

More drops for Hyderabad, less crops for farmers

Water institutions and water reallocation from agriculture to Hyderabad (South-India)

M. Celio

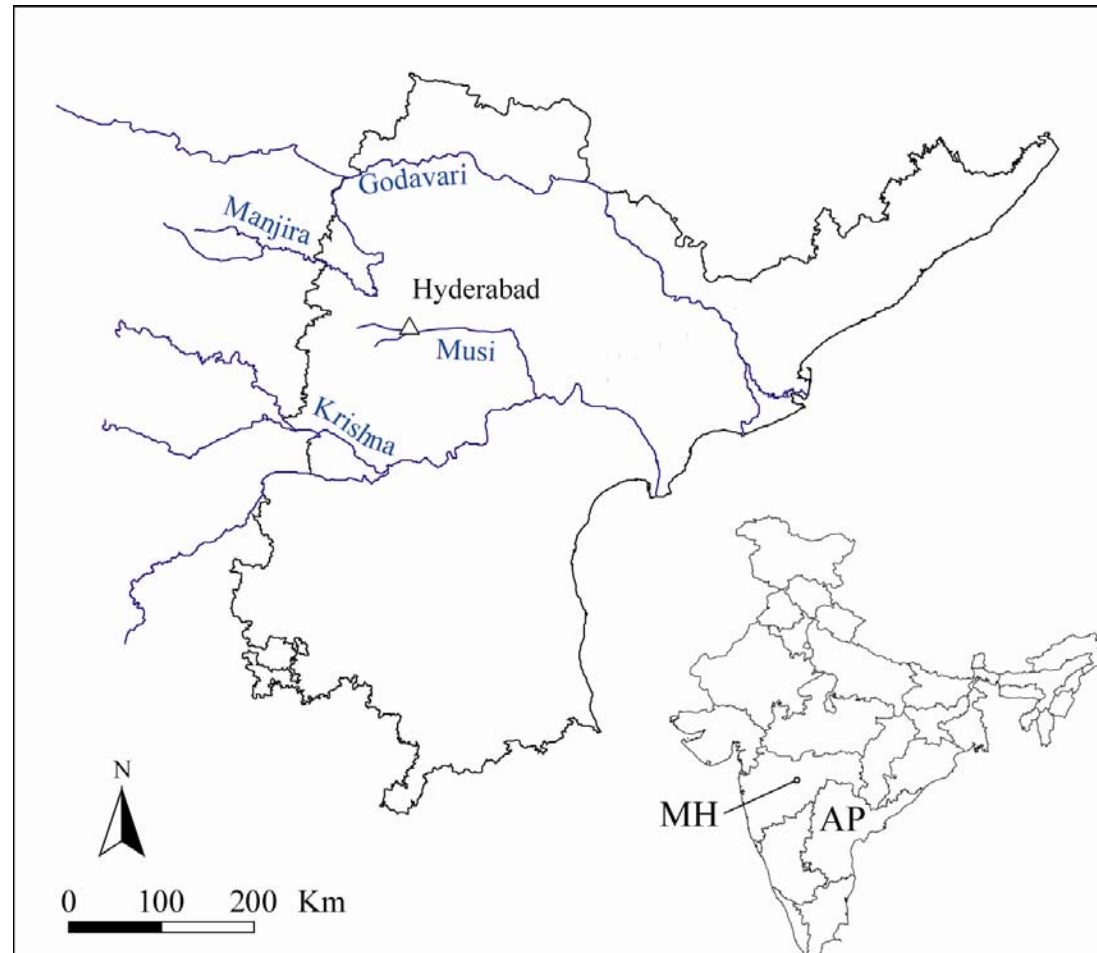
IELRC Geneva / 20-21 April 2007

www.iwmi.org

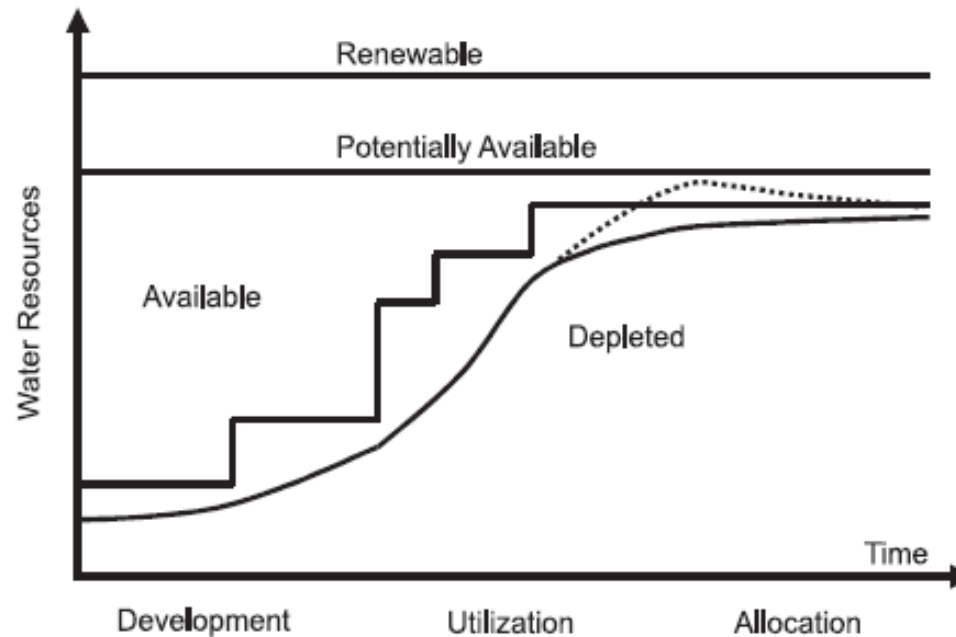
Plan of the presentation

- 1. Introduction**
- 2. Case background: river basin closure and urban growth**
- 3. Inter-sectors water allocation mechanisms**
- 4. Institutions for water reallocation**
- 5. Main shortcomings of public water reallocation from agriculture to Hyderabad**
- 6. Ways ahead**

Introduction

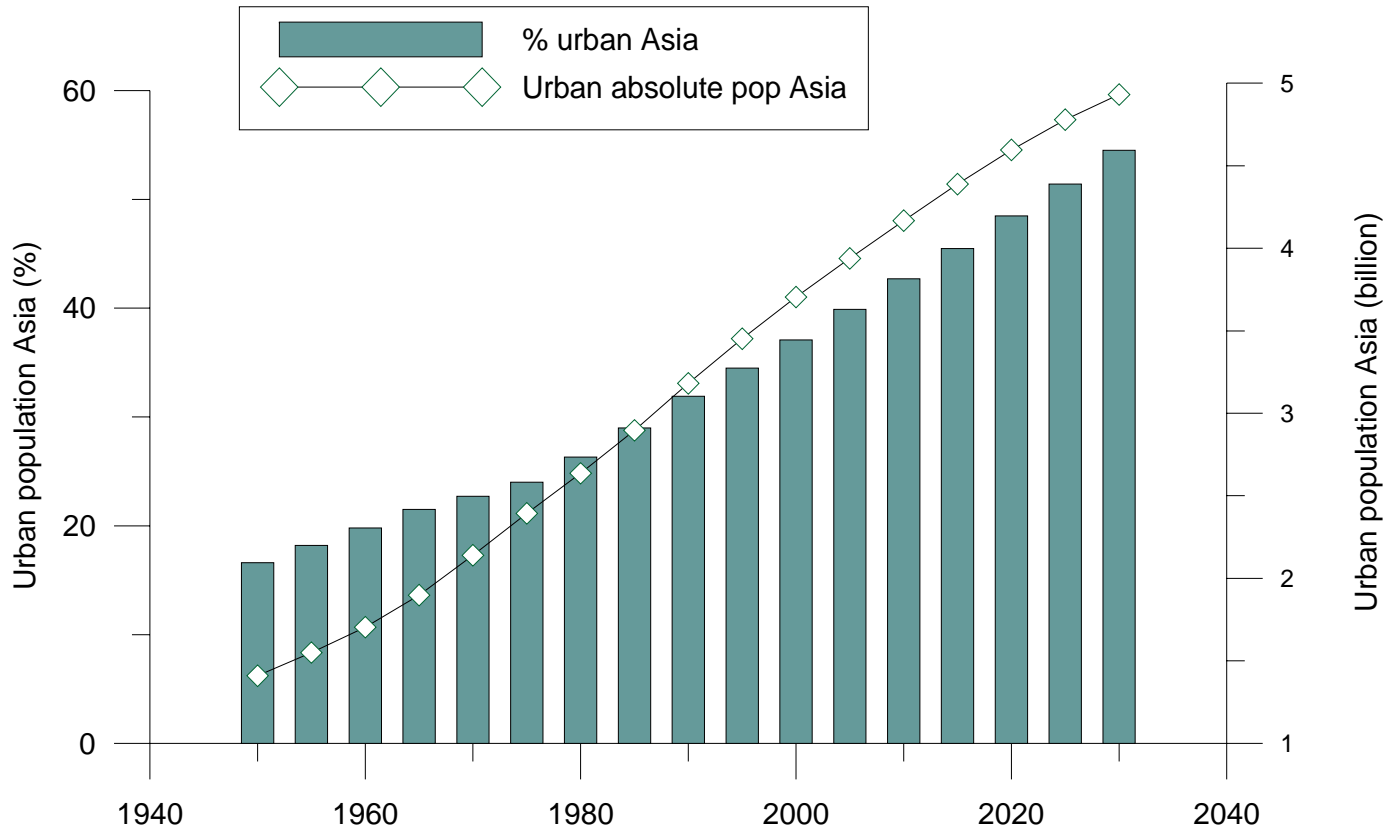


Case background: river basin closure and urban growth



[Molden, D. J., R. Sakthivadivel, et al. (2001)]

Case background: river basin closure and urban growth



[data-source: UN World population prospects: the 2006 revision]

Public or private water allocation?

Main intersectoral water allocation mechanisms:

- Water users are vested with water rights that they can lease or sell: markets
- Water rights are vested within State Governments: administrative (or “public” allocation)
- Water pricing
- User-based allocation, e.g. WUA with authority to make decisions on water rights

Water policies and inter-sectors water allocation

In the National Water Policy issued in 2002 there is a clear concern for planning and setting-up institutional mechanisms capable of dealing with multisectoral water uses, since “Water resources development and management will have to be planned (...) multi-sectorally (...)”

Water policies in Maharashtra and Karnataka make similar provisions

Water law reforms in Andhra Pradesh and water allocation 1/2

Andhra Pradesh (AP) on the forefront of water law reforms in India:

- AP Farmers' Management of Irrigation Systems Act (1997)
- AP Water Resources Development Corporation Act (1997)
- AP Water, Land and Trees Act (2002)

AP Farmers' Management of Irrigation Systems Act (1997)

Reform inspired by international examples in which allowing for the active participation of farmers in the management of irrigation systems sub-units had had a positive impact on the performance of the agricultural sector

- Farmers haven't acquired any additional rights over water as compared to those they used to enjoy prior to the implementation of the reform
- Technical and organizational shortcomings in irrigation systems impinge upon the negotiation of water transfers between public authorities and farmers

Water law reforms in Andhra Pradesh and water allocation 3/4

AP Water Resources Development Corporation Act (1997)

- Interesting in a multi-sectoral perspective, since dealing with the broad spectrum of water uses: “promotion and operation of irrigation projects, command area development and schemes for drinking water and industrial water supply (...) and for matters (...) including flood control”
- The Corporation is not explicitly entrusted with the function and powers to plan intersectoral water allocation in an integrated manner, but only to look at each of the sectors separately
- The Act strengthens the role of the State, since the members of the Corporation either belong to – or are elected by – the Government of AP

Water law reforms in Andhra Pradesh and water allocation 4/4

AP Water, Land and Trees Act (2002)

Tackles in particular issues of ground- and surface-water protection, and makes provision for the constitution of an authority in charge of performing a number of functions related to the provisions spelled out in the Act

- Only marginally accounts for the regulation of intersectoral water use, notably when it gives priority to drinking water through banning the sinking of tubewells within a pre-established distance from groundwater drinking water sources

Hyderabad water supply and sewerage organizational set-up

Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB)

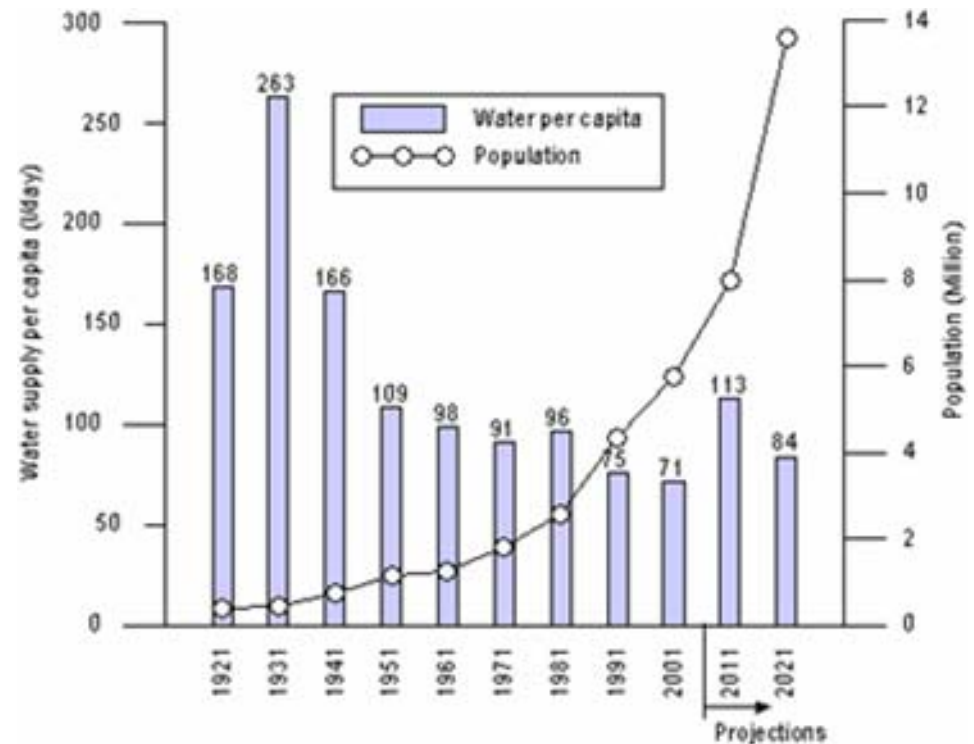
- Constitution of the HMWSSB, encouraged by the World Bank, was seen as a means of establishing a water and sewerage authority with great financial autonomy, as well as heightened accountability to the costumers
- HMWSSB eventually became highly dependent on – and controlled by – the Government of AP. This dependence on the political establishment is further accentuated by the fact that the Chief Minister of AP acts as the chairman of the Board of Directors of the HMWSSB
- Irrigation Department holds some key responsibilities in Hyderabad water supply system, notably since being entrusted with the operation of the city main water reservoirs

Water institutions in Andhra Pradesh and intersectoral water reallocation: summing-up

- Water policies acknowledge the importance of intersectoral water reallocation but ...
- Water law, though recently reformed, doesn't account for intersectoral reallocation
- Water Acts passed in the last decade have reinforced the power of the State over surface water resources
- Water Users Associations: a missed opportunity?
- HMWSSB not autonomous, and in competition with the Irrigation Dept.

Main shortcomings of public water reallocation from agriculture to Hyderabad

- Transaction costs, notably the delay in increasing Hyderabad water supply from the Krishna River
- Water supply in HYD dropped to an estimate low of 71 litres per capita in 2001 (see Figure)
- Failure to promote water conservation in agriculture and in the urban water supply
- Third-party effects: unregulated public water transfers negatively affect mainly poor farmers and poor urban dwellers



[Celio and Giordano (forthcoming)]

Ways ahead

Water markets:

- Theoretical and empirical evidence tend to show that markets are not the solution ...
- ... but interesting to see how the situation in Maharashtra State will evolve
- Providing for compensations, e.g.
 - Monetary for the loss of crops
 - “Reclaimed” water for cities
- Alternative water source, notably groundwater
- Farmers adaptive capacities to cope with reductions in canal water