INTEGRATED REGIONAL APPROACH TO THE NATURAL SMALL WATER RETENTION MEASURES

D.T3.5.2 - Report from National policy dialogue

Slovakia

Slovak Water Management Enterprise and GWP Central and Eatern Europe

26 November 2019

1. General Data

Country:	**Slovakia**
Date & Place:	**26 November 2019, Water Research Institute, Bratislava**
Organizers:	Slovak Water Management Enterprise (SWME) and Global Water Partnership Central and Eastern Europe (GWP-CEE)

Documents

Please send together with the report:

- Scan of list of participants
- Agenda
- Photos

2. Report

Main points of the dialogue / short summary *(max 2000 characters)*

Please prepare short summary of the dialogue with main messages and outcomes so that it can be used as an article or promotion for social media, web page, etc.

The Second National policy dialogue as a continuation of national capacity building events was opened by Mr. Norbert Kurilla, state secretary of the Ministry of Environment of the Slovak Republic (MoE SR). Mr. Kurilla appreciated FramWat project which is dealing with natural small water retention measures (NSWRM) and is focussing on their better integration into national policies. He emphasized the role on NSWRM in the better (more natural) management of landscape mainly in the context of drought and floods (climate change) which negative impacts are more evident and still stronger in the landscape artificially changed by humans.
Main scope of the dialogue was to present and discuss measures proposed within the Concept plan for the Blh sub-catchment, draft structure of the Guidelines and developed tools and results of testing them in the pilot sub-catchment of Blh river within the Slaná River Basin and to discuss with participants the sustainability and usability of developed tools.
The dialogue was further moderated by Ms. Monika Supeková (SWME), project manager for Slovakia. At the beginning, the participants introduced themselves. The dialogue was divided into two sections, first one was oriented on presentations and second one was workshop section.
Firstly the short general information on FramWat project and so far reached different results for the Blh sub-catchment were presented to the audience (Ms. Monika Supeková). Further the Concept plan for Blh sub-catchment was introduced (Ms. Monika Supeková) both Expert variant and Local preferences variant too, the participants were interested who has proposed the measures and the process of their proposal. The communication with local stakeholders is important for the Expert variant too, as they can have valuable input for their location and extent precising. The difference between Concept plan and Action plan was emphasized. Valorization method, FroGIS tool and its results were presented by Mr. Jozef Dobias, the questions on applicability of the FroGIS tool in other catchments of Slovakia, data necessary and their preparation and scale were raised by the audience. Ms. Liliana Rástocká has

presented the draft structure of the Guidelines commonly with proposed structure and actual content of Decision Support System (DSS) and particular links. Mainly participants from self governing regions were interested in usability of the tools in their daily work with focus on proposal of measures within their region territory.
During the separated workshop session on Guidelines held by Ms. Liliana Rástocká the draft structure of the Guidelines was discussed and commented step-by-step by participants in more details. The second part of workshop session was held by Ms. Monika Supeková and within this part the selected issues were presented to participants and afterwards commented by them as Catalogue of measures and the relevance of measures for goals and sectors, the way of measures aggregation based on expected similar/same effect of measure; potential proposal of other measures for any of Concept plan variants based on Catalogue of measures; list of indicators and their relevance for particular goals; list of measures and their pre-selection for static tool, relevance of measures for application within static or dynamic tools, list of indicators defined for effectiveness assessment and values of their importance for change of SPUs valorization results, definition of thresholds and their values for particular measures pre-selected for static tool application and also the Multi-criteria analyses tool and its criteria selected/proposed to be used within Analytical hierarchy process method. The role and basic content of Manual on how to assess the effectiveness of the system of measures in the river basin was explained.
Finally Mr. Vladimír Novák, director general of the Directorate for Water Protection of the MoE SR thanked to all participants for their active inputs into the discussions and constructive comments.
The reporter of the Radio and television of Slovakia has participated at the Second National policy dialogue too and the interview with Mr. Norbert Kurilla, Ms. Monika Supeková and Mr. Jozef Dobias about FramWat project and results for the Blh sub-catchment was held.

Participants *(max 500 characters)*
Shortly describe who were the participants, from which sector, institutions, levels, ….? How many of them, etc.?

Target groups	**41** *(please attached also list of participants)*
Local public authority	2 (State Nature Conservancy of the SR, branch Strážovské vrchy)
Regional public authority	2 (Slovak Water Management Enterprise, branch Banská Bystrica) 3 (Banská Bystrica Self-Governing Region) 1 (Žilina Self-Governing Region) 3 (Prešov Self-Governing Region)
National public authority	3 (Slovak Water Management Enterprise Banská Štiavnica) 2 (Slovak Hydrometeorological Institute) 1 (State Nature Conservancy of the Slovak republic) 5 (Ministry of Environment of the Slovak Republic 1 (Ministry of Agriculture and Rural Development of the Slovak republic) 1 (Central Control and Testing Institute in Agriculture in Bratislava) 2 (Hydromeliorations, state enterprise) 2 (Water Management Construction Bratislava, state enterprise)
Sectoral agency	

Interest groups including NGOs	2 (GWP-CEE)
Higher education and research	7 (Water Research Institute) 2 (National agricultural and food centre) 1 (Slovak Academy of Sciences) 1 (Comenius University in Bratislava)
International organization	
General public	

**according to the Target groups identified in AF*

Short description (if necessary) of the participants:

The Second National policy dialogue was held in Bratislava at Water research institute. It brought together 41 participants and these time also representatives from self governing regions have participated, in total 7 participants. The rest of participants came from local public authorities (2), the other 2 participants from regional public authority, 17 from national public authorities thereof 5 from the Ministry of Environment of the Slovak Republic and 1 from the Ministry of Agriculture and Rural Development of the Slovak republic, 2 participants from interested groups and business, and 11 from educational and research organizations. All most important sectors as nature protection, environment, water management and hydrology, forestry, agriculture and already mentioned regional administration bodies, and research in the field of water management, agriculture and food, biology, including landscape planning and landscape ecology were present.

3. Outcomes

Please provide short feedback from your stakeholders on below topic (the ones that you have discussed):

Feedback/comments on the Concept plan / selection of the measures *(max 1000 characters)*
To the participants were presented Expert variant and Local preferences variant of Concept plan which contains measures to solve main problem identified for pilot area - floods. In principal, the participants were interested in the way of proposal of localization of measures and the process of their proposal. For the Expert variant the communication with local stakeholders helped to precise the localization and extent of proposed measures. Comments from participants were: - Participants do not agree with “technical measures” (local bank vegetation management, sediment excavation) which are not NSWRMs and are part of the Concept plan. – It was explained, that they are already planned within strategic documents and they are necessary for calculations of effectiveness of measures. - Also the requirements of WFD should not be forgotten. – Of course.

- Will the proposed measure be realized within the project too? – No, there is no time and budget for realization of measures, but via Action plan they will become a part of strategic planning documents.
- How dry polders as measures were proposed? – Based on terrain analyses and based on problems occurred and reported by water managers and mayors/municipalities. It was commented that mayors are not "experts in the field" and the proposal of measures should be based on "water manager expertise". It was explained, that it is result of cooperation. Dry polders are quite easy to be modelled.
- Question on "reaching the compromise" if totally opposite measures are proposed (e.g. water managers and nature protection) and ways of reaching the decision was raised. - Decision of mayors only is not enough, in general the "modelling" was agreed as "selection tool for measures" (although the effectiveness is not known for every measure and expert judgment should be used) but it is usable at least for hydrotechnical structures. And to use the "calculation of flood damages compered to the cost of NSWRMs" was proposed. It was assumed, that experts should decide and select appropriate measures anyway, not mayors or municipalities who are not experts in the water management, landscape or nature protection.
  There have been defined 5 criteria within Multicriteria analyses which is part of DSS and there is intention that these criteria are used for "tuning of Concept plan variants".
  In the case of more combinations of measures where it is not possible to take compromise, more variants of Action plans could be compiled.
- If measure as "landuse change" is applied, it is necessary to take care on the forest structure, timber types, age of forest, etc. as all these characteristics are influencing forest retention capacity.
- Few measures as "to keep natural wood in the forests", "to keep natural wood in the rivers", "revitalization of drained/dewatered wetlands" were proposed in general, but without precise localization.
- To be aware that "dry polder" is not a water retention measure, it is flood protection measure with a main aim to reduce flood peak/slow down the discharge, not to retain water.

Feedback/comments on the draft structure of the Guidelines (Steps) *(max 1000 characters)*

The proposed structure of Guidelines and its role as "planning tool" and actual content of Decision Support System (DSS) with particular links were presented to the audience. Comments from participants were:

- The structure of the Guidelines is similar as "Tisza sub-basin Guidance", so in general the proposed structure was agreed as suitable and sufficient.
- Is the scope of the Guidelines international or will be accommodated to Slovak conditions? – The scope is general/international describing the workflow with project results/outputs. Concrete are partial results of workpackages, results of tools testing in pilot sub-catchment of Blh river and Action plan, which is the "implementation tool" to be used to incorporate results reached for Blh sub-catchment into II. cycle of national Flood Risk Management Plans and III. cycle of national River Basin Management Plan.
- As not all data in Slovakia are available for free and are not published, so general public can not find them easily, it was proposed that the "data availability in Slovakia" should

be described whether in the Guidance or somewhere within the DSS. - In the Guidance information should be general with common rules for all the partners, but within the DSS or Action plan also national specifications can be mentioned, within the DSS the description is also in national languages.
- Participants will provide any additional comments on Guidelines to liliana.rastocka@gwpcee.org.

What are future steps/plans in terms of preparation of the Action Plan? *(max 1000 characters)*

After the explanation of difference between Concept plan and Action plan, which is "implementation tool" developed within FramWat project, the following comments were raised:

- What is the Action plan, will it be concrete for Slovakia? – Yes, it is "implementation tool" and will reflect particular situation in Slovakia.
- Would the Action plan be prepared for a specific problem such e. g. Slovakian Drought Action plan? – In principle yes, as we are dealing with concrete problem (flood) determined in the pilot catchment.
- Existing legislative rules and laws which should be respected in general, should be emphasised somewhere (maybe in the Action plan). Mainly the issues as "restrictions of building-up in inundation areas along rivers", how to deal with so called "black buildings" found in non-appropriate areas, how to deal with "non appropriate land management in steep landscapes", or how to deal with "non-appropriate incentives for refuges or buffer strips", etc.
- The role of "liable/responsible spatial planning" and importance of regular update of "spatial planning documents" should be emphasised.
- How the Action plan will be developed if no reasonable compromise of Concept plan will be approved with relevant stakeholders? – It will be decided on the ministerial level, but there is also possibility to propose two variants of Action plan with emphasising the advantages of both of them, which will be recommended for further in-depth evaluation during III. cycle of River Basin Management Planning period, II. cycle of Flood Risk Management Planning period respectively.

Feedback on usability of the tools and how they can be used after the project ends *(max 1000 characters)*

Mainly self governing regions and research organizations appreciated developed tools and the fact, that their all are/will be available online with possibility to be applied in other areas/catchments of Slovakia, further testing or further development (open source codes). The raised comments were:

- Self governing regions were interested whether they can use tools for their own planning purposes? They need such a tools by daily decision making and they have also possibility to finance NSWRM projects of municipalities within the region from their own budget. – Yes, according manuals the potential users can prepare their own data and run calculations for the area of their concern.

- Is it possible, e. g. via FroGIS, to calculate impact of the reduction of forest area on the temperature of the landscape? – Not primarily, but as a result of calculations ran for the drought problem/goal and proposal of particular measures focused on mitigation of drought impacts.

Feedbacks/proposals for follow-up/future activities

As a follow-up activities it were proposed:

- In the case there will be no reasonable compromise reached between Expert and Local preferences variant of Concept plan, than it was recommended to organize follow-up meeting with relevant stakeholders to take decision.
- To organize follow-up meeting to present Action plan to relevant stakeholders and to approve Action plan with them.
- If there will be capacity, to organize trainings for self governing regions which were interested in usability of the developed tools in their daily work.
- To focus on the assessment of effectiveness of selected types of measures identified within FramWat project and test it via modelling within another models.
- To distribute all source materials (tables and questions) prepared for the workshop session among participants to get their written comments and potential proposals (e.g. MCA criteria, indicators, threshold values for Static tool, etc.).
- Participants will provide any additional information on good praxis examples, any documents, publications, references, etc. relevant for Slovakia (best in Slovak) and which can be used within DSS component Education to monika.supekova@svp.sk.
- Participants will provide any additional comments on Guidelines to liliana.rastocka@gwpcee.org.

Please add input/comments from stakeholders also on other FramWat outputs if you include them in the discussions:

Cost analysis (act. 3.3)

It was shortly explained, that cost analyses is develop by SI partner and tested by three of partners only. The questions raised were:

- How can the costs of different countries be compared within the project? Will there the cost of SI partner be used as the basis in the rest of partners countries? – No, it is not possible to use SI cost among project partners countries, but there is intention to collect the data on measure costs among all of partners. The testing is focused on the approach to define some “average costs” or “cost ranges” for particular measures and whether it is feasible for using them within partners countries.

Multi-criteria Analysis

Within the workshop session the multicriteria analyses (MCA) was shortly introduced. It was proposed to use analytical hierarchy process method and that there have been defined five criteria - It defines a dynamic relationship between 5 selected criteria as economic (cost)

efficiency, maintenance complexity, environmental (ecological) acceptability of measures, land requirements and potential conflicts caused by implementation.
No comments were raised as no one of workshop session participants had experience with any MCA.

Effectiveness of NSWRMs (O.T2.1)

Within the discussion on static and dynamic tools, where also level of macro and micro scale was introduced to participants, the following questions were raised:

- Screening level was appreciated as not all potential users are able to proceed modelling and also they do not have the possibility/financing to buy concrete data.
- What does it mean if the indicator is stimulant or non-stimulant? – Stimulant: high value of indicator means high need of measure proposal, non-stimulant: high value of indicator means low need of measure proposal.
- How the effectiveness will be evaluated? – On the level of SPUs based on change of valorization results for particular SPUs. Then different combinations of sums for different types of measures and/or for entire catchment can be calculated.
- How will the potential user decide whether he will use static tool or dynamic tool to assess effectiveness? – It depends on the data available (general data on the river basin scale, precise data on measures design level) and scale, whether for user it is enough to gain results on the macro scale of river basin or whether he would rather gain the results on the micro scale (local scale).
- Particular types of measures as dry polders, small weirs, water or sediment trapping dams, etc. are quite easy to be modelled, and this possibility should be mentioned somewhere. – It is possible to mention it in Manual on how to assess the effectiveness of the system of measures in the river basin, as this document will summarize the workflow with static and dynamic tools.

Decision support system (Act. 3.4.)

The developed DSS (structure and actual content) was presented to participants online via link http://levis-framwat.sggw.pl:8080/#/home. Main components of DSS are Education, Catalogue of measures and Tools, DSS will be multilingual. The DSS is under development. Raised comments were:

- Mainly participants from self governing regions were interested in usability of the tools in their daily work, all participants appreciated DSS as “one common entry point” to all developed tools and results.
- Participants will provide any additional information on good praxis examples, any documents, publications, references etc. relevant for Slovakia and which can be used within DSS to monika.supekova@svp.sk.

FroGIS (O.T1.1.)

The basic principles of valorization method, FroGIS tool and its results were presented. The idea of FroGIS tool was very much appreciated by participants. And the questions raised were as follows:

- The tool looks fine, but what about the input data? Which data are necessary and how the user will prepare the data? Or are the data a generic part of the application? – Yes, potential user has to prepare his own data for his area of concern. The results will be more precise if accuracy of data will be better. Manual on data preparation is part of the FroGIS webapplication. A set of "example data" is part of webapplication too, see at http://waterretention.sggw.pl/?id=388cfff4d0cb6ec49b3adf08d4654cf1. There was intention to use global data too, but their accuracy is too low.
- Is it possible to apply the FroGIS tool in another parts/basins of the country? – Yes.

Other comments

In general it is possible to summarize, that the participants were quite strongly interested into particular results of the project whether general as Catalogue of measures, FroGIS, or indicators to assess effectiveness or concrete for the Blh sub-catchment as proposal of particular measures.

They have appreciated also the way of active communication with all of them, mainly with local stakeholders or experts from the nature protection field. Although it can be assumed, that to assure effective and active communication with stakeholders and gaining relevant comments/proposals/participation is quite time consuming and requires personal and intensive engagement of project partner. The other comments were as followed:

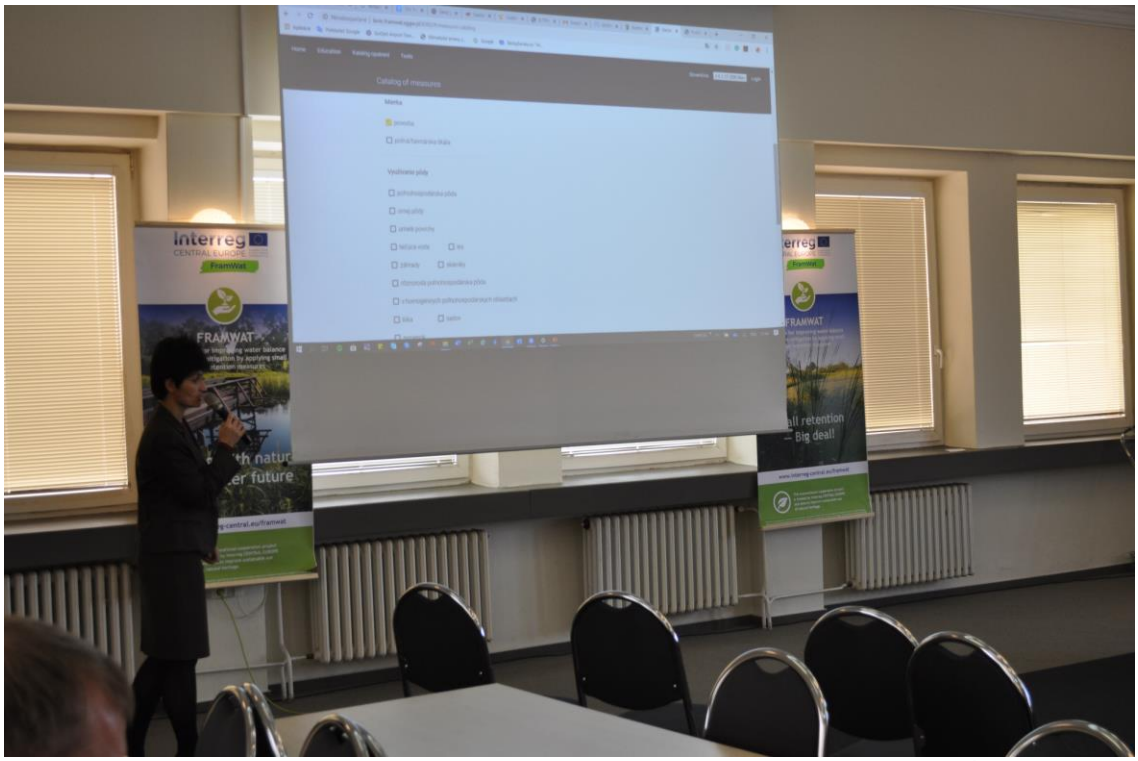
- Is it possible to use developed tools in other parts/basins of Slovakia? Mainly the tool for NSWRM planning? – Yes, tools are developed and will be applicable in Central Europe.
- Where is Catalogue of measures available? – It is available online within the Decision Support System (temporary testing link is http://levis-framwat.sggw.pl:8080/#/home) and in the form of table distributed during the workshop session is Catalogue of measures available for users within the Slovak NSWRM planning webapplication called "FramWat – Plánovanie opatrení" (https://rekrek.maps.arcgis.com/apps/webappviewer/index.html?id=03895c79c30946199053ac39aa8445da) and there Catalogue of mesures is available at link https://drive.google.com/file/d/1DEt0ep01H3DLCyEWwG8oCdadaw_UA-4J/view .
- **To use terminology in Slovak (e.g.valorization) not in English.**

4. Photos

Mr. Norbert Kurilla, state secretary of the MoE SR, is opening the Second National policy dialogue.

Presentation section (Ms. Monika Supeková, SWME).

Presentation of draft structure of Guidelines followed by workshop session on Guidelines (Ms. Liliana Rástocká, GWP-CEE).



Discussion on Decision Support System with participants (Ms. Monika Supeková, SWME).

Discussion on water retention capacity of particular types of NSWRMs (Mr. Peter Panenka, Water Management Construction Bratislava, state enterprise).

Workshop session focused on selected results of project.

Workshop session focused on selected results of project.

Interview about FramWat project outputs with the reporter of the Radio and television of Slovakia (Ms. Monika Supeková, SWME).