The issue of water supply and sanitation in adaptation strategy to water cycle change

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Chair
Task Force Extreme Weather Events
Protocol Water and Health to the UNECE Water Convention
THIS PRESENTATION

- TO SHARE LESSON LEARNED on GUIDANCE DEVELOPMENT:
  - WHY WE NEED IT
  - HOW WE DID IT
  - WHAT DOES THE GUIDANCE ADDRESS

Guidance on Water Supply and Sanitation in Extreme Weather events

Task Force Extreme Weather events
Protocol on Water And Health to the UNECE Water Convention
LEADERSHIP: Italian Ministry of Environment
CHAIR: L. Sinisi, ISPRA Italy
A) Share experience on the safe operation of facilities for, and maintenance of adequate, water supply and sanitation in short-term critical situations (e.g. floods and extreme – given prevalent local conditions – temperatures) and develop guidelines to respond to such situations.

B) Develop strategies to satisfy water supply and sanitation needs in the long term, given the potential impacts of climate change and the need for adaptation and mitigation programs.

Further mandate by Joint Bureaux:

Cooperation with UNECE Task Force Water and Climate
Development of guidance on water supply and sanitation in extreme weather events

- April 2008, 1st Task Force meeting, Rome
- October 2008, Madrid – First meeting of the ad hoc Drafting group
- February 2009, Rome – Second meeting drafting group
- May 2009 - 1st draft of the guidance to be translated in Russian
- July 2009 – presentation of the guidance to the Protocol WG Water and Health
- July – Sept 2009 – Circulation of the draft for comments and review
- October 2009 – Document discussion at the Second Meeting of the Task Force
- November 2009 – Presentation Guidance EUWI ECCA meeting, Bucharest,
- January 2010 – Guidance discussion EUREAU water and climate experts, London
- March 2010 – Presentation of the Guidance (working Document) to the Environment and Health Ministerial Conference

- May 2010 – Presentation at Protocol Working Group Water & Health
- 30 June 2010 – Deadline for final comments/additions
- Fall 2010 – Final Endorsement 2nd Meeting of the Parties (Protocol)
WHY WE DID IT
EXTREME EVENTS are hitting the Region

Number of extreme weather disasters 1980-2008
Comparative trends between UNECE and Global Regions

Number of total affected people by drought, extreme temperatures, flood and storm disasters * in UNECE Region (1970-2008)

Extreme events in the Region: trends and social impacts

38 millions of people affected in the past 20ys - disasters ONLY

Source: EM-DAT database by CRED*, adapted by ISPRA**
**ISPRA= National Institute for Environmental Protection and Research - Italy
*CRED= Centre for Research on the Epidemiology of Disasters - Université Catholique de Louvain

*At least one of the following criteria must be fulfilled:
- 10 or more people reported killed
- 100 people reported affected
- declaration of a state of emergency
- call for international assistance

ISPRA= National Institute for Environmental Protection and Research - Italy
CRED= Centre for Research on the Epidemiology of Disasters - Université Catholique de Louvain
(largely) affects environmental water(s) protection and management policies

Is a crucial environmental health determinant under climate variability

high vulnerability of technical performance in extremes, including transboundary impacts

Is still a main & costly challenge in EU and the Region

Water & climate challenges are shared with private sector

It is not just a delivery service issue
HOW WE DID IT
Looking for partnership in adaptation

1. Integration with IWRM policies & planning on the field

2. Integration with health professionals in adaptation planning
   (emerging health risk, public communication, vulnerability of health services)

3. Involvement of utilities managers in disaster preparedness
   (early warning, land use, capacity building, personnel training, Technology investments & choice)

1. IWRM: partnership TF Water & Climate of UNECE Water Convention

2. Health sectors & WHO among contributors
   • Emerging health risk management as key issue in adaptation measures

3. UTILITIES managers as main target audience
   • Utilities directly involved in drafting, key chapters on adaptation measures
WHAT DOES THE GUIDANCE ADDRESS
### ADAPTATION VULNERABILITIES & CHALLENGES

<table>
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<tr>
<th>Address management “system” vulnerabilities</th>
<th>• CHALLENGES AWARENESS</th>
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<tr>
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<td>• KNOWLEDGE/TECHNOLOGY TRANSFER &amp; IMPLEMENTATION</td>
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<td>• SUB REGIONAL DIFFERENCIES in CLIMATE VARIABILITY</td>
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<td>• EMERGING NEW environment and health RISK</td>
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<td>• MANAGEMENT IN EXTREMES: e.g. link to IWRM, land use</td>
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“ In the countries of Eastern Europe, Caucasus and Central Asia problems of access to water services are rooted in the history of that Region”

Source: “Financing water supply and sanitation in EECCA Region” Nov 2005, Armenia( OECD, 2005)
<table>
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<th>Guidance structure</th>
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<tbody>
<tr>
<td><strong>RISK MANAGEMENT</strong></td>
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<td>- Environmental vulnerabilities</td>
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<td>- Health vulnerabilities</td>
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<td><strong>WSS SYSTEM VULNERABILITY</strong></td>
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<td>- Utilities management</td>
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<td>- Preparedness</td>
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<td>- Communication and information</td>
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Three rules management

- IMPROVE WHAT YOU’RE DOING
- PROTECT WHAT YOU HAVE
- MANAGE WHAT YOU DON’T HAVE
Guidance brochure at 5th Ministerial E&H Conference – Protocol Day

GUIDANCE ON WATER SUPPLY AND SANITATION IN EXTREME WEATHER EVENTS
CONCLUSIONS

- Recurrent adverse weather events are hitting the Region
- Water quality/availability impacts are strictly linked to WSS
- WSS should be included in adaptative risk reduction strategies and water management adaptation strategy
- Technology transfer and implementation is an urgent issue
- Utilities managers should get involved in the overall process
WATER SUPPLY AND SANITATION


more action to realize the MDG 7 target 10 about water and sanitation..

“Like hunger, it is a silent emergency experienced by the poor and tolerated by those with the resources, the technology and the political power to end it”

Thank you
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