Sustainable livelihoods through small scale agriculture: a case from Bangladesh

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Contents

Acronyms

ALO	: Alternative Livelihood Options
APONE	: Alleviating Poverty in North East Bangladesh
ARP	: Agricultural Rights Program
BBS	: Bangladesh Bureau of Statistics
BDS	: Business Development Service
BS	: Business Service
DAE	: Department of Agricultural Extension
DEW	: Development Wheel
DLS	: Department of Livestock Service
EU	: European Union
GDP	: Gross Domestic Product
GOB	: Government of Bangladesh
MDG	: Millennium Development Goals
MSE	: Micro and Small Enterprise
NGO	: Non-Government Organization
NSAPR	: National Strategy for Accelerated Poverty Reduction
PNGO	: Partner Non-Government Organization
SAAO	: Sub Assistant Agriculture Officer
SAARC	: Association of South Asian Regional Cooperation
SDG	: SAARC Development Goal
SIDA	: Swedish International Development Agency
TX	: Traidcraft Exchange
SLIPP	: Sustainable Livelihood for Poor Producers
SSE	: Social Solidarity Economy
UNDP	: United Nations Development Program

Executive Summery

DEW has completed successfully agricultural development based SLIPP (Sustainable Livelihood for Poor Producer) project aimed to increase income, employment and sustainable livelihood of 1200 poor and marginalized farmers in Mymensingh and Netrokona districts, Bangladesh. The main objective of this project was to reduce production cost through agricultural practices as well as alleviate poverty for small and marginal farmer. Initially we started work with 1200 farmers, but due to field demand we added more 400 farmers and formed district level vegetable, fish & duck producer association which was milestone for that region.

DEW had a dream to provide Sustainable livelihoods program, Human Rights and Fair Trade program for the poor and disadvantage people. Since the inception of the organization, DEW has continued to grow and emerge in response to changes in the needs and demands of the poor people of north east part of Bangladesh. DEW has focused its attention on promotion and starting new projects so that more people might change their livelihood through these development activities. Now we are hopeful that DEW will reach a great number of rural marginal farmers, who providing food for whole country (160 million people) but not getting fair return of their hard work, wages and great contribution to our nation,. DEW remains dedicated to long-term learning, a commitment to democracy, citizen involvement and the rule of law, as well as women empowerment. It is a pleasure to be associated with an organization with such a high caliber of professionalism. DEW owes its reputation as one of the most successful programs SLIPP project, now based on that experience we have started new projects APONE-Alleviating Poverty in North East Bangladesh, ALO-Alternative Livelihood Options anf ARP-Agriculture Rights Programme (Thanks to our development partners Traidcraft Exchange, European Union, UKaid, Big Lottery fund, Oxfam, Swallows India Bangladesh/Sida and farmer groups in greater Mymensingh districts). Based on those projects we have initiated to form farmer associations in that region so that they can raise their voice as well as move in a structure formed for getting their rights from the public and private service providers. For organizing farmer we get emphasis on their economic empowerment through agricultural practices such as increasing their productivity, reducing production cost and ensuring fair price of their product to ensure solidarity economy.

1. INTRODUCTION

Development Wheel (DEW) is a non-profit development organization founded in 1996 by a few development professionals and researchers to promote self-help poverty alleviation initiatives of the poorest households in Bangladesh. The main focus of the organization is to work for the promotion of the Arts and Crafts sector of Bangladesh through facilitating the development of small enterprises with an aim to generate sustainable self-employment opportunities for under-privileged rural and urban people. Besides, DEW is also active in the fields of sustainable livelihoods through small scale agriculture, climate change, livelihoods security, agricultural promotion, women empowerment, human rights and good governance in partnership and collaboration with different international and national organizations. Our vision is to have a society where all people will enjoy equal rights, equitable access to employment and adequate resources necessary for their livelihoods and will live in dignity.

DEW implemented a five-year long small scale agriculture project entitled "Sustainable Livelihoods for Poor Producers in Mymensingh and Netrokona, Bangladesh (SLIPP)" co-funded by European Commission (EU) and Traidcraft Exchange from April 2007 to March 2012. SLIPP's objective was to reduce poverty among poor and marginalized communities in the north east Bangladesh (Mymensingh and Netrokona districts). The main outputs of the project include: promotion of a business-enabling environment, strengthening the capacity of business development service (BDS) providers, development of grass root producer associations, and development of affordable BDS provisions. Thus the project helped to promote employment and income opportunities for poor and disadvantaged communities by contributing to a business enabling environment including policy framework for sustainable growth and by capacity building of BDS providers so that they can provide appropriate services to their clients.

The approach is to systematically analyze the market by various methods such as sub-sector and value chain analysis to identify all the actors, their interrelationships, constraints and finding out viable solutions. The project intends to develop systems that ensure access of the poor to appropriate BDS that they need on a sustainable basis to fight poverty.

The sub-sector studies under the project have identified Fish and Vegetable products for Mymensingh district, and Duck and Vegetable products for Netrokona district. The project is implemented through a network of NGO partners which facilitate the formation and maintenance of producer groups and associations. In addition, the project enhances the capacity of NGOs to adopt the evolving BDS so they can replicate the approaches in their existing program.

The major problems in the agriculture of Bangladesh being addressed by the project are:

- Farmers are not organized; they don't have any platform for voicing their needs.
- Limited skills of farmers to access services, resources, information, technology and markets.

- Poor bargaining and negotiating capacity amongst farmers.
- Absence of climate-adaptive and environment-friendly agricultural practices.
- Lack of preparedness of farmers to militate against shocks or stresses (financial, environmental, etc).
- Poor policy implementation and lack of awareness amongst farmers of available benefits of government programs.

2. DESIGN OF THE SLIPP PROJECT

Agriculture is the driving force of the economy of Bangladesh, accounting for about 21% of GDP and about 50% of employment (Bangladesh Bureau of Statistics, 2009). The sector is made up of millions of poor and marginal farmers; 76% of farming households operate with less than one hectare of land (Department of Agriculture Extension 2007), of which 40% are almost landless (below 0.02 hectares) or marginal (0.02 - 0.2 hectares). This 76% of households account for just 4% of cultivated land (Department of Agriculture Extension 2007)

Figure 1 illustrates the problem analysis that was at the heart of SLIPP project. SLIPP began with the aim to reduce poverty among poor and marginalized communities by increasing their income and employment opportunities. The strategy chosen was to increase the ability of marginalized, micro and small enterprises and their producers to benefit equitably from trade. It is based on a facilitation model of developing the value chain as a whole for mutual benefits of the producers and all other value chain actors they interact with.

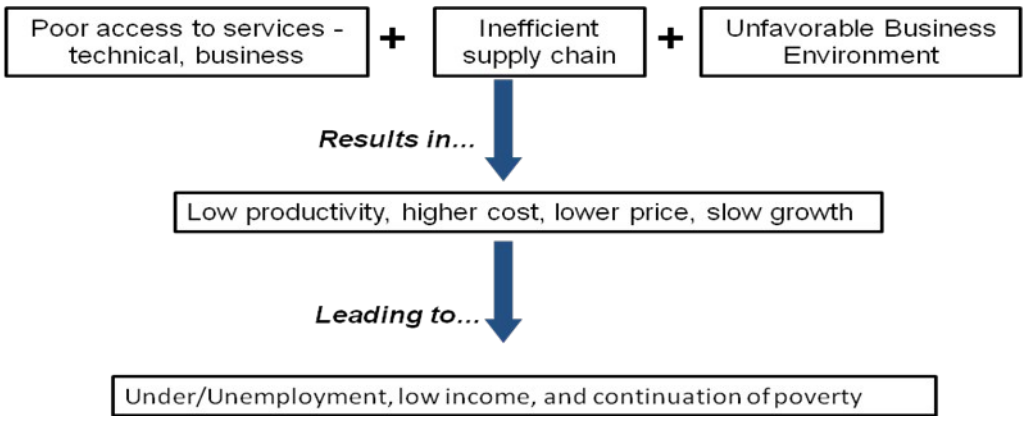

Figure 1: Problem Analysis

It was determined that the project will intervene to address three generic problems in the selected subsectors/ value chains- (i) poor access to business services, (ii) inefficient supply chain and (iii) unfavorable business environment. These core problems lead to low productivity, higher cost of operations, lower market price and slow growth in the market, which in turn results to unemployment/ underemployment, low income and continuation of poverty.

The results chain for SLIPP (Figure 2) therefore focuses on addressing the core constraints such that beneficiaries could benefit from improved productivity, lower cost of operations, higher

market price and accelerated growth.

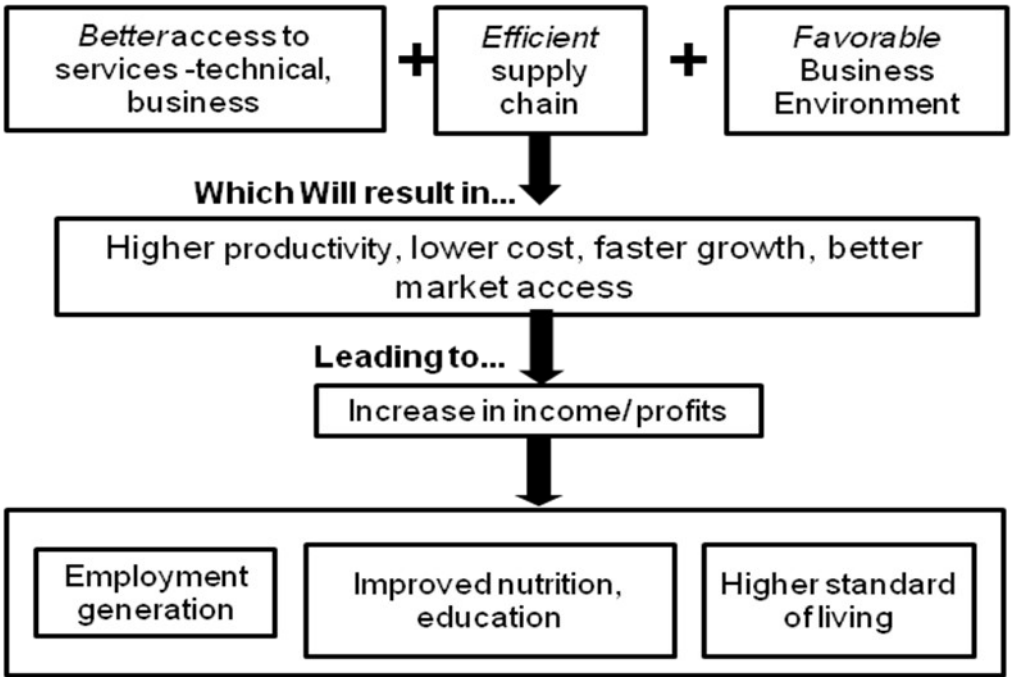

Figure 2: The Results Chain for SLIPP

To materialize the concept, it was essential that SLIPP had an implementation framework that could support the strategic road map that was planned. As can be seen in figure 3, the project organized its interventions into three strategic areas: (i) create awareness and build capacity of the service providers, (ii) organize, empower, and build capacity of the MSEs and (iii) engage public stakeholders and local administrations. These were linked with several intermediate impacts (for example: capacity building of service providers leading to provision of cost effective business services), yielding the final impacts, i.e. (i) better business services, (ii) efficient supply chain, and (iii) enabling business environment.

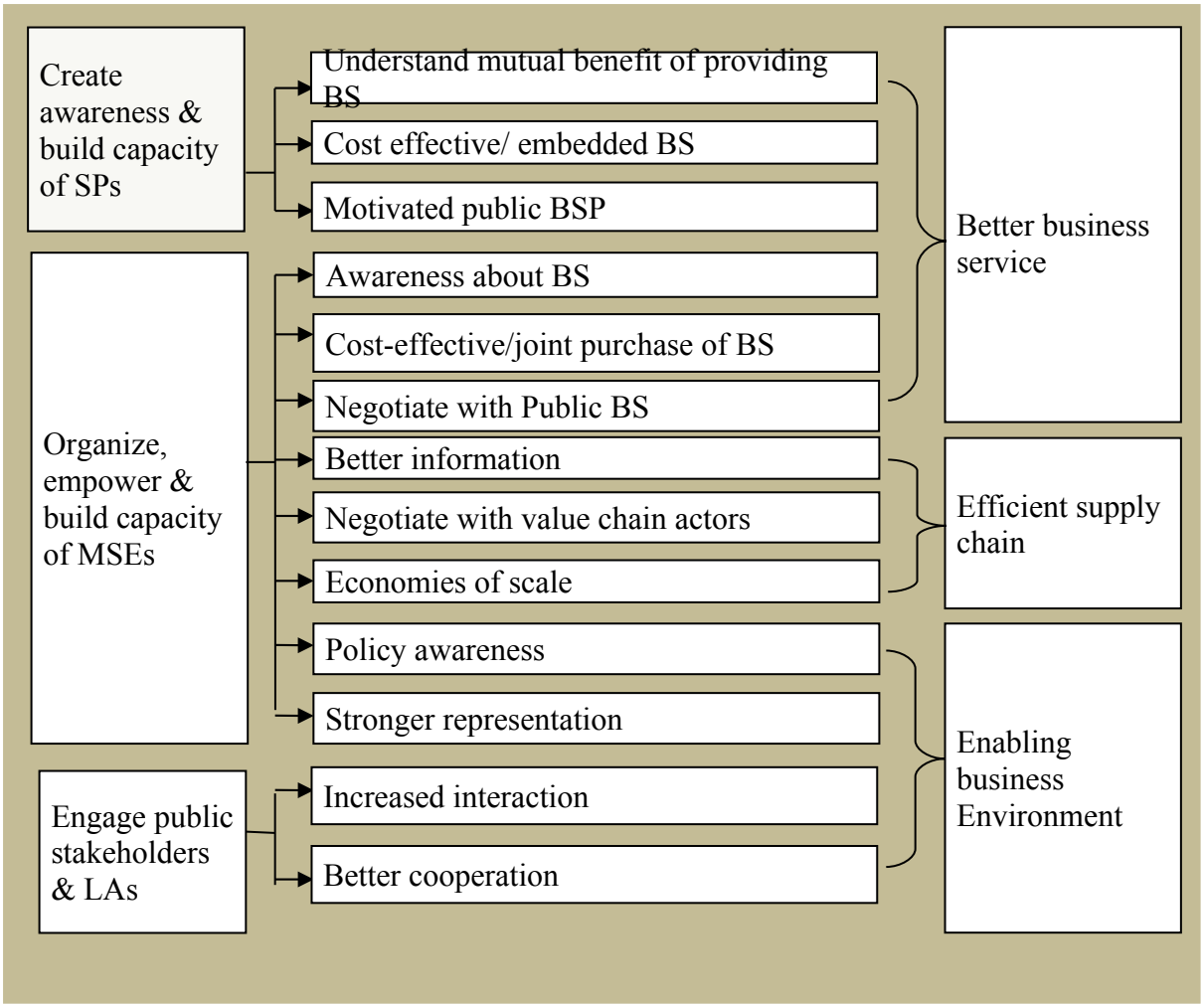

Figure 3: The Implementation Framework of SLIPP

3. PROJECT IMPACT

The producers participating in the project are mainly poor and disadvantaged groups. They undertake production collectively in groups, focusing on vegetable and fisheries in Mymensingh, and vegetable and duck in Netrokona. The products were selected through a scoping mission conducted by a professional consulting firm, which unfortunately did not consider the relevance of the product to the project's goals of increasing income, creating employment, and improving livelihood. As a result, the SLIPP farmers had varying performance with respect to these three goals.

In the vegetable subsector, project targets were achieved in all three aspects - income, employment and livelihood. It benefitted large number of producers who belonged to the marginalized farm households in the region. Since self-labor does not generate additional

income for the household, we defined 'employment' as the increase in person days of work for hired labor. Given this definition, the employment impact of SLIPP in the duck subsector was limited since farm households depended solely on self labor. However, SLIPP had very good impact on income and livelihood of farm households engaged in duck rearing.

Mymensingh has a large and thriving fisheries subsector employing thousands of labor on the backward and forward linkages. Fishery enterprises are also relatively well off in terms of resources. Field findings suggest that because of the presence of larger fish farms it was initially difficult for the project to identify beneficiaries that could qualify for SLIPP.

4. DEVELOPMENT OF THE SOCIAL ENTERPRISE

The SLIPP project undertakes the following activities:

- Form producer groups and associations to enable sustainable and cost effective market access and strengthen supply chain.
- Build the capacity of the BS providers to provide affordable and quality business services to MSEs in a sustainable manner.
- Create an institutional infrastructure of business support services for poor MSEs and producers.
- Influence policy makers to ensure an enabling business environment for poor MSEs and producers.

5. Farmer groups and producer associations formed

Initially farmers ware not organized. The SLIPP project aimed to empower the farmers through the formation of farmer groups and farmer associations, making them aware of their rights, and building their capacities to identify their problems and find solutions. The farmer 'self help groups' were thus the main channel of service delivery (advocacy, lobbying, negotiation etc), and the main instrument for enterprise development and sustainability.

The project evaluation reveals that the strategy to form farmer groups was effective in the sense that private and public services are now being delivered through the farmer groups. The farmer groups have given both the public and the private sectors an instrument to increase accessibility to their services and products. For instance, it was evident that the block supervisors of the government are now increasingly using the farmer groups to provide their services. Department of Agricultural Extension (DAE) and Department of Livestock Service (DLS) were also using the farmer groups for their training and demonstration campaigns. Working with large number of people enabled the few workers of the SLIPP project to deliver a variety of interventions with quality and within the project's resource constraints.

The functioning of farmer groups depends largely on the group leaders who were the change agents. In SLIPP, It took time to build leadership and the social capital that is essential for proper functioning of the farmer groups. In due course, the farmer groups evolved into a unified body

that aptly represents the individual members. The farmer groups have elected their representatives to the respective farmer associations in Mymensingh and Netrokona districts. The farmer associations are functional to this day and working for the interest of the farmers.

6. New Projects introduced by DEW

Based on very successful implementation of SLIPP model DEW is now implementing two new projects in Mymensingh, Sherpur and Netrokona districts entitled "Alleviating Poverty in North East Bangladesh- APONE" and "Alternative Livelihood Options- ALO" from April 2012 co-funded by the UK aid and Big Lottery Fund. In addition, DEW started another farmer rights based project named Agriculture Rights Programme (ARP) supported by Swallows India Bangladesh/SIDA. These projects will run for four years in Mymensingh, Netrokona and Sherpur districts. These projects will ensure sustainable livelihoods for poor and marginal communities, particularly women, in Northern Bangladesh through improvements to small-scale agriculture. By organizing farmers and linking them to information, skills, services and markets, the project will reduce costs of production, increase productivity and improve access to resources. This will lead to a 50% increase in income, directly benefiting 12,000 households (40% women including 30% ethnic minority) and their families (60,000 people).

DEW started a development program in Mymensingh in 2007. From that time on, enterprise development became part of DEW's farm extension services. The farming community widely accepted the approach of changing their livelihood through agricultural enterprise development.

7. The role of service providers in enterprise development

There are many public and private (NGO) service providers working for the poor and disadvantaged people especially in farming communities. The resources of the Bangladesh government are very limited. Government services do not cover all the people in the country. Some government programmes do assist farmers, but due to the inefficiencies in the government service delivery system the most disadvantaged are often unable to access them. For example, in a sub-district of Mymensingh 60 Sub-Assistant Agriculture Officers (SAAOs) try to cover 20,000 farmers, indicating a SAAO to farmer ratio of 1:333, which is untenable when the SAAO has to work with farmers on an individual basis.

Levels of private service provision are also extremely low as private sector actors (e.g. input suppliers) struggle to provide services to huge numbers of farmers scattered across rural areas and they often do not see business with small-scale farmers as viable. Moreover, there are gaps in information dissemination to farmers on new technologies/practices as research institutions do not have a mandate or funding for this type of development research work.

8. SLIPP project contributions to the Millennium Development Goals (MDG)

Most of the people in Bangladesh live below the poverty line. The enterprise development thrust of the SLIPP project in agriculture helps improve the livelihood of the people in the rural areas. It also helps our country achieve MDG by 2015. At the national level, however, recent economic growth in the country has not led to a major fall in poverty, particularly in the rural areas (Overseas Development Institute, 2008). This has been exacerbated by the 2008 global economic crisis, volatile food and fuel prices and debilitating natural disasters which have had a significant negative impact on the proportion of people living in extreme poverty in the country (UNDP Bangladesh, 2009). As such, MDG1 has only been partially achieved (GOB MDG Progress Report, 2009). Key targets such as sustainable agricultural growth with environmental preservation and expansion of rural employment generation are yet to be achieved (GOB, 2009). There is also the criticism that progress towards MDG 1 in Bangladesh has been 'gender blind'.

Enterprise development of the SLIPP project helps address some of the targets in MDG 3 which Bangladesh at the national level is not on track to achieve, such as the share of women in wage employment. The project also contributes to MDG 7 which, in Bangladesh, strongly influences progress towards achieving the other MDGs through the dominant interface between poverty, environment and climate change. Despite substantial efforts by donors, development agencies and the GOB, key challenges remain in dealing with the impact of climate change (GOB, 2009).

Even as the SLIPP project contributes most directly to the achievement of MDGs 1, 3 and 7, by enabling people in poverty to derive greater income through trade, the development work of DEW also contributes to the achievement of other MDGs, especially MDGs 2-6 where sustainable income increases access to education, health and nutrition for poor families.

The main accomplishments of the SLIPP project's enterprise development component are as follows

- Promote the image of the agricultural business with the public at large
- Achieve the goals of the agricultural business in terms of improving income, employment and livelihood
- Ensure that goods and raw materials are purchased at the better prices and are available when needed
- Effective use of the factors of production (land, capital, labor and entrepreneurship) to produce the goods needed
- Assist in running the business of handling information
- Inculcate proper practices of enterprise management
- Ensure that the good and services are delivered from the producer to the consumer with proper use of market research information
- Assist in financial recordkeeping and in raising the necessary capital

9. Problem/needs to be addressed

9.1 Lack of environment friendly and agro-ecological production practices: Increased use of chemical fertilizers and pesticides has led to increased crop production. But it has also induced imbalance in the use of fertilizers and pesticides which brought about many cumulative ill effects such as depletion of organic matter in the soil, nutrient mining, degradation of the physical and chemical properties of the soil, scantly use of bio and organic fertilizers and poor farm management practices. All these have slowed yield growth in major crops.

9.2 Inadequate knowledge on sustainable soil and water management: Farmers hardly have any idea about the chemical and organic contents of their land. So they estimate the range, amount and proportion of fertilizers to be applied depending on their previous experiences for a given land-size and specific crop. This result in the excessive use of fertilizer which in turn pollutes water, harms aquatic resources, and often makes crop vulnerable to disease and pest attack.

***9.3 Lack of access to information and knowledge on the importance of organic farming*:** Farmers are unaware about the importance and benefits of organic farming. They follow conventional non-organic farming practices to increase their productivity without any consideration of their agro-ecological conditions.

9.4 Lack of crop rotation practices and eco-friendly cropping pattern: Cropping pattern is one of most the important factors of soil fertility management. Eco-friendly cropping patterns such as rice-maize –mug bean, rice-vegetable –jute/green manure crop, etc balance plant nutrient into the soil. Most farmers are unaware about the eco-friendly cropping pattern which is vital for crop production in a sustainable way.

9.5 Lack of government policy on organic agriculture: The National Agriculture Policy 2010 broadly aims at creating an enabling environment for sustainable growth of agriculture for reducing poverty and ensuring food security through increased crop production and employment opportunity as envisaged in National Strategy for Accelerated Poverty Reduction (NSAPR), the MDG, and the SAARC Development Goals (SDGs). However, there is no specific policy direction and certification system on organic agriculture and products.

10. To address these challenges, the desired solutions of the SLIPP project are:

- Enable farmers to have access to services more easily
- Organize farmers to benefit from economies of scale by bulk purchasing
- Enjoin government & private sector to collectively invest in agricultural infrastructure and equipment
- Enable farmers to negotiate more effectively with buyers
- Build the capacity of farmer associations to lobby local and national government bodies

11. PARTICIPANTS OF THE VALUE CHAIN

11.1 Producers

Farmer beneficiaries of the SLIPP project were suffering from various inefficiencies in the forward and backward linkages of their value chain. Lack of knowledge on best production practices resulted in imbalanced use, mismanagement and misuse of their resources. In addition, retailers themselves often lacked the capacity to deliver their services effectively. These issues were mostly addressed through knowledge sharing and capacity building by the project for both producers and retailers. In addition, low bargaining power of farmers often resulted in exploitation by private traders during peak season.

Farmers also lacked the networking required to gain access to necessary information to improve their situation. In response to interventions of the SLIPP project, the retailers have made it known that it is more profitable for them to do business with the vegetable and duck farmer groups. The SAAOs also reported that it is easier to provide support to the groups. It is thus clear that the development of the enterprises of farmers will be enhanced with more stable linkages with input suppliers and appropriate service providers.

11.2 Input Suppliers

Input suppliers in the SLIPP project have improved across all product lines (vegetable, duck, and fisheries) in terms of bargaining strength mainly. For vegetable farmers, the problem was each input supplier tried to cover a large number of farmers, each with small purchasing power. Thus, even if the retailers lost a customer or two, it did not matter. As a result, supply chain malpractices of overpricing and adulteration were rampant in peak season which exploited the farmers.

After the formation of SLIPP groups, the relationship between farmers and input suppliers improved. In the past, most farmers used to buy from the same input supply shop individually. At present, whether famers buy individually or as a group, the input supplier's reputation quickly spreads among the group members. The incidence of malpractice reduced greatly as input suppliers realized that they stood to lose not just one customer but 25 to 30 of them at a go. Also, when the SLIPP farmers achieved success (in terms of the project goals) after the 1st year of the project, news of their success spread among non-SLIPP members. Consequently, the input suppliers wanted to gain the SLIPP farmers as their customers due to their improved reputation. Thus, a relationship based on mutual benefits has developed between the farmers and input suppliers. The input suppliers working with SLIPP farmer groups give additional services like visiting the farmers' on-field to suggest medicines for a diseased crop or livestock after personally examining it.

Nonetheless, the interests of the farmers and input suppliers do not always perfectly match. Not all SLIPP members want quality solely with every input; they always bargain for the best quality at the lowest price while the input supplier wants to maximize profit. Farmers do not usually make any written agreement with the input supplier. They don't have any written

contract. They use verbal contract. When they faced problem with an input supplier they switch over to another where they can get better price for their produce.

11.3 Buyers of farm produce

The SLIPP project has worked with three major buyer companies, among which two, Renata and Syngenta, elaborated the objectives of their interaction with great clarity. Syngenta worked mainly in building capacity of trade partners, i.e., input suppliers. Subjects covered by their training courses were on agriculture, especially modern cultivation practices, new seed varieties and institutional link with marginal farmers. Both firms depend on foreign imported hybrid seeds and feeds with many variants as per market requirements. While vegetable farmers still depend largely on seeds saved from previous seasons, due to project interventions, availing hybrid seeds have become easier for the beneficiaries and the rate of their use has increased.

Working with large firms has the additional benefit of having access to a ready channel for reaching out to relevant stakeholders like input-selling retailers. However, large firms are also more difficult to convince to deal with small farmers as their investment is higher. The results were very clear. Prior to the project, Syngenta split up the national market into 10 divisions and rated them according to volume of business. Among them, vegetable seed business was insignificant and nearly negligible in the Mymensingh division and was last in market rank among all. However, after the project, the Mymensingh division has become 3rd highest vegetable seed selling region.

Syngenta's primary motivation in joining the project was to maintain their brand value to newer markets which had growth potential. Before the mini packaging, retail input suppliers used to cut up the bigger packet into smaller one to sell to farmers. Not only did the open packets damage the quality of seeds, retailers also mixed in other seeds to adulterate the product. As a result, the farmers often suffered and in turn Syngenta would lose credibility of quality. Releasing the mini-packs solved those problems. In addition, better performance and relations developed with the farmers through field demonstrations have built the company's reputation as a whole among the beneficiaries and others.

11.4 Other service providers

Producer groups require many service providers to meet their farm needs from crop production to marketing. Training service is provided by DAE and an NGO which hire consultants or resource persons to help build the farm production and management capacity of the producer. The sub-district cooperative office, women affairs office, and youth development office also play some useful role particularly in developing the enterprises of the producer group members. No written agreement is normally required to facilitate transactions between the producer and the service provider. The producer group has the option to change the service provider anytime and switch over to another. The main problem underlying the falling off of relations between the two is that producers lack knowledge or misinformed about the service that the service provider is actually capable of giving.

The group-based approach is generally human resource intensive from the standpoint of the project coordinator, as it requires hand holding to form and guide the groups. The project covered large areas with adverse travelling conditions. The project's core efficiency came from using PNGO staff with limited expense instead of fully using project staff. In addition to cost-efficiency, using local hire also made the project execution better as the staff had better knowledge of locality, which beneficiaries to choose, the relevant stakeholders and how to interact with them for maximum impact. This was crucial to the project's impact results. The project ownership and dedication demonstrated by the Partner Non Government Organization (PNGO) and project staff was crucial to the project's success, particularly in forming the groups and guiding them towards effective functionality.

12. Key factors that motivate service providers to do business with producers

Service providers do business with producers for certain considerations. These are:

- *Potential for scale up:* The main benefit for the service providers from doing business with producer groups is the platform it provides for disseminating business information and selling to a large number of people with minimum effort. Thus, the bigger the platform is, the more attractive it is to service providers.
- *Potential Customer Base:* An important consideration of input suppliers in determining whether to join the project or not is the potential size of the customer base they can reach out. A large customer base will not only make facilitation of services easier and more effective; it can also impact positively the company's return on investment. Demonstration plots arranged by Syngenta helped to convince farmers about the quality of their product and to successfully introduce new products into the market. By building the relationship with the beneficiaries directly, both Syngenta and Renata have managed to get a sizeable customer base for their products. For duck farmers, Renata demonstrated proper feeding techniques to promote its brand of poultry feed. Sales of Renata have increased, demonstrating the potential for SLIPP to open up new markets.
- *Interest of other farmers:* Input supplies also look at the project's impact on the responses of other farmers to the project. In the case of SLIPP, when the beneficiary group of producers started to get tangible benefits form their adoption of the practices learned from trainings organized by SLIPP, other non-SLIPP members expressed interest to get involved in the project. SLIPP members helped them to form groups and get registered under the project. This positive effect of the SLIPP project on other farmers added fuel to the motivation of input suppliers to do further business with the SLIPP producers.

12.1 Linkage with traders

Generally, impact on market access was not as strong as the impacts on input supply. This was primarily because SLIPP worked in small territory with limited number of beneficiaries which limited its scope to have impact on market-access related problems (for example: higher market price) since these are caused by market dysfunctions at the regional and the national levels (for example increase in production and supply of cucumber in the national market leading to lower market price). Also, SLIPP intervened to improve market-access related conditions at a late

stage of the project (after the 3rd year for most groups) because of which it had limited time to increase the depth of its interventions. As explained in the anecdote below, much of the success related to market access came from collective selling but it was generally confined to older groups.

12.2 Implementation benefits

Input service provider is another important output of this project. Besides other agricultural input seller, our producer groups also produced eco-friendly compost fertilizer named *Tricoderma* compost fertilizer which increases crop production as well as improves soil health. This practice is continuing in this region even after the completion of this SLIPP project. We are using this technique in our other ongoing project demonstration plot establishment. As an entrepreneur that sorts of household activities may become a good source of income generation. Women played an important role in compost preparation process of this project. They used household wastage with decomposition of different materials.

One of the major benefits is that farmers of Mymensingh region are more aware about their rights then before. Now they can easily communicate with the service providers as well as local government representatives which bring different facilitation in their community. This project ensured some lead farmers access to and participation in leadership and decision making whose capacity increased by the different training activities in sub-district and district level. Now they become the representatives of poor and marginalized farmers of Mymensingh region, they also can influence local government power structure regarding their rights. That leadership helps them to attain sustainable development in agriculture.

12.3 Producer attended in different public events:

This project has been under taken so many activities for value chain or particularly confidence building of suppliers. We arranged public dialogues, public hearing, and maintaining communication with local level administration and also met with the supplier for better coverage or reach their service. In those programs farmers are discussed about their needs in a participatory manner and demands that services for them to survive or sustain. This is the only one farmers' platform of our producers where they can raise their voice against all illegal activities. We can term it as a sense of leadership which helps them to ensure their capacity as well as confidence building.

12.4 Moving the farm enterprise upwards:

One of the means to move the farm enterprise upward in the value chain is to increase the number of organized farmer groups. This step enables farmer groups to link up with service providers inasmuch as it would meet the scale requirements for viability of the services of the public and private sectors. SLIPP increased the number of farmer groups rapidly in the middle and later stages of the project in response to increasing interest from the farmers in the targeted region. This step was found to be essential since the private and public sector partners as well as the private business service providers required scale to make the delivery of their services to the farmers more cost effective.

To ensure the continued functioning of farmer groups, it is important to complete the activities involved in identifying and developing the farmer groups. As the project evaluation reveals, one of the challenges in group formation is that the rapid scale-up of farmer groups, which occurred in the latter stage of the project, stretched out the staff capacity and affected field operations. Furthermore, the project evaluation also indicates that newer groups lacked the social capital that was evident in most of the older groups, and that it takes two years of continued and intensive engagement of the project staff to make the groups functional.

Another important project finding is that developing a local anchor or guardian for the groups should be started from the very onset of the project. Although SLIPP planned to hand over the ownership of the groups to the farmer's association, it did not materialize well because of amendments in the approach (for example forming two regional associations rather than forming value chain specific associations). Due to this, it was found at the end of the project that a local anchor was missing, thus an opportunity was lost for forming new groups and for facilitating the development of older groups.

Finally, a strong indication of an upward move of farmer groups in the value chain is that they have already initiated buying and selling activities with other social enterprises in the region. They have started assembling their produce and selling them in the market to fetch better price. There were few instances where the farmers association bought the produce of individual members. In some cases, the farmer group bought agriculture equipments and rented them out to the members.

13. SOCIAL AND SOLIDARITY ECONOMY

A far-reaching challenge for the farmers groups in Mymensingh and Netrokona districts is to seriously address the agenda of socially inclusive and sustainable development. They need to look at an alternative approach to development that appears to be gaining traction in many countries. In contexts of not only endemic unemployment and multiple and recurring crises (finance and food), but also new opportunities for cultural expression and social interaction, workers, producers, consumers and communities are organizing themselves autonomously in ways that seem to hold considerable promise for socially inclusive and sustainable development.

The term Social Solidarity Economy (SSE) refers to the autonomous acts of ordinary people to organize them and undertake economic activities collectively. SSE encompasses organizations and enterprises that:

- have explicit economic and social (and often environmental) objectives;
- involve varying degrees and forms of cooperative, associative and solidarity relations between workers, producers and consumers;
- Practice workplace democracy and self-management.

Against this backdrop, the farmer groups of Mymensingh and Netrokona districts that are participating in the SLIPP project have a long way to go. They still depend on a third party to get themselves organized, to improve their own enterprises, and to streamline their value chains. It is hoped, however, that the existing farmer groups and farmer associations could take the initiative of extending group formation among farmers in other parts of the region and in neighboring districts

14. Challenges in developing the SSE

With the use of value chain analysis, this case study identified the major constraints of the farm sector in Mymensingh and Netrokona districts towards SSE development. Most problems of access to business services, both technical and business-related, were interlinked with inefficient supply chain and unfavorable business environment. Thus, the SLIPP project's intervention design addressed the constraints of access to business services by delivering relevant knowledge and information to the beneficiaries through relevant stakeholders.

The main strength of this facilitation method was the dual benefit of addressing the problems of developing business service access while strengthening linkages between the beneficiaries and important market actors; thus enhancing the effectiveness of the supply chain and building a more favorable business environment for them. It is this core advantage of the project's intervention design model which produced the favorable results of the project and increased its sustainability.

The project opted to address some key constraints. For example; in vegetable, the problems lay in improper soil fertility management arising from lack of soil testing services and awareness about the benefit of soil testing, access to quality seeds, lack of use of compost and compost technology (trichoderma), insecticides and pesticides management, lack of market access, etc In duck, lack of knowledge about disease identification and management, lack of access to veterinary services led to the current situation. In fisheries, quality of fish seeds, overstocking, pond health, and market price were identified as key constraints.

An important aspect of the project that is related to SSE is group formation. At the onset of the project, the farmers were not organized; they did not have any platform to make their voices heard. SLIPP has created the opportunity to get the farmers united. It provided them a platform to raise their voice and build their capacity to create a knowledge-based farmers community. It is hoped that the knowledge-based farmers' community can become a seed of SSE in the Mymensingh and Netrokona districts.

15. INDICATORS FOR MEASURING ENTERPRISE PERFORMANCE

15.1 Social impact indicators

At a very simplistic level, 'social impact' is the social change that an organization creates through its actions- i.e. the impact of its interventions. Depending on the nature of enterprise the social impact of organization may include things that happen sometime after the actual intervention and / or affect a wider group of individuals than just the chosen target population. Social impact indicators are the specific, measurable things that can be tracked and which will allow the evaluator to assess the effectiveness (the impact) of the enterprise. The indicators defined for a specific organization will be dependent on the access/ ability to collect certain information and the audience to whom these indicators will need to be communicated.

The best way to define organization's social impact indicators is to measure (outputs) and the corresponding outcomes it is aiming to achieve.

15.2 Cross Cutting Impact

Climate change and gender equality are two development goals which have gained increasing importance in the SLIPP project. SLIPP was not mandated to address these cross cutting agenda but, at a later stage, the project was enjoined to initiate interventions on these issues. SLIPP could have played an important role in addressing these two development goals. Interventions in the agriculture sector provide a broad scope for environmental as well as gender impact and there are existing interventions in agriculture that have had positive impacts on these two agendas. In future development interventions in agriculture, these two development goals should be considered right from the beginning. In every aspect of the project inception, from sub-sector selection to beneficiary selection to intervention design, the environmental and gender impacts should be planned for along with the existing economic sustainability impacts in terms of increased income, employment and improved sustainable livelihood.

15.3 Environmental impact

Environment and poverty are inextricably interrelated. Environmental degradation perpetuates natural calamities and as a consequence, poverty intensifies. Social development work is based on the insight that poverty reduction is impossible in the long term, unless importance is given to conservation of natural resources on which people are dependent upon for building their livelihoods. In view of this, intervention projects in agriculture need to address the conservation of natural resources for the sustainability of the agricultural production system. Organic farming should be given more importance. Interventions in agriculture should include building the capacity of farmers to combat soil degradation caused by chemical fertilizers and pesticides. This will have positive impact on the health condition of the local community and consumers which will also contribute to a decrease in healthcare cost and to an improvement of household food security.

A potential approach that could help conserve environment is balanced fertilization. In the past, arbitrary use of fertilizers often destroyed the crops. Based on the information acquired from Soil Testing, balanced fertilization created relatively significant business impact and is widely practiced by SLIPP farmers. Although soil testing incidences were low among group members, the results from those tests were used by all farmer members, shared through group meetings and informal discussions. Among the SLIPP farmers, the sources of information about balanced fertilization have not only increased in quality but also in numbers. This means the farmers were taking information from more sources than before, a clear indication of the increasing importance of balanced fertilization among them. In addition to reduced use of chemical fertilizers, using the soil test report as a guide also led to higher use of micronutrients like Zinc and Boron.

Another environment friendly practice is compost use. SLIPP farmers now agree that the soil cannot remain healthy without the use of compost. They are aware of the importance of compost use which has led to greater use as seen in the evaluation study. SLIPP farmers have ready access to natural materials like manure and leaves, leading to the 92% adoption rate of composting. Use of Trichoderma compost is low however, as identified in focus group discussions [involving 3 to 5 participants per 30 members]. The probable bottlenecks identified were high initial set-up cost (ring-based production), and large amount of fertilizer needed, which requires a lot of time and hassle in using trichoderma compost.

Thus, for SLIPP, cross cutting interventions like these show clear impact which builds credibility for further work with the farmer groups. These interventions are quite helpful in expanding the SLIPP intervention model horizontally or vertically to other areas for their sustainable livelihoods and in solidarity with larger farmer communities in Bangladesh.

16. SLIPP Project Final Evaluation

Final dissemination workshop of SLIPP (Sustainable Livelihoods for Poor Producers) project, which was launched in 2007 by Traidcraft Exchange Bangladesh, funded by European Union has completed. The 5-year project aimed to increase income, employment and sustainable livelihood of 1200 poor and marginalized beneficiaries in Mymensingh and Netrokona districts. It intervened in vegetable, duck and fish sectors to enable better market access and business enabling environment for poor MSEs as well as capacity development of the business service providers by creating institutional infrastructure. The findings showed how the project successfully addressed key constraints in the selected sub-sectors, resulting in income growth, improved livelihood, better child nutrition, increased access to health and education.

Key Achievements of SLIPP Project

- 2400 (against 1200 target) producers
- 96 groups and 4 District Level Producers Associations
- 326 (against 60 Target) Business Service Providers

- 3 inputs selling companies
- 9 Public Service Providers-DAE, SRDI, DOF, BAU, BARI, BFRI, DLS, DA, LA
- 60% of 2400 Producers i.e. 1440 producers have increased 15% income Through 30% increase in sales and 20% reduced in production cost by using soil testing, compost fertilizer, quality inputs, improved cultivation practices, group purchase and sales, etc
- Each producer employed 3 seasonal workers which is equal to 7200 workers, i.e. 24% increased in employment Through improved production practices, increased cropping intensity, integrated cultivation practices, etc
- 164 trained input sellers have increased 30% sales
- 81 trained soil collectors promote soil testing service-results around 700 producers tested their soils
- 30 Compost producers promote compost fertilizer by involving SRDI and DAE
- 25 trained feed crushers provide information and knowledge on cost effective feed formulation to 300 fish farmers
- 2 trained fish hatchery produce quality fry and fingerling by using improved hatching technique and have increased their sales by 40%
- 50 trained duck hatcheries have increased their production from 1.8 million to 2.2 million ducklings as their hatching efficiency increased from 60% to 65%.

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