

Technical Note Number 1

**Applying a Gender Lens to Katalyst Market
Development Activities**

Prepared by

Mary Morgan

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Abbreviations and Acronyms

ADB	Asian Development Bank
BARI	Bangladesh Agriculture Research Institute
BBS	Bangladesh Bureau of Statistics
BRRRI	Bangladesh Rice Research Institute
BDT	Bangladesh Taka
CIMMYT	International Maize and Wheat Improvement Center
DAE	Department of Agricultural Extension
ESRB	Environmentally and Socially Responsible Business
GDP	Gross Domestic Product
GOB	Government of Bangladesh
ICT	Information and Communications Technology
MSE	Micro or Small Enterprise
NCCBL	National Credit and Commerce Bank Ltd
NGO	Non Government Organization
PRA	Participatory Rapid Appraisal
SME	Small or Medium Enterprise
UNDP	United Nations Development Programme
USD	US Dollar

Preface

Over a five year period, Katalyst supported a number of companies in training up retailers to improve their knowledge of generic agricultural cultivation practices and the use of specific agricultural inputs herein. In response thousands of retailers started to give more and better advice to farmers, which led to significant increases in agricultural productivity and farm income (see Faces of Pro-Poor Growth No. 4). A logical question to ask then is: do *all* farmers benefit from access to these services?

It is custom in Bangladesh that men deal with “external” environment, they buy inputs, they sell the crop, which means that female farmers will have little direct exposure to (trained) retailers. This could make the intervention not only less effective, but also less pro-poor as females are likely more directly involved in farming in poorer households and more of the additional income they generate from, for instance, homestead farming might be spend on household expenditures related to nutrition, education and healthcare.

Mary Morgan spent two weeks in North-western Bangladesh to understand who deals with whom; who has which level of decision making authority over which piece of land, which crop, and which crop-specific activity; who is (better) informed; and what are different information channels used. She describes a picture in which commercial farming is a family business with male domains and more female domains, and with most information percolating in through male. Females are not necessarily less informed than males but clearly receive information less directly than males do and hence value opportunities to have more independent access. Trained retailers are relevant also for females, but additional steps could be taken by retailers to reach females more directly.

Mary Morgan also wrote in more general terms on how a ‘gender lens’ could be applied to the work of Katalyst and other value chain or market development projects. Key here is to understand the roles that females play in particular value chains and design interventions around those specific activities to reinforce these, instead of doing the opposite, to design more generic intervention and then “drag” females into these. In the latter case, females might end up being engaged in activities, which are simply not ‘theirs’.

Mary Morgan worked closely with some dedicated Katalyst staff, especially Sraboni Sarker, Ehasanul Huq, Fouzia Nasreen and Harald Bekkers. The author remains solely responsible for the content of this technical note.

Both Mary Morgan’s analysis of retailers and vegetable cultivation and the gender lens framework will help Katalyst in designing relevant interventions for females and have stronger pro-poor impact. Of course we hope that the relevance of her work does not remain limited to Katalyst alone. We are interested in your feedback.

Peter Roggekamp
General Manager
Katalyst

Executive Summary

Katalyst works in the field of Small and Medium Enterprise (SME) promotion in Bangladesh. It started in 2002 and is currently active in around sixteen sectors. Two sectors in which Katalyst has been working in Northern Bangladesh are vegetables and maize. In the vegetable sector the strategy has been to improve productivity by improving farmers' access to quality inputs, the knowledge to use those inputs and generic information on vegetable cultivation. In maize the strategy has been to increase maize production by introducing a new 'maize-based cropping pattern', improving soil fertility with compost and contract farming. For both sectors private local service providers have been trained to provide information as an embedded service to farmers.

Katalyst's approach as a facilitator focuses on existing markets' mechanisms and incentives and is driven by market actors. The interventions in the maize and vegetable sub-sectors in the district of Rangpur have resulted in increased production and improved access to affordable quality input supplies for smallholder farmers. Katalyst has a commitment to pro-poor market development and recognizes that women are very poor and at the same time integral actors in agricultural production at the household level. Integrating gender into market development has challenges, which is why Katalyst is seeking to understand better how to incorporate women into pro-poor market development so that women can also benefit from the improved market systems.

Although gender aspects were incorporated in the retailer training programs, the question arises if female farmers have access to information on how to use input supplies in the vegetable and maize sub-sectors from trained retailers and, if not, by what other means or mechanism do they or could they have access to relevant agricultural information? This technical note looks at these questions.

Gender is one of the organizational principles of Bangladeshi society, with men in the public sphere and women in the private sphere. This system upholds a rigid division of labour that controls women's mobility, roles and responsibility.

The agriculture sector absorbs 78% of women labourers. Men and women view agricultural production as a "household activity", whether it is for commercial or consumption purposes. Women are 100% responsible for agricultural activities related to household consumption with men helping in some activities. The production of crops for commercial purposes occurs in the fields and men are responsible for these crops with women helping with weeding, harvesting and post harvest.

Input supply retailers and seed retailers are the predominate sources for input supplies which are purchased. Women are getting their information about input supplies primarily from their husbands, resource farmers and neighbour farmers; in that order.

Women's roles in maize production are limited to weeding, harvesting and shelling. They do these activities with men. The only activity which is solely a woman's task is drying. Women contract farmers were only involved in contract farming to access the credit for the input supplies so their husbands could produce maize commercially.

Pro-poor market development understands that the poor are consumers, producers and employees within markets. In order for markets to be inclusive and benefit the poor, market development focuses on transforming malfunctioning markets, encouraging businesses to find new markets, customers and salespeople in poor communities and enhancing the capacity of the poor to participate in markets as consumers, producers and workers.

To identify the barriers and constraints that impede or prohibit the participation of the poor in markets, a sub-sector and value chain analysis is conducted. The chain of activities required to bring a product from conception to consumer is called a value chain. The value of the product increases at each point in the process, hence the term value chain. Applying a gender lens to market development permits development practitioners to identify what women and men are doing in economic development and how the distinct roles contribute to economic development.

Katalyst works with lead firms in contract farming and in exporting. Oftentimes lead firms are sub contracting out aspects of production crucial to producing the product demanded in the market place. If the processing activity is dominated by women, Katalyst can play a key role in assisting lead firms to

improve their tendering processes for subcontractors to include provisions for skill development, improved working conditions and remuneration which reflects the improved skill level. It would be advantageous for Katalyst to develop a mechanism that would support lead firms to address efficiency, quality and ultimately improve sales when tendering out to sub contractors. This mechanism could be a diagnostic tool which would then provide the lead firm with the evidence needed that when labourers and employees are better prepared in their job efficiency, quality will improve which will result in higher productivity and ultimately profits.

There are many opportunities through the existing market mechanisms to include women in market development. This requires identifying the actual roles and responsibilities that women play in each sector with which Katalyst works. This will then assist Katalyst to develop appropriate supports at the firm level. It is recommended that Katalyst conducts all sub-sector analyses with a gender lens to reveal where women are currently working in the sub-sector, what their roles and responsibilities are and the constraints which impede their full participation. Interventions can then be developed to address the constraints.

Incorporating a focus on improving the lives of women in market development requires approaches which are appropriate within the socio-cultural context, not only for lead firms and market mechanisms to begin to view women as integral players, but also for women themselves to decide on their own how they want to participate in market development.

1. Introduction

Bangladesh has faced many challenges since its independence in 1971. Major impediments to growth include: frequent cyclones and floods, inefficient state-owned enterprises, inadequate port facilities, a rapidly growing labour force that cannot be absorbed by agriculture, delays in exploiting energy resources (natural gas), insufficient power supplies, and slow implementation of economic reforms.¹ The absolute number of poor in Bangladesh numbers 63 million of the total population of 136 million. 85% of the country's poor—53.5 million out of a total of 62.7 million—live in rural areas.

Despite these challenges, Bangladesh has made important gains towards achieving Millennium Development Goals in the fight against poverty. The country was able to lower the overall incidence of poverty from 58.8 per cent in 1991-92 to about 50 percent in 2000. Bangladesh's overall growth in terms of Gross Domestic Product (averaging 5%) and per capita growth (averaging 3.3% per annum) has contributed much to this progress.²

However, poverty alleviation efforts in Bangladesh need to be accelerated to tackle the low rates of human development in this country of 136 million people. Economic growth—vital for poverty reduction—depends heavily on the private sector, comprised of six million SMEs, contributing to 25% of the national income. Millions of farmers also play a key role. These enterprises continue to grow, but face increasing competition from an increasingly globalized market. Therefore, improving the competitiveness of selected sectors in which the poor participate as producers, employees and consumers is essential for private sector growth that will have a positive impact on the poor.³

Purpose of this technical note

The purpose of this consultancy was to look at gender factors in selected sub-sectors. Two sub-sectors in which Katalyst has been working in Northern Bangladesh are vegetables and maize.

In the vegetable sub-sector, Katalyst's strategy has been to improve productivity (yields per acre are currently two to four times lower than in surrounding countries) by improving farmers' access to quality inputs, the knowledge to use those inputs; and to generic information on vegetable cultivation. The focus has been on five promising vegetables: tomato, cabbage, pointed gourd, bitter gourd, and cauliflower.

In maize, local production has been slow to react to market demand because farmers generally were not very familiar with this new cash crop. Katalyst's strategy has been to increase maize production by introducing the following: a new 'maize-based cropping pattern'; compost (to maintain soil fertility); and contract farming. Contract farming acts as a mechanism to spread knowledge about maize cultivation and a means to connect maize farmers to distant maize markets.

For both the vegetable and maize sub-sectors, private local service providers have been trained to provide information as an embedded service to farmers. In the vegetable sub-sector, retailers of input supplies who sell pesticides and fertilizers were trained by Syngenta and Bayer Crop Science. Seed retailers were trained by East West Seeds. Two private soil testers established themselves with support from Katalyst.

In the maize sub-sector, T. Aman seeds' producer Rahman Agro trained seed retailers; Annapurna, a local compost manufacturing company, trained input retailers; Auto Equipment trained input retailers; and Doyal Agro Limited, a local maize cultivator, set up a network of field organizers to supervise maize contract farmers.

Most of the retailers are located in larger bazaars. All of them are also men. *Although gender aspects were incorporated in the retailer training program of, for instance, Syngenta, the question arises if female farmers have access to information on how to use input supplies in the vegetable and maize sub-sectors from trained retailers and, if not, by what other means or mechanism do they or could they have access to relevant agricultural information?*

Objective

Research was undertaken towards a twofold objective:

1. To develop practical guidelines which explain how interventions—in particular identified (potential) information mechanisms, following market development principles—will improve access of female farmers to relevant information on agricultural markets, cultivation practices and agricultural inputs.
2. To produce guidelines on improving the access of female farmers to relevant information on agricultural markets. These guidelines should relate to the international debate on gender and market access, cultivation practices and use of inputs. They should make use of relevant concepts from the fields of gender and market access and be ‘conceptually strong’, and should be able to be used as reference material in international events.

Methodology

Research in the consultancy had four phases, utilizing various research tools and techniques to assess how women were accessing information on input supplies in the vegetable and maize sub-sectors,.

Phase One began with a literature review, to familiarize the consultant with Katalyst’s work in vegetable and maize sector.

Phase Two encompassed field work in Rangpur. To assess how women access information on input supplies and crop husbandry, qualitative surveys were used to interview actors along the value chain, and focus groups were used to gather information from farmers. Nine in-depth interviews were conducted to pilot a quantitative survey for women farmers. This was adjusted and then utilized by a research firm in *Phase Three*.

The following provides a list of which actors were interviewed and with whom focus groups were held.

Table 1: List of actors who were interviewed and with whom Focus Groups were held	
Interviews	
Actors	Number of interviewees
Women Farmers	13
Male Farmers	3
Resource Farmer	1
Trained retailers	3
Trained seed retailers	1
Untrained retailers	2
Mobile Seed Vendors	2
Sprayers	2
Vegetable Traders	3
Soil Tester	1
Block Supervisors – Department of Agriculture Extension (DAE)	4
Doyal Agro Limited	<ul style="list-style-type: none"> • Director • 2 Field Organizers • Loan Coordinator
CARE	<ul style="list-style-type: none"> • Rural Livelihood Program Officer • Assistant Program Coordinator Private Sector
International Development Enterprises	<ul style="list-style-type: none"> • Market Development Coordinator • Country Director
Canadian International Development Agency	<ul style="list-style-type: none"> • Gender Equality Advisor • Gender Coordinator
Focus Groups	
Actors	Number of attendees
Female Vegetable Farmers	22
Female Maize Farmers	11
Male Maize Farmers	13
Female Maize Dryers – Day Laborers	9

Phase three was conducted by the research firm Org-Quest Research Limited. They conducted 100 in-depth interviews with women farmers in five villages throughout Rangpur.

Phase four of the consultancy was the consolidation of all the research into the final report. Findings from the field work and recommendations were submitted on October 1st, 2006 to Katalyst Senior Staff to review. The results from the research conducted by the Research Company and comments from Katalyst staff were returned to the consultant by November 20th. This was incorporated in to this final report.

Scope and Limitations of the Field Work

During the nine days of field work in Rangpur district, fourteen interviews were conducted with input suppliers who are potential sources of information for male and female farmers; sixteen farmers were interviewed (three males; thirteen females); and 46 farmers participated in focus groups (22 females in the vegetable sub-sector; eleven female maize growers; thirteen male maize growers).

The Katalyst staff who accompanied the consultant, Ehasanul Huq and Sraboni Sarker, were extremely competent in identifying appropriate informants to be interviewed, which facilitated the success of this consultancy.

Field work was hampered by two days of strike that prohibited any driving. Adjustments were made to the research plan and informants from institutions who could be accessed in the city of Rangpur were interviewed at this time. However, a focus group with women farmers that had been planned with CARE had to be cancelled, which limited access to women farmers.

Plan of Presentation of this Report

Section Two: Women in Bangladesh provides an overview of the position of women in Bangladesh and presents findings from the research regarding the sexual division of labour in vegetable and maize production.

Section Three: The Vegetable Sector in the district of Rangpur presents the findings from the research on how information on input supplies is being disseminated to male and female farmers.

Section Four: Maize Production with Doyal Agro Limited presents the findings from the research on how women are involved in maize production and how they participate in maize production with this leading firm.

Section Five: Market Development and Gender provides an overview of what the approaches are to market development and what gender is within the development context.

Section Six: The Integration of Gender into Katalyst Programs lays out some recommendations for Katalyst to take forward in their market development work.

2. Women in Bangladesh

Macro Economic Context of Bangladesh

Year	2003	2004	2005
GDP Growth of output, annual change (%)	5.3	6.3	5.4
Sectoral Growth of Output			
Agricultural Sector (%)	3.1	4.1	0.3
Industrial Sector (%)	7.3	7.6	8.5
Services Sector (%)	5.2	6.5	5.9
GDP per Capita (USD)	400	440	470
External Trade, annual change (%)			
Export	7.5	22.1	25.3
Import	14.0	14.9	25.9
Trade Balance	-25.2	-4.4	-27.0
Source: http://www.adb.org/Bangladesh/default.asp			

GDP growth decreased from 2004 to 2005 as a result of the floods at the start of the year which reduced food production; escalating oil prices which increased costs for industry and services; and the end of quotas on textiles and clothing on December 31st, 2004 with the termination of the Multi Fibre Agreement. The resulting trade imbalance limits the Government's ability to meet the growing need for

infrastructure (including ports, roads, rail and power supply) and social services. Between 2004 and 2005, outputs for agriculture and services decreased 3.8% and 0.6% respectively. The increase in fuel prices and decrease in production pushed inflation up to 6.5%, mainly increasing food prices. The increase in imported goods and the devaluation of the Bangladeshi taka also contributed to price pressures.⁴

Poverty profile in Bangladesh

Human Development Indicator Rank	137/177
Population living below USD 1 a day (%), 1990-2003	36.0
Population living below USD 2 a day (%), 1990-2003	82.8
Population living below the national poverty line (%), 1990-2002	49.8
Population undernourished (%), 2000-2002	30.0
Source: Government of Bangladesh (GoB) and United Nations Development Programme (UNDP), 2005, Millennium Development Goals: Bangladesh Progress Report	

The most commonly used standard for measurement of a poverty line is based on a minimum level of consumption. The population living below this line are the poor. Table 3 shows us that 30% of the population

of Bangladesh is undernourished, and 49.8% live below the poverty line. Thus, a significant proportion of Bangladesh's population does not have an adequate level of food and is particularly vulnerable to economic and environmental shocks.

Social and cultural context of women

The life of a woman in Bangladesh is dominated by the patriarchal, patrilineal and patrilocal social system. Gender is one of the organizational principles of Bangladeshi society, with men in the public sphere and women in the private sphere. This system upholds a rigid division of labour that controls women's mobility, roles and responsibility. Traditionally Bangladeshi women have derived their status from their families. A woman's role includes the maintenance of her family as a social institution and as an economic entity. However, women's roles, responsibilities and mobility are changing due to persistent poverty.⁵

The social system in Bangladesh gives higher value to sons because they are considered to be potential providers in a household. They receive preferential treatment and access to education. Women are considered important for their reproductive roles and are generally viewed as economic

Adult literacy rate, 2000-2004	41
Adult literacy rate 2000-2004, Female	31
Adult literacy rate, 2000-2004, Male	50
Source: GoB and UNDP, 2005, Millennium Development Goals: Bangladesh Progress Report	

dependents and given secondary status. These socio-cultural mores have resulted in less access to education and lower literacy rates for women. This affects any

sort of skill development for women, whether it is in industry or agriculture. Improving production requires the ability to read instructions or make calculations.

Table 5 shows that 19.4 million women in Bangladesh work as labourers, paid and unpaid. In Table 6 we see that 16.7 million of employed women are rural women and that 13.2 million of these women are unpaid family helpers, which is 68% of women labourers. The 32% of women labourers who are getting paid are earning only 46% of what men earn (See Table 7). These figures illustrate very clearly that Bangladeshi women today may be experiencing more mobility to enable them to work outside the home, but remuneration is negligible for many women, who are considered employed when they are actually “unpaid family helpers” or considered to be contributing family workers.

Table 5 indicates that the agriculture sector absorbs 78.3% of women labourers. Men and women view agricultural production as a “household activity”, whether it is for commercial or consumption purposes. Rural income-generating activities for women include post harvest activities, cow fattening and milking, goat farming, backyard poultry rearing, pisciculture, agriculture, horticulture, food processing, cane and bamboo works, silk reeling, handloom, garment making, fishnet making and handicrafts. Women workers are found in certain activities traditionally falling within the male domain (e.g. day labour in the fields). This is particularly the case for landless women and also indicates growing economic pressure and erosion of traditional beliefs and norms regarding women’s outside work.⁶

	Total		Male		Female	
	No. (mln)	%	No. (mln)	%	No. (mln)	%
Total Labourers	51.8	100.0	32.4	100.0	19.4	100.0
Economic Sector						
Agriculture	32.6	62.9	17.4	53.7	15.2	78.3
Industries	5.2	10.1	3.6	11.0	1.6	8.4
Services	14.0	27.1	11.4	35.4	2.6	13.2

Source: Bangladesh Bureau of Statistics (BBS), 2002, *Labour Force Survey Bangladesh 1999-2000*

	Bangladesh			Urban			Rural		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total Employed	51,764	32,369	19,395	9,456	6,789	2,667	42,308	25,580	16,728
Self Employed	18,170	16,040	2,130	3,667	3,129	538	14,503	12,910	1,592
Employer	97	86	11	52	49	2	45	37	8
Employee	6,533	4,917	1,617	3,251	2,320	931	3,283	2,597	686
Unpaid Family Helper	17,475	3,269	14,206	1,359	361	998	16,116	2,907	13,208
Day Labour	9,490	8,058	1,431	1,128	929	198	8,362	7,129	1,233

Source: BBS, 2002, *Labour Force Survey Bangladesh 1999-2000*

	Men	Women
Estimate earned income (Purchasing Power Parity in USD for 2004)	2,540.00	1,170.00
Ratio of estimated female to male earned income	1	0.46
Contributing family workers (% of total), 1995-2004	42	58

Source: GoB and UNDP, 2005, *Millennium Development Goals: Bangladesh Progress Report*

Productive Activities in Agriculture and the Division of Labour

Productive activities are considered more important than reproductive activities within the market economic system because the value of the activity is remunerated with cash, the medium of exchange. Social and political status is closely linked to economic status, i.e. the more one earns the more status one has.

Statistics show that 37.45% of the labour forces in Bangladesh are women, of which 73.24% are unpaid family helpers who do not earn any money. They contribute to the household with their labour, while men contribute to the household with the income earned. The fact that almost three-quarters of women working in productive activities in Bangladesh are not remunerated supports the socially accepted notion that women “do not work” and that women are not farmers. Without any access to cash, women’s interface in the market is limited. In the public sphere in rural areas women are practically invisible as they do not interact directly with markets, yet in the private sphere they are an integral part of household production and are an essential labour force in the fields. This invisibility lends to the belief that women are not involved in economic activities.

The division of labour in agricultural activities is very explicit. Women are 100% responsible for agricultural activities related to household consumption. This includes tending to livestock and the homestead gardens, where crops are grown for household consumption. Men do apply pesticides and fertilizers in the homestead garden and help with harvesting. If the homestead garden produces a surplus, then this is sold, and in many cases women sell directly to farm gate traders because these traders enter the domestic sphere. The production of crops for commercial purposes occurs in the fields and men are responsible for these crops with *women helping* with weeding, harvesting and post harvest. All of the selling is done by men who control the income earned, although the money earned is considered to be for the household.

3. The Vegetable Sub-Sector in Rangpur

In April of 2003, Katalyst conducted a sub-sector analysis on vegetables in the Rangpur district. It was found that there was an unmet demand for locally produced vegetables.

Katalyst chose the vegetable sector because of its importance in terms of size: out of Rangpur's 1.6 million rural households, 60% are estimated to be engaged in vegetable cultivation. It is also a growing sector—revenue generated by horticulture has increased consistently since 2001-02.

Table 8: Revenue generated for “Crops and Horticulture”				
(Figures in million BDT)				
Year	2001-02	2002-03	2003-04	2004-05
Crops and Horticulture	298,187	360,240	388,830	408,150
<i>Source: BBS and Bangladesh Ministry of Finance, 2005</i>				

The sub-sector analysis revealed that low productivity meant that the farmers could not meet demand for

vegetables. The low level of knowledge and information among farmers regarding best practices in vegetable farming was found to be a key bottleneck in market expansion in vegetable production. The lack of knowledge results in low productivity which limits supply and results in unmet market demand. Katalyst initiated work with the private sector to be conduits for this knowledge. During the sub-sector analysis, Syngenta, a market leader in agro input supplies, was identified. Katalyst developed a partnership to assist Syngenta in training their retailers in delivering information on input supplies as an embedded service when they sold products directly to smallholder farmers.

A contract with Syngenta was signed in December 2003, and since then 480 retailers have been trained. Short term impact has seen that sales have increased by 20% to more than 100% for Syngenta products that are sold by the trained retailers. Fewer than one in ten of these retailers have reported no growth in sales. Overwhelmingly, many have reported that they have more confidence in giving advice to farmers and spend more time with them as customers. In the training program special attention was given to female farmers as a potential source of clients.⁷ The intervention with Syngenta was later replicated with Bayer Crop Science and East West Seeds. The question at hand for Katalyst then was: are women getting information on agro inputs as a result of this type of intervention?

Women's Role in Vegetable Production

Adults are goal oriented in their learning, and the learning has to have practical benefits. Therefore, to understand what sort of technical information men and women need in vegetable production, it is important to understand what activities they are each responsible for during the production cycle from land preparation to selling the produce. If development practitioners do not know what women do in vegetable production, then how can we know what information women need? What mechanism/s would be best to disseminate information to improve their participation?

One of the questions asked in every interview with every actor along the value chain was —what do women do in vegetable production? The answer varied from response to response. Some said that women did the planting, others said that women only did the harvesting, others said that women did planting, weeding, harvesting and post harvesting. It became clear that the lack of clarity about what women actually do in the production of vegetables affects the delivery of agricultural information to women.

During this consultancy, two techniques were employed to determine the roles of women in vegetable production: Participatory Rapid Appraisal (PRA) during a focus group with women farmers, using drawings to animate the discussion; and a survey including two questions about who does what in the production of vegetables in the homestead garden and in the fields.

There was one focus group held with 22 female vegetable farmers in the village of Nilphamari. The emphasis of this focus group was to use a PRA tool to learn who is responsible for what in the production of vegetables in the homestead garden and in the fields. Pictures were drawn of a woman, a man and a man and woman together. These pictures were placed on the floor. Pictures were also drawn of every activity during the entire cycle of vegetable production. One of the team members used the picture to guide a discussion of each activity with the focus group participants. The women

then let us know if only women, or only men, or men and women together were responsible for the activity in the cycle of vegetable production.

Photos of Focus Group Discussion using drawings



The findings revealed that in homestead garden production:

- Women are responsible for most of the activities in vegetable production—land preparation, seed preservation, planting, weeding, composting, harvesting, post harvest, selling the surplus to farm gate traders.
- Men are responsible for interacting with input and output markets—the purchase of input supplies (seeds, fertilizer and pesticides) and selling the surplus in the markets.
- Both men and women apply the pesticides and fertilizers.

The division of labour is different for vegetable production in the fields, which is for commercial purposes:

- Men prepare the land, purchase seeds, buy and apply fertilizers and pesticides, sell produce to farm gate traders and in the market.
- Both men and women preserve seeds, plant, weed, compost, harvest and post harvest.
- Labour is hired for planting and applying pesticides for some families.

Women have much more responsibility in producing vegetables for the household, which is a reproductive task. Yet women's labour is essential for the production of vegetables in the fields. In both instances, women are not responsible for interfacing with input markets and only when there is a surplus with homestead garden production do women interface with output markets.

Table 9 illustrates that women are responsible for most of the labour involved in vegetable production in the homestead garden and that men are responsible for applying fertilizers and pesticides and selling the surplus. In many households, vegetable production activities in the homestead garden are executed by both men and women. This illustrates that the homestead garden production is a household responsibility and not solely the responsibility of women.

Another survey was conducted where 100 women in five villages were interviewed and revealed a similar pattern with more variations in the responses.⁸ One of the questions asked in the survey was about who does what (i.e. division of labour) in vegetable production. Responses varied between interviews where sometimes only the husbands were involved in a certain process, sometimes it were the wives, sometimes it was both of them and in other scenarios other family members or day labourers either did all the work or helped them with the job.

Table 10 summarizes the responses in absolute figures. One distinguishing feature learned in the focus group of women was about who sold the surplus from the homestead gardens. Of the 100 surveyed, 84 had a surplus, of which 83 sold their surplus. The Table 10 shows that husbands of the households with a surplus from the homestead garden sell the produce as do the women. This finding is not consistent with the findings from the focus group. Only the women in the focus group were selling the surplus production from their homestead gardens to farm gate traders and ten of the

sixteen women had control over the income. This discrepancy could be a result of the more conservative nature of the villages where the surveys were conducted, or of the distance to the market and accessibility to farm gate traders. What it reveals is that direct interaction with the market varies from village to village for women in Bangladesh. Program design needs to take this into consideration.

The survey shows that division of labour for the vegetable production activities in the fields are the same as in the focus group. Men are essentially responsible for applying fertilizers and pesticides, as well as the selling of the produce. Women are involved in all the other activities, including the land preparation.

Activity	Homestead Garden			Field Production			
	Women	Men	Women & men	Women	Men	Women & men	Hire Labour
Land preparation	X				X		
Seed preservation	X					X	
Purchase seeds		X			X		
Planting	X					X	X
Weeding	X					X	
Composting	X					X	
Buy fertilizers		X			X		
Apply fertilizer			X		X		
IPM - N/A							
Buy pesticide		X			X		
Apply pesticide			X		X		X sprayers
Harvesting	X					X	
Post harvest	X					X	
Selling to farm gate trader ¹⁰	X				X		
Selling in the market		X			X		

Activity in production cycle	Homestead production				Field production			
	Wife	Husband	Both	Others*	Wife	Husband	Both	Others
Clean land	72	1	27	22	13	42	45	29
Make mounds	73	3	23	14	9	63	26	24
Plant	77	2	21	15	5	47	45	25
Weeding	83	1	16	16	18	23	62	24
Apply fertilizers	46	23	27	11	2	82	8	23
Apply pesticides	9	58	7	20	0	83	0	30
Harvest	53	4	43	22	10	14	75	36
Post harvest - store, clean	66	1	34	20	14	11	78	30
Sell surplus to farm gate trader	5	13	4	6	6	79	7	24
Sell surplus to trader in haat	1	42	0	18	4	89	0	23

*Others include their sons, daughters, fathers, day labourers, etc.

Vegetable Production Yields and Revenue Generated

Women are participating in vegetable production for both consumption and commercial purposes. They are responsible for the production of vegetables for household consumption in the homestead gardens which contributes towards food security at the household level. They do not generally interface directly with input or output market actors outside of the village as this is in the public sphere.

Homestead Garden Yields and Sales

The 100 women interviewed were growing 33 varieties of vegetables. Of these 33 varieties, 61 women were growing pumpkin, 77 were growing beans and 89 were growing bottle gourd. Table 11 illustrates the annual yields for each crop in kilograms.

Name of crops	1-5 kg	6-10 kg	11-20 kg	21-30 kg	31-50 kg	51-75 kg	> 76 kg
Pumpkin	1	4	8	15	14	6	13
Bean	2	8	17	16	14	6	14
Bottle gourd	1	4	16	19	15	7	27

The revenue generated from the sale of the surplus production for pumpkin, yard long bean and bottle gourd in the homestead gardens is not substantial, as the majority of respondents were earning less than 200 BDT (65 BDT = 1 USD) which is roughly 3.08 USD. Only five respondents were generating income for the household which fell between 15.4 USD and 76.92 USD for the sale of their surplus vegetables. In a country where the GDP per capita is 407 USD per year, this could be considered a noteworthy contribution.¹¹

	<200 BDT	201-400 BDT	401-1000 BDT	1001-5000 BDT
Pumpkin	18	3	4	1
Bean	18	6	9	3
Bottle gourd	24	14	8	1

Field Yields and Sales

The production yields and revenue generated from crops in the fields is markedly significant. There were 38 varieties of vegetables being grown in the field, the three most common were potato grown by 75 households, chilly by 51 households and red spinach by 48 households. Many of the households were growing more than 100 kg of these varieties. The revenue generated for the majority is between 401-10,000 BDT (6.17 – 153.85 USD). Table 13 and Table 14 shows the production and revenue values.

Name of crops	1-5 kg	6-10 kg	11-20 kg	21-30 kg	31-50 kg	51-75 kg	76-100 kg	> 101 kg
Potato	0	0	5	0	3	0	4	63
Chilly	0	3	0	3	5	2	2	36
Red spinach	1	3	3	1	7	5	4	24

	<200 BDT	201-400 BDT	401-1,000 BDT	1,001-5,000 BDT	5,001-10,000 BDT	10,001-15,000 BDT	15,001-20,000 BDT	20,001-25,000 BDT	> 25,001 BDT
Potato	3	0	10	15	16	4	2	5	8
Chilly	3	4	9	16	9	3	4	1	0
Red spinach	10	5	14	8	5	0	1	0	0

Women's Access to Input Supplies

The Katalyst intervention focused on making technical information regarding vegetable production accessible through input supply retailers that were trained by Syngenta, a manufacturer of input supplies. We have learned that women do not interface directly with input markets, but are integrally involved in vegetable production for consumption and commercial purposes at the household level. If yields and quality of vegetables are to improve to meet unmet market demand, increase household income, and enhance food security, which are the responsibility of women, it goes without saying that women also need access to technical information about vegetable production. So how are they getting access to this information? How can we improve the dissemination of technical information to women?

Table 15 lays out where input supplies are accessed and who accesses the inputs. The answers are shown in absolute numbers where a respondent was allowed to name multiple sources for accessing inputs. Seeds for homestead garden vegetable production are mainly accessed at the village level through resource farmers or the efforts of seed preservation. This is complemented with commercial seed suppliers. The seeds for vegetables grown in the fields are mainly accessed through seed or input supply retailers, complemented with seeds that are preserved at the household level.

Composting and integrated pest management is done in the household garden, but chemicals are used in the field. This may be because of the size of the fields which is larger than the homestead garden and requires more of these inputs. The organic production of inputs may not be sufficient for the area planted.

What is interesting is that a significant number of households are engaged in the production of organic inputs which are utilized in the homestead production. It is also interesting that traders are a source of fertilizers and pesticides for homestead gardens and a source for seeds for vegetables grown in the fields. Males are the predominant purchasers of input supplies, and it is through the men that women have access to input supplies.

Table 15: Accessing Inputs			
Source of inputs for Homestead Gardens			
	Seeds	fertilizer	pesticide
Seed Preservation	91		
Composting		76	
Input Supply Retailer	39	48	70
Neighbor	25	0	0
NGO	3	2	0
Agriculture Extension	4	2	0
Traders	0	4	4
Sprayer	0	0	7
Did not use inputs		1	22
Who purchases inputs for homestead gardens			
	Seeds	fertilizer	pesticide
Woman	3	3	1
Husband	38	45	63
Son	15	13	19
Do not purchase inputs	53	48	20
Source of Inputs for field vegetable production			
	Seeds	fertilizer	pesticide
Seed Preservation	72		
Integrated pest management			2
Composting		1	
Seed Retailer	82		
Input Supply Retailer	6	89	89
Neighbor	1	0	0
Resource farmer	3	2	1

Block Supervisor	8	19	14
Traders	4	0	0
Sprayer			14
Who purchases inputs for field vegetable production			
	Seeds	fertilizer	pesticide
Woman	2	3	1
Husband	81	89	87
Son	20	23	21
Other Males in Family	7	9	6
Neighbor	2	2	2
Spray Man	0	0	2

Input supply retailers and seed retailers are the predominant sources for input supplies that are purchased. Table 16 illustrates that women are getting their information about input supplies primarily from their husbands, and then from resource farmers and neighbour farmers respectively. Their husbands are getting information from retailers primarily, then from resource farmers and neighbours. Resource farmers and neighbour farmers are important conduits of information at the village level. Thus since the main source of input supplies that the men are accessing is retailers, retailers are ultimately playing a very important role in disseminating information.

Table 16: Sources of Information			
Where women get information about inputs			
	Seeds	Fertilizer	Pesticide
Husband	80	83	77
Son	6	4	5
Other Male Relatives	4	3	3
Resource farmer	42	40	36
Neighbour farmer	40	24	24
Retailer	0	0	1
NGO	8	7	4
Traders	0	1	1
Spray man	0	0	9
Where husbands get information about inputs			
	Seed	Fertilizer	Pesticide
Retailer	27	53	56
Resource farmer	77	69	70
Neighbour farmer	45	39	36
Block Supervisor	14	16	15
Wife/Mother	5	5	3
NGO	4	3	3
Traders	3	8	7
Spray man	0	0	19
Leaflet/Book	2	2	3
Input manufacturer	4	5	6

In the focus group, all the women said that they decide what is to be grown in the homestead garden which has influence on what seeds are purchased if they need to be purchased. They also discussed with their husbands what will be grown in the fields, but ultimately the men have the say that influences seed purchasing. None of the women have any say over what fertilizer or pesticide is to be purchased. The fact that women do not have a say in these decisions affects their need for information.

Name of the Village	Bayer Crop	Syngenta	Total
Palichara	2	1	3
Nishcintapur	1	2	3
Shibrampur	0	4	4
Bara	2	1	3
Char	0	4	4
Total Trained			14

In the area of the 5 villages where the 100 women farmers were surveyed, 14 input supply retailers have been trained. Table 17 shows the number of trained retailers. These retailers are located in the village and local *haats* (markets) where farmers are buying their inputs. The majority of the respondents interviewed travel 15 to 30 minutes to purchase their input supplies which indicates that they are going to the closest market.

Access to Technical Information for Women

Although women are not responsible for applying fertilizers and pesticides, 47% responded that they would like to learn how much fertilizer to apply and 46% were interested in learning about how to cure vegetable diseases. 52% were interested in learning how to achieve better yields.

During the field research, some respondents mentioned a “law” that prohibits the sale of pesticides to women because of the number of suicides that have been induced by pesticides. Upon further investigation it was discovered that this is an informal law and not included in the Pesticide Rules passed as law in 2005. It is understood that IF a woman commits suicide using pesticides and this is revealed during the police investigation into her death, the police will investigate where the pesticides were purchased, and question the retailer. This discourages retailers to sell pesticides to women for fear of being implicated in assisting a suicide if a woman uses pesticides to do so. This could be a factor which makes information on pesticide use scarce among women.

Table 18 shows that very few women are accessing technical information regarding land preparation, planting, intercropping, harvesting, post harvest and markets. from their husbands, but between 80-84% are getting this information from resource farmers. Their husbands are accessing technical information regarding the aforementioned activities from resource farmers and Block Supervisors who are employed by the Department of Agricultural Extension. Traders provide information on post harvest to 16 % of the respondents and on markets to 39%.

Sources of technical information for women							
	Resource Farmers	Experience	NGO	Spouse	Traders	Neighbor	Retailers
Land	84	66	6	2	0	1	0
Planting	88	29	6	5	1	0	1
Intercropping	88	59	7	3	1	2	0
Harvesting	85	71	0	0	0	0	0
Post harvest	92	42	3	1	2	0	0
Markets	92	8	1	5	16	11	0
Sources of technical information for husbands							
	Resource Farmers	Experience	BS	Retailers	NGO	Traders	Neighbor
Land	78	77	9	4	4	4	1
Planting	76	35	15	4	3	4	0
Intercropping	70	71	12	17	2	3	1
Harvesting	71	76	6	2	2	1	1
Post harvest	72	61	6	3	2	16	1
Markets	73	36	4	1	1	39	11

Women want information and 89% of the respondents feel that male farmers have more access to information than they do because men have contacts. Reasons cited why women do not have equal access to information were: 11% said that women are shy to ask for information; 23% responded that they are not allowed to have access to information; and 20% responded that they are not interested in

accessing information. Of the respondents who are receiving input information from their husbands, 89% are satisfied with the information they receive. To improve access to technical information for women, 61% suggested that women farmers be trained so they can teach other women. Many women in the focus group stated that if retailers came to the village for “yard meetings” they would attend.

Despite the fact that the majority of retail customers are men, retailers who were interviewed did concur that women were an untapped business opportunity because good information means better productivity and women are an integral part of vegetable production on smallholder farms. All the trained retailers and one of the untrained retailers make farm visits. All of them said they would go to a village to meet with women if women invited them to a “yard meeting”,

Other possible sources for information on input supplies are mobile seed vendors, sprayers and soil collectors, although they are not currently providing information to women. All of these sources who were interviewed had minimal contact with women farmers. The two sprayers interviewed did spray vegetable crops for widows, although it was only one or two. Soil testing can reduce fertilizer consumption by 200-300 taka per 30 decimals and increase sales 1,000 taka when the proper dosage is applied. But access to this service is very limited. If retailers are soil collectors (one untrained retailer interviewed also provided soil collecting as a service) they can increase their sale of fertilizers. If sprayers were attached to retailers, then retailers could increase their sales of pesticides. Training of the retailers who in turn train their sprayers could be an effective mechanism to make information on dosage and quantity more accessible to farmers. Sprayers do service widows, and are the ones who provide pesticides to 14% of the households of the women surveyed.

4. The Maize Sub-Sector in Rangpur

While there is a significant potential for maize cultivation in Bangladesh, Katalyst found that maize cultivation in Greater Rangpur was not very prominent for a number of reasons: input and output marketing channels for maize were weak to non-existent; farmers lacked information on how to grow and sell maize; and farmers were reluctant to produce a non-food crop because of its insecure market. All of these factors have led to low maize production in Greater Rangpur, as well as low productivity per acre. Through contract farming all these constraints and risks related to maize cultivation can be addressed.

When Katalyst entered the maize sector, only one company, Doyal Agro Limited, operated contract farming in Greater Rangpur and the system it used was limited to purchasing and processing. Information on maize cultivation and post-harvest treatment were not considered to be necessary and the frequency and quality of services provided was low. Traders did not provide any sort of inputs, which limited the production yields of farmers. Katalyst therefore envisioned that introducing a more elaborate contract farming system that included technical assistance and access to input supplies could play a role in the development of the maize sector in Greater Rangpur.

Katalyst with Winrock incorporated the know-how of institutions active in the maize sector in Bangladesh to facilitate the delivery of technical assistance. This assistance would increase farmers' awareness and skills in applying scientific practices to cultivation, post harvest processing and a maize based cropping system. Institutions such as the Department of Agriculture Extension (DAE), the International Maize and Wheat Improvement Center (CIMMYT), the Bangladesh Agriculture Research Institute (BARI), and Bangladesh Rice Research Institute (BRRI) became partners in developing the maize subsector. The delivery of training adopted a family approach where the husband/wife and daughters/sons all attended to ensure that all members had the information needed for production. *With the family training approach, and the inclusion of women contract farmers groups, are women benefiting from improved access to technical information and input supplies for maize production?*

Doyal Agro Limited Contract Farming System

In 2002-03 Doyal Agro Limited organized a maize contract production system. They currently have 235 farmer contract groups with 1,650 farmers, of which two are women's groups with 17 members. To become a member of a contract farmer group, one must have at least one acre of land. Each contract farmer household receives training (the member, his/her spouse and child) on land preparation, germinating seeds, planting, crop maintenance, harvesting and post harvesting. The training is accompanied by an illustrated manual which was produced by CIMMYT and each member keeps it for reference. Farmers also receive inputs and credit of up to 10,000 taka per acre. All inputs are provided through Doyal and each group receives a weekly supervisory visit.

The access to credit is the critical component of the whole system. Without credit, the farmers would not be able to access the inputs to produce maize commercially. To access credit, each member in a farmers' group must pay back their loan in full before anyone in the group can access another loan. National Credit and Commerce Bank Ltd. (NCCBL), a private bank, is providing the working capital for the company. It provides loans for input supplies to the contract farmers and investment loans to local service providers to develop the support services for tilling, shelling and drying.

Women's Role in Maize Production

To determine the roles of men and women in maize production, two focus groups were conducted; one with 11 women contract farmers and one with 13 male contract farmers. In each focus group the question was posed: what do men do and what do women do for each activity in the cycle of maize production? Table 19 demonstrates the responses.

What was revealed was that women's roles in maize production are limited to weeding, harvesting and shelling. They do these activities with men. The only activity which is solely a woman's task is drying. This was the same for both women contract farmers and for the wives of male contract farmers. Thus the women contract farmers were only involved in contract farming to access the credit for the input supplies so their husbands could produce maize commercially.

Activity	Women	Men	Women & men
Land preparation		X	
Purchase seeds		X	
Planting		X	
Weeding			X
Buy fertilizers		X	
Apply fertilizer		X	
Buy pesticide		X	
Apply pesticide		X	
Harvesting			X
Drying	X		
Shelling			X
Selling to Doyal		X	

Women and Maize Contract Farming

To become a member of a contract farming group, women are required to attend the family approach training. They receive training on all aspects of maize production: from seed germination and land preparation to crop maintenance, harvest and post harvest activities along with their spouse, son, daughter or other family member like a sister or brother-in-law.

The woman contract farmers do not produce maize. They dry the maize. Essentially they are contract farmers in order to provide loans to their husbands, who are solely responsible for the production of the maize. The two Field Organizers interviewed stated that women farmers "are inattentive to information provided on input supplies and markets—they forget". Yet if it was understood that women are not responsible for these activities and that they have many other tasks to complete in a day, it might also be understood that retaining information about something they are not responsible for might well be unnecessary.

Doyal has created facilities to handle the post harvest processes of drying and storing. Several private drying and storing facilities have emerged to handle the volume of production since Doyal started operating, and Doyal has subcontracted this process to them. The subcontractor hires female labour for drying, netting, grading and packaging, as these activities are not labour intensive. Male labourers usually do such heavy work as carrying the sack of maize to the store room, and are only involved in about 10 to 20% of the activities that women do. Women are being hired because they are more reliable and responsible than men, and also because they are cheaper labour—men receive 100 taka per day and women receive 60 taka per day. Women's wages here are higher than the national estimate of male to female earned income of 54 percent, yet it is still discriminatory.

In the last contract cycle documented, 845 farmers from 200 groups made late payments that affected the disbursement of loans to purchase input supplies in time for planting. This is to say that 51% of the contracted farmers had not paid on time and 85% of the groups had not paid on time. The amount overdue in the last cycle was 30% of the total amount disbursed. Of the women's groups 10 of the 17 members were late in their payments, which is 58% of the female farmers. Many of the farmers side-sell because of their need for cash, since when they sell their product to Doyal, the money goes directly to paying the loan and they do not receive any cash.

Doyal is extremely disappointed in the performance of the women farmers' groups and have decided not to begin any other women farmers' groups. They do recognize, however, that women are better day labourers and sub contractors are inclined to hire women over men for this task. Yet if the overall performance of all contract farmers in paying their loans on time and selling back the produce to Doyal were analyzed, the women's groups performance is on par with that of the men's farmers' groups.

5. Market Development and Gender

Pro-poor market development understands that the poor are consumers, producers and employees within markets. In order for markets to be inclusive and benefit the poor, market development focuses on:

- Transforming malfunctioning markets and addressing the causes of market failure. Sometimes market failure lies in inadequate supply to meet the demand or the supply not being the quality and standard required and desired by the end market.
- Encouraging businesses to find new markets, customers and salespeople in poor communities. Making goods and services accessible to the poor is good for business and also for the poor.
- Enhancing the capacity of the poor to participate in markets as consumers, producers and workers.¹³

To identify the barriers and constraints that impede or prohibit the participation of the poor in markets, a sub-sector and value chain analysis is conducted. The chain of activities required to bring a product from conception to consumer is called a value chain. The value of the product increases at each point in the process, hence the term value chain. The range of activities a product follows to be transformed and to reach the market is: input supplies → production → processing → wholesaling → retailing → exporting. Typical value chain consumer groups are rural, low income urban, high income urban, international.

A value chain is defined by the final product reaching the end consumer group within a market channel. There are usually several value chains in a sub-sector. Analyzing the entire sub-sector reveals the different value chains in it. This provides the opportunity to analyze not only the competitiveness of each value chain within the sub-sector, but also to identify which value chain provides the best market opportunity for a large number of SMEs. The value chain which illustrates unmet market demand and improved income opportunity for hundreds or even thousands of SMEs is often a good choice to develop.

Gender is a social construct specifying the socially and culturally prescribed roles that men and women are to follow. Sex roles are essentially biologically determined and ensure successful reproduction and form the basis of sexual division of labour in which women are associated with maintaining the household.¹⁴ Social constructs adapt to the socio-economic and political environment. Extreme poverty is changing gender roles because women have to work outside of the home in order to contribute to the household income.

Gender analysis is a means to understand what women and men do and who benefits. Applying a gender lens to market development permits development practitioners to identify what women and men are doing in economic development and how the distinct roles contribute to economic development. As women are less involved in interfacing with input and output markets it is often assumed they are not involved in economic development. Yet their unpaid contributions are often essential in any economic development activity whether it be weeding, harvesting, processing, and/or packaging.

A gender lens cannot be applied outside of a socio-cultural context or it can cause social repercussions that bring harm to women and men. If men are displaced to benefit women, men will feel threatened and women are often fearful to get involved. Focusing on increasing women's visibility in end markets may actually be unsafe for women in some socio-cultural contexts. Focusing on developing women's skills and knowledge that improve malfunctioning markets and benefit both men and women, as well as economic development, may be a better entry point. Applying a gender lens to any development initiative provides insights to create opportunities that benefit men and women.

Value Chain Development with a Gender Lens

Step 1: Sub-sector Market Assessments

This is an important step as it assists in making an informed decision when selecting a competitive sub-sector to study in depth. Secondary research sources like government economic reports, World Bank reports or industry reports are good sources to identify competitive sub-sectors where the poor are participating. Reports done by other NGOs are also helpful.

Applying a Gender Lens – When doing a market assessment, look for sub-sectors where women are already involved and are being remunerated or have the potential of being remunerated. For instance, in many cases women are involved in agricultural production but are not being remunerated. When sub-sectors are identified, it may require going to the field and mapping out what women do in the sub-sector with both men and women. Men and women need to be asked: What do men do? What do women do? And what do men and women do together in the transformation of a product in a sub-sector? Women may only be involved in processing or in the recycling of by-products or manufacturing alternative inputs like compost. An in-depth sub-sector/value chain analysis would then reveal market opportunities where their contributions could effectively make the selected value chain more competitive.

Step 2: Sub-sector Selection

Criteria for sub-sector selection also need to be chosen. The following is a good guideline for criteria to guide the process of selecting a sub-sector.¹⁵

1	Unmet Market Demand and Growth Potential	<ul style="list-style-type: none"> Evidence of strong effective unmet demand for products being produced Buyers have ready market for products but are unable to meet demand Potential for growth and continued competitiveness of sub-sector
2	Potential Increase in Income and Wealth	<ul style="list-style-type: none"> Potential for increased revenues at all levels of sub-sector Projected increases in sales, profits, or returns to labour
3	Opportunities For Linkages	<ul style="list-style-type: none"> Potential forward/backward linkages between large and small enterprise Large buyers are overlooking Micro and Small Enterprises (MSE) as a source of supply or unable to organize them to meet their demands.
4	Potential for Employment Generation	<ul style="list-style-type: none"> Potential for enterprises (large and small) to create new employment opportunities as the sub-sector develops or expands.
5	Reaches large number of MSEs from vulnerable populations	<ul style="list-style-type: none"> Potential to reach large numbers of underserved and vulnerable populations (for example women, youth ex-combatants, ethnic minorities, etc.)
6	Value Added Potential	<ul style="list-style-type: none"> Potential for MSEs to add value to raw materials and gain higher earnings.
7	Potential For Increases in Productivity	<ul style="list-style-type: none"> Potential for technologies or management systems to increase the productivity and earnings of enterprises in the sub-sector.
8	Competitiveness	<ul style="list-style-type: none"> Competitiveness of the sub-sector on the world market and/or of MSEs in the sub-sector.
9	Impact can be achieved and measured in the short, medium and long term.	<ul style="list-style-type: none"> Positive changes in the livelihoods of participants can be measured in the short term through the designed intervention.

Applying a Gender lens – One of the criteria would be that women benefit from the development of the value chain with increased income, market access and/or skill development

Step 3: Sub-Sector/Value Chain Analysis

This step is the most laborious in the process of value chain development. A value chain analysis reveals the system of interactions and relationships between the different firms and organizations influencing the operation of the market system in the value chain. The relationships shed light on how the product is traded and between whom. It shows the process of creating value, which in many cases is not just production but the value added activities that increase incomes. This information enables us to identify solutions that can improve malfunctioning markets.

The following outline shows the various elements looked in identifying competitive value chains:

- End-market opportunities
- The enabling environment
 - national
 - regional
 - global
- Inter-firm cooperation
 - vertical
 - horizontal
- Existence of support markets
 - input supplies
 - infrastructure (i.e., transportation, storage)
 - finance
- Access to firm level upgrading
 - technical information
 - technology

When the sub-sector is chosen, a sub-sector map should be developed to assist in identifying the existing value chains and actors that need to be interviewed in order to identify the constraints and opportunities in the sub-sector and the most competitive value chain.

Interviews and focus groups are conducted to find out what the problems are and the end market opportunities. The data that is collected is then analyzed to determine the constraints, solutions and the existing and potential solution providers.

Applying a Gender Lens – A sub-sector/value chain analysis with a gender lens highlights the positions and contributions within the sub-sector and along the chain made by men and women and the constraints particular to men and women. A gendered value chain looks at:

- Segmentation of work—what are women doing and what are men doing
- Entitlements and Capabilities—socio-cultural constraints particular to women and men

When the preliminary sub-sector/value chain map is developed, this is an opportunity to distinguish the roles of women and men in economic activities within the sub-sector and value chains. The tools that are developed to gather the data should include questions regarding the roles of men and women and to distinguish the constraints and how they affect men and women differently.

Ensure that women are interviewed and participate in focus groups. Find out what women are doing from women themselves to determine the constraints that are impeding their participation in higher value markets. This does not mean you do not talk with men also. Value chain development will include men and women. When male value chain actors are interviewed, ask how they would incorporate activities which women are performing into improving the functioning of the value chain. In many cases women are not approached in this phase and therefore the constraints particular to women are not addressed thus they are not included in the vision for value chain change.

Step 4: Value Chain Selection

When the sub-sector is analyzed with the different value chains the most competitive value chain with the most promise for MSEs and the target population should be selected.

Applying a Gender Lens – When the value chain is selected, ensure that women will benefit from the development of this value chain. Some questions to keep in mind are: How will their participation improve the competitiveness of the value chain? Will they be able to access higher value markets, gain more skills, and earn more income to contribute to the household? What do they need to improve efficiency and production levels?

Step 5: Assessment of Business Solution Providers

To assess the business solution providers, surveys should be developed and interviews conducted with the identified solution providers that came out of the sub-sector/value chain analysis.

Applying a Gender Lens – When assessing the business solution providers determine their openness to working with women and improving women’s skills and abilities to contribute to the functioning of the value chain. Including women in value chain development should be from the premise of a business opportunity and not to improve the welfare of women. If women are critical in the value chain, removing the constraints that impede their participation benefits everyone.

Step 6: Design Interventions to develop the selected Value Chain

Interventions are activities which are intended to remove the constraints that impede the transformation of a product in reaching a higher value market while creating wealth for the poor who are participating as suppliers and buyers along the value chain. Interventions oftentimes require market development facilitators to build capacity with market actors to improve efficiency and productivity as well as develop vertical and horizontal inter firm relations to link buyers and suppliers.

Applying a Gender Lens – Interventions that include women often require sensitivity as to when training is delivered so that it does not conflict with domestic responsibilities. Oftentimes men need to be included in all activities to avoid exclusion and backlash. Socio-cultural sensitivity is paramount in designing and implementing interventions which benefit both men and women in value chain development.

6. The Integration of Gender into Katalyst Programs

Environmentally and Socially Responsible Business (ESRB) and Gender have been prominent themes in Katalyst since its design phase. The inclusion of these cross-cutting issues in SME Projects is not new. However, the adaptation and operationalization of ESRB and Gender in a business service market development project is new and presents a variety of challenges due to the nature of such projects. These projects are characterized by:

- Being based on existing market mechanisms and incentives
- Being focused on market systems instead of individual firms
- Being a facilitator either on the supply side through capacity building and product development, or on the demand side by awareness creation
- Being primarily driven by the market actors

The question of is—how should Katalyst integrate gender as a cross-cutting issue? This paper has presented the results of research that focussed on two projects in two sectors:

1. Improving the provision of quality input supplies and technical information on vegetable production to small holder farmers through the training of input supply retailers.
2. Improving the supply of maize by facilitating the dissemination of technical information to farmers through training and strengthening the contract farming systems with an existing company.

Integrating Gender into the Provision of Input Supply Information for Vegetable Production

The current situation

Women, whether married, widowed or divorced have a substantial role in vegetable production for consumption purposes at the household level and assist in vegetable production for commercial purposes with their husbands in the fields. The purchasing of inputs is predominantly the responsibility and role of men, even for women who are widowed or divorced. The women in the latter categories get their neighbours or sons to make the purchases, although some women in these categories will purchase directly from retailers or mobile seed vendors. Women want information on plant diseases and are interested in learning new things about other aspects of production as this is what benefits them directly in their responsibilities. The application of pesticides and fertilizers are the sole responsibility of men in commercial production, yet in the homestead garden dedicated to consumption, women are applying these inputs with men helping them.

Trained retailers are providing information to women farmers through their husbands. They are making visits to villages and going to the fields to see what the problems are. The women would be interested in getting directly from retailers in the village. The retailers interviewed recognized that women are an untapped business opportunity and that women do participate in some decision making regarding production so they consider women to have an influence over potential sales.

Recommendations

Focusing on women is not a charity issue. It is a business case and a market opportunity. When women have improved access to information, then production will be impacted. Receiving information directly instead of through another individual is the optimum in the delivery of information.

It is recommended that Katalyst assist the companies in developing and delivering a module in the existing retailer training on customer service to include how to develop women farmers as potential customers. Male retailers understand that sales can increase and that is why they are interested in approaching women farmers. Just mentioning that women are potential customers is not enough. Men know that they cannot just walk in to a village and start to chat with women about improving their farming practices. They need to be invited. An addition to the existing customer service module which utilizes participatory techniques could include the following:

- When retailers go to villages and talk with the male farmer, invite the wife to go to the fields with him and sell the idea that if the wives also have the information and knowledge they can be better prepared to assist in vegetable production
- When the male retailer talks with the wife accompanying the male farmer, suggest that she get other women together for a yard meeting and she can invite other women farmers to attend to

- receive information on input supplies and how to use them properly. He can then attend and share information on input supplies and how to apply them correctly.
- If retailers are selling directly to women, suggest to the female customer to get women farmers together for a yard meeting that he can attend to share information on input supplies and the proper application or to address the most pressing need that the woman customer is seeking information on.

Integrating Gender into Contract Farming for Maize Production

The current situation

Men are solely responsible for all activities in maize production—from land preparation to harvesting. Post harvest activities are the responsibilities of women in maize production. This includes drying and shelling. Families are renting the shelling machines and men are assisting women in this process. Contract farming has increased the volume of production to the point where families are taking the harvested maize to locations where it can be dried. The contract farm company has subcontracted the post harvest steps and these subcontractors are hiring women, who are mostly landless or marginal farmers, because they are more responsible workers and they are cheaper labour.

Doyal started women's groups because of the influence of a visit from the Swiss Ambassador who asked the women if they wanted to be contract farmers and the women said yes. There was no understanding of the role of women in maize production and women farmers said they were interested because of the benefits of receiving credit, inputs and a ready market. Male farmers want their wives to be members because they had access to the means to produce a crop that would increase household income.

Recommendations

Katalyst understands that it makes little sense to discuss abstract concepts related to ESRB and Gender. ESRB and Gender practices are defined as those that improve—or at least minimize the negative effects—on women, the environment and working conditions. The objective here is to integrate these issues in the project's markets and interventions.

In this particular project, women are being hired to dry, net and grade yet the pay differential is substantial (60 BDT/day for women and 100 taka/day for men). This activity is subcontracted by the lead firm and the lead firm has no say in how labourers are treated or paid. This is an opportunity for Katalyst to implement its ERSB and gender strategy by providing advice and supports on how to ensure the quality of the product which Doyal receives to sell to their buyers.



If the activities are mapped with a detailed description of responsibilities for each step in the post harvest process and a gender lens is applied to determine where women are working, opportunities for skill development could be revealed which women could benefit from, as well as the company. For instance, at this point the dryers are only drying. If they were able to learn the skill of grading they could improve efficiency on the drying floors and ensure that the bagged end product was bagged according to grade. Now the maize is put out to dry, and the women then bag it all with mixing the graded kernels of corn. This skill enhancement would provide a learning opportunity for women employees and also improve the efficiency for the company.

Labour usually absorbs the largest proportion of expenses in a business operation. When costs have to be reduced to improve profits, labour costs are the first to be reduced. Employment opportunities for women are reduced because of their low literacy rates and socio-cultural mores that confine women to traditional roles and close to home. Yet the immense poverty is forcing women to seek paid employment to buoy the household income to meet the basic needs of consumption, shelter, clothing, education for the children and medicine. Their lack of skills limits their employability. Thus they will

take anything. Equal pay isn't just a women's issue. When women get equal pay, their family incomes rise and the whole family benefits. Their earnings are essential to family support. Pay discrimination costs women a lot but it robs husbands and families, too. Equal pay is also a business case—skilled staff, retention and loyalty all reduce business costs while at the same time increase productivity.

Gender as a Cross Cutting Issue within Katalyst Programming

Table 21: Gender as a Cross Cutting Issue within Katalyst Programmig		
	Katalyst Market Development	Market Development & Gender
Research/Sub-sector Analysis	Identify sub-sectors: <ul style="list-style-type: none"> • The poor participate in large numbers as producers, employees and consumers. • Growth Potential of the sector • Number of farmers/entrepreneurs involved • Market size • Profitability of the sector • Seasonality • The participation of women 	<ul style="list-style-type: none"> • Analyse the socio-cultural attitudes within the enabling environment • Determine the roles of men & women in the functioning of the sub-sector—what do men do? What do women do? • Identify constraints impeding the participation of men; women in higher value markets • Identify technical information and technology needs of women and of men in relation to their specific roles within the sub-sector to improve their competitiveness
Intervention Design	<ul style="list-style-type: none"> • Identify solutions that remove the constraints • Identify solution providers—this may be lead firms • Design programs that improve competitiveness of firms in the sub-sector and strengthens links between actors through facilitation 	<ul style="list-style-type: none"> • Ensure technical assistance is available to women and men—take into consideration the domestic workload of women and coordinate the delivery of training to fit their schedule • Build business case with lead firms as to how women can improve efficiency and productivity of firm if skills development offered in their designated role
Monitoring & Evaluation	<ul style="list-style-type: none"> • Develop logistical framework to facilitate results based management for each intervention—include goal, objective, outputs and outcomes with indicators and means of verification 	Monitor: <ul style="list-style-type: none"> • Skill development and how it affects productivity and efficiency—this builds business case for women to be trained • Social impact of improved household income, women contributing monetarily to the household, men & women making decisions together

Apply a gender lens in the market research stage

Before Katalyst starts any project in any sector, they conduct a subsector analysis. Applying a gender lens in a sub-sector analysis will reveal where women are currently working in the sub-sector, what their roles and responsibilities are and the constraints which impede their full participation. Focus groups can be conducted to determine the roles of men and women in the transformation of a product from raw material to finished product. Questions can also be included in surveys that accomplish the same. When the roles of women and men are identified, constraints that impede their participation and realization of benefits can be determined and solutions to remove the constraints identified.

Focus on improving productivity through a more efficient and skilled work force

Katalyst works with lead firms in contract farming and in exporting. Oftentimes lead firms are sub contracting out aspects of production crucial to producing the product demanded in the market place. If the processing activity is dominated by women, Katalyst can play a key role in assisting lead firms to improve their tendering processes for subcontractors to include provisions for skill development, improved working conditions and remuneration which reflects the improved skill level. It would be advantageous for Katalyst to develop a mechanism that would support lead firms to address efficiency, quality and ultimately improve sales when tendering out to sub-contractors. This mechanism could be a diagnostic tool which would then provide the lead firm with the evidence needed that when labourers and employees are better prepared in their job efficiency, quality will improve which will result in higher productivity and ultimately profits. Contractual agreements between

lead firms and subcontractors can then include these items which would be particular to the firm in question. Lead firms can then market their improved subcontracting and employment practices to encourage foreign investment.

7. Conclusion

Katalyst is a dynamic and innovative entity committed to market development which benefits the poor. Katalyst's approach as a facilitator focuses on existing markets mechanisms and incentives and is driven by market actors. This particular document has focused on market development interventions in the maize and vegetable sub-sectors in the district of Rangpur. In both sub-sectors the interventions have resulted in increased production and improved access to affordable quality input supplies for smallholder farmers. Katalyst has a commitment to pro-poor market development and recognizes that women are very poor and at the same time integral actors in agricultural production at the household level. Integrating gender into market development has challenges, which is why Katalyst is seeking to understand better how to incorporate women into pro-poor market development so that women can also benefit from the improved market systems.

Women in Bangladesh are virtually invisible in agricultural production because they are not interacting directly with input or output markets. Yet at the same time they are integrally involved in agricultural production at the household level. The labour force participation of women is relegated to non skilled occupations as a result of their low literacy levels and social mores which have traditionally confined women to reproductive activities—child rearing and household management.

There are many opportunities through the existing market mechanisms to include women in market development. This requires identifying the actual roles and responsibilities that women play in each sector with which Katalyst works. This will then assist Katalyst to develop appropriate supports at the firm level.

Incorporating a focus on improving the lives of women in market development requires approaches which are appropriate within the socio-cultural context. Not only for lead firms and market mechanisms to begin to view women as integral players but for women themselves to decide on their own that they want to participate in market development.

Katalyst recognizes improved business performance holds opportunities to improve the environment, working conditions and the position of female workers. They can play a key role in providing lessons learned on incorporating gender into market development. This document has presented some opportunities for Katalyst to take the learning's from the projects investigated and apply them to others in their portfolio to achieve their objectives in Bangladesh.

Endnotes

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- ² "Millennium Development Goals: Bangladesh Progress Report", jointly prepared by the Government of Bangladesh and the United Nations Country Team in Bangladesh, February 2005.
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- ⁵ Asian Development Bank Programs Department (West) 2001, "Country Briefing Paper – Women in Bangladesh." Asian Development Bank, August 2001.
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- ⁷ For more information on the intervention see "Bringing Knowledge to Vegetable Farmers: Improving embedded information in the distribution system: by Alan Gibson at
<http://www.Katalystbd.com/admin/downloads/20060501030010.pdf>
- ⁸ Org-Quest Research Limited was hired to conduct a survey where 100 female farmers in 5 villages were interviewed. This was done in October 2006 in the villages of Palichara, Nishcintapur, Shibrapur, Bara Kamlabari; Char Gatasam in the district of Rangpur. Of the 100 respondents, eight were the head of households.
- ⁹ This data was collected from a focus group held with 22 women farmers on October 22, 2006 in the village of Choraikhola in the Union of Dalaler Bazaar in the Upazilla of Nilphamari Sadar in Nilphamari.
- ¹⁰ The selling of vegetables from homestead gardens is only the surplus or "extra" that is produced after consumption needs are met. Whereas crops produced in the fields are for commercial purposes and therefore are the sole responsibility of the men to sell.
- ¹¹ UNDP, 2006, Human Development Report
- ¹² This data was collected from two focus groups conducted on October 19, 2006 with contract farmers supplying Doyal. One focus group was with 11 female contract farmers and the other was with 12 male contract farmers.
- ¹³ Centre for Development and Enterprise. 2006. "Accelerating Shared Growth: Making Markets Work for the Poor in South Africa." Paper commissioned by ComMark Trust, Woodmead, South Africa.
<http://www.commark.org/Downloads/ResearchAndLearning/ACCELERATING%20SHARED%20GROWTH.pdf>
- ¹⁴ *The New Dictionary of Cultural Literacy*, Third Edition, 2002.
- ¹⁵ Lusby, F., and H. Panlibuton. 2004. "Promotion of Commercially Viable Solutions to Subsector and Business Constraints." Paper prepared for Office of Microenterprise Development, USAID, USAID/G/EGAD/MD, Washington DC. Updated 2004. <http://www.actionforenterprise.org/paper0404.pdf>.