Water and Sanitation Safety Planning in Rural Communities



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SUSANA MEETING IN STOCKHOLM

#### Water supply in rural areas of Eastern Europe, the Caucasus and Central Asia





#### Sanitation in rural areas of Eastern Europe, the Caucasus and Central Asia





# Present practice in the rural communities

WECF Experiences:



The rural population is lacking awareness on

- Access to Information e.g. data about water quality
- Influence of their activities on water quality
- Public participation

Sanitation is inadequate. Groundwater pollution due to pit latrines.

Legislation exists but is not put into practice,

e.g. water protection areas.

#### Water Safety Planning (WSP) by WHO





# Potential of the Water Safety Planning (WSP) developed by WHO



- WSP leads to a safe drinking water management
- WSP supports information and transparency in questions about drinking water
- WSP leads to a better understanding of profitability of drinking water systems
- WSP can be used as a tool to involvement and mobilisation of civil society
- WSP can be used for educational work

# WHO/IWA tools to develop and implement WSP and SSP



Excel-based "WSP Quality Assurance" Tool and User Manual (2009) <a href="http://www.who.int/water\_sanitation\_health/publications/wsp\_qa\_tool/en/index.html">http://www.who.int/water\_sanitation\_health/publications/wsp\_qa\_tool/en/index.html</a>

Water Safety Planning for Small Community Water Supplies (2012) Step-by-step risk management for Small Community Water Supplies <u>http://www.who.int/water\_sanitation\_health/publications/2012/water\_supplies/en/index.html</u>

Sanitation Safety Planning manual Manual for safe use and disposal of wastewater, greywater and excreta (2015)

Step-by-step risk based approach to assist in the implementation of the 2006 WHO Guidelines for Safe Use of Wastewater, Excreta and Greywater in Agriculture and Aquaculture

http://www.who.int/water\_sanitation\_health/publications/ssp-manual/en/







#### Adaption of the WSP to small communities through citizen science

WSP - Toolbox for schools includes:

Manual with:

- Background information
- Suggestions for activities
- Questionnaires for different stakeholders
- Checklists for sanitary inspection of wells, public taps
- Forms and examples for reporting results
- Materials for water quick tests like nitrate, pH, colour, turbidity
- Workshop for Teachers and local authorities Teachers develop a 8-months Programme



# Why including Sanitation?



- Sanitation is an important aspect for the health in the rural areas
- Many diseases are not water-based, but transmitted through faeces, example: parasites (STH soil transmitted helminths)
- According to estimations of WHO (data from 2009) are in Romania 0.8 million children who suffer from STH and need to be dewormed
- In Part C: a chapter on "Personal hygiene for young people" added

#### **WSSP-Compendium 2016**

In English, Macedonian, Romanian, Albanian and Bulgarian



Part 1: How to accomplish WSSP (Water and Sanitation Safety Plan) and Instructions (8 Modules)

Part 2: Background information for developing WSSP (8/9 Modules)

Part 3: How to involve schools (6/7 Modules)





based on a decision of the German Bundestag

### **Structure of WSSP: 10 Steps**



Step 1: Start: Introducing Water and Sanitation Safety Plans
Step 2: Description of the Situation of water supply and sanitation in the community

Step 3: Identification of relevant stakeholders and regulations

Step 4: Documentation, Water and Sanitation-Mapping

Step 5: Risk assessment and water tests

Step 6: Preparation of Information and mobilization of the community

Step 7: Development of a plan of measures Step 8: Reporting and discussion of measures

Step 9: Implementation of measures

Step 10: Monitoring, improvement and adjustment

## Activities with the school children











# Results







- Know how about the water quality (Nitrate, Turbidity, pH)
- Risk Analyses of the quality of the water sources and surroundings
- Cooperation with Authorities and participants
- Informing of the population
- Awareness raising
- Concrete improvements/ planning and actions

# Results of the WSSP for the improvement of safety of drinking water resources



Identified main problems

- Uncontrolled deposition of urban waste
- Lack of wastewater management
- Leaking distribution network
- Inadequate sanitation

Recommendations which lead to an improved water protection as wall as save drinking water quality were formulated:

On the level of households On the level of the village/community On national level

# Field study – Mănăștiur (Romania)





#### • Conclusions

- Immediate measures to control the microbiological risk and to control the free residual disinfectant have to be taken
- Technical assistance on the process of water treatment is recommended, especially by the Regional Operating Company (ROC), e.g. Aquatim
- Displaying work instructions for operating the treatment plant, and periodic checks
- Regular training of staff
- Putting the wastewater treatment plant into operation
- Restricting grazing areas so that animals no longer exist in the catchment area
- Communication and cooperation with all stakeholders in the catchment

#### Examples of outcome: Implementation of a new School toilet in Moldova UN "Water for Life - Best Practice Award"



Pupils became active and found a sponsor for the construction of a new school toilet (UDDT)



http://www.wecf.eu/english/articles/2013/03/ormax\_winning\_un\_award.php

# Conclusion



- The WSSP is a helpful guideline for small communities and schools to develop and implement concrete action for improved water and sanitation
- The understanding for environmental linkages rises
- Civil society can be strengthened
- Improvement of the communication and the understanding between the population and the authorities
- Basis for national guidelines on WSSP in rural areas (Romania)
- WSSP is a suitable method for a extensive and practical environmental education that can inspire and mobilise schools (WSSP Program becomes a part of the school curriculum)



## Thanks for your attention!



Boy in Moldova in front of a UDDT

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