Experiences Monitoring Global Drinking Water and Sanitation targets

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WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP)

Original scope of work of the JMP

Monitor trends and progress within the water supply and sanitation sector

Strengthen national capacity for sector monitoring

Inform policymakers and advocate for action at all levels

MDG target + Indicators

MDG 7 Target 7C:

- Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicators:

- Proportion of population that *uses* an improved drinking water source
- Proportion of population that *uses* an improved sanitation facility

"Improved" means….

An improved drinking water source is:

"*a source that by nature of its construction is adequately protected from outside contamination in particular with fecal matter*"

An improved sanitation facility:

" *a facility that hygienically separates human waste from human contact*"

MDG definitions of improved/unimproved

Drinking Water

IMPROVED

- Piped into dwelling, plot or yard
- Public tap/standpipe
- Tube well/borehole
- Protected dug well
- Protected spring
- Rainwater collection

UN-IMPROVED

- Unprotected dug well
- Unprotected spring
- Cart with small tank/drum
- Tanker truck
- Surface water (river, dam, lake, pond, stream, canal, irrigation canal)
- Bottled water*

Sanitation

IMPROVED

- Flush/pour flush to:
    - piped sewer system
    - septic tank
    - pit latrine
- Ventilated improved pit (VIP) latrine
- Pit latrine with slab
- Composting toilet

UN-IMPROVED

- Flush/Pour flush to elsewhere
- Pit latrine without slab/open pit
- Bucket
- Hanging toilet/hanging latrine
- Shared sanitation of any type
- No facilities, bush or field

Data sources on access to water supply and sanitation

JMP data sources are <u>national</u> sources:

- Nationally representative household sample surveys (DHS, MICS, LSMS, CWIQ, SES, WHS, HBS, H&N, RHS, PAPFAM, etc)
- National census

Note: **JMP is not involved in primary data collection**

instead….

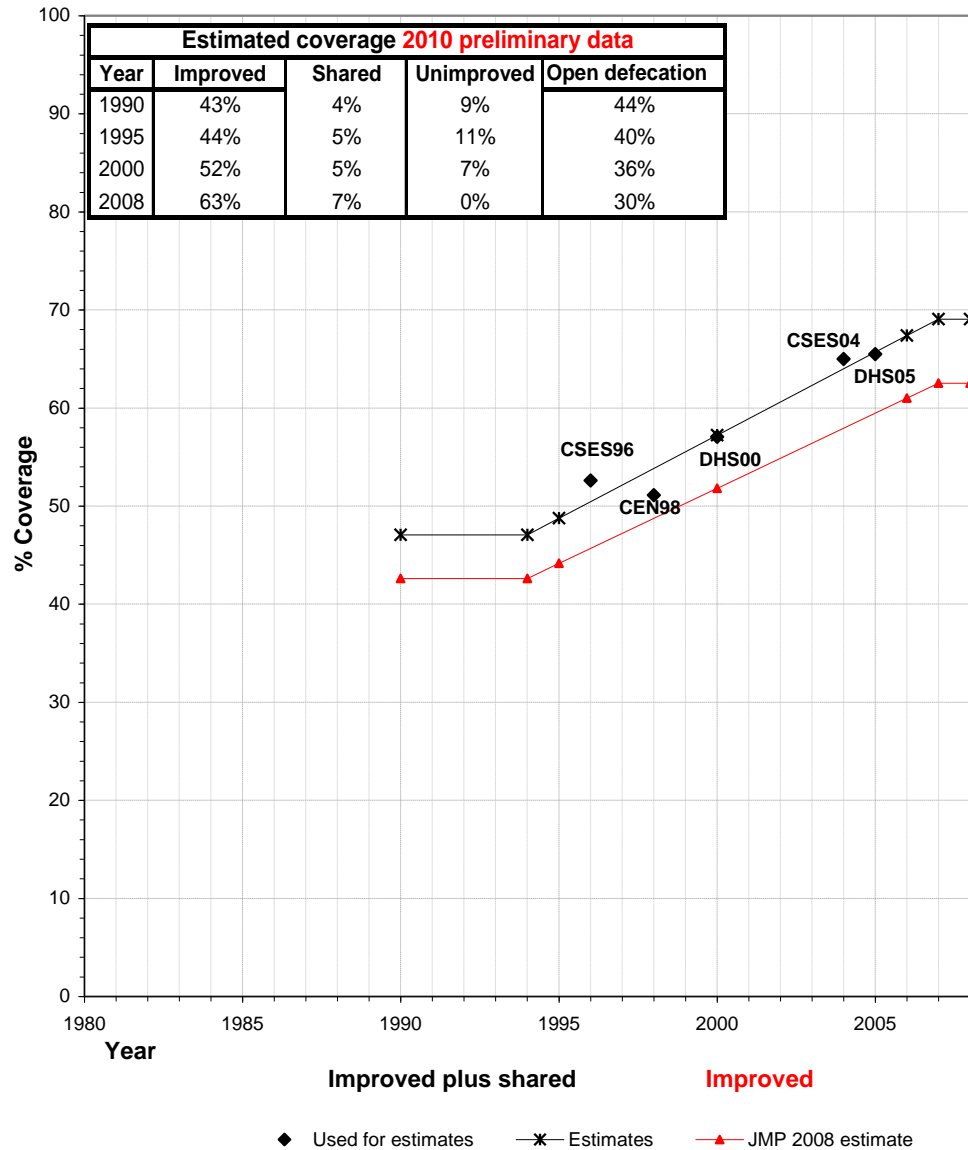**JMP promotes the use of standard questions & indicators among surveys**

JMP – **data base** (2009)

- Data for +/- 170 countries
  - **Note:** Limited data for developed countries
- 750+ results of HH surveys + Censuses from 1985 – 2008
- Bulk of surveys for LDCs, SSA, larger developing countries
- 35 - 40 new survey + census results per year
- Frequency for most developing countries one survey every three years

JMP Methodology - Summary

- Primarily based on *user* data derived from household surveys and censuses rather than data reported by governments

- Adjustments made to full historical series to ensure comparability over time and between countries

- Use linear regression to extrapolate and interpolate reference years instead of using the latest household survey data

Cambodia - urban -
Use of improved sanitation facilities

Estimated coverage 2010 preliminary data				
Year	Improved	Shared	Unimproved	Open defecation
1990	43%	4%	9%	44%
1995	44%	5%	11%	40%
2000	52%	5%	7%	36%
2008	63%	7%	0%	30%

Improved plus shared   **Improved**

◆ Used for estimates   ✱ Estimates   ▲ JMP 2008 estimate

Shared facilities :
The proportion of the population using a shared improved sanitation facility is based on the DHS05

JMP - The early years

1990 - 1997

- Annual questionnaires to Ministries of Health
- Use of "reported" coverage data – different years

Problems

- Not the right institution reporting
- No standard definitions of what to report
- No consistency from year to year
- No inter-country comparability of data
- No incentive for national authorities to accurately report
- Data not objectively verifiable

User-based data

1997 - 2000

- **Use of household sample surveys and national census data + reported data**

- **Development of current JMP methodology using linear regression for estimates**

- **Introduction of "improved" drinking water sources and sanitation facilities**

Exclusive use of household sample surveys + census

2000 - 2002

- **Exclusive use of survey and census data**
  - **Objective "snapshot" of the situation**
  - Nett picture of new facilities constructed and those fallen in disrepair
  - Avoid double counting of upgraded improved facilities (e.g. hand pump to piped house connection)

- **Discard reported data or administrative sources**
  - Limited in scale, reliability and specificity

Problem

- **Surveys and census do not use comparable definitions**

Harmonization

2002 - 2006

- **Coordination among major international data collection mechanisms (MICS, DHS)**
  - Standard questions, response categories
  - Standard definitions

- **Technical Advisory Group**
  - Broaden sector input + support base + validation of methods

- **MDG indicator brought in line with what is actually measured: access to → "Use of" an improved source/sanitation facility**
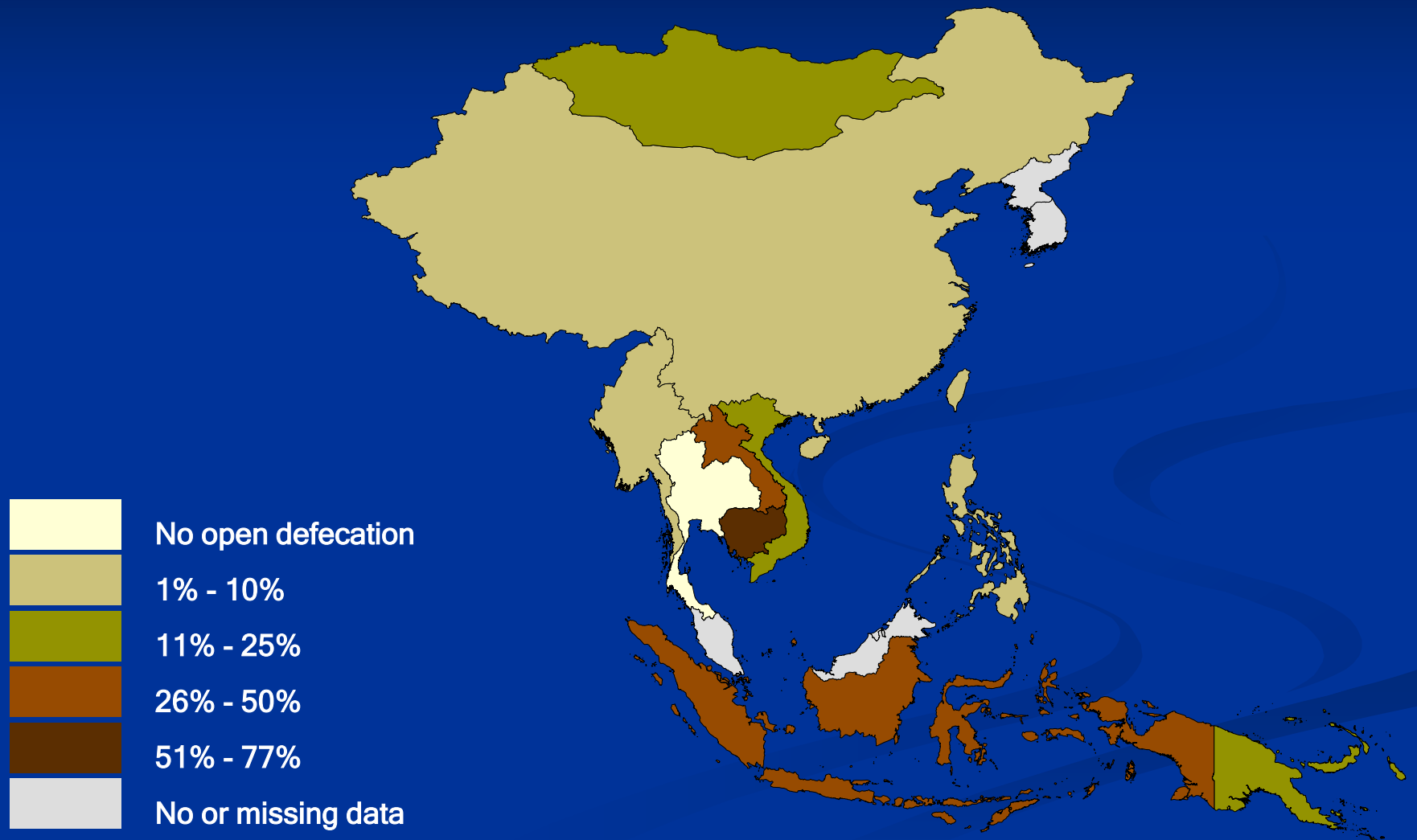
JMP products

- Bi-ennial global updates
- UN- Reference data for monitoring the MGDs
- Core questions on water supply and sanitation for household sample surveys

The world is not on track to meet the MDG sanitation target

Progress on Drinking Water and Sanitation: Special Focus on Sanitation, UNICEF, WHO, 2008

Open defecation rates in East- and South-east Asia

No open defecation
1% - 10%
11% - 25%
26% - 50%
51% - 77%
No or missing data

Challenges ahead

Methodological Challenges
- Continue to develop and validate tools and instruments to measure:
  - Sustainable access
  - Water quality
  - Access to basic sanitation
  - Appropriate hygiene - and hand washing behaviour
  - Disparities (pro-poor focus)
  - Gender disaggregated data
  - Access in peri-urban and urban slum areas

Challenges for wider sector monitoring
- Strengthen sub-national monitoring
- Invest in sector monitoring of the enabling environment
  - E.g. policies, HR capacity, financing mechanisms and investments, sustainable operation & maintenance, decentralization of authority, quality management etc.