Managing Co-operative Farming: A Case of Gambhira Collective Farming Society

NT Sudarshan Naidu
Assistant Professor
School of Management and Entrepreneurship
Shiv Nadar University, India
Situation of Food Production and Farmers in India

- Indian position - Net importer to exporter of agricultural commodities
- Food production - 50.82 MT to 257.13 MT between 1950-51 to 2012-13
- High indebtedness among farmers

Diagram:
- Low Return
- Low Investment
- Low Productivity

Group approach will help to break this cycle
Problems with Farming Co-operatives

- Farming cooperatives have universally failed (Deshpande, 1977)
- The problems in farming co-operatives are related to
  - work incentives and management (Deshpande, 1977)
  - the government’s overwhelming role, and prescriptive and restrictive legislation (GOI, 2009).
  - inefficiency of office bearers (Gadgil, 1956),
  - lack of educated and enlightened leadership (Mamoria, 1983)

- Only a handful of farming cooperatives have overcome the problem of the tragedy of the commons and working smoothly
Research Questions

- How do collective farming initiatives work for long time?
- Why do some collective farming initiatives sustain over long time?
- How do collective farming societies overcome the problems associated with smallholder agriculture?
- How do successful collective farming societies overcome the tragedy of commons?

Methodology

- Gambhira collective farming society working for more than 60 years
- focus group discussions, in-depth interviews, multiple field visits and referring to records of the organization
Gambhira - Formation

- Location - 4 villages Gambhira, Kothiakhad, Nani-Serdi and Bilpad on Mahi river belt in Gujarat, India
- Heavy floods in 1949; Farmers became landless overnight
- Government distributed 201 acres to 176 farmers in 1951 on Chhaganbhi Patel request
- Individual farming was unviable
- Mahisagar Bhatha Samudhayik Sahakari Kheti Mandali Limited on October 14, 1953
- Both ownership and cultivation rights with society
- Area and membership increased to 526 acres and 291 respectively
Organizational Structure and Management

- President
- Managing Committee
  - Manager
    - Other employees
  - Group Leaders
    - Group Members
Group Formation

- 30 working groups of 8-14 members for operational convenience
- Land allocated to group - 13 to 24 acres (average 17 acres) – equitability maintained
- Group leader elected by group members

Crop Production

- Groups are responsible for production
- Cropping pattern:
  - *Kharif* - paddy, bajra & tobacco
  - *Rabi* – wheat, tobacco & Jowar
- Primary cultivation: Society
- Sowing: Inputs supplied by Society
Marketing

- Auction conducted at Gambhira
- Managing Committee decides the date and price
- Groups display their produce in lots; each group will have only one lot
- Traders submit their bid price in sealed covers & produce is sold to highest bidder
- Traders have to take produce within 15 days by paying 65% amount; remaining 35% in 3 months
- Society dictates terms of trade due to bargaining power achieved because of quality and quantity of tobacco
- Receive very high price
- Payments in time
Sharing of Risk, Produce & Profit

- Total Revenue = 1.5% to group leader + $\alpha$
- $\alpha$ = 35% to society + 65% to group
- 35% to society = Expenditure (for inputs, administration expenses) + $\beta$
- $\beta$ = Society's reserve fund (20%) + $\gamma$
- $\gamma$ = Education fund (1.5%) + $\delta$
- $\delta$ = Bonus to groups (70%) + Village development fund (20%) + House fund (10%)
# Total production and amount paid to members

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Value of Production (Rs)</th>
<th>Members Share of Production (Rs)</th>
<th>Bonus to Members (Rs)</th>
<th>Total amount paid to Members (Rs)</th>
<th>Members Share (%)</th>
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</thead>
<tbody>
<tr>
<td>1953-54</td>
<td>90,660</td>
<td>45,320</td>
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<td>1960-61</td>
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<td>1970-71</td>
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<td>268,685</td>
<td>46,714</td>
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<td>1980-81</td>
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<td>1990-91</td>
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<td>1999-00</td>
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<td>5,984,646</td>
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<td>2005-06</td>
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<td>4,300,286</td>
<td>552,392</td>
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<td>2006-07</td>
<td>6,302,019</td>
<td>3,788,983</td>
<td>207,282</td>
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<td>2007-08</td>
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<td>2008-09</td>
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<td>3,528,043</td>
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<td>2009-10</td>
<td>32,630,540</td>
<td>21,213,663</td>
<td>4,617,590</td>
<td>25,831,253</td>
<td>79.16</td>
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</tbody>
</table>
Working of Groups

- Groups are responsible for production
- Each group has its own norms/rules
- Work allocation: Group leader allocates equally to members
- Monitoring: No scope for free riding
  - Small groups & small fields- Both group leader and members monitor the work of each other
- Penalty for violation of rules.
- Group leader record the labour contribution
- Interlocking behavior eliminates free riding.
- Group leaders have incentive to monitor (his share & proceeds from membership)
Impact

Household Level:
- Income was higher. Average of Rs.90,000 for labor contribution of 160 days
- Emphasized the importance of education – funds for school buildings, assistance to students
- All the families have graduates and at least one person in each family is employed
- Constructed better houses
- > 90% of members belongs to baria caste. Improved social status

Community level:
- Contribution to various developmental works from inception
- Donate the funds to Gram Panchayat
Conclusions

- Commons was formed after failure of private farming to meet their expectations
- Successfully overcome the problems associated with unviable holdings and the tragedy of commons
- Much higher returns through economies of scale, bargaining power and optimal utilization of resources
- The tragedy of commons was overcome by forming small groups and devising mechanisms for sharing of work and profits, monitoring and sanctioning and institutionalizing rules and norms.
Thanks