

INCREASING WOMEN'S PARTICIPATION IN COMMUNITY BASED LIVELIHOODS INTERVENTION

LESSONS LEARNT FROM THE BIHAR RURAL LIVELIHOODS
PROJECT (BRLP)



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A Self Help Group (SHG) member engaged in Poultry Farming promoted by the Project JEEViKA

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EXECUTIVE SUMMARY

The Government of India has acknowledged the critical role of women in sustainable development and thus promotes community-driven livelihoods intervention that operates on the principle of a community (or women) taking control of the development process, resources and decision making authority. One of such programmes, under the purview of National Rural Livelihoods Mission (NRLM) is Bihar Rural Livelihoods Project (BRLP) or the Project JEEViKA (or the Project).

Implemented in the selected districts of Bihar, eastern region of India, the Project focuses on the rural poor that are primarily dependent on agriculture and wage employment. The JEEViKA model is such that any intervention is implemented through 'community-owned institutions', and thus the Project has utilized the institutional platform of 'women-based' community organisations to promote its livelihoods interventions in the villages. First, the Project focuses on forming women-based Self-Help Groups (SHGs) from the marginal families. Then the groups are federated at the village level to form the Village Organisations (VOs). The VO receives investments from the Project and, as an entity; it plays a vital role in implementing livelihoods intervention programmes in the village. Additionally, the Project has engaged Resource Persons to provide technical assistance to the SHG members who are participating in the interventions.

Our study attempted to understand i) the role of each player in implementing JEEViKA's livelihoods intervention, ii) how each player influences the success of the initiative, and iii) what factors influence women's decisions to participate in the livelihoods intervention. Findings indicate:

1. JEEViKA has been successful in mobilising women from marginal families into forming the SHGs and has designed a well-organised institutional structure. The Project has managed to build a strong relationship between different stakeholders within its institutional structure.
2. The Project has managed to provide extensive trainings on livelihoods intervention, particularly agriculture intervention to all stakeholders.
3. The participation of women in any livelihoods intervention was low. For example, only 27% of women had ever adopted System of Rice Intensification (SRI) technique. Likewise, less than 10% women had ever participated in other off-farm or non-farm intervention.
4. While the constraints to the adoption of innovations were lack of land, limited access to information, and inadequate incentives; women's decisions were also influenced by their cultural beliefs, perceived opportunity cost of the intervention and hand holding support they received from the Project.
5. The performance of the SHGs significantly influenced members' decision to participate. Likewise, the performance of the Village Organisation, and the Resource Persons influenced the effectiveness of the SHGs, which in turn, resulted in members' decision to adopt the technique. For example, higher proportion of those who were in the SHG leadership position or getting support from the VOs participated in the intervention. Likewise, higher proportion of those participants that were monitored by the Resource Persons continued using the service.

6. Resource Persons were paid based on the number of SHG women engaged in the intervention, thus, they were not strict about screening the beneficiaries based on their performance as SHG members.
7. The majority of VO leaders were not provided with the trainings on group management and financial management.

Based on our research findings, we highlight the importance of the following five factors for the long-term success of JEEViKA's livelihoods intervention.

1. Understanding how education and economic background of women, and cultural variations influence women's willingness to adopt the livelihoods intervention.
2. Following up with the SHG members about the interventions with the repetition and persistence of messages, mainly focusing on how these interventions could benefit women and their families.
3. Restricting Resource Persons roles to providing technical support to participants only.
4. Authorizing that VO leader be changed periodically to provide opportunities to all group members to develop leadership skills.
5. Providing robust financial and group management trainings to VO leaders.

BACKGROUND

INTRODUCTION TO BIHAR RURAL LIVELIHOODS PROJECT (BRLP)

Development experts have acknowledged that inequality in access to tools and resources between men and women manifests itself in lower agricultural productivity, food insecurity and reduced rural economic development. The Government of India has acknowledged the critical role of women in sustainable development and thus promotes community-driven livelihoods intervention designed to include women as decision-making bodies as well as the beneficiaries of the programme. One of such programmes, under the purview of National Rural Livelihoods Mission (NRLM) is Bihar Rural Livelihoods Project (BRLP) or the Project JEEViKA (or the Project).

Implemented in the select districts of Bihar, eastern region of India, the Project focuses on the marginal families that are primarily dependent on agriculture and wage employment. The Project functions with a well-defined tier-based institutional structure at the community level. First, the Project focuses on forming women-based Self-Help Groups (SHGs) from the marginal families. Once formed, the Project assists groups to facilitate self-saving. It is expected that through member savings, internal loaning and regular repayment, the groups become a self-sustaining organisation. Second, the groups are federated at the village level to form the second tier of the community organisations called Village Organisations (VOs). The VO receives investments from the Project and, as an entity; it plays a vital role in implementing livelihoods intervention programmes in the village. The VOs are then federated to form higher-level community organisations at the cluster and block levels. Additionally, the Project has engaged Village Resource Persons to provide technical assistance to the SHG members who are participating in the interventions.

In order to strengthen the community institution building process and its sustainability, the Project has developed a well-structured capacity building strategy to engage all stakeholders. SHGs and its federations are provided with trainings on group management aspects. Further higher-level trainings are provided to the VOs and Resource Persons. Once the Project identifies a specific livelihoods intervention in a particular area, women are provided with trainings on the techniques of the intervention as well.

In order to improve livelihoods outcomes, the Project has identified specific farm, off-farm and non-farm based livelihoods activities in 'select districts'. While farm intervention, particularly System of Rice Intensification (SRI), has been implemented in all 'select districts', non-farm and off-farm interventions have been implemented in smaller geographical clusters with specific community groups employed in them. For example, specific activity based clusters of producers have been developed in arts and craft, bee-keeping, Agarbatti (incense) rolling, goat rearing and backyard poultry. Additionally, SHG members are linked with Dairy Cooperative Societies (DCS) that provides better market prices and quality extension services to their members.

JEEViKA model is such that any livelihoods intervention is implemented through 'community-owned institutions', and thus the Project has utilized the institutional platform of 'women-based' community organisations to promote its livelihoods interventions in the villages.

RESEARCH OBJECTIVES AND DESIGN

The objectives of the study are to understand:

- i. How a community institutional organisation engages women as decision making bodies and as beneficiaries
- ii. How the performance of each stakeholder influences the success of the initiative
- iii. Factors that influence women's decisions to participate in the livelihoods intervention.

The study was conducted in six blocks of three districts of Bihar - Nalanda District (Rajgir and Noorsarai Blocks), Gaya District (Bodh Gaya and Dobhi Blocks) and Muzaffarpur District (Bochaha and Musahari Blocks). Within each district, we systematically identified two blocks that are considered "intensive" by the Project. The criteria for identification of these blocks was that the Project was introduced more than four years ago, and a full complement of NRLM component existed with trained and dedicated professional staff. From each intensive block, we randomly selected four villages, totaling 24 villages. It is to be noted that findings from the villages might not represent the state of the entire block or district. The fieldwork took place between January and May 2014.

The surveys and in-depth discussions were conducted with stakeholders at different levels as explained below.

Discussions with JEEViKA officials

We designed our research objectives based upon the discussions with JEEViKA officials, as well as, our understanding of how the research findings could add value to both implementers and policy makers. To this end, part of our discussion focused on understanding the specific area of the Project that required studying, and could be streamlined with our research findings. The

block level officials provided us a list of villages where livelihoods interventions have been implemented.

Interviewing Village Resource Persons

In each village we visited, all village-level Resource Persons that were available at the time of the survey were interviewed. In total, we interviewed 47 Resource Persons, out of which, 31 specialized on farm-based intervention, 9 on poultry farming, 4 on Agarbatti or incense making activity, and 3 on dairy intervention. The survey focused on understanding how these Resource Persons were engaged in the programme, how informed they were about their job responsibilities, their knowledge of the technicalities of the intervention, challenges they faced while working, and the kind of support they received from Village Organisations and the Project.

Interviewing the members of Village Organisations (VO)

In each village, four members of a VO were randomly selected for the interview. If a village had more than one VO, we interviewed an additional randomly selected four members of the second VO as well. In total, 131 VO members from 24 villages were interviewed. Our interviews focused on understanding the role of the VO in implementing the livelihoods intervention and how they worked with Resource Persons and SHG members.

Interviewing the members of Self Help Groups (SHGs)

In each village, we randomly selected and interviewed 25-26 SHG members, totaling, 613 SHG members. The survey focused on understanding members' participation in the livelihoods intervention. In particular, we were interested in understanding what factors influenced members' decisions to participate in the intervention as well as their reasons for not adopting the interventions, despite access.



A Village Resource Person using PICO projector to train SHG members

**RESEARCH OBSERVATIONS
AND FINDINGS**

PROFILE OF THE PROJECT BENEFICIARIES

Formation of Self Help Groups in villages

As per our discussion with the Block Managers, geographical stratification or social mappings of all villages were conducted to determine the inhabitations with large concentrations of the poor, followed by the mobilization of women from poor households. Data suggests a huge number of women being engaged in the Project's institutional structure in our study region. 41% of villages had 15 or less SHGs, 59% had more than 15 SHGs [16% villages had more than 30 SHGs]. On an average, each SHG had 10-12 women from marginal families. The majority (84%) had joined SHGs more than two years ago. While 80% identified JEEViKA as the one that formed their SHG, 12% reported another organisation such as PRADAN forming the group.

Amongst beneficiaries, 31% belonged to Scheduled Castes and 53% to Other Backward Castes. Data indicates all respondents were either landless or marginal farmers. The main source of household income for the majority of households was from unorganized labour markets (45%). Only 15% families reported their income coming from farming, 23% from enterprises, and the remaining from salaried jobs as highlighted in Table 1.

Table 1: Primary source of household income

FARMING	15%
GOVERNMENT JOBS	4%
PRIVATE COMPANY	10%
ENTERPRISES	23%
AGRICULTURAL LABOR	37%
NON-AGRICULTURAL LABOR	8%
REMITTANCES	1%
SOCIAL SECURITY PROGRAMME	2%

Only 50% of SHG members reported of having agricultural land. On an average, they owned 23 Kattha (1.15 Bigha or 0.38 acre) of land [median 10 Katha (0.5 Bigha or 0.17 acre)]. [Kattha and Bigha are local measures of land area in Bihar. 1 Bigha= 0.32 acre= 20 Kattha]. Only 48% reported of cultivating at least one crop in the previous season, amongst whom, 42% of farmers that cultivated crops opted for sharecropping.

VO members and their knowledge about their role and responsibilities

Once the SHGs are consolidated in a village and reach a reasonable level of maturity, they are federated at the village level called the Village Organisations (VOs). As per the Project, ideally each VO should represent 10-15 SHGs. The number of VOs in any village might vary, depending on the population of the poor families. We learnt that typically two to three members, mainly leaders of a SHG, become VO members. Almost all VO members (95%) whom we interviewed held a leadership role in their respective SHGs. These VO members were appointed by other SHG members. 51% VO leaders could read and write, and 42% could sign. Nevertheless, not all VO members were aware of all the functions as described by the Project as shown in Table 2.

Table 2: Proportion of VO leaders that were aware of the VO functions as listed by the Project

NETWORK WITH RESOURCE AGENCIES	58%
PLAN FOR INTERVENTION IN THE VILLAGE	57%
FACILITATE THE FORMATION OF SHGS	47%
REVIEW SHG PERFORMANCE	52%
SOLVE CONFLICTS OF SHG MEMBERS	68%
PROVIDE TECHNICAL ASSISTANCE TO SHG MEMBERS	71%
NETWORK WITH RESOURCE AGENCIES	58%

Not all knew about all the interventions as proposed by the Project. While 89% were aware of agricultural intervention, 53% dairy intervention, 52% food security intervention, surprisingly, many VO members were not aware of the SHG Bank Linkage

Programme (only 35% reported of knowing), even though, all knew about the provisions of loans to SHG members through Community Investment Fund (CIF). Very few VO members knew about skill development (1%) and social development (8%) interventions. 64% knew that they are responsible for monitoring the livelihoods intervention in the village, however, only 47% were aware of targeted and current number of beneficiaries in JEEViKA's livelihoods initiatives. All VO members reported of conducting Executive Committee Meeting every month and 88% reported of conducting General Body Meeting twice a year.

SHG meetings, savings and credit

The Project has focused on member based savings and credit rotation as the key activities of SHGs as it requires active participation and commitment of all members. The Project has established Community Investment Fund (CIF) that is to be released in a phased manner and the release of the fund depends on the efficiency of the SHGs and its federations. Additionally, the Project indicates that livelihoods interventions are to be provided to 'discipline' SHGs that are facilitating regular meetings, saving regularly, and repaying loans. In our study area, almost all women (95%) reported that their SHGs have regular meetings on a fortnightly basis (80%). Only 12% women reported of meeting every week, and 8% women reported of meeting on a monthly basis. All SHG members were saving on a regular basis, primarily on a weekly basis (95%). On an average, the reported minimum monthly savings amount was Rs. 33. 92% of SHG members reported that their groups had received loans. Surprisingly, not all women chose to take loans even though their groups received one. Only 64% women reported of getting loans from their groups in the previous year. Amongst those that did not receive loans, the majority (62%) reported that given the extreme poverty level of their households and erratic cash inflows, they did not want to

take the risk of taking a loan. These women feared that failure to repay a loan might affect their social status.

Members' dropouts and loan default

We further examined the level of member dropouts and loan default in our study area. First, we asked JEEViKA officials if their areas face any dropouts or loan defaults. Only 6 out of 15 JEEViKA Coordinators were concerned about the dropouts and loan defaults in their areas. Second, we raised this concern with the VO members. 53% of VO members reported women dropping out mainly due to their inability to attend regular meeting, migration and group conflicts as highlighted in Table 3.

83% of VO members reported of SHGs defaulting loans mainly due to lack of income (79%), and members thought the loan was a grant from the Project (17%), and thus refused to pay later. As reported by VO members, on an average, an amount of Rs. 58, 333 was being defaulted in the year 2012-13 in their villages.

Table 3: Reasons for members dropping out as reported by the VO leaders

INABILITY TO SAVE	6%
INABILITY TO ATTEND MEETINGS	39%
LOAN SIZE WERE NOT LARGE ENOUGH	10%
OLD AGE OR DEATH	1%
INABILITY TO REPAY LOAN	1%
GROUP CONFLICT	18%
MOVED TO ANOTHER GROUP	1%
MIGRATED	22%

Employment of Village Resource Persons

JEEViKA promotes the employment of Resource Persons who provide technical assistance to the beneficiaries. Typically, Village Organisations identify the requirement of the Resource Persons based on the nature of the intervention, and accordingly they are recruited. In our study, there were 47 Resource Persons (19 males and 28 females), and the majority belonged to the Other Backward Castes (65%). Almost all (46 out of 47) could read and write. 24% of them had completed higher secondary school, 52% high school, 17% middle school and 7% primary school. The main source of household income for Resource Persons was from farm activities (41%), followed by salaried employment (21%), and unorganized labour market (19%). The majority of Resource Persons (80%) reported to have agricultural land and the average landholding was 26 Kattha (1.32 Bigha or 0.44 acre), implying that Resource Persons were from marginal families.

Technically, the VOs are to monitor the Resource Persons, however, in our study area, only 10 Resource Persons perceived that they were working for the VOs. The rest reported that they were working for JEEViKA officials. The majority (87%) were working in one village at the time of survey.

We further examined if Resource Persons were aware of their job functions. We listed the key responsibilities from the Project's guidelines and asked if they perceive that to be their responsibilities. Not all perceived every task that the Project has listed to be their responsibilities as highlighted in Table 4.

While the Resource Persons were aware of multiple tasks that their jobs demanded, almost all reported of considering one task as important, and they primarily focused on that task. For example, those engaged in farm intervention reported of focusing on enrolling and training SHG members in agricultural intervention and supporting farmers that had adopted agricultural techniques

as their main task. Beyond this, the Resource Persons did not invest their time in other allotted responsibilities. We further examined if monetary incentives encouraged the Resource Persons to prioritize their work. Surprisingly, only 35% reported so. Irrespective to the monetary incentives, 65% gave priority to that work that could be practically handled. Only 22% reported that they prioritized their work based on audition.

Table 4: Proportion of Resource Persons that were aware of their roles as listed by the Project

DISSEMINATE VIDEOS	37%
MAINTAIN VO BOOKS OF RECORDS RELATED TO INTERVENTIONS	33%
WORK WITH SHG MEMBERS THAT HAVE ADOPTED THE INTERVENTION	77%
ATTEND ALL REQUIRED MODULAR TRAININGS	33%
PARTICIPATE IN VO AND SHG MEETINGS	40%
WORK WITH VO TO IDENTIFY BENEFICIARIES	23%
INFORM AND TRAIN SHGS ABOUT AGRICULTURAL TECHNIQUE	90%
CONTACT SHG MEMBER/ FARMERS	83%

The Project mandates that the Resource Persons meet certain performance standards as they are working at a grassroots level. VO members, who are responsible for monitoring the activities of Resource Persons, reported that Resource Persons are fired if they fail to meet performance standards. At the time of the survey, the Resource Persons were paid based on the number of SHG members they were working with, and the caste of the families. For example, they were paid more if they worked with ST/SC families compared to Other Backward Caste families. 72% complained about not being paid on time, nevertheless, the majority were positive about working for the Project as they perceived that they had developed new job skills after commencing their work, mainly community speaking skill (67%), management (63%) and mobilization of community (61%).

LINKAGES BETWEEN STAKEHOLDERS

The Village Organisations and Block Project Implementation Unit (BPIU)

The Project has established a Block Project Implementation Unit (BPIU), which typically has a Block Manager, supported by Area and Community Coordinators. With the support from a large cadre of community mobilisers, the unit works directly with the Village Organisations. While the unit provides training and capacity building support to the SHGs and its federations, it is also responsible to appraise the micro plans submitted by the VOs. Based on the micro plan submitted by the VOs and the performance of the community organisations, the BPIU allots fund, popularly called Community Investment Fund (CIF). In our study region, VOs were actively engaged in submitting the appraisal to the BPIU, and on an average, they submitted it twice in the previous year. The VO members acknowledged that they received continuous support from the Project (89%). The VO members suggested that since lack of infrastructure (66%) causes the biggest hurdle, BPIU should invest on enhancing the infrastructure.

The Village Organisations and Self Help Groups

The majority of SHG members knew about the functions of the VOs (84%), and reported of their groups receiving support from the VO, primarily in getting loans. Likewise, all VO leaders reported of working with SHGs. The majority of VO leaders (66%) reported that their VOs had formed new SHGs. 68% VO members reported of them handling SHG conflicts, which generally happened due to loan default (86%). 95% VO members reported of reviewing the performance of SHGs once in three months. The performance evaluation was done based on the repayment of loans (80%), participation in group meetings (66%) and cumulative SHG savings (47%). For each village, the VO is to set the targeted

number of beneficiaries for any fiscal year, and based on that, a micro plan is prepared and submitted to the JEEViKA office. While 82% reported that their VO keeps a record of SHGs that have adopted the intervention, not all were aware of targeted number of beneficiaries. Only 57% VO members knew the number of beneficiaries in farm intervention. Half of those that were aware of the targets reported that lack of infrastructure or resources, such as irrigation or land, play a major hurdle in reaching the targets.

The Village Organisations and Resource Persons

In our study area, the majority of VO members reported of them recruiting (90%) and monitoring (84%) the Resource Persons. The majority of VO members (89%) were aware of the responsibilities of the Resource Persons as well, and they claimed Resource Persons performing all the required tasks allotted to them effectively. Nonetheless, when it comes to the nature of the challenges that Resource Persons were facing, VO members did not seem to know well. For example, while 64% VO members reported Resource Persons were not facing any challenges, at the same time, 69% of Resource Persons reported of facing major hurdles, mainly, lack of interest of SHG members in livelihoods intervention (66%), lack of SHG discipline (25%), inadequate support from the VOs (19%), and inefficient coordination between the VOs and the SHGs (16%).

The Resource Persons and Self Help Groups

The Project highlights that SHG members that are disciplined should be targeted for the livelihoods intervention. However, only 7% Resource Persons agreed that only discipline SHG members should be targeted. 65% of SHG members engaged in farm intervention reported of Resource Persons visiting their farm, out of which only 20% reported of receiving agricultural inputs from the Resource Persons. Likewise, only 58% of those that had adopted Zero Budget Natural Farming reported of Resource

Persons' visits, out of which 35% reported of receiving agricultural inputs from them. When it comes to Poultry Intervention, almost all that had taken up the poultry farming reported of the visits by the Resource Persons.

The Resource Person and Jeevika Officials

Almost all Resource Persons (98%) reported of working with JEEViKA's Livelihoods Specialist, and 67% reported of receiving adequate support from the specialists. On an average, these Resource Persons met 4-5 times with the specialists in a three month period. Resource Persons are also encouraged to interact with other external stakeholders such as farmer' cooperatives and producers groups, Agriculture Technology Management Agency (ATMA), Krishi Vigyan Kendra (KVK), and Panchayat office. None of the Resource Persons reported of meeting with any other external stakeholders.

CAPACITY BUILDING TRAININGS

Trainings for the Self Help Groups

As per the Project, SHG meetings are used as a primary platform for trainings, particularly in relation to the livelihoods intervention. The majority of Resource Persons (83%) expressed that training modules for SHGs need to be improved, particularly on crops intensification, and vegetable cultivation. Improvements could happen by enhancing the sound quality of the videos, and by making the content more specific. Some Resource Persons reported that they were not provided with adequate materials that they could use to train SHG members, and they suggested that needed to be addressed immediately. Some suggested that the Project should provide bigger screen and stand to show videos.

Trainings for VO leaders

As per the Project, the VO leaders are to be trained about their roles and responsibilities, group and financial management skills, and techniques of livelihoods interventions. Surprisingly, only 43% VO members reported of attending trainings on their roles and responsibilities as leaders. We further asked if they had been trained about group management. Our surveyors explained group management training involves sessions on importance of regular meeting, leadership roles, conflict management, and importance of maintaining a group norm. Only 30% VO members reported of attending such trainings. Amongst those that attended, they were trained about the importance of group cohesiveness and maintaining meeting norms, nonetheless, very few remembered trainings on leadership and conflict management. Likewise, only 48% of VO leaders reported that they were trained about financial management, mainly covering topics on importance of group savings and group lending norms. Nevertheless, VOs were trained rigorously about the agricultural intervention (89%).

Trainings for Resource Persons

As Resource Persons play a vital role in educating and informing SHG members about the livelihoods intervention, it is important that they are provided with adequate trainings before they commence their work. The Resource Persons engaged in farm intervention reported of receiving trainings on system of rice intensification (87%) and vegetable cultivation (77%). Only half reported of being trained on other innovative farm technologies such as zero budget natural farming (53%), disease control (57%) and effective way to apply fertilizers (50%). Very few reported that they received trainings on vermi-composting (7%) and irrigation (7%). The Resource Persons engaged in Agarbatti intervention received trainings on micro-planning, strategies to mobilize women and procedures to order raw materials, and those engaged in dairy intervention were trained to examine "cream" in milk, micro-planning, and strategies to mobilize women to get them join Dairy Cooperative Society (DCS). Likewise, the Resource Persons engaged in poultry intervention were trained on the poultry management technique. Nobody reported about trainings on linking women to the markets. All Resource Persons unanimously suggested that trainings provided to them should be more detailed and related to day-to-day activities of villagers. 63% showed interest in learning about video production, innovative agricultural techniques and institutional management.

We further examined Resource Persons' level of understanding about the innovative farm techniques. Our test questions were designed based on the principles of System of Rice Intensification as reported by the Directorate of Rice Development, Bihar. Table 5 describes the questions that we asked, as well as the proportion of Resource Persons that replied correctly. Data indicates that the Resource Persons were aware of the basic principles of the SRI, however, they lacked technical knowledge about the Zero Budget Natural Farming.

Table 5: Test questions and proportion of Resource Persons that answered correctly

1. IN SRI, HOW ARE SEEDLINGS PLANTED?	SINGLE	93%
2. IN SCI METHOD, IS THE SPACING OF SEEDLINGS PLANTED IN THE SOIL THE SAME AS TRADITIONAL METHOD?	NO	90%
3. IS THERE ANY SPECIFIC SPACING ASSIGNED FOR EACH TYPE OF CROP?	YES	100%
4. WHAT ARE THE DEMERITS OF PLANTING SEEDLING VERY CLOSELY?	NO ENOUGH LIGHT	17%
	NO ENOUGH NUTRIENT	73%
	NO ADEQUATE WATER	6%
	NO PROPER GROWTH	90%
5. COW DUNG AND COW URINE ARE USED TO PREPARE THE NATURAL FERTILIZER. CAN BUFFALO URINE OR DUNG BE USED INSTEAD OF COWS?	NO	27%
6. WHAT KIND OF MANURE IS PREFERRED? ORGANIC, INORGANIC OR BOTH?	ORGANIC	73%
7. WHAT KIND OF IRRIGATION IS RECOMMENDED IN SCI METHOD- ALTERNATE WETTING/ DRYING OR CONTINUOUS FLOODING?	ALTERNATE WETTING/ DRYING	87%
8. WHAT ARE THE THREE INGREDIENTS THAT ARE USED TO PREPARE NATURAL FERTILIZERS SUCH AS JEEVAMITRA?	COW DUNG	90%
	COW URINE	87%
	OTHERS (GARLIC, NEEM)	37%
9. WHY ARE NATURAL FERTILIZERS USED?	KILL PESTS	20%
	INCREASE PRODUCTIVITY OF CROPS	70%
	LOW COSTS	20%
	SOIL PRODUCTIVITY	40%

PARTICIPATION IN LIVELIHOODS INTERVENTION

System of Rice Intensification (SRI)

The Project identified that enhancement of agriculture income can significantly improve food security, and thus introduced a well-known technique called the System of Rice Intensification (SRI). The technology is a low-cost method, as it relies on indigenous knowledge and better management of soil, water, and nutrients.

At the time of survey, the majority of SHG members (85%) were informed about the SRI technique, nonetheless, only 30% amongst those (27% in our total sample) had ever adopted the technique. The participants were motivated to adopt the technique mainly due to their expectation that the technique would result in higher yield of crops as highlighted in Table 6.

Table 6: Motivating factors to adopt the SRI

EASILY ACCESSIBLE AND APPLICABLE	10%
EVERYONE OPTED FOR It	8%
TECHNICAL SUPPORT FROM THE VRP	4%
CONVINCED THAT YIELD WOULD BE HIGHER THAN CONVENTIONAL	
METHOD	49%
SUBSIDIZED OR FREE INPUTS	24%
GRANT	5%

Not all that adopted the SRI continued to do so. 48% of those that had once adopted the technique discontinued. The reasons varied as highlighted in Table 7.

Amongst those SHG members who did not adopt despite being informed about the technique reported the lack of land (60%) as the main reason for not adopting the SRI as highlighted in Table 8. A few women reported that even if they understood and were willing to adopt the technique, their husbands were unwilling to do so. Some did not adopt as the technique looked expensive.

Table 7: Reasons for not continuing with the SRI

DID NOT RECEIVE FREE SEEDS	22%
YIELD WAS LOW	19%
PROBLEM OF LABOUR AVAILABILITY	5%
NON AVAILABILITY OF REQUIRED FARM EQUIPMENT	4%
LACK OF SUITABLE LAND FOR SRI	1%
LACK OF IRRIGATION FACILITY	16%
NON AVAILABILITY OF ORGANIC MANURES	5%
NON AVAILABILITY OF QUALITY INPUTS	5%
NON AVAILABILITY OF TECHNICAL KNOWLEDGE	6%

Table 8: Reasons for not adopting the SRI

NO LAND TO GROW CROPS	60%
HUSBAND WAS NOT INTERESTED	8%
NO FOLLOW UP SESSION	8%
TECHNIQUE LOOKED EXPENSIVE	10%

We asked VO leaders and Resource Persons regarding the factors hindering the take-up of the SRI. Many VO leaders voiced their concerns regarding the lack of adequate training, funds, and resources to implement the intervention. Likewise, Resource Persons reported of experiencing farmers dropping out mainly because of the lack of resources such as irrigation and labourers needed for the SRI. The Resource Persons suggested that to ensure more farmers adopt the technique, intense follow up and provisions of resources need to be provided by the Project.

Zero Budget Natural Farming

The Project has introduced Zero Budget Natural Farming (ZBNF) technique that involves the usage of locally available natural materials such as cow dung, cow urine, *neem* leaves, garlic etc. to control pests. This method is used to reduce the cost of cultivation without affecting the productivity as farmers use indigenous inputs made from crop residuals and other home grown material.

In our study area, 67% of SHG members were informed about this technique, nevertheless, only 12% of those that were informed (8% in our study sample) reported of adopting it. The main reasons for applying were availability of subsidized inputs (41%) and expectation that application of this technique would increase the crop productivity (40%). The majority that applied once, re-applied (71%). Amongst a small group of women that stopped applying reported that they used this technique to sell the natural fertilizers, but they were not able to sell the produce.

As highlighted in Table 9, the majority of women chose not to use the technique despite knowing as they did not have land for farming. Even amongst those with land, one in three did not have livestock. It is to be noted that cow dung and cow urine are key ingredients to prepare any natural organic fertilizers. Some were not open to adopt new technique to control pests, and some suggested that they were not followed up by the Resource Persons. A few women reported that they could not adopt it as their husbands were not interested in this technique.

Table 9: Reasons for not adopting ZBNF

HUSBANDS ARE NOT INTERESTED	7%
LACK OF LIVESTOCK FOR INGREDIENTS	32%
NO FOLLOW UP BY THE RESOURCE PERSONS	10%
NOT OPEN ABOUT NEW TECHNIQUE	17%
NO FARMING DUE TO LACK OF LAND	50%

Kitchen Garden

The Project has started the Kitchen Garden initiative so women could grow a variety of vegetables in their own premises. Block managers reported that in some cases, micro drip irrigation systems are being developed to water the Kitchen Garden. Those that have adopted the technique are provided with subsidized or free seeds as well.

We learnt that the Kitchen Garden initiative was not introduced across the region (except Noorsarai and Rajgir blocks in Nalanda district at the time of survey). Thus, only 33% of SHG women were aware of it. Nonetheless, amongst those that had heard about it, the adoption was very low as only 13% had adopted it (4% in our study area). Impressively, amongst those that adopted, 55% did not have any agricultural land. They adopted because they wanted to grow extra vegetables for their families, they were receiving subsidized or free inputs to grow vegetables, and they thought it was easily applicable in their homes.

Amongst those that were aware of the technique, yet, they did not adopt primarily because they did not have enough space to grow vegetables. Additionally, Resource Persons expressed that women's belief that the Kitchen Garden might require more of their time was hindering the take-up.

Poultry Farming

Block level officials reported that once SHG member makes the required payment, she is provided with 45 Day Old Chicks (DOCs) which she receives in three instalments. These DOCs are supplied to the mother unit, and after rearing for 21 days at the mother unit, the poultry is distributed to the beneficiaries.

In our study region, 78% of SHG women were aware of the intervention, nevertheless, only 8% of these women (6% in our study sample) had participated. The ones that adopted reported that long term profits (45%), loan provided by the Project for the purchase of DOCs (31%), and availability of technical assistance (28%) motivated them to invest in the intervention. At the time of survey, participants, on average, had received 25 chickens. 58% reported that they were able to sell chickens or eggs, mainly in the market or to neighbours. The rest consumed eggs at home. Only 31% perceived an increase in household income due to poultry farming as they were able to sell eggs or chickens in the market.

Few participants were planning to discontinue poultry farming as they were finding it difficult to manage poultry at home due to death of chickens in winter. The Poultry Resource Persons reported of participants dropping out, mainly due to inability to make profits, and death of chickens.

45% of women that did not adopt poultry farming, despite knowledge, reported they did not want to share their household space with chickens as it affected their social status. These women perceived chicken to be dirty. 35% reported of being interested and they had applied for the intervention, yet, at the time of survey, they were waiting for JEEViKA officials or Resource Persons to follow up with them. Only 9% reported of their interest, but found the intervention expensive.

Dairy Intervention

The Project has identified cattle rearing and dairying to be the second most common livelihoods activity in rural Bihar. For cattle rearing and dairying to be an income generating activity, the Project has integrated SHG members to the Dairy Cooperative Societies (DCS), a village level cooperative institution where members supply their surplus milk. DCS provides several facilities such as reasonable price of milk containing fat, fodder for cattle, vaccination and artificial insemination of livestock.

At the time of the survey, the intervention was not implemented in all the blocks. Thus, only 39% of women were informed about it. Amongst these women, 62% knew about the functions of the DCS. Nevertheless, despite knowing the benefits of the service, only 8% (3% in our sample) had participated. Impressively, 75% of those that participated reported of increase in household income after they became the member of the DCS. Profits (60%), easy access to the DCS (50%), peer pressure (20%), and access to loan to purchase livestock (20%) were key motivating factors that influenced the participation. A few reported that they had to discontinue because their livestock died and in some cases, the DCS was no longer operating in their villages.

Amongst those who were aware of the intervention, but did not join, reported that lack of livestock (43%) as the major reason for not joining. 21% reported that they were not contacted by the Dairy Resource Persons after the initial discussion about the initiative. 17% reported that since the DCS was not available within their villages, they chose not to participate. 11% reported of milk enough for household consumption only whereas 8% were found selling milk, but they chose not to sell to the DCS as they thought that they could make more profits selling milk to neighbours.

Agarbatti Intervention

The Project has implemented Agarbatti intervention, in which women are engaged in making incense sticks. In our study area, 59% of SHG women were aware of it. The knowledge was high in Bodh Gaya, Dobhi and Rajgir blocks, and low in Musahari block. Nevertheless, only 5% of those that knew about it (3% in our study sample) reported of participating in it. Interestingly, some women were engaged in Agarbatti enterprise, particularly in Dobhi block, however, they were in this business independently. For example, 27 women reported of being engaged in Agarbatti enterprise, amongst which, only 12 were engaged through the Project.

Data suggests low participation in the intervention was due to unavailability of the service, rather than lack of interest from women. For example, 52% women reported that they had been waiting for the intervention to start, however, there had been no follow ups regarding it. In fact, 25% of women that were aware of the intervention had registered their names and waiting for raw materials at the time of survey. 9% reported that they were not physically fit to do this business. 22% reported of not having enough time to get engaged in this intervention.

FACTORS INFLUENCING THE ADOPTION OF THE INTERVENTION

Performance of the SHG members VO leaders and Resource Persons

The importance of the tier-based institutional structure that the Project employs has been thoroughly discussed in the previous chapters. Thus, it is important to measure the influence of the efficacy of each stakeholder in the success of the livelihoods intervention. In order to understand the efficiency of each group, we considered specific variables (or factors) for each stakeholder to calculate their performances. To rate the SHG members we considered the following factors;

- Members' ownership of land
- Members' educational and literacy level
- Duration of the SHG membership.
- Members' leadership role in the SHGs.
- Average minimum saving of the group
- Dropouts of any SHG member
- Members defaulting loans as reported by the VO/ SHGs
- Members' access to loans
- Members receiving support from the VO

To calculate the performance (or rate) of the VO leaders, we considered the following factors;

- Average duration of the VO, as an entity
- VO leaders' knowledge about their responsibilities
- VO's engagement in farm intervention
- VO leaders' knowledge about farm intervention
- Trainings provided to the VO leaders
- Knowledge about the functions of the VRPs.
- SHG drop outs and members defaulting loans.
- VO members' interaction with the external stakeholders.

Additionally, we rated Resource Persons considering the following factors;

- Education and literacy level of the Resource Persons
- Resource Persons knowledge about their responsibilities
- Level of challenges faced by Resource Persons
- Level of trainings and capacity building support received by the Resource Persons
- Salary and incentives
- Technical knowledge about the intervention.

For each village, we calculated the proportion of each assigned variable (or factor), and accordingly, a score was given to that village by comparing the village proportion with the proportion of the same variable in all the villages together. The composition of the score was based on the nature and the importance of the variables. For example, data indicates that the ownership of land plays a greater role in a woman's readiness to opt for the farm intervention. Thus, if the proportion of the ownership of agricultural land in a particular village, let us say 'Village A', was higher than the overall proportion in the study sample, then the 'Village A' scored 10, and if not, it scored 5. Likewise, if the proportion of dropouts and defaults in the same 'Village A' was higher than the overall proportion, then it scored a negative score of -15. The final set of overall score of each group of stakeholders of a particular village was then linked with the participation rate of that village to understand the relationship between the performance of each stakeholder and women's participation in farm intervention.

As highlighted in Table 10, the statistically significant result ($p < 0.05$) indicates a significant relationship between the quality of the SHGs and the participation rate in any village. At the same time, data indicates no significant direct relationship between the performance of the Resource Persons as well as the VOs with the participation rate. What this finding explains is the effectiveness of the VO leaders or the Resource Persons, alone, is not enough to influence the adoption until and unless the SHG members are not efficient.

Table 10: Relationship between the effectiveness of the stakeholders and the adoption rate

	P-VALUE	R-SQUARED
PERFORMANCE OF SHG AND THE ADOPTION RATE	0.0073*	0.1391
PERFORMANCE OF VO AND THE ADOPTION RATE	0.45	0.03
PERFORMANCE OF RESOURCE PERSONS AND THE ADOPTION RATE	0.927	0.0005

Significance level: * when $p < 0.05$ and ** when $p < 0.01$

Factors influencing the decision to adopt

As the previous section indicates that the performance of the SHGs has a significant relationship with the participation rate, we further conducted a regression analysis to estimate which particular factor has the maximum effect on an individual's decision to adopt the technique. The dependent variable, *participation*, was whether an individual participated in any of the farm-related livelihoods intervention (System of Rice Intensification, Zero Budget Natural Farming, or Kitchen Garden). We considered five independent variables:

- a. Ownership of land
- b. Individual's leadership position in the group
- c. Individual getting support from the VO
- d. Individual's saving habits with the groups
- e. Individual's active participation with the group

Considering these variables, we tested how the participation rate changes when any one of the independent variables varied, while the other independent variables are held fixed.

Table 11: Statistical analysis of the factors that influence the decision

INDICATORS	COEFFICIENT
OWNERSHIP OF LAND	1.651**
LEADERSHIP POSITION	0.818*
SUPPORT FROM THE VO	0.716**
SAVING BEHAVIOR	0.099*
ATTENDANCE OF THE MEETING	1.312

Coefficients given in log-odds Significance level: * when $p < .05$ and ** when $p < .01$

The statistically significant result ($p < 0.01$) as shown in Table 11 highlights that owning agricultural land has the best odds at participating in the intervention. [After converting the coefficients, which are in log-odds, into odds, we found that an individual is 5.2 times more likely to participate in an intervention if he or she owns agricultural land]. Data indicates that amongst those that adopted the farm intervention, 47% of participants reported farm

activities as their primary source of income and 76% reported of having their own land for agriculture [15% of SRI farmers rented land, and 40% opted for sharecropping]. We further verified our data examining the profile of those 69% of respondents that had heard about SRI (74% in our study sample) but never adopted the technique. Amongst this group, only 23% reported farm activities as their key source of household income. The majority (59%) did not have any agricultural land, and the rest had an average land of 20 Kattha (1 Bigha or 0.33 Acre). Data clearly indicates those that did not adopt were either landless or smallholding families. Thus, it is safe to imply that ownership of land plays the key role in influencing farmers' decision to adopt the technique.

Data suggests that support from the VO and members' leadership positions in the group have a slight effect on an individual's decision to participate in the intervention. In our study region, 37% of those that had adopted SRI were SHG leaders. Regression analysis indicates that an individual who is in the SHG leadership position or getting more support from the VOs is more than twice as likely to participate in the intervention. This could also be because the individuals that are associated with the VOs are more likely to get adequate information about the intervention. On the other hand, the savings behavior, although significant at 5%, barely increases the chance of participating in the intervention if an individual increases their saving. Likewise, even though the data suggests SHG members' regular attendance in the meetings has positive effect on the participation rate, however, this result is not statistically significant.

Factors influencing women's decisions to continue the participation

Once the technique is adopted, it is equally important to understand whether or not the participants continue using the technique. As explained in our previous chapters, not all participants re-applied the farm intervention. For example, only 48% of those that had once adopted the SRI, reported of re-applying. Thus, we did a regression analysis to estimate which factor has the maximum effects on farmers' decisions to continue with the technique.

Many believe that if the productivity of the crop increases, the farmers would automatically continue with the technique. Although 64% of SRI farmers perceived an increase in the productivity of crops, it had no significant effect on the re-application of the technique as highlighted in Table 12. At the same time, though not statistically significant, getting the support from the VOs had some effects on individual's decision to re-apply the technique. However, the statistically significant result ($p < 0.01$) shows that the Resource Persons regular visits to farmers' plots greatly impacts an individual's decisions to re-apply. Data suggests that a SRI farmer who is frequently visited by the Resource Persons is three times more likely to re-apply the technique compared to those who are not visited.

Table 12: Statistical analysis of the factors that influence the decision to continue the intervention

INDICATORS	COEFFICIENT
SUPPORT FROM THE VO	0.662
PLOT VISITS BY THE RESOURCE PERSON	1.050**
INCREASE IN PRODUCTIVITY	-0.004

Coefficients given in log-odds. Significance level: * when $p < 0.05$ and ** when $p < 0.01$

One reason why Resource Person's visit has such an effect could be that a farmer who is guided and monitored by the Resource Person might be more knowledgeable about the technique, which in turn, encourages him to continue with the service. For example, we

examined the knowledge about SRI technique amongst those farmers that had adopted. We asked basic questions about the SRI technique such as its importance in spacing of seedlings, how the crop is planted, the importance of nursery beds, the demerits of planting seedlings incorrectly, and irrigation methods. Based on farmers' knowledge, we created a 'knowledge index' and categorized farmers into two groups - "low knowledge" and "high knowledge". In our sample, 56% were low knowledge, and 43% high knowledge. Amongst those who were never visited by Resource Persons, 67% had low knowledge. Amongst the "high knowledge" group, 74% were frequently visited by the Resource Persons. Additionally, data also suggests that farmers that were monitored by the Resource Persons perceived the increase in the productivity of crops. This could be because when the Resource Persons monitor, the technical procedures of the SRI are followed according to the guidelines. For example, 65% of SRI farmers reported that the Resource Persons visited their plots, and amongst this group of SRI farmers, 76% reported the increase in yield, compared to 44% of those that were not visited by the Resource Persons. Amongst those SRI farmers that were visited by the Resource Persons, 58% re-applied, compared to 31% that were not visited.

Overall, it is safe to imply that though the performance of VO leaders and the Resource Persons do not directly influence the initial participation rate, nevertheless, their support has effects on the effectiveness of the SHG members, which in turn, result in members' decision to adopt or continue with the technique.



Women farm labourers

RESEARCH CONCLUSION AND RECOMMENDATIONS

WHY PROMISING INTERVENTIONS FAIL TO IMPRESS WOMEN

The study concludes that despite opportunities and systematic community-driven handholding support from the government, women might still choose not to participate in economic development process. It is to be noted that findings from the villages might not represent the state of the entire block or district, but the challenges we have highlighted could be learning lessons for all.

The Project has been exceptionally successful in mobilising women from marginal families in its community structure. Half of randomly selected SHG women were from landless households, and amongst those that owned land, the average land size was not more than 0.5 acre. Additionally, the Project has managed to build a strong relationship between different stakeholders as well, and all stakeholders are provided with trainings about livelihoods intervention. Yet, despite being informed about the livelihoods intervention, the majority of women were not engaged.

One of Project's most promoted interventions for some years, System of Rice Intensification (SRI), was adopted only by 27% of women. Even amongst this, half had already discontinued the service. Many did not adopt due to lack of adequate land (60%). It raises a question if farm innovation alone is the right intervention, particularly when the majority of women were from either landless or near landless households.

The Project has acknowledged this concern. Thus, it promotes off-farm and non-farm interventions such as Poultry Farming, Agarbatti-making enterprise, etc. However, data implies, the participation has not been satisfactory. The reasons for not participating varied.

First, cultural barriers and taboos discouraged women to participate. For example, despite being affordable for many women, only 8% of women had taken up Poultry Farming. 43% of women reported they did not want to share their household space with chickens as it affects their caste-based social status.

Another constraint was lack of time. For example, the Project has started the Kitchen Garden initiative so women could grow a variety of vegetables in their own premises. To entice women, the Project provides free or subsidized seeds and other technical support. Yet, only 4% of women had adopted it, mainly because many perceived the technique would require extra time and energy, and it did not provide any immediate income.

At the same time, women perceived they could make immediate income from enterprise-based intervention; however, there were no active follow-ups. For example, 52% women reported that they had been waiting for the agarbatti-making enterprise to start, however, they had not heard about it from the Project. This clearly highlights the incongruity between what Project is offering to women and what women need.

Lastly, due to lack of control over household income, women found some low-cost interventions prohibitively expensive. While subsidized loan was available for the initial take-up, one in three women chose not to take loans as they feared it might affect their social status if they failed to repay.

We also found that lack of continuous handholding support influenced many women to discontinue the service. For example, 48% of women that had previously adopted the SRI technique stopped re-applying. What is interesting is 64% of women that had adopted this technique perceived an increase in the productivity of crops, yet, it had no significant effect on the re-application of the technique. Instead, data implies the role of Village Resource Persons (VRPs) in influencing the interest of women. Data suggests

that a participating woman who frequently receives handholding support from the Resource Persons is three times more likely to re-apply the technique.

Lastly, data indicates a woman who is in the SHG leadership position or receives support from the Village Organisations is more than twice as likely to participate in the intervention. However, most women hesitated to assume leadership position even if they were qualified due to the mistaken notion about their own capability.

Findings clearly indicate that provisions of well-designed interventions do not guarantee participation. While the lack of resources greatly influences women's participation, at the same time, women's decisions are influenced by their cultural beliefs, perceived opportunity cost of the intervention and handholding support they receive from the Project's stakeholders.

STUDY RECOMMENDATIONS

While our study finds that the ownership of land greatly influenced the decision to the adoption of farm innovation, at the same time, we also found women's decisions were influenced by their cultural beliefs, internal family dynamics and their established notions. Hence, given the large scale nature of public programmes targeting women that intend to reach millions of beneficiaries in India, there is a great need for rigorous and extensive policy research to understand if there is any mismatch between what service providers are offering to women and what women need or perceive about the programmes. Thus, further research on analysing how education and economic background of women, perception of self-worth, presence of an educated daughter in the house and cultural variations influence women's willingness to participate in economic development is needed.

Secondly, farm intervention itself is not sufficient as many were not engaged as cultivators due to lack of land. Thus, the Project's off-farm and non-farm interventions such as poultry farming, Agarbatti making enterprise and more need to be publicized rigorously as these interventions could provide stable work and income to women from landless and marginal families. In our study area, while many were not aware about these interventions, many interested women were waiting for the further information from the Project. Since these are demand-based interventions (they are implemented based on the micro-plan prepared by the VOs), the Project should invest on the repetition and persistence of messages, mainly focusing on how these interventions could benefit women and their families, particularly their children, to influence women's interest in such interventions.

Data suggests that the Village Resource Persons play a crucial role in influencing participants' decision to continue the service. We recommend that the Project invests on enhancing the quality of the

Resource Persons by providing more robust trainings, capacity building support and timely remuneration to encourage the performance. As the data suggests, the quality of the Resource Persons does not have any significant effect on the participation rate of the SHG members, however, Resource Persons' engagement with existing SRI farmers has a significant effect on farmers' decision to continue with the intervention, thus, we recommend that the Project does not allot too many responsibilities to the Resource Persons and restrict their roles to providing technical support to farmers only.

We recommend that the Project authorize that leaders be changed periodically to provide opportunities to all group members to develop leadership skills. From our discussions, we found that women, in general, approved of existing leaders continuing the position, and comfortable about no periodical rotation of leadership. However, if being in leadership position influences the decision to participate (as data suggests), then encouraging new members to become leaders is extremely important to enable equal and full participation of women.

Finally, in sustaining any livelihoods programmes, sustain ability of credit provisioning operation is highly essential. In our study area, loan default is reported to be a major problem by the VO leaders. Financial experts have argued that soft loans, combined with subsidies, have often faced defaults as beneficiaries see subsidized loans as grants. However, past experiences have implied that through a better monitoring and intervention of federation leaders and staffs and the provision of both positive and punitive incentives, groups have reduced loan default. We recommend that the VO leaders are provided with more robust financial literacy trainings to improve retention and reduce defaults. It is important because in our study sample, the majority of VO members had never attended trainings on group management and financial management.

Overall, we strongly believe that the livelihoods intervention programmes that are being promoted by the Project align with the needs of the rural women from marginal families in Bihar. Findings clearly indicate that provisions of well-designed interventions do not guarantee participation. While the lack of resources greatly influences women's participation, at the same time, women's decisions are influenced by their cultural beliefs, perceived opportunity cost of the intervention and handholding support they receive from the Project's stakeholders. The implementers must be aware of these factors that influence women's readiness for the programme. Failure to do so might not only affect the long-term success, but also, systematically exclude the less powerful women from participating in livelihood interventions.

REFERENCES

- 1 UN Women, In Focus.
The role of women in rural development, food production and poverty eradication
- 2 JEEVIKA, Bihar Rural Livelihoods Promotion Society,
State Rural Livelihoods Mission, Bihar. Annual Report 2012-13
- 3 Directorate of Rice Development, Bihar, Patna.
System of Rice Intensification (SRI)- Principles and Methods.

