



Maharashtra Water Resources Regulatory Authority

Presentation on

Legislative / Regulatory Framework in Water Sector

Seminar on “Water for Inclusive Growth”

at Gandhinagar on March 22, 2011

Presentation by

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Issues in Water Sector - Maharashtra

1. Wide spatial variation in availability of water
2. Wide variation in per capita water availability, 40,000 m³ in West Flowing River Basin to 400 m³ in Yerala Sub-basin (Sangli).
3. Rising level of urbanisation leading to higher Municipal demand
4. Rising Level of Industrialisation leading to higher industrial demand
5. Increasing pollution of rivers due to municipal and industrial effluents.

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Issues in Water Sector - Maharashtra

6. Absence of recycling and reuse of water by non-irrigation users.
7. Low water use efficiency in irrigation which uses 83% of water resources .
8. Over-exploitation of groundwater leading to decline in groundwater level.
9. Large number of incomplete irrigation projects (24 lakh hectares irrigation potential held up).
10. Unregulated multi sector water use (lack of holistic planning) leading to inter-sectoral conflicts.

Approach to Sustainable Development in Water Sector

New approach to water resource management being adopted through :

- *Water Use Plans* at Basin & Sub – Basin levels with broad stakeholder participation
- Well defined, transferable water rights or *Entitlements*
- Rational *Tariff* structure for various user categories
- *Environment* related obligations of all user categories
- *Efficiency* related obligations of all user categories
- Arms length *dispute resolution* mechanism between service providers & user entities

Reform Initiatives in State Water Sector

- **State Water Policy adopted in 2003.**
- **Maharashtra Management of Irrigation Systems by Farmers Act 2005 – enacted in March 2005**
- **The Maharashtra Water Resources Regulatory Authority Act enacted in March 2005**
- **Authority established in August 2005.**
- **Enactment of Maharashtra Ground Water (Development & Management) Bill 2009 is in process**

Functions of Maharashtra Water Resources Regulatory Authority

- Determine, regulate and enforce the distribution of Entitlements for various categories of use
- Establish regime for Trading in Water Entitlements
- Act as Appellate Authority for Dispute Resolution relating to Entitlement
- Establish water Tariff system for various categories of water user entities in consultation with beneficiary public

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Functions of Maharashtra Water Resources Regulatory Authority

- Approve water resource projects to ensure
 - a) Development as per Integrated State Water Plan (ISWP),
 - b) Economic, hydrologic and environmental viability
 - c) Statutory and other obligations of inter-state entitlement
- Support and aid the enhancement and preservation of water quality
- Promote sound water conservation and management practices

Role of Authority in Backlog Removal

(Section 21 of Act)

- **Authority to ensure Governor's Directives regarding removal of Irrigation backlog are followed**
- **Authority to ensure that available man power is used by Govt. for surveying, planning & designing new projects in Backlog areas.**

Salient features of Authority

- Full time Chairperson & Two Members appointed by Governor for a fixed term of 3 years
- Five special invitees one from each river basin for assisting Authority in policy matters appointed by Government
- 23 out of 38 Supporting staff posts filled by Authority

Progress Made by MWRRA

Entitlements

- 6 – Pilot projects selected for determination, enforcement, regulation of Entitlements in 2006 – 07
- Up scaled to 20 Projects in 2007 – 08, 77 Projects in 2008 – 09, 129 projects in 2009-10 and 229 projects in 2010-11 covering 404 WUAs & 1.8 lakh ha.
- Technical Manual prepared on the subject of Entitlement for field staff
- Guidelines on Powers & Functions of Regulators prepared & Circulated

Water User Associations in Maharashtra

Sr. No.		No. of WUA	Area (lakh ha)	Remarks
1.	Under MMISF Act in on going MWSIP project of World Bank.	1512	6.68	Handing over after completion of system rehabilitation.
2.	Under old Cooperative Act	1019	3.35	Area already handed over.
	Total	2531	10.03	

Bulk Water Tariff

Provisions in MWRRA Act, 2005 for Bulk Water Tariff

- *Section 11(d) : To establish a water tariff system, and to fix the criteria for water charges at sub-basin, river basin and State level after ascertaining the views of beneficiary public, based on the principle that the water charges shall reflect the full recovery of the cost of the irrigation management, administration, operation and maintenance of water resources project....*
- *Section 11(u) : The authority shall review and revise the water charges after every three years....*

Thus Stakeholder consultation is prerequisite for finalizing tariff system

Bulk Water Tariff

Progress made

- 1. Norms for maintenance & repairs prepared through WALMI,**
- 2. Draft approach paper prepared & discussed at 9 stakeholders meetings between Feb – June 2009.**
- 3. Basic approach : Allocation of O & M cost between each user category based on Affordability, Accessibility & Quantity and Timeliness of supply.**
- 4. Based on stakeholders response, approach paper revised and draft criteria prepared (kept on website & at Taluka level for access to beneficiary public).**
- 5. Discussed at state level workshop in Jan 2010 & 6 stakeholders consultation meetings between Feb – April 2010.**
- 6. Criteria for bulk water tariff finalized and sent to WRD in June 2010 for submitting tariff proposal.**
- 7. Tariff proposal received in Dec 2010. Vetted & sent to WRD in Jan 2011 for public consultation.**
- 8. First tariff order expected to be issued by April 2011.**

Gist of important points raised by various stakeholders

- Water be treated as social good & not economic good
- Small, marginal, tribal farmers & PAP should not be charged water tariff
- For farmer's suicide affected districts, tariff should be low
- For Vidarbha, dates for crop seasons be modified
- Improve water use efficiency & reduce establishment cost
- Canal losses & water theft be reduced to minimum
- Leakages & thefts be quantified and dealt with
- Losses due to inefficient revenue collection be not loaded on users

Gist of important points raised by various stakeholders

- Hike in water tariff should be last resort
- Water tariff for horticulture be charged after 3 - 5 years
- Agriculture be given priority over Industry
- Provision of penalty for size of family is improper
- WUAs should get maintenance grant in time
- Differential water tariff be charged for GP & ULBs
- Polluter pays principle should be strictly observed
- Concession should be given for recycling & reuse of water

Final Criteria for Determination of BWT

Concessions / Incentives / Disincentives

Agriculture

Rabi - Basic Rate (BR), Kharif - 50% of BR, Hot Weather - 150% of BR

1. Area based tariff

(a) Marginal and small farmers will enjoy concessional tariff as under

- | | |
|---|---|
| • Small farmer (< 2 ha) | - 75% of Basic Rate (BR) |
| • Small farmer (< 4 ha) in Vidarbha's PM Package & Naxalite affected areas. | - 50% of BR |
| • Medium & large farmer | - BR |
| • For projects from tribal sub plan | - No tariff will be levied for tribal farmers |
| • For PAP | - 75% of BR |

(b) Incentive for adoption of micro irrigation for each crop - 75% of BR

(c) Family size farmers with more than 2 children (born after one year of enactment of MWRRA Act) – 1.5 times BR. [Sect. 12 (11)]

(d) For select horticulture crops First 3-5 years after plantation – 25% of BR .

2. Volumetric rate (Basic Rate) will not be more than 75% of area based rate, however for paddy, it will be 50% of area based rate

Final Criteria for Determination of BWT

Concessions / Incentives / Disincentives

<u>Drinking water</u>	
Basic rate will be linked to source of supply and will remain same for all seasons.	
(g) Additional requirement by ULBs	Subject to (i) review of norms of supply; (ii) water audit; and (iii) recycling facility in place
(h) Rebate for effluent treatment	75% of BR - if treated sewage effluent is provided for irrigation / gardening.
(i) "Polluter pays" principle	1.5 times rate from Municipal Corporation/Municipality who do not submit the program within 2 years for setting up STP.
(j) Stepped tariff	Differential Tariff for rural & urban users: 1. GP 75% of basic rate. 2. ULB ... 90% of basic rate 3. MC 125% of basic rate
(k) Commercial rate	Bulk Water Supply Agreements with Municipal Corporation / Municipality will separately identify commercial use & charge appropriate industrial rate.

Final Criteria for Determination of BWT

Concessions / Incentives / Disincentives

<u>Industry</u>	
(l) "Polluter pays" principle for all types of industries	For industries not treating effluent to required MPCB standard - rate will be <u>twice basic rate</u> . Mechanism to be developed by WRD to check whether there is operational ETP for respective industry.
(m) Agro Processing industries (canning, poultry, sugar, dairy etc.)	75% of basic rate
(n) Rebate for recycling provided utilization is reduced by 25%.	25% rebate for industries reducing original demand to 75%, (25% saving) by recycling i.e. tariff will be 75% of basic rate for reduced demand. WRD to verify the reduction/recycling.

Targets fixed by the Authority for Service Provider (WRD) & Measures for improvement

- **Improvement in collection efficiency :**
Present – Drinking 60 to 70 %; Industry 90 %; & Irrigation 25 to 45 %;
Proposed for Irrigation – **at least 75 % in next 3 years.**
- **Ensuring Water to tail end farmers**
Provision in Sec. 12(7) of MWRRA Act & Sec. 18 of MMISF Act Rules to be strictly implemented
- **Improvement of Water Use efficiency (WUE)**
 - Water Audit Report :WUE increased from 94 to 110 ha/Mm³
 - Future targets for WRD:

2010-11	120 ha/Mm³
2011-12	125 ha/Mm³
2012-13	130 ha/Mm³
- Mechanism to be developed by WRD for 100% assessment of irrigated area using remote sensing .
- SEs to be responsible for rotation programs (tail to head) assuring tail enders of their entitlement
- Transmission losses to be quantified by calibration of canal system & reduced by improved maintenance
- Benchmarking of each project to be carried out

Circle wise annual information to be given by RBAs to Authority for monitoring performance

Effective Asset Management

A) For systems not handed over to WUA -

- Funds to be allocated as per maintenance requirement & prioritized on safety consideration.

B) For systems handed over to WUA - Current Share of WUA

Project	Functional Association Minor level WUA	Upper level association			Total
		Distributary level WUA	Canal level WUA	Project level WUA	
Minor	75%	-	-	-	75%
Medium	50%	15%	10%	3%	78%
Major	50%	20%	20%	3%	93%

This does not meet maintenance needs of system below minor.

Hence GR to be revised as below:

- 95 % of water charge collected be reimbursed to WUA.
- Reimbursement should happen within 10 days of payment of water charges by WUAs.

Other Initiatives

Papers being circulated for Consultation

1. Criteria for fixation of Entitlement of non-irrigation user entities
2. Approach Paper for establishing criteria for modification in Entitlements through public hearing
3. Approach Paper for establishing criteria for Trading of Entitlements

Proposed Role of Authority in Ground Water Development & Management

- **Draft Bill for Maharashtra Ground Water Development & Management prepared by Water Supply & Sanitation Dept. & GSDA in consultation with Authority and introduced in Assembly in December 2010**
- **MWRRA Act will be accordingly amended**

Salient Features of Draft Maharashtra Ground Water (Development & Management) Bill 2009

- MWRRA to function as State Ground Water Authority with additional Member
- Notification of over exploited / critical watersheds by Authority through consultative process
- Deep tube wells to be banned in notified areas
- Constitution of Watershed Water Resources Committee (WWRC) of stake holders in notified areas
- WWRC to prepare annual groundwater use plan, promote community participation, artificial recharge, and grant permission for new wells

Conclusion

1. MWRRA as regulatory mechanism in water sector is the first of it's kind in the country
2. The Authority's jurisdiction is limited mainly to bulk water user entities
3. The main tools with Authority are Entitlements and Tariff
4. Authority to work in a transparent manner and through consultative process
5. Authority needs to develop expertise through a broad range of consultancies



Thank You