

Stories of Most Significant Change from the Eastern Gangetic Plains

Conor Ashleigh



"This project makes women more happy, this technology saves on irrigation and labour so this is why they're happy."
- Female farmer, Nepal



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1 Introduction

The Eastern Gangetic Plains (EGP) of Bangladesh, India and Nepal is a global hotspot of rural poverty, home to 300 million people, and highly dependent on agriculture for food security and livelihoods. The EGP has the potential to become a major contributor to South Asian regional food security, but crop productivity is low and diversification is limited because of poorly developed markets, sparse agricultural knowledge and service networks, and inadequate development of available water resources and sustainable production practices. With high levels of outmigration being experienced, labor shortages are becoming more acute. These factors converge to produce highly vulnerability for smallholder farmers, rural communities and the environment; options are needed to sustainably improve food systems in the region (Jackson et al. 2018).

The Sustainable Development Investment Portfolio (SDIP) is an Australian Government initiative, coordinated by the Department of Foreign Affairs and Trade (DFAT). It aims to improve the integrated management of food, energy and water in South Asia, to facilitate economic growth and improve the livelihoods of the poor and vulnerable, particularly women and girls. The Australian Centre for International Agricultural Research (ACIAR) are partners in the program, and have funded the Sustainable and Resilient Farming Systems Intensification (SRFSI) project to improve the productivity,

livelihoods and resilience of smallholder farmers to climate variability by facilitating the adoption of gender-inclusive, productive, profitable and lower-risk farming systems.

The SRFSI project addressed two research questions: would farm management practices based on the principles of conservation agriculture (CA) and the efficient use of water resources provide a foundation for increasing smallholder crop productivity and resilience; and would institutional innovations that strengthen adaptive capacity and link farmers to markets and support services enable both women and men farmers to continue to innovate in the face of climate and economic change? The research targets rice-based systems in eight districts across the three countries of the EGP.

The farming systems improvements tested in SRFSI are based on Conservation Agriculture based Sustainable Intensification (CASI), which is a broader form of Conservation Agriculture that incorporates agronomic, socio economic and institutional aspects of food production, including more sustainable agroecosystem management, increased input use efficiency and increased biological and economic productivity. These are based on the CA principles of minimizing soil disturbance, ensuring soil cover and diversification through rotations – and include improved varieties, better irrigation practices and improved crop management techniques (Jackson et al., 2018).

Throughout the project, there have been many approaches used both understand local systems and monitor the impact of using of new technologies, including on-farm trials, surveys, focus group

discussions and stories of change. Results from these studies have shown that CASI practices improve productivity and profitability while reducing water, energy use and labour requirements in rice, wheat, maize and lentil systems in the EGP, and with flow on effects for households that include better education, health, and community confidence. This report features the stories of most significant change from the perspective of men and women farmers across the EGP, which complements previous findings using the Most Significant Change (MSC) technique. MSC is a qualitative and participatory form of monitoring and evaluation based on the collection and systematic selection of stories of reported changes. The technique was developed by Rick Davies in the mid-1990s to meet the challenges associated with monitoring and evaluating a complex participatory rural development program in Bangladesh. The purpose of collecting farmers MSC stories are to learn about their experience with the SRFSI project told through their own words.

4 participatory workshops delivered across 4 regions of the Eastern Gangetic Plains



65% votes from men
35% votes from women



More than 50 individual comments made by farmers discussing the results



About the Author

Conor Ashleigh is a visual storyteller and communications for development consultant.

For the past decade Conor has worked extensively throughout the Middle East, Africa, South Asia and the Pacific with a number of international development organisation and global research institutions.

Drawing on a background in community development combined with his strong technical skills as a visual storyteller, Conor has found a developed a unique and deeply participatory process for working with communities and communicating longitudinal impact from projects.

In addition to delivering this report and stories of most significant change for SDOP, Conor has also been engaged over the past few years to produce a series of films for the research program. The series of films produce include:

- [The nexus between food, energy and water](#)
- [Understanding the role of women in agriculture across Eastern Gangetic Plains](#)
- [How can markets work better for farmers?](#)
- [The West Bengal story](#)
- [Australian High Commissioner Julia Niblett meets Lucky Begum](#)



2 Methods

The MSC stories were collected through a series of participatory workshops with mixed groups of farmers in Nepal, Bangladesh, West Bengal and Bihar (India). The workshops were comprised of two farmer-led activities that used a participatory photo-voting activity to identify the MSC, and discussion to situate the MSC within the Sustainable Livelihoods Framework (SLF). The SLF is a conceptual approach used to understand the linkages between livelihood assets and activities and to identify livelihood strategies and the ways in which local people respond to shocks and stresses. A sustainable livelihoods approach to development focuses on the existing capital of communities through five major assets: natural, financial, physical, human, and social. For the purpose of this research, the SLF was used to locate farmers' stories of most significant change within the five major frames.

Communication for development specialist Conor Ashleigh facilitated the series of participatory workshops alongside local partners in four locations outlined in **Table 1**. In total, 274 people participated in the workshops, with 35% women (**Table 2**).

Table 1 Workshop locations

Workshop Dates and Locations		
Workshop 1	25 th February 2019	Bhokraha Village, Sunsari District, Nepal
Workshop 2	5 th March 2019	Mohonpur Village, Rangpur District, Bangladesh
Workshop 3	10 th March 2019	Hawragari Village, West Bengal, India
Workshop 4	15 th March 2019	Kathali Village, Purnea District, Bihar, India



Table 2 Total votes from photo voting exercise among farmers in Bangladesh, India and Nepal, results divided by gender.

Participants	Nepal	Bangladesh	Bihar	West Bengal	Total
Male	58	32	47	41	65%
Female	16	27	31	22	35%
Total	74	59	78	63	274

2.1 Participatory Photo Voting Activity

The participatory photo voting activity provided farmers a chance to communicate visually through a photo selection activity. During the workshop, farmers first had a facilitated discussion to reflect on the SRFSI project in their community, and then viewed a series of 24 images before thirdly being asked to vote on the image that most represents the benefit they've experienced from the project. In this activity, participants were given three rounds of votes for the pictures most significant to them.

The 24 images used in the activity were taken during an earlier trip by communications consultant Conor Ashleigh. They were chosen for their visual diversity however one limitation must be noted that during Conor's earlier trip he visited in the monsoon season and wasn't able to document all aspects of the SRFSI project. For example, one major piece of machinery introduced by the project that he didn't

have photos of working, were the multi cropper and zero-till machines.





2.2 Most Significant Change

The MSC method is a qualitative and participatory form of monitoring and evaluation based on the collection and systematic selection of stories of reported changes. The technique was developed by Rick Davies in the mid-1990s to meet the challenges associated with monitoring and evaluating a complex participatory rural development program in Bangladesh that had a variety of implementation forms and outcomes (Davies and Dart, 2003).

MSC is most commonly used by organizations within the development field and stories that emerge from participants and are typically fed upwards; “these dozens, if not hundreds, of stories are passed up the chain and winnowed down to the most significant as determined by each management layer until only one story is selected — a story that describes a real experience, reviewed, defended, and selected by the people charged with the success of the project or program” (Serrat, 2009, p.2).

Applying the MSC approach in a research context is significantly different to how it can be used in a development project in that a research project does not have upper layers of management making decisions about the single story of most significant change that will emerge. The purpose of collecting most significant change stories in this research project context was to learn about the broad spread of stories of impact from the SRFSI project.



2.3 Sustainable Livelihoods Framework

For the purpose of these workshops, the SLF was used to frame the stories that were being shared by the farmers during the participatory workshops. The SLF provides a people-centred and integrated

approach that supports groups to identify their most pressing constraints as well as benefit they have experienced (**Figure 1**).

The approach builds on people's strengths and is grounded in the recognition of everyone's inherent potential for his/her removal of constraints and realisation of abilities. According to Kollmair (2002, p.4) the framework emphasises the importance of sustainability; "a livelihood can be classified as sustainable, if it is resilient in the face of external shocks and stresses, if it is independent from external support, if it is able to maintain the long-term productivity of natural resources and if it does not undermine the livelihood options of others"

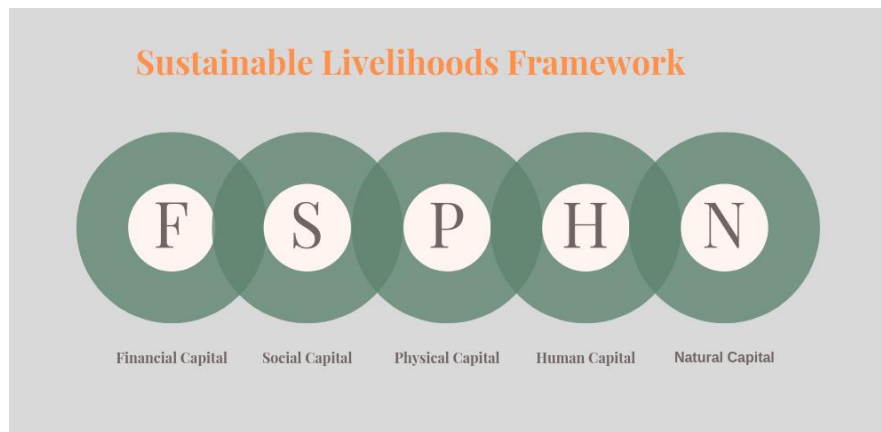


Figure 1 The Sustainable Livelihoods Framework's five frames (Ashleigh 2019).

The types of capital in the SLF are further explained below:

Financial Capital includes savings in any form, access to financial services, regular inflows of money, reductions in costs;

Social Capital includes trust within communities and the social resources that people draw on to make a living and lower the costs of working productively together. These relationships are often with more powerful people (vertical connections) or with others like themselves (horizontal connections), or membership of groups or organisations;

Physical Capital is the basic infrastructure that people need to make a living, as well as the tools and equipment that they use. For example, transport and communication systems, shelter, water and sanitation systems, and energy;

Human Capital includes the amount and quality of knowledge, individual sense of well-being and confidence and available labour in a household;

Natural Capital includes the natural resource stocks that people can draw on for their livelihoods, including land, forests, water and air.

3 Results

3.1 Participatory Photo Voting Results

See Tables 3-7 for the top votes from photo voting exercise among farmers in Bangladesh, India and Nepal, divided by gender.

3.1.1 Most popular individual photos

The following three pictures were individually the most popular across the four workshop locations.



Table 3 The most popular photo with explanations from farmers.


					
Participants	Nepal	Bangladesh	Bihar	West Bengal	Total
Male	5	8	2	4	18
Female	1	5	5	1	12
Total	6	13	7	5	30
Farmers explanations	<p><i>“There is development through cows, I get milk. I saw that there is development, and I liked it”</i> – Male farmer, Bangladesh</p>				
Farmers explanations	<p><i>“cow’s have multi benefit to us. Initially milk which is a prime source of nutrition for the family members and when family members are healthy they can do more work in the fields. Cows are also a source of organic manure which we can use for fertilizer on the soil as well.”</i> - Female farmer, West Bengal</p>				
Farmers explanations	<p><i>“cows they give us a lot of options. We can get more money from selling milk, we can also use the cow dung for fertilizer and fuel when cooking.”</i> – Female farmer, Bihar</p>				
Farmers explanations	<p><i>“cattle farming is very important for us”</i> – Male farmer, Nepal</p>				

Table 4 The second most popular photo with explanations from farmers.


					
Participants	Nepal	Bangladesh	Bihar	West Bengal	Total
Male	8	2	1	5	16
Female	2	2	1	6	11
Total	10	4	2	11	27
Farmers explanations	<i>“this is a very nice technology only in the last two years so it’s not been that popular and currently isn’t as widely used, so although it’s a promising technology that can benefit farmers it needs to be more widely used to reach its full potential.” – Male farmer, Bihar</i>				
Farmers explanations	<i>“this rice transplanter is very important for us because if a man is not at home a female can do these activities. Also these machines save labour for transplanting as well.” – Male farmer, Nepal</i>				
Farmers explanations	<i>“rice productivity has increased a little. In the past I used to have to go to the fields to work doing manual rice transplanting but now I don’t need to go. Before I would work as a labourer but now through my hand I am generating income by growing and selling the seedlings. By earning my own income I also have my own freedom, previously I couldn’t purchase what I like for the household from my husbands income. Then I was working as a labourer but then also doing a lot of work in my house as well and for this I didn’t have a choice. But now I can spend the money on myself and buy some little thing or I can spend it on my children for example give good tiffen and education to my children.” – Female farmer, West Bengal</i>				

Table 5 The third popular photo with explanations from farmers.



Participants	Nepal	Bangladesh	Bihar	West Bengal	Total
Male	5	3	3	7	18
Female	2	0	1	2	5
Total	7	3	4	9	23
Farmers explanations	<p><i>“as rice is the main staple food and everyone wants good rice yield. People in Bihar and Rajasthan they can’t survive on roti. Now through using ZT for rice, wheat, maize people have come to see what we’re doing. Yield has increased a little but the major important thing is that input and farming costs are very much lower.”</i></p> <p>– Samaru Das, West Bengal</p>				
Farmers explanations	<p><i>“because there is less labour the machine helps them to plant seedlings in a time efficient way and also saves the cost of labour.”</i> – Nutan Devi, Bihar</p>				
Farmers explanations	<p><i>“Before we used to sow by hand. Now we use machine. It is beneficial. It is beneficial for lot of people. For little land it is beneficial. Now consider that the machine has been used, less money is expended, that is why it is beneficial to us. This is why we have given vote for this one.”</i> – Male farmer, Bangladesh</p>				

Key highlights of most popular photos

Most popular – The photo is not directly related to the project however it highlights the importance of mixed farming to smallholder farmers who participated in SRFSI project and the workshops.

Second Most popular – Among project participants the role of women in farming is important, as is women engaging with the CASI technologies. A key aim of SRFSI was to increase the participation of



women in decision making about their farm as well as enable new employment opportunities for women.

Third Most popular – This photo highlights a young machinery operator, one of the new employment opportunities created by SRFSI in communities across the Eastern Gangetic Plains. Machinery operators play a crucial role in using CASI technology on farmers land as well as promoting the machinery to other farmers in the area, especially for young men.



3.1.2 Photo voting by gender

Below are the top five most popular photos by gender and as percentage of total votes by gender.

Table 6 The most popular photos by gender

Rank	Male	No. of votes (%)	Female	No. of votes (%)
1		18 (10%)		12 (13%)
2		18 (10%)		11 (11%)

3



16 (9%)



8 (8%)

4



16 (9%)



6 (6%)

5



14 (8%)



6 (6%)




The results of the top photos by gender highlight a number of similarities and differences in gender voting patterns. Key findings include:

- Both groups had voted for photos where they see their own gender both represented undertaking CASI-related activities.
- The photo of the female farmer with the cow was the most voted for photo for women and equal first for men.
- 40% of pictures feature CASI technology.

3.1.3 Photo voting by location

Below are the top three most popular photos per location.

Table 7 The most popular photos by location.

Rank	Bangladesh	Bihar	Nepal	West Bengal
1				
2				
3				

The results of the top photos by location highlight a range of different patterns. Key findings include:

- Bihar's most popular photo is one of a mixed group of men and women farmers sitting together for a meeting.
- West Bengal's most popular photo is a field of rice.
- 58% of pictures feature just women.
- 40% of pictures feature CASI technology.

3.1.4 Findings

The photo voting exercise across the four locations suggests a number of things of interest for the SRFSI project including:

- CASI technology has been effectively disseminated to mixed groups of farmers and they visually identify strongly with the machines.
- The role of women has been recognized as important across all locations and by both men and women farmers.
- Cattle play key roles in the livelihoods of farming communities across the four locations of SRFSI, offering an option for diversification of the system.

3.2 Most Significant Change related to Sustainable Livelihoods Framework

The most significant change workshops were run across the four locations of Bangladesh, Nepal and West Bengal and Bihar in India.

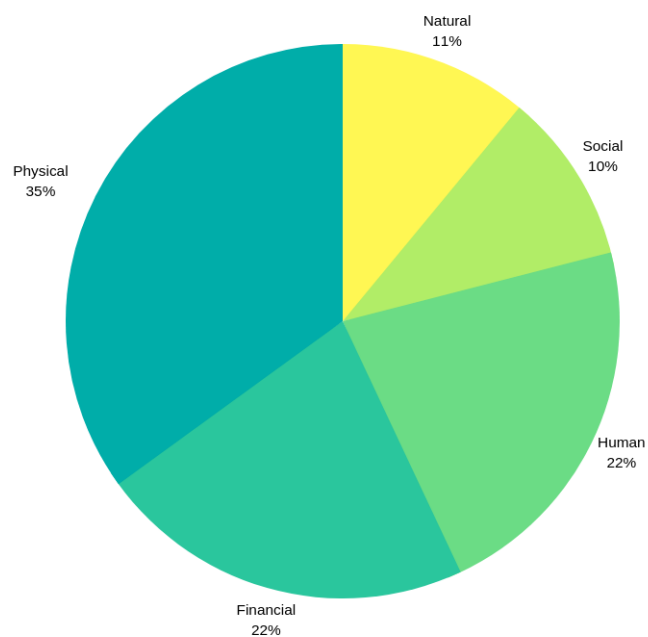


Figure 2 The most significant change stories framed using the sustainable livelihoods framework.

Table 8 The most important capital by location.

Frames	Bihar	Nepal	Bangladesh	West Bengal	Stories Total by Frame
Natural	4	2	1	0	7 (11%)
Social	0	2	2	2	6 (10%)
Human	1	4	3	6	14 (22%)
Financial	6	2	2	4	14 (22%)
Physical	7	5	3	7	22 (35%)
Total	18	15	11	19	63

3.3 Most Significant Change Case Studies

3.3.1 Rajkumari Mehta: Human and social capital impacts in Nepal

Rajkumari Mehta's like many farmers in Bhokhaha Village is a diversified farmer;

"I do vegetables farming, Maize, wheat, gourds, beans, pumpkins and all sort of vegetables. I have buffaloes and goats."



Rajkumari is an outgoing farmer who is confident to share the challenges women face in her community,

"women are paid less than the men get. Males are valued much but females are considered less valuable. The females earn the money and it is spent by males."

As part of the SRFSI project, Rajkumari and other women in the village learnt themselves about the CASI practices and technologies

"well, one gentleman from Tarahara came over here and trained us. We also went to Bhairahawa and many other places and got chance to see them. I went to Tarahara to see machine and trusted it by seeing everything it does and the farming it is used for. I learnt that it saves our resources and money, it is then I decided to adopt it. I learned it by seeing it in different places."



Since adopting the CASI practices, the benefits to Rajkumari are clear

"we used to adopt traditional tilling before which required us to plough the field for three times. It would take 8 days to prepare the field. But now we can use it immediately after harvesting paddy. We need to use herbicides and planting the crops can be done just within 2/3 days. It saves our time. Also now it drops both fertilizers and seeds together and saves time. It has also saved time for irrigation and water. It has saved our time. It has made our life easier without any difficulties. Zero tillage has made our life easier."

Looking to the future Rajkumari would like to keep learning new skills, *"If provided, I would like to learn driving tractor, it would help me a lot."* She also hopes that female farmers are able to have greater control over the income they earn, *"If we earn income, it is useless if it is not mobilized. The more we mobilize it, the more benefit we can make. It is useless if locked in the box at home."*



3.3.2 Babul Sardar: Physical and financial capital impacts in Bangladesh

Babul Sardar lives with his extended family in Mohonpur village of rural Bangladesh. Babul farms leased land that he hires on four-year leases. When SRFISI local partner RDRS began working in the community and introducing the CASI farming practices and technologies, Bablu Sardar became eager to get involved,

"through RDRS I came to learn about this (CASI), we used to have meetings every month and my interest came as I saw that there aren't many costs involved in the new farming (methods)."



When Babul Sardar had to take out a new contract on the land he leases, he was confident he would be more productive using the CASI technology and practices,



"When I came into the new contract we did it like that and since 2014 I have been using zero tillage, It has been 5 years until now."

As a farmer familiar with CASI practices over a number of years the physical benefits are quite clear

"Before sowing, we give (cow dung) fertilizer, other fertilizers, and then we sow it. Now there is no cost involved in labour. For example, all the stubble left in the land, there is no need for labour to remove them manually."

Another physical benefit he has noticed is through the savings of water

"Little water is needed now for this work and through this our expenditures are less."



The most evident advantage of using CASI is in the yields,

"we used to harvest and we would get 15 -20 sacks of maize, and now after doing this (new) method, we get 30 sacks of maize. From 25 to 30 sacks. So we are getting more benefit. Our crop yield is good. We don't have any loss."

Babul hopes to use this extra income he is now earning to provide a bright future for his children

"I have three daughters, one of them have cleared her inter, and another one has just appeared for her matriculation exam and the other one is studying in class 5. Yes, there is an investment being made for their education."

3.3.3 Samaru Das: Natural and social capital impacts in West Bengal

Samaru Das' farmland lies opposite his family home where he lives with his wife and two sons. He remembers the difficulty he has faced with his farming in the past

"before the project (SRFSI), I used to plough with cow, then we had shortage of money, I used to work on the farm, simultaneously had to also work for other people. Our bodies were subjected to a lot of pain. We grew up with a lot of sadness."

When the SRFSI project began in 2015 it initiated working in a number of districts in West Bengal including Cooch Behar District where Samaru's lives in Hawragari village. Through the project, local service provider Satmile Satish Club played a key role in linking with local agri-input shops and custom hiring centers who themselves had significant reach into the local farming communities in Hawragari village, local custom hiring centre operator Asghar Ali was responsible for introducing farmers including Samaru Das to CASI technologies and practices.

"Ashgar bhai told me, 'hey Samaru, come for a little bit, visit us in the office, whenever Asghar bhai calls me, I go, no matter how much work I have, I leave my work and go. After time, I went for meetings held at Satmile Satish Club."



Samaru become one of the early CASI adopters in his community and soon other farmers started to notice,



"for spreading information regarding these new farming methods, after seeing my farming, my neighbour did it, then near Sarisa (club) someone else did, then in Kadamtala Village they farmed forty five bighas of mustard, after seeing me. When people who live in the other village pass through this side, they see my farm, and realise that it is possible. Everyone has gotten confidence that it is possible to farm like this."

The SRFISI project has emphasised a collaborative approach between key institutions, who in West Bengal include local agricultural university UBKV, West Bengal Department of Agriculture and various service centres like Satmile Satish Club. If Samaru has challenges with his farming, he has a range of people he can call on for support,

"I have got (Satmile) Satish Club's help, also I have got help from Agricultural Department officer, and also Asghar bhai's help as well."

Since adopting the CASI practices and technologies, Samaru has managed to save significantly on all his input costs including, labour, water and other farming inputs

"earlier, the amount of money that we had to spend, we now only spend one-quarter of that amount and three quarters come to our home."

Samaru has also noticed benefits on his land

"For the last two years, I have been cutting the roots and leaving them intact, and the soil's productivity is now much better. If the soil is good, less fertilizer is required, and the crop is better. This is the benefit of better soil."

For Samaru the greatest benefit since adopting the CASI practices and technologies is his two son's newfound interest in farming.



"My sons used to wonder why I used to go for these meetings. They used to tell me 'what is the use of going to these meetings, it's a waste of my time.' Now they say, 'baba go wherever you go, our crops are growing well,' they say this now."

Samaru's family now together sees a productive and sustainable future in farming and CASI has played an important role in this transformation.

3.3.4 Nutan Devi: Financial and physical capital impacts in Bihar

Nutan Devi lives in the small village of Dogachi in the Purnea district of the Indian state of Bihar. She and her husband Yogendra Mandal were some of the earliest adopters of the conservation agriculture-based sustainable intensification practices introduced by the SRFSI project. Like most farmers across the Eastern Gangetic Plains, the couple grows rice during the monsoon and wheat or maize during other major seasons.

"As crops, we grow wheat, paddy and maize, because of this we depend on farming."

Female farmers in Bihar have often had limited roles in making decisions about their farming. Among most rural communities there are strong gender roles and much of women's work is invisible

"For example, when we get up in the morning the first thing we do is pick up the broom. We clean and mop and do the dishes. Those who have cattle collect the cow dung and bathe the cow. Then she goes and throws away all the waste she has collected. Then she takes the child to the toilet and washes them. If the child is small, and has wet the bed, she washes the bedding. She feeds the child milk or gives him breakfast, perhaps biscuits. Then the husband comes and he wants breakfast, so she has to do everything fast. There is so much work that has happened before BAM that is not seen."



In Bihar, the SRFISI project partners with the Bihar Agriculture University and local NGO Jeevika. Over the past decade, Jeevika has been working throughout the state of Bihar to establish active women's self-help groups where financial literacy is key skills women learn and then they're able to operate as small microfinance organisations lending money to members with affordable interest rates and repayment options.

In 2015, the SRFISI project first began working in Dogachi village, Nutan and Yogendra were the first farmers in the community to volunteer their land for the CASI trials. After the initial yields they received from their small plot where the zero-till machine was used, the couple decided to increase the amount of land for CASI farming,

"the second year we planted on one acre land- i.e. two and half acres and then Last year we did sow in eight acres and this year we put in twelve acres."



While the yields using CASI practices had increased the savings in production were more impressive

"It is better because first of all water is preserved, we don't need as much water even if it is sown in dry conditions. Labor is not needed as much and we save five to seven thousand rupees per acre, the zero tiller is excellent."

While the savings have impressed Nutan Devi she has also noticed physical improvements in the quality of the soil.

"this zero till preserves the minerals and growing strength of the soil and it does not need to be tilled so much."

CASI practices that improved the productivity of farms also lead to increased yields and significant savings during production. In addition to these benefits at the individual farm level, Jeevika's work with the women's self-help groups has considerably contributed to increasing confidence of women and their ability to play more active roles on farms and also with finances.

"yes, earlier, we could not take decisions but now we do. We can even make our own decisions in the family. Say if there is a decision to be taken about farming then I can sit with my husband and discuss what must be done and what will give us more yield, or what will reduce our expenses. All these we decide ourselves now."



4 Most Significant Change Film

Click below to watch the Most Significant Change Film.



5 Discussion

Agricultural research for development projects set out to answer their original technical research questions while also wanting evidence of impact or benefit derived by the participating farmers and communities, as well as proof of the value of an investment. With this in mind, the stories shared in this report coupled with the broader workshop results suggest a number of emerging themes and outcomes.

The stories of most significant change strongly demonstrate that there has been a range of benefits experienced by farmers from across the SRFSl project sites in the three countries. At the farmers' level these impacts are reflected through the benefits they have noted since transitioning to conservation agriculture based sustainable intensification.

Below are a few key areas that emerged from the results of the workshops and the most significant change stories.



CASI technology is crucial

The results revealed that CASI technology has been effectively disseminated to mixed groups of farmers and this is evidenced through the fact that farmers visually identify strongly with the photographs of CASI machines. In the photo voting, 40% of photos featured CASI technology, which highlights the strong connections farmers have developed with the machinery and their association with improved farming outcomes when using CASI practices and machinery.

Throughout the Most Significant Change activity, stories that highlighted a physical impact represented 35% of all stories shared. While there are other physical benefits that have emerged from

SRFSI, stories about the technology itself were shared frequently. Successful adoption of CASI technologies through the SRFSI project also ensures a future increased demand for CASI technology that in turn ensures greater markets for agro-machinery companies as well as local service providers and custom hiring centres.



SRFSI has increased the role of women in farming

In the photo voting activity conducted across the four locations, 58% of pictures that received votes featured just women. The fact that the role of women has been recognized as important across all locations and by both men and women farmers highlights how the SRFSI project has been responsible in providing a space for women farmers to participate more significantly in farming where CASI practices and technologies are being adopted.

In the Indian state of Bihar, there is still significant stigma for women to undertake a number of tasks outside the homestead that even includes farming in some Districts. In Bihar, the most popular photo was one of a mixed group of men and women farmers sitting together during a meeting. While this wasn't supported by stories shared during the Most Significant Change activity the fact that the farmers who participated in the workshop visually identified with the photo is important as it suggests there has at least been a perception shift.



Unexpected Outcomes

Possibly the most unexpected result from the workshops was the most popular photo of the women farmer with livestock (cow). This picture was the most voted for photo for women and equal first for

men. The most popular photo within the photo voting activity the fact that for many farmers involved in the SRFSI project, their farming system and indeed livelihood portfolio is diverse, and in fact farming is about more than just CASI. The reality for many farmers across the four locations is that families have mixed income streams and livestock, or cattle more specifically, represent for many to be a reliable source of income, savings or nutrients for a family. This result is relevant for the SRFSI project as it highlights the potential for diversification outside the cropping system.

6 Conclusion

The purpose of the participatory farmer-led workshops was to collect farmer stories and learn first-hand about their experiences with the SRFSI project.

The stories that emerged including the four case studies detailed in this report highlight a rich diversity in experience of farmers across the Eastern Gangetic Plains. In addition to the variety of stories, there was also a number of overarching trends, in that stories of change that emphasized physical, social or financial impact were most common.

It is hoped that this report told through farmers' own words and eyes can act as evidence of the impact experienced by farmers across India, Bangladesh, and Nepal as part of the Sustainable Resilient Farming Systems Intensification project.

7 References

- Dart, J. & Davies, R. 2003, 'A Dialogical, Story-Based Evaluation Tool: The Most Significant Change Technique.' American Journal of Evaluation Vol. 24, No. 2 137–155.
- DFID (2000): Sustainable Livelihoods Guidance Sheets. Department for International Development. http://www.livelihoods.org/info/info_guidancesheets.html (accessed: 23rd July 2019).
- Jackson T., Chatterjee K. and Tiwari T.P. (2018), Contributions to improved food, energy and water security for sustainable food systems. A synthesis of results from the Sustainable and Resilient Farming Systems Intensification project to guide future investments. Canberra, ACIAR.
- Kollmair, M. and Gamper, St. (2002): The Sustainable Livelihood Approach. Input Paper for the Integrated Training Course of NCCR North-South. Development Study Group. University of Zurich.
- Serrat, O. (2009). The Most Significant Change Technique, Knowledge Solutions, Asia Development Bank <https://www.adb.org/publications/most-significant-change-technique> (accessed: 23rd July 2019).