Water and Sanitation Safety Planning in Rural Communities

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Women Engage for a Common Future

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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

Water Safety Plan manual (2008) Step-by-step risk management for drinking water suppliers, based largely upon HACCP (Hazard Analysis and Critical Control Point) which is a preventive risk management system that has been used in the food manufacturing industry for a number of decades


Step-by-step risk management for Small Community Water Supplies

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
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
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)
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 well 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)

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<th>CATCHMENT</th>
<th>TREATMENT</th>
<th>DISTRIBUTION NETWORK</th>
<th>CONSUMER’S TAP</th>
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- **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 area
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!

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Boy in Moldova in front of a UDDT