Micro Irrigation in Gujarat: A Case Study of State Effectiveness

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Meaning and need for State Effectiveness

- State effectiveness is vital to democratic transition and consolidation.
- Today’s challenges is a systemic crisis in accountability and effectiveness of governance.
- Create opportunities to equip leaders and managers with the knowledge, skills and tools to create inclusive policies and accountable institutions.
- Where State infrastructural power is deficient, efforts must be made to build essential State institutions and capabilities.
- “State-building” is often vaguely defined as a process in which the State accumulates power. But it should be accumulating only infrastructural power, not despotic power.
Six Most Critical Functional capacity of an Effective State

- The capacity to monopolize the legitimate use of violence (coercive capacity)
- The capacity to extract resources (extractive capacity)
- The capacity to shape national identity (assimilative capacity)
- The capacity to regulate the society and economy (regulatory capacity)
- The capacity to maintain internal coherence of state institutions (amalgamating capacity)
- The capacity to distribute resources (redistributive capacity) - GGRC

* Pye 1966; Binder et al 1971; Grew 1978
Reason for Gujarat State Intervention in MIS Scheme

- Subsidy for Micro Irrigation System (MIS) was available under different schemes and sub-schemes.

- Varying subsidy assistance norms and implemented by multiple Govt. Depts. creating confusion among farmers.

- No integrated approach, it was in piecemeal.
- Confusion among the farmers at ground level.
- Taking a long time to disburse the subsidy.
- Progress of MIS was very minimal.

- The Government wanted to put all efforts into an integrated approach in uniform manner to remove anomalies.

- Integrate all available funds in one head to utilize efficiently and extend benefits to more and more farmers of the State.
State Intervention led to: Formation of GGRC in Vibrant Gujarat 2005, announced by the Hon’able CM of Gujarat

GGRC

GNFC  Equity 46%

GSFC  Equity 46%

GAIC  Equity 8%

GAPC

Govt. of Gujarat

Gujarat Green Revolution Company Limited
Major Intervention by State Government

1. Strong and focused Political will – Intervention in place of Interference

2. Single window approach for implementing Scheme for entire State.

3. Transferring Governance from Government mode to Corporate mode.

4. Intervention through major policy decision by issuing a unique GR compare to other States.

5. MIS considered as mode of Irrigation.

6. Change in Department from Agriculture to Irrigation Department.
7. Delegation of authority and responsibility for implementation of the Social Sector Scheme-MI to a Corporate body

8. GGRC with relatively higher autonomy in its functioning and decision making.

9. Highest Level of priority to the Scheme: as per the State need and problems.

10. Well thought business model to implement socio-economic Scheme.
Contd…..

11. First **PPP Model** in implementing Socio-economic Scheme in the Country.

12. Reposed **faith in third party inspection agencies** to get the work done report (**major deviation from the routine Government monitoring system**)

13. **Multi stage monitoring and control system** (Field & Technical Inspection)

14. Introducing **principle of FIFO i.e. equal opportunity to get the benefit of the Scheme**
15. Linked the Scheme to operate by market forces.
16. Placing a uniform mode for the implementing the Scheme for the entire State (Price as well as MIS Suppliers).
17. Giving freedom to Agency to use latest IT in its implementation procedure.
18. **Transparency**- At every stages of application processing
Gujarat Model – A case study for State Effectiveness

A unique GR was issued by the GoG in 2005 different from other States, wherein any farmer can go for

- Any area
- Any crop
- Any type of Micro Irrigation System
- Choice of MIS Supplier

Other features

- Electricity connection on overriding priority.
- No subsidy ceiling - Uniform norms

<table>
<thead>
<tr>
<th>Category of Farmer</th>
<th>Subsidy Norms (per ha. which ever is less)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All farmers</td>
<td>Up to 50% of the MIS Unit Cost or Rs. 60,000/-</td>
</tr>
<tr>
<td>SC / ST Farmers</td>
<td>Up to 75% of the MIS Unit Cost or Rs. 90,000/-</td>
</tr>
<tr>
<td>Dark Zone Farmers</td>
<td>Up to 60% of the MIS Unit Cost or Rs. 60,000/-</td>
</tr>
</tbody>
</table>
Decides to adopt MIS and Chooses MIS Supplier

MIS Supplier Does field Survey and Prepare Design and Cost estimate of MIS as per GGRC approved rates

Farmer approves design & Signs on all relevant documents for online submission to GGRC

GGRC Process the file online as well as physical, issue work order, verify the installed MIS and disburse the subsidy
Gujarat Model of Application Processing at GGRC

1. Receipt of MIS Application, Registration and document verification
2. Verification of MIS Cost & design, subsidy estimation and issuance of work order
3. Submission of Signed in TPA by MIS Supplier
4. Verification of TPA, Receipt of Farmer’s Contribution and Advance Payment to MIS Supplier
5. Submission of Final Invoice with Third party report and subsidy release form of farmer by MIS Supplier
6. Installation of System and verification by Third Party
7. Verification of final Invoice and Release of Subsidy (Online transfer/ by Cheque)
8. Agronomical Services
9. Insurance Coverage to MIS
The practices and approach followed by GGRC was evaluated by NABARD Consultancy Services (NABCONS) engaged by Govt. of India during the year 2009 and identified the Best Practices in the Country for implementing MIS Scheme.
Major IT Intervention for speedy and accurate processing

- Incorporation of Barcode System
- Introduction of Biometric System (under progress)
- Introduction of Colour code system for easy identification of files.
Unique Features led to the Success of State Effectiveness

I. Simple and Flexible in its Approach

✓ Single window approach, farmer doesn’t need to go pillar to pillar for application to sanctioning
✓ Farmer has the choice to choose MIS Supplier and type of MI System,
✓ Free access to Farmers of same quality product linked with market with a competitive edge.
✓ System design as per cropping pattern and as per farmer’s/field requirement

II. Transparency in its Approach

✓ A state-of-art IT application called C-MIMS (GDRS, GWORKS, GSPRINK, FAS) has been put in place to process the MIS Application.
✓ Farmers can track progress of his application.
✓ Effective IT mechanism to prevent duplication of subsidy disbursement.
✓ MIS applications are processed centrally on Corporate mode with the use of web-based dedicated software.
✓ The processing of MIS applications, management of grants, receipts and disbursements have been integrated into a Business Module
Complete access of information to the participating stakeholders in the MI Scheme.

III. Effective Quality Monitoring and Assurance System

- Third Party inspection at the factory site
- Third Party Inspection is conducted on every farmer's Micro Irrigation System installed on his field.
- Concurrent evaluation of MI Scheme is ongoing process.

IV. Use of IT based application to monitor the installed MIS

- Application of “Geo-tagging solutions” to capture and upload photographs of the MIS installation, at site, along with GPS coordinates, on a mobile phone for verification and monitoring of the site on Google Map.
V. Basket of Services

✓ Maintenance, Warranty and Guarantee of MI Components for five years

✓ Inbuilt agronomic as well as system maintenance advisory services through SMS services

✓ Inbuilt insurance of the MI System as well as farmer’s life

✓ Effective Complaint Redressel System and toll free helpline number

✓ Promotion of high nutrient use efficiency - Water Soluble Fertilizers

VI. Implementation cost for the Government is nil.

Above all implementation is based on the concept of PPP Mode and overall improvement in the quality of the service.
Result of State Effectiveness

Before establishment of GGRC

- The achievement under MIS Scheme was 2.26 lakh hectares with approximate 1.41 lakh beneficiary farmers
  (From 1991 to 2005).

- Average Annual Achievement was 15,000 ha./year

After establishment of GGRC

- The achievement under MIS Scheme is 10,28,704 hectares with 6,37,146 beneficiary farmers
  (From 2005 to Dec-2014)

- Average Annual Achievement is 1.06 lakh ha./year

- Gujarat ranking continuously first since last three years in terms of bringing area under Micro irrigation per annum among various States of India.
Additional Income to Farmer due to Major State Intervention in MI Scheme

Considering per hectar average additional income of Rs.17000/.-.

<table>
<thead>
<tr>
<th>Year</th>
<th>Income (Rs. in crore)</th>
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<tbody>
<tr>
<td>2005-06</td>
<td>27</td>
</tr>
<tr>
<td>2006-07</td>
<td>73</td>
</tr>
<tr>
<td>2007-08</td>
<td>159</td>
</tr>
<tr>
<td>2008-09</td>
<td>257</td>
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<td>2009-10</td>
<td>377</td>
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<tr>
<td>2010-11</td>
<td>541</td>
</tr>
<tr>
<td>2011-12</td>
<td>778</td>
</tr>
<tr>
<td>2012-13</td>
<td>1093</td>
</tr>
<tr>
<td>2013-14</td>
<td>1436</td>
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<tr>
<td>Total</td>
<td>4741</td>
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Considering the area covered under micro irrigation during the period 2005-06 to 2013 -14; now onwards there will be increase of annual income of 4741 crore among the farmers adopted MIS. Considering 100% MI System is in use by the farmers who have adopted MIS within last 5 years, and 60% is in use by the farmers who have adopted MI System before 5 years back.

**Major contributor for the Agricultural Growth (avg, more than 10%).**
Still, a lot to be done to realise “Taakat Ek Boond Ki”

To achieve More Crop per Drop as per our Hon’able PM’s vision to achieve more State Effectiveness
Thanks FOR Your Kind Attention
Geo - tagging System