

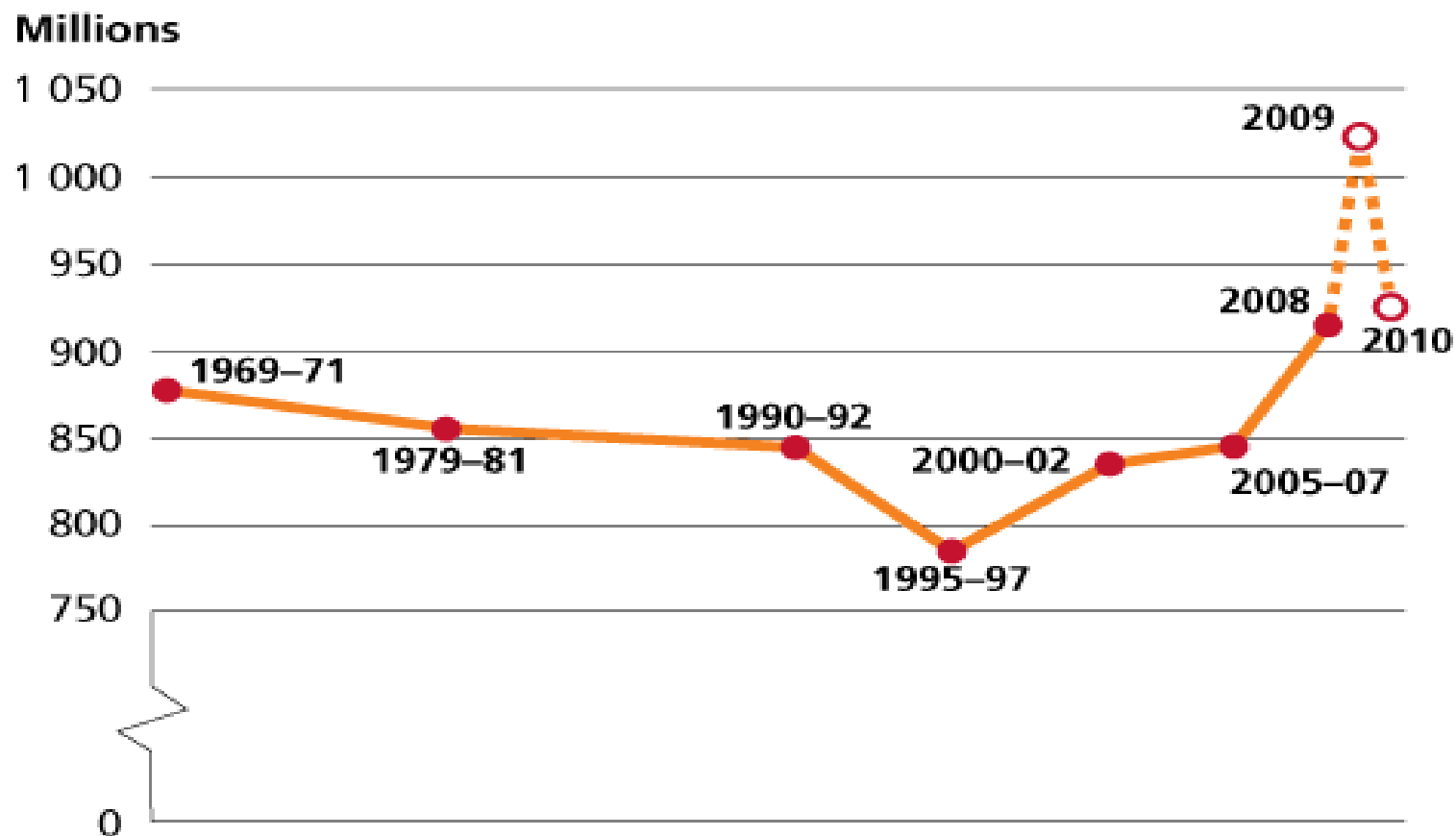


*FAO's approach to Innovation
In Water Management*

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Trends in world food insecurity



Note: Figures for 2009 and 2010 are estimated by FAO with input from the United States Department of Agriculture, Economic Research Service. Full details of the methodology are provided in the technical background notes (available at www.fao.org/publication/sofi/en/).

Source: FAO.

What defines food security?

- availability
 - global, national, local, household
 - land, water, inputs, technology, yields
- access
 - national, local, household, individual
 - prices, income, wealth
- utilization
 - individual
 - clean water, sanitation, health
- stability
 - variability in any of the above



Photo: Curt Carnemark, World Bank

Trends in Central Asia hunger

WORLD Region/subregion/ country [undernourishment category]	Total population 2005–07 (millions)	Number of people undernourished				Progress in number towards WFS target = 0.5*	WFS trend 1990–92 to 2005–07
		1990–92	1995–97	2000–02	2005–07		
Central Asia	58.7	4.2	4.9	10.1	6.0	1.4	▲
Kazakhstan [1]	15.3	ns	ns	1.2	ns	na	na
Kyrgyzstan [3]	5.3	0.8	0.6	0.9	0.6	0.7	▼
Tajikistan [4]	6.6	1.8	2.4	2.9	2.0	1.1	▲
Turkmenistan [2]	4.9	0.3	0.4	0.4	0.3	0.9	◀▶
Uzbekistan [3]	26.6	1.1	1.2	4.7	3.0	2.7	▲

WHY agriculture is so important in the water debate?

Simply because globally agriculture water is:

- 70% of all fresh water withdrawals and
- 90% of the consumption



The unavoidable facts

Liters per day per person

Drinking 2-4

Domestic use 40-400

Food needs 1000-5000 (and more)

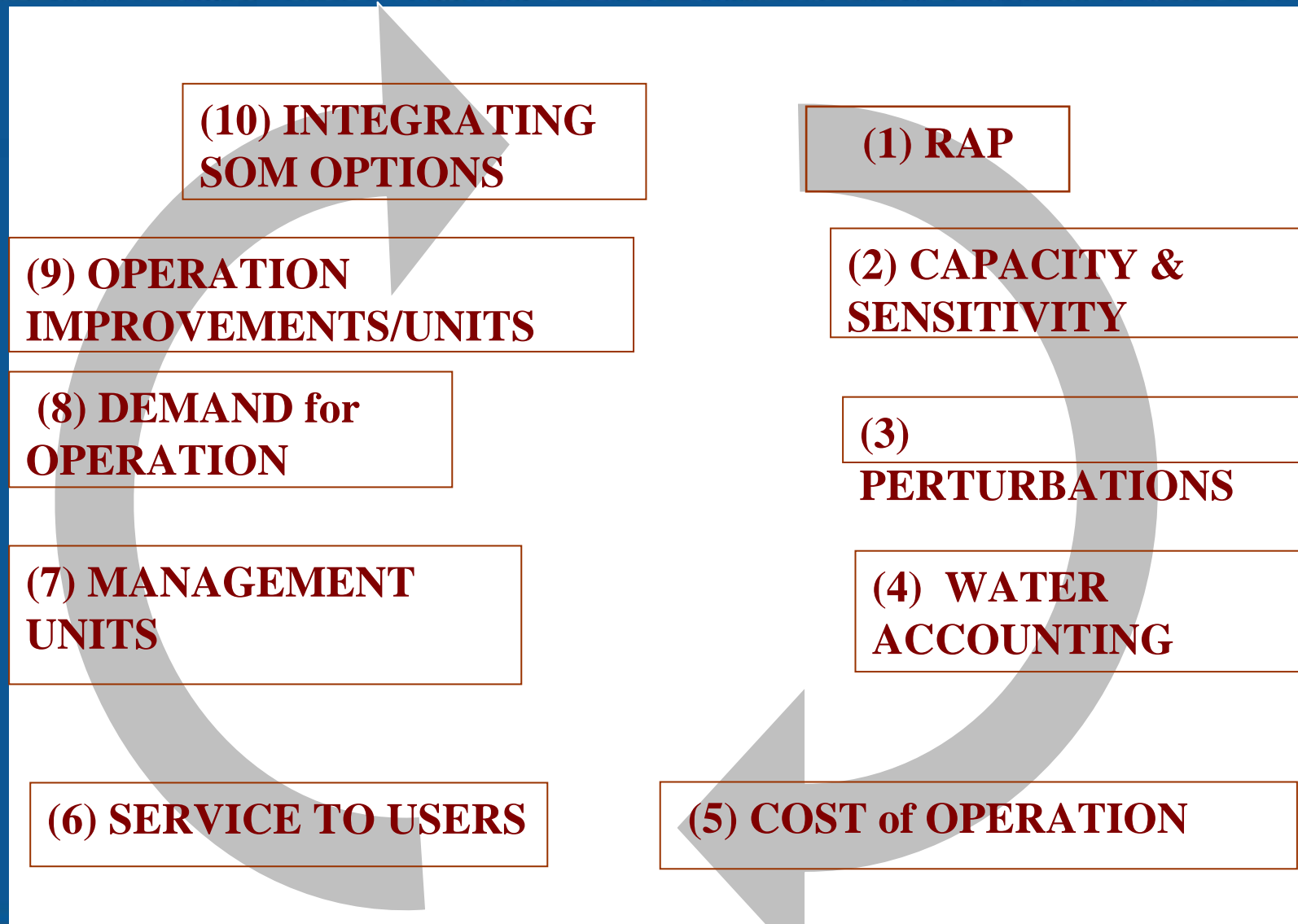
The good news is that **1%** of water productivity gain in agriculture means **10%** increase of availability for other uses

How to unlock the potential of irrigated agriculture ?

- Sectoral approaches have shown their limits
- Only integrated management can cope with the challenges of food security, energy, domestic water and sanitation, environment, etc., that is IWRM
- MUS (Multiple Uses of Water services) is a local practice of integration, FAO promotes the concept of MUS

How to unlock the potential of irrigated agriculture ?

- Investment in agriculture remains unacceptably low: national budgets and ODA
- Investment in agriculture at least twice as effective to combat poverty
- Modernising existing irrigation schemes



Conclusions

- The world needs to solve food insecurity not only for its own value BUT also for all the generated effects on MDGs, and to unlock water for other uses.
- Increase focused investment in irrigated agriculture to support livelihoods
- Agricultural trade agreements: regional

Theme 2.2
Contribute to
food security
by optimal use
of water



www.fao.org/nr/water