

GENDER IMPACT ASSESSMENT OF THE ASI SUNHARA INDIA PROJECT



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EXECUTIVE SUMMARY

Cultural Practice, LLC conducted a gender impact assessment of the Sunhara India Project implemented by Agribusiness Systems International in seven districts of Uttar Pradesh State. The assessment took place between March 25 and May 30, 2013.

Structure of the Report

Section I of the report presents an overview of the project. It also describes the objectives and methodology of the assessment. Section II of the report presents the findings from the assessment in relationship to indicators of women's empowerment. Section III of the report examines the findings in relationship to the projects women's empowerment hypothesis, with a specific focus on the implementation strategies identified by the project. These are:

- Target women as farmers.
- Partner with local organizations that are committed to women's empowerment and understand the market's potential to empower women.
- Use collective group action to leverage economic opportunities for women.
- Use collective group action to address social gender-based constraints.
- Build and nurture women leaders.
- Educate and involve men and family members through gender-awareness activities.

Section IV of the report highlights an analysis of suggestions to guide the design of future projects.

Project Background

The Sunhara India Project implemented by Agribusiness Systems International (ASI), with a grant from the Bill & Melinda Gates Foundation, focused on increasing rural household income for 25,000 farmers in seven districts of Uttar Pradesh by facilitating changes in the horticultural value chain. It was designed as a learning project to "showcase successful models and capture learning about enhancing access to and better use of inputs, services, and markets by small-scale producers" (ASI 2010:2). From the beginning the project set a target to ensure that women would make up 25% of the participants in project activities. The project introduced new production practices to increase productivity and new post-harvest practices to increase the value of the vegetables. It supported ways to bring input suppliers and buyers closer to the farmers, and facilitated farmers' access to a variety of new and existing market outlets.

The project design included three interlinked objectives:

- 1. *Outreach for efficient production* by enhancing productivity of small holder-based horticulture, through farmers' access to information, technologies, and strengthened management practices and organizations.
- Increased market access and development by strengthening and diversifying sustainable
 market options, through increase capacity of market services, alternative market options,
 and improved knowledge and capacity to use existing market infrastructure and
 institutions.

3. To empower women by increasing household income through exclusively women managed on-farm enterprises and increased capacity and competitiveness of women's groups.

Gender Impact Assessment Purpose

The Gender Impact Assessment of the Sunhara India project examines changes in gender relations and women's empowerment brought about by the project. The specific objectives of the gender impact assessment are to:

- 1. Assess the project's impact on changes in women's empowerment, gender relations, and their relationship to value chain development in the targeted areas.
- 2. Evaluate the soundness of the project's hypothesis/theory of change about women's empowerment in agriculture value chain development, "that the combinations of socio-economic interventions and the process of implementing those interventions in a way that bolsters women's collective strength to overcome gender-based constraints are necessary for women to be empowered and to take advantage of market opportunities facilitated through value chain development (from the evaluation SOW)."
- 3. Examine the implications for applying the approaches from Sunhara India in other agricultural, economic and value chain development programs and contexts in India and elsewhere to achieve inclusive value chain development and women's empowerment.

Gender Impact Assessment Design and Methodology

A three person team at Cultural Practice conducted the gender impact assessment. Two members of the team conducted fieldwork in Uttar Pradesh and were principally responsible for the data collection and analysis. A third team member supported the development of the interview guides and contributed to the analysis.

The Gender Assessment (GA) Team used several different methods for collecting information about changes in women's and men's roles and decision making as the result of the innovations introduced by the Sunhara India Project.

The first part of the assessment included a thorough review of project documents and consultations with project leadership on the focus of the assessment. Prior to fieldwork, the GA team conducted a workshop with project field staff and leadership at the main office in Lucknow, using the Most Significant Change Methodology to identify, from the staff's perspectives, the most notable changes in gender relations brought about by project interventions.

Following the workshop, the team spent two weeks in the field (i.e. at project implementation sites in select districts) gathering information through interviews, observation, and collection of stories about changes in participants' lives, groups, and communities as a result of the project.

Note: This assessment was not envisioned, resourced, or conducted to produce quantitative, statistically-significant findings or provide a rigorous time-lapsed perspective on changes; such a data-driven effort was provided for in the project's end line study, contracted separately. Rather, the goal of this gender study was to use recall methods, the most significant change methodology,

and the GA team's general expertise to provide an independent perspective of some of the more qualitative changes, personal change stories, and the project's overall socio-economic empowerment approach. Findings and recommendations are therefore presented within this context of constraints to the methodology, the small sample sizes of interviews; and the GA team's time-bound interaction and familiarity with the project. In addition, it was difficult in many cases to determine the comparative degrees of changes experienced between men and women. The GA team is confident in its presentation and in the strength of its findings and recommendations, but it is up to the ASI India team to absorb and adjust any feedback to reflect its full knowledge of implementation processes and scale.

Findings

The Sunhara India Project has achieved notable increases in women's control over their income, mobility, and decision making within the household as a result of their engagement in the production related activities supported by the project.

The assessment found that there were changes in gender roles and relations among vegetable farmers regardless of whether the project worked initially with men or women, or worked with them together. In part this was a factor of extension agents' outreach to both men and women, at different points in the process, even where this deviated from the initial intervention model. The flexibility and innovation demonstrated by the Sunhara India field staff demonstrated a creative ability to respond to local demand in a way that supported changes in women's and men's roles in agriculture, decision making, and women's mobility.

There were differences in the degree of change in gender relations depending on whether the farmers' groups were composed of women only or men only. In men only areas, there were noticeable changes in women's and men's roles in the field, and investments in technologies and practices designed to save women's time spent on tasks in the household so that she would have more time to work in the fields, but there was little evidence of women's increased decision making or mobility. This was the case in Allahabad and in communities in Sultanpur with men's only groups. In Allahabad, changes, especially in agronomic skills and improved practices, may have been partially furthered by the joint technical trainings of men and women, piloted by the project with select male-only farmer groups in several districts in the final six months of the project. However, the GA team found indications of positive change even outside of these groups.

In areas where farmers' groups were composed of women only, as in Pratapgarh, Shahjahanpur, and parts of Sultanpur, the GA team observed changes in women's and men's roles in agriculture, including greater management and control by women over the production and marketing decisions. The greatest personal stories about increased mobility emerged out of discussions with men and women in Sultanpur. Women described it as getting out of the house more and men described it as increased socializing among women, and among men and women in different households.

There are many different facets of collective action, and Sunhara India emphasized the importance of groups in building social capital, increasing access to services such as savings or capacity building opportunities (agricultural training, literacy, etc.), and building economic structures for aggregation to improve market positioning. The GA team found positive indicators

of change in all of these areas, as highlighted further in Section II, Findings. In taking an expanded view of collection action that encompasses advocacy at a more structural and institutional level, however, it became more difficult to identify changes in higher-level structural gender roles and relations. There was evidence that women's participation in groups contributed to their increased access to knowledge and skills that were fundamental to them taking on different roles. There was less evidence of the groups' actions contributing to reductions in structural gender barriers, such as decreasing harassment in markets, addressing women's time constraints which limited their capacity to become supplier franchisees, or shareholders in a producer company supported by the project. Project implementers acknowledge that the latter – reduction of structural gender barriers -- was not an intended outcome of collective action within the short time frame of this program. In addition, project implementers recognize that more clearly defining 'collective action' and its intended outcomes for all staff and partners is necessary in future iterations of the program to more effectively implement and assess this development hypothesis. The marketing opportunities supported for women, mainly pushcarts, were not subjected to the same rigorous market and financial analyses, as were the opportunities open to men.

Project support for the development of a federation of self-help groups, Vamashakti, in conjunction with the development of a literacy training network, was responsible for developing a cadre of women leaders. Some of these leaders that emerged started out as lead farmers in the farmers' groups, but there was not a clear synergy between the farmers' groups and the self-help groups. Going forward, the implementers recognize that a greater focus on governance and organizational structure of Vamashakti, the SHGs and women's farmers' groups is necessary. One of Vamashakti leaders, who began as a lead farmer, chose to step back from her roles as a lead farmers in order to serve as salaried literacy teachers (of which there were a total of 17), although the majority of lead farmers (totaling 61) continued with their role throughout the life of the project. Lead farmers and other women farmers, without the literacy skills, preferred to dedicate their time to agriculture rather than participate in the self-help groups.

Lessons Learned and Points for Reflection in Support of Future Programming

- 1. In addition to initial outreach conducted via community meetings, the project also used kitchen gardens as a gateway to identifying potential beneficiaries and involving women (especially those from more marginalized households) in the vegetable value chain. This was an effective strategy, especially in areas where women do not control land holdings. In Sunhara India, being able to demonstrate increased yields, even on small plots of land, gave women access to larger holdings on their farms or through lease arrangements.
- 2. The project's focus on vegetable production, which had a quick return on investment, contributed to significant increases in income and changes in the organization of production that benefited both women and men, while opening a gateway to women's increased decision making, mobility, and control over assets.
- 3. There should be more engagement of men about gender equality and its benefits to the household and community at the beginning of the project. Most men were eventually supportive of their partners' participation once they understood the benefits, especially the economic benefits of increased income, and the social benefits of having a more active partner in decision making about management of the farm and household.

- 4. The ability to purchase clothing and jewelry directly stood out as an important indicator of women's empowerment because it demonstrated both decision-making over income, access to cash, and mobility to go to the market, as well as comfort to deal with strangers. It also indicated improved self-image, a desire to spend money on oneself and wear better saris. Women's direct purchase of saris, signifies two important empowerment indicators: increased mobility outside of the home and control over resources.
- 5. There were missed opportunities to work more on gender inequalities within institutions, especially in the context of service provision and market linkages. Men had many more opportunities than women to move into positions as traders and suppliers. Even when these opportunities were made available to women, they offered a much lower earning potential and the terms of financing were much more restrictive. Uptake by women into these non-traditional roles and market opportunities admittedly is complex due to social norms about gender roles, women's own desires regarding their activities and responsibilities, and gender-specific barriers (some economic, some social, some legal) that often take significant time to address. Nevertheless, there are ways to address these more structural constraints within the context of value chain projects. In the future, ASI should consider ways to design interventions that intentionally reach both men and women, address the different types of barriers they face, and provide the necessary support to put them on a more level playing field.
- 6. Training extension workers in gender was very important to Sunhara India's impact. The extension agents were able to use what they learned to be very innovative about how to bring both men and women into the process. One of the great strengths of the project was its field staff that was able to innovate in response to women's and men's demands for training and extension advice. Extension agents created their own help lines for both the trainees and their spouses by making themselves available around the clock by mobile phone.
- 7. The theory of change focused too narrowly on women's individual empowerment through collective action, rather than on women's group empowerment through promotion of more equal opportunities at different levels of the value chain. The implementers focused on individual empowerment as a first step that is necessary to do before focusing on womenled group empowerment. In a longer program or in follow-on programming, women's group empowerment should be further developed. The GA team observations are that this limited women's access to more lucrative and dynamic opportunities. In the future the development or at least better articulation of one theory of change for the project that explicitly connects all objectives, including those focused on achieving gender equality, will make the implementers more accountable for addressing the structural constraints that discriminate against women and limit their access to equal opportunities. Individual empowerment of many women, while important, in itself does not alter these structural inequalities, which are the real barriers to poverty reduction and social equality for women and men.

A note on the selection of vegetables as a target value chain system: The project's selection of the horticultural value change put women in a position to build on expertise and control that they had over their household gardens. In most areas, the division of labor in vegetable production was less rigidly established than grain crops. The introduction of new vegetables also put women and men on more of an even playing field. Finally, when women met resistance from their husbands about

growing new crops, they could plant in their gardens or on field bunds without challenging men's hegemony over other agricultural fields. Several women, who could not convince their husbands, even with the assistance of the extension agent, implemented the practices in their kitchen gardens. Once their husbands saw the results, they agreed to let women take the lead and plant on larger extensions of land.

LIST OF ACRONYMS

Acronym Definition

ASI Agribusiness Systems International

FRC Farmer Resource Center GA Gender Assessment

IFPRI International Food Policy Research Institute

INR Indian Rupee

MSC Most Significant Change

NABARD National Bank for Agriculture and Rural Development

NGO Non-Governmental Organization

PC Producer Company

SAPPL Samridhi Agri Products Private Limited

SHG Self-help Group SOW Scope of Work

SVSS Svavishvas Seva Sansthan (NGO in Sultanpur)

VPCL Vighna Harta Agri Horti Producer Company Limited

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1 INTRODUCTION

1.1 Project Background

The Sunhara India Project implemented by Agribusiness Systems International (ASI), with a grant from the Bill & Melinda Gates Foundation, focused on increasing rural household income for 25,000 farmers in 7 districts of Uttar Pradesh by facilitating changes in the horticultural value chain. It was designed as a learning project to "showcase successful models and capture learning about enhancing access to and better use of inputs, services, and markets by small-scale producers (ASI 2010:2). From the beginning the project set a target to ensure that women would make up 25% of the participants in project activities. The project introduced new production practices to increase productivity and new post-harvest practices to increase the value of the vegetables. It supported ways to bring input suppliers and buyers closer to the farmers, and facilitated farmers' access to a variety of new and existing market outlets.

The project design included three interlinked objectives:

- 1. *Outreach for efficient production* by enhancing productivity of small holder-based horticulture, through farmers' access to information, technologies, and strengthened management practices and organizations.
- 2. *Increased market access and development* by strengthening and diversifying sustainable market options, through increase capacity of market services, alternative market options, and improved knowledge and capacity to use existing market infrastructure and institutions.
- 3. *To empower women* by increasing household income through exclusively women managed on-farm enterprises and increased capacity and competitiveness of women's groups.

ASI made a strategic decision to only work in districts where farmers had previously been organized into groups by NGOs, BAIF in Allahabad and Pratapgarh, and Svavishvas Seva Sansthan (SVSS) in Sultanpur, and Vinoba Seva Ashram in Shahjanpur. The decision was based on the short time frame and the limited budget which precluded organizing groups while testing different intervention models, as well as recognition of the high failure rate of farmers' organization in India.

The project's theory of change connected Objectives 1 and 2 by stipulating that better information and opportunities through the value chain depended on facilitating interactions among producer organizations, suppliers and buyers, and enhancing the capacity of service providers and producers. These actions were designed to raise awareness of service providers about potential new opportunities and increase farmer's awareness and capacity to better utilize services and access existing and alternative market channels. Improved capacity and access were designed to increase productivity and outputs, which in turn would increase household incomes. A separate project impact learning report (Sunhara India, May 2012) explains the women's empowerment hypothesis, with a more linear theory of change.

The hypothesis, which provides the rationale for Objective 3, empowerment of women, is that:

The combinations of socioeconomic interventions and the process of implementing those interventions in a way that bolsters women's collective strength to overcome gender-based constraints are necessary for women to be empowered and to take advantage of market opportunities facilitated through the value chain development.¹

The theory of change postulated that:

A model of collective action, which assumes that when women are organized into collective groups, they are better able to overcome the gender-based inequalities and discrimination they face as individuals. For this approach to succeed, programs need to provide an economic incentive for women to join and for their husbands and family members to support their participation. In Sunhara India case, that incentive is the increased access women gain, via the groups to market-based economic opportunities. From a value chain development perspective, this structure for collective action enables women to capitalize on new market opportunities through a market chain development program. Also central to the approach is the development of a cadre of women leaders who have the confidence and skills to lead the women to take on new roles and overcome traditional barriers (Sunhara India May 2012:3).

A gender assessment usually precedes the design of a project, and in the case of Sunhara India, the project leveraged findings from an independent gender study, conducted based on primary and secondary sources in 2011 (see Khadelwal and Deo 2011), identified specific gender-based constraints affecting women's capacity to participate in and benefit from investments in agricultural development to the same degree as men. These included limits on women's mobility, ownership of land and other assets, and decision making within their households and communities. In addition, beliefs about women's proper roles, self-worth, and aspirations constrain women's capacity to take advantage of new opportunities. Various practices, based on beliefs about women's unequal status, such as denying women access to education, subjecting them to gender-based violence, and encumbering them with greater workloads also put women at a greater disadvantage than men. Because the study was not specific to Sunhara India but rather on women in agriculture in general, the list of constraints contains many that were outside the mandate and scope of Sunhara India to address. The specific constraints identified in the 2011 independent gender study are summarized in the table in Annex D, which shows the relationship between interview questions and the constraints.

The way the project designers decided to connect the three objectives in implementation was to target either women only or men only groups in different districts. This was also a strategic decision on the part of project implementers based on the determination that gender norms in the region precluded equal treatment of and benefits for women and men in mixed groups, and that the project resources were inadequate to support parallel women's and men's groups in all communities, as well as the more intensive activities necessary to overcome these inequalities if the project worked with men and women from the same households. Additionally, the project

² This study was actually not commissioned as part of the design of the Sunhara India project (which was well underway by 2011), but rather it was a separate study. Shipra Deo, the Women's Empowerment Component Director, was involved in that influenced the design.

¹ This is a quote from the SOW for the Gender Impact Assessment.

design designated different types of strategies for working with women in different districts, ostensibly to test the hypothesis. The implementation strategies identified by the project were to:

- Target women as farmers
- Use collective group action to leverage economic opportunities for women
- Use collective group action to address social gender-based constraints
- Build and nurture women leaders
- Educate and involve men and family members through gender-awareness activities.

In the first two years, project leadership decided to implement activities with women in three districts, Pratapgarh, Sultanpur, and Shahjahanpur, by employing different combinations of the strategies in the three districts. As with the interventions with the men, the project partnered with local organizations, and worked through either farmers' groups or self-help groups (SHGs) in districts that targeted men and women. Men's and women's farmers' groups appeared to be identical in the types of activities, training, and information they received.

Below is a table illustrating the allocation of women beneficiaries across districts and groups:

District	Total women reached	Farmers Group & SHG membership	No. female lead farmers	No. female SHG leaders	No. learning centre participants	No. learning centre teachers
Shahjahanpur	2,663	100% in farmers groups	103	n/a	n/a	n/a
Sultanpur	1,016	100% in combined farmers groups & SHGs	81	n/a	n/a	n/a
Barabanki	77	100% in farmers groups	2	n/a	n/a	n/a
Allahabad	42	100% in farmers groups	0	n/a	n/a	n/a
Pratapgarh	2,504	43% in both farmers groups & SHGs 14% in farmers groups only 43% in SHGs only	61	14 SHG cluster leaders (3 of whom are jointly lead farmers & teachers)	255 (all SHG members)	17 (6 of whom are also lead farmers)
Total	6,302		247	14	255	17

Men's and women's SHGs received different types of support and were exposed to different types of opportunities. In many ways, this represents a realistic assessment of capacity, opportunity, and project scope. Nonetheless, the GA team believes there were missed opportunities to push integration and inclusive markets even further, representing an opportunity for reflection and growth on future projects. For example, the activities for women's SHGs focused on building the Vamashakti Federation, providing loans for pushcarts, development of collection centers, and market linkages for small processing facilities for potatoes and amla. However, the SAPPL franchise network of input/output linkages, a key project success and legacy, was much more fully developed in the male cluster areas, and the men's farmer groups received support in organizing into a producer company of shareholders (VPCL), connecting them to supplies, equipment, and markets through the producer company, a more formal, commercially-oriented, and significant body. There were several reasons given by project staff

for the difference in approaches. The project made the decision, based on resource constraints, to launch the commercially-based pilot of the producer company in an area where they determined farmers groups were most able to rapidly take advantage of this new market structure – this was in the male clusters of Allahabad. Likewise, the PC president was selected based on best practices for PCs in India, which advised someone with a business-based background and professional experience in business operations and marketing. Based on limits on women's mobility, limited literacy, lack of educational and professional management experience, and only emerging direct interactions with market-based actors 'higher' in the value chain, project leadership determined that the women at Vamashakti did not have the capacity to run a producer company, nor was this a realistic goal to achieve responsibly within the life of the project. They also decided it would take more time for women to take advantage of the market opportunities. Instead, they observed that the capacity the project built in the women's federation Vamashakti was sufficient to support a potato processing unit in Pratapgarh and towards the very end of the project, to extend the producer company's (VPCL) operational linkages from Allahabad to Pratapgarh, creating an initial channel of marketing between Vamashakti and VPCL and an opportunity to build capacity post-project, incrementally, in Pratapgarh amongst the women involved.

The GA team understands the time and budget limitations justifications, expediency is not an adequate reason for not addressing gender-based barriers that limit women's commercial opportunities relative to men's in the value chains supported by the project. While the project made seemingly rational choices in the face of time and budget constraints, the choices deterred the project from exploring alternative ways to engage women and men as more equal partners in the value chain,

1.2 Objectives of the Gender Impact Assessment

A gender assessment is typically composed of an analysis of gender relationships in a particular sociocultural context in relationship to specific development objectives. A gender assessment collects information on the different roles, power, and identities socially ascribed to men, women, boys, and girls, and the relationships among them. Analysis of this information reveals how those socially assigned roles and identities differentially constrain or facilitate men's and women's access to and control over assets and decision making.

This end-of-project gender impact assessment has the following specific objectives:

- Assess the project's impact on changes in women's empowerment, gender relations, and their relationship to value chain development in the targeted areas. To do this, the evaluators examine the extent to which the relevant identified constraints from Khadelwal and Deo's report have been mitigated, reduced, or eliminated by the actions of the Sunhara India Project.
- 2. Evaluate the soundness of the project's hypothesis/theory of change about women's empowerment in agriculture value chain development, "that the combinations of socio-economic interventions and the process of implementing those interventions in a way that bolsters women's collective strength to overcome gender-based constraints are necessary for women to be empowered and to take advantage of market opportunities facilitated through value chain development."

3. Examine the implications for applying the approaches from Sunhara India in other agricultural, economic and value chain development programs and contexts - in India and elsewhere - to achieve inclusive value chain development and women's empowerment

2 Methodology

A three person team from Cultural Practice conducted the gender impact assessment. Two members of the team conducted fieldwork in Uttar Pradesh and were principally responsible for the data collection and analysis. A third team member supported the development of the interview guides and contributed to the analysis.

The Gender Assessment (GA) Team used several different methods for collecting information about changes in women's and men's roles and decision making as the result of the innovations introduced by the Sunhara India Project. The team spent two weeks in 'the field' (e.g. at the main office in Lucknow and at select project sites at villages) gathering information through interviews, observation, and collection of stories about changes in participants' lives, groups, and communities as a result of the project. A full schedule of interviews and a contact list is in Annex B.

2.1 Desk Review of Project Reports and Relevant Literature

The team reviewed project reports, data and performance management plans (PMPs), case studies, success stories, videos, training reports and agendas provided by ACDI/VOCA and ASI staff. The team also reviewed published and unpublished literature on topics related to the assessment.

2.2 Most Significant Change Workshop

To initiate the gender impact assessment, the ASI staff and their implementing partners identified stories that illustrate significant changes in women's and men's lives, the groups they participate in, and in their communities as a result of the Sunhara India Project. A mix of field and Lucknow-based staff were involved, including men and women with greater and lesser levels of sustained engagement in Component 3 activities. The stories identified and selected during the workshop were used to identify key categories of change and the contributory factors resulting from project interventions. The MSC process revealed:

- Contextual illustrations of significant changes in women's and men's lives
- Examples of social and economic impacts of the project on individuals, producer and self-help groups, and on communities
- Key domains and areas of focus for the gender assessment

The GA team used the Most Significant Change Methodology (MSC) with Sunhara India Project staff to elicit and analyze stories illustrate changes associated with project at different levels of intervention. The staff were divided into three groups to focus on changes in individuals (group 1), small groups, such as self-help groups (SHGs) and farmers groups (group 2), and communities (group 3). Within the groups, participants paired up to interview each other about the stories they selected. Participants shared stories within the groups to identify the most

significant change illustrated by each story and the project level factors contributing to the changes. The groups shared the themes that emerged from each group to come up with a common set of themes or categories of change (see Annex B for Workshop Schedule).

After developing the categories of change and contributing factors, the participants regrouped to select the most significant change story among all the stories in each group. In order to avoid each person advocating for his or her own story, the groups changed tables to select the most significant story from another group's stories.

2.3 Fieldwork

The GA team primarily focused the field interview question guide (see Annex C) around eliciting feedback on issues related to value chain/economic-based structures, functions, and roles; attempts were also made during discussions to address the broader set of social constraints included in the constraint analysis framework (see Annex D). The goal of field work was to elicit information that would provide an understanding about how gender relations were affected by the enabling environment gender strategy activities, capacity building in agricultural skills and empowerment activities (see Annex D).

The assessment fieldwork used a mix of qualitative methods, including:

- Individual interviews and discussions with women and men farmers
- Group discussions with women and men farmers, lead farmers, cluster leaders, and SHG members
- Interviews and interaction with field staff for strategic and logistical support
- Interviews and interaction with the senior management team

2.4 Individual and Group Interview

The team conducted individual and group interviews with men and women farmers (lead framers and outgrowers) separately in their fields and households. The team also conducted individual interviews with a number of other stakeholders, including, franchisees, traders, SHG members and leaders, teachers and participants in the literacy program, gooseberry (amla) processers, and extension staff.³

Table 1: Number of People Interviewed

	Tuble 1. Trumber of 1 copie lines viewed									
Interviews/Meetings	Lucknow		Allahabad		Pratapgarh		Sultanpur		Shahjanpur	
Individual	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Lead Farmers			3	3	4		2	4	5	2
Outgrowers			3	5	4	1	4	10	8	
Franchisees				2						
Traders								2		
Vegetable sellers					1	1	2			2
SHG Leaders					3					
Individuals Engaged										
Through Group										

³ The farmers referred to as outgrowers are not outgrowers in the technical definition of the term, but the project used this term to distinguish the lead farmer from 'regular' farmers in the hub-and-spoke model utilized for training, technology transfer, and extension.

Interviews										
Learning Center					6					
Vamashakti (mix of					23					
leaders and members)										
SHG Cluster Group					31					
Farmers' Group Members							35			
Amla Processing Center					3	1				
Sunhara India Staff	4	15		4	4	1	1	1	1	2
Other Partners	1	2		3		2		1	1	
TOTAL	5	17	6	17	79	6	44	18	15	6

In coordination with Shipra Deo, ASI Gender and Livelihoods Specialist, the GA team decided to focus interview questions so as to ascertain if the gender-based constraints identified in the initial gender study had been reduced or alleviated. Interview questions were focused on the practices supported by the project that were intended to address the constraint. Follow up questions ranged quite widely depending on issues and topics that arose in conversation.

In Allahabad and Sultanpur, we spoke to both women and men. In Pratapgarh we spoke to mostly women and few men. In Allahabad there are no women's groups. We spoke first to men who are members of farmers' groups and then to their women partners to find out if the women had any access to the technical information and demonstrations provided by the project's extension agents. In Sultanpur, we interviewed both men and women who were members of women's groups in women's group only communities, and members of women's and men's groups in communities with both men's and women's groups. Although the project did not formally organize any mixed gender groups, there were some mixed groups that evolved by default, when partners' of men's or women's groups joined in unofficially (e.g. in Allahabad and Sultanpur). We also interviewed the spouses of participants in single sex groups (both men and women partners). In Shahjanpur, we spoke primarily to women lead farmers and members of women farmers' groups and with male family members of 4 women farmers.

2.5 Change Stories

The project has been collecting oral stories about the changes in some women's lives as a result of participation in SHGs, farmers' groups and extension activities, the women farmers' fair, and literacy training. As part of the assessment the GA team attempted to capture similar stories. The team also ended all individual and group interviews of women and men farmers by asking them what were the most important changes that had occurred as a result of their participation in the project. These stories also illustrate changes in the constraints on women's participation, decision making and control over assets in agricultural production and in their households and communities.

2.6 Analysis of Findings

The team used the constraints table and the analytical questions from the SOW to guide the analysis. All interviews and stories were transcribed and analyzed. The team classified these stories using the indicators that compose the IFPRI Women's Empowerment in Agriculture Index (IFPRI 2012). A summary of the constraints, the project interventions aimed at reducing or overcoming the constraints, and the sources of information the GA team collected to measure changes in constraints is provided in Annex C.

2.7 Debriefings

The team debriefed with Sunhara India staff (in-country, before departing India) and over the phone with ACDI/VOCA-ASI headquarters staff on preliminary findings.

2.8 Methodological Challenges

This assessment was not envisioned, resourced, or conducted to produce quantitative, statistically-significant findings or provide a rigorous time-lapsed perspective on changes; such a data-driven effort was provided for in the project's endline study, contracted separately. Rather, the goal of this gender study was to use recall methods, the most significant change methodology, and the GA team's general expertise to provide an independent perspective of some of the more qualitative changes, personal change stories, and the project's overall socio-economic empowerment approach. Findings and recommendations are therefore presented within this context of constraints to the methodology, the small sample sizes of interviews; and the GA team's time-bound interaction and familiarity with the project. The GA team is confident in its presentation and in the strength of its findings and recommendations, but it is up to the ASI India team to absorb and adjust any feedback to reflect its full knowledge of implementation processes and scale.

In addition, assessing the validity of the project's development hypothesis, which is the rationale for Sunhara India project's Objective 3 (women's empowerment), is a central focus of the Gender Impact Assessment. To respond adequately to the questions posed about the hypothesis it is useful to first understand the relationship of the hypothesis to the project's other two objectives and theory of change.

Over the course of the project, there appears to have been periodic disconnects between the women's empowerment objectives and the focus on increasing productivity and diversifying market linkages and expanding access to market outlets. The following quote from the year 3 annual report highlights one of these disconnects, and to the project staff's credit, their capacity to self-correct.⁴

"ASI proposes to remove indicator 3.4, percent of women engaged in alternative enterprise activity. This indicator was developed to respond to the project's original expectation to target women not primarily as farmers, but food processors. However, as the project developed, it became apparent that while women are very active as farmers, they are largely disfranchised from societal recognition as farmers, which affects access to markets, services, control over resources, and empowerment. Therefore, Sunhara India made a conscious effort to prioritize working with women as farmers, not as processors, to thereby avoid pushing them into a stereotypical 'womanly activity.' Today, in terms of learning and adopting agricultural technologies, and increases in income, achievements in female clusters are comparable to the male clusters. Although Sunhara India does have some activities targeting production for processing (amla, menthe), targeting alternative enterprises is not a priority. Instead, we are targeting farming as an enterprise (ASI October 2012: 5)."

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In addition, to test the hypothesis, there had to be clear differences in the approaches in each area, but we found those differences were blurred. Changes to the implementation approaches along the way made it difficult to compare the different modalities, or group configurations, selected in different districts. In the end, it appeared that where training was introduced first to men or women through farmers' groups eventually, their respective partners also received some training either by joining in informally, or by prevailing on the extension agents to form other groups for men or women. For instance, while men were trained officially in Allahabad, women ended up participating in extension agents' and lead farmers' visits and demonstrations. A woman farmer from Behraya community said that she participates when the extension agent trains her husband on farm, as well as when other farmers come to ask her husband, a lead farmer, questions. The farmers in his group also come with their partners to learn. She often provides advice to other women farmers as well.

Similarly, it was difficult to assess the value added of women participating in a farmers' group and an SHG as many women were only in one or the other, even in areas where both types of groups were supported by the project and their implementing partners.

2.9 Structure of the Report

Section II of the report presents the findings from the assessment in relationship to indicators of women's empowerment. Section III of the report examines the findings in relationship to the hypothesis, with a specific focus on the implementation strategies identified by the project. These are:

- Target women as farmers.
- Partner with local organizations that are committed to women's empowerment and understand the market's potential to empower women.
- Use collective group action to leverage economic opportunities for women.
- Use collective group action to address social gender-based constraints.
- Build and nurture women leaders.
- Educate and involve men and family members through gender-awareness activities.

Section IV of the report highlights some missed opportunities and suggestions and lessons learned to guide the design of future projects.

3 FINDINGS

- This section presents the findings from the assessment in relationship to indicators of women's empowerment, which the GA team has identified and organized according to the following three institutional levels:
- Intra-household: Changes in Indicators of Women's Economic Empowerment and Decision Making
- Community Level: Changes in Gender Relations and Leadership
- Group Level with Regional Significance (Collective Action): New Roles and Identities

The MSC methodology, in combination with stakeholder interviews and other change stories, allowed the GA team to focus on the changes that were most notable for different stakeholders.

The MSC stories were told and prioritized by Sunhara India staff in a two day workshop. Our findings highlight changes experienced by men and women, as well as changes in the relations between them. The MSC stories told by Sunhara India staff shared some elements in common with stories told by project participants, but there were also divergent elements.

3.1 Intra-household Women's Economic Empowerment and Decision Making

The GA team selected the following indicators of empowerment to highlight intra-household level changes:

- Adoption of New Practices
- Changes in Knowledge and Skills
- Division of Labor
- Increases in Income
- Increased Decision Making Authority and Control over Income and Assets (as a Result of Increased Income)
- Social Mobility and Access to Markets

The following most significant story change story illustrates intra-household changes facilitated under the project:

Test Box 1: Most Significant Change Story: Surjadevi

Surjadevi belongs to a very poor family. They own very little land. It was very difficult to meet their living expenses. Surjadevi has one daughter and three sons. Her husband is an alcoholic. When the Sunhara India group was formed she participated in the discussions. She is very hardworking and courageous. She volunteered to become the leader of the group. She participated in all the meetings and supported the other group members. She went alone from her village for the exposure visit organized by the project; she began saving money and also opened a bank account and deposited some money in the account. She cultivated mentha and increased her income substantially. She saved money in a clay pot buried inside a wall in her house. After one year when the pot was removed and broken she realized that she had saved R. 11,500. She used this money to build a house for her family. She is respected in the village and she also gained recognition at the district level when she was nominated to the district level agriculture advisory committee. (MSC story selected as the most significant by Sunhara India staff in Lucknow).

The Sunhara India staff selected this story because Surjadevi worked hard and increased her income substantially by cultivating mentha. She undertook the cultivation of mentha although it was a newly introduced crop. They said that she sets an example to other farmers, has good leadership qualities, and was the first to come out of the house and participate in the project activities. They consider her to be eager to learn and work for the betterment of her group and community. Surjadevi's story illustrates many of the changes experienced by women who engaged in project supported activities.

3.1.1 Adoption of New Practices and Changes in Knowledge and Skills

Both women and men farmers in Sultanpur reported that it is difficult for farmers to change their practices, but those who participated in project-led training and exposure to new practices and knowledge were able to increase the productivity, reduce cost of production and increase their income substantially.

One practice that was particularly challenging for women however was the adoption of new seed varieties. Prior to participating in the project, most farmers were indebted to input suppliers over long periods, and found it difficult to break away from this dependence. In order to adopt new seed varieties, they had to buy new seeds from new sources. Men and women reacted differently to the

Text Box 2: Change Story from Pratapgarh

A lead woman farmer wanted to try out the improved potato seed being promoted by the project and tried to persuade her husband to buy it. Since the seed was more expensive than the one they always used and he was unsure of the results, he refused to buy it. Using her own salary, which she earned as a teacher in the Literacy Center, she bought 50 kgs of the new seed and planted it on 5 biswas of land. Her production was twice that of her husband's using the old seeds. He was so impressed that he insisted on putting her production in cold storage for seeds for next season [although this is not recommended by the extension agents because the harvest potatoes are not as good for seeds as potatoes grown for seeds instead of consumption.]. She still plants on 5 biswas and keeps that money for herself (Storytold by extension agent).

opportunities. Several men lead farmers in Allahabad said that they were enticed by financial support from the project to pilot materials for greenhouses and inputs for the demonstration plots they developed as part of their role as lead farmer. Women farmers in Pratapgarh and Shahjanpur stated that they often met with lack of enthusiasm for the new practices from their husbands. Lacking access to their own lands or decision making power over lands held by their partners, they invested their own resources for seed and grew them in garden plots next to their homes.

The extension worker in Shahjanpur reported that a significant number of women farmers who received the training tried out the new seeds on the field bunds until their husbands were convinced to adopt the new seeds and practices. These stories reinforce the importance for both women and men of the demonstration effect in changing farmer behavior and increasing adoption of improved practices and technologies.

Women and men farmers most appreciated access to information and "proper advice" or valid information related to farming practices provided by the project. Information and knowledge acquired through training and continuous support by the extension staff enabled the farmers to cultivate and harvest crops all through the year and plan for short crop cycles of vegetables with higher returns.

Even in contexts where men were the main participants in the agricultural training, their partners also experienced changes in their roles on farm and within the household. For example, a farmer from Allahabad discusses decisions about what to grow in the greenhouse with his wife (who has not received any direct training), because "she is also involved in the care of the plants." A woman farmer from Shahjanpur can read and write and always took notes during the training sessions. When she returned home she would show the notes to her son and teach him the new practices she had learned. A woman farmer from Allahabad who has never received training directly from the project says that farming is more interesting now with the new practices her husband is adopting.

3.1.2 Division of Labor

Changes in practices have also resulted in changes in the division of labor among women and men. Both in areas where men have been trained and in areas where women have been trained women have taken on responsibilities in the field formerly undertaken by men. It is less common for men to take responsibility for tasks that are commonly undertaken by women.

In general, the new farming practices have increased both men's and women's time and labor in the fields. They now cultivate year round, have increased the amount of land planted, and some tasks take more time than before, such as transplanting. Other tasksnow take less time and are less arduous, such as weeding and harvesting. Men and women both said that the increase in time spent in the fields and the hard work was worth it because of the increase in profits. Weeding, done almost exclusively by women, now is easier because the raised beds limit weeds to the irrigation ditches. Some farmers also use herbicide to limit weeds.

Men are responsible principally for the plowing and spraying of pesticides. Fertilizer is applied by men or women. Women do most of the composting with worms and also normal composting. Men also prepare the channels for irrigation. Men and women both work in the nursery. Women and children do the transplanting. Weeding is done by both men and women, but largely by women. Harvesting is done by both. Grading was taught by ASI and is done by both men and women.

The benefits of increased income from vegetable production to fund time-saving technology and practices have only partially offset time constraints faced by women as a result of their additional responsibilities for household work and childcare. Women doubly or triply are burdened by their work on the farms and their domestic tasks in the home compared to men. As a woman farmer in Sultanpur explained, "there are not enough hours in the day to complete all of our tasks." They are spending more time in the fields. Their long hours confine them to home and farm. They are not able to escape these responsibilities. While performing one task they are always thinking about the next task that needs to be completed.

As women have realized the economic benefits of vegetable production, they have delegated many of their other household tasks to daughters or daughters-in-law, which have not changed

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⁵ On the surface it appears that these changes were less dramatic than in households where women participated from the beginning in training, but the study was not able to determine this level of detail due to a limited sample sizes and the focus of the team's discussions with farmers.

⁶In Shahjanapur, women also applied fertilizer and pesticides.

the balance of the workloads between women to men. It has merely displaced the load to other women in the household. Those who do not have other women to rely on, try to manage all the tasks on their own. If they cannot manage then they have to hire labor for agriculture tasks. In most cases, children also help with different tasks in the fields. Women farmers in Sultanpur said that men cannot do women's tasks but women can do all men's tasks. Only one woman said that there are some good men who also help with domestic tasks.

Most men may not help in household tasks, but a group of men farmers in Allahabad made a difference in the lives of the women farmers in their households by making a conscious decision to invest in cooking gas stoves. Realizing that the women were spending more time and labor in the fields they obtained the registration cards for purchasing cooking gas, so as to reduce the drudgery and time required for preparing dung briquettes and cooking with dung or wood fire stoves.

Text Box 3: Change Story

"Cooking gas—it's magic! Just a turn of the button and the fire lights up and food is cooked in no time at all" explained a woman farmer from Allahabad. Besides commenting on how quickly she could cook with gas, she described how long and arduous the process of making dung cooking bricks was and how difficult it was to do when it rained. She said they also make the house dirty when they burn and then it creates more work to clean. She said it is a waste of time. Now she can cook quickly and has a clean house. Other women farmers in the village agreed and explained that they now used the dung for preparing compost for organic manure and this was a better use of dung than for cooking. (Story told to GA team during an interview in Allahabad)

Women in other districts also reported that with an increase in income they were able to purchase the gas cylinders on a more regular basis, but most women used the gas stoves for making tea and coffee and boiling milk, and continued to use the wood or dung stoves for cooking meals. While the project was not designed to reduce women's household labor burden, increased income, greater economic participation in generating household cash income, and their increased

decision making contributed, in some households, to reductions in their household labor burden

Text Box 4: Change Story"My knowledge and skills in agriculture have made me the head of my household" says a woman farmer from Shahjanpur, who passes on the knowledge she acquired through training, to her husband and son (Story told to the GA team in Shahjanpur).

through the purchase and use of time saving technology.

3.1.3 Increased Income

Almost all of the MSC stories highlight increased income from new vegetable farming practices introduced by the project. Women and men increased their incomes as a result of investments in new vegetable farming practices and more competitive markets. More disposable income has also increased expenditures on food, education, health and hygiene, and clothing.

The stories about men emphasize their pride in increased income and investments in their families' education, housing, and farm-related infrastructure or equipment.

Text Box 5: Most Significant Change Story

Ramesh (a man) is a farmer from Lucknow district. He used to grow common vegetables in an open field and sold them to the local market (mandi), where he did not get a fair price for his vegetables. The weights in the mandi were not correct and sometimes were not used at all. He did not grade his produce. He learned about new vegetable farming techniques in the Sunhara India training. Sunhara India also helped him to obtain financing from a local bank for construction of a greenhouse. Now he sells exotic graded vegetables, such as cherry tomato and celery to Spencer, which pays him a good price. His income doubled. He has built a new house for his family and he is happy (Story collected in Lucknow from Sunhara India staff in MSC Workshop, but not one selected as the most significant by entire group).

The stories about women, told to the GA team by project staff, by women themselves, tell a similar story—increased income and improved living standards. For women, increased income from vegetables was the catalyst for changes in their roles and decision making in their households and communities.

When your stomach is full, you become confident. (Rajrani, woman farmer from Mirpur village)

3.1.4 Decision Making and Control over Income and Assets as a Result of Increased Income

In areas where women were the primary participants, changes in income and expenditures as a result of women's greater participation in agricultural decisions also appear to have increased women's control over cash and decision-making about household expenditures.

Because of the training that women have received, either directly from the extension staff or indirectly by observing and "listening in" the on-farm training for men farmers, gender relations have become more equitable in all aspects of cultivation, and decision-making. The GA team was not able to observe if there were any differences in the extent to which gender relations became more equitable for women who directly or indirectly participated; however the implementers observed that there were greater change in gender relations among men and women in cases where women directly participated in training.

Women are more involved and engaged in farming than they were before and have a better understanding of the cultivation cycle. There are many examples as cited above, where women farmers convinced the men in their households to adopt the new practices

Text Box 6: Change Story

"When the first mentha crop was harvested, I was very excited and I went with my husband and son on the tractor to the trader to see how much I had earned. I told my husband that this was my money because I had planted and cared for the crop." (Story told to GA team by a woman farmer from Shahjanpur).

by demonstrating to them the new techniques on small pieces of land or on field bunds. Husbands consult their wives more about decisions on farm—what to plant, whether to lease land, and what to sell. This has resulted in more consultative decision-making between men and women within the household as well and greater recognition for women farmers within the household and community.

An extension worker reported that women farmers in Shahjanpur have a long history of growing vegetables in small kitchen gardens, on field bunds, and any other available space on the family

land, both for home consumption and sale. The income from the sale of these vegetables belongs to the women farmers. The project identified these women and trained them to cultivate a wide variety of vegetables on a larger scale. Women have greater control over income from vegetables than food grain crops, even if they themselves may not take the vegetables to the market, or mandi for sale.

They are involved in decisions about what portion of the crop to sell or consume, and are aware of the prices at which the produce is sold. The GA team observed that the situation is similar in the project area in Pratapgarh.

In Sultanpur the situation is different for different caste/class groups in the project area. In the upper caste families, women from the household do not work in the fields. Women laborers are hired for "women's tasks". Therefore women from these households have less access to cash, even though they supervise the hired labor in the fields. Other women in Sultanpur appeared to have a great deal of control over decisions about what is sold, the purchased of inputs, and decisions about making purchases of clothing and jewelry for themselves.

A critical factor in women's increased control over income is their increased say in how money is invested. Women who participated in training in agriculture and are working on the farms themselves, appear to have more knowledge about the cost of production, the prices of different inputs such as irrigation, labor, fertilizer and pesticides than women who have learned the practices from their partners, without the benefit of direct training. When women farmers don't sell their produce directly in the markets, they ask their male partners for accounts upon return from the market. In these households women expect their husbands to turn most of the money over to them, while allowing their husbands to retain some for their personal expenses, as part of the accounting process. Usually the men make purchases for the farm and household from the cash received from the sale of the produce before returning home from the market. Therefore the women ask to see the receipts so that they can understand how much was earned and how much was spent on various items.

In the Allahabad project area, where only men participated in the training, men and women appear to make joint decisions about how to spend the income on the farm and in the household, but women appear to have less access to cash for their own consumption. In Allahabad, and among women in Sultanpur, who were not as directly involved in the new practices as women who had been trained directly, they were less sanguine about the benefits. Even while acknowledging that income had increased and daily needs were being met, these women still felt that it was a bit early to say how consistent these changes would be. They were of the opinion that whatever they earned from the fields goes back into the fields, the prices fluctuate a lot, and there are hardly any savings, therefore although it is easier to cover expenses now, it is still a struggle and will continue to be this way.

In Pratapgarh, Sultanpur, and Shahjanpur women farmers' increased access to cash income has also made it easier to pay for additional luxuries such as milk for tea, coffee, soap and shampoo and better clothes. Women are able to spend money on soap and shampoo of their choice. One woman said she was very happy that she could finally buy sachets of Vatika (Indian cosmetic brand) shampoo to wash her hair and soap for bathing. Another woman said she had bought a

buffalo which she gave to her mother-in-law to tend; the mother-in-law earns an independent income from the sale of milk. Women are also spending on health care.

Increased income and a ready source of food in the vegetable fields appear to have contributed to improvements in nutrition, both in terms of access and quality. Since cash income is available every day from the year round sale of vegetables, unlike the sale of single annual crop of food grains, the families are assured two meals a day. And since they are growing vegetables they get to consume more vegetables and a wide variety of vegetables.

Savings are used first for structural improvements to houses, re-thatching roofs, putting in new roofs, additional rooms, kitchen, purchase of ceiling fan, etc. or building new houses of brick and cement. Some households have purchased cattle, farm equipment such as thresher, cane crusher, winnowing fan, and installed irrigation facilities. Education also is highly valued in the region and it was routine to find that participants' older daughters and sons of the women interviewed going to college in nearby towns and cities. Some families are also paying for girls and boys to stay in rented accommodation in the towns so that they could go to college, although for girls, this remains rare.⁷

3.1.5 Social Mobility and Access to Markets

The ability to purchase clothing and jewelry directly stood out as an important indicator of women's empowerment because it demonstrated both decision-making over income, access to cash, and mobility to go to the market, as well as comfort to deal with strangers. It also indicated improved self-image, a desire to spend money on oneself and wear better saris. Women's direct purchase of saris, signifies two important empowerment indicators: increased mobility outside of the home and control over resources. While in most instances, women said that they still go in the company of a spouse or son, a few also now go alone. 8

In a group interview of 35 women farmers in Sultanpur, the participant emphasized that the biggest change for them was that they now purchase their own saris in shops or the market. Earlier women did not go to the shops themselves as they lacked confidence and also were not able to handle the cash. Their husbands bought their saris, but these were not necessarily of their choice. Now they go themselves to buy the saris because they are confident in dealing with the shops and they have control over the income. Women also save money from household expenses and keep it aside to buy "expensive" saris and jewelry of their choice. If the women do not have direct access to cash and the men give them cash for household expenses, women save money from this amount for personal expenses and eventualities. If the men give them money to buy saris for themselves and the money is not enough to buy the sari of their choice they use the money they have saved in order to supplement the cost.

⁷In the past, this was much less common for girls than for boys. Although still less common for rural girls, it also is a demonstration of increased mobility for younger unmarried women.

⁸See Hashemi, Syed, and Schuler 1993, Schuler, Islam, and Rottach's 2010 work on Bangladesh and Kishor and Gupta 2009 analysis of DHS data in India for further discussions on women's empowerment indicators in South Asia. Schuler, Islam, and Rottach argue in their 2010 article that purchase of small items is no longer a good measure of empowerment in rural Bangladesh because it is not linked to mobility. Women can purchase goods from small shops close to their homes or from itinerant traders who come to the house. Instead, they identify management of family assets as a more significant measure of women's empowerment. We discuss this later on in section IV of the assessment.

Mobility within the community appears to have increased, especially among women participating in both farmers' groups and SHGs. SHG members go to meetings and SHG sponsored activities. Women in farmers' groups visit each other's homes and fields. Both men and women commented that project activities increased women's movement, sociability, and deepening of ties to people outside of their families. This was the result as much of the lead farmer and outgrowers model where women visited each other's farms to give and receive advice, as a consequence of activities deliberately aimed at increasing mobility, such as the training outside of the community, and events like the women's farmers' fair.

The constraints to mobility external to household members imposing restrictions on women's mobility appear to limit women's direct access to markets. These include lack of transportation and harassment of women on public transportation, when it exists. Women in Allahabad, for instance, said that one of the reasons they did not go to the market alone was because there was no adequate transport from the village to the market. They preferred to go on the bicycle with their husbands rather than to walk. In other places women went to the bazaar if it was easily accessible. Women are regularly harassed on public transport and in markets. The extrahousehold constraints to mobility continue to limited women's opportunities at other levels of the value chain, such as becoming supplier franchisees or traders. Therefore, future or follow-on programs should seek to address these additional constraints to mobility.

3.1.6 Literacy

Women who are newly literate said it helped them to understand how to implement the new agricultural practices better. For instance they now understand weights and measures. Before they didn't understand what 10 grams meant so had trouble following the extension agents' instructions about how many seeds to plant. They can also read labels and instructions on input supplies such as seed packets, pesticides and fertilizers. Although women who are illiterate struggle to take advantage of certain market opportunities, the project, occasionally, found ways to overcome these limitation. For example, recipients of the vegetable push carts in Sultanpur could not read the digital scales provided by the project, so it replaced them these had to be with manual balances.

Women also said that numeracy skills are helping them to see the prices on products and ensure that they are getting the correct amount in change. They can now negotiate better in the sale of their vegetables. They can also read the price tags of material for saris and know how much material to measure.

Text Box 7: Change Story

Ramraji is an outgrower in a farmers' group in Mirjapur Chauhan Village. She learned to read and write from her daughter-in-law, who also taught her about new vegetable cultivation practices. Ramraji grows vegetables on 5 biswas and rice and wheat on 25 biswas of land. They used to broadcast the seed, but only half the seeds would germinate. She learned to plant seeds in trays to germinate the plants before planting them in the field. Even though her husband was not convinced that this was a better technique, she decided to plant the seeds in the trays anyway. When her husband saw the plants, he changed his mind. The 5 biswas of vegetables are totally under her control. She manages them and buys inputs herself. As a result of the combination of literacy skills acquired through attendance in the project sponsored learning center, she can calculate, purchase inputs and keep accounts. When her son and husband return from the market after selling the vegetables she asks for accounts. She spent her own money for the son's wedding (Story collected in Pratapgarh from Vamashakti Coordinators).

In addition, participants in the learning centers were proud of the booklets that they contributed to, which were distributed/launched at the women's farmer fair and learning center to other women. Most of the literature for agriculture is usually found in technical language which is difficult for rural women to understand. Realizing the gap, some women conceptualized and developed small booklets on agriculture technologies for the neo-literate women. These booklets are written in their own vernacular language, and use bold letters and pictures to support comprehension of the text. The pictures and the text represent women as independent farmers.

3.2 Community-level Changes in Gender Relations and Leadership

Community-level changes are organized as follows: women as farmers, women as leaders, and social capital. The GA team's findings in this section are specific to insights gained from the MSC exercise only, with greater incorporation of insights from the field interviews incorporated in the social capital section.

3.2.1 Women as Farmers

This story was selected by the Sunhara India staff as a most significant change story because it is illustrative of changes in communities. It demonstrates how men and women participated, benefited and worked together to improve the agriculture, the atmosphere in the community has changed and everyone is happy. Women also gained identity as farmers. As a result of the training their incomes also increased. They said it is an example of how technological interventions bring about changes in the relations between men and women and how they are now working together in agriculture. Women came out of their homes, which they did not do before, and awareness increased for men and women about agriculture and family welfare.

Text Box 8: Change Story

In Shahjanpur district when we started working in the villages, we had to first work with the men, we had to organize a meeting with the men, after which we could organize a meeting with the women and form a group of women farmers. We discussed with the women about agriculture and gave them training in cultivation of unseasonal vegetables at Pant Nagar University. In order to gain support of the villagers, a group of men were also taken outside the village for training. When this group returned and shared their experiences with the other villagers, the men began to trust the project and believed that the women were being trained in agriculture for improving their own farming practices. Now the husbands of these women have no objection to project activities and do not prevent the women from participating and traveling outside the village. Men and women are both happy and both go to the Farmer Resource Centre to buy inputs. Men and women are happy to work together and benefit greatly from working together (Story told to GA team by leaders of Vinoba Seva Ashram in Shahjanpur)

Text Box 9: Change Story

Mira Singh did not get along with her husband. She used to be sad and rarely smiled. She has four sons, one of whom is married and has three children. One son works in Mumbai. She began participating in the project when she decided to plant potato and peas. She cultivates potato and vegetables on 10-12 biswas of land and wheat on 2.5 bigas. She needs to grow grain for the family's food requirements and her cash needs are met through the sale of vegetables. She is able to take care of the education expenses of her children and grandchildren. Soon after she joined the SHG group she became the group leader and also formed two more groups in the village. She is the President of her cluster group. She finds out information about government schemes such as pension schemes for widows and senior citizens, helps people in the village to fill in the application forms and gives them to the Village Pradhan (head of the village). Recently when a family feud in the village was to be settled in the village meeting the village Pradhan invited her to sit beside him on the platform along with other senior villagers. She helped to settle the family feud through dialogue and negotiation (Change story told to GA team by Vamashakti coordinators in Pratapgarh)

3.2.2 Women's Leadership and Social Capital

Mira Singh is considered a good leader by Vamashakti because she relates well to people, has good networking skills, and is a confident public speaker. At the beginning of the project, extension agents had to work very hard and make persistent efforts to interact with the women and in most cases approached them first through the male members of the household. It was also a challenge to get them to participate in the training activities and to join the farmers' groups. Women did not have the confidence to interact in new situations with people they did not know. But once women began to participate, their confidence grew and they began to interact with each other, visit each other and develop friendships. The farmers' groups provided them with a reason to go out of their homes and visit each other. They went to each other's fields to give and receive advice.

The agriculture training particularly helped to form these relationships. Women were interested in learning how to improve the income from farming and once it became clear that the purpose of the training and groups was to improve agriculture, they were supported by members of their households. They said they were motivated to join the project activities because of the need to improve their income from farming.

At the community level, the MSC stories focused on more systemic changes brought about by women's roles in vegetable farming. They emphasize changes beyond the household level, in which men are more accepting and encouraging of women's mobility, learning, and economic activity. For example, when the men in Rahatipur Village were asked at what point did their wives get involved in the agricultural extension activities, they said: first the men had a couple of training sessions. When asked about this information, the extension agent in the area said that after a year the men proposed the women get involved. All the men agreed because they wanted their women partners to know about the new practices so that they could work together in the fields. The men said that before the training there was less socializing. Now there are more social interactions among women and men. This is an indication (and it may be that the extension agent was exaggerating the ease with which men embraced mixed gender-trainings and socializations), of increased acceptance over time by men of women's role in the farming system.

In other villages, women farmer's group members said that they now visit each other and their husbands visit each other as well. The story below told by a Vamashakti leader illustrates changes in patterns of interaction across gender and caste.

Text Box 10: Change Story

Three women from different villages who were all teachers in the learning centers have become good friends. They now go to each other's' houses and spend time together outside of the SHG. They are also from 3 different castes. Although they had completed class 8, they decided to go back to school to prepare for the class 10 exams. They went to the same school and their husbands are now also friends. Recently, the results of the final exams were announced, and all three women received a first division pass with grades of 68, 72, and 75 percent respectively.

(Story told by Vamashakti coordinators in Pratapgarh).

3.3 Changes at the Group Level with Regional Significance (Collective Action)—New Roles and Identities

The project defined collective action as aggregation (of smaller groups into the federation), increased social capital and networking, and 'strength through numbers' in terms of progress in areas of personal empowerment.

Text Box 11: Most Significant Change Story

Women Farmers' Fair: Women members of 240 SHGs from 2 blocks formed a federation in Raniganj. These women together organized a women farmers' fair on 28 Feb 2013. These women who did not leave their homes before and followed traditional ways at home and in the farms got an opportunity to get out of their homes after joining the groups formed by Sunhara India project. They learned new ways of doing agriculture and most importantly they learned that although they worked so hard in the fields they were not recognized as farmers. The women decided that together they would organize a women farmers' fair. They started planning one month before the identified date. They had to decide many things: where would the fair be held, who would put up the tent, what fees will be charged, what role will the children play, what will be displayed in the exhibition, what entertainment will be provided, games for women and children, children's stories, who will be responsible for the food, how will other organizations participate, who will ensure the presence of government officials. Women distributed and shared responsibilities among themselves. About 3000 women were involved and participated. An exhibition of agriculture technologies and practices, learning center, amla processing, and other organizations (outside organizations were invited to put up stalls). A puppet show and a play were organized. Women acted in the play. There were also food stalls (Story selected as most significant change story by Sunhara India staff to illustrate changes brought about by group participation).

This story was selected by the staff as a most significant change because the fair demonstrated the high level of confidence that the women had acquired. This was the first time that a farmer's fair was being organized for women, by women. The women's families also participated, especially the children. The fair demonstrated collective action for social and economic change

due to group formation and SHGs. It also solidified attitudes that had begun to change as a result of the training about women's role in agriculture into public recognition of women as farmers. The stories related to changes at the group level (i.e. in SHGs and farmers' groups), focused more on how the groups provided support and the conceptual framework for women to articulate the changes brought about as a result of agricultural training and increased income from vegetable farming. There were very few references – outside of those articulated by the project team and the leadership of Vamashakti- to transformation of the group as an effective mechanism for advocacy or as a financially sustainable support system for women.

3.3.1 Collective Action for Women

The project's focus on empowerment was based on the "idea that structured groups can be an effective mechanism for helping women collectively overcome gender-based constraints and experience empowerment (ASI May 2012)."

The training received in farmers' groups and through training for Vamashakti leaders appears to have similar benefits for women's ability to speak in public, have greater mobility, and greater control over income. Consequently, it was difficult to assess if one type of group participation was more effective than another, and almost impossible to test the benefits of belonging to both types versus only one.

Not all women participate in SHGs – some are engaged in farmer's groups only or choose to be independent. For example, in one farmers' group, the outgrower members and the lead farmer interviewed for this assessment said that they prefer to get together in their farmers' group. The women went together to the exposure visit and for the extension agent's demonstrations.

The project worked with SHGs and farmer groups. Below is a table illustrating the allocation of women beneficiaries across districts and groups:

District	Total women reached	Farmers Group & SHG membership	No. female lead farmers	No. female SHG leaders	No. learning centre participants	No. learning centre teachers
Shahjahanpur	2,663	100% in farmers groups	103	n/a	n/a	n/a
Sultanpur	1,016	100% in combined farmers groups & SHGs	81	n/a	n/a	n/a
Barabanki	77	100% in farmers groups	2	n/a	n/a	n/a
Allahabad	42	100% in farmers groups	0	n/a	n/a	n/a
Pratapgarh	2,504	43% in both farmers groups & SHGs 14% in farmers groups only 43% in SHGs only	61	14 SHG cluster leaders (3 of whom are jointly lead farmers & teachers)	255 (all SHG members)	17 (6 of whom are also lead farmers)
Total	6,302		247	14	255	17

SHG members spend about one hour at meetings once a month. SHG leaders spend another three hours at cluster meetings and cluster leaders spend seven hours attending three meetings per month (including travel), at their own SHG, at their cluster meeting, and at a meeting of cluster leaders at Vamashakti. Several women said that it was difficult to assume leadership roles in Vamashakti if they were actively involved in vegetable production due to the time commitment. Literacy teachers (of which there are six), more often than not, also decided to forgo an active role in vegetable farming as they were expected to be in the learning center on a daily basis.

Time was cited as a major constraint by both farmers and Vamashakti leaders. With women farmers' multiple responsibilities in the fields and households, it is hard for them to juggle the demands of vegetable growing, with outside group membership. As such, the more informal farmer group structure also promoted by the project worked well for many women beneficiaries. The handful of women who serve as leaders for Vamashakti, in the capacity of cluster leaders and literacy teachers, appear to reduce the time they spend in agriculture. The tradeoffs in terms of income were difficult for the assessment team to assess, as many women are just in their first or second cycle of vegetable production.

3.3.2 Collective Action for Men

The project also engaged men in collective action. The men farmers' groups were structured exactly the same as the women's, with a lead farmer who received extension support to his group of farmers, who learned new practices from both the lead farmer and the extension agent. In some instances, farmer groups also registered as SHGs to access the national savings programs available to registered SHGs, as was the case in Allahabad. This formal registration was also important to farmer groups wishing to become involved in the VPCL Producer Company.

3.3.3 Collective Action for Women and Men

In response to men's and women's requests, the extension agents also engaged men and women together; even those groups were not officially organized by the project.

There was a limitation of having primarily gender-segregated districts of operation. For instance, in Allahabad and other select, traditionally 'male-only' districts of Sunhara India's intervention, the project piloted mixed gender trainings in the final six months of the project. Women joined the men's groups for demonstrations in the fields by both lead farmers and extension agents. In Allahabad, even though men were organized in SHGs as shareholders in the VPCL producer company, women were not invited to join – in large part because they were not formal members of these groups. The CEO also did not perceive women as potential purchasers of inputs or sellers of potatoes; the CEO, unlike the extension agents, had not participated in project's gender training. Towards the end of the project, there was an attempt to address this feature of the design which limited women's opportunities to benefit from market opportunities and to give them opportunities similar to men. The project facilitated linkages between the VPCL and the potato facility at Vamashakti, opening up the VPCL's markets to women in that district. It is one area to consider improving on in future program design models.

In Sultanpur, men and women participate as lead farmers and outgrowers in men's only and women's only groups that met at the same time for the extension agent's visits. There was some variation across communities, which appeared to be related to differences in gender relations

based on caste. In one community, where the farmers were Brahmin, their partners were less involved in agriculture. Although when those households hired labor, the women supervised the women laborers, who performed the majority of labor in the fields.

In other Sultanpur communities, it was the men who requested the extension agent to train their partners. In some communities, women approached the extension agent stating that if they were going to labor in the fields, they needed to understand the practices better. In response, the extension agent brought women into existing men's groups, and in others she formed women's only groups. In still other communities, she approached women first about forming groups and then spoke to their husbands.

Women from some Sultanpur communities also stated that they have bank accounts now. They put money aside regularly when they get together with the extension agent. In the same village, in interviews with men, they said the trainings facilitated communication between men and women. In another village, with a women only famers' group, the members emphasized how participation had been important for getting them out of their houses and onto each other's fields. They also went to training together outside of the community and attended the women farmers' fair in Pratapgarh.

Another outcome, men said, was increased socializing among women. In recognition of how hard women work, they have looked for ways to decrease their labor, such as driving wheat to market in carts rather than having women carry it on their heads as they had done in the past.

In Shahjahanpur extension agents ended up working with both men and women, sometimes separately and sometimes together. The woman extension agent in Shahjahanpur began her outreach in each community to men. She met with them several times until they understood the reason for working with women. Men were initially doubtful about women being able to learn or understand the new practices. Within a short period of time after the women had begun to participate in the training however, the extension agent noticed an interesting role reversal. Men called her identifying themselves as women participants' husbands. The women also encouraged her to train the men. As a result, women now perform many of the tasks that men used to undertake such as spraying and irrigation. When women encountered resistance from their husbands they planted improved seeds on the field bunds, kept the proceeds and opened bank accounts. In one community, the women farmers' group engaged in collective action at a local bank where they insisted the branch manager re-open their dormant accounts.

4 RESULTS LINKED TO THE HYPOTHESIS

The preceding section revealed changes in gender relations at both the individual and community levels. In order to assess what extent it was the project's focus on collective action that brought about these changes, this section assesses the extent to which the project women's empowerment hypothesis holds true. It examines how the different approaches used, especially with regard to the particular combination of social and economic interventions, affected women's empowerment and opportunities in the value chain.

The hypothesis, which provides the rationale for Objective 3 of this SOW, empowerment of women, is that:

The combinations of socioeconomic interventions and the process of implementing those interventions in a way that bolsters women's collective strength to overcome gender-based constraints are necessary for women to be empowered and to take advantage of market opportunities facilitated through the value chain development. ¹⁰

The theory of change postulated that:

A model of collective action, which assumes that when women are organized into collective groups, they are better able to overcome the gender-based inequalities and discrimination they face as individuals. For this approach to succeed, programs need to provide an economic incentive for women to join and for their husbands and family members to support their participation. In Sunhara India case, that incentive is the increased access women gain, via the groups to market-based economic opportunities. From a value chain development perspective, this structure for collective action enables women to capitalize on new market opportunities through a market chain development program. Also central to the approach is the development of a cadre of women leaders who have the confidence and skills to lead the women to take on new roles and overcome traditional barriers (Sunhara May 2012:3).

The implementation strategies identified by the project were to:

- Target women as farmers
- Use collective group action to leverage economic opportunities for women
- Use collective group action to address social gender-based constraints
- Build and nurture women leaders

Educate and involve men and family members through gender-awareness activities.

These are evaluated in each sub-section below, with respect to how they relate to achievement of the hypothesis.

4.1 Target Women as Farmers

Overall targeting women as farmers appeared to improve the delivery of services to women, improve their confidence, and allow them to more proactively engage in the project's activities. As an overarching strategy, this showed great promise although there was some variation in the different types of ways this was implemented that are worth highlighting. Reaching out to women farmers came from extension agents, but the GA team also encountered husbands who requested their spouses be included. In women only groups, women often prevailed on the extension agent to speak to their husbands to convince them of the value of the new practices and to reassure them that their money would be well invested in the recommended seeds and other inputs.

The project's recognition of women as farmers in their own right, and their right to receive the same extension support as men, contributed to notable changes in women's incomes and more control over its use than previously. Women, however, did not have access to the same

 $^{^{\}rm 10}$ This is a quote from the SOW for the Gender Impact Assessment.

opportunities as men from some of the more dynamic changes in markets and services, or to opportunities higher up in the value chain, as SAPPL supplier franchisees, or as traders. ¹¹Men's and women's farmers' groups appeared to be identical in the types of activities, training, and information they received.

4.2 Extension agents reaching out to women farmers

As discussed in the previous section, the extension agents were particularly adept at responding to these requests from both men and women. For example, in Pratapgarh, the extension agent explained to men why they were working with women and then handed out his phone number, telling the men to call him anytime (women participants also had his phone number). He said he regularly received phone calls from men to validate what their partners had told them. He used the same techniques to train men and women. He showed pictures, used the blackboard for drawing while explaining, and demonstrated practices on farm. In most communities, he trained the women first and then their partners. He selected land near the road for his demonstration plot as it was important for other people to see it. He felt it was particularly important to have it be successful when working first with women, in order to also convince their partners. He found the women more willing to experiment, although often the decision to change practices depended on the man's decision.

4.3 Focusing on the vegetable value chain

Another important finding was that the project's selection of the horticultural value change put women in a position to build on expertise and control that they had over their household gardens.

In most areas, the division of labor in vegetable production was less rigidly established than with grain crops. The introduction of new vegetables also put women and men on more of an even playing field. Finally, when women met resistance from their husbands about growing new crops, they could plant in their gardens or on field bunds without challenging men's hegemony over other agricultural fields.

Several women, who could not convince their husbands, even with the assistance of the extension agent, implemented the practices in their kitchen gardens. Once their husbands saw the results, they agreed to let women take the lead and plant on larger extensions of land. The extension agent in Pratapgarh said that the project's focus on the horticultural value chain was extremely important to bringing women into the process, because of the prominence of their roles in vegetable cultivation. If the project had focused on rice or wheat value chains, he thinks it would have been more difficult.

4.4 Use Collective Group Action to Leverage Economic Opportunities for Women

The farmers groups provided women with increased income and opportunities to participate in activities outside of their households and communities. The agricultural training also built upon

¹¹ The rationale for these decisions according to project leadership is that women in Pratapgarh own very small pieces of land and irrigation was also a challenge; the opportunities for commercial potato production were limited until they were able to lease land. The assessment team acknowledges this limitation, however, in other instances, where men's opportunities were constrained; the project intervened to overcome those constraints by either making investments, hiring experts, or providing loans and grants on very favourable terms.

their pre-existing knowledge on vegetable cultivation. In some instances, women were able to parlay their new income into greater control over assets by leasing land or sharing decisions about the use of land with their husbands or sons. Men also benefitted from the vegetable production and in many communities also recognized the economic contribution of their women partners.

For women, this meant that they engaged in more joint decision making with their partners about adopting new agricultural practices, deciding what and when to sell their products, and exerting more say over how their own and household income is spent.

Other activities sponsored by the project did not benefit men and women equally. For instance, project activities designed to strengthen economic opportunities for rural households through the potato value chain focused only on men farmers. One of the reasons is that Allahabad, a district with high levels of potato production was a district where only men's groups were the target of project activities. Although women farmers occasionally participated in extension activities n Allahabad, it was informal (outside of the last six months of the project when the mixed gender trainings were piloted) and frequently upon their own initiative; although they benefited in some measure as members of the household from increases in production and income, they did not appear to achieve the same benefits as women involved more actively in other vegetable production in terms of greater control over income.

Men farmers benefited at many levels, as franchisees, input suppliers and buyers. Furthermore, as share-holders of VPCL, men farmers will continue to benefit from a share of the profits. What the men farmers have been left with at the end of the project is a private limited producers company with better prospects for success through its partnership with private sector enterprises such as SAPPL. Their membership role in the VPCL also gives them a role in management decisions and positions them as shareholders to benefit from the producer companies' proceeds. ¹²

There were other types of income generating activities designed for women that were not available to men although they seemed to the GA team to be, on the whole, less lucrative than opportunities available to men as franchisees or shareholders in the producer company. As mentioned earlier in this report, these constraints still preclude women from benefitting from the full range of interventions that men were able to participate in and from operating on the exact same 'playing field' as men in terms of opportunities, skills building, and benefits. There are opportunities to incorporate learning in this area into future designs, including ways to expand the full set of project-facilitated market opportunities into women clusters, make them more inclusive, or identify and nurture equally strong market opportunities.

Although implementers did not consider the learning centers as an income generating activity, the GA team observed that working as a teacher in the learning center was the activity that was most attractive to women with literacy skills. It should be noted that there are only 17 literacy teachers out of 5,000 women farmers directly targeted by the project, which is a very small

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¹²The decision to host the VPCL in Allahabad was based on the higher levels of potato production in Allahabad and the interest of the private sector. If Allahabad had been the site chosen for women's farmers' groups as opposed to male farmer groups at the initial startup, however, women rather than men might have had a greater opportunity to participate directly as members in the producer company.

portion. Women literacy teachers at the learning centers earned a salary of 1500 INR per month. They were able to make autonomous decisions about the use of their income, including using it to invest in activities that gave other members of their households more autonomy as well, such as a woman who bought her mother-in-law a cow so that her mother-in-law could have a source of income she controlled herself.

The women's SHGs provided more limited economic opportunities for women. All SHGs offered women the opportunity to save, which was a requirement of membership. Groups that had accumulated enough in savings to lend money provided their members with access to small amounts of credit. Vamashakti, the SHG Federation, lent money to SHGs for women interested in purchasing vegetable pushcarts or for leasing bicycles. Many of its activities were designed to generate money for the federation, such as plans to sell small seed packets for kitchen gardens, to rent out agricultural equipment, and to support the production of herbal medicine. In general, these activities do not appear to have a lot of promise in terms of generating significant economic benefits. The various activities promoted by Vamashakti are not based on a market study or business plan.

The one exception is a planned potato processing plant that will provide employment for individual women and income for the federation, but member SHGs will not participate as shareholders directly. The processing plant (potato wafers), will be run by a company specifically set up for the purpose called Vamashakti Associates Private Limited. VPCL, another private partner, and ASI will be represented on the board along with two women members of the Vamashakti Federation, chosen by the cluster leaders. These two women have already been identified and are supposed to represent all the women members of all the SHGs. The Federation, rather than the individual SHGs is the shareholder. Aside from these two representatives, it is not clear how engaged the rest of the membership will be in decision making and oversight. The main opportunities for women will be as employees of the processing plant and as producers of potatoes, which the company will buy.

Profits from the potato processing plant will essentially be shared by the plant's investors and Vamashakti Federation. One part will be re-invested in the company. One part will filter down to the men farmers through their equity shares in VPCL. One part will be given to Vamashakti federation to run welfare services for women, and run some group-based livelihood enterprises for women. Women members of Vamashakti federation will not receive any share of the profits as shareholders from Vamashakti Associates Private Limited. It is a business model where profits are shared by men and women are recipients of "corporate social responsibility", reinforcing stereotypes about what men and women are capable of — and also reflecting the reality on the ground of how the project decided to allocate sources of financing available at the time.

Women also did not participate equally in the project activities that supported improved market linkages, particularly with regards to the franchise networks. While men were engaged as traders or suppliers and were benefiting from investments in their businesses and infrastructure by the project, women's opportunities were much more constrained. Women received loans for pushcarts (INR 5500) which they had to pay back. Men received a \$3000 licensing fee paid by the project for the (initial) cadre of men franchise owners to offset their own investment of risk

with SAPPL through taking an in-kind loan of inputs which had to be repaid at the end of the season with harvests. ¹³ Once the concept was proven, however, project support tapered off and by the end of the project, franchises were launching independent of project support, based on the strength of the proven business model itself. The infrastructure improvements in the market were more beneficial to men traders than to women sellers. There were no investments in infrastructural or organizational designs to mitigate harassment of women sellers. Restrooms and washing areas were not priorities for funding.

The Farmers' Resource Centers (FRCs) which are the input suppliers are all owned and managed by men. Seed capital for the first four FRCs, valued at \$1000, was provided by the project in the form of a grant. With the concept proved, the remaining FRCs started up independent of project financial support. The vegetable collection center which serves as trader-buyer is a wholesale cum retail shop and is owned by a woman SHG member and her husband. Her husband's uncle is also a partner in this venture. The business is managed by her husband, and she keeps the accounts and manages the shop for two-three hours in the afternoons.

4.5 Use Collective Group Action to Address Gender-based Constraints

As discussed earlier, the project used an operational definition of empowerment that focused on the individual rather than on group empowerment. While the project did not explicitly emphasize collective action as a way of addressing gender-based constraints in institutions beyond the household, there were a couple of instances where collective action contributed to alleviating structural gender-based constraints related to women's identity as farmers and their access to the banking system. The farmers' fair in Pratapgarh and the bank sit-in in Shahjanpur, discussed earlier in Section II, were examples of how women could band together to address gender-based constraints outside of those imposed by their households.

Nevertheless, the project did not address structural gender-based constraints that affect women's mobility, control over higher value assets, such as land, and their access to opportunities at other levels of the value chain aside from production. While this was not the mandate of the project and thus outside the scope of a project-specific assessment, the GA team finds this to be a missed opportunity in the overall design that should be considered with regards to areas for future improvement. This is discussed at greater length in Section IV.

Both the farmers' groups and the SHGs offered women and men opportunities to become leaders in their groups and communities. Both types of groups encouraged women to play a role as

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¹³For the initial cadre of franchise shops, owned by men, established in project sites, the project covered the \$3000 startup franchise fee required by SAPPL for its training and branding rights; owners also received \$3000 in a loan from the supply company and potato wholesale buyer SAPPL to cover the initial costs of inputs at the start of the season, which the franchisee has to repay in-kind at the end of the season. In Pratapgarh and Sultanpur, push carts were sold to 14 women SHG members for which the women have to pay in installments over 10 months. If they are not able to pay their installments, then the SHG Federation has the option to charge interest after 10 months. Some of the women were previously engaged in small scale horticulture sales (selling vegetables from baskets on their heads) but are now engaged in rural retail through the acquisition pushcarts. Two of the women already had push carts; it is not clear why the project chose to give them additional push carts. At present, all the women are paying their installments.

public speakers, sources of information, organizers and trainers. Men and women expressed an increase in their self-confidence

It is difficult to pinpoint the exact set of project activities that contributed to building leadership skills. Many of the leaders in Vamashakti, the federation of SHGs supported by the project, were women who started out as lead farmers or served as literacy teachers. Clearly all three types of groups ---farmers' groups, learning centers, and SHGs---provided skills and support for women leaders to emerge. The activities within the groups contributed to women's self-confidence, increased knowledge and skills.

In retrospect, women's farmers groups may have served as a better platform for the development of women's producers' associations or the integration of women into men's producer associations (i.e., VPCL member SHGs), than SHG affiliates of Vamashakti, which were composed of vegetable farmers, other farmers, and non-farmers.

4.6 Educate and involve men and family members through gender-awareness activities.

Some of the activities aimed at gaining men's support for women's greater agency were more successful than others. As noted above, the extension agents were particularly adept at developing ways to diffuse men's resistance and doubt. They attributed much of men's resistance to their own lack of information. At other times, men's resistance was a product of beliefs and practices about gender roles, but at others it was a product of their concern for their women partners' safety, itself a product of structural and institutional gender inequalities.

One of the original implementation strategies was to "educate and involve men and family members through gender-awareness activities." The project had a limited number of formal trainings to implement this activity, including two systematic residential gender trainings for men and exposure visits and residential agricultural trainings for men (in women's cluster). Instead, the project focused on more informal sessions and dedicated meetings for men and their participation. The project also focused on building the capacity of extension agents, who themselves were expected to integrate awareness into their daily jobs, and who proved extremely innovative and responsive to both men's and women's concerns.

The deviation from the intended design actually allowed for more flexible and innovative actions by extension agents, which benefitted both the women partners of men who were trained and men partners of women who were trained. In retrospect, the anticipated difficulty of training both men and women in the same areas should have been tested from the beginning of the project, perhaps with some phase in period as was done by individual extension agents. With the appropriate adaptations to ensure that women were not sidelined, several extension agents were able to work successfully with both men and women in the same households.

5 OPPORTUNITIES FOR ANALYSIS AND IMPLICATIONS FOR FUTURE DIRECTIONS

Sunhara India's approach to women's socioeconomic empowerment was based on a model of collective action which assumes that when women are organized into collective groups, they are better able to overcome the gender-based inequalities and discrimination they face as individuals. The project design postulated that economic incentives are necessary to get women to join groups. The groups in turn provide the structure for the collective action that informs women of their rights, which empowers them to take advantage of new opportunities provided by the value chain development program. In addition, the program develops a cadre of leaders to take on new roles and overcome gender-based barriers.

There was evidence that women's participation in groups contributed to their increased access to knowledge and skills that were fundamental to them taking on different roles. There was less evidence of the groups' actions contributing to reductions in structural gender barriers, such as decreasing harassment in markets, addressing women's time constraints which limited their capacity to become supplier franchisees, or shareholders in a producer company supported by the project.

Through interviews with diverse groups of stakeholders, the assessment identified a number of changes in gender relations that plausibly are associated with actions of the project. ¹⁴After careful consideration of the hypothesis in light of these changes, the GA team believes that there were several important missed opportunities attributable to the hypothesis and the operational definitions of empowerment and collective action, as well as the way they informed project design.

Women's empowerment at an individual level does not necessarily result in equal opportunities for men and women in communities or the larger society. While the GA team recognizes that projects have limited time and money and that implementers must make choices and assess the trade-offs of different options to arrive at a set of actions that are within the manageable interest of the project, there is limited evidence to show that interventions systematically addressed gender based constraints at levels of the horticultural value chain other than production. The qualitative changes in gender relations at the household level described above have occurred largely as a result of men and women farmers' participation in the extension training and the subsequent adoption of improved cultivation practices, which produced increased incomes.

Although there continue to be lively discussions and debates about the empowerment, current best practice recognizes that the concept of empowerment is not limited to individual agency but also encompasses institutions, which provides the preconditions for effective agency. The institutional dimension of empowerment *provides the opportunity structure* for individuals and groups to express their agency (Alkire and Ibrahim 2007: pp. 8-9). To operationalize this definition, it is necessary to support women's and men's equal access to and control over critical

¹⁴The endline study was not finalized prior to this gender assessment team. This statement merely reflects the limitation of our methodology and access to other information.

economic resources and opportunities and to eliminate gender-based structural inequalities at different levels of the value chain that limit women's and men's opportunities and productivity. 15

Reconsider the project's operational definition of collective action from organizing in groups in support of individual change to a concept of increased social capital and networking for social mobilization and collective action, would support a more comprehensive approach to reducing the types of gender-based constraints that restrict agency and limit access to opportunities. A recent review by Oxfam of women's collective action in agricultural projects in Mali, Tanzania, and Ethiopia points out that development actors promoting women's collective action have tended to focus more on issues such as group formation, mobilization, and providing technical and financial inputs than on overcoming gender-based constraints to accessing markets, governance, and restrictive policies (Oxfam GB 2013).

Sunhara India, by focusing predominantly on the agency component of empowerment and the group formation component of collective action, made little headway on significant genderbased structural constraints that in the long-run are likely to limit women's opportunities as traders, suppliers, processors, and expansion of their roles on farm as producers, managers, and owners. If future interventions are planned with the purpose of creating equal opportunities for men and women in value chain development, there is a greater likelihood that the programs will contribute to overcoming constraints that limited women's opportunities at different levels of the value chain. ¹⁶This approach is different than the approach taken in Sunhara India which added a women's empowerment component onto a value chain project.

While recognizing that all projects are limited by resources and choices made at design, some examples of collective actions to address structural constraints are: 1) transforming the hostile culture toward women in mandis 2) advocating for more responsive and effective services (health, policy, credit, land titling, and legal) 3) advocating/organizing for equal wages for men's and women's labor (on and off farm) 4) supporting women's opportunities to become franchisees and traders; 5) supporting women to become members of the VPCL.

More generally, the assessment suggests three gender-based structural constraints critical to women's empowerment that were not addressed by the project, but are fundamental to sustaining the project's achievements and improving the design of subsequent programs. They are:

1. Time constraints: Women interviewed all stated that time constraints as a result of their responsibilities in the care of the household and children limit their wider participation in agriculture and SHGs. The extension agent in Shahjanpur commented that although women have taken on new roles in vegetable cultivation, men have not taken on new roles in the care of children and the household. Older women were able to shift some of their household duties to daughters or draughts-in-law, but those actions only shift the limitations on time and opportunity to other women. The Oxfam study cited above found that women group members tend to be older, married, and from wealthier households. While we did not have the data to come to similar conclusions, we did find that time restricts participation of some women in groups, thereby restricting their access to

¹⁵This is adapted from Tornqvist and Schmitz 2009.

¹⁶ See Rubin, Manfre, and Nichols for how to design a program from this perspective.

knowledge and skills delivered by the project through groups. One strategy that was not fully realized by the project was greater engagement of men around the mutual benefits of more equitable gender relations and benefits. Many men partners of women involved in the farmers' groups voiced their understanding of working together on vegetable production. The next step would be teaching men to share in other tasks that are not normally their responsibility as well as sharing decision making and ownership of assets more fully. ¹⁷ The complementary focus on improved practices and technologies was also designed in part to reduce the labor burden from these expanded production roles (for example, reductions in weeding and increased returns on the land allocated to vegetables).

- 2. **Limited Control over Assets:** One critical constraint that has not changed appreciably is women's control and ownership of land and equipment. Some women in the project area have increased their control over land through leasing arrangements. Men and women farmers in all four districts increased the area under cultivation substantially by acquiring land on lease or through share-cropping arrangements. Women farmers have more control over the leased land which they frequently manage. They use the income from vegetables grown on the leased land to pay for the lease. Five groups of about 10 women in Pratapgarh have leased land jointly for cultivating vegetables. They do all the work themselves and plan to share the profits. Land is available because grain crops have a limited growing season and sit idle the rest of the year. While this is clearly a good strategy in the short term, as other farmers see the benefits of vegetable cultivation, land might once again become a scarce resource. Many of the stories highlighted women's lack of decision making with regard to land use. There is Indian Government schemes that support titling land for women or jointly. While a future project may not directly affect land titling, it is in a position to connect women to programs that will. In addition, many gender focused agricultural and food security programs include actions to strengthen women's ownership of assets. One of the most notable stories was about the woman who bought her mother-in-law a cow with her earnings from vegetables. Now they both have a source of income that they control.
- 3. **Restricted Access to Markets and Suppliers:** Women will not have significant control over their income until they have increased direct access to markets, a belief embraced by the project. The GA team found the most important missed opportunity in the vegetable value chain was related to the mandi set up under the project in Sultanpur. There was an opportunity to design a market where women would feel comfortable. The project provided significant resources for the market in benefit of the traders as well as the sellers. There was an opportunity to leverage those resources to engage traders and men farmers in a discussion of how to 1) decrease harassment of women sellers 2) support and mentor women traders and 3) organized transport to increase women's access.

One of the lessons of the project is that certain activities, such as group formation and agricultural extension, allowed for more similar methodologies and 'treatment' of men and women and that outcomes in these areas (e.g. adoption of technologies, yields) were more equal. The project implementers determined that further 'up the chain' interventions went, the more entrenched certain gender-based constraints were and this is where the

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¹⁷Examples can be found at Engenderhealth (<u>www.engenderhealth.org</u>); Promundo (<u>www.promundo.org</u>); and mencare (http://www.men-care.org/).

project determined addressing those gender-based constraints were beyond its capacity to address. One lesson learned from this experience is that it is important to build the capacity among project staff from the beginning to give them adequate know how and skills. Furthermore, it is important to provide project participants with adequate technical and social support for more equitable treatment and benefits for both women and men.

While men and women don't necessarily start on a level playing field, there are ways to design activities to put them on more equal footing. A committee consisting of both men and women can be set up to manage the mandi. The men traders interviewed said that 10-12% of the farmers who bring their vegetables to the mandi are women, but they have to wait outside the mandi until all the men farmers have sold their produce and then they come in to sell their produce to the traders. A simple change of rule can be instituted whereby the traders who wish to operate in the mandi attend to women farmers first and attend to the men farmers second, until non-harassment policies are enforced. A few women farmers also set up stalls near the mandi. In the future, the project can help to facilitate these sellers' entry into the mandi as regular traders through training and financing. Another constraint women face in the mandi is the lack of sanitation facilities. In the future, men's and women's sanitation facilities can be incorporated into the design and financing negotiated as cost share between traders and the project.

5.1 Lessons Learned

- 1. In addition to initial outreach conducted via community meetings, the project also used kitchen gardens as a gateway to identifying potential beneficiaries and involving women (especially those from more marginalized households) in the vegetable value chain. This was an effective strategy, especially in areas where women do not control land holdings. In Sunhara India, being able to demonstrate increased yields, even on small plots of land, gave women access to larger holdings on their farms or through lease arrangements.
- 2. The project's focus on vegetable production, which had a quick return on investment, contributed to significant increases in income and changes in the organization of production that benefited both women and men, while opening a gateway to women's increased decision making, mobility, and control over assets.
- 3. There should be more engagement of men about gender equality and its benefits to the household and community at the beginning of the project. Most men were eventually supportive of their partners' participation once they understood the benefits, especially the economic benefits of increased income, and the social benefits of having a more active partner in decision making about management of the farm and household.
- 4. The ability to purchase clothing and jewelry directly stood out as an important indicator of women's empowerment because it demonstrated both decision-making over income, access to cash, and mobility to go to the market, as well as comfort to deal with strangers. It also indicated improved self-image, a desire to spend money on oneself and wear better saris. Women's direct purchase of saris signifies two important empowerment indicators: increased mobility outside of the home and control over resources.
- 5. There were missed opportunities to work more on gender inequalities within institutions, especially in the context of service provision and market linkages. Men had many more opportunities than women to move into positions as traders and suppliers. Even when

these opportunities were made available to women, they offered a much lower earning potential and the terms of financing were much more restrictive. Uptake by women into these non-traditional roles and market opportunities admittedly is complex due to social norms about gender roles, women's own desires regarding their activities and responsibilities, and gender-specific barriers (some economic, some social, some legal) that often take significant time to address. Nevertheless, there are ways to address these more structural constraints within the context of value chain projects. In the future, ASI should consider ways to design interventions that intentionally reach both men and women, address the different types of barriers they face, and provide the necessary support to put to put them on a more level playing field.

- 6. Training extension workers in gender was very important to Sunhara India's impact. The extension agents were able to use what they learned to be very innovative about how to bring both men and women into the process. One of the great strengths of the project was their field staffs that were able to respond to women's and men's demands for training and extension advice. Extension agents created their own help lines for both the trainees and their spouses by making themselves available around the clock by mobile phone.
- 7. The theory of change focused too narrowly on women's individual empowerment through collective action, rather than on women's group empowerment through promotion of more equal opportunities at different levels of the value chain. The implementers focused on individual empowerment as a first step that is necessary to do before focusing on women-led group empowerment. In a longer program or in follow-on programming, women's group empowerment should be further developed. The GA team observations are that this limited women's access to more lucrative and dynamic opportunities. In the future the development or at least better articulation of one theory of change for the project that explicitly connects all objectives, including those focused on achieving gender equality, will make the implementers more accountable for addressing the structural constraints that discriminate against women and limit their access to equal opportunities. Individual empowerment of many women, while important, in itself does not alter these structural inequalities, which are the real barriers to poverty reduction and social equality for women and men.

A note on the selection of vegetables as a target value chain system: The project's selection of the horticultural value change put women in a position to build on expertise and control that they had over their household gardens. In most areas, the division of labor in vegetable production was less rigidly established than with grain crops. The introduction of new vegetables also put women and men on more of an even playing field. Finally, when women met resistance from their husbands about growing new crops, they could plant in their gardens or on field bunds without challenging men's hegemony over other agricultural fields. Several women, who could not convince their husbands, even with the assistance of the extension agent, implemented the practices in their kitchen gardens. Once their husbands saw the results, they agreed to let women take the lead and plant on larger extensions of land.

ANNEX A: BIBLIOGRAPHY

- Alkire, Sabine and Solava Ibrahim 2007: Agency and Empowerment: A Proposal for International Indicators," <u>OPHI Working Paper Series</u>. Oxford, UK: Oxford University.
- ASI "Expanding Rural Access to Agricultural Inputs through Commercially Sustainable Models: Farmer Resources Centers and Franchisee Model." Lucknow, India: Agribusiness Systems International.
- ASI October 2010 "Gender and Development Workshop." Lucknow, India: Agribusiness Systems International (ASI)
- ASI 2012 "Global Development Progress Report: Sunhara India Project Annual Report (Year1), July 8, 009-August 31, 2012." Luckn"w, India: Agribusiness Systems International.
- ASI 2010 "Sunhara India Project Annual Report (Year 1)July 8, 2009 August 31, 2010." ." Lucknow, India: Agribusiness Systems International.
- ASI May 2012 Impact Learning: Women's Empowerment in Agriculture-Collective Action through Group Structures." Lucknow, India: Agribusiness Systems International.
- ASI September 2012 "Integrating Functional Literacy into Agricultural Development and Women's Empowerment Programs Experience from the Sunhara India project." Lucknow, India: Agribusiness Systems International.
- ASI "Potato Processing unit PratapgarhProject for Establishment of Potato Chips &Bhujia Manufacturing Unit." Lucknow, India: Agribusiness Systems International.
- ASI February 2011Training Report: Gender, Rights and Collective Action: A training for select women leaders and women staff of partner organizations." Lucknow, India: Agribusiness Systems International.
- ASI June 2010 "Training Report: Basic Gender Training." Lucknow, India: Agribusiness Systems International.
- ASI February 2013 "Women As Farmers: Celebrating the Spirits' The highlights of Women Farmers Fair in Pratapgarh." Lucknow, India: Agribusiness Systems International.
- EDA Rural Systems Private Ltd and Andhra Pradesh MahilaAbhivruddhi Society 2006 "Self Help Groups in India: A study of the lights and the shades." Gurgaon and Hyderbad: EDA and APMAS for CRS, USAID, CARE, GTZ/NABARD.
- Gotschi, Elisabeth, JemimahNjukib, and Robert Delve 2009 "Equal Numbers, Equal Chances? A Case Study of Gender Differences in the Distribution of Social Capital in Smallholder Farmer Groups in Bu´zi District, Mozambique." "European Journal of Development Research Vol. 21, 2, 264–282.

- Hashemi, M.Syed, Sidney Ruth Schuler 1997 "Definiting and Studying Empowerment of Women: A Research Note from Bangladesh," JSI Working Paper. Arlington, VA:JSI.
- Kaarak Enterprise Development Services 2010 Final Baseline Report of Sunhara India Project. Delhi, India: Sambodhi.
- Khandelwal, Ashok and Shipra Deo 2011 "The Participation and Status of Women in Indian Agriculture, with Special Focus on Select Districts in Uttar Pradesh." Lucknow, India: Agribusiness Systems International.
- Oxfam 2013"Women's Collective Action: Unlocking the Potential of Agricultural Markets." London: Oxfam G.B.
- Rubin, Deborah, Cristina Manfre, and Cara Nichols Barrett 2009 "Promoting Gender Equitable Opportunities in Agricultural Value Chains: A Handbook." Prepared for dTS,under the Greater Aces to Trade Expansion (GATE) project, Women in Development IQC Contract No. GEW-I-0-02-00018-00. Washington D.C.: dtS for USAID.
- Schuler, Sidney Ruth, Farzana Islam, and Elisabeth Rottach 2010 "Women's Empowerment Revisited: A Case Study from Bangladesh," <u>Development Practice</u> 20(7):840-854.
- Tornqvist, Annika and Catherina Schmitz 2009 "Women's Economic Empowerment: Scope for SIDA's Engagement," Working Paper 30. Stockholm: SIDA.

ANNEX B: SCHEDULE OF FIELD VISITS AND PEOPLE CONTACTED

Fieldwork Schedule as it happened!

Date	Time	Activity
9 April 2013		Arrival in Delhi
Tuesday		
10 April 2013	11.40 am to	Telephone discussion with Swapnil and Akash of Sambodhi
Wednesday	12.15 pm	1
•	4.25 pm to	Flight to Lucknow
	5.25 pm	
11 April 2013	10.00 am to	Meeting with DeoDatt Singh and Shipra at ASI office
Thursday	12.30 pm	
•	2.00 pm to	MSC workshop
	6.00 pm	*
12 April 2013	10.00 am to	MSC workshop
Friday	1.00 pm	*
	3.30 pm to	Travel to Allahabad
	8.30 pm	
13 April 2013	9.30 am to	Discussion with VinayTuli
Saturday	10.30 am	·
	10.45 am to	Meeting with V P Sharma, BAIF State Head and Kamal Jaiswal,
	12 noon	Programme Officer at BAIF office
	1.30 pm to	Visit to Behraya village: meeting with lead farmer RamchandraMaurya
	3.00 pm	and UrmiladeviMaurya
	3.00 pm to	Meeting with lead farmer Vijay Patel and Parmila Patel in Mailama
	3.45 pm	
	4.00 pm to	Meeting with VPCL: UphaarKaushal
	5.30 pm	
	5.30 pm to	Meeting with Ranjeet Kumar, franchisee
	6.15 pm	
14 April 2013	9.30 am to	Travel to Lokapur village
Sunday	10.45 am	
	10.45 am to	Meeting with lead farmer Kalluram and outgrowers followed by
	12.30 pm	meeting with a group of women: Gayatridevi, Guddudevi, Sunita and
		Gulab
	12.50 pm to	Meeting with franchisee AvdeshMaurya at Monduspur village
	1.30 pm	
15 April 2013	9.00 am to	Travel to Pratapgarh
Monday	10.45 am	
	10.45 am to	Visit to Amla center at BAIF Bhavan, Rajapur and discussion with
	11.30 am	women: Dharma devi, Somaridevi, and Shanti Mishra,
		Accounts Manager GulabSohni Marketing Specialist
		Marketing Specialist
	12.00 noon to	Ravinder Singh of BAIF Mosting with women at Learning Center: Sundari, Learning Vidyo Patel
	12.40pm	Meeting with women at Learning Center: Sundari, Laxmi, Vidya Patel, Savitri, Urmila and Shama
	1.00 pm to	Meeting with Vamashakti women: more than 20 women participated
	2.45 pm	with vaniashakh women. more than 20 women participated
	2.50 pm	Meeting with women farmer leader and outgrowers at Mirashir village:
	2.50 pm	meeting with women farmer leader and outgrowers at winasin village.

		Sarojadevi Mishra, Sarjadevi and Vimladevi
	5.10 pm to	Visit to Vegetable Collection Center and discussion with Dinesh Patel
	5.30 pm	· · · · · · · · · · · · · · · · · · ·
	6.00 pm	Visit to women farmers at Shekhurpur village: Geeta Patel,
	o.oo piii	JameladeviRajori
16 April 2013	9.00 am to	Meeting with lead farmer Pushpadevi and outgrowers at Kharhar
Tuesday	10.10 am	village
Tuesday	10.40 am	Meeting with Sadhana and RamrajTripathi in Vishnupur village
	11.45 am	Cluster meeting: 31 women SHG representatives and Shanti and
	11.43 am	Meenakshi
		Discussion with pushcart owner: Pyaridevi
		Visit to Vimladevi in Sandila village
	2 00 mm to	
	3.00 pm to	Meeting with Rajkant Mishra, Shanti Mishra, MeenakshiTripathi and
17 4 11 2012	6.00 pm	ShyamaPandey
17 April 2013	8.30 am to	Travel to Sultanpur
Wednesday	9.15 am	
	9.30 am to	Discussion with farmer: Ganesh Shankar Singh at village Uturi, and
	12.15 pm	menthe farmer Ramkumar Verma
		GhanshamVerma and outgrowers at Devkali,
		YashodaVerma and other family members
	12.30 pm to	Discussion with women's group at Rahatipur village: 35 women
	2.30 pm	farmers participated
		Discussion with men farmers: Prithviraj Verma, Somnath Verma,
		Rajesh Kumar Verma, Ashok Kumar Verma
	3.00 pm to	Discussion with women farmers at Baintikala village: SushilaMaurya,
	4.10 pm	JayprakashMaurya, Shanti Maurya and SitaSohni
		Discussion with two men farmers
	4.10 pm to	Discussion with Beena (extension worker)
	4.40 pm	
	4.40 pm to	Visit to mandi and CoolBot
	5.00 pm	Trader: Ramashanker and other traders
	5.00 pm to	Travel and discussion with RakeshDviwedi of SVSS
	6.20 pm	
	6.20 pm to	Visit with push cart owner Savitri
	6.40 pm	and pushcart owner Mamta
	6.40 pm to	Travel back to Lucknow
	10.20 pm	
18 April 2013	11.00 am to	Debrief at ASI office in Lucknow
Thursday	2.00 pm	
19 April 2013	10 am to 1.00	Travel to Shahjanpur
Friday	pm	
Tilduy	1.00 pm to	Discussion with Ramesh bhai at Vinoba Seva Ashram and lunch
	2.00 pm	Discussion with Namesh onar at villoua Seva Ashrani and Iulich
	2.00 pm to	Discussion with extension staff: Kamla Singh, Amar Singh and Feroz
	3.00 pm	Khan
	3.00 pm to	Visit to Lead farmer: Rumadevi and her husband Ramdas
	•	Discussion with outgrowers: Santaradevi, Rupadevi, Ramadevi,
	4.35 pm	
	1 25 nm to	Santaravati, Veeravati, Rama, Nannidevi
	4.35 pm to	Visit to local mandi: Met vegetable grower's husband
	5.30 pm	and visit to Famers' Resource Center: Zayed Khan

	5.30 pm to 6.35 pm	Travel to Badaban village and discussion with Lilavati and her family and visit to the vegetable field.
20 April 2013	8.15 am to	Travel to village and discussion with Amar Singh, extension agent
Saturday	8.45 am	
	8.45 am to	Discussion with Lead farmer Surjadevi and outgrowersKusumkanti
	10.00 am	and Bijaykumari in Mahadru village
	10.40 am to	Discussion with Rooprani and Kusuma in Hathaodiya village
	11.40 am	
	11.40 am to	Visit to menthe fields
	12.00 noon	
	12.00 noon to	Travel to Lucknow
	4.00 pm	
25 April 2013	2.00 pm to	Discussion with Dhiviya David, gender trainer from Sangat
Thursday	2.40 pm	

Contact List

	Name	Position	Location	Contact
				Information
	Sambodhi			
1	SwapnilShekhar	Team Leader, Endline Survey		
2	Akash	Field Coordinator, Endline		
	ASI Staff			
3	Shipra Deo	Gender Program Manager	Lucknow	
4	DeoDatt Singh	Managing Director	Lucknow	
5	VinayTuli	Director, Technical Services	Lucknow	
6	RakeshDwiwedi	Project Coordinator	Sultanpur	
7	Amar Singh	Extension Officer	Shahjahanpur	
8	Firoz Khan	District Manager	Shahjahanpur	
9	Savitri	Extension Officer	Sultanpur	
10	BeenaPathak	Extension Officer	Sultanpur	
11	Hanuman	Extension Officer	Sultanpur	
12	SanjeevTiwari	District Manager	Sultanpur	
13	AshishBharadwaj	Regional Manager	Agra	

14	Amit Kr. Pandey	Extension Officer	Agra
15	Kamlesh Kr. Gupta	Extension Officer	Allahabad
16	Rajkant Mishra	District Manager	Pratapgarh
17	Shanti Mishra	Project Coordinator	Pratapgarh
18	Kanchan	Cluster Leader	Pratapgarh
19	N.P. Singh	Regional Manager	Lucknow
20	Uma Shankar	Extension Officer	Lucknow
21	Upendra Kumar	Extension Officer	Lucknow

ANNEX C: DATA COLLECTION INSTRUMENTS (INTERVIEW GUIDES) 18

Interview guides for value chain actors

This guide provides a basic interview guide for value chain actors associated with the Sunhara India project. It is organized by group of actors. Each section provides a brief summary of the purpose or objective of the interview and identifies the specific groups in the Sunhara India project to whom the interview will be applied.

The guides may need to be modified for specific interviews. The order of questions can also be rearranged. Every interview will end with a question related to the Most Significant Change methodology.

1. Service Providers

This group of actors includes a range of providers that deliver inputs, information and advice, credit, and other services to farmers and different types of farmers groups. The interview seeks to understand: 1. How the service provider is organized and managed; 2. The profile of its clientele, including individual and groups; and 3. Any differences between men and women customers or challenges in meetings men or women farmers' needs.

The interview should be used with staff or managers of the firm.

For Sunhara India this includes, but is not limited to, the following groups:

- Franchise outlets, e.g. the SAPPL franchise outlets
- Farmer resource centers
- BAIF
- NBARD

Interview questions

1. Organization and management

- a. Is this enterprise owned by a man or a woman?
- b. How did you raise the initial funds to purchase/obtain the business?
 - i. Where do operating funds come from?
- c. Who carries out the day to day operation of the business?
- d. Who makes decisions about purchasing supplies and hiring employees?

¹⁸Adapted from Rubin, Manfre, and Nichols Barrett 2009.

- e. How many employees (men/women?)
- f. What kind of jobs do men and women do in the business?
- g. Do you believe that men or women are better suited to particular jobs in your business?
 - i. What is an example?
- h. Are there jobs in the input supply shop that are believed to be more difficult for women/men?
 - i. What is an example?
- i. Are there jobs in the input supply shop that men or women are prohibited from doing?
 - i. What is an example?

2. Clientele and gender differences

- a. Do you have more men or women as customers?
- b. Are there differences in the purchases made by men and women producers?
 - i. Provide an example.
- c. Are there differences in men's and women's preferences in purchasing inputs, e.g. timing, pricing, and size?
- d. Do you believe there is a difference in how men and women use inputs in their horticulture enterprises?
 - i. Provide an example.
- e. Do you offer credit to your customers?
 - i. Are more of them men or women?
- f. Who makes decisions about offering credit?
- g. In your opinion, are men or women more creditworthy?
 - i. Why?
- h. Do you work with groups of farmers, e.g., farmer groups or self-help groups?
 - i. Are you working with men-only or women-only groups?
- i. Please describe how your business relationship with these groups works.
- j. Are there differences in the business relationship with men's or women's groups?

- k. Are there differences in working with groups versus individual farmers?
 - i. Provide an example.
- 3. What is the most significant change you have experienced in your business as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

For an interview with the SAPPL parent company (not an individual franchise), use the following set of questions:

- a. How many franchise outlets does SAPPL have?
- b. What are the requirements for establishing a franchise?
- c. Do you have more men-owned or women-owned franchise outlets?
- d. Are there differences in the size or scope of franchises outlets owned by men or by women?
- e. Do you believe that being a men or a woman helps someone to become a franchise owner?

2. Farmers

The interview with farmers seeks to understand what activities the farmer is involved in and how his or her participation in a group has improved his or her farming enterprise.

Interview questions:

1. About their farming activities

- a. How much land do you farm?
 - i. How did you obtain your land?
 - ii. Who makes decisions about how to use the land?
- b. What crops do you produce? (Follow up afterwards with: What livestock or small ruminants do you manage?)
 - i. Who makes decisions about what crops to produce?
 - ii. Who makes decisions about what new farming practices to adopt?
- c. What crops do you sell?
 - i. Where do you sell them?
 - ii. To whom do you sell?
 - iii. Who makes decisions about what crops to sell?
 - iv. Who receives income from the sale?
 - v. What household expenditures are you responsible for?
- d. Tell us about the work that you do specifically on the farm.

2. About their participation in the association

- a. When did you become a member of your group?
- b. Tell us about your decision to become a member of the association.
 - i. What are the requirements for participating in the association?
- c. What benefits do you expect to receive from your participation in the association?
- d. How has being in the group improved access to information about new farming practices?
 - i. Please provide an example.
- e. How has being in the group improved access to inputs?
 - i. Please provide an example.
- f. How has being in the group improved access to market prices?

- i. Please provide an example.
- g. How has being in the group improved access to new buyers?
 - i. Please provide an example.
- h. How has being in the group improved your income?
 - i. Please provide an example.
- i. Do you know any men or women farmers doing similar work as you that are not part a group?
- j. Can you tell us why you think they have not joined a group?
- k. Are there differences in men and women's ability to join groups?

3. Most Significant Change

- a. What is the most significant change you have experienced in your farming enterprise as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?
- b. What is the most significant change your group has experienced as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

3. Farmer leaders

- 1. What is the process for becoming a leader?
- 2. Did you volunteer or were you nominated?
- 3. Is it more difficult to become a leader if you are a woman/man in relation to your other responsibilities in the home and society?
- 4. How do you manage your different roles and responsibilities after becoming a leader? Your livelihood responsibilities, home and family, social responsibilities, etc.?
- 5. How do you perceive your role?
- 6. What does the group expect from you?
- 7. What are your responsibilities as a leader?
- 8. What benefits have you received as a leader?
- 9. How are decisions taken? What are the main areas in which decisions are taken?
- 10. What is the process of organizing the meeting? How is the agenda decided? Time and place?
- 11. What challenges have you faced as a leader?
- 12. Do you believe there are specific challenges you face as a women/man leader?
- 13. What are your achievements as a leader?
- 14. What are your future plans for the group?
- 15. What is the most significant change you have experienced as a farmer leader as result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?
- 16. What is the most significant change in your group? Can you tell us a story that illustrates this change?

4. Farmer groups

The interview seeks to understand: 1. How the group is organized and governed; 2. The composition of its members; and 3. Its relationship with other actors. This interview is generally conducted with members of the executive or leadership committee of the group. Additional questions from the Farmer guide can be added to this guide if appropriate.

For Sunhara India this includes, but is not limited to, the following groups:

- Farmer groups
- Self-help groups
- Producer companies

The guide can be modified or rearranged for specific interviews.

Interview questions

1. Group governance, management, and operations

- a. Tell us about your producer association/self-help group.
 - i. When did it start?
 - ii. Is it registered?
 - 1. How is it registered? Under what rules/regulations?
 - iii. What are the main activities of the group?
 - iv. What are the benefits to members?
 - v. How much are membership fees (registration and maintenance fees)?
 - vi. How often do they have to be paid?
- b. What financial resources and other assets does the group have?
- c. When are meetings held?
 - i. How often are they held?
 - ii. What time of day are they held?
 - iii. Where are they held?
- d. Tell us about the leadership positions in the association.

- i. How many are women?
- ii. How many are men?
- e. What qualifications are required to become a leader in the association?
 - i. What resources (financial, time, and other) are required?
- f. Do you believe that being a man or a woman helps someone to become an association leader?
- g. What management challenges does the group face?
- h. What challenges exist for growing (or formalizing) the group?

2. Composition of the group

- a. How many members are in the group?
 - i. If a mixed group, ask how many members are men or women.
- b. What are the criteria for membership in the group?
- c. Do men or women in this area face any challenges in becoming a member of this group?

3. Relationship with other actors

- a. What relationships does the group have with other agricultural actors
 - i. For example, input suppliers?
 - ii. Buyers or traders?
- b. How do members of the group access the services provided by these actors?
- 4. What is the most significant change your group has experienced as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

5. Buyers and traders

This group of actors includes a range of different types of buyers including collective centers (small wholesale points), mandis, individual traders, and others. The purpose of the interview will vary according to the different type of buyer. The interview guide provides some suggestions for different questions to ask by type of buyer.

For Sunhara India this includes the following groups:

- Collective centers (small wholesale points)
- Mandis
- Traders (or Punjab University which is training traders)

Interview questions

For the Collection Centers:

- 1. Tell us about your collection center.
 - a. When did it start?
 - b. Is it registered?
 - i. How is it registered? Under what rules/regulations?
 - c. What are the main activities of the center?
 - d. What are the benefits to members?
 - e. Who uses it and for what purpose?
 - f. What is collected there?
- 2. What is the mechanism for collection and storage? Marketing?
- 3. How is the collection center managed?
 - a. Are there more men or women in the management of the center? (It may be that it is managed by men or women only)
- 4. Does it seem to serve the purpose it was set up for?
- 5. What are the problems faced? How are they dealt with?

6. What is the most significant change collective center has experienced as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

For mandis

- 1. Tell us about how the mandi operates.
 - a. What are the main activities of the center?
 - b. What are the hours?
 - c. What is sold?
- 2. How is the mandi managed?
 - a. Are there more men or women in the management of the center? (It may be that it is managed by men or women only)
- 3. Tell us about how you identify the people you buy from.
- 4. Do you buy from more men or women?
- 5. Have you noticed any differences in buying from men and from women?
- 6. Do you believe that there are differences in the volume or quality of the product that you receive from men or women?
- 7. What is the most significant change the mandi has experienced as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

For individual traders

- 1. How many buyers/traders in your field are men? How many are women?
- 2. What makes it harder for women to become buyers/traders?
- 3. What qualifications are required to become a buyer/trader?
 - a. What resources (financial, time, other) are required?
- 4. Who carries out the day to day operation of the business? (if the buyer is a collective center or mandi, not for individual traders)
- 5. Who makes decisions about purchasing supplies and hiring employees?

- 6. What kind of hours do you work? (especially for individual traders)
 - a. How often and how far do you have to travel?
- 7. What are the characteristics that make a successful buyer/trader?
- 8. Are there aspects of buying/trading that are believed to be more difficult for men women/men?
 - a. What is an example of such a task?
- 9. How many employees (men/women?)
- 10. What kind of jobs do men and women do in the business?
- 11. Do you believe that men or women are better suited to particular jobs in your business?
 - a. What is an example?
- 12. Are there types of jobs that men/women are discouraged from doing?
 - a. What is an example?
- 13. Are there aspects of buying/trading that men or women are prohibited from doing?
 - a. What is an example?
- 14. Tell us about how you identify the people you buy from.
- 15. Do you buy from more men or women?
- 16. Have you noticed any differences in buying from men and from women?
- 17. Do you believe that there are differences in the volume or quality of the product that you receive from men or women?
- 18. What is the most significant change you have experienced as a trader as a result of participating in the Sunhara India project? Can you tell us a story that illustrates this change?

6. Production and/or processing companies (workers)

The interview guide provides some suggestions for different questions to production and/or processing companies. It should be with women at the processing center. For Sunhara India this includes the Aonla Processing Center

Interview questions

- 1. Tell us about your work at the processing center.
- 2. What are hours do you work?
- 3. Do you believe that men or women are better suited to particular jobs in your business?
 - a. What is an example of such a task?
- 4. Are there aspects of processing that are believed to be more difficult for women/men?
 - a. What is an example of such a task?
- 5. Are there aspects of processing that men or women are prohibited from doing?
 - a. What is an example?
- 6. What is the most significant change you have experienced as a result of working at the processing company? Can you tell us a story that illustrates this change?

AGENDA FOR THE MOST SIGNIFICANT CHANGE WORKSHOP IN LUCKNOW

Time	TOPIC of Day 1 Sessions
2:00 -2:15	Introduction of Process for the Day
2:15 -2:45	Vote with your Feet
2:45 -3:30	Overview of the Process
3:30 - 4:30	Group Assignment and Paired interviews
4:30- 4:45	Tea/Coffee Break
4:45-5:30	Sharing Of Stories In The Group and Selection of Key Change
5:30 -6:00	In Plenary, Selection of Change Domains
Time	TOPIC of Day 2 Sessions
9:30-9:45	Introduction of Process for the Day
9:45-11:00	Selection and documentation of most significant change stories by domain
11:00-11:15	Coffee/Tea Break
11:15-1:30	Presentation of Most Significant Change Stories Selected by Each Group and Discussion in Plenary about what it tells us about the comparative impact of the project on men's and women's lives, livelihoods, and economic opportunities through agricultural value chains

ANNEX D: CONSTRAINTS ANALYSIS FRAMEWORK--Constraints Matrix

Constraint*	Project's Enabling Environment A ctivities	Project's Agri- hort capacity building, and empowerment activities	GA team's Data Sources to asses changes
Beliefs and Perceptions: Women have no identity as farmers	Gender training for men and women Organizing campaigns, such as South Asian Women's Day and IWD events, conferences and women farmers' fair	Knowledge-building through regular training Training in agricultural institutes and university and exposure of women to field days Two women conferences in Pratapagrh Two women conferences in Shahjahanpur Women Farmers' Fair Adoption of new technologies Farmer resource centers Six booklets for new literate women farmers on agricultural practices	 Interviews with women farmers about their involvement in farming and division of labor, changes in their activities and time use, and new knowledge Interviews with men farmers about the division of labor, acquisition of new knowledge, and involvement of their partners in agriculture Change stories Farmers Fair participation
Practices: Women earn lower wages than men			 Interviews with women and men farmers about wage labor on farm Interviews with Amla Processing Plant

Power: Women have no role in decision making	Cadre of women leaders providing opportunities to nurture leadership	Adoption of new technologies Formation of farmer groups/self-help groups	 workers Interviews with extension agents Interviews with women and men farmers about decision making in hh and on-farm Change stories Interviews with staff Observation of SHG Cluster meeting Discussions with Varma Shakti leaders
Practices: Women have too much work (double/triple labor burden)		Some agricultural technologies were labor saving.	 Interviews with women and men farmers about division of labor and changes as result of project, and impact of technology on women's and men's use of time Change stories Discussion at Amla processing plant and with Vama Shakti Leaders and Women's group in Sultanpur
Beliefs and Perceptions: Women's farm work is considered as an extension of housework	Link back to increasing identity as a farmer (see above), and building the economic value from engagement in agricultural	Adoption of new technologies Six booklets for new literate women farmers on agricultural practices Formation of farmer groups/self-help groups Lead women farmers	 Interviews with women and men farmers about division of labor and changes as result of project, and impact of technology on women's and men's use of time (See above: women's identity as farmers) Change stories

Power: Women have limited access to and control over assets (including income), knowledge, resources, and extension services	Raising identify as farmer helps women demand and advocate for these services; and externally for service providers to see women as a possible audience	Formation of farmer groups/self-help groups Collection Centers Farmer resource centers Credit through SHGs	•	Interviews with women and men farmers about changes in income and other assets in the hh as result of project, and impact of increased income, new market outlets, and new technology and practices on women's decision making Discussed savings and credit uses through SHGs (Varma Shakti and SVSS) Asked women about their roles in selling and purchasing goods in the market and shops Change Stories
Practices: Drudgery: transplanting, weeding, harvesting, threshing, winnowing, etc.		Adoption of new technologies Expanding/diversifying women's role into marketing (i.e. outside of these drudgery type activities)	•	Interviews with women and men farmers about division of labor and changes as result of project, and impact of technology on women's and men's use of time Questions about what women and men regard as difficult and tedious work. Discussions with extension workers about changes in work patterns over the agricultural cycle with different crops Change stories
Beliefs and Perceptions: Perception that	Gender training for men and	Formation of farmer groups/self-help groups	•	Interviews with women and men farmers about

educated women are more difficult to control	women	Literacy training Gender training	 investments and attitudes about girls education Interviews with literacy teachers Change stories
Beliefs and Perceptions: Perception that women cannot learn technical knowledge and skills	Gender training for men and women	Formation of farmer groups/self-help groups Identification of lead farmer/leaders	 Interviews with men and women farmers Extension agents Literacy teachers and participants Change stories
	Women resource center	Knowledge-building through regular training	
		Showcasing improved practices through demonstration lots	
		Training in agricultural institutes and university	
		Adoption of new technologies	
		Farmer resource centers	
		Literacy Trainig	
		Six booklets for new literate women farmers on agricultural practices	

Restrictions on mobility	Gender training for men and women	Formation of farmer groups/self-help groups	 Interviews with men and women farmers, and members and leaders of SHG groups Change stories
Lack of education	Gender training for men and women Learning/literacy centers	Formation of farmer groups/self-help groups Six booklets	 Visit to and interviews with teacher and participants at Literacy Center Change stories
Domestic Violence	Organizing campaigns, such as OBR Gender training	Formation of farmer groups/SHGs	Change storiesInterviews with staff
Extension system does not recognize women as farmers	Gender training for men and women Women's resource centers	Formation of farmer groups/Self-hel groups Identification of lead farmers/leaders	 Interviews with men and women farmers about their experience with extension training on the project Interviews with extension staff Change stories
	Gender training with all franchisees and extension officers	Knowledge-building through regular training Showcasing improved practices through demonstration lots	
	Farmer's fair – raise profile amongst service providers, public	Training in agricultural institutes and university and university and exposure of women to field days	
		Farmer resource centers	

	Six booklets for new literate women farmers on agricultural practices	
Marketplaces (mandis) are not women friendly	Facilitation of access to alternative market outlets (e.g. pushcarts, aonla collection centers, vegetable collection center, and a retail shop.	 Interviews with women and men farmers about their market activities for sales of produce and purchase of inputs. Interviews with traders and franchisees Review of business plans for the VPCL Producer Company and the Potato Processing Plant in Pratapgarh Visit to and interview with vegetable collection center owner and pushcart owners
Policies/research is biased toward gender dominant models	Publication of issue of an agriculture journal on women farmers	N/A (was not a major focus of the project)
Fewer women in agricultural research, extension, and development positions	Training in agricultural institutes and university and university and exposure of women to field days	Interviews with men and women farmers about ability to work with women and men extension agents

Constraints were identified from the study by Ashok Khandelwal and ShipraDeo (2011) "The Participation and Status of Women in Indian Agriculture with Special Focus on Select Districts of Utter Pradesh," Lucknow: Sunhara India Project.