Reducing conflicts through Multi-Stakeholders' Dialogues: Impacts of increased urban demand for water on livelihoods of Chennai city's peri-urban areas in India

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Basic Premise and Policy Context

Water transport from peri-urban villages into cities has affected rural livelihoods due to declining agricultural activities and consequent decline in income.

But is it adequately compensated by non-farm job creations?

To what extent urbanization sprawl eats into local resources and contributes to local ecological stress?

To what extent the conventional notion that *cities and urban expansions are engines of growth*?

This is the case study of two river basins called called
A-K basin and Lower Palar basin –
both adjacent to the Chennai metropolitan city

Besides published data, good deal of primary data were also collected through a detailed survey of two villages

The much talked about A-K Basin even by the World bank

One of the important projects which has ramifications for the PU areas is the project is called A-K (Araniar-Kortaliyar) river basin GW project

The A-K basin, which covers an area of about 1000 sq.kms. is adjacent to Chennai – in Tiruvallur district

Cuurently, agriculture is the major occupation in this basin - spread over 100 villages

The Metro water board is currently drawing about 44 mld of water from this aquifer

“Studies carried out in 80s have estimated the sustainable yield from this source to be about 960 mld. Another study carried out in 90s by the State PWD has estimated the sustainable yield as 1627 mld” (Metro water board Annual report, 1998-99)

Unfortunately, the reality is completely different

The Metro Water Board has been transporting water from peri-urban villages of the A-K basin for over 20 years and it became quite acute in after the late 1990s

In many villages, water table has dropped steadily and many wells have become dried

The Poverty and livelihoods analysis carried out in two sample villages in the A-K basin brings to light many shocking points the most important of which are the following:

Groundwater table has dropped to a significant low and in many parts, groundwater is completely dried or reached a dead-end with hard-rocks

Many farmers have become heavily indebted due to heavy investment on wells

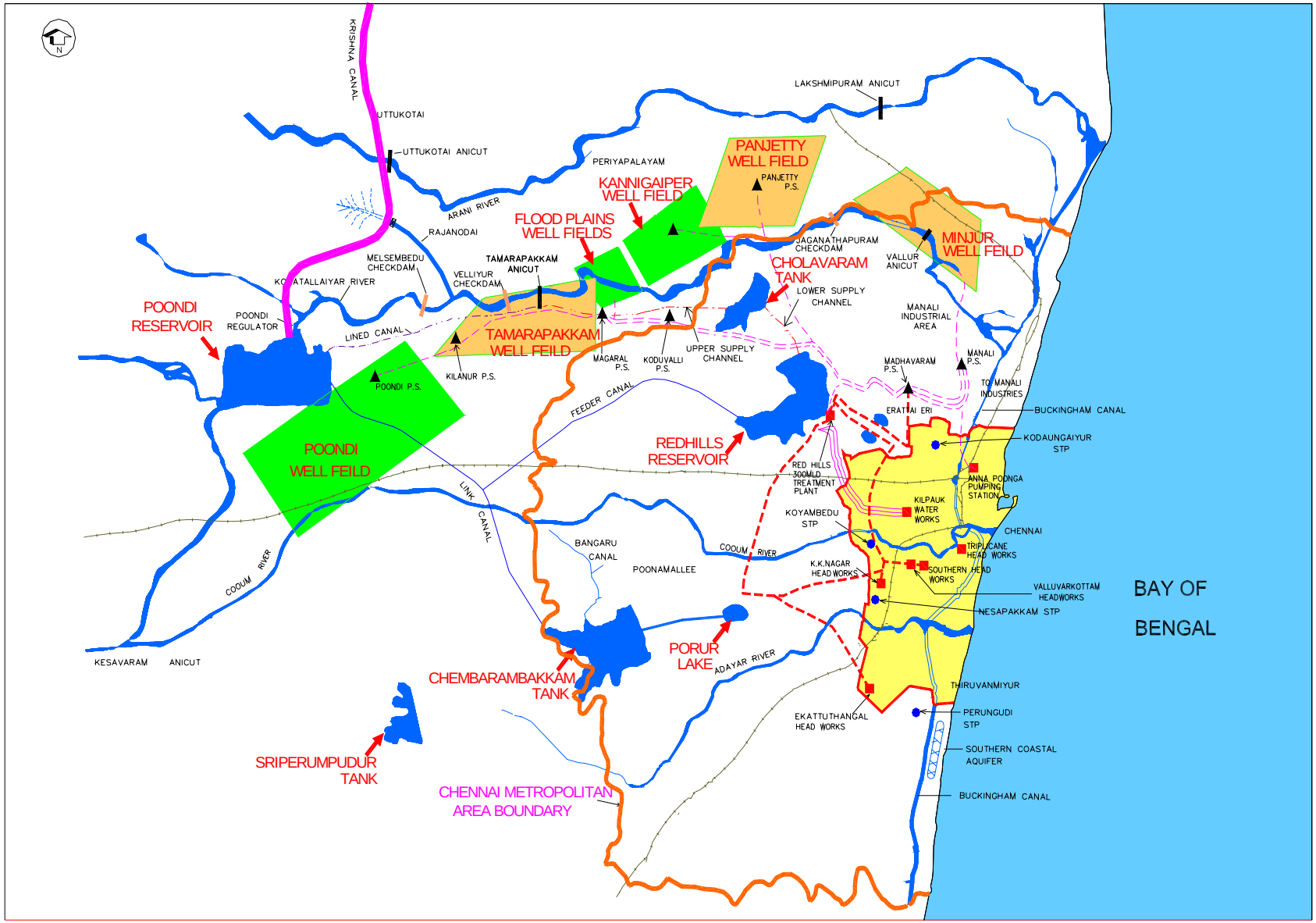
The existing surface water bodies are completely neglected or encroached

All these have adversely affected agricultural activities resulting in shrunk in agricultural income. Employment opportunities have also reduced quite considerably. In turn, unemployment has emerged as a serious problem in these villages

Landless agricultural labourers and marginal farmers started migrating to other villages and towns for want of employment; many have become foot-loose population migrating to cities and towns, creating pressure on the on the already stressed urban infrastructure

Whatever non-farm job opportunities that have emerged in the peri-urban villages are only incidental and unplanned.

Private well fields from where water is transported into the city



Sources of conflict

The 1983 Ordinance was the main source and beginning of the conflict:

During the 1983 drought, farmers in the A-K basin in general and MAG village in particular were expanding area under GW irrigation

This particular attitude of farmers threatened the Board since they thought water pumped from the common lands of the MAG village would be adversely affected

Therefore, the 2003 Ordinance prohibited GW pumping for irrigation and insisted on licensing procedure for pumping water for irrigation

But this Ordinance was challenged by farmers which later was stayed in the Court

Since then, farmers of the A-K basin and MAG village in particular went in for a massive GW expansion – but in the process completely neglected tanks - ecological degradation started since then in this region

Sources of conflict

In addition to the 1983 Ordinance,

10 wells were dug by the MW Board for supplying to the City in the year 1969

•Continuous pumping of groundwater for a long period of 35 years has reduced the groundwater availability considerably in the village even for drinking;

•Agriculture is badly hit due to water scarcity

•Water sales from 33 wells made the labourers to migrate in search of job

•Sand mining which has reduced the water yields in the Kosathalaiyar riverbed aquifer

•4 bore wells installed by TWAD board to supply water to Thiruniravur town Panchayat

•One borewell installed by TWAD board to supply water to Nadugudhu Panchayat

All these had a combined affect in triggering off the conflict

Sources of conflict in – PS

12 wells dug by the TWAD Board - continuous pumping of GW from the RBA has reduced considerably GW availability even for drinking; Agriculture is badly hit due to water scarcity

Continuous sand mining has reduced the water yields in the Palar RBA

The stretch – in particular from villages as such as Thimmavaram, Athur and Palur – GW was pumped in the years 2003-04 to supply water to the city – water was transported to the Metro Water (MW) Board through tanker-trucks. Everyday at least 2500 tanker loads were sold from these areas (1 load = 12,000 litres). This has also affected groundwater supply in the PS village

A sugar mill constructed in the year 1987 - severely opposed by people generates good deal of effluent and discharge them into Al Kondan tank untreated (which is supposed to irrigate 423 acres)

The sugar factory has not only occupied / purchased land irrigated by the spring channel, the mill has blocked the water flow which eventually was supplying water to the Al Kondan tank

Some pertinent questions are

Since the urbanization is an inevitable process, should we let the peri-urban population / areas to suffer? Or

The urban and peri-urban conflict should take its own due course?

Or

Is there a way in which the spread of urbanization could be used for the best use and advantage of both the populations?

Ways forward

Nevertheless, there is a necessity to understand urban-peri-urban water conflicts

There is rising competing demand for water across sectors / uses, between urban – peri-urban and rural areas; in this context, there is an urgent need for working out a joint strategy for optimal allocation of water

All State agencies concerned with water need to work along with farmers living in the peri-urban villages.

- This is necessary to maintain much needed water supply in the city and peri-urban areas, to minimize damage to ecology and environment, to protect water bodies and agriculture and to create alternate livelihood strategies wherever agriculture is wiped out.

- This is precisely the point where one has to think about multi- stakeholders' participation to negotiate and to deliberate upon for finding solutions in which both urban and peri-urban areas could benefit – a win-win situation!

Conflict

- Contradiction between individual rationality and collective rationality
- Individual water seller versus a village society – its ecology, livelihoods and environment
- Metro water Board versus peri-urban population

Identification of stakeholders in the context of Chennai –Peri-urban interface

Two sets of stakeholders could be identified who have diagonally opposite interest: (1) State and (2) PU population

State is represented by

Metro-Water Supply and Drainage Board
Tamilnadu Water Supply and Drainage Board
Chennai Metropolitan Development Authority
Village Administrative Officer (VAO)
Block Development Officer (BDO)
Thasildar (the Revenue Department taluk-level head)
District Collector
Public Works Department (water resources)
State and Central Groundwater Boards
Chennai city Municipal Corporation
Departments of Agriculture, Revenue, Forest and a few others who are concerned with water
Tamilnadu Pollution Control Board
Member of Legislative Assembly (MLA) and
Member of Parliament (MP)

Peri-urban population is represented by

Farmers (as a broad category) who live in peri-urban illages

- Land and well owners
  - Water sellers
  - Non-water sellers
  - Land owners but non-well owners
  - Tenant cultivators
  - Landless agricultural labourers
- Women Self-Help Groups Village Panchayat
- Village level informal institutions

Plus

- Non-agri. population who live in peri-urban villages including traders, employed in the other non-agricultural sector.

In addition third set of stakeholders – represented by

Tanker-truck operators and their Association
Water companies who sell purified drinking water
A large number of high profile hospitals
A large number of high profile hotels
A large number of educational institutions
A large number of commercial enterprises and industries
Flat promoters
Residents' Welfare Associations and
Other urban water users

The last batch of stakeholders represent

Civil society organizations such as,

Non-Governmental Organizations (NGOs)
Activists
Researchers
Media

Strengths and weaknesses of stakeholders

Four sets of stakeholders have been identified: They are,

- State (all official agencies and political leaders)
- other urban stakeholders on the one side
- Peri-urban agricultural and non-population on the other side
- Civil Society is like a cat on the wall

It is not very difficult to judge strengths and weaknesses and exigency, legitimacy and power of these stakeholders.

Cultural theory framework (Thomson 2001)

Dividing the society into four groups:

1. Hierarchists – State – Power hungry – rule bound
2. Marketeers – Profiteers - without any regard or concern for the society or ecology or environment – tanker operators, water companies, industries etc
3. Egalitarians – Civil society organizations – NGOs, judicial activists and activists lawyers, human rights activists and academic activists – basically noise makers - never get organized or interact with each other for any unified action
4. Fatalists – PU farmers and landless agricultural labourers
   This section is defenseless; Either they flee or stay and suffer.
   Basically *shock absorbers or takers*

Do we have a way out for peri-urban problems?

The prevailing conditions in Chennai city is such that one cannot take extreme positions

An ideal situation is one in which both the Chennai city and peri-urban villages co-exist in a conflict-free state, cooperating with each other for each other's benefit; a state where one can anticipate a win-win situation – from conflicts to cooperation

But to how to each this point?

This is precisely where multi-stakeholders platform (MSP) and multi-stakeholders' dialogue (MSD) play a key role

Multi-stakeholders' dialogue initiatives in Chennai

•Research, followed by stakeholder analysis and then multi-stakeholders' dialogue process was initiated in the context of Chennai peri-urban area
•Research helped to identify various dimensions of city and peri-urban water problems; to document and analyze conflicts
•MSD process was initiated with a view to negotiating and finding solutions to the city and peri-urban water conflicts
•A series of multi-stakeholder meetings have been held during July 2004 to April 2006. More meetings have been planned for the forthcoming months.
•A Committee of water users of urban and peri-urban areas was constituted with 65 members

Outcome of the MSD

<u>The key measures discussed in the MSD Committee meetings are,</u>

•Restoration of temple tanks within the city
•Recycling of wastewater generated in the city
•Restoration of around 3000 irrigation tanks in the peri-urban villages (which are in a bad shape), which will not only ensure water supply but also will augment groundwater aquifers in PU villages and excess water from these tanks can be diverted to the city's water needs
GIS analysis has already been started to achieve this goal

This will pave the ground for a clear win-win situation which is diagonally opposite to the current win-lose situation in these villages. The MSD will strive hard to achieve this result.

• **However, success or failure of MSD depends upon**

•(a) Intensity of crisis or conflict - A threshold level of crisis will make dialogue initiative more sustainable and will ensure active participation of all contending stakeholders; otherwise, only one set of stakeholders will participate

•(b) Need for an untiring facilitator who can carry on with the job of facilitating and arranging a platform for the dialogue to continue

•(c)Dialogues are never smooth; there will be lots of ups and downs; this should be expected

•(d) Active support of the government

•(e) Final outcome is uncertain; difficult to judge; No time frame –

•<u>But in the absence of a viable alternative there is a case for pushing the dialogue initiative as far as possible until one reaches any where near a viable solution</u>

Thank you!!