

Custom Hiring Centre of Farm Implements

A case study

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THE MSSRF initiated a programme for the empowerment of women farmers-*Mahila Kisan Sashaktikaran Pariyojana* (MKSP) – in 2007 which has a membership of 3265 women farmers, formed into 215 women farmers' groups, across 60 villages, in Wardha and Yavatmal districts of Maharashtra. Among the member-farmers, non-ownership of farm implements is highest among marginal holders at 85%, followed by 64% among small holders, 32% among semi-medium holders, 26% among medium holders and nil among large holders, as per MSSRF's survey carried out in 2012. Thus, there is a clear positive relationship between size of land holding of farmers and their ownership of implements. Usually, the farmers who do not own implements are dependent on other farmers who own them and are able to borrow the required implement only after the owners' use for that implement is over. This dependency for implements would provide space and scope for exploitative relations among farmers and would also hinder carrying out farming operations on time, with serious implications for crop productivity. Given the significant social and

economic implications of setting up custom hiring centres of farm implements and given the demand for such centres among the women farmers, the MSSRF decided to facilitate the same, on a pilot basis, in the villages of Lonsawali and Sonegaon Bai of Wardha district. Agriculture is the main livelihood option for the people in these villages with cotton, soya bean and pigeon pea as main crops.

The Process

In establishing the centre, in the year 2012, the list of implements needed for the centre as well as the operational guidelines have been arrived at in a participatory manner by members of women farmers' groups in the two villages as well as the team members of MSSRF. A core committee (*Sanchalan Samiti*), comprising of eight members (seven members selected from women farmer groups and one representative from MSSRF) was constituted to manage the centre. It was unanimously decided by the committee members, that the centre head (*Kendra Pramuk*) will manage the day to day activities as well as financial transactions of the centre. The committee fixed a lower hiring rate for members of MKSP compared

to non-members. Bank accounts have been opened in nationalized banks for each centre which is operated by three members of the core committee. A register is maintained at the centre where all transactions are recorded by the *Kendra Pramuk*. Typically, a farmer who borrows an implement returns it, pays the rent and collects a receipt for the same from the *Kendra Pramuk*. The *Sanchalan Samiti* reviews the accounts every month after which the rent receipts are deposited in the bank account of the centre. Table-1 provides salient features of the centres.

Results

Analysing the user data for 2013-14 (June 2013 to May 2014) for the centres at Lonsawali and Sonegaon Bai shows that a very large section of borrowers are landless agricultural labourers (Table 2). 47% of all borrowers (92 households) in Lonsawali and 31% of all borrowers (56 households) in Sonegaon Bai are landless labour households. Further, 50 % of borrowers in Lonsawali and 67% of borrowers in Sonegaon Bai operate holdings less than 10 acres. In Lonsawali while marginal holders rarely use the centre, 20% of borrowers are small holders and

The article presents the results of a small initiative of the M S Swaminathan Research Foundation (MSSRF) in setting up 'Custom Hiring Centres of Farm Implements' across two villages in the Wardha district of Maharashtra. Considering that a very high percentage of small and marginal farmers in India do not own farm implements and given the close correspondence that prevails between access to farm implements and quality of agricultural operations, a discussion on the results of this enterprise would offer important lessons for such initiatives across the country.

Table 1. Details of farm machinery available in the centre, Lonsawali and Sonogaon Bai, 2013-14

Classification of available farm machinery for different agricultural operations		Number of units of machinery available	Rent/Day for Member Household (in ₹)	Rent/Day for Others (in ₹)
Pre Tillage	Cotton stubble remover	5	10	15
Tillage	Cultivator	3	15	20
	Harrow	4	15	20
	Plainer / Leveler	1	30	50
	Plough (Big)	1	15	20
	Plough (small)	1	15	20
	Sowing Machine	1	30	50
Sowing	Seed drill (P V C)	12	5	5
	Hoe	6	15	20
Inter culture	Cycle hoe	2	10	15
	Kerosene engine with fitting accessories	1	150	200
Irrigation	Sprinkler pipe	50	5	5
	Foot stand with brass nozzle and accessories	8	7	10
	Spray pumps	14	15	20
Spraying	Stool	6	10	15
	Perforated sheet (3x4)	6	10	15
Post harvest and	Tarpaulin	8	20	30
	Miscellaneous	Spade	5	5
Miscellaneous	Pick axe	5	5	5
	Steel basket	10	10	10
	Cotton picking apron	10	2	5
	Drum	5	10	20

Table 2. Classification of user-households by landholding, 2013-14

Size of operational	Number of user-households holding (in acres)		Percentage of user-households	
	Lonsawali	Sonogaon Bai	Lonsawali	Sonogaon Bai
Nil	92	56	46.70	30.60
0.01-2.49	1	18	0.51	9.84
2.50-4.99	40	59	20.30	32.24
5.00-9.99	60	45	30.46	24.59
10.00-24.99	4	3	2.03	1.64
Above 25	0	2	0.00	1.09
Total	197	183	100.00	100.00

another 30% are semi-medium holders (factor underlying the low usage by marginal farmers needs to be studied in detail). Whereas in Sonogaon Bai village, 10% of borrowers are marginal holders, 32% are small holders and 25% are semi-medium holders. While establishing the Centre, the benefits that would accrue to small and marginal farmers were factored in but the benefits the Centre would bring to the landless labour households was not visualised at all. Apparently, the probability of employment for agricultural labourers improves with possession of implements. An analysis of the borrowing details of implements by households indicates that the landless households essentially borrow spray

pumps, hoe, cultivator and seed drills- implements which enhance their chances of procuring employment. Thus, the functioning of the centres have been essentially used by the most marginalised sections of the village society for carrying out timely field operations as

Table 3. Classification of user-households by caste, 2013-14

Caste Group	Number of user-households		Percentage of user-households	
	Lonsawali	Sonogaon Bai	Lonsawali	Sonogaon Bai
Scheduled Caste	56	35	28.43	19.13
Scheduled Tribe	50	5	25.38	2.73
Special Backward Classes	22	20	11.17	10.93
Nomadic Tribe	5	22	2.54	12.02
Other Backward Classes	64	95	32.49	51.91
Others	0	6	0.00	3.28
Total	197	183	100.00	100.00

well as for procuring employment.

Classifying the users of the Centres by caste, in Lonsawali 53% of user-households belong to socially backward castes (Scheduled Castes and Scheduled Tribes together) while in Sonogaon Bai the corresponding percentage is 44% (Table 3). Using the Census 2011 data, it is estimated that 31% of population in Lonsawali and 18 % of population in Sonogaon Bai belong to Scheduled Caste and Scheduled Tribe. Comparison of the census data on percentage of Scheduled Caste and Scheduled Tribe population in the villages with the percentage of user-households of the centres from these caste groups suggests that a relatively larger percentage of vulnerable caste group households have been the users of the centres in both the villages. For instance, in Lonsawali, while just about one third of the population belonged to socially backward castes, they accounted for more than half of the users of the centre. Similar is the situation in Sonogaon Bai Centre.

Data on user-households for 2013-14 further indicates that out of the total 327 households in Lonsawali, 197 households (60%) have borrowed some farm implement from the Centre at least once during the course of one year while in Sonogaon Bai the corresponding figure was 183 out of 339 households (54%). The 197 households of Lonsawali who have used the Centre have done so more than once and the frequency of usage per household on an average is 2.17. In Sonogaon Bai, though the percentage of households using the Centre is relatively lower, each household on an average has used the centre 2.64 times, indicating a more intensive use by the user households

Table 4. Intensity of usage of farm implements available in the centre, Lonsawali and Sonegaon Bai, 2013-14

Implement	Lonsawali			Sonagaon Bai		
	No. of households who borrowed	Frequency of borrowing	Intensity of usage of implement	No. of households who borrowed	Frequency of borrowing	Intensity of usage of implement
Cultivator	48	57	19.0	23	27	9.0
Spray Pump	85	137	9.8	93	168	12.0
Harrow	20	31	7.8	21	32	8.0
Tarpaulin	37	40	5.0	32	49	6.1
Plough	9	9	4.5	0	0	0.0
Hoe	19	27	4.5	30	45	7.5
Perforated sheet	23	27	4.5	46	59	9.8
Drum	14	16	4.0	28	46	11.5
Seed drill	18	20	1.67	14	20	1.67
Kerosene engine with fitting accessories	1	1	1.0	6	7	7.0
Pick axe	2	3	0.6	0	0	0.0
Cotton stubble remover	2	2	0.4	0	0	0.0
Spade	1	1	0.2	0	0	0.0
Steel basket	1	1	0.1	1	2	0.2

compared to Lonsawali.

Analysing the details of implements borrowed from the centres, we find that the pattern of usage of implements have been more or less similar across the two villages (Table 4). Cultivator, harrow, hoe, seed drill, spray pumps as also gears used for post-harvest purposes have been borrowed extensively in both the centres. However, there are also specificities in the borrowing pattern in the two villages: plough has been borrowed in Lonsawali while there has been no demand for it in Sonegaon Bai; 6 households have borrowed engine in Sonegaon Bai while just one household has borrowed it in Lonsawali. Further, some implements such as pick axe, spade, stubble remover etc. have either not been used at all or used by very few households in both the villages. Analysing the intensity of usage of implement, it has been the highest for cultivator in Lonsawali and the spray pump in Sonegaon Bai. Intensity of usage of a machinery is the ratio between frequency of borrowing and number of units of machinery available and is obtained by dividing the former by the latter. The 3 cultivators in Lonsawali were taken on rent by 48 households, over 57 times with a very high intensity of usage. Similarly, in the Sonegaon Bai centre, the 14 spray pumps were borrowed by 93 households and the

intensity of usage of each pump was 12. Spray pumps are used by farmers for foliar application of botanical insecticides, bio pesticides as well as for chemical insecticides and fungicides. Intensity of use of harrow and hoe has also been high in both the centres. Each centre has 8 tarpaulin sheets that have been used quite intensively by households across the two villages.

In the absence of detailed cost-benefit calculation for individual users of the centre, we rely on comments from the users to understand the range of benefits received.

- *Narayan Pandurang Chachane*, a landless agricultural labourer owns a pair of bullock. Hiring out his bullock pair has been an important source of income for him. He says, "My implements are made of wood and are of old design. So I borrow hoes from the Centre and tie two hoes together to my bullock pair, thereby saving time and labor cost for whoever employs me. I also borrow other implements like harrow, plough, seed drill, spray pumps, tarpaulin sheets from the centre resulting in more employment for me".
- *Purusottam Shyamrao Tamgadge* leases in land for cultivation. He says, "I am able to complete the agricultural operations on time because of availability of implements from the centre. Seed

drill attached with plough proved very useful for sowing of Bengal gram".

- *Ramesh Shrawan Nehare* says, "As I could get a cultivator on time, I could reduce the cost of weeding".
- *Manda Ambadas Ranvir* says "I managed to get employment for more number of days as I could borrow a spray pump from the centre. I also earned extra money by working in more than one field in a day".

SUMMARY

The experience of MSSRF in setting up the custom hiring centres for farm implements clearly indicates the enormous reach of the centres to the most marginalized sections of the village community, namely, the landless agricultural labourers, the small farmers belonging to the Scheduled Castes and Scheduled Tribes. Villagers, whether or not they are members of the women farmers' groups of MSSRF could use the centres. The personal interactions with the users of the centres, in particular those in the margin, clearly indicate how these centres have either aided them in completing the agricultural operations within the required time frame or in procuring employment and earn wages. Further, some of the implements such as the perforated sheet or grain sieve that were made available in the centres aided in drudgery reduction for women. In addition, the women farmers in the *Sanchalan Samiti*, with very minimal guidance from MSSRF team, have been managing the centres efficiently over the last one year, which is a clear sign of their empowerment. Moreover, all this has been possible with a relatively low level of investment, of less than two lakh rupees per centre. However, an attempt has not been made to estimate the economic benefits that have accrued to the users of the centres.

Standard classification of land holdings is used, (in acres): < 2.5 –marginal; 2.5 to –5 Small; 5 to 10, Semi Medium; 10 to 25 – Medium; > 25 large.

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