Clean Water

- Improves health
  - ⬆hygiene
  - ⬇disease

- Economic benefits
  - Businesses
  - Reduction in burden (women)

- Societal benefits
  - Fire prevention

Goal/Assumption

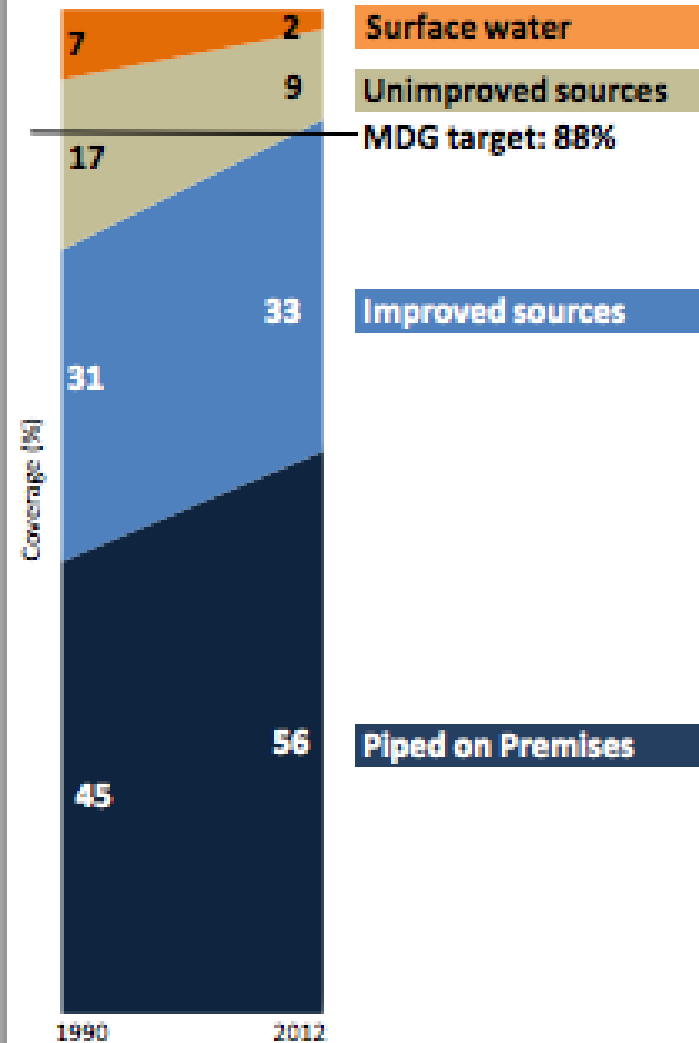Piped, treated infrastructure water into the dwelling

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The global MDG drinking water target was met in 2010

7	2	Surface water
	9	Unimproved sources
		MDG target: 88%
17		
31	33	Improved sources
45	56	Piped on Premises

1990   2012

Coverage (%)

Trends in the proportion of the global population using piped drinking water on premises, other improved drinking water sources, unimproved sources and surface water, 1990 -2012

Water MDG goal

- Reduce by ½ those w/o "improved"

- World met goal in 2010
  - 748 million use unimproved sources

- Masks disparities
  - Regional, economic

- Does not account for quality
  - ~>2 billion drink unsafe water

- But, great progress (little "infra")

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Future of water infrastructure?

- Water infrastructure limits
  - Political will / financing
  - Intermittent supply/drought
  - Geography/terrain
  - Emerging contaminants
  - Fixed (aging) systems (early 1900's)
  - Public faith (bottled water?)

- Need for second revolution?
  - Dual-systems
  - Water reclamation/reuse
  - New technologies: desal, R/O, others?
  - New ideas: drinking water to house?

Informal settlements are the fastest growing human settlement (~1 billion, 1 in 7)

What to do in these informal water situations?

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Today's Clean Water Session

- Focus: infrastructure
  - Appropriate for China, US

- Four speakers
  - Water safety
  - Small systems
  - Emerging contaminants
  - Treatment