



Cereal Systems Initiative for South Asia



A Study of SHGs in Muzaffarpur District in Bihar

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CSISA is mandated to enhance farm productivity and increase incomes of resource-poor farm families in South Asia through the accelerated development and inclusive deployment of new varieties, the dissemination of sustainable management technologies, the promotion of partnerships, and the formulation and implementation of appropriate policies.

The views expressed in this report are those of the authors and do not necessarily reflect the views of USAID, BMGF, CIMMYT, IRRI, IFPRI, ILRI, or CSISA.

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Executive Summary

The Cereal Systems Initiative for South Asia (CSISA), supported by the Bill & Melinda Gates Foundation and USAID, is a multi-institutional project promoting durable change in cereal-based cropping systems in South Asia's most important grain baskets. Under CSISA, since 2009, a number of conservation agriculture (CA) practices have been promoted. In Bihar (India), CSISA is working to empower women farmers by ensuring their access to improved technological innovations, knowledge, and entrepreneurial skills that can help them become informed and recognized decision makers in agriculture. Through the CSISA-formed *Kisan Sakhi* group (women farmers' group), CSISA has facilitated farmer-to-farmer learning and participatory technology evaluation. Training of and knowledge dissemination to women farmers started from Muzaffarpur District in Bihar. The district unit of Bihar *Mahila Samakhya* Society (BMSS) in Muzaffarpur agreed to coordinate with CSISA and the *Jyoti Mahila Samakhya* Federation (JMSF), and the village entry points were the self-help groups (SHGs). Hence, a study was conducted to understand the existing socioeconomic conditions. The themes covered in the survey are household socioeconomic characteristics; gendered participation in decision making related to agriculture, household income, and expenditures; participation and involvement in agricultural activities; access to information; and freedom of mobility. Thirty-two SHGs were selected for the study in June–July 2014. Each SHG has on average 10 to 11 members. The survey team interviewed each member of the selected SHGs and the total sample size was 317 women farmers.

SHGs particularly function in capacity building of women in various aspects such as attempting to meet their needs and addressing their socioeconomic constraints. SHGs function through their regular meetings, and disseminate awareness. The women reported that there had been a change in their status at the family and community level after joining the SHGs. The first issue examined in the report is whether women had access to land and had land ownership. Another aspect of women's status examined was their involvement in agricultural activities and their decision-making power. Two-thirds of the women were engaged in land preparation, crop establishment, weeding, harvesting, and drying. Marketing of farm produce and access to market information continue to be the domain of men. When it comes to the decision-making process, a majority of the women reported that their involvement was below 50% compared with that of their husbands. Hence, it can be concluded that, though women were involved in agricultural activities, decision-making power did not reside with them.

Normally in a household, monthly expenditures are incurred on food, fuel, personal items, household items, transportation, education, medicine. The decisions on these expenditures were

generally made either by the respondents themselves or in collaboration with their husbands. Women's freedom of mobility was also examined. More than 60% of the women can go to places outside the village to visit friends/relatives, shop, visit a hospital/clinic/doctor, attend meetings, or go to farmland or a place of work. Among women who visited places alone, a majority of them could do so always or often. Most of the women consulted their husbands or other relatives to visit places alone.

Another aspect relevant to the status of women is their access to information. A majority of the respondents did not meet an agricultural extension worker or livestock/fish worker in the past 12 months. Around 90% of the respondents had never read a newspaper, did not listen to radio, and did not watch television. However, three-fourths of the respondents used mobile phones every day or a few times a week. A majority had access to information on farming and livestock. The main source for this type of information was an NGO/NGO outlet or private shop/suppliers.

The women were assessed through a game to understand to what extent they could take risk in their lives. Before starting the game, the respondents were asked whether they were fully willing to take risk, more willing to take risk, indifferent, less willing to take risk, or unwilling to take risk. The study reported that a majority of the respondents were indifferent (not decided whether they were willing or unwilling to take risk). Apart from this, the respondents were either less willing to take risk or more willing to take risk (which makes it difficult to conclude). The respondents reporting being fully willing to take risk or unwilling to take risk (the ends of the risk assessment spectrum) were rather few.

1. Introduction

Women are the most disadvantaged people in the rural regions of India. Even though they largely participate in economic activities, mainly in agriculture, their work is not considered economically significant. They are thus most vulnerable to the effects of poverty (Manjunatha 2013). It is on account of these and other similarly situated women that the 1994 Cairo International Conference on Population and Development (ICPD) called attention to women's empowerment being vital to any development effort and declared that, if human development is not engendered, it is endangered (Sahu and Singh 2012). Empowerment requires changes first and foremost in women's aspirations, resources, and achievements; second, in the broader social structures that condition women's choices and chances; and, third, in the character of the social relationship through which women negotiate their needs and rights with other social actors, including men. The addressing of gender inequality will thus require individual and collective changes (Drinkwater 2005). Providing economic support or loans to rural women helps them to empower themselves, not only economically but also socially (Manjunatha 2013).

In India, self-help groups (SHGs) have played an important role in changing the lives of women in rural areas and are therefore considered one of the most significant tools in implementing the participatory approach toward the economic empowerment of women and in improving various aspects of the social structure in the country. These groups, which are formed and usually supported by nongovernment organizations (NGOs) or, now increasingly, by government agencies, are small voluntary associations of poor and marginalized people, preferably from the same socioeconomic background, whose structures, processes, and activities provide their members with the opportunity to identify for themselves the problems that confront them and seek the solutions that they can and are willing to implement. These also provide their members with better access to support services, including credit and government extension services. By empowering rural women this way, SHGs have become the vehicle of change for poor and marginalized people to be released from the clutches of poverty (Sahu and Singh 2012), while enhancing the status of women as participants, decision-makers, and beneficiaries in the democratic, economic, social, and cultural spheres of life (Kondal 2014).

Women's participation in SHGs has created tremendous impact upon the lives of poor women and has empowered them at various levels, not only as individuals but also as members of families, and communities. As members of an organization, they come together for the purpose of solving their shared challenges by helping themselves and each other.

2. Study background

The Cereals Systems Initiative for South Asia (CSISA), supported by the Bill & Melinda Gates Foundation and USAID, is a multi-institution project promoting durable change in cereal-based cropping systems in South Asia's most important grain baskets. Since 2009, a number of conservation agriculture (CA) practices have been supported under CSISA. In Bihar, CSISA is working to empower women farmers by ensuring their access to innovative, scale-appropriate agricultural technologies and associated knowledge, while helping them acquire entrepreneurial skills that can help them become informed and recognized decision-makers in agriculture. Through the *Kisan Sakhi* group (women farmers' group), whose formation CSISA encouraged and supported, the project has facilitated farmer-to-farmer learning and participatory technology evaluation. It has also conducted training and knowledge dissemination among women farmers in Muzaffarpur District. The district unit of BMSS¹ in Muzaffarpur has agreed to play a catalytic role in facilitating coordination between CSISA and the *Jyoti Mahila Samakhya* Federation (JMSF), its associate federation in the area. The village entry points are the SHGs. Representatives from the SHGs participate in the training CSISA provides and they, in turn, are expected to train the other members of their groups.

One of the CA practices being promoted among women farmers in Muzaffarpur District is mechanical rice transplanting, which saves 10–20% of the total water required for rice production. This technology requires the use of self-propelled mechanical rice transplanters (MRTs). Because of its high cost (INR 1 lakh), however, most individual farmers cannot afford this machine. CSISA has facilitated the procurement of MRTs by some SHGs. In kharif 2014, for instance, women from two SHGs bought one MRT with support from CSISA. The women farmers used the machine in their own fields and rented the machine in Lakhisarai. However, 2014 was the first year and mainly represented a pilot stage. Detailed understanding of the use of the MRT and how the two SHGs earned profit from it will be verified after kharif 2015.

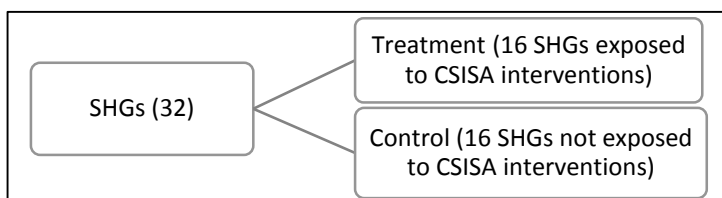
Muzaffarpur District has six blocks (Aurai, Bandra, Bochaha, Gayghat, Kudhani, and Musahari) where CSISA interventions started with women farmers in early 2014. Hence, a study was

¹ Bihar Mahila Samakhya Society (BMSS) is the nodal agency for the state of Bihar to oversee the implementation of the Government of India-supported *Mahila Samakhya* (MS) Program, which is mandated to root out gender discrimination from society. As its major thrust, the BMSS formed women's groups that would allow women to learn at their own pace, set their own priorities, and seek knowledge and information to make informed choices. The BMSS has nine federations operating in the state and is operational in 17 districts, in the process having direct linkage with 170,465 women. At the village level, the women's groups formed Legal Committees to work against domestic violence, social evils, and gender discrimination against women. These committees hold regular meetings and discuss local gender-related issues and raise awareness on gender equity among women.

conducted in June 2014 to understand the household socioeconomic characteristics; gendered participation in decision making related to agriculture, household income, and expenditures; women’s participation and involvement in agricultural activities; women’s access to information; and women’s freedom of mobility. In a later stage of the project, a follow-up study can be conducted to see whether the intervention activities have any impact on the lives of the women farmers.

3. Research methodology

A survey was conducted in June-July 2014 with members of 32 SHGs from six blocks (Aurai, Bandra, Bochaha, Gayghat, Kudhani, and Musahari) of Muzaffarpur District serving as survey



respondents. The 32 SHGs consisted of two groups: 16 SHGs that have not received any training or exposure on MRTs (mechanical rice transplanters) from CSISA and another 16 SHGs that have. The first group is designated as the “control group” while the other group is referred to as the “treatment group.” The SHGs in the control group were selected across the six blocks in Muzaffarpur District from the available list of all SHGs in the blocks. The 16 SHGs of the treatment group include two SHGs that bought one MRT.

Each SHG group has on average 10–11 members, with the total survey sample amounting to 317 (Table 1).

Table 1. Distribution of surveyed SHG members.

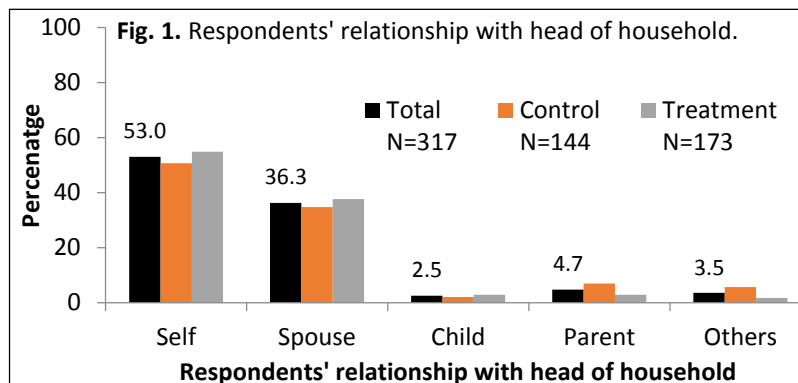
Type	Total number of women	Percentage	Total number of women interviewed	Percentage
Control	146	44.1	144	45.4
Treatment	185	55.9	173	54.6
Total	331	100.0	317	100.0
4% nonresponse rate				

To obtain an in-depth understanding of the study objectives, a qualitative study was conducted. Small group discussions with these 32 SHGs were conducted in September 2014.

4. Results of the study

4a. Profile of the respondents

Household relations: Slightly more than a half of the women in Muzaffarpur District were heads of households (51% in the control group and 55% in the treatment group) (Fig. 1). This characteristic should be expected as studies have noted the widespread existence of



female-headed households in rural areas in all geographic regions in India (Gandotra and Jha 2003). The main cause of this phenomenon in Bihar is the out-migration of husbands, with Bihar having one of the highest rates of male out-migration in the country. Of the women household heads, the majority were currently married, with around a third (32% in the control group and 30% in the treatment group) having husbands who were out-migrants. Two-thirds (63% in the control group and 62% in the treatment group) lived in nuclear household structures. Almost all (90%) belonged to the Below Poverty Line (BPL) category. The study implies that female-headed households have higher percentages of nuclear household structures and belong to the BPL category than male-headed households (Table 2).

Table 2. Characteristics of women as household heads.

Characteristics of women as household heads	Total		Control		Treatment	
	Yes	Number	Yes	Number	Yes	Number
Household structure						
Extended	37.5	63	37.0	27	37.9	36
Nuclear	62.5	105	63.0	46	62.1	59
Marital status						
Married, single spouse	89.3	150	87.7	64	90.5	86
Widowed	10.7	18	12.3	9	9.5	9
Husband is an out-migrant						
	30.4	168	31.5	23	29.5	28
Belong to BPL category						
	90.5	168	93.2	68	88.4	84

One-fourth of the women respondents reported that their husbands were out-migrants² (29% in the control group and 21% in the treatment group), mostly to other states. On average, the migrant husbands visited their native homes two to three times in a year and remitted from INR

² If he is away from home for employment and has been away for at least three months.

2,000 to 6,000 a month, with remittances arriving eight times in a year (six times for the control group and 10 times for the treatment group) (Table 3).

Table 3. Location, frequency of home visits, and number and amount of remittances of migrant husbands.

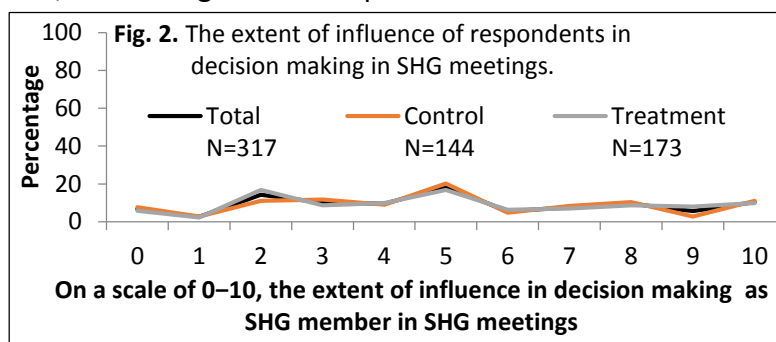
Migration status of husbands	Total		Control		Treatment	
	Percentage	Number	Percentage	Number	Percentage	Number
Husband is a migrant	24.6	317	29.2	144	20.8	173
If migrant, his current place of work						
Outside the village but same district	1.3	1	0.0	0	2.8	1
Other district within the state	5.1	4	2.4	1	8.3	3
Other state	93.6	73	97.6	41	88.9	32
Frequency of visits in a year						
Up to 2 times	53.8	42	61.9	26	44.4	16
3–4 times	37.2	29	33.3	14	41.7	15
More than 4 times	9.0	7	4.8	2	13.9	5
Number of times receive remittance in a year						
Up to 4 times	33.3	26	42.9	18	22.2	8
4–8 times	32.1	25	35.7	15	27.8	10
8–12 times	30.8	24	21.4	9	41.7	15
More than 12 times	3.8	3	0.0	0	8.3	3
Remittance amount per month						
Up to INR 2,000	23.1	18	21.4	9	25.0	9
INR 2,000–4,000	35.9	28	33.3	14	38.9	14
INR 4,000–6,000	33.3	26	35.7	15	30.6	11
Above INR 6,000	7.7	6	9.5	4	5.6	2

Bihar has a rich history of out-migration that goes back to as early as the 19th century. However, during the last few decades, migration for work has increased (Datta and Mishra 2011). In India, where about 80% of the people live in villages, migration from rural areas has a special significance in the context of rural development. Migrants from rural areas tend to retain an attachment to their native places; they continue to maintain links with their families and villages through visits and by sending remittances (Singh et al 1980).

Membership in SHGs: The respondents joined SHGs mainly between 2007 and 2009, the period when these organizations were strongly promoted. The major reasons they cited for joining SHGs were to save money and to expand their network. Nineteen percent held leadership positions (as president, secretary, or treasurer of the SHGs).

On a scale of 0 to 10, the women rated as “5” (neutral) their influence on decision making during SHG meetings (Fig. 2). Slightly less than half (49%) reported that the decisions were not

influenced by women of the upper caste or by aged women (51% of control group and 47% of treatment group members). However, 26% disagreed and opined that decisions were often influenced by women of the upper caste or by aged women (24% in the control group and 27% in the treatment group). Slightly more than half (56%) also reported that they had improved their status at home and in society after joining SHGs (54% in the control group and 58% in the treatment group).



On a scale of 1 to 5 (high rate), the women rated themselves mostly as “2” and “3” compared with the other members of their respective SHGs in terms of wealth. The great majority (92%) of them agreed that “Trust is strong among (their) SHG group members.” Ninety percent expressed full confidence in their SHGs’ leaders’ ability to make the right decision. However, only 50% claimed they trusted their SHGs’ members and leaders in case of a crisis and emergency.

Access to information: Around 90% of the respondents had never read a newspaper, did not listen to radio, and did not watch television. However, three-fourths had used mobile phones from a few times a week to every day. Around 60% had access to information on farming and livestock, the main sources being an NGO/NGO outlet (for 39% of the respondents), private shop/suppliers (27%), and family members (34%). A large majority (77%) claimed to be able to easily access information on education and training on improved livelihood and farming practices.

Political knowledge and behavior: Around 10% of the women knew the name of the chief minister of Bihar (8% in the control group and 12% in the treatment group) while 29% knew the name of the prime minister of the country (22% in the control group and 35% in the treatment group). The vast majority (97%) voted (99% of control group and 95% of treatment group members). Among respondents who voted, 74% voted by themselves (75% control and 73% treatment) while 21% depended on their husbands (18% control and 24% treatment), that is, the women vote as directed by their husbands.

4b. Profile of respondents’ households

Household size and age: The size of the respondents’ households averaged six to seven, each having one child aged up to 5 years. There was a high percentage of young people in the study area and the percentages of females were higher than of males in almost all the age groups.

A little over a third (38%) of the respondents' household population was illiterate or had not received formal education (40% in the control group and 37% in the treatment group) while 45% had attained up to primary/middle school education (45% of both the control and treatment group). Meanwhile, the occupation pattern depicts that 14% of the population was unemployed (14% of the control group and 13% of the treatment group), 24% consisted of self-employed farmers or family farm workers (22% in the control group and 26% in the treatment group), and a third comprised children in school/college (Table 4).

Table 4. Respondents' household population characteristics.

Household population	Total		Control		Treatment	
	Percentage	Number	Percentage	Number	Percentage	Number
Education						
No schooling (illiterate)	27.0	482	29.1	247	25.2	235
Literate with no formal education	11.3	202	10.5	89	12.1	113
Primary school (up to class V)	28.7	511	27.8	236	29.4	275
Middle school (up to class VIII)	16.4	293	17.1	145	15.8	148
Secondary school (up to class X)	9.5	169	8.8	75	10.1	94
Senior secondary school (up to class XII)	4.8	85	5.0	42	4.6	43
Graduate and above	1.7	31	0.6	5	2.8	26
Don't know/can't say	0.5	9	1.1	9	0.0	0
Occupation						
None	13.5	241	13.7	116	13.4	125
Self-employed farmer or family farm worker	24.3	433	22.4	190	26.0	243
Livestock rearing	1.1	19	1.2	10	1.0	9
Salaried employment	1.6	28	1.5	13	1.6	15
Self-employed off-farm	3.4	61	3.1	26	3.7	35
Casual labor on-farm	2.9	52	2.4	20	3.4	32
Casual labor off farm	9.5	170	10.0	85	9.1	85
School/college child	30.8	549	32.3	274	29.4	275
Nonschool child	1.1	19	0.6	5	1.5	14
Involved in household chores	4.7	83	5.4	46	4.0	37
Other (specify)	7.1	127	7.4	63	6.9	64

The majority of the respondents belonged to the Hindu religion. Meanwhile, 58% belonged to the OBC (Other Backward Classes) caste category and one-third belonged to the SC (Scheduled Caste) category. In the control group, 49% belonged to the OBC and 40% belonged to the SC while, in the treatment group, 66% belonged to the OBC and 24% belonged to the SC (Table 5A). The results are statistically significant.³

³ Chi-square and Mann-Whitney tests have been applied to test the statistical significance, whenever applicable.

Table 5A. Respondents' household characteristics.

Household characteristics	Total		Control		Treatment	
	Percentage	Number	Percentage	Number	Percentage	Number
Religion						
Hindu	97.8	310	100.0	144	96.0	166
Muslim	2.2	7	0.0	0	4.0	7
Caste						
General	2.5	8	4.2	6	1.2	2
SC (Scheduled Caste)	31.2	99	40.3	58	23.7	41
ST (Scheduled Tribe)	5.4	17	6.3	9	4.6	8
OBC (Other Backward Classes)	58.4	185	49.3	71	65.9	114
Other	2.5	8	0.0	0	4.6	8

More than three-fourths of the women respondents had either semi-*pucca* or *kachha*⁴ houses. The main source of lighting was kerosene (77% of total respondents) and the main source of cooking fuel was wood/straw/agricultural waste (98% of total respondents) (Table 5B).

Table 5B. Respondents' household characteristics.

Household characteristics	Total		Control		Treatment	
	Percentage	Number	Percentage	Number	Percentage	Number
Structure of household						
<i>Pucca</i>	22.4	71	22.2	32	22.5	39
Semi- <i>pucca</i>	40.4	128	43.1	62	38.2	66
<i>Kachha</i>	37.2	118	34.7	50	39.3	68
Main source of lighting						
Electricity	23.3	74	24.3	35	22.5	39
Kerosene	76.7	243	75.7	109	77.5	134
Main source of cooking fuel						
LP gas	1.3	4	0.7	1	1.7	3
Kerosene	0.3	1	0.7	1	0.0	0
Biogas	0.3	1	0.0	0	0.6	1
Wood/straw/agricultural waste	97.8	310	98.6	142	97.1	168
Others	0.3	1	0.0	0	0.6	1

The great majority (84%) of the respondents had BPL (Below Poverty Line) cards (88% in the control group and 82% in the treatment group) and 88% belonged to the BPL category (91% of control group and 85% of treatment group members). A higher proportion of the respondents in

⁴ Houses made from mud, thatch, or other low-quality materials are called *kachha* houses. Those that use partly low-quality and partly high-quality materials are called semi-*pucca* houses. Those made with high-quality materials throughout, including the floor, roof, and exterior walls, are called *pucca* houses (IIPS 2006).

the control group belonged to the BPL category compared with the treatment group but the result is not statistically significant.

More than 80% of the households had incomes ranging from INR 2,000 to 10,000 a month. A larger proportion of the households in the treatment group fell under this category than in the control group. Meanwhile, 13% of the households in the control group reported incomes of INR 10,000 to 20,000 a month while only 6% of the households in the treatment group reported the same (Table 5C). Almost all the households (95%) saved money. Remittances and sales of crop production were the two main sources of savings for the households. They saved in either bank or SHG accounts. The nonagricultural assets owned by the respondents were mostly mobile phones, bicycles, and electric fans. The agricultural assets used by the respondents were chaff cutters and sprayers.

Table 5C. Respondents' household characteristics.

Household characteristics	Total		Control		Treatment	
	Percentage	Number	Percentage	Number	Percentage	Number
Have a BPL[#] card	84.2	317	87.5	144	81.5	173
Belong to BPL category	87.7	317	91.0	144	85.0	173
Monthly household income						
Less than INR 2,000	6.0	19	5.6	8	6.4	11
INR 2,001 to 5,000	38.5	122	34.0	49	42.2	73
INR 5,001 to 10,000	45.1	143	45.8	66	44.5	77
INR 10,001 to 20,000	9.1	29	13.2	19	5.8	10
INR 20,001 to 35,000	0.9	3	0.7	1	1.2	2
Did not disclose	0.3	1	0.7	1	0.0	0

[#]Below Poverty Line.

4c. SHGs and their formation

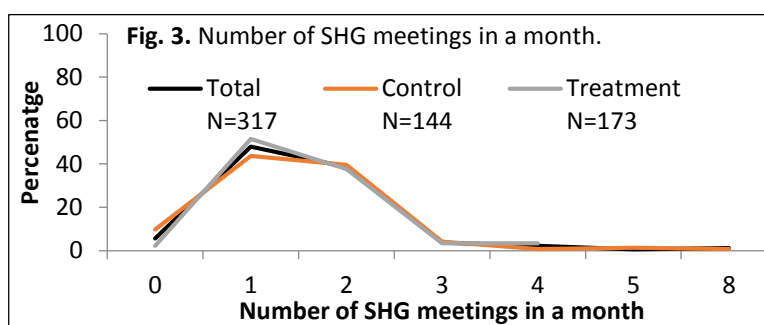
The SHG is a “people’s scheme” and its organization is a significant step toward empowering women. Women’s SHGs represent a form of intervention that is a radical departure from most current programs. They are an effective strategy for poverty alleviation, women’s development, and social empowerment. The women’s SHGs have enhanced the status of women as participating decision-makers and beneficiaries in the democratic, economic, social, and cultural spheres of life and sensitized the women members to take an active part in the socioeconomic progress of rural India. SHGs in social change imply not only a change in the outer form of a community or a society but also in the social institutions as well as ideas of the people living in that society (Das and Bhowal 2013).

Focus group discussions (FGDs) revealed that the CRPs (community resource persons) from *Mahila Samakhya Society* went around the villages to first identify the depressed localities where the women were particularly limited (in terms of knowledge, attitude, and practices). After rapport building for days together, they tried to convince the women to form small groups (named self-help groups) that would be a source of information and have a number of benefits. The CRPs proposed that forming SHGs would help the women save money (*har roj ek rupayia jama kijiyege to mahine me tees rupay jama ho jayga (saving a rupee a day will save INR 30 every month)*-CRP) and borrow SHG money in times of need at a low interest rate. They would have opportunities to know about various issues such as health, education, savings, domestic violence, and *panchayati raj* and attend meetings and training activities. In some places, the CRPs had a tough time forming SHGs; eventually, they were successful in convincing the women.

After the SHGs are formed, a president, secretary, and treasurer are elected unanimously in each SHG. The basic criteria for these positions are that the women should be literate, outgoing, and honest. Eventually, money is collected from the SHG members. The three position holders and other SHG members along with the resource person open a bank account. Each SHG has an account. The money that is collected every month is deposited in the bank by the SHG members in their respective SHG bank accounts. Everybody has her turn month-wise to go to the bank to deposit money. However, for withdrawing money, the three position holders have to go to the bank. Their tenure is usually three years. However, the SHGs generally do not replace the position holders unless and until required due to death of the president or secretary or treasurer or due to any other unavoidable circumstances. The reason behind this is that it is difficult to change the bank account name as this takes time.

Each SHG generally has 10–12 members. The trend is that in rare cases women drop out. The reasons may be that the husbands did not allow them or they do not have money to deposit every month or that they did not find any benefits by joining the SHG. In a SHG, members are divided into different committees (i.e., health, education, savings, violence, and *panchayati raj*).

For any training related to the same, the representatives from the SHGs attend and then come and train their respective other SHG members. The SHG meetings are held at least once or twice in a month (Fig. 3) and money is collected from each member



(ranging from INR 20 to 100). The women deposit this money either from the work they do (any income-generating activity) or from the money given by their husbands for household purchases.

The amount of money that is deposited in each SHG has increased over time. One SHG increased the deposit amount from INR 25 to 50, and now they deposit INR 100 while another increased the amount from INR 50 to 100. The SHGs do have meetings in emergencies. Apart from solving intra-SHG problems, they help other women in need (they may not be a part of the same SHG or any SHG).

Now, many of the women participating in the SHGs we talked with have reported becoming more outgoing and now feel they can put forth

Case study: In Muzzaffarpur, one dealer strongly opposed the formation of SHGs, preferring that the women remain subjugated. *One day, the women called for a meeting with the Mahila Samakhya. Ultimately, the dealer had to apologize. Actually, others (male well-to-do category) opine that “aurat majdoor hai (Women are labourers)”. The women oppose it now. The SHG members posed the question: Why should they tolerate subjugation? They are no longer ready to be dominated. (Mahila Samakhya, Bochaha)*

their opinions. There are women who indicated that they can now go to the bank and deposit money. Some have learned to read and write. The SHGs do not have any financial support from any organizations. However, through the *Mahila Samakhya Society*, the women become exposed to different types of training. The SHGs do not generally take a loan from the bank. They borrow money from their SHGs (the money collected every month and saved in bank). The interest rate is 2% per month. However, mostly the SHGs to date have not started any collective business by investing the SHG savings. The savings are mostly used at the individual level and for individual benefits. Some SHGs have access to government schemes. SHGs particularly work to meet women's acute financial needs and address their socioeconomic problems.

After joining the SHG, women have better access to credit facilities and increased income, which allows them to contribute to household expenses. Some are even able to successfully plan the family budget (Sahu and Singh 2012).

Decision on buying a mechanical rice transplanter: The SHGs obtained information about CSISA from the *Mahila Samakhya Society* in December 2013. Prior to this, they had not heard of the project. Then, they were called for training (February 2014) and learned about mechanical rice transplanting, including seeing a demonstration of the machine. Initially, in a meeting, it was decided that 10 SHGs would buy the machine together by paying INR 10,000 per SHG. However, six SHGs withdrew and four SHGs decided to buy the machine. Eventually, two SHGs bought the machine. Each SHG had to pay INR 50,000. However, till now, they managed to pay INR 25,000 per SHG. These SHGs pooled together SHG money to pay another INR 25,000. The rest of the amount they expect to pay back from the earnings they will have by renting out the machine. The decision was made by all the SHG members together. The SHGs bought the machine and this influenced other SHGs, in spite of criticism from some within the village.

After obtaining information about CSISA and by attending training activities and meetings, the women made this decision to buy a machine worth INR 1 lakh. The SHG money they collect every month is around INR 20 to 100, and INR 1 lakh is a considerable amount. Despite this, the two SHGs were ready to invest.

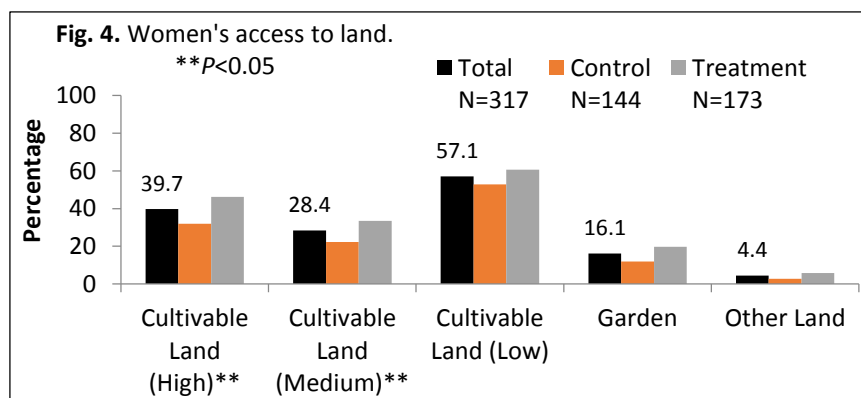
4d. Women's participation and decision-making authority

Access to, and control over, land can enable women to gain gender equality while overcoming their material deprivation. Land is not just a productive asset and a source of material wealth, but is equally a source of security, status, and recognition. However, the issue of women's rights in land (and more generally in property) has been, until recently, largely neglected in both research and policy (Agarwal 2002). In investigating the state of empowerment of the women of Muzaffarpur District, the research team looked into this issue.

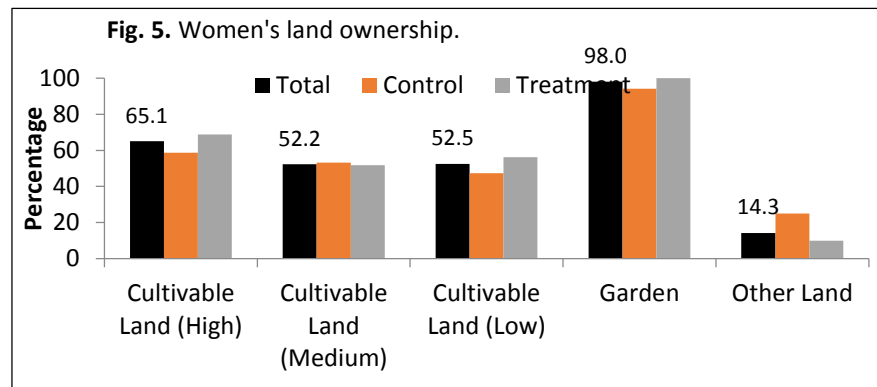
a. Land access and ownership

A smaller majority (57%) had access to cultivable lowlands (53% in the control group and 61% in the treatment group) while 40% had access to cultivable highlands (32% in the control group and 46% in the treatment group). Members of SHGs in the

treatment group had greater land access than those in the control group. Access to cultivable highland and medium land by women in the control and treatment group is statistically significant (Fig. 4).



Among those who had access to cultivable lowlands, 53% owned the land and 43% rented it. Among those who had access to cultivable highlands, 65% owned the land and 31% rented it. Among those who had



access to cultivable medium lands, 52% owned the land and 44% rented it (Fig. 5). A larger proportion of women in the treatment group owned land than the women in the control group. Moreover, a considerable percentage of women rented land for cultivation but these results are statistically not significant.

The decision to sell and purchase cultivable land was mainly made by the couple together or by other household members. Women did not have the authority to sell/purchase land on their own although women were involved in such decisions even if these were made along with the husband or other household members (Table 6).

Table 6. Holder of the authority to decide whether or not to sell/purchase land

Decision to sell/purchase land	Self	Husband	Both self and husband	Head of household	Other members	Number
Total						
Cultivable highland	10.3	20.6	26.2	7.9	34.9	126
Cultivable medium land	5.6	13.3	32.2	7.8	41.1	90
Cultivable lowland	6.1	17.1	21.0	6.6	49.2	181
Garden	15.7	35.3	33.3	7.8	7.8	51
Other land	0.0	14.3	0.0	14.3	71.4	14
Control group						
Cultivable highland	10.9	19.6	17.4	10.9	41.3	46
Cultivable medium land	3.1	18.8	25.0	12.5	40.6	32
Cultivable lowland	5.3	18.4	14.5	10.5	51.3	76
Garden	23.5	29.4	23.5	11.8	11.8	17
Other land	0.0	0.0	0.0	50.0	50.0	4
Treatment group						
Cultivable highland	10.0	21.3	31.3	6.3	31.3	80
Cultivable medium land	6.9	10.3	36.2	5.2	41.4	58
Cultivable lowland	6.7	16.2	25.7	3.8	47.6	105
Garden	11.8	38.2	38.2	5.9	5.9	34
Other land	0.0	20.0	0.0	0.0	80.0	10

About 26% of those who had access to cultivable highlands, 32% of those who had access to medium lands, and 21% of those who had access to lowlands reported that the decision regarding the property was made jointly with their husbands. The percentage of women reporting that the decision to sell/purchase land was made by couples was higher in the treatment group than in the control group (Table 6) but these results are statistically not significant.

The main obstacles to rural women's access to land and their ability to enhance productivity consist of institutional barriers to their social recognition (Rao 2011). Women ought to have effective and independent rights in land; effective rights are rights not just in law but also in practice, and independent rights are rights that women enjoy in their own capacity and independent of those enjoyed by men (Agarwal 2002).

b. *Involvement in agricultural activities*

Two-thirds of the women were engaged in land preparation, crop establishment, weeding, harvesting, and drying. In each of these activities, higher percentages of the women in the treatment group were involved than the women in the control group. Higher percentages of women in the treatment group than in the control group were involved in land preparation, crop establishment, spreading herbicide/pesticide, harvesting, and threshing and the result is statistically significant. In marketing and seed preservation, around 28% of the women were involved (Table 7). Marketing of farm produce and access to market information continue to be the domains of men, and this situation perpetuates women's disadvantageous position in the agricultural sector (Opio 2003).

Table 7. Proportion of women's involvement in agricultural activities.

Agricultural activities	Total (N = 317)	Control (N = 144)	Treatment (N = 173)
Land preparation**	62.8	55.6	68.8
Crop establishment (broadcasting or transplanting)**	64.0	56.9	69.9
Weeding	63.4	58.3	67.6
Spreading herbicide/pesticide**	46.4	38.9	52.6
Harvesting**	65.0	58.3	70.5
Drying	67.5	64.6	69.9
Threshing**	59.6	53.5	64.7
Marketing	28.7	29.2	28.3
Seed preservation	27.4	25.0	29.5

Significance level: ** $P < 0.05$.

Women spent more than 60% of their time compared with that of their husbands or other men in the households in land preparation, weeding, and harvesting and 70% of their time in drying. Women spent 58–59% of their time compared with that of their husbands or other men in the household in crop establishment, threshing, and seed preservation and spent 45–49% of their time in spreading and marketing (Table 8).

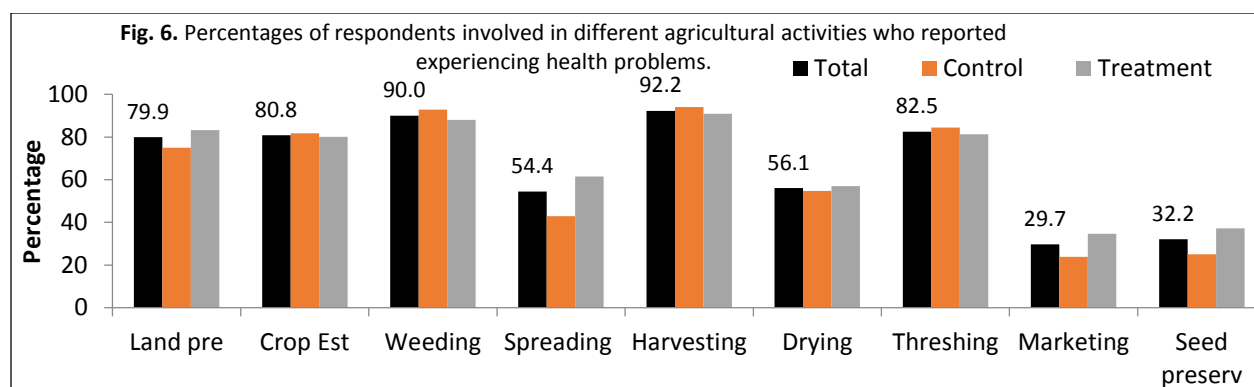
Table 8. Involvement in agricultural activities.

% of time women spent compared with their husband or other men in the household	Total		Control		Treatment		Difference (control – treatment)
	Avg % of time	Number	Avg % of time	Number	Avg % of time	Number	
Land preparation	61.1	199	63.7	80	59.4	119	4.3
Crop establishment (broadcasting or transplanting)**	59.0	203	63.8	82	55.7	121	8.0
Weeding	64.5	201	68.4	84	61.8	117	6.6
Spreading herbicide/pesticide	49.3	147	47.6	56	50.3	91	–2.7
Harvesting**	62.1	206	66.5	84	59.0	122	7.5
Drying	73.3	214	74.5	93	72.5	121	2.0
Threshing**	57.8	189	62.5	77	54.6	112	8.0
Marketing	45.7	91	44.7	42	46.6	49	–1.9
Seed preservation	58.0	87	57.4	36	58.4	51	–1.1

Significance level: ** $P < 0.05$.

The women in the control group spent more time than their husbands or other men in their households in different agricultural activities (except weeding, marketing, and seed preservation) than the women in the treatment group. Statistically significant results are found in crop establishment, harvesting, and threshing. On the other hand, the women in the treatment group were more involved in agricultural activities.

Most of those who were involved in agricultural activities (except marketing and seed preservation) claimed to have suffered from health problems. More than 90% of the women involved in weeding and harvesting reported health problems while around 80% of the women involved in land preparation, crop establishment, and threshing reported the same. Higher percentages of women in the control group reported health problems than the women in the treatment group but the result is not statistically significant (Fig. 6). The health problems that were reported were mainly fever, backache, and pain in different parts of the body.



Although large proportions of women suffered from health problems, not many sought treatment. Only a little over a third (37%) of the women involved in land preparation sought treatment. Some 27% among the women involved in crop establishment, 22% in weeding, 39% in spreading, 25% in harvesting, and 29% in drying did the same (Table 9). Higher percentages of the women in the treatment group sought treatment than the women in the control group but the result is not statistically significant.

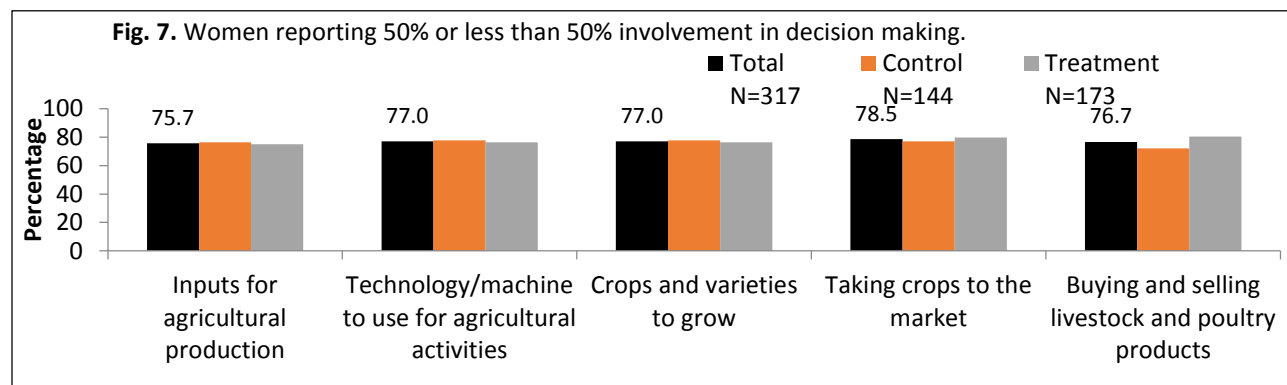
To summarize, higher percentages of women in the treatment group were involved in different agricultural activities than the women in the control group. However, the women in the control group spent higher percentages of their time in different activities. Moreover, although higher percentages of women in both groups reported experiencing health problems, more women in the treatment group sought treatment than women in the control group.

Table 9. Percentages of respondents involved in particular agricultural activities who sought medical treatment for health problems.

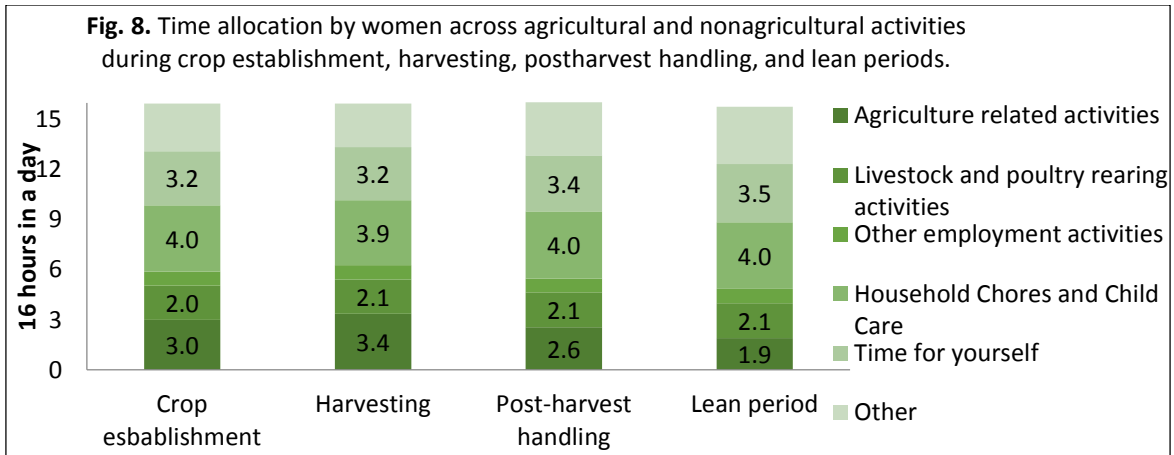
Agricultural activities	Total		Control		Treatment	
	Yes	Number	Yes	Number	Yes	Number
Land preparation	37.1	159	30.0	60	41.4	99
Crop establishment (broadcasting or transplanting)	26.8	164	20.9	67	30.9	97
Weeding	22.1	181	19.2	78	24.3	103
Spreading herbicide/pesticide	38.8	80	41.7	24	37.5	56
Harvesting	25.3	190	19.0	79	29.7	111
Drying	29.2	120	25.5	51	31.9	69
Threshing	22.4	156	16.9	65	26.4	91
Marketing	14.8	27	20.0	10	11.8	17
Seed preservation	28.6	28	11.1	9	36.8	19

c. Participation in decision making: Agriculture

Despite being involved in different agricultural activities, the women of Muzaffarpur District have limited influence on decisions relating to agricultural activities. Three-fourths reported that their involvement in such decisions was below 50% (Fig. 7). The result is statistically significant between the control and treatment group in crop establishment, harvesting, and threshing. Moreover, there was little desire among them for a change in their situation. Two-thirds claimed that they were happy with whatever decision-making power they had. They added that they wanted to become neither more involved nor less involved in the process. Some 10–15%, however, said that they would like to become more involved. A larger proportion of women in the treatment group than in the control group reported that they would like to become more involved in making decisions related to agricultural activities. But, the result is not statistically significant.



Women were asked about the time they allocate for different agricultural and nonagricultural activities in a 16-hour day during the various phases of crop production, and during lean periods. The activities considered were agriculture-related activities, livestock and poultry tending activities, other employment activities, household chores and child care, time for one's self, and others. The results showed that, during different phases of farming, that is, crop establishment, harvesting, and postharvest handling, and during lean periods, there was no significant result in time allocation across these activities. However, it was noted that, during crop establishment and harvesting, women spent slightly more time in agricultural activities than in lean periods. The results were the same irrespective of which group the women belonged to (Fig. 8).



Base: 317

d. Participation in decision making: Household expenditures

Forty-three percent of the respondents (44% in the control group and 42% in the treatment group) had 50% or less than 50% influence (equal say or less than that) in decisions related to household food expenditures while 47% (46% in the control group and 49% in the treatment group) had the same level of influence in decisions related to household nonfood expenditures. Fifty-nine percent (64% in the control group and 56% in the treatment group) were satisfied with the extent of influence they had on household food expenditures while 62% (69% in the control group and 55% in the treatment group) were satisfied with their influence over household nonfood expenditure decisions. A larger proportion of respondents in the treatment group (36%) wanted to become more involved in decision making over household food expenditures than in the control group (29%). The same trend could be seen in the level of desire of the respondents to obtain more influence over household nonfood expenditures (36% in the treatment group and 24% in the control group). However, these results are not statistically significant.

The decisions on how much to spend on what household expenditures were generally made either by the women themselves (50% of the respondents) or with their husbands. The women in the treatment group had higher decision-making power regarding the allocation across household expenditure items than those in the control group (but not statistically significant).

Excluding the cost for food, the monthly household expenditures on different items respectively amounted to approximately INR 1,000 or below. The average food expenditure was around INR 3,500. The total monthly expenditures for the households of the women of Muzaffarpur District were INR 6,000–7,000. The same cost structure prevailed in the households of the women in both the treatment and control group.

e. Participation in decision making: Household income

The sale of farm produce was one of the sources of income of the largest number of respondents (45%: 35% in the control group and 53% in the treatment group) in the previous year and the result is statistically significant. It was followed by nonagricultural wage (39%: 40% in the control group and 37% in the treatment group) and the sale of livestock produce (37%: 33% in the control group and 39% in the treatment group). Around one-third of the respondents reported remittances as one of their

Table 10. Sources of income of respondents' households in the previous year.

Source of income	Total (N = 317)	Control (N = 144)	Treatment (N = 173)
Sale of farm produce (crops)**	44.8	35.4	52.6
Sale of livestock produce (milk, meat)	36.6	33.3	39.3
Trading (shop/market/merchant, etc.)	12.6	16.0	9.8
Agricultural wage	24.9	26.4	23.7
Nonagricultural wage	38.5	40.3	37.0
Salary for services rendered	7.3	8.3	6.4
Remittances	34.1	39.6	29.5
Government transfers/subsidies	9.5	9.0	9.8
Others	8.2	7.6	8.7

Significance level: ** $P < 0.05$

sources of income while one-fourth pointed to agricultural wages. The rest of the income sources of the households of the women were trading, salary from services rendered, and government transfers/subsidies (Table 10). The respondents reported at least two sources of income for their households last year. The yearly household income was around INR 85,000 (INR 84,000 in the control group and INR 87,000 in the treatment group).

Around 66% of the women were involved in the selling of livestock produce (83% in the control group and 53% in the treatment group), either as the earners themselves or earning jointly with their husbands. The result is statistically significant. Slightly more than half (52%) were involved in earning wages from agricultural activities (66% in the control group and 39% in the treatment group). The result is statistically significant. The husbands were the main earners of nonagricultural wages, remittances, salaries from services provided, and trading gains. When it came to making decisions on spending income, the majority reported that they did so themselves or together with their husbands. A little over half (54%) decided on the disposition of income from the sale of farm produce along with their husbands while 27% decided by themselves. In the meantime, 49% decided with their husbands on the spending of the income from the sale of livestock produce and 37% decided on their own. Almost the same pattern could be seen for the spending of agricultural wages, with 48% deciding with their husbands and 32% deciding alone, while 62% decided with their husbands and 17% decided alone on the disposition of nonagricultural wages. The pattern for remittances was 44% deciding with their husbands and 37% deciding on their own. The respondents in the treatment group had more say than those in

the control group on the spending of income earned from trading, agricultural wages, services, and remittances. Overall, the respondents in the treatment group had higher decision-making power regarding the spending of household income than those in the control group. The results are not statistically significant.

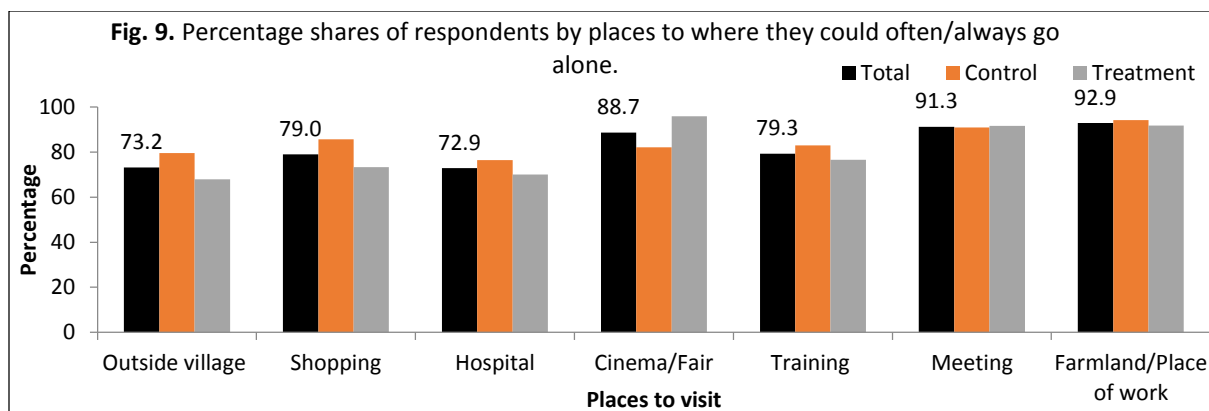
f. Freedom of mobility and access to information

Female autonomy can be measured through two lenses: first, through female mobility, which is the extent to which a woman can move around without the permission of her husband, and second, the extent to which women can participate in various household decision-making processes (Rahman and Rao 2004). In the study area, it was found that more than 60% of the

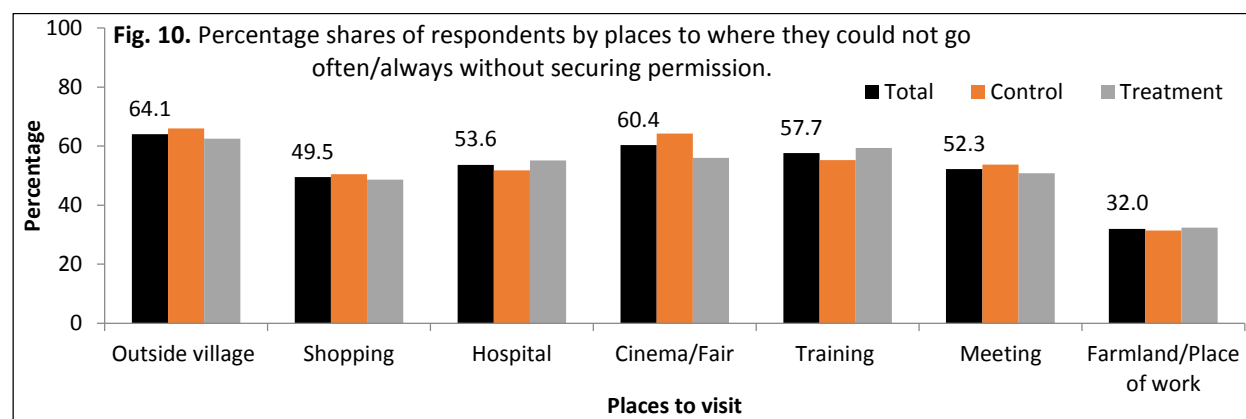
women respondents can visit places outside their village to visit friends/relatives, shop, visit hospitals/clinics/doctors, attend meetings, or go to farmland/places of work. A larger proportion of women in the treatment group had freedom of mobility	Table 11. Places visiting alone.	Total (N = 317)	Control (N = 144)	Treatment (N = 173)
	Outside village to visit			
	friends/relatives	72.9	71.5	74.0
	Shopping	63.1	63.2	63.0
	Hospital/clinic/doctor	60.6	59.0	61.8
	Cinema/fair	16.7	19.4	14.5
	Training from NGO/programs	35.0	32.6	37.0
	Attending meeting	76.0	84.0	69.4
	Farmland/place of work	62.1	59.7	64.2
	Others	2.5	3.5	1.7

compared with the women in the control group. When it comes to attending training or going to fairs or to the cinema, the freedom of mobility is low (Table 11).

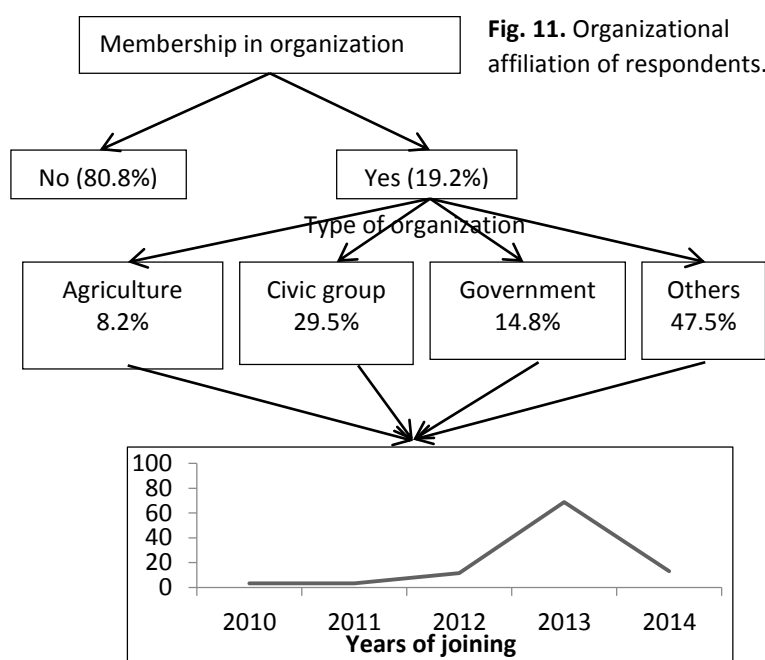
Figure 9 clearly depicts that, among the women who could visit places alone, the majority could do so always/often. More than 90% of the women could always/often attend meetings or go to farmland/places of work alone. Around 89% could always/often go to cinemas/fairs, 79% to training from NGOs/programs, or go shopping. Seventy-three percent could always/often visit places outside the village to visit friends/relatives or hospitals/clinics/doctors alone. Women in the control group could always/often visit places alone more than the women in the treatment group (except cinemas/fairs and meetings) (Fig. 9). However, the results are not statistically significant.



Most of the women did have to consult their husbands or other relatives in order for them to visit places alone. In the study area, it was found that permission had often/always to be secured by more than 64% of the women to visit places outside the village to visit friends/relatives, by 50% to go shopping, by 54% to visit hospitals/clinics/doctors, by 52% to attend meetings, and by 32% to farmland/places of work (Fig. 10).



A large majority of the respondents (82%) had not met an agricultural extension worker or livestock/fish worker in the 12 months before the survey was conducted while 19% held a membership in an organization. Out of those who were members of an organization, 8% were members of an agriculture-related group, 30% were associated with civic groups, 15% were with a government body, and 47% were with other organizations. They joined these organizations in 2012 and 2013 (Fig. 11). The organizations the respondents joined provided training on crop production, nutrition, and other such topics.



4e. Risk aversion among the respondents

Risk-taking behavior has been studied widely from different perspectives in psychology. In decision theory, it is considered as part of decision making (Arend et al 2003). It can be studied when the situation involves two or more alternatives and there is an inverse relation between the probability of obtaining a reward and its magnitude.

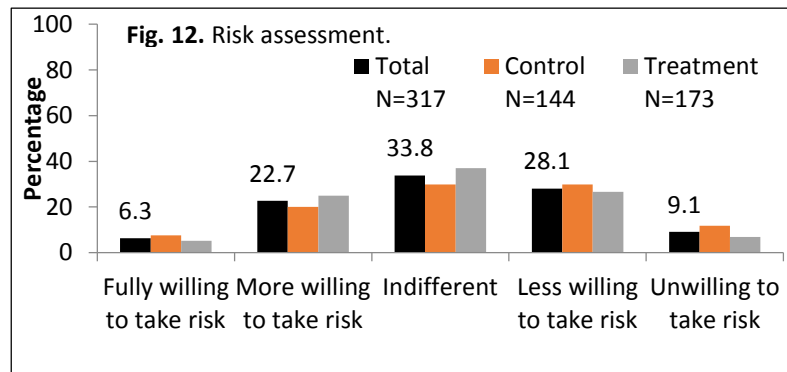
In the study, a game (lottery) was played with the respondents to assess their risk-taking behavior. In this game, the respondents were given five options and then required to select one option. The

Table 12. Game options.	Option chosen by the respondent
(1) Odd (INR 80).....Even (INR 80)	1
(2) Odd (INR 70).....Even (INR 100)	2
(3) Odd (INR 60).....Even (INR 120)	3
(4) Odd (INR 40).....Even (INR 150)	4
(5) Odd (INR 0).....Even (INR 200)	5

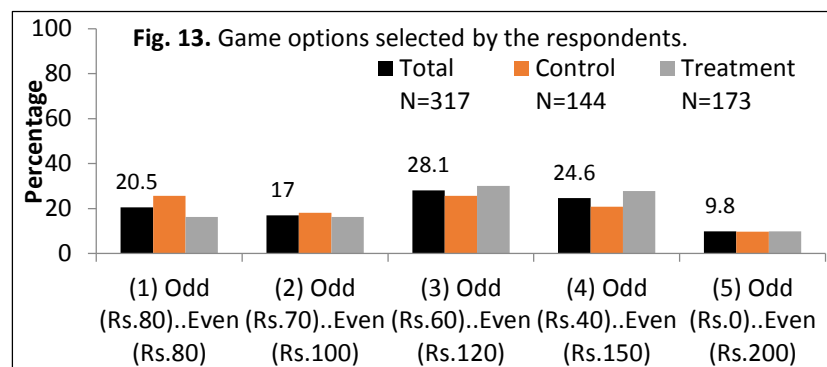
value of the lottery depended on the outcome of a dice, which has two possible outcomes (odd or even number on the dice), with equal probability of occurring. The respondents' payoff depended on the option they chose and the outcome of the lottery. For example, if the respondent chose Option 2 (Odd (INR 70).....Even (INR 100)), and the outcome of the throw of the dice was any "even" number, then she was entitled to obtain INR 100 (Table 12).

Before starting the game, the respondents were asked whether they were fully willing to take risk, more willing to take risk, indifferent, less willing to take risk, or unwilling to take risk. Thirty-four percent of the respondents were indifferent (undecided whether they were willing or unwilling to

take risk). Twenty-eight percent of the respondents, meanwhile, were less willing to take risk whereas 22% were more willing to take risk. The respondents claiming to be fully willing to take risk or unwilling to take risk were rather few (Fig. 12). The results are not statistically significant.



During the game, the largest proportion of respondents (28%) chose Option 3, followed by Option 4 (25%). A fifth (20%) chose Option 1, which was the least risky of the alternatives, while 17% selected Option 2. The rest of the respondents (10%) chose

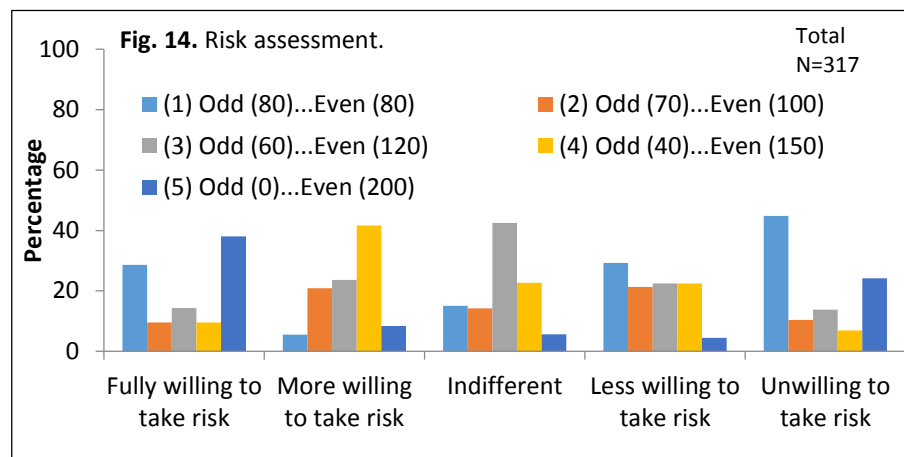


Option 5, which was the riskiest of all the alternatives (Fig. 13).

Option 1 was chosen by a fourth (26%) of the control group and by 16% of the treatment group. Option 5 was chosen by an equal proportion of respondents (around 10%) in both the control and treatment group. In the meantime, Option 4 was chosen by 28% of the treatment group and by 21% of the control group. Option 3 was chosen by 30% of the treatment group and by 26% of the control group. Finally, Option 2 was chosen by almost the same proportion of respondents between the two groups (18% of the control group and 16% of the treatment group) (Fig. 14). These results show that the women farmers who were members of the SHGs that received support from CSISA took more risks than those in SHGs that did not receive CSISA support. The results are not statistically significant.

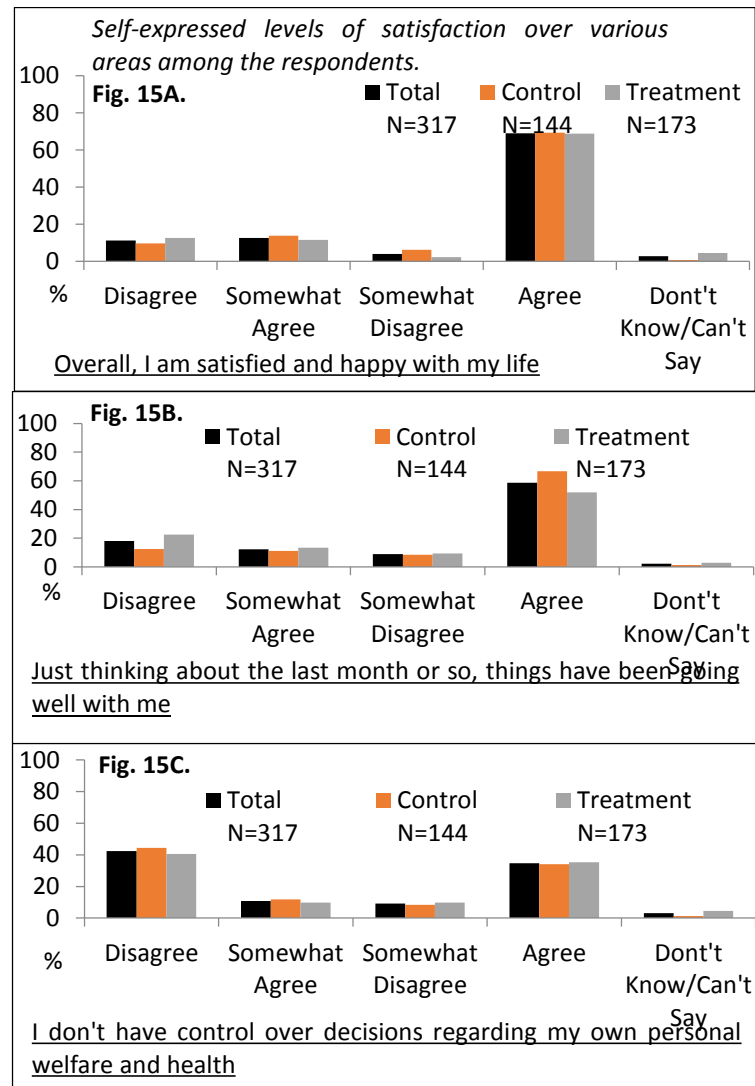
It would be interesting to see what percentages of women who claimed to be fully willing to take risk actually took risk while playing the game. An analysis of the data shows that, of the women who reported that they were fully willing to take risk, 38% actually took risk by selecting Option 5, the riskiest alternative (33% of the control group and 44% of the treatment group), while 29%

played safe by selecting Option 1, the safest alternative (33% control, 22% treatment). Options 2, 3, and 4 were selected by women who were more willing to take risk (21%, 24%, and 42%, respectively). Among the members of SHGs in the control group, 28%, 17%, and 45% chose Options 2, 3, and 4, respectively, while among those in the treatment group, the respective percentages were 16%, 28%, and 40%. Moreover, of the respondents in the treatment group who reported that they were more willing to take risk, 12% opted for Option 5 while only 4% did so among the members of the control group. In all, 8% of the respondents who claimed to be more willing to take risk chose Option 5. Among those women who were indifferent toward risk, 43% chose Option 3, the third-riskiest alternative (47% among control group and 40% among treatment group members). Of the women who reported that they were less willing to take risk, 30% selected Option 1 and around 20% chose Option 2, 3, or 4. Among the women in the control group who claimed to be less willing to take risk, 40%, 23%, 14%, and 16% chose Options 1, 2, 3, and 4, respectively. Among the women in the treatment group who made the same claim, 20%, 20%, 30%, and 28%, respectively, chose Options 1, 2, 3, and 4. Of the women who were unwilling to take risk, 45% selected Option 1 (47% of the control group and 42% of the treatment group) (Fig. 14).



4f. Perception of the quality of life

Perceptions on quality of life are quite subjective. First, the term “quality” is a broad and vague concept. The WHO defines “Quality of Life” as individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a wide-ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of their environment (WHO 1997). In line with this WHO definition, the study crafted three statements on which the respondents were asked to agree, disagree, or feel neutral about. These statements were (a) “Overall, I am satisfied and happy with my life”; (b) “Just thinking about the last month or so, things have been going well with me”; and (c) “I don’t have control over decisions regarding my own personal welfare and health” (Fig. 15A, B, C). The results are not statistically significant.



The results of the analysis of the responses show that the majority of the respondents were satisfied with their respective lives. The same was true regarding satisfaction over the course of their lives over the past few months. However, the respondents were ambivalent over whether they had control over decisions regarding their own personal welfare and health. Forty-two percent of them claimed that they did have such control while 35% said that they didn’t. When asked whether they would like to change anything in their lives, 58% of the respondents said “yes” (57% in the control group and 60% in the treatment group). To own a house, to own farms,

and to renovate the house were some of the changes that the respondents wanted in their lives. A sustainable income source and good education for children were also mentioned.

5. Summary

A SHG functions through its regular meetings, disseminates awareness, and works as an institution. The women reported that there had been a change in their status at the family and community level. The first issue examined in the report was whether women had access to land and land ownership. The women had access to land and a considerable number of them had land ownership. The decision to sell and/or purchase cultivable land was mainly made by the couples together or by other household members. The women in the treatment group had higher access to land than the women in the control group.

Another aspect of women's status examined was their involvement in agricultural activities and their decision-making power. Two-thirds of the women were engaged in land preparation, crop establishment, weeding, harvesting, and drying. A higher percentage of women in the treatment group than in the control group were involved in land preparation, crop establishment, spreading herbicide/pesticide, harvesting, and threshing and the result is statistically significant. Marketing of farm produce and access to market information continue to be a domain of men.

The women in the control group spent more time (compared with their husbands or other men in the household) in different agricultural activities (except weeding, marketing, and seed preservation) than the women in the treatment group. It can be seen that, though women in the treatment group were involved more in agricultural activities, the percentage of time spent in different agricultural activities compared with that of their husbands or other male members in the household was higher for the women in the control group than for the women in the treatment group. When it comes to the decision-making process, a majority of the women reported that their involvement was below 50% compared with that of their husbands. Hence, it can be concluded that, though women were involved in agricultural activities, decision-making power did not reside with them. However, most women reported that they were happy with whatever decision-making power they had.

Normally in a household, monthly expenditures are incurred on food, fuel, personal items, household items, transportation, education, medicine, etc. The decisions on these expenditures were generally made either by the respondents themselves or with their husbands.

Women's freedom of mobility was also examined. More than 60% of the women could visit places outside the village to visit friends/relatives, shop, visit a hospital/clinic/doctor, attend meetings, or go to farmland or a place of work. When it comes to attending training or going to

a fair/cinema, the freedom of mobility was low. The question arises as to whether women had freedom of mobility and, if they did, then how frequently did they visit places alone. Among the women who visited places alone, a majority of them could do so always or often. Most of the women consulted their husbands or other relatives to visit places alone.

Another aspect relevant to the status of women is their access to information. A majority of the respondents did not meet an agricultural extension worker or livestock/fish worker in the past 12 months. Around 90% of the respondents had never read a newspaper, did not listen to radio, and did not watch television. However, three-fourths of the respondents used mobile phones every day or a few times a week. A majority had access to information on farming and livestock. The main source for such information was an NGO/NGO outlet and private shop or suppliers.

The women were assessed through a game to understand to what extent they could take risk in their lives. Before starting the game, the respondents were asked whether they were fully willing to take risk, more willing to take risk, indifferent, less willing to take risk, or unwilling to take risk. The study reported that a majority of the respondents were indifferent (undecided whether they were willing or unwilling to take risk). Apart from this, the respondents were either less willing to take risk or more willing to take risk (which makes it difficult to conclude). The respondents reporting being fully willing to take risk or unwilling to take risk (the ends of the risk assessment spectrum) were rather few.

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The Cereal Systems Initiative for South Asia (CSISA) is a regional initiative to sustainably increase the productivity of cereal-based cropping systems, thus improving food security and farmers' livelihoods in Bangladesh, India and Nepal. CSISA works with public and private partners to support the widespread adoption of resource-conserving and climate-resilient farming technologies and practices. The initiative is led by the International Maize and Wheat Improvement Center (CIMMYT), implemented jointly with the International Food Policy Research Institute (IFPRI) and the International Rice Research Institute (IRRI), and is funded by USAID and the Bill & Melinda Gates Foundation.