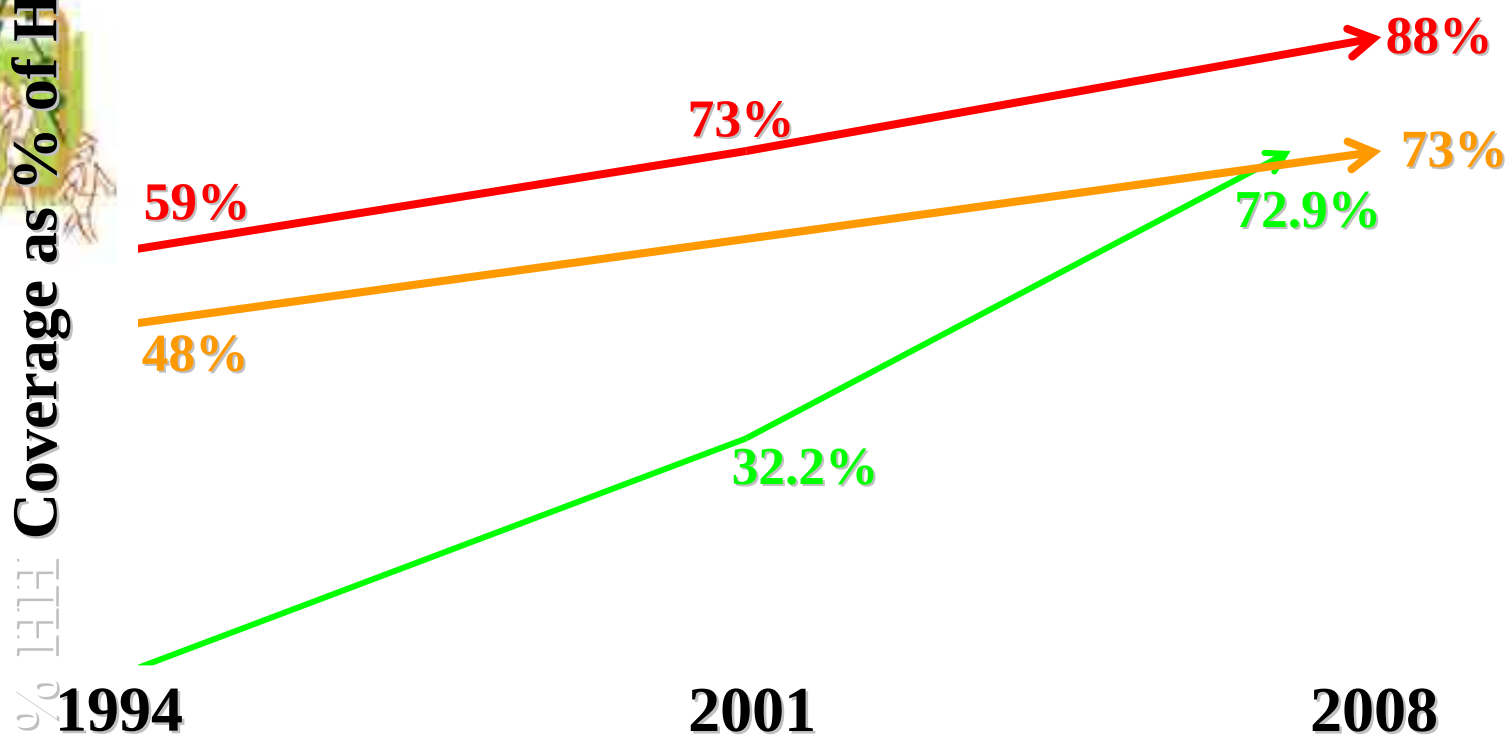
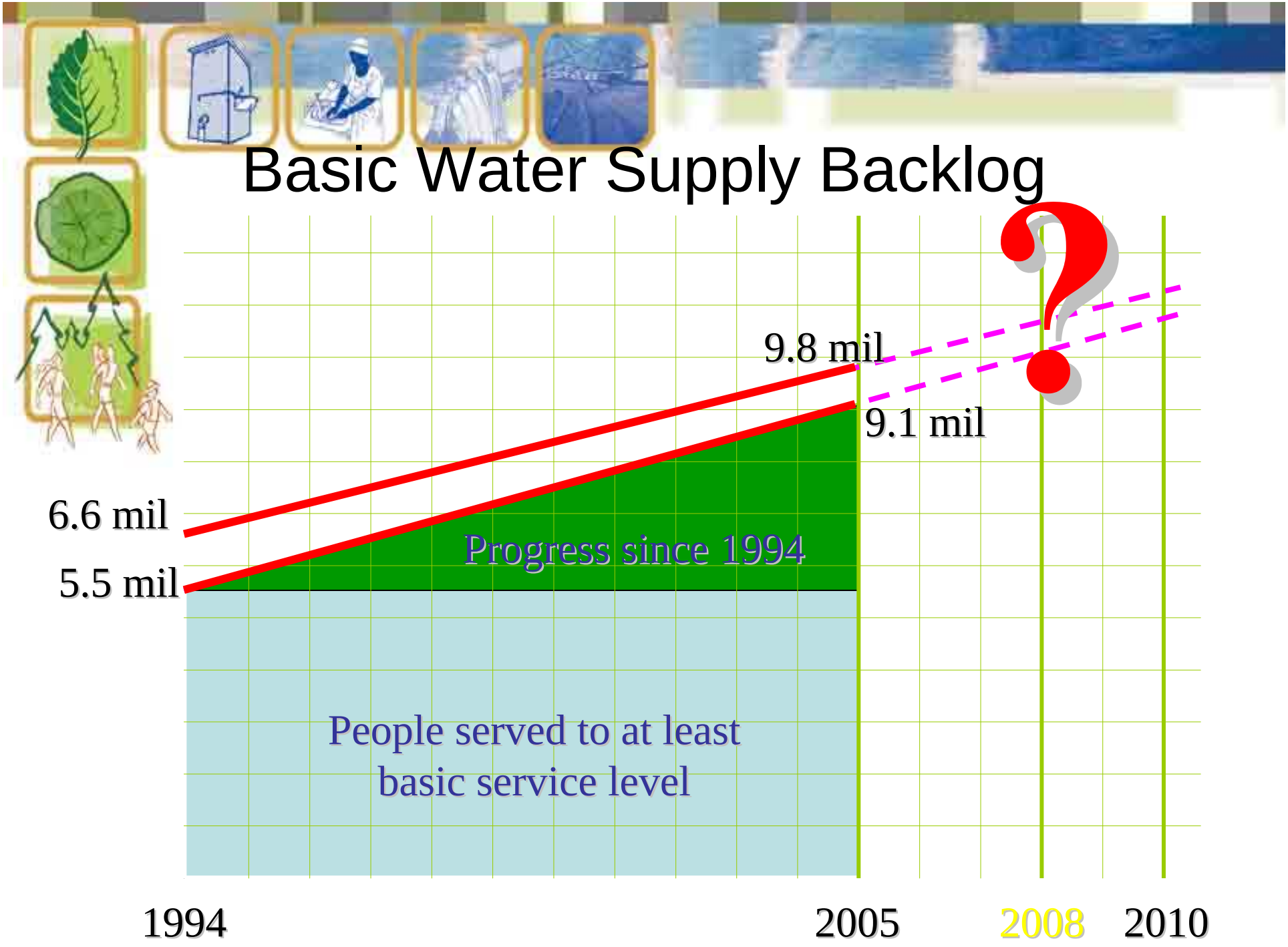
% Households with Access to: Water, Sanitation & Cell Phones



Basic Water Supply Backlog



Bar chart to show relative costs

- Small local surface or underground water supplies (rural village)
- Local surface resource (one town)
- Regional surface resource (few towns)
- Large inter basin transfers (LHDP)
- Treatment of effluent for industrial use (Mondi)
- Treatment of effluent for domestic use
- Treatment of mine water for domestic use
- Desalination (Atlantic> Indian Ocean)

This cartoon first appeared on March 25 2002

Water supply principles

- South Africa requires specific unique solutions for specific areas
- Use inland water resources for inland demands
- More use of treated effluent for industry (such as Ethekwini/Mondi contract)
- More treated effluent for domestic use (drinking water standard) - generally cheaper to treat domestic effluent than desalination of sea water

Water supply principles (2)

- Treatment of excess water from mines for industrial and domestic use- (process can include desalination). A win-win situation as pollution from acid mine drainage is minimized whilst creating additional domestic supplies such as Anglo Coal/Witbank project.
- Local feasibility studies will determine actual choice.
- Feasibility must include full life-cycle costs.

WATER SUPPLY FROM:	2008	Mid term 2020	Long term 2040
Surface water	77%	65%	50%
Groundwater	9%	10%	10%
Return flows (treated effluent)	14%	20%	30%
Desalination	< 1%	4 %	7 %
Treatment of excess mine water	< 1 %	1 %	3%