Field Experiences on Irrigation Reforms in South India

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South India Farmers Organisation for Water Management

Consultation on Water Rights, Equity and Water Law Reforms in India, 19 April 2008, organised by the International Environmental Law Research Centre (IELRC)
Participatory Irrigation Management

Topics

- Participatory Irrigation Management
- Existing legislation and its implementation in terms of PIM (Models from Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu)
- Farmers Network for Water Sector Reforms undertaken by JalaSpandana
- Participatory Training Programme in Canal Irrigation by JalaSpandana
- Water Rights and Entitlements (Issues for further investigation)
PIM in South India

Challenges in Water (Irrigation) Sector

- Inadequate allocation of O&M.
- Low water rate recovery
- Deteriorated condition of the system.
- Poor drainage.
- Unscientific use of water
- Lack of adequate and reliable water supply
- Lack of incentives for saving water.
- Gap Ayacut –25% to 40%.
- Lack of accountability - entitlements
Participatory Irrigation Management

An alternative!
What is PIM

- PIM is the full involvement of users (farmers) in all aspects of the irrigation sector
  - Planning
  - Design
  - Construction
  - Management
  - Rehabilitation and modernization

PIM also leads to

POWER IMBALANCE!

Politicians, Contractors, Irrigation Department
Aim

- Distribution of water among users with equitable and reliable supply
- Adequate maintenance of irrigation systems
- Efficient and economic utilization of water to optimize agriculture production
- Ensure ecological balance involving farmers
- Appropriate representation for Gender issues
- Inculcate sense of ownership
- Water budgeting and implementation of operational plan
Formation of WUAs in Andhra Pradesh

Background APFMIS Act 1997 and subsequent amendments

1. WUAs at three levels promised (WUAs, D.C. and PC)
2. About 10,000 WUAs formed
3. Generated lot of interest and the irrigation management started becoming public issue (from department only to joint)
4. Project Committees never formed (now govt has made statement to form)
5. Holding elections to WUAs in the first 5 years was State discretion (Elections were not conducted after 5 years, farmers put pressure through JalaSpandana)
6. As per APFMIS Act, lashkars/patkaris (water man) have to work under WUAs, but lashkars approached court refusing to work under WUAs. State showed no commitment to resolve the issue the case is pending in the High Court.
7. Apportionment of water tax amount not happening – Revenue Department not complying with Irrigation reforms. (Willingness to pay and unwillingness to be paid)
WUAs in AP

Revised Set-Up as per amendments

- WUA to be a continuous body
- 12 TCs in Major & Medium sector WUA
- 6 TCs in Minor WUA
- 1/3rd of TC members retire once in every 2 years.
- Vice-President post is newly introduced.

Term

TC members       6 yrs (with variable tenures during the first cycle)
President        2 yrs
Vice President   2 yrs
Revised WUA SET-UP( Major Irrigation)

Chairman

Elects

MC of PC

Elects

Vice Chairman

President

Elects

MC of DC

Elects

Vice President

President

Elects

MC of WUA

Elects

Vice President

Indirect Election

Indirect Election

Indirect Election

Direct Election

Farmers (Land holders)
Revised WUA SET-UP (Medium Irrigation)

- **Chirman**
  - ElectsMC of PC
  - Indirect Election

- **President**
  - ElectsMC of WUA
  - Indirect Election
  - ElectsVice President

- **MC of PC**
  - ElectsVice Chirman

- **MC of WUA**
  - ElectsPresident

- **Farmers (Land holders)**

- **Direct Election**
  - TC1 TC2 TC3 TC4 TC5 TC6 TC7 TC8 ............TC12
Revised WUA SET-UP (Minor Irrigation)

Farmers (Land holders)

President

Erects

MC of WUA

Elects

Vice President

Indirect Election

Direct Election

TC1 TC2 TC3 TC4 TC5 TC6
## O&M costs in AP

(Rs/Ha)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Cost</th>
<th>Avg.Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major irrig.</td>
<td>157</td>
<td>370</td>
</tr>
<tr>
<td>Medium irrig.</td>
<td>387</td>
<td>370</td>
</tr>
<tr>
<td>Minor Irrig.</td>
<td>397</td>
<td>198</td>
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</table>

Amount allocated for O&M (in Crores)

<table>
<thead>
<tr>
<th>Sector</th>
<th>Requirement</th>
<th>Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major</td>
<td>61.66</td>
<td>46.55</td>
</tr>
<tr>
<td>Medium</td>
<td>20.77</td>
<td>0.87</td>
</tr>
<tr>
<td>Minor</td>
<td>48.79</td>
<td>37.95</td>
</tr>
<tr>
<td>Total</td>
<td><strong>131.22</strong></td>
<td><strong>85.37</strong></td>
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Sharing of Water Tax Collection Past
At present increased to 75 per cent in Major and Medium Project

<table>
<thead>
<tr>
<th></th>
<th>Major(%)</th>
<th>Medium(%)</th>
<th>Minor(%)</th>
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<tbody>
<tr>
<td>WUAs</td>
<td>25</td>
<td>30</td>
<td>90</td>
</tr>
<tr>
<td>DCs</td>
<td>10</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>PCs</td>
<td>10</td>
<td>15</td>
<td>--</td>
</tr>
<tr>
<td>GP</td>
<td>05</td>
<td>05</td>
<td>10</td>
</tr>
<tr>
<td>I &amp; CAD</td>
<td>50</td>
<td>50</td>
<td>--</td>
</tr>
<tr>
<td>-----------</td>
<td>------------------------</td>
<td>-------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Irrigation</td>
<td>41.1</td>
<td>333.1</td>
<td>Details Not available</td>
</tr>
<tr>
<td>Industries</td>
<td>0.043</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Drinking</td>
<td>3.621</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Power</td>
<td>31.32</td>
<td>36.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>76.084</td>
<td>373.8</td>
<td>5.00</td>
</tr>
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</table>
O & M and Sustainability of WUAs (Participatory Training Programme)

Demand by Irri and Revenue Dept.

Demand by Irri and Revenue Dept.

<table>
<thead>
<tr>
<th>Amount in Rs.</th>
<th>Irri Dept</th>
<th>Revenue Dept</th>
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<tbody>
<tr>
<td>WUA 13</td>
<td>400000</td>
<td>160000</td>
</tr>
<tr>
<td>WUA 14</td>
<td>250000</td>
<td>140000</td>
</tr>
<tr>
<td>WUA 15</td>
<td>300000</td>
<td>150000</td>
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Capacity Building

- Institutional build up at main system management
- Water use efficiency analysis and rating
- SRI –Farmer Field Schools – Establishment and Management
- Conflict resolution- Tailend deprivation
- Productivity enhancement and yield per unit of water
- Para Workers – Training and induction, roving trainers
- Knowledge Management (IT) – IT Kiosks, establishment and management
- Market intelligence – sharing and management
- Federation / networking / sustenance
- Studies
**PIM in AP**

**Achievements in AP**
- Mr. S.P. Tucker, Principal Secretary put lot of efforts and gave life to almost dead PIM in AP
- Attempts to redefine modernisation programmes
- Involvement of NGOs/SO and Research Institutes
- Formation of WUAs and DCs
- Actions for PCs
- Farmers discussing about irrigation management

**Further Issues for investigation**
- Water Reforms and Revenue Reforms
- Main system management (Project committees)
- Gender issues in PIM policy
- Role of WALAMTARI in reform processes
- Financial viability for the sustainability of WUAs
- Evaluation of Capacity building Programme
- Why AP is not willing to go for volumetric supply
**PIM in Karnataka**

- Irrigation Act of 1965 was amended in 2000
- In Major and Medium Irrigation Project are formed under Cooperative Societies Act
- In Minor Irrigation Projects, WUAs are formed under Societies Act, Gram Panchayat General Body
- JSYS – World Bank Assisted Tank Project
- About 3500 WUCs in Major and Medium Irrigation Project
- Distributary Committees
- Project Level Committees
PIM in Karnataka

- Karnataka first to form Project Level Federation Called As WUCs Federation
- Malaprabha Irrigation Project, Ghataprabha irrigation Project, (Krishna Basin) and Harangi and Kabini irrigation project (Cauvery Basin)
- Water supply through volumetric supply
- MOU for works
- Water Charges collection based on tariff on volume and crops.
- MOU for water distribution based on volumetric supply
  - Many MOUs do not have mention of volume of water
  - One sided – no action can be initiated from WUAs
- Even to take over water charges collection we need to create awareness with scientific information to all stakeholders
PIM in Tamil Nadu…

TNFMIS Rules – 2002


Rules includes – Area of WUAs, Voter list, Meeting procedures, Filling up Vacancies, Administration, Water levy, Documents maintenance, Water Regulations, Accounts, Auditing and Social Auditing, Dispute resolution, Budget etc.,

conti…
Organizational Structure of WUAs as per TNFMIS Act

APEX COMMITTEE
1. Apex body for the whole State Water bodies.
2. Includes Department Higher Officials, All Project Committees Presidents and NGOs

PROJECT COMMITTEE (PC)
1. Includes up to 9 Distributory Committees.
2. All DCs Presidents are the members of Managing Committee.
3. One president elected by the Managing Committee.

DISTRIBUTORY COMMITTEE (DC)
1. Includes 2 to 5 Water Users Associations
2. All WUAs Presidents are the members of Managing Committee.
3. One president elected by the Managing Committee.

WATER USERS ASSOCIATION (WUA)
1. All land holders and legal tenants are eligible as Members.
2. One President Elected by direct Election. One WUA Includes 4 to 10 T. Cs.
3. All TC Presidents are the members of Managing Committee.

TEERITORIAL CONSITITUENCY (TC)
1. All land holders and legal tenants are eligible as Members.
2. One President elected by direct Election.

Continued...
Implementation Process of PIM in Tamil Nadu

1. Farmers Councils (FC) created in some parts of the State by CADA.
2. One time Functional grant allotted as Rs. 500 per hectare to FCS.
3. Minimum training program & Materials provided to FCs by the Irrigation Management Training Institute (IMTI).
4. WRCP (Water Resources Consolidation Project) evolved and implemented with the support of World Bank.
5. Water Resources Organisation of Public Works Department is the implementing agency of PIM in the State according to TNFMIS Act 2000.
7. Maintenance grant of Rs 100 per hectare disbursed to limited elected WUAs in the State.
PIM in Tamil Nadu...

**Issues Identified**

1. Lack of concentration of Govt. in implementing its own PIM policy

2. Lack of farmers perception in PIM policies

3. Less awareness programs for Farmers and Department officials on PIM - Policy and implementation levels.

4. Gap between the Policy and implementation process in PIM

...conti...
FNWSR - Project activities in Tamil Nadu…

Issues Identified Cont…

5. Hasty election process minimized the users participation.

6. WUA structures should be on the basis of hydrology and not on the basis of command area extent

7. Need for farmers’ platform to discuss PIM regularly

8. Lack of commitment on the part of officials in implementing the policy

continues…
FNWSR - Project activities in Tamil Nadu…

Issues Identified Cont…

9. Lack of necessary assistance made available to WUAs like Data, Finance, etc.,

10. Mismatching of New policy for the organisational set up and functions of Old institutions in PIM

11. Encroachments of Water Bodies

12. Pollution of Water Bodies

13. Long pending dialogue process by the State Government on renewing agreements with neighbouring States
TNIAMWARM Project (World Bank)

- Involvement of all line departments
- Involvement of WRO
- Establishing and Strengthening of users institutions.
- Integrated approach
- Institutional building
- Commodity Interest Groups
- Livelihoods Issue
- Involvement of SOs initially
Modernisation not in consultation with farmers
Interaction of Farmers Network with Ministers on Water Policy Issues

- Farmers Networking at district and project level found very useful in negotiating and contesting for water resources and improvement in system performance.
- Farmers Network project had series of dialogue with the concerned Ministers and Bureaucracy in these States.
- Farmers Network mounted pressure on the government to conduct elections for WUAs in Andhra Pradesh.
- The state wide farmers network organised workshop in which the Ministers participated and farmers presented their case before the Ministers and demanded possible changes at the policy and implementation process.

Mr. J. Raymond Peter, ED, INPIM inaugurating the PIM workshop in May 2005 Minister for Law and Parliamentary affairs, GOK and farmers in the picture

Farmers Network discussing with Minister for Major and Medium Irrigation, GOAP
PIM in South India

Experiences

- PIM programme in South India has made a land mark by forming WUAs.
- Farmers Interaction with Ministers, bureaucrats and others in Water Resources on policy issues
- Farmers are willing to adopt to PIM
- Implementation of PIM is either person (Minister/ Bureaucrat/Professional) oriented or donors oriented
- Lack of consistency in implementation
- WALMI's capacity is insufficient to reach the huge requirements
- PIM is not seen as part of Irrigation Departments task (on par with technical/physical task)
- Clear divide in implementation of PIM under projects externally supported and state funds
Issues for further investigation from academic institutions

• How to push PIM on top of the agenda (socially, politically, economically and technically)

• What should be the expectation level of the department when IMT/PIM is introduced in phase manner.

• Water Reforms backed by reforms in allied sectors (Critical evaluation of transferring revenue responsibility in India (before and after)

• Monitoring at various levels as inbuilt mechanism

• Role of Support Organisations

Mr. A. Ramasamy, Farmer and Chairman of JalaSpandana speaking during PIM workshop

Mrs. A.R. Sudhamani, Secretary of JalaSpandana succeeded in becoming chairman of Harangi WUCs Federation in Karnataka (Major Project with 86 WUCs)
Water Rights in Irrigation Domain

Entitlements refers to any recognised claim that somebody may have to irrigation water.

Localisation specifies the land and crop authorised for cultivation. (Karnataka empowers wuas to decide on crop pattern)

Enforceable water rights not ensured in these States (in the past and even in the amended Irrigation Act

Although, Karnataka has adopted volumetric supply there is no enforceable rights (MOU do not speak about how one could realise his/her rights)

Despite experiences like water audit and budgeting – most irrigation projects have adhoc water management.

This leads to unpredictable water distribution not just within irrigation but also inter sector.
Increase in the Role of WRO Engineers

• Myth that PIM replaces WRO engineers by farmers
• What actually happens is the change in roles from monotonous daily routine to Professionalism
• Mutual trust and confidence
• Sigh of relief to all stakeholders (especially from mutual allegations)
• Sense of Ownership
• Basin and Sub basin level users participation
• WUAs and multi stake holders forum
SRI FFS – Participatory Training Programme
No Substitute for PIM in Canal Irrigation

Thank You