

Kick off meeting

Date: 28-29.10.2013

Venue: Warsaw University of Life Sciences, Warsaw, Poland

Organizer: GWP Poland

Integrated Drought Management Programme  
Workpackage 5, Activity 5.3

Participants:

Tomasz Okruszko - GWP Poland/ Warsaw University of Life Sciences  
Magdalena Jarecka - GWP Poland/ Warsaw University of Life Sciences  
Ignacy Kardel - GWP Poland/ Warsaw University of Life Sciences  
Waldemar Mioduszeowski - GWP Poland/Institute of Technology and Life Sciences  
Janusz Kindler - GWP Poland, observer  
Sabina Bokal - GWP CEE  
Darja Istenic - Limnos d.o.o., Slovenia  
Janos Feher - University of Debrecen, Hungary  
Vladimir Mosny - HYCOMP, Slovakia

## **28.10.2013 -Monday**

**I. Welcome** by Tomasz Okruszko –Activity Leader.

Each participants presented himself.

**II. Presentation of Activity 5.3** – Activity Leader

- What have we promised in project application?
- How should we use this set of measures (small retention, landscape retention, natural retention) - in Poland we call it small retention;
- Definitions of what we are working on (in English and our native languages). The way how we can use it in a practice;
- Four countries (Hungary, Slovenia, Slovakia, Poland) cover all small retention problems in different landscapes of our CEE region (colder, warmer, lowlands, hills);
- Development of GIS tools – basic research approach
- Guideline - general chapters without going into specific details; language of guidelines - English and national (local) languages (how to fund the translations?);
- Linkages with other activities - try to think about other activities in which we could participate (SB, JK) - we should be aware of this activities;
- Other CEE countries - we might have some extras from other countries - organize the training next year - together with the 2nd IDMP workshop or special workshop with participants from other countries;
- Workshop goals: state of the art - where we are in general - what is in our countries, tables and not only numbers, what is the legal state of the small retention, etc.
- Milestone 1; thanks! Requested data received from all four partners;
- Planning - up to April 2014;
- Looking for opportunities
- Capacity building – trainings: 1st this year, 2nd - next year - problems with budget transfers between years – October 2014 - Prague; April 2014 – Lubljana

### III. Small retention/landscape retention - theory from the Polish perspective (Waldemar Mioduszewski)

#### The purposes of small retention

- Improvement of the structure of water balance in river basins is essential to limit the negative impact of droughts and floods.
- Development of small retention (limiting of rapid rain water outflow from the catchment) significantly contributes to reaching the above goal. Comments on water resources and their distribution in Poland (temporal and spatial).

Summarizing:

- Poland is one of the European countries with relatively small surface waters resources.
  - These moderate water resources are unequally distributed in time and space - that is the reason for the occurrence of frequent water surplus (floods) and water deficits (droughts).
  - Implementation of the WFD requires undertaking many activities in rural areas.

#### System and methods of water retention in rural areas

- Overview of small retention measures: landscape retention, soil retention, ground water retention, surface water (hydrotechnical systems of water distribution and storage);
- Relationship with Water Framework Directive (one of the basic actions pertaining to agriculture)
- **Agro- environmental programmes** (*tutaj przydałoby się kilka słów wyjaśniających co to jest*)

Discussion:

What does "natural" retention mean? - without technical influence of people

How drainage system in Poland works? The financial involvement of owners.

### IV. Presentation of national tables:

#### 1. How looks small retention in Poland - Ignacy Kardel

- presentation of two definition of small retention - 1st based on prof. Mioduszewski, 2nd from "Small Retention Programme for mazowieckie voivodeship"
- division of small retention in Poland : landscape, soil, groundwater, surface water
- methods of water collecting - technical, non-technical
- level of small retention plans - voivodeship, forest district
- presentation of greatest need for water collection

#### 2. Practical and legal experience from Hungary - Janos Feher

- there is no legal definition of small retention in Hungary
  - presentation of national agro- environmental programme - this programme targets specific areas - which are priority areas - money was allocated to this sub-programmes (most important sub-programmes for water retention - Wetland habitat utilization scheme, Environmentally Sensitive Areas (Regional) schemes to ensure recovery,

Discussion:

- Does this reservoirs solve the problems of floods? - if all 14 reservoirs are finished - then the flood level will be reduced by 60 cm - acceptable reduction
- How farmers cultivate the areas - everything is cultivated - but they take risk that this areas will be flooded - farmers receive the compensation because of lower value of the area
- Can we call this "natural small retention"? this is a mixture of natural phenomena and man-made structure
- "Reed management" - for economic purposes

#### 3. Water measures in Slovakia OK is not OK- Vladimir Mosny (Slovakia)

- definition of the main problems - programmes - flood protection, drought, optimisation of water regulations in country ?
- measures in basin - legitimacy - presentation of stages of project realization and government bodies responsible and control for different stages; professionalism - Expert design hydrology and hydraulics parameters in basin, rain or any atmospheric precipitations parameters, surface runoff, flood wave, design discharges and safety; responsibility and control real operations – real examples surface runoff

in basin – rain design parameters, infiltrations of surface, coefficient of runoff, flood wave with peak and time of discharges.

- main question water measures - who is applicant of project, life time constructions and financing of operations the constructions - big problem as owner of the constructions don't finance operations in life time, accidents and destruction of construction at the end of its working life; Financial service of water construction; Reconstruction of water constructions with the new hydrological and hydraulics parameters.

#### Discussion:

- definition of "small retention" in Slovakia - there is any legal definition, but there are many construction, water, environmental, and other sectoral definition of water retention - any influence in water regime must be authorized and need water and constructions permission
- other forms of retention in Slovakia - only reservoirs or any other forms that increase the capacity of water retention – forest, agriculture and green constructions.
- all activities which change water regime are specified in water law
- revitalization of country - there was a plan of government 2010 - 2011- was it only one plan which regarded the water retention and water measures – In this time I do not know other new plans of water measures, but government activities are oriented on river regulations and reconstruction of water reservoirs.

#### 4. Small Water Retention Measures - National Survey Results - Darja Istenic - Slovenia

- general characteristic of country - very small country
- forms of small retention: reservations and accumulation lakes - hydro power, recreation, fishing, small retention ponds, fish ponds, rainwater harvesting (households sometimes collect rainwater for gardening, carwashing, heating, collection in underground plastic tanks, tax for storm water runoff in some municipalities,
- definition of small retention - no legal definition, just definition of independent water bodies; no thresholds for reservoir size
- main water management problems for implementation of small retention: no legal demand on water retention - water rich country,
- Problems:
  - o national plan for water management - prevention of pollution and deterioration of water quality, maintenance and regulation of water quantities, protection against harmful water effects, maintenance of water and coastal land, care for hydromorphological status, the programme lacks concrete examples of good measures)
  - o construction of retention facilities has to consider numerous acts, rules and decrees,
  - o funding only for irrigation systems,
  - o planning of small retention: water management plan and river basin management plan are prepared, enough room for small natural water retention, Possibilities for small water retention - small Hydropower are interested, stormwater retention and reuse, water retention in agriculture,
  - o education and promotion of small retention,

#### V. Discussion about guidelines

- how the natural small retention measures can improve the drought management?
- in the guidelines we will not focus very much on legal issues because of different situation in each country: - there will be no detailed analysis of legal basis;
- practical definition of small retention - to be verified in other countries before first training workshops
- tackling a segment of water management – part of a bigger picture (making demonstration project on particular segment of water management) - we are not talking about all possible water management measures
- the question about urban area? - rather escape from urban areas - but it is still open question - rather focus on non-urban areas
- definition given by Darja **"Permanent or temporary water bodies and measures that enable water retention on site (of its origin)"** approved as working small retention definition.
- we have to find compromise between natural phenomena and anthropogenic impact on small retention
- suggestion - we should find definition of small water retention which is related to water management

- how we can utilize water for compensation works - additional value, storage the water
- focusing on NGO (Natura 2000, how are they preserving natural ecosystems), forestry (in mountains they are erosion control),
- add to definition – prolongation of the water cycle by increasing the capacity to retain rainwater
- water quality
- with soil retention - we should be in touch with other demonstration projects (5.1; 5.2)
- small retention is to collect water in a smaller scale and make it available at later stage for different purposes - soil retention has not that kind of character; we can say that soil retention is part of water retention – we are going to hydrological part – is too much; but this water cannot be used for other purposes; better to focus on active water – to use it when drought occur;
- we can focus on management part of water retention

## **29.10.2013 -Tuesday**

### **I. Summary of the day one, decisions about the definitions used**

- different approach
- national tables - go through the files with WM and IK and send some proposal words, additional info to make better cross-comparisons of the tables - send also to Sabina - need one month - end of November version 2 of the 1st Milestone
- definition - compromise both proposals Slovenia and Poland -
  - **Small water retention there are permanent or temporary water bodies and measures that enable water retention on site (of its origin) it may have natural appearance and provide diverse ecosystem services (not only water retention)**
  - **Activities focusing on prolongation of the water cycle by increasing the capacity to retain rainwater (slow drain), stop pollution and reducing energy losses of water and sediment movement. It means not only the retention of surface water with water or damming up watercourses, but also agricultural practices and phyto land improvement and afforestation to increase the retention of soil, regulation of rivers such as changes in cross-section troughs and longitudinal slope and the use of natural flood plains**
- we agreed - soil retention as possible tools but we don't subject this issue as it is covered by other activities (5.1) - only mention this part as important activity

### **II. Presentation of GIS based tool for the small retention planning - Ignacy Kardel**

- presentation of the basis of analyses preparation - need of "Small Water Retention Programme for Mazowieckie voivodeship"
- presentation of main programme components, valorization steps,
- conclusions: Application of valorisation allowed add environmental conditions in the assessment of investment; as a result of this approach "Program ..." has become a tool more flexible and open to new local initiatives

#### **Discussion:**

- we don't have direct connection between "Programme..." and WFD in the terms of masters plans which might include this type of activity - it might be interesting to incorporate the water bodies concept (catchment of the water bodies) to show that we are working in the same units as WFD (it was not done before)
- we will try to build the tool which will also say what should be done first and what could wait
- water demand - there is no information about need of water - irrigation in Poland
- prepare some papers (materials) for partners (few pages summary with the examples) to evaluate if such a tool can be a small part of guidelines - mid November

- Hungary – will have national dialogue on 3<sup>rd</sup> December – they can discuss this material there; how they think of it, how they can use it
- Slovakia – program is interesting but need to define exactly hydrology parameters and anthropogenic entrances.

### III. Case studies

#### 1. Poland - Waldemar Mioduszewski

- presentation of four case studies (Pisa Forest, Białowieża, the programme of „Small Retention in Forest”, Piskurka reservoir)
- most important player - NGO's - they have possibility and skills to enquire from UE - they are very important bodies

#### 2. Hungary - Janos Feher

- presentation of project (2008-2009) on the Bodrog river with partnership with two other countries - the concept of the project was to find out how we can improve the flood capacity of the river and with some small investments how we can improve the water management of the floodplain area (south part of Bodrog river)
- Who is the most important player to collect the water, to make project etc.? State + water management society in partnership with local communities - water societies represents the interest of farmers, local communities formulates special requirements (tourism),

#### 3. Slovakia - Vladimir Mosny

- Program of revitalization the country and Integrated management of basin in Slovak republic - 2011 - realizations in two programs - 2011
- Revitalization measures defined by Government of the Slovak Republic (in urban areas, in agriculture, in river, in forest)
- Realizations –
- The pilot implementation project
- (24 village - 30 782 Eur)
- 1. implementation project - accepted 9.III.2011
- (200 village - 24 mil. Eur)
- 2. implementation project - accepted 7.IX.2011
- (348 village - 8,161 mil. Eur)
- Activity – polder, weirs, thresholds, green gardens etc.
- Presentations of good and bad activities in water measures in Ždiar, Necpaly, Brehy, Revúca, Rudňany – mistakes and realizations.

#### 4. Slovenia - Darja Istenic

- presentation of four projects
  1. Restoration of Alpine stream in order to increase water retention capacity
    - Conceptual design for hydropower plant
  2. Restoration of degraded river due to combined sewer overflow
    - Conceptual design for municipality
  3. Retention and treatment of stormwater at industrial site
    - Implemented project, private owner
  4. Retention and treatment of agricultural runoff
    - Research project

### IV. Guidelines

- The Guidelines will be written in English;
- It will be based on definition given in point I;
- It will stress the need of increase water retention (landscape retention) according to the second part of definition;
- It will advice technical and non-technical measures, GIS based ;
- It will advocate the use of water retention in our region especially in the context of droughts and floods as a sort of water for dry period;
- description and characteristics of water retention (about the measures that can be taken; nice catalogue of things that can be done – useful retention (use it in operation sense) – technical and non-technical;
- Planning of small retention (GIS based) – about the programs, the group of measures and try to asses them
- Advice, best practice; legal requirement in each country are to diverse – this will not help others;  
**best practice approach – which steps to be taken to be effective;**
- Case studies – 40% of the book (they will have the common template form) – to have examples from other CEE countries (in autumn next year also sent to other countries – to get feedback on voluntary basis).

## V. Conclusions form the meeting

We have agreed upon the working definition used for this programme and we have decided about the most important features of the guidelines. Still we have to cope with the big diversity of measures and different understanding of natural or small retention measures in the different countries. We have agreed for the following to do list:

- the presentation will be available for participants on web page
- there is a request for looking again at national tables – updates – tables has been sent by Ignacy – request for filling in till 29.11.2013 .
- some papers (materials) for partners (few pages summary with the examples) to evaluate if such a tool can be a small part of guidelines - mid November
- version 2nd of tables - by the end of November
- by the mid of November – send more built up version of Ignacy presentation (GIS tool) – to have comments on GIS tools + review in your country which my be of use for planning small
- communication with the materials via server (send the details) – log in and password has been sent
- propose to publish an articles in Journal of Water and Land Development - each country prepare; send to everybody journal with the instruction for authors) – like a review of each countries (not scientific) – more information was sent by e-mail by Waldemar Mioduszewski on 13.11.2013
- skype discussion in March - before next April - opportunity for training - meeting on the 2nd IDMP workshop in Ljubljana (need to pay additional three people)
- before April - workout the template for case studies - send to all partners
- at the moment think about case studies
- need of materials from partners - each country - referring chapters on needs (national tables) and description and characteristic of water retention - technical and non technical (pictures etc.) - from partners - copyrights for this materials
- In September 2014 – workshop (training) with other CEE countries (but have to show them that we done our job) – because just by sending around the template they will not get nothing (we need to get additional budget for this workshop!!!)
- next milestone - end of holidays

- Remaining challenge: Translate the guidelines into different languages – it is important (useful only an English version will not have that impact - translate the guidelines into 4 languages – 6000 eur / language (in pdf) – 24.000 eur more. Try to find possibility for obtaining the funds for translation in particular countries. Feedback should be given to Tomasz
- Connection with other activities: 5.1 activity & 5.2 forest - to be present one person at each meeting (Sabina will inform about the dates)