Institutional Learnings from Mirjapur

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Discussions were held both with sangham members and CEC and IGMRI staff to assess their evaluation of the project and the impressions gathered are given below.

1) Learnings of sangham members
2) Learnings of implementing agencies

Fallow lands

The table below gives an idea of the area covered under the fallows cultivated, crops and output in quintals and yield per acre.

<table>
<thead>
<tr>
<th>Year</th>
<th>Acreage greengram</th>
<th>Total greengram</th>
<th>Output in qtls</th>
<th>Yield per Acre greengram</th>
<th>Sorghum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-2000</td>
<td>17.2</td>
<td>27.15</td>
<td>44.35</td>
<td>28.40</td>
<td>71.75</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>1.65</td>
<td>2.64</td>
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<tr>
<td>2000-2001</td>
<td>48.20</td>
<td>57.00</td>
<td>105.20</td>
<td>69.50</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.44</td>
<td>2.42</td>
</tr>
<tr>
<td>2001-2002</td>
<td>24.00</td>
<td>20.20</td>
<td>44.20</td>
<td>25.25</td>
<td>45.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.05</td>
<td>2.25</td>
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</tbody>
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Figures are only for Kharif. The Rabi crop had been corriander in less than 25% of the acreage.

Benefits

Uncultivated lands are being brought under cultivation.
Tractors are being used to plough sangham fallows because payment is assured.
Low expenditure on ploughing since large acreage is undertaken.
Employment has increased.
There is better food availability at the household level.
Decrease in soil erosion.
Timely sowing is made possible.
Women are able to check diesel levels at the time of ploughing.
There is a growing demand from non members of the sangham to be included in the programme, due to non-availability of bullocks for ploughing and due to the attraction of credit inputs.

We need costs of production for fallows (including CEC subsidy and credit inputs) to assess if fallow land production has positive or negative impact on food security.

Problems
Problems are typical of rain-fed farming.
There is no life saving irrigation available for fallows.

**Leased land**

The members of the sangham by and large feel that the experience with leased land cultivation is beneficial. The various reasons given are:

- Increased number of work days.
- Availability of and access to grain in the village.
- Feeling of security with grain stored in the grain bank. This is certain for those who can afford to buy the grain. It needs to be studied as to how many people can not afford to buy. The impression gathered seems to indicate that those who are agricultural labourers are the ones having cash to purchase and the same is not true of the small farmer members of the sangham. This needs further investigation.
- Pulses being paid as wages.
- Certain amount of grain is distributed free.
- Making grain available to four destitute families.
- Farmers are getting interested in giving their land on lease (this could be due to the non-availability of agricultural labourers).
- Sangham is in a better bargaining position.
- Earnings for sangham corpus fund.
- Collective work culture is being developed.
- Increase in acreage and production.

**Issues:**

Long period to break even (3-4years) along with frequent crop failures.

**Questions:**

Whether the grain produced is for cash or for consumption?
Whether food security is provided through Cash?

**Bin**

Is intimately connected with the land lease programme.
Grain is available to members only when Sangham or Bayamma decides to give it (who in turn is waiting for a favorable price) and not when a family needs it. Case studies indicate that the lean season purchase of grain from the bin is much lower than during the other times. This issue needs further investigation through the project period. Sangham members are still buying sorghum from the market. Bayamma & food committee are hesitant to give grain on credit to the members, but there is a demand from them.

Sorghum is not available for non-sangham members.
Market fluctuations have an impact on the price of jowar making it difficult to sell. There is a pressure to empty the bin before the rabi crop came in. There is a possibility of selling it to non sangham members, especially since it is being sold at the market price but this is not yet considered by the sangham.

**Group Dynamics**

Sangham’s other programmes seem to be having an impact both positive and negative on the land lease programme. eg sangham giving loans to certain members for purchase of buffaloes. Similarly a few members were allotted solar lamps. The logic behind sanctioning of loans is not understood by the members. It could be a problem with transparency. This is an issue that needs investigation.

The sangham feels that giving grain on credit is not desirable because the repayment is not assured. There had been an earlier experience with a few members of the sangham not repaying and this resulted in the decision not to supply grain on credit. In the case studies conducted it was evident that certain members are clearly displeased with the present system. There were other complaints about certain members not being allowed to be part of land lease programme. The reasons for dissatisfaction were not very clear and need further investigation to see the links between the policy and functioning of the sangham.

**The Save Grain Campaign**

There is a change in the scenario of the village with the proposed introduction of the Save Grain Programme. There is a talk among the sangham members of getting individual bins for grain storage. This programme demands smaller groups of fifteen members to be formed. This implies more management work as well as costs for CEC. It also seems to provide a possibility of creating more groups there by having a larger coverage.

**Bin structure**

According to the members the big size of the bin is good and in their own words, it is “better to have a big one than an insufficient one”. But they would appreciate if there is a partition in the middle to hold kharif and rabi grain seperately. They find the lid too heavy. Preference is shown for a fiber glass lid or a metal one. A stone structure with light and smooth finish in cement is the most ideal. In their opinion it is better than the RCC bin since there will not be a moisture problem. Tin is not good, since rusting will be a problem.

**Learnings of CEC and various elements of their food security agenda:**

The bin constructed in Mirzapur (N) village helped the women’s sangham to address some of the problems faced by them in storing the grain belonging to them. Earlier they did not have the experience in storing large quantity of grain. Before the bin the grain
collected by them from the fallow land and land lease programmes was literally at the mercy of the elements.

In Mirzapur village the bin provided impetus to the activities of the sangham. An asset has been created in the village at the initiative of the women’s sangham. This has helped to enhance the status of the sangham members in their village.

While the construction of bin initially added to the spirit of the struggling village women, the operation of it threw up some issues, pointing to a set of new issues to contend with. Though the grain was stored in the bin to be used during the lean season, because of market and other external influences the jowar could not be withdrawn from the bin. The bin was basically designed to address the uncertainty in food grain availability. But, the market forces have come in the way, from a different angle by lowering prices, in sustaining that uncertainty. There is an attempt below to examine the implications of this development.

Evolving leadership at the Sangham is very important to the successful operation of the project. While a very strong leader in Mirzapur (N) creates problems in terms of allowing other members of the sangham to play active role in the operation of the project, lack of leadership as in the case with Kollur village may place the very sustainability of the programme in question.

Family members, particularly men of the sangham member’s families, play an important part in the success of this endeavour. While in Mirzapur (N) and Thogapur male family members extended full cooperation to the efforts of the sangham members, in Kollur there is an instance where family members played a negative role in the construction of the bin. In Mirzapur (N) and Thogapur villages male members supported the activities of the women’s sangham as their work over a period of time has resulted in more income to the family. In Kollur when women planned to start construction of the bin on the village panchayat land a male member of one of the members of the sangham obstructed the work saying that that land belonged to him but not to the panchayat. He planned to benefit himself monetarily at the cost of the women’s sangham. In this he appears to have the support of the then village sarpanch who belonged to another caste. Pleadings of his wife, who is a member of the sangam, with her husband was of no use. Awareness about benefits a family would gain with collective activity, along with the issue of women’s empowerment needs to be created among the male members of the family too.

Understanding shifts in approach and interventions:

The experience so far had shown that the strategy of land lease and fallow land cultivation to increase food production in the hands of the villagers for food security is inadequate and there is a need to address the challenges thrown up by the market forces even at the village level. Increasing food grain production cannot succeed on its own in tackling food insecurity.
In the recent past play of market and other external forces have brought in new influences, which need to be tackled if the overall objective of food security is achieved. Nearly 40 quintals of jowar stored in the bin since the last agriculture year is remaining unutilised. One of the reasons is that with the entry of grain from far away markets like Proddutur in Cuddapah district market price of jowar has declined considerably. The price at which the Sangham has decided to sell the jowar after taking into account the cost of cultivation and grain management proved to be higher than the market price. Over the last one year only 13.5 quintals were withdrawn from the bin. Similar experience took place during the previous year also. Besides jowar from outside jowar grown in irrigated areas is also entering the market, further driving the prices down.

Other important factor influencing the programme is the PDS policy of the government in the wake of mounting food grain stocks, wheat and rice stocks with the Food Corporation of India (FCI). In order to bring down the stocks government is releasing the stocks at even lower prices. Besides this the government has also come out with food for work programme under which rice is being distributed as part payment. This too has contributed in the reduction of the usage of jowar. In other words the food security programme is caught up with the food grain programme of the government.

Shifts in the tastes of the people is another issue with the lessening consumption of jowar. Usually villagers say that they use equal quantities of rice and jowar for their food needs. While jowar used to come from their own cultivation, rice used to be bought both from the PDS and the open market. The present food security programme is visualised to reduce their dependency on the open market for rice where usually prices are high. But observations of the CEC staff indicate that the villagers are buying more of rice than jowar, even when price of jowar is less than rice. Villagers say that children prefer rice to jowar.

These changes in markets and choices of the villagers call for a change in our approach. How concerns of food insecurity could be addressed while depending on dry land agriculture is still a question. Here sources of irrigation are limited and dependence on dry land agriculture cannot be ruled out. Whether it is possible to provide some subsidy to jowar so that price of jowar becomes attractive? Whether crop diversification can be one of the solutions to this is to be explored. But the scope seems limited. Strengthening the capacity of the group in coping with ups and downs and how it can be done needs to be investigated.

Given the fluctuations in incomes issue of grain on credit could be another way of addressing the uncleared stocks.

**Field level problems faced:**

The project is not progressing according to the schedule. By this time all the three bins should have been in operation but only one is in operation. While one more bin is ready for operation, the third is still being constructed. One bin got delayed because of changes
in samples, another bin got delayed because of organizational changes in the implementing agency. The bin planned in Thogapur of Mahaboobnagar district was under UNDP-SAPAP programme. Before grounding the bin’s construction, the UNDP programme was replaced by the World Bank supported poverty alleviation programme. And this transfer of the programme from one organization to the other, created delays in taking up the bin construction.

One of the problems involved in grain storage management is to ensure uniform good quality from the members of the sangham. Recent sample study showed that the grain stored in the bin contained more foreign matter compared to the grain stored in the individual homes. This makes room for breeding of pests. The quality of grain to be stored in the bin is to be improved to reduce incidence of pest attack.

While the bin is successful in tackling the rodent problem the same cannot be said about the pest attack. Even after the precautions taken considerable quantity of grain is spoiled because of pest attack. Pest growth is starting from the outlet. The outlet needs to be modified.

According to the IGMRI the original design for the lid of the bin is that of metal one. But in Mirzapur (N) they found it difficult to find a blacksmith who could replicate the design. This was due to the locking system which could not be copied by the blacksmith. The decision was taken to use cement lid. The lid became too heavy for even three women to try to open. They got hurt on some occasions. The consultant from Delhi suggested to try a design using Fibre Reinforced Plastic (FRP) for the lid. It was made to order and imported from Delhi and transported to the villages. But this lid was not given to Mirzapur (N) which would have meant chipping the edges of the cement concrete opening to suit the new lid. The procedure would take four days and it is possible to execute the idea.

Regarding the suggestion made by the village sangham to have two compartments for grain from kharif and rabi to be stored separately the response from the IGMRI is, it is difficult to create one now. There are several problems like partition being week (because it is not built in to the main structure) and lack of space for two lids to be built.

Regarding the outlet problem IGMRI staff feels that it could be repaired easily and once the present grain is taken out before filling it with rabi sorghum the outlet could be repaired involving small cost. Here this problem developed because the outlet was not fitted properly and cement plastering was also not up to the mark. During rain small quantities of water used to settle near the outlet leading to dampness, which in turn created favourable condition for pest growth.

The discussion about the problem of pest attacks on the grain in the bin led to some interesting insights. The IGMRI feels that single layer grain drying is essential to avoid pest attacks. The grain that needs to be cleaned and dried before storing is not put through such vigorous process and that becomes the main reason for pest attacks. The sangham feels they need 6/4 plot (24 sq. ft) to drain one quintal of grain which has to be dried in a
single layer. Drying 40 bags at a time is near to impossible. The possibility of the members cleaning and drying grain in small quantities in their own homes was discussed but the sangham is not oriented to follow this practice. The discussion continued about other possible technological interventions and conclusions were unsatisfactory. Usually rains and crop harvesting go together during kharif season and this poses a problem sometimes of mould developing on the grain. Nothing can be done about the mould and once it appears, no technology can help. Yellow sorghum is the only variety that doesn’t get mould but people’s preference is for the white variety since the yield is better.

Regarding the Save Grain Campaign, which is a extension part of the IGMRI, the staff explained that under this Campaign 25 to 50 women from a village will be selected and will be given training for 10 days on various issues of grain storage at the household level. During training each day the participants will be paid daily stipend of Rs.250 per day. At the end of the programme each participant will be given a metal bin to store 1.5 quintals of grain at 25% subsidy. The usual practice is instead of giving the daily stipend they will be given the bin at free of cost.

Initially there appeared to be a communication problem between CEC and IGMRI staff and Sangham members. Whenever Sangham had a problem with grain storage they had to wait until the staff visited the village. Now this is solved to some extent as they could make telephone calls to enquire with the staff.