¿In Search of Better sanitation – Will MDGs Help to Advance Progress Towards Achieving Access to Improved sanitation?

¿What Actions are Required – A Regional Perspective?

Gerardo Galvis
PAHO/WHO
Access to Drinking Water and Sanitation Systems

Based on Evaluation 2000 and Studies on Inequities:

- In the 90s the population in LAC increased from 429 to 497 million
- Access to sanitation increased from 66% to 79% and “potable” water from 80% to 85%
Sanitation Coverage

During the past decade:
- New sewer connection to 20,000 new persons/day
- *In situ* sanitation provided to 10,000 new persons/day

However,
- 103 million (21%) lack sanitation: 66 million rural (50%) 37 million urban (10%)
- 241 million (49%) with sewerage systems but only 14% of their effluents receive some level of treatment
Household Water Connection by Deciles of Per Capita Expenditures in Peru
### Water & Sanitation Damages From Hurricane Mitch in Central America

<table>
<thead>
<tr>
<th>Damages</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Guatemala</th>
<th>El Salvador</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water Systems</td>
<td>1,683</td>
<td>79</td>
<td>60</td>
<td>155</td>
<td>1,977</td>
</tr>
<tr>
<td>Sewerage Systems</td>
<td>ND</td>
<td>9</td>
<td>2</td>
<td>14</td>
<td>25</td>
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<tr>
<td>Affected Wells</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>7,622</td>
<td>7,622</td>
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<tr>
<td>Latrines Damaged</td>
<td>85,000</td>
<td>37,000</td>
<td>2,500</td>
<td>9,193</td>
<td>133,693</td>
</tr>
</tbody>
</table>

**Source:** PAHO/WHO MASICA, 1999
**NA = Not Available**
## Infant Mortality and Access to Sanitation and Drinking Water (% of population)

### Table

<table>
<thead>
<tr>
<th>Country</th>
<th>Infant Mortality</th>
<th>Access to Water</th>
<th>Access to Sanitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAN</td>
<td>7</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>EUA</td>
<td>8</td>
<td>91</td>
<td>94</td>
</tr>
<tr>
<td>CUB</td>
<td>10</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>CHI</td>
<td>14</td>
<td>91</td>
<td>93</td>
</tr>
<tr>
<td>COR</td>
<td>14</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>URU</td>
<td>20</td>
<td>89</td>
<td>84</td>
</tr>
<tr>
<td>VEN</td>
<td>23</td>
<td>79</td>
<td>69</td>
</tr>
<tr>
<td>ARG</td>
<td>24</td>
<td>65</td>
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<td>PAN</td>
<td>25</td>
<td>84</td>
<td>83</td>
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<tr>
<td>COL</td>
<td>28</td>
<td>75</td>
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<tr>
<td>MEX</td>
<td>34</td>
<td>83</td>
<td>77</td>
</tr>
<tr>
<td>DOR</td>
<td>42</td>
<td>77</td>
<td>55</td>
</tr>
<tr>
<td>HON</td>
<td>43</td>
<td>73</td>
<td>53</td>
</tr>
<tr>
<td>ECU</td>
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<td>77</td>
<td>69</td>
</tr>
<tr>
<td>ELS</td>
<td>44</td>
<td>73</td>
<td>67</td>
</tr>
<tr>
<td>BRA</td>
<td>47</td>
<td>55</td>
<td>67</td>
</tr>
<tr>
<td>GUT</td>
<td>48</td>
<td>69</td>
<td>66</td>
</tr>
<tr>
<td>NIC</td>
<td>52</td>
<td>67</td>
<td>39</td>
</tr>
<tr>
<td>PER</td>
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<td>66</td>
<td></td>
</tr>
<tr>
<td>HAI</td>
<td>86</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

### Diagram

- **Infant Mortality**: 7 8 10 14 14 20 23 24 25 28 34 42 43 44 44 47 48 52 55 86
- **Access to Water**: 100 100 91 91 100 89 79 65 84 75 83 73 77 55 53 69 67 62 66 39
- **Access to Sanitation**: 100 100 94 93 94 94 69 84 93 83 72 90 70 58 68 85 79 76 74 26

**Source**: PAHO, Regional Report on the Evaluation 2000 in the ‘Region of the Americas’ and Health in the Americas
Considerations on Environmental Burden of Disease (Bartone, 2002, based on Lvovsky, 2001)

- 11% of the burden of disease in LAC is due to environmental factors (versus 18% for all developing regions, and 4.5% for developed regions)

- Principal diseases associated with the environment are diarrheal diseases and respiratory infections

- In LAC, 5.5% of the environmental burden of disease is associated with WS&S and 3.5% with indoor and outdoor air pollution

- 43% of the environmental burden of disease affects children under 5, although they only represent 12% of the population
Millennium Development Goals and Targets

- Goal 1. Eradicate extreme poverty and hunger
- Goal 2. Achieve universal elementary education
- Goal 3. Promote gender equality and empower women
- Goal 4. Reduce child mortality
  - Target 5. Reduce in 2/3, between 1990 and 2015, the mortality of children under 5.
- Goal 7. Ensure environmental sustainability
  - Target 10. For the year 2015, reduce to half, the percentage of people without access to drinking water. After Johannesburg in 2002, sanitation is included.
In Search of Sustainable Solutions

ENVIRONMENT (NATURAL RESOURCES)

RISK REDUCTION

SCIENCE & TECHNOLOGY

SUSTAINABLE SOLUTIONS

RISK

OWNERSHIP

COMMUNITY AND LOCAL ORGANIZATIONS

CONTEXT
Political, Legal and Institutional
Capacity Building (UNDP, 1996)

- An enabling environment with appropriate policy and legal framework
- Institutional development, including community participation
- Human resource development and the strengthening of managerial systems
Lines of Action

- National Assessments and formulation of national strategies

- Sectoral information:
  - JMP: WHO–UNICEF
  - SISAM, A Regional Monitoring System on Environmental sanitation and the MDG associated with WS&S.

- Information and knowledge sharing
  - CEPIS, Collaborating/associated Centers, BVSA (Virtual Library), "Clearinghouses"
Lines of Action

- Sanitation and integrated management of water resources
  - Wastewater treatment and reuse; recreational waters

- Education in hygiene. Sanitary and environmental education.
  - Primary Environmental Care
  - Healthy schools, including sanitary infrastructure

- Reduce the environmental vulnerability by disaster mitigation and preparedness

- Team learning and demonstration projects
Lines of Action

- Primary Environmental Care (PEC) Strategy

  - Ecoclubs: 1992: Initial steps; 1996: 30 ecoclubs in Argentina; 2001: 264 in ten countries of South and CA

  - Municipal Network of EPC: Activities in 12 countries.

  - EPC Centers: Santiago de Chile and other municipalities

  - Web site and electronic newsletter supported via CEPIS
Team Learning Projects (TLPs)

INVENTORY
Institutional Information

RAPID ASSESSMENT
Validation and Adjustments

SYSTEMATIZATION
Organization of Information

PROBLEM TYPES AND PRIORITIZATION OF SOLUTIONS
Consensus-building for solutions

PROJECT IDENTIFICATION AND FORMULATION

TEAM LEARNING PROJECTS

BROAD IMPLEMENTATION OF DEVELOPMENT PROJECTS