Enabling water and sanitation safety planning in rural communities

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Water supply in the rural communities
Sanitation in the rural communities
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 pollution in the rural communities

From Communities (point pollution):
- Pollution through pit latrines,
- wastewater pits, leakage in the sewage network, livestock holding, deposits of waste

From Agriculture (diffuse pollution)
- Chemical fertilizer, pesticides, liquid manure
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
Why Implement a DWSP?

- EPA has adopted a safety plan approach to ensure:
  - Safe → Meets standards
  - Secure → Management System in place
  - All potential risks identified source to consumer
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WHO/IWA tools to develop and implement WSP

Target groups are especially Water supplier

Step-by-step risk management for drinking water suppliers 11 Modules


Step-by-step risk management for Small Community Water Supplies
Challenges with small water supplies

WHO/IWA guidelines to WSP are very good, but

• Are mainly focusing of organised suppliers
• The WSP Team has to consist of specialists

In many rural communities:

• Little Know-how on drinking water and sanitation and their responsibilities
• Minor personnel and financial capacities
• Minor awareness for information and involvement of citizens
Benefits of WSP

• Communities understand the ecological connection and the influence on water quality

• Communities understand their own responsibility for the water quality

➢ Water supply can be improved through own action
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
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 trans-mitted helminths).

According to estimations of WHO are in Romania alone 0.8 million children who suffer from STH and need to be dewormed.
Water and Sanitation Safety Plan Compendium

- Publication with background information, instructions and Materials for teachers and NGOs
- 22 Modules (including small centralised drinking water supply systems):

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

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

Part 3: How to involve schools (6 Modules)
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
Monitoring and risk assessment of the drinking water supply with the pupils
Monitoring and risk assessment of the drinking water supply with the pupils
Activities and results

- Testing 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
More results

- Local authorities, citizens were informed about nitrate-measurements
- Citizens were informed about water quality, they came with water samples to the pupils
Results of the WSSP for the improvement of safety of drinking water resources

Identified main problems
• Uncontrolled deposition of urban waste
• Lack of Wastewater treatment plants
• Leaking distribution network
• Inadequate sanitation

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

*On the level of households*

*On the level of the village/community*

*On national level*
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 (Ecosan)

http://www.wecf.eu/english/articles/2013/03/ormax_winning_un_award.php
Conclusion

• The Compendium 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 will be strengthened
• Improvement of the communication and the understanding between schools/population and the authorities
• 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!

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