carbonized plant residue use, organic fertilizers use and other approaches). Practical proposals for farming and procedures. Motivations for national and EU agricultural policies. Conclusions.*

Steps for implementation of the activity	**Till when?**	**Who is responsible?**
Set up of experiments. Start of the theoretical study.	June 2013	National leaders
Theoretical review of problems and first results of experiments	November 2013	National leaders
Evaluation of second year of experiments	November 2014	National leaders
National final reports and practical documents.	February 2015	National leaders
Final report	March 2015	Activity leader with national leaders
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FINAL OUTPUT Analysis and proposals of preventive measures as a tools for drought management in agricultural practices and technologies.	March 2015	Common study under coordination of activity leader