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**PRICE**  
POVERTY REDUCTION BY INCREASING  
THE COMPETITIVENESS OF ENTERPRISES

# POVERTY REDUCTION BY INCREASING THE COMPETITIVENESS OF ENTERPRISES BANGLADESH

QUARTERLY REPORT JANUARY-MARCH 2012





# **POVERTY REDUCTION BY INCREASING THE COMPETITIVENESS OF ENTERPRISES (PRICE)**

**QUARTERLY REPORT JANUARY – MARCH 2012**

**Contract No. 388-C-00-08-00021-00**

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## LIST OF ACRONYMS

AAS	Agriculture Advisory Society
AHFC	Allahwalla Hatchery & Farming Complex
AMBS	Alamdigi Khudra-Motsya Bebohashi-Somity
BBMS	Bamunji Beel Motsojibi Somity
BCLT	Bangladesh College of Leather Technology
BFFEA	Bangladesh Frozen Foods Exporters Association
BMCS	Bhaluka Motsya-Chashi Samaboya-Somiti
BMET	Bureau of Manpower, Employment and Training
BMH	Bakolia Matsya Hatchery
BSIL	Bengal Shoe Industries Ltd.
BTEB	Bangladesh Technical Education Board
CAPL	Chitralatha Aqua Park Ltd.
CBT	Competency Based Training
COEL	Centre of Excellence for Leather Skill Bangladesh Limited
CST	Closed System pond Technology
DBE	Din Bijoy Enterprise
DoF	Department of Fisheries
DMBBS	Digherkanda Mastopona Bebohashi-Kallan Bohumukhi Somabaya Somity
DSKS	DEESHA Samaj Kallyan Sangstha
DU	Dhaka University
EF	Extension Facilitators
ETP	Effluent Treatment Plant
EU	European Union
GAP	Good Aquaculture Practices
GFL	Gazi Fish Ltd
GHERS	Greater Harvest and Economic Return from Shrimp
GHFPL	Golden Harvest Sea Food and Fish Processing Limited
GIMCS	Global Islamic Multipurpose Cooperative Society
GKSSE	Grameen Krishok Shahyak Sangstha Enterprise
GoB	Government of Bangladesh
GUKED	Gram Unnayan Karma Enterprise Development
HACCAP	Hazard Analysis and Critical Control Points
IFC	International Finance Corporation
ILO	International Labour Organization's
IPM	Integrated pest management
IVLP	International Visitors Leadership Program
JSK	Jano Seba Kendra
KMCSS	Kahaloo Matsya Chashi Samoby Somity
KMFCSL	Kansat Mango Farmers Cooperative Society Limited
KMPUSS	Mymensingh and Kahaloo Mosta-pona Utpadonkari Samaboya-Somiti
KMPUS	Kahaloo Matsya Pona Utpadonkari shomoby Shamitee
LFMEAB	Leather Goods & Footwear Manufacturers & Exporters Association of Bangladesh
LTSE	Leather Technologist Small Entrepreneurs
MFBA	Muktagacha Fish-Farmers & Business Association
MFFH	Ma Fatima Fish Hatchery

MMCS	Murail Matshya Chashi Shamitee
MMCSS	Mourail Matsya Chashi Samoby Somity
MOU	Memorandum of Understanding
MTT	Modified Traditional Technology
NBTH	North-Bengal Thai-Tech Tilapia Hatchery
NFC	Nowapara Fisheries complex
NFMC	Nazirertek Fish-dryers Multipurpose Cooperative Somity
NGO	Non-government organization
NMS	Nokla Motsojibi Somity
NTH	Niribilli Tilapia Hatchery
NTTH	North Bengal Thai Tech Tilapia Hatchery
NVQF	National Vocational Qualification Framework
PBKS	Polli-Bodu Kallan Sanghtha
PCR	Polymer Chain Reaction
PPFA	Phulpur Fish and Prawn Farmers' Association
PL	Post-larvae (Shrimp)
PMCS	Patchpir Bazar Matsya Chashi Shomoby Samity
PMH	Pori Matsya Hatchery
RDF	Rakhaing Development Foundation
RFH	Rupali Fish Hatchery
SABINCO	Saudi-Bangladesh Industrial & Agricultural Investment Company Ltd
SBH	South Bay hatchery
SBMK	Sambridhi Bhomuki Matshya O Gobeshona Kendra
SBMUGK	Sumridhi Matsya Unnayan O Gobeshona Kendra
SMCS	Sherpur Matsya-Chashi Samaboya-Somiti
SME	Small and Medium Enterprises
SMEF	SME Foundation
SMH	Shuvro Matsya Hatchery
SMSC	S&M Shrimp Culture Ltd
SMSFL	SMS Feeds Limited
SSFP	Smiling Sun Franchise Program
SSS	Society for Social Service
SSURD	Society for Sustainable Development for the Rural & Urban Area
TBMP	traditional best management practices
TFFS	Trisal Fish Farmers-Business Somity
TMCS	Talora Ancholik Matsya-Chashi Samaboya-Somiti
TMUS	Trinomool Manobik Unnayan Sangstha
TSMS	Tarakanda Satata Matsya Somity
TVET	Technical and Vocational Education and Training
WFC	World Fish Centre

## Executive Summary

This quarter, PRICE-supported partner SMEs and associations increased their sales by \$34.7 million and more than 10,000 new jobs were created across the value chain. Also, SMEs and associations investments increased by nearly \$1.96 million. PRICE remained focused on training by training nearly 17,800 farmers and SMEs on improved technology and approximately 11,400 on improved management skills. In addition, through PRICE's workforce development interventions, PRICE built the capacity of nearly 2,000 workers across the three sectors.

The **horticulture** sector continued its activities in potato, eggplant, and mango production, as well as in quality inputs, compost, pest management, post-harvest handling, and market linkages through working with several SMEs, farmer associations, NGOs, and enterprises. This quarter, PRICE facilitated several trainings on potato production and post-production technology, commercially safe vegetable production and marketing, eggplant cultivation, and mango production and orchard management which helped farmers increase their production through better quality produce. PRICE horticulture partners increased their sales by approximately \$5.3 million and 2,578 new jobs were created in the sector. Total investment increased by \$172,797 in fixed assets. Additionally, 6,470 farmers were trained on improved technology and 990 participated in the workforce development program.

This quarter, the **aquaculture** sector continued its activities in production improvement in the fish and shrimp sub-sectors. PRICE supported its partners in commercial production of new species and high density commercial farming. PRICE promoted raising quality brood and improving brood bank management among hatchery owners, supported laboratories in testing Post-Larvae (PL), and promoted the use screened PL shrimp among farmers through the Greater Harvest and Economic Return from Shrimp (GHERS) initiative. PRICE also promoted three types of improved farming practices.

PRICE also facilitated project beneficiaries' access to better inputs, including seed and feed, as well as market linkages between farmers, depots, wholesalers, and processing plants. As a result, the aquaculture sector partners increased their sales by approximately \$20 million, generated 6,769 new jobs in the sector, and increased their investments by \$1.75 million. This quarter, 11,310 fish and shrimp farmers received trainings on improved farming technology, and 7,600 farmers were trained on improved management. Furthermore, 200 participated in workforce development programs in the fish sub-sector.

In the **leather products** sector, PRICE continued its efforts in workforce development, increasing access to finance through linking banks with SMEs, and developing market linkages through various fairs, such as the Trade Fair and SME Fair. PRICE also continued to strengthen their institutional capacity through training programs. This quarter, PRICE's support helped generate additional sales of \$9.35 million, created 669 employment opportunities, and increased investment by \$30,120 as fixed assets. Also, 818 employees were trained as part of the workforce development program.

## **Horticulture**

This quarter, the climate, and particularly the temperature, was favorable for producing a range of horticultural crops. Although a delayed harvest of the aman rice crop (the main rice crop planted to gain advantage from monsoonal rainfall) resulted in a later sowing of table and seed potato, these and other winter vegetables including eggplant performed well in the field.

Activities in the south strengthened the value chains of several enterprises, associations, and NGOs. These activities focused on potato, eggplant, mango and other high value horticultural crops including seeds and crop inputs such as compost, with the objective of assisting improve the economic conditions and livelihoods of generally poor producers and other value chain actors.

PRICE is reorienting its horticulture component focus from the north to the twenty districts targeted by USAID's Feed the Future (FtF) program in the south and southwest of Bangladesh. The next quarterly progress reports will describe the horticulture component activities associated with responding to the FtF program. The component is also moving to strengthen approaches in developing business service centers, market orientation in the target value chains, and service delivery. It will utilize recognized associations or other groups with the goal of reducing the current large number of individual memorandum of understanding (MoU) agreements and consultancy contracts. Some MoU partners received a match from PRICE up to 75 percent, and as this is the final phase of the project this match will be reduced to greatly lessen dependence on the project. A series of scoping studies will be needed to ensure effective and efficient targeting to the FtF target districts, and these will be scheduled in the next quarter.

### **A. Potato**

Preliminary field estimates indicate this year's potato cultivation area was eight to ten percent less than the previous year due to comparatively low market prices last year. However, with the arrival of a new potato crop to the market, prices were better than last year. Capacity building and successful technology transfer, with better access to quality inputs, combined with optimum pest and water management and adopting the right kind of harvest and post-harvest handling operations were some of the PRICE interventions helping growers achieve higher yields. This year the national monthly average wholesale market price of fresh white potato was around Tk 800 (\$9.70) per quintal (100.0 kg in 1 quintal) in January 2012 with an increasing trend up to Tk 950 (\$11.52) per quintal in March 2012. The price of newly introduced processing varieties was around Tk 1,200 (Tk 14.55) per quintal. Potato production was very good in the southern and northern areas supported by PRICE, reaching to a maximum of 30-32 MT per hectare. Exporters stated the higher domestic prices made it difficult, and the exported volume was low.

## **A.1. Potato Seed**

### **A.1.1. Assisting Enterprises to Produce Basic Seed**

Interventions by PRICE are addressing a key issue of increasing commercial availability of first generation potato seeds. These seeds are disease free, with high vigor and genetic purity and thereby produce higher yields and farmer gross higher margins.

Continuing from the last quarter, PRICE assisted partner seed entities to produce basic seeds. This includes the steps from tissue cultured pre-breeder and breeder seeds, following strict phytosanitary measures to avoid diseases and particularly viruses. All supported seed enterprises of Konica Seed Company Ltd., Unique Seed Company, Sajib Seeds, and Technology for Rural Development, Ferdous Biotech Ltd., RDA, and the Potato Seed Growers Association were engaged in crop management, harvest and post-harvest handling of pre-breeder seed production. These trainings focused on tissue cultured plantlets, breeder and foundation seed production in net houses designed to prevent insect entry and thereby prevent disease.

Using net houses, Ferdous Biotech produced 4,000 kg of mini-tubers and 16,500 kg of breeder seed of Diamant and Cardinal varieties from one hectare in Golna, Nilphamari District, and Sajib Seed produced 18,500 kg of breeder seeds of Diamant from 0.87 hectares from their own mini-tubers. The Unique Seed Company produced 9,000 kg of breeder seed of Diamant and Cardinal from 0.40 hectares and 400 kg of mini-tubers from tissue cultured plantlets in their net house in the Bogra District. Technology for Rural Development, in the Nilphamari District were also assisted in disease-free potato seed production, producing 17,00 kg pre-breeder seed from tissue culture plantlets from 0.27 hectares and 50,000 kg of breeder's seeds from 6.7 hectares of net houses. From their own breeders' seed in 2010, they produced 303 MT of foundation seed valued at around Tk 12,120,000 (\$146,919).

Assistance continued to RDA which increased its capacity in tissue culture laboratory operations with production from their own tissue cultured plantlets and pre-breeder seeds and post-harvest handling of pre-breeders seed and breeders seeds of Diamant, Cardinal, Lady Rosetta, and Asterix varieties. Konica Seed Company, the only potato seed company in the south, from tissue cultured plantlets and mini-tubers, pioneered to produce quality pre-breeder and breeder's seed under net houses. From 0.18 hectares of net house the company produced 3,800 kg of breeder seeds of Cardinal from mini-tubers, and this will be multiplied to produce foundation seeds. Konica also produced 95 MT of first generation foundation seeds of Cardinal and Diamant from 3.2 hectares in Chuadanga District. The company organized trainings for 30 contract seed growing farmers on seed production from tissue cultured materials.

### **A.1.2. Strengthening Contract Farming for Certified Seed Production**

Contract farming of certified potato seed is one of the important PRICE initiatives, which has successfully replicated and addressed a chronic problem of inadequate availability of quality seeds. PRICE assisted PRIDE Agro Enterprise Limited of Jessore to provide technical support to 60 contract farmers during tuberization and maturity of potato, as well as on haulm pulling,

harvesting, curing, sorting, grading, and bagging. PRICE assisted to procure 20,000 kg of seeds properly certified by the Seed Certification Agency and placed them in cold storage.

Konica Seed Company of Chudanga, another PRICE supported company, increased their contract farming area from 37 hectares to 42 hectares involving 130 contract farmers. They also obtained 850 second generation foundation seed of Diamant and Cardinal variety of potato using foundation-1 seed. The seeds were duly certified by the SCA, graded, sorted, packed, and stored. These seeds are expected to be utilized mostly by the potato farmers of the FtF districts.

Ferdous Biotech, along with their own production, continued to support 25 contract farmers during the quarter. These farmers produced 102 MT seeds of Diamant, Cardinal, and Granola varieties in 6.8 hectares of land located in Joldhaka, Nilphamari. These seeds were certified, procured and stored in cold storages for next year's market.

Shibganj Potato Farmers Cooperative Society, consisting of 2,400 potato farmers, requires a large quantity of good seeds every year but always struggle to obtain them. PRICE supported the association to grow seeds from foundation seeds in 1.4 hectares of land to meet the captive demand of the association.

During January and February, a late blight affected the Shibganj area, but with the technical support of PRICE, they prevented severe damage. As a result, they could produce about 16 MT of grade -A and B clean certified level seeds and stored them in a timely manner, a success for the association members. The remaining 35 percent of the potato was or will be used for table purposes.

In most cases, the Seed Certification Agency certifies the seeds of the PRICE partners and PRICE assisted establishing linkages between the two.

### **A.1.3. Facilitating Demonstrations and Field Days for Technology Dissemination**

Some of the major constraints of the potato value chain are an unstable amount of total production which differs year to year and affects market prices, quality and dry matter, hampering both export market and the ability to meet the required specifications of the food and processing industry. During the last quarter, twelve demonstration plots were established in Raingagar, Laughata, Jibon- nogor, Atmol, Borobelgharia, Upson, Blolrampur, Kichok, Miarhat, Vasubihar, Buriganj, and Jamurhat of Shibganj Upazila of Bogra with an average plot size of 0.04 hectares.

While establishing the demonstration plots, the plot owners and the neighborhood farmers were provided technical advice and guidance. Major learning interventions were: irrigation schedule and optimum soil moisture maintenance; aphid control and use of appropriate pesticide in correct doses; control of late blight; earthing up during tuber maturation to avoid greening; haulm pulling; curing in shade to make better skin finish; and sorting and grading into proper sizes. Then, during harvest and before packing, farmers were shown the effect the technical interventions and first generation seeds had on yield. The average per hectare finished

product was 28 MT, which was about 8-10 tons more than the best farmers yield without intervention.

Another important consideration for establishing the demonstration plots was popularizing Cardinal, Diamant, and Asterix potato varieties, which have better market value. The dominant variety of the area is Granola which has a very low market price. Farmers are now confident on production technology and know the source of better seeds, which will eventually change the whole production scenario of the area.

Two field days on potato seed production from tissue cultured products were held at the Seed Village and RDA farm where potato farmers participated from the neighboring villages of Dhawapara, Baroinjol, and Rainagar. Representatives from several seed companies supported by PRICE, including Konica Seed Company, Unique Seed, Ferdous Biotech, and Ankur Seed also attended the field days. Seed certification officers of Bogra participated and expressed their satisfaction about the quality of seeds.

Farmers visited pre-breeder, breeder, and foundation seed plots and harvested from some parts of different plots to observe the type of seed potato and yield. A lively discussion session was held at the end of the field visit about the production technology, and the price of different types of seeds. Farmers showed interest in buying the seeds for next year crop production.

## **A.2. Establishing Supply Chain of Processing Potato**



*Courage-a newly introduced processing type of potato*

Processing industries, especially newly established real potato chip making industries, have been facing challenges of running their factories year round due to a lack of adequate quantity of processing types of potatoes and the available potatoes having high dry matter content. This dual challenge needs to be addressed, otherwise these new industries will start suffering.

PRICE initiated to start contract farming through Bombay Agro and two local enterprises, but the effort did not continue due to a lack of the required level of dry matter of the Asterix variety potato produced in the Bogra region. This year, another processing variety, Courage, was cultivated in different areas of the country with higher doses of inputs with optimum irrigation under the semi-contract farming system introduced by Blue Moon International.

PRICE supported the enterprise with technical service and provided training to the farmers while Blue Moon ensured good quality seeds. Eight training sessions for 95 contract farmers were held in five different locations of Bogra, Rangpur, Jamalpur, and Munshiganj. This time, dry matter level increased and finally Blue International succeeded in supplying 878 MT of high quality processing type of potato to Bombay Agro factory for making real potato chips. The company bought the potato at a prefixed rate of Tk 12 per kg.

### **A.3. Successful Introduction of a New High Yielding Dual Purpose Potato**

PRICE introduced Asterix – a table and processing purpose variety of potato – for the first time in Bogra Sadar last year under a contract farming system among 139 farmers which was partially successful. This year, farmers kept their seed and under the technical supervision of PRICE and the involvement of two PRICE partners, Murail Association and GUKED, more than 400 farmers cultivated the variety in around 405 hectares of land. These farmers got a bumper production with an average yield of 28-30 MT per hectare. Farmers sold the potato with a premium price of Tk 12/kg. The potato will eventually meet the demand of the French fry industry.

Sajib Seeds, another PRICE partner, planted Lady Rosetta, another table- processing type of potato, in nine hectares of land producing 228 MT of potatoes. Both the varieties are red skinned, have high yields, great taste, a higher dry matter content, and can be used by the processing industries due to the great demand in the fresh market as well as the fast food industry.

### **A.4. Supporting Enterprises to Increase the Capacity of Potato Farmers on Crop Management**

Addressing food and nutrition security of the southern region is one of the important targets of the PRICE project. In this context, potato stands as a great crop. Potato is now a major crop of the north while in the south it's not very prominent.

During the early part of the quarter, while potato was at one of the critical stages of growth, and the same time as a late blight attack, PRICE assisted several new enterprises and NGO's in the south to train their potato farmers. In order to ensure a good quality potato production, farmers were instructed to use the right type fungicide and adopt appropriate pest management, apply proper doses of fertilizer, cover the potato to protect from sunlight, follow the irrigation schedule closely, and harvest properly.



During this quarter, Proshikkhito Jubo Kalyan Agro Enterprise trained 240 farmers, including 95 female farmers. Trainings covered potato crop management. The farmers learned about raising earth along the potato row, top dressing, irrigation management, the spraying schedule for control of late blight, and harvesting. The enterprise assisted 600 contract farmers to grow crops in their 70 hectares of land by providing technical support during potato growing period, particularly in applying fertilizer, raising potato ridges, and control of aphids. Farmers had a very good harvest in

comparison to last year. They got 20-25 MT yield per hectare which is a record for this area.

The Rural Reconstruction Foundation organized technical trainings for 870 potato farmers on "Improved Technology on Potato Cultivation through Contract Farming." During the early growing period, another PRICE partner of south, Shushilon, organized a training course for 60 farmers, on "Potato Crop Management." RRF facilitated access to credit and established linkages with input dealers to get better inputs such as fertilizer and pesticides.

Jagoroni Agro Industries (JAI) organized nine trainings on “Improved Technology on Potato Cultivation through Contract Farming” at Sharsha, Navarin, Barinagar of Jessore, Moheshpur, and Khalispur of Jhenaidaha, and Kotchandpur. Sixty of the 270 participants were female farmers. PRICE’s technical staff supervised 330 farmers with 412 acres of land during the period which has helped farmers to avert late blight and get a good yield.

Shibganj Upazilla Farmers Cooperative Society, Limited organized trainings on “Modern Potato Cultivation and Management Practices” in different venues of Shibganj. A total of 760 potato farmers participated in the events. PRICE supported the association members with technical support to follow proper management practices and crop protection measures during humid and foggy weather conditions. While many potato crop fields were attacked by late blight, the association farmers were able to protect their crops and had a high yield.

PRIDE Agro–Enterprise, another PRICE partner in the south, assisted 600 potato farmers in ten villages in applying fertilizer and pesticides effectively, adopting haulm pulling before harvesting, curing, grading, packing, and marketing. The enterprise also assisted the farmers to get quality fertilizers and pesticides from the designated local authentic dealers.

### **A.3. Improving Post-Harvest Handling of Potato**

PRICE undertook a special effort by supporting several enterprises to improve the quality of potato to cater to the demand of wholesalers, cold storage owners as well as consumers by minimizing losses of potato during the process of marketing and storage. During this quarter, PRICE facilitated trainings on post-harvest handling for farmers and workers in collaboration with several partner enterprises.



*Hands on training for women workforce on potato post harvest*

During this quarter, trainings were held on post-harvest handling of potato at Shibganj, Bogra. A total of 2,250 potato farmers of the Shibganj Upazilla Farmers Cooperative Society, Limited participated in 58 training programs. Farmers were given theoretical and practical training on the haulm killing, field curing, harvesting, after harvest curing, cleaning, sorting, grading, and packing. PRICE is supporting the Shibganj Farmers Cooperative to increase its potato farmer’s capacity.

Murail Rural Development Multipurpose Cooperative Society Limited of Bogra organized a farmers training on harvesting and post-harvest handling of potato at Murail Bogra for 400 workers at Belghoria, Bkahari, Sikli, Puboil and Murail village under Murail Union of Bogra. One hundred fifty two of the trainees were female. The training helped to improve the quality of potato and grading them according to size. Farmers who immediately sold the crop fetched Tk 500-1,000/ ton.

## B. EGGPLANT

Yields were generally excellent in most locations and the wholesale price per quintal ranged from Tk 1,000 (\$12.12) in early January 2012 reaching around Tk 1,900 (\$23) in February 2012. PRICE farmers received continuous technical support in production, post production and marketing.

Eggplant is one of the major vegetables and has a high market demand. Winter eggplants planted in late December and early January grew well during February and March. PRICE supported its partner enterprises to organize contract farming involving and organizing small farmers' groups, trained them to address major constraints on production, specifically top dressing with balanced doses of fertilizers, earthing up of rows, and irrigation management. In addition, the control of pests mostly by means of biological and mechanical control measures in order to improve the quality of the crops to meet high market standards, lower the cost of production and reduce damage to the environment and negative effects on human health was addressed.

### B.1. Increasing the Capacity of Eggplant Farmers

In the south, particularly Jessore, eggplant is the main crop. But in recent years, eggplant production cost has increased due to the use of higher quantities of chemicals.

Farmers are faced with a tough decision. On one hand, if they use chemicals they are unable to make profits. On the other hand, without chemicals, production is down. In addition, using chemicals can risk the health of farmers' and consumers and is also damaging to the environment.



*Training session of egg plant*

In this challenging situation, PRICE has been working with several enterprises to address these constraints in the southern region of the country. During this quarter, PRICE supported PRIDE Agro Enterprise to train 900 on 'Eggplant Crop Management, Post-harvest Handling and Marketing. Eggplant farmers' groups participated in training sessions covering crop nutrition, irrigation, pest management, post-harvest handling, and marketing.

With PRICE's support, the Enterprise helped eggplant farmers use improved technology for eggplant cultivation. PRIDE Agro Enterprise assisted 290 farmers of Delobari, Hurgati, Chalkidanga, and Kondoppur villages of Monirampur to set pheromone traps, use organic pesticides, and apply fertilizer and irrigation effectively. Farmers followed the technologies and were expecting a bumper crop and a good price.

PRIDE also made arrangements with wholesale agents of Bhojgati market for marketing the products. The Enterprise has started procurement of eggplant from their contracting farmers since mid-March and marketed 35,040 kg at an average rate of Tk 12.40/kg, earning a total revenue of Tk 434,496. Farmers are expecting yield of 60 MT per hectare.

Polly- Prokrity of Magura organized trainings during March for 210 eggplant farmers who will be planting summer eggplant. Summer eggplants are usually cultivated in Jaria, Joynagar of Sreepur Upazilla, and Malondo, Chandanprotap, Okkurpara, and Bashdanga of Sadar Upazilla of Magura. The area is suitable for summer vegetables due to the availability of high land. However, shoot and fruit borer is one of the major pests of eggplant which causes serious crop damage. Seedling wilting is also a major cause of crop failure and farmers who fail to properly address the situation find production system is not competitive in the market.

To address these problems, PRICE supported Polly-Prokrity to train farmers to build their capacity in seedling raising techniques, planting, and to control fruit and shoot borer by adopting good agricultural practices and using the right kind of pesticide in proper doses and intervals. Farmers were also trained on proper irrigation management to control wilting. Additionally, the soil of the area is deficient of boron, which affects the size of the eggplants, causes mottling and curling, and as a result yield is poor, quality and low and returns are small. Farmers were advised to address the problem by applying boron and using phosphate with other micronutrients during the flower initiation stage to enhance flower initiation and flower dropping as well as to improve the fruit quality.

PRICE assisted Jagoroni Agro Industries to organize on eggplant production and post-production technology for their 150 contract farmers of Kotchandpur, Moheshpur, and Khalishpur. Krishok Bandhu Karmashuchi also organized farmer refreshers trainings on eggplant for their 300 contract farmers of Rajapur, Parandarpur, Kawria, Borni, Mohinikhati, Bolla, and Bejiatala villages under Jhikorgacha Upazilla of Jessore. The trainings addressed farmer's major problems regarding crop and pest management and post-harvest handling and marketing. The enterprise supported ten contract farmers to have their soil sample analyzed for applying balanced doses of fertilizers and compost. Farmers were shown new harvesting techniques and how to use a sharp knife to minimize crop loss due to improper harvesting at the peak season.

## **B.2. Results Demonstration and Field Day for Eggplant Farmers**

Training does not always bring change in the behavior of the farmers. PRICE has found however, that trainings followed by results demonstrations can bring effective change even among the late adopters. Krishok Bandhu Karmashuchi of Jessore and Grameen Krishok Shakyak Sangstha Enterprise of Bogra and Riya Fertilizer of Sirajganj established 14 demonstration plots in their respective areas to showcase the adoption of better technology and use of compost on eggplant farming. Krishok Bandhu Karmashuchi established four demonstration plots in their farmer's plots, and GKSSE farmers harvested their crops, which showed higher yields in all cases.

In all the demonstrations the yield was about 40 percent higher than the yield of other neighborhood farmers. The neighborhood farmers were amazed to see such a big change after adopting new technology and expressed their satisfaction about the eggplant production.

### B.3. USAID Team Visits PRICE Eggplant Site in South



Discussion meeting with egg plant farmers

A two member USAID team and the Chief of Party of PRICE visited the eggplant field at Hurgati, Monirampur on February. The team visited PRIDE Agro Enterprise eggplant field and met with several eggplant farmers.

The farmers informed the team that they had learned and were implementing modern cultivation techniques of eggplant, they enjoyed access to high quality seed and fertilizers, irrigation techniques, and plant protection measures. The farmers are now using pheromone traps and other biological methods of pest management, which have greatly reduced their production cost and improved the quality of their produce. With these methods their yield has increased from 8MT/acre to 16 MT.

A market linkage was established between local wholesale agents and PRIDE Agro-enterprise to buy their produce. After the meeting with eggplant farmers, the team observed a farmer training on improved technology and post-harvest management and marketing of eggplant at Hurgati Village of Monirampur Upazilla.

### C. MANGO

In general, mango yields in northern Bangladesh are high and this region is known as the mango hub of Bangladesh. The favorable climate with improved management practices achieved around 70 percent tree bearing and good fruit growth. The situation in the south was the opposite as only around 50 percent plants had flowers with poor fruit setting.



USAID team visiting egg plant field at Jessore

Mango is a valued crop in the north, particularly in Rajshahi and Chapainwabganj Districts. While mango grows in the southwest, there are differences in the growing pattern from a microclimate effect created by the late monsoon rainfall pattern and from late winter weather. Mango crops were good in the southwest during 2011, mainly in Chuadanga and Jessore districts, although in coastal areas such as Satkhira district crops were poor. Flowering was poor in the south due to heavy fog during February and March 2012, and was further reduced with less fruit due to the fungal disease *Anthracoese spp.* Crops in the north were good until the end of March.

PRICE provided training and technical support to mango growers in both areas during the growing season to help them obtain optimum harvest and returns. This included supporting two enterprises in the south and two farmer associations in the north. PRICE trained growers to retain fruit, protect crops from pest and diseases, improve and maintain fruit quality to satisfy local markets, and compete with imported fruit.

### **C.1. Assisting the Mango Farmers in Building Capacity to Address Market Demand**

PRICE helped organize 19 trainings for the 760 member farmers of Kansat Mango Farmers Multipurpose Cooperative Society Ltd. Farmers attended training sessions conducted by mango experts from the Mango Research Institute of Nawbganj on various aspects of mango orchard management. The farmers attending the trainings attended interactive sessions and later visited nearby mango orchards.



Bonolota Mango Farmers Association of Chapainawabganj, another PRICE supported farmers association, organized 20 trainings for 30 farmers from mango orchard management and post-harvest handling of mango at Nayagola, Chapainwabganj in January 2012.

PRICE is assisting the Mango Farmers Association to organize training on mango orchard floor management, irrigation, pest management and harvesting techniques to improve the productivity, and quality of mango, minimize production cost through rational management practices, adoption of proper harvesting by using harvester, hot and cold water treatment after harvest, and cleaning, sorting, grading, and packing.

Chesta Agro Enterprise, a PRICE partner in Jhenaidaha, supported mango farmers of Mohonpur, Rahchandrapur, Fulbari, Solemanpur, of Kotchandpur Upazilla of Jhenaidaha during the orchard floor management season. Since January 2012 the enterprise trained 540 mango farmers on different orchard management topics. Farmers were specifically trained on irrigation, fertilizer management, tilling, and leveling the orchard floor for pest control. Farmers were provided technical guidance intended to address pest management and irrigation problems.

Adorsho Foundation Agro Enterprise is a new NGO based enterprise in the south through which PRICE reached 750 farmers who farm roughly 390 hectares of small mango orchards. PRICE provided technical support to address their problem of production, post-harvest handling, and marketing problems. During this quarter, PRICE assisted the enterprise to train 360 farmers of Dhannoghora village under Damurhuda Upazilla of Chuadanga district. Farmers attended the training on improved mango orchard management and contract farming of mango. The course addressed the farmer's lack of information and knowledge on cultural practices, establishing high density mango plantations, fertilization and irrigation, pest and disease management, harvesting and post-harvest handling, and marketing. The enterprise has involved its field staff to provide day-to-day technical support to the mango farmers, who are currently organized in 21 groups. The trainees were provided with training materials and mango flip charts developed by PRICE.

## **Crosscutting Issues**

### **D.1.SAFE VEGETABLES**

#### **D.1.1. Promotion of Safe Vegetable Production in the Dykes of South**

PRICE has been focusing its efforts to support enterprises in the FtF districts, located in Khulna and Bagerhat which have more water bodies and low lying areas vulnerable to climate change. PRICE has been supporting Renaissance, a local enterprise located at Chitolmari of Bagerhat, since last quarter to establish a contract farming model involving 2,100 small-holder farmers. Many of the farmers are women involved in vegetable cultivation in the dyke. They have formed 70 small producer groups, each of which consists of 30 members. During this quarter, PRICE assisted them in organizing training sessions on safe summer vegetables (bitter melon, cucumber, wax melon, and bottle melon), production in the dyke, and completed trainings for 1,410 farmers, of which 933 were female. Farmers were also given clear guidance on the contract farming system.

PRICE supported another southern-based enterprise; EFADF Agro Business to organize small dyke-based vegetable farmers for safe vegetable cultivation through contract farming at the southern fringe of Khulna and adjacent to the Bagerhat districts. The enterprise organized twelve different two-day farmers' trainings consisting of 30 farmers in each group. The training focused on improved technology for safe vegetable production through contract farming at Ballavpur, Patharghata, Betaga, and Lockpur. Out of 360 total participants, 240 were female. The trained farmers were provided with seeds and compost for organizing summer vegetable cultivation.

#### **D.1.2. Information Dissemination and Other Services to Dyke Farmers**

During this quarter, EFADF organized information dissemination meetings at the enterprises farmer's information center. This location was chosen because it is also where field supervisors and field extension agents of the Department of Agriculture Extension (DAE) provide regular technical advice on production related problems and provide input and market price information for vegetables.

Renaissance opened five service centers for providing inputs and technical information to the farmers. The enterprise supplied 1,000 kg of good quality okra, tomato, bottle melon, cucumber, bitter melon, ash melon, and pumpkin seeds to the farmers, procuring from Lalteer Seed Company, Supreme, Delta, and ACI. Renaissance also supplied 4,000 kg of fertilizer to 2,000 farmers through the service centers.

Through the information dissemination meetings held regularly at different points in Lockpur, Ballavpur, Hosla Ghospara, Patharghata, and Betagi of Khulna, 525 vegetables farmers were given weekly production tips for growing vegetables based on local growing conditions and weather.

## **D.2. Vermi and Tricho Compost**

### **D.2.1. Promotion of Compost through Farmer's Field Day**

PRICE helped organize farmer's field day at Dumurgram, Murail, Kahaloo, Bogra and another in Pirozpur, Miarhat, Mithapukur, Rangpur to observe the effects of adopting better crop management practices along with using vermi and tricho- compost in eggplant.

In the first event, 43 neighborhood farmers attended the field day. Farmers visited two eggplant plots where compost was used along with better management practices and two nearby control plots where farmers' own technology was followed.



*Farmers Field day at  
Dumurgaram, Bogra*

In one plot of 0.05 hectares, farmer Tariqul Islam harvested 1,920 kg of eggplant over a three month period where he adopted the new technology. From his other plot he harvested 1,280kg of eggplant where he followed his own traditional practices. He had 50 percent more yield and an additional income of Tk 8,000/ by adopting new technology. In another plot of 0.02 hectares, Mr. Hasen Ali Bepari from the same village had a harvest of 2,560 kg of eggplant in a three month period. In that same period he harvested 640 kg of eggplant from the other plot where he did not apply compost and better management practices. In his case, the yield increase is 70 percent and he earned Tk 24,000 more.

In the second event, 50 farmers attended the field day. Farmers visited one eggplant plot of 0.07 hectares of Mr. Anowarul Islam, who harvested 4,000 kg of eggplant in a two month period in a plot where he adopted the new technology. His second, same size plot yielded 3,200 kg of eggplant where he followed his own practice. He had 25 percent higher yield and an additional income of Tk 8,000/ by adopting new technology during the period of two months.

### **D.2.3. Assisting for Sustainable Production by Using Compost**

PRICE has been supporting its partners to promote the use of compost to improve and preserve soil, thereby making production sustainable. PRICE partner GKSSE, a compost producer, assist vegetable farmers on the use and application of compost and other organic based fertilizers in Bogra, Rangpur, and Gaibandha.

Since January 2012, GKSSE, conducted trainings for vegetable farmers of Bogra, Rangpur, Gaibandha, and Joypurhat to get a better understanding of the use and importance of compost for sustainable vegetable production and minimizing the cost of fertilizers and pesticides for vegetable production as part of their marketing strategy.

PRICE supported the enterprise in organizing trainings for 1,540 vegetable farmers where farmers learned application methods and benefits of using vermi and tricho compost produced by the company. The company invited its local dealer, introduced them to the farmers, and offered them a promotional price. Farmers who had used the compost previously attended this meeting and narrated the benefit of the compost. Benefits include increasing yields, extending the harvesting period by at least fifteen days, and getting at least 20 percent higher yield while

reducing the production cost by 30 percent.

During this quarter, many trained farmers used organic fertilizer, compost, and tricho-extract as a plant disease protecting agent in potato, tomato, eggplant, country bean, cucumber, onion, and green chili. Using this, they achieved higher crop yields and simultaneously contributed to the overall health of their soil, their most valuable resource.

#### **D.2.4. Up-gradation of Compost Producing Enterprise in South**

PRICE has started supporting the small compost producing enterprise of Chuadanga- Biotech Agro Complex in improving and upgrading its process and assisting in expanding its market network. PRICE guided and facilitated the enterprise owner to visit CD vermi compost industry in Amjhupi of Meherpur district to learn about vermin compost production worms in addition to his traditional composting process.

### **D.3. Vegetable Seeds**

#### **D.3.1. Improve Backward Linkage and Knowledge Dissemination**

PRICE supported Lalteer Seed Company organize trainings for 30 vegetable seed dealers of four upazillas (Sarsha, Sadar, Navaron, and Jhikorgacha) in Jessore on seed quality, production, and business ethics. In turn, these dealers will provide better service and disseminate the farming knowledge to the farmers and retailers.



*Seed dealers are differentiating*

PRICE is supporting the initiative to increase productivity of vegetables in twenty FtF districts of the south through better access to good seed and embedded information and technology services. Each dealer is directly linked with at least a hundred farmers who usually buy seeds and other agro inputs and solely depend on their advice. Through this effort, PRICE will reach at least 3,000 farmers with better information on vegetable production and protection technology along with inputs. Each of the dealers will also establish demonstrations of a premier variety of vegetables suitable for growing in their area and hold awareness building meetings.

#### **D.3.2. Promoting Good Quality Vegetable Seeds in the South**

PRICE assisted M/S Padma Seeds to procure more than 30,000 kg of high quality vegetable seeds (ribbed gourd, cucumber, red amaranthus, eggplant, chili, yard long bean, okra, and bottle gourd) from 600 small seed producing contract farmers who produced seeds in their 78 hectares of land during the period. PRICE supported the enterprise to provide theoretical and practical trainings on types of seed generation, planting techniques, crop management, rouging, isolation, plant and crop protection, soil nutrient management, harvesting of seed and fruits, post-harvest handling, seed cleaning, drying, and packing. In addition, seed production technical support was provided and quality checking continued during the growing period.

Before harvesting, varietal purity was checked, crop yield and crop quality were assessed, and sample crop cutting was done to check the seed quality. After harvesting, seeds were dried adequately, cleaned, and packed variety wise with lot number, plot, location, and date of

harvest. In addition, purity percentage was also calculated and noted against each lot. The company bought seeds from the farmers through its lead farmer and due its better quality all seeds were sold in advance to its dealers.

#### **D.4. Market Linkages**

##### **D.4.1. Facilitating Market Linkages**

Most horticultural crops are traded fresh in the domestic market and a very negligible quantity is processed. Market infrastructure, transportation, packing, etc. are in pitiable condition, and growers act individually as do the wholesalers and retailers. In Bangladesh, contract farming for fresh horticultural produce is not in existence. Access to finance for market operators is not easy. To aid this, PRICE is assisting its partner enterprises in strengthening marketing networks through establishing market linkages with market players. PRICE is consistently supporting Renaissance, EFADF, GKSSE, Riya Fertilizer, Padma Seeds, Konica Seed Company, and several other partners, in market promotion and building new market linkages.

Riya Fertilizer appointed its own marketing agent in seven districts (Jessore, Kushtia, Joypurhat, Pabna, Natore, Rajshahi, and Sirajganj) linking 80 input retailers to organize and expand its marketing network. During this quarter, the company marketed 180 MT of compost and 1,000 liters of Tricho liquid. As a part of market promotion, 185 Sub Assistant Agriculture Officers of Natore and Sirajganj were given orientation courses on product quality and benefits so that SAAO can advise farmers how to use the product.

During this period, Renaissance sold 83,000 kg of fresh and safe winter vegetables directly to the wholesale market with a total revenue of Tk 146,6750. They have created casual employment for 235 men and 162 women of the area through their marketing initiatives. The enterprise has also established market linkages between farmers and the local wholesale markets so they can buy additional products directly.

EFADF Agro Business marketed 492,790 kg of safe vegetables directly. PRICE supported EFADF Agro Business to establish links with wholesalers and marketing agents of Khulna and Dhaka. Their group farmers marketed 28,7820 kg of safe vegetables directly to the wholesale market of Khulna with total sales revenue of Tk 10,546,041.

The enterprise created casual employment for 252 men and 162 women during this period. PRIDE Agro enterprise also marketed 180MT of table potato, 35,040 kg of eggplant and established a market linkage for their potato farmers.

#### **D.5. Access to Finance**

##### **D.5.1. Facilitating Access to Finance**

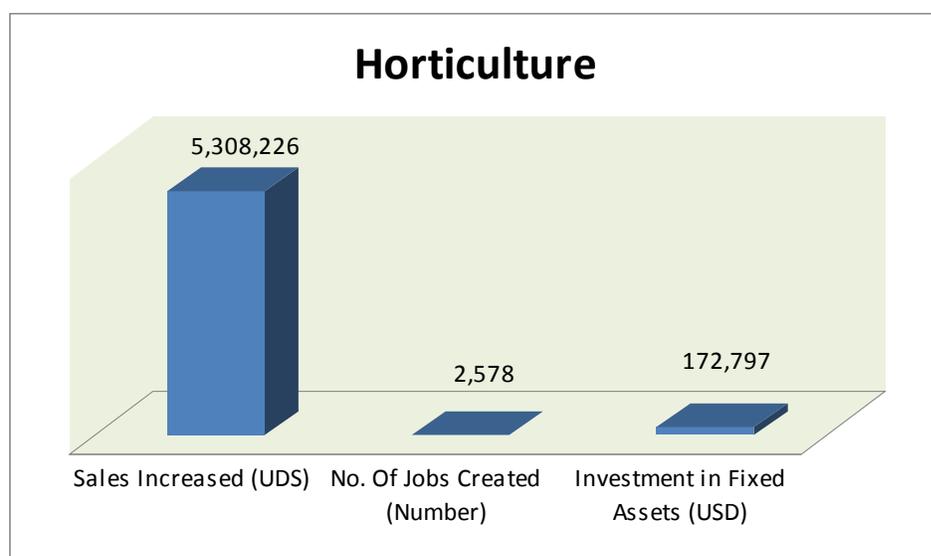
Renaissance provided Tk 1,235,350 to its contract farmers through its captive micro-finance facility for procurement of inputs and other costs associated with growing summer crops on dykes. GUKED Enterprise Development provided seasonal loans amounting to Tk 12,800,000 to 715 vegetable farmers of Shibganj and Shahjahanpur of Bogra to grow summer crops. The

credit product was designed to match the cropping period and not on a weekly repayment system.

### E. Quantitative Results

In this quarter, \$5.3 million of sales was increased by the partners in Horticulture sector. Gram Unnayan Karma Enterprise Development played the highest role by increasing the sales by \$1.5 million. Golden Harvest Agro Industries and Krishak Bondhu Karmashuchi created 2,578 full time equivalent jobs through their activities. Gram Unnayan Karma Enterprise Development and Krishok Bandhu Karmashuchi were the highest players in jobs creation. The partners in this sector also increased their investment by \$173 thousand through the assistance of PRICE activities. PRIDE Agro Enterprise played a major role for that.

Sales increased	\$5.31 million
New jobs	2,578
Investment increased	\$173 thousand
Farmers trained in technology	6,470
Farmers trained in management	3,815



#### Partner-wise Results in Horticulture:

Region	Product	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
			Domestic	Export	Total	Male	Female	Total	
Bogra-Daichahi	Potato	Gram Unnayan Karma Enterprise Development (GUKED)-1	642,925	0	642,925	262	175	437	0

Region	Product	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
			Domestic	Export	Total	Male	Female	Total	
Jessore-Khulna	Eggplant	Gram Unnayan Karma Enterprise Development (GUKED)-2	858,574	0	858,574	709	398	1,106	0
		Gram Unnayan Karma Enterprise Development (GUKED)-1 Farmers	369,560	0	369,560	-93	85	-8	17,395
		Murail Rural Development Multipurpose Cooperative Society Ltd	17,298	0	17,298	27	4	31	0
		Rural Development Academy (RDA)	0	0	0	-5	0	-5	0
		Ferdous Biotech Ltd	0	0	0	3	5	8	0
		Sajeeb Seeds	29,530	0	29,530	12	6	17	0
		Unique Seeds	1,205	0	1,205	-12	5	-7	0
		Technology For Rural Development (TFRD)	0	0	0	119	67	187	18,819
		Shibgonj Upazila Farmers Cooperative Shamitee (SUFCSL)	282,154	0	282,154	98	11	109	0
	Egg-plant	Agricultural Advisory Society (AAS)-(Horti)	40,374	0	40,374	17	1	18	0
	Cross-Cutting	Grameen Krishak Sohayak Sangstha Enterprise (GKSSE)	72,886	0	72,886	35	0	36	0
		Grameen Krishak Sohayak Sangstha Enterprise (GKSSE)-Farmers	476,153	0	476,153	109	22	131	0
		Riya Fertilizer	38,313	0	38,313	12	0	13	1,193
	Potato	Konika Seed Company Ltd	87,381	0	87,381	-5	5	-1	378
Muktir Alo Agro Business-(Potato)		3,468	0	3,468	1	0	1	0	

Region	Product	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
			Domestic	Export	Total	Male	Female	Total	
		Pride Agro Enterprise-(Potato)	22,169	0	22,169	33	19	53	1,663
		Krishak Bandhu Karmashuchi-(Potato)	107,908	0	107,908	34	17	52	0
		Krishak Bandhu Karmashuchi - Potato Farmers	515,209	0	515,209	205	52	257	0
		Pride Agro Enterprise-Potato Farmers	284,512	0	284,512	110	8	119	133,350
		Muktir Alo Agro Business-Potato Farmer	13,872	0	13,872	3	1	4	0
	Egg-plant	Muktir Alo Agro Business-(Eggplant)	857	0	857	0	0	0	0
		Pride Agro Enterprise-(Eggplant)	5,235	0	5,235	0	0	0	0
		Krishak Bandhu Karmashuchi-(Eggplant)	14,235	0	14,235	0	0	0	0
		Chesta Agro Enterprise	0	0	0	3	0	3	0
	Cross-Cutting	Padma Seeds	75,331	0	75,331	6	4	10	0
		EFADF Agro Business	127,061	0	127,061	34	3	37	0
		Renaissance	240,896	0	240,896	-47	4	-43	0
		Golden Harvest Agro Industries Limited	759,345	65,146	824,491	7	6	14	0
		Lalteer Seed Limited	156,627	0	156,627	1	-2	-0	0
	<b>Total Horticulture</b>			<b>5,243,080</b>	<b>65,146</b>	<b>5,308,226</b>	<b>1,680</b>	<b>898</b>	<b>2,578</b>

\* Direct job information is complemented using a statistical model to estimate associated job creation across the value chain.

Source of data: Partner interviews for enterprises and mini surveys for farmer groups.



## Aquaculture

### Overview

Aquaculture in Bangladesh is a major supplier of animal protein and its exports contribute a significant amount of foreign income to the economy. Not only is it an important factor in food security, earnings, and employment opportunities in rural Bangladesh, but the fish and shrimp sectors have potential for growth throughout their production, supply, and value chains.

In the domestic market, fish faces huge unmet demand with many farmed species and the market is expanding day by day. Due to its size, Bangladesh farmed shrimp is quite popular in the international market, but since there is little value added, it earns less revenue.

Aquaculture covers roughly one million hectares for both fish and shrimp sub sectors. Shrimp farming is popular in coastal belts and fish farming is conducted mainly in fresh water inland bodies. Bangladesh has the capacity to produce fish fries and shrimp post larvae (PL) to meet the high demand, but not for fresh water shrimp. Roughly 1,000 fish and 60 shrimp hatcheries supply the required fry and PL demand in the country.

Most of the farmed water bodies are under extensive traditional aquaculture areas where farmers typically use almost no supplemental feedings and consequently generate very low yields. In the fish sub sector the supply chain and value chain is rudimentary. The value chain is also weak in the shrimp sub sector, but the supply chain is relatively strong.

To address the most important challenges of the sector, PRICE's major focus has been on improving the overall production, and less in the supply chain and value chain. However, the emphasis has begun to shift and PRICE will begin to strengthen various actors along both the supply chain, and value chain of the fish and shrimp sub-sectors.

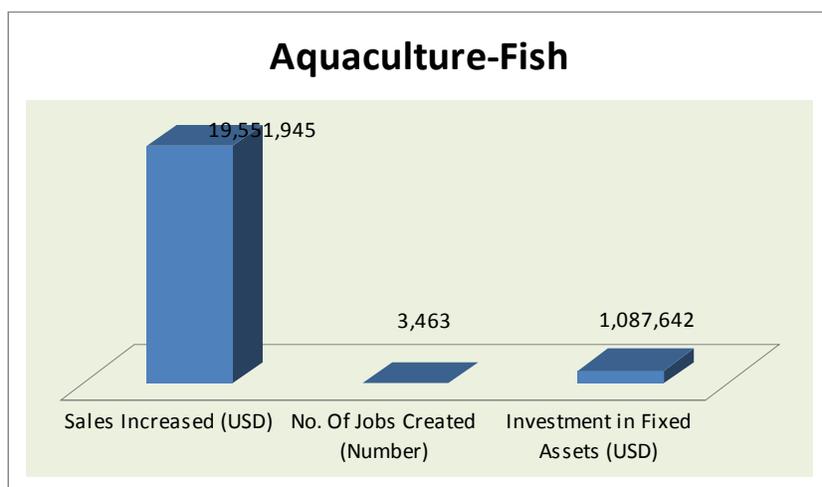
As a cumulative number, 75,288 fish and shrimp farmers have been trained on improved farming technology, and 3,025 of these shrimp farmers were also trained on improved management of their farms during the past years.

PRICE also facilitated project beneficiaries' access to better inputs, including seed and feed, as well as market linkages between farmers, depots, wholesalers, and processing plants. Through March 2012, PRICE activities in aquaculture have led to more than \$166.94 million in additional sales, generated 32,666 new jobs, and added \$7.42 million in new investments.

<i>Sales increased</i>	\$20 million
<i>New jobs</i>	6,769
<i>Investment increased</i>	\$1.8 million
<i>Farmers trained in technology</i>	11,310
<i>Farmers trained in management</i>	7,600
<i>Persons trained for workforce development</i>	200

## A. FISH

PRICE has worked throughout the country in the fish sub sector. However, moving forward, PRICE will be focusing activities in the southwestern region of the country. PRICE has been facilitating trainings and hands-on lessons to farming associations and to strengthen linkages with different actors.



One activity was to link beneficiaries to high quality seed-producing hatcheries and nurseries. Along with better inputs came trainings. The trainings focused on improved farming techniques, how to properly take advantage of high quality grade inputs, and the benefits of group marketing. Thus far, PRICE has provided technical assistance to more than 122,945 farmers and other value chain actors till this quarter, including 25,060 women.

### A.1. Better Brood, Spawn, and Inbreed-free Seeds

Fish hatcheries in Bangladesh use brood fish for induced breeding purposes and disregard quality. This deteriorates production performances at the farm level. Using high quality grade brood ensures healthy, inbreed-free and quality fish seeds for farmers.

PRICE worked with a dozen of fish hatcheries and nurseries, and a seed trader's association to ensure the use of high quality broods in hatcheries, superior fries in nurseries, and excellent fingerling sales by traders. Through this, genetic corruption in hatcheries was significantly reduced.

Sales increased	\$19.55 million
New jobs	3,463
Investment increased	\$1 million

The danger faced by hatcheries to lose business due to inbreeding encouraged them to raise and procure high quality grade broods. PRICE then linked nursery operators with proven hatcheries among PRICE's partners and identified hatcheries so that quality fries were provided for nurseries.

### A.2. Commercial Production of New Fish Species by Partners

Fish farmers in Bangladesh traditionally use local and imported carp, which have relatively small yields. Some of the PRICE partners in the Mymensingh region now practice innovative methods of high density farming of high-valued commercial species and are making good profits. The project decided to connect farmers from across the country with farmers in the Mymensingh

regions so they could learn how to farm lucrative stinging catfish and climbing perch farming. Farmers associated with PRICE from Bogra and Jessore regions began raising high density stinging catfish and climbing perch and have begun to reap the benefits of higher yields.

### **A.3. Promoting Early Crops by OW Seeds and Sustainable, Innovative Farming Practices**

From its inception PRICE has promoted over-wintered (OW) fish seeds so farmers could harvest a quick crop between the winter and monsoon seasons. During this quarter, farmers were provided counseling through associations for farming management using OW seeds. As a result, thousands of farmers used OW seeds for quick crops. Most of the PRICE-affiliated farmers now practice year-round farming, transforming a seasonal business into a year round economic activity in rural areas.

Additionally, PRICE supported diverse farming trainings for 7,700 fish-farmers including 3,962 women. Trainings were held on crop-rotational and integrated farming technologies focusing on improved, high-density, integrated, and semi-intensive culture systems.

### **A.4. Value Chain Actors Backward and Forward Linkages Strengthened**

Though most beneficiaries under the project are associated with production, a significant number of stakeholders have been linked with different supply chain and value chain activities. During this quarter, PRICE continued to link partner hatcheries and feed millers to nursing and farming associations to provide quality inputs, both live – fry, fingerling, post larvae – and material – lime, fertilizers, feeds.

Moreover, fish and shrimp producers are being linked to depots and processors for processing, packaging, marketing, and export. Service providers in supply chain and value chain were counseled for responsible post-harvest handling, cool chain management, and measures for HACCP and bio-security.

### **A.5. Embedded Services by Fish Seed Traders and Nursery Operators**

PRICE assisted fish seed traders and nursery operators to increase their capacity through trainings. The routine training programs were held on improved farming of fish under diverse methods to make them capable to provide embedded services to farmers who purchase seeds from them.

One fish seed trader's association and a couple of nursery operator groups were provided counseling on responsible transportation. They were also provided a written manual in Bengali on the basics of aquaculture, focusing mainly on acclimatization of transported fries and fingerlings, natural productivity enhancements in farms, and initial feeding and transplantation of nursed seeds to different ponds. This information has enhanced the capacity of the DMBBS members to serve thousands of fish farmers with quality fish seed and diversified varieties.



Training on Improve farming at Nandail, Mymensingh

## **A.6. Increasing Access to Finance**

PRICE arranged access to finance workshops in the beginning of FY 12 and linked large farmers and entrepreneurs engaged in aquaculture business with 10-15 public and private banks. Some of PRICES's partner beneficiaries received loans from banks during this quarter.

However, access to institutional credit is difficult for small and medium sized fish farmers. Banks require collateral and most small and medium farmers lack that security. To overcome this, the project explored the possibility of arranging microcredit and seasonal loans to its partner beneficiaries through negotiating with local NGOs. Initially, the response was not very optimistic. But, at the end of this quarter a total of 3,170 project beneficiaries received microcredit ranging from Tk 3,000 to 15,000 (approximately \$44 - \$220).

## **A.7. Increasing Women's Participation and Supporting Minorities**

Fisheries have been dominated by males for a long time and aquaculture is a male dominated profession in Bangladesh. PRICE encourages participation of women entrepreneurs and housewives to conduct fish farming in household ponds and to participate in trainings facilitated by PRICE partners. During this quarter, roughly 4,301 women were trained on improved farming and farming management by the Society for Social Services (SSS), Jeno Saba Kendra (JSK), Unnayan Sangha (US), Agricultural Advisory Society (AAS), DEESHA, and Polli Bodu Kalan Sangstha (PBKS). The initiative was highly successful as thousands of small scale, household farming units were established and women's aquaculture activities increased. As a result, their income and employment opportunities increased.

Incorporating women into this sector has improved household feeding habits and nutritional standards. PRICE will be evaluating how household aquaculture changes feeding habits and nutritional standards at family level. Preliminary investigation and interviews have been conducted in-house by PRICE staff and a survey has been planned for next quarter.

It can be added that, in this quarter, women's participation in fish sub sector has crossed 25 percent at its beneficiary levels where as country's average is only 3 percent combined in aquaculture and fisheries at the national level.

The project has also encouraged ethnic minority participation in aquaculture. PRICE partner Rakhaing Development Foundation (RDF) arranged trainings for a mixed group of main stream Bengalese and minority Rakhaing community members of the coastal district Patuakhali.



Improve farming training– organized by PBKS

### **A.8. Better Farming through In-country Study Trips and Cross-partner Visits**

Based on the better performances of some selected value chain actors, PRICE continuously encourages lesser performing farms to follow the successes of higher performing farms. PRICE facilitated several in-country study trips for the lower performing value chain actor groups to observe relatively higher performing partners in other regions.

### **A.9. Focus on Supply Chain and Value Chain Strengthening in the Southwest**

PRICE's work in aquaculture has been in four major geographic areas, including the southwest. The major focus has been to increase production at a grass-roots level to due to the opportunity for rapid revenue generations.

During this quarter, PRICE has taken the initiative to refocus its activities to the 20 districts of the south western areas of the country. The major focusing areas are now strengthening the supply chain and value chain of the sector.



PMCSS farmers visited a Shing & Magur Aquafarm at Jamalpur.

#### **A.9.2. Opening of High Density Commercial Farming in the Southwestern Region**

The southwest region of the country has relatively more water bodies and natural fish supplies, which has hindered the growth of commercial fish farming. However, PRICE has registered high yields of some selected farmed fish species.

During this quarter, the project has taken initiative to popularize farming of those species in the 20 districts in the southwest. The selected species are Thai pangas, mono-sex tilapia, stinging catfish, and climbing perch.



Training Program on association capacity strengthening

### **A.10. Organization Strengthening of Associations**

Most of the partners in the aquaculture sector are cooperations or associations – mostly informal groups with limited membership services. These cooperations and associations need organizational strengthening for sustainability.

During this quarter, PRICE provided assistance to fish farming associations in the Bogra region by utilizing international consultants. An MoU was signed with Winrock International to facilitate the strengthening of a dry fish manufacturing association in Cox's Bazar.

### **A.11. Promotion of Dried Pellet Feeds for Fish Farming**

Use of supplemental feeds for fish is a relatively new development in Bangladesh aquaculture. In Bangladesh, among 1.8 million tons of total fish production, only 0.3 million tons are fed on dry commercial pellet. This is less than 18 percent of the total cultured fish produced. PRICE is addressing this issue by promoting improved feed. During this quarter, work continued with a feed mill in Mymensingh, SMS Feeds Limited, which specializes in fish feed formulation and

marketing. PRICE will continue to promote quality grade commercial feeds for vertical production rise in aquaculture for commercial farmed fishes.

## B. SHRIMP

Out of more than two dozen types of salt and fresh water shrimp species available in the country, only two species, the freshwater giant (*golda*) and the brackish water black tiger shrimp (*bagda*) are commercially farmed. Both species are export oriented and are carefully processed through a supply chain to reach processing plants for export.

PRICE mainly deals with *bagda*, which is farmed mainly in the southwestern coastal districts and is 75 percent of the total shrimp exports from Bangladesh (about \$520 million in value during 2010-2011).

Although the total amount of production is low in Bangladesh, the size of shrimp is

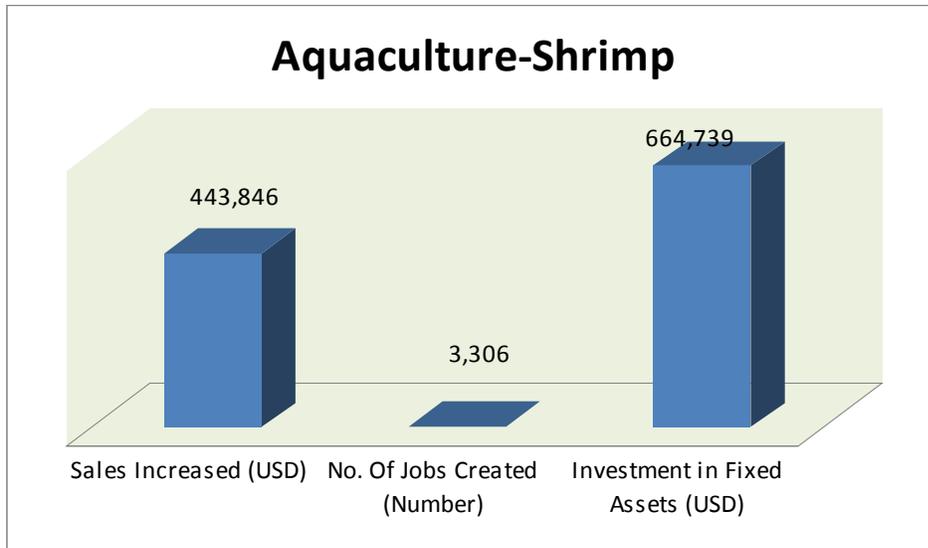
large, which fetches a higher price on the export market. The shrimp sub-sector in Bangladesh is fraught with several constraints such as low productivity, lack of traceability, faulty supply chain, poor HACCP, bio-security, and a poor image in international market.

Sales increased	\$444 thousand
New jobs	3,306
Investment increased	\$665 thousand

The project has been trying to mitigate sector constraints by assisting the following measures:

- a) Higher yields of healthy and disease-free larger-sized shrimp.
- b) Popularizing virus negative screened post-larvae (PL) of shrimp for better production and ultimate ban of virus-positive PL.
- c) Observance of international codes of conduct throughout the value and supply chain.
- d) Increasing awareness against adulteration and malpractice.
- e) Promoting Bangladesh products to new markets and value-added product development.

The project helped the shrimp value chain to develop skills in bio-security measures such as HACCP and SSOP, and compliance with Bangladesh Labor Law by training supply chain workers and staff on labor rights and responsibilities. In 2010, only two processing plants received PRICE's assistance which increased to six in 2011.



As part of the collaboration with the shrimp industry to expand the export market, PRICE will assist five processing plants to explore new markets in the Middle East. Furthermore, as the shrimp industry faced bad publicity in the foreign media regarding alleged malpractice and adulteration in exportable shrimp, PRICE collaborated with the industry to initiate an awareness program against alleged bad practices. Through March 2012, shrimp sub-sector partners increased their sales about \$43.28 million, invested more than \$3.42 million, and created around 19,741 jobs.

#### **B.1. GHERS (Greater Harvest and Economic Return from Shrimp) Initiative**

PRICE subcontracted with World Fish Center (WFC) to carry-out major interventions in the shrimp sub-sector by the GHERS initiative. Its goals are to increase production in shrimp farms, improve the quality of the product, ensure disease-free farmed shrimp, and create traceable supply chain.

During January- March 2012, 33 depot owners in three southwestern districts jointly facilitated trainings on improved farm management and production techniques. A total of 3,510 shrimp farmers, all under contract farming systems, attended the training sessions.

GHERS provided hands-on and farm-level training to three distinct modes; closed system pond technology (CST), the modified traditional technology (MTT), and traditional best management practices (TBMP) which are based on stoking density, management, and farming intensifications. The farmers were trained and counseled by skilled extension specialists (ES) and extension facilitators (EF). During this quarter three ES and 57 EF facilitated on CST, MTT, and TBMP shrimp culture techniques. Through March 2012 PRICE has trained 26,070 trainees, including 1,844 female participants through GHERS.

## **B.2. Screening for Virus-Negative Post Larvae**

Since 1997, high density shrimp farming has been under continuous threats of virus infection. One of the most important objectives under GHERS is to produce and popularize virus-negative PL of *bagda* that may ensure disease-free, healthy shrimp crops. PRICE-WFC supported Pranti Polymerase Chain Reaction (PCR) Laboratory, a private testing laboratory in Cox's Bazaar which tests shrimp seed production cycles so virus-negative strains can be traced and identified. Pranti PCR Laboratory, in partnership with seven hatcheries in Cox's Bazaar and Khulna, tested 210 samples and certified 44.43 million PL as virus-negative.

## **B.3. Facilitating Semi-intensive Farming**

During this quarter, PRICE assisted two SABINCO farms in the Khulna district, Gazi Fish Ltd, (GFL) and S&M Shrimp Culture Ltd (SMSC). These farms received semi-intensive *bagda* shrimp culture and capacity development training for the farm's workforce. Both GFL and SMSC use tested and screened PL for their farms. Also, during this quarter, some CST and MTT farmers under GHERS received assistance to visit GFL and SMSC to observe their high production techniques.

## **B.4. Use of Quality Grade Feed**

PRICE facilitated training programs and counseling sessions to educate shrimp farmers on the benefits of using quality grade feeds to enhance production and FCR. PRICE is encouraging partner beneficiaries to use quality grade feeds by arranging result-based demonstrations at feed millers. These feed millers share the incentive to arrange these demonstrations to expand their own businesses. During this quarter, two feed millers arranged demonstrations for lead farmers and it is expected that this number will increase.

## **B.5. Training to *Bagda* Farming Association Members**

GHERS has been working to popularize screened PL, but their activities are confined to the southwest. Screened PL are produced only in Cox's Bazar but farmers in that region seldom use tested PL as popularization and implementation activities are ongoing only in southwest regions. PRICE has also taken the initiative to popularize tested PL in Cox's Bazar. PRICE signed two MOUs with two farming associations in Cox's Bazar to train roughly 2,500 farmers in 2011 and 2012. It is expected that by June 2012 all these farmers will be trained.

## **B.6. Supporting Group Procurement of Inputs and Group Sales**

Shrimp farmers usually procure seeds and other inputs individually which waste time, energy and is expensive. Shrimp farmers also produce small yields and often sell their products individually which complicates traceability and hampers judicious cool chain management. PRICE guides farmers to procure inputs in groups and to sell their products in groups. Working in bulk lowers both procurement and transportation costs and raises the selling price. Extension specialists and extension facilitators stressed this idea to farmers through yard meetings and counseling.

## **B.7. Women's Involvement in Shrimp Farming**

Brackish water black tiger shrimp; *bagda* farming has been dominated by men in Bangladesh for a long time. Remoteness and difficult terrain in a saline zone were the major drawbacks for

women participation in this type of farming. PRICE has achieved considerable success involving women in household fish farming to ensure food security and family-based nutrition. The same methodology has been followed in the shrimp sector as well. The project actively encouraged women's participation in *bagda*-based integrated farming in the greater Khulna and greater Jessore districts. Initially, PRICE started women's participation in bagda farming by involving single mother households and widows.

### **B.8. Improving Access to Finance and Value Chain Financing**

Shrimp farmers in Bangladesh usually obtain credit from set buyers (depots) in a form of contract farming system where farmers receives soft loans for inputs and running expenses and farmers repay them with shrimp. Since the processing capacity in the country is higher than the current usage, a 'soft loan' is considered value chain financing. Applying this tradition of informal value chain financing, PRICE convinced depot owners to finance the cost of farmers' inputs in shrimp production (feed, seed and fertilizer) through the contract growing systems. However, some shrimp farmers, as a result of increased farming, are in need of more capital through institutional loans. Earlier, PRICE arranged access to finance workshops in the Khulna and Jessore regions and the follow-up program continued. As a result, a significant number of farmers received bank loans to pursue CST form of farming.

### **B.9. GAP Training on Responsible Shrimp Farming**

In collaboration with Business Promotion Council's (BPC) PRICE arranged TOT on good aquaculture practices (GAP) at Cox' Bazar where 45 public-private extension workers attended. The core trainers are now working in shrimp dominated areas sharing GAP among shrimp farmers in the southwest.

### **B.10. Compliance for Bio-security and Food Safety Measures in Processing Plants**

PRICE partnered with six processing plants in the southwest to provide technical assistance on workforce development trainings covering bio-security measures required in processing operations, personal hygiene, HACCP, SOP, SSOP, good manufacturing practices, and value-added product development. To date, a total of 505 factory workers and 150 office and higher factory staff members on management staff have been trained. These trainings also fostered an awareness of their rights and obligations under Bangladesh Labor Law-2006.



Awareness creation campaign at Shamnagor, Satkhira

### **B.11. Awareness Creation against Malpractice and Adulteration**

In the recent past, Bangladesh shrimp exporters faced problems in exporting products due to concerns with food items' safety, alleged adulterations and malpractices. PRICE in collaboration with Bangladesh Frozen Food Exporters Association (BFFEA) took initiatives to create mass awareness on these issues. Under a signed MoU, PRICE and BFFEA encouraged (Department of

Fisheries) DoF participation in organizing awareness campaign programs in 14 areas of Satkhira, Khulna, and Bagerhat districts. The program successfully completed within March 2012.

### **C. GENDER INTEGRATION IN AQUACULTURE**

PRICE's work plan has been designed to work with young adults and women as much as possible. The goal is to improve the fish and shrimp farming techniques to improve food security at family levels. PRICE initiatives were to incorporate women into activities so that women can conduct small-scale aquaculture for self-employment, opportunistic employment, and generate income at the household level. Including women in these efforts has helped resource-poor farming families to increase their fish-based consumption and limit chronic malnutrition in rural Bangladesh. Since shrimp farming in Bangladesh always incorporates some fish, integrated farming has gained ground in PRICE command areas with significant contributions from of women.



Women Farmers' Group in training

### **D. Results**

The aquaculture sector helped to increase the sales revenue by \$20 million during this quarter. A major part of these sales came through fish subsector partners.

Among the fish subsector partners, Trinamool Manobik Unnayan Shangstha (TMUS) alone contributed the highest amount of \$3.8 million. Kahaloo Motshya Pona Utpadonkari Somobay Somity and Sherpur Matsha Chasi Somobay Somity each generated more than \$1.5 million during this reporting period. Kahaloo Motshya Chashi Somobay Somity and Society for Sustainable Development for the Rural & Urban Area together generated about \$2.5 million of increased sales. In total, fish subsector partners increased their sales by \$19.6 million in this quarter.

In shrimp subsector, the processing plants Jalalabad Frozen Sea Foods Ltd., Jahanabad Frozen Foods Ltd., and Organic Shrimp Export Ltd. played the most significant roles in increasing sales in the shrimp subsector, by contributing about \$4.9 million in this period. GHERS generated about \$801,000 of increased sales. The total sales increased by the shrimp partners in this quarter is \$444 thousand.

In these three months, 6,769 full time equivalent new jobs have been produced as result of PRICE activities. GHERS along with Nokla Motsojibi Somity, Muktagacha Fish Farming Association, and Ma Fatema Hatchery created this new job opportunity.

PRICE partners invested \$1.8 million in aquaculture, of which Muktagacha Fish Farming Association generated \$615,000 followed by GHERS project that contributed for \$660,000.

*Partner-wise Results in Aquaculture:*

*Partner-Wise Results in Fish:*

Region	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
Mymensingh-Jamalpur	Digherkanda Matsopona Beboshahi-Kallan Bohumukhi Somabaya Somity (DMBBS)	55,271	0	55,271	13	0	13	240
	Phulpur Fish and Prawn Farmers' Association (PFPFA)	-76,054	0	-76,054	64	0	64	7,048
	Phulpur Fish and Prawn Farmers' Association (PFPFA)-2	-143,367	0	-143,367	-17	0	-17	1,036
	Trisal Fish Farmers' Business Somity (TFFS)-1	48,416	0	48,416	-194	-1	-194	1,012
	Trisal Fish Farmers' Business Somity (TFFS)-2	1,056,337	0	1,056,337	-81	0	-81	10,378
	Nokla Motsojibi Somity	38,133	0	38,133	313	66	379	0
	Bamunji Beel Motsojibi Somity	28,193	0	28,193	143	8	152	1,807
	Muktaghacha Fish Farming and Business Association	186,816	0	186,816	299	0	299	614,869
	Unnayn Sangha	32,786	0	32,786	18	0	18	0
	Tarakanda Satata Motso Beboshahi Somity	635,710	0	635,710	93	0	93	33,618
Bogra-Rajshahi	Trinamool Manobik Unnayan Shongstha (TMUS)-1	147,863	0	147,863	49	-0	49	11,147
	Trinamool Manobik Unnayan Shongstha (TMUS)-2	3,796,144	0	3,796,144	-12	0	-12	51,084
	Chitralatha Aqua Park Ltd	8,537	0	8,537	4	0	4	1,687
	Kahaloo Matshya Chashi Samoby Samity-2	1,335,587	0	1,335,587	194	-0	194	21,349

Region	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
	Pachpir Bazar Matsya Chashi Samoby Samity-1	156,248	0	156,248	60	0	60	4,587
	Pachpir Bazar Matsya Chashi Samoby Samity-2	65,381	0	65,381	8	0	8	266
	Murail Matsya Chashi Samoby Samity-1	250,851	0	250,851	6	1	106	7,427
	Murail Matsya Chashi Samoby Samity-2	339,820	0	339,820	60	-0	60	1,103
	Society for Sustainable Development for the Rural & Urban Area (SSURDA)	1,275,161	0	1,275,161	209	0	209	22,659
	Talora Ancholik Matsa Chasi Somobay Somity	835,726	0	835,726	151	-5	146	4,832
	Sherpur Matsa Chasi Somoboya Somity	1,647,541	0	1,647,541	153	3	156	22,600
	Kahaloo Matshya Pona Utpadankari Somoby Somity	1,849,100	0	1,849,100	13	-5	9	20,098
	Adamdhighi Khudra Motso Beboshahi Somity	977,655	0	977,655	-34	-3	-37	20,092
	North Bengal Thaitech Tilapia Hatchery	57,898	0	57,898	-1	0	-1	482
	Agriculture Advisory Society (AAS)- (Aqua)	1,261,735	0	1,261,735	86	-0	86	20,824
	Palli Bandhu Kallan Sangstha	194,040	0	194,040	82	0	82	17,610
	Chitralatha Aqua Park Ltd- Farmers	828,831	0	828,831	133	-1	132	39,608
North Bengal Thaitech Tilapia Hatchery- Farmers	217,979	0	217,979	31	0	31	6,227	
Barishal	Rakhaing Development Foundation (RDF)- 1	94,981	0	94,981	31	0	31	6,219
	Rakhaing Development Foundation (RDF)- 2	390,613	0	390,613	116	0	116	5,430

Region	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
	Barisal Aquaculture Development Society	216,255	0	216,255	108	12	120	17,349
	Society For Social Services (SSS)-1	77,646	0	77,646	6	0	6	0
	Society For Social Services (SSS)-2	191,479	0	191,479	33	-1	32	0
	Janaseba Kendra (JSK)- 1	16,992	0	16,992	1	0	1	0
	Janaseba Kendra (JSK)- 2	130,171	0	130,171	97	0	97	13,381
	Janaseba Kendra (JSK)- 3	65,804	0	65,804	41	0	41	6,373
	Allahwalla Hatchery & Farming Complex	97,199	0	97,199	41	0	41	7,831
	Samridhi Bohumukhi Matsya Unnayan Gobesana Kendra	4,805	0	4,805	3	0	3	120
	Niribili Telapia Hatchery	33,735	0	33,735	-57	0	-57	0
	Niribili Telapia Hatchery- Farmers	177,812	0	177,812	3	0	3	5,020
	Allahwalla Hatchery & Farming Complex - Farmers	45,647	0	45,647	11	0	11	0
Jessore-Khulna	Samridhi Bohumukhi Matsya Unnayan Gobesana Kendra -Farmers	103,424	0	103,424	44	0	44	3,486
	Mulia Matshyajibi Samittee	112,442	0	112,442	70	0	70	9,418
	Goldhamari Motshojibi Samabay Somity	52,574	0	52,574	146	-0	146	0
	South Bay (Pvt) Ltd	9,036	0	9,036	1	0	1	0
	Nowapara Fisheries Complex	5,777	0	5,777	-11	-0	-11	0
	Ma Fatema Fish Hatchery	19,022	0	19,022	10	0	10	0
	Pori Matshya Hatchery	5,651	0	5,651	4	0	4	4,241
	Rupali Fish Hatchery	5,436	0	5,436	7	0	7	4,940
	Shuvra Matshya Hatchery	36,745	0	36,745	14	0	14	0
Deesha Samaj Kolyan Sangstha	62,409	0	62,409	35	0	35	2,410	

Region	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
	Din Bijoy Enterprise-(Fish)	0	0	0	0	0	0	0
	Vairob Fish Agency-(Fish)	32,555	0	32,555	0	0	0	0
	Razu Enterprise-(Fish)	11,973	0	11,973	0	0	0	0
	Modina Matshya Prokolpo-(Fish)	0	0	0	0	0	0	0
	Mondal Fish- (Fish)	10,069	0	10,069	0	0	0	0
	Satata Fish- (Fish)	13,283	0	13,283	0	0	0	0
	Satkhira Feed Industries Ltd.-(Fish)	377,711	0	377,711	5	1	6	0
	South Bay (Pvt) Ltd-Farmers	46,183	0	46,183	2	0	2	4,509
	Nowapara Fisheries Complex-Farmers	255,923	0	255,923	83	0	83	5,060
	Ma Fatema Fish Hatchery-Farmers	375,586	0	375,586	236	-0	236	6,365
	Pori Matshya Hatchery-Farmers	125,687	0	125,687	55	-0	55	4,317
	Rupali Fish Hatchery-Farmers	355,653	0	355,653	130	1	131	10,402
	Shuvra Matshya Hatchery-Farmers	262,128	0	262,128	162	-0	162	21,054
	Golden Harvest Sea Food & Fish Processing Limited	0	156,522	156,522	4	5	9	0
	<b>Total Fish</b>	<b>19,395,423</b>	<b>156,522</b>	<b>19,551,945</b>	<b>3,282</b>	<b>82</b>	<b>3,463</b>	<b>1,087,642</b>

\*Direct job information is complemented using a statistical model to estimate associated job creation across the value chain.

Source of data: Partner interviews for enterprises and mini surveys for farmer groups.

*Partner-Wise Results in Shrimp: Oct-Dec'11*

Region	Partner	Sales Increased (\$)			No. Total Jobs Created*			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
Je	Gazi Fish Culture Ltd	0	0	0	27	13	40	705

	Din Bijoy Enterprise-(Shrimp)	0	23,494	23,494	2	1	3	181
	Vairob Fish Agency-(Shrimp)	0	143,205	143,205	3	5	8	110
	Razu Enterprise-(Shrimp)	0	60,305	60,305	-1	2	1	0
	Mofa Fish Pvt Ltd.	0	0	0	0	0	0	0
	Modina Matshya Prokolpo-(Shrimp)	0	8,434	8,434	1	-4	-3	3,373
	Mondal Fish- (Shrimp)	0	37,316	37,316	1	1	2	0
	Satata Fish- (Shrimp)	0	78,759	78,759	1	1	2	0
	Satkhira Feed Industries Ltd.-(Shrimp)	126,145	0	126,145	0	0	0	0
	GHERS-1 by The WorldFish Center	66,711	734,392	801,103	365	-75	289	56,247
	GHERS-2 -2010 by The WorldFish Center	126,552	-1,013,557	-887,005	-7	-127	-134	297,698
	GHERS-2 2011 by The WorldFish Center	151,821	-690,549	-538,728	2,238	-11	2,226	212,994
	GHERS-3 2012 by The WorldFish Center	21,699	32,548	54,247	732	32	764	93,430
	BSFF	0	0	0	0	0	0	0
	Rupali Sea Foods Ltd	0	-4,879	-4,879	-5	-29	-33	0
	Organic Shrimp Export Ltd	0	127,111	127,111	3	3	6	0
	Jahanabad Frozen Foods Ltd	0	172,850	172,850	15	38	54	0
	Jalalabad Frozen Sea Foods Ltd	0	195,143	195,143	15	42	57	0
	Mofa Fish Processing Pvt Ltd	0	36,505	36,505	9	11	19	0
	M.U. sea Foods Ltd	0	9,842	9,842	-2	-3	-5	0
Cox's	Islamia Fishing Limited-(Shrimp)	0	0	0	10	0	10	0
	<b>Total Shrimp</b>	<b>492,928</b>	<b>(49,082)</b>	<b>443,846</b>	<b>3,406</b>	<b>(100)</b>	<b>3,306</b>	<b>664,739</b>

\* Direct job information is complemented using a statistical model to estimate associated job creation across the value chain.

**Source of data: Partner interviews for enterprises. GHERS information is reported by the World Fish Center.**

## Leather Products

### Overview

Bangladesh's leather sector faced its first jolt since the global recession started couple of years ago. The performance of the sector until last quarter, i.e. December 2011, was very promising, but a slight decline occurred during this reporting quarter (January-March 2012), particularly in the footwear sub-sector. On the other hand, the leather goods sub-sector still showed strong growth while the leather sub sector is slightly over the growth line.

The overall target of the sector of the 2011-2012 fiscal year is set at approximately \$792 million. This reporting period, the export revenue from leather, leather goods, and footwear increased by approximately seven percent, 44 percent, and -10 percent respectively compared with the same period a year earlier.'

To date, leather earned approximately \$82 million, leather goods earned \$24 million, and footwear earned \$69 million from export, against the strategic target of approximately \$83 million, \$20 million, and \$98 million respectively. Therefore, collectively leather goods and footwear earned approximately \$93 million, whereas leather earned roughly \$82 million.

Industry experts and stakeholders believe that the root cause of this change stems from the beginning of the recession, where importers became more reserved and conservative in putting in new orders for most value-added products, such as shoes. They also hope that this downward trend is temporary and will soon reverse.

<i>Sales increased</i>	\$9.4 million
<i>New jobs</i>	669
<i>Investment increased</i>	\$30 thousand
<i>Firms trained in technology</i>	9
<i>Firms trained in management</i>	9

### A. SME DEVELOPMENT

PRICE continued its facilitation role in strengthening and building business linkages for SMEs through national trade fairs – Dhaka International Trade Fair (DITF) and the National SME Fair

#### A.1. Supporting SMEs to Participate in DITF

PRICE, in collaboration with Leather Sector Business Promotion Council (LSBPC), supported a group of potential SMEs to participate in the Dhaka International Trade Fair 2012. Like last year, these potential SMEs from leather products (footwear and goods) sector participated at DITF in 2012 as a group in the Leather Cave, to promote the leather products sector. The objectives of this program were the following:

- To support participating SMEs in building new and strengthening old business connections to enhance their portfolios in the market.

- To convey the importance of linkage building in expanding businesses to other SME sector players.

This one month long (January 2012) trade fair was organized by Export Promotion Bureau (EPB) and the LSBPC took a pavilion with 24 stalls. PRICE, in collaboration with LSBPC, supported 19 SMEs from the leather products sector in participating in that fair, nearly doubling the number of participants from 2011 (10).

This year, PRICE assisted all participants in understanding and developing their product lines for the fair, displaying their products in the right manner, and arranging potential buyer-seller meets to promote the strength of Bangladeshi leather sector SMEs.

This fair attracted approximately 50,000 visitors to the Leather Cave and resulted in approximately \$0.1 million spot sales and nearly \$22,000 in future orders. Representatives from a few corporate business houses also visited the Leather Cave and explored opportunities for mutual business. PRICE facilitated this initiative and now continues to follow up for further development. To date, 42 new potential buyers have contacted the participating SMEs.

### **A.2. Promoting a Group of Leather Products SMEs under a Common Brand “Ozin”**

PRICE and the SME Foundation supported a group of small leather product producing enterprises in strengthening old and developing new market linkages through participating at a three day long National SME Fair, held at Bangabandhu International Conference Center, Dhaka in February.

PRICE assisted eight footwear and goods manufacturing small enterprises in developing and displaying their product lines, preparing their company profiles, branding and promoting their combined effort in the banner of Ozin, and arranging buyer-seller meets. This initiative helped small enterprises represent the SME players of the sector, showcase their strength, and secure connections with some new potential buyers.

### **A.3. Progress of Access to Finance Support to the SMEs**

Eastern Bank Limited (EBL) Udoj, a PRICE facilitated financial product exclusively for the leather SMEs, was launched in November 2011. The two salient features of this product are its single digit interest rate and no collateral to avail the loan.



SMEs stalls in Dhaka International Trade Fair 2012



SMEs stalls in Dhaka International Trade Fair 2012



Eastern Bank Limited (EBL) Udoj launching for leather SMEs

Since then, PRICE has remained in contact with the beneficiaries who took advantage of this financial product. As of February 2012, sixteen small enterprises took approximately loans of \$5,000,000 working capital in this phase. The next follow up phase will be completed in May, 2012.

#### **A.4. Development of SOPs for Small Producers of Leather Footwear and Goods**

In collaboration with Aarong, the PRICE leather team initiated the process of developing a SOP for all (approximately 50) small sub-contractors of Aarong. As a part of this initiative, PRICE facilitated a pre-needs assessment meeting in February 2012 with various departments, such as designing, quality control, store, retail and social compliance of Aarong. A few industry experts had discussions with concerned producers and management to understand the pre-requisites for a need assessment and the road map for developing a comprehensive SOP. A SOP is a comprehensive guide for any producer to achieve the excellence in quality. It also acts as a manual for management to control the expected level of quality assurance.



Aarong and PRICE leather team meeting for SOP development for SME producers

PRICE, in collaboration with Aarong, has been supporting these 50 small leather products producers in the following areas:

- Developing market linkages
- Getting better access to finance
- Training on improved technology
- Training on better management practices
- Enhancing skills of the supervisors and workers through on-the-job training

The ultimate objective of the SOP will be to establish a benchmark for any SMEs working in this sector, which will help them adopt better business practices in terms of technology and management.

The next step of this initiative will be to engage experts/consultants in analyzing the existing situation among the small producers and then develop recommendations for better industry practices. PRICE consultants will utilize secondary data and relevant experiences to make their recommendations.

## B. WORKFORCE DEVELOPMENT

### B.1. New Initiatives through Center of Excellence for Leather (COEL):

#### B.1.1. Training of the Trainers (TOT) in Collaboration with ILO and GoB

PRICE, in collaboration with ILO, Bureau of Manpower, Employment and Training (BMET), and National Skills Development Council (NSDC), supported COEL in organizing a Training of the Trainers (TOT) program for mid-level managers/supervisors of the Leather Goods and Footwear Manufacturers and Exporters Association of Bangladesh's (LMFEAB) member enterprises. Twenty-seven supervisors from nine enterprises (i.e. Bata, Landmark, FB Footwear, Fortune Footwear, Apex Adelchi, PICARD, Jennys, Apex LeatherCraft, and Madina Footwear) participated in this three-day long TOT program.



TOT for for mid-level managers of LMFEAB member enterprises

The main objective of this initiative was to support the sector players through strengthening capacity of their mid-level technical managers by providing training that develops skills in technology and management. Through this training, they can become in-house trainers, and they can effectively assess the performance of the workers they supervise.

The program was held at COEL. PRICE's support included employing three resource people and customizing training modules. The joint secretary of the Ministry of Labor and CEO of NSDC, Mr. Jibon Kumar Chowdhury, was the chief guest of the inaugural program held in January. PRICE also promoted COEL as one point service center through this initiative.

#### B.1.2. COEL Supervisor Training Program to Enhance their Technical and Managerial Capacity

PRICE facilitated a day-long workshop and training in February on "Strengthening Technological and Managerial Capacity" for the mid level management/floor supervisors at the COEL center. The objective of this initiative was to build the capacity of 43 new trainees in terms of understanding and practicing solutions on how to overcome day to day challenges commonly faced by mid-level managers. The areas covered under this initiative were team building, people management/motivation, dispute handling, inventory management, Goods in Process (GIP) management, and the basics of lasts and adhesive applications. PRICE brought two industry experts to conduct these sessions. PRICE, ILO, and SDC are supporting COEL to be established as one point solution or service provider to the sector.



Workshop for mid level management at the COEL center

## **B.2. Ongoing Program at COEL**

### **B.2.1 COEL Supervisors Training Ended Successfully**

The six-month long floor supervisor skill-development program ended in February 2012 with remarkable learning results. This COEL-based initiative started in August 2011 with the primary objective of developing approximately 50 floor supervisors, particularly for the footwear sub-sectors, in addition to developing workers. The secondary objective of this initiative was to develop and promote COEL as a one point service center for the sector.



Floor supervisor skill-development program of COEL

The batch of 50 trainee floor supervisors was recruited through a rigorous screening process. They underwent comprehensive training in developing their skills to understand the production process completely. The production process covers trouble shooting in production, daily production planning, inventory management, manpower handling, and coordination with maintenance department to ensure that the quantity and quality of production becomes a regular practice anywhere they work in the sector.

This six month long extensive program was divided into two tiers. Equal amounts of theoretical and practical sessions kept the objective to apply the theoretical knowledge at the practical session. All the theoretical and basic practical sessions were conducted at the COEL center. In order to enrich the overall skill levels of the new staff members in terms of knowledge sharing, this program also invited some (approximately 10) experienced supervisors from various enterprises to mix with the newcomers.

PRICE engaged three trainers who have primarily used the module of this program. At the end of the program, 43 trainees completed the program successfully, of whom one is female. These successful trainees have already secured jobs in two enterprises, namely Apex Adelchi and Madina Footwear, under the LFMEAB umbrella.

### **B.2.2. PRICE-COEL-ILO Apprenticeship Program's Progress**

Since its inception in June 2011, this year long apprenticeship program reached its peak during this quarter. The primary target is to develop skills of 1,000 footwear workers in the following areas: cutting direction, pairing, machine pressure, etc. in the cutting department; skiving, splitting, folding, edge finishing, thread, needle, machine adjustment, etc. in the sewing department; toe and heel lasting, machine adjustment, finishing chemicals, packing, etc. in the lasting/finishing department. The first batch is expected to complete the full course during the next quarter.

At the successful completion of the apprenticeship program, the workers will be given certificates. The first three months of the training is on and off the job training at the COEL floor level and the remaining nine months is workplace learning at factory premises.

During this quarter 101 trainees (26 male, 75 female) completed their three month tenure at the COEL floor level and moved to the factory learning part.

### **B.3. PRICE-LFMEAB-Apex Extended Training Program Ended**

The tripartite agreement of PRICE, LFMEAB, and Apex ended in February 2012 with significant results in its workforce development interventions. During its full tenure, this initiative helped develop skills of approximately 2,500 trainees (710 male, 1,795 female) in the footwear manufacturing technique.

Developing skills of 2,200 trainees was the primary target of this two phased program; however, due to the strong commitment of all partners and the enthusiasm of the trainees, this program managed to exceed its target and train an additional 300 trainees in footwear technology.

The two month long On the Job Training (OJT) focused on the following areas: industry safety, discipline and basics of shoe engineering, cutting direction, pairing, machine pressure, etc. for cutting workers; skiving, splitting, folding, edge finishing, thread, needle, machine adjustment, etc. for sewing workers; and toe and heel lasting, machine adjustment, finishing chemicals, etc. for lasting workers.

### **B.4. PICARD and PRICE Cooperation for Developing Workers' Skills**

In October 31, 2010, a tripartite agreement was signed between LFMEAB, PICARD Bangladesh Ltd., and PRICE. The objective of the agreement was to address the prevailing shortage of skilled workers in the leather goods industry, which has hindered the growth of Bangladesh leather sector/enterprises, particularly in terms of exports.

Initially 600 trainees were enrolled and 520 completed the session. The following skill areas were covered during this training: industry safety, and the discipline and basics of leather goods engineering; cutting direction, pairing, machine pressure, etc. for the cutting workers; skiving, splitting, folding, edge finishing, thread, needle, machine adjustment, etc. for sewing workers; and fitting of different components, parts, finishing, packing, machine adjustment, finishing chemicals, etc for assembling workers. A new group of 400 trainees were then selected for continuation in second phase.



Certificate distribution program at PICARD Bangladesh Ltd.

This is the first ever initiative of OJT program in Bangladesh's leather goods sub-sector taken by PICARD and facilitated by PRICE. This program covered the technical part, as well as the occupational health and safety, factory norms, and working environment related issues. This period, 120 (49 male, 71 female) trainees completed their training and are now employed by PICARD.

PRICE also distributed certificates through a certificate distribution ceremony among the trainees those successfully completed the two month long "OJT on



Trainee on skill development program at Bengal Shoe Industry Limited, Noakhali

Leather Goods Making” program. This batch consisted of 45 trainees and 37 passed successfully completed the program. Mr. Thomas Picard, Chairman of PICARD International and Mr. Saiful Islam, Managing Director of PICARD Bangladesh Ltd. were present along with other top PICARD officials.

### **B.5. Skill Development Interventions at Bengal Gain Momentum**

Since late 2010, PRICE has been working with LFMEAB and Bengal Shoe Industry Limited (BSIL) in facilitating workforce development training programs at BSIL premises in Laxmipur for local young trainees, of whom 95 percent are women. This training program aims to overcome one of the leather sector’s biggest constraints - the lack of skilled machine operators.

This training focuses on shoe making principles. It covers cutting direction, pairing, machine pressure, etc. for cutting workers; skiving, splitting, folding, edge finishing, thread, needle, machine adjustment, etc. for sewing workers; toe and heel lasting, machine adjustment, etc. for lasting workers. PRICE engaged one lead trainer to coordinate the program.

As a part of that support, the PRICE leather team, along with the communication and training team went to BSIL to follow up on the training program, to assess the program and arrange a focus group discussion with successful women trainees who have been employed by BSIL. During this visit, PRICE also handed training certificates to the BSIL authority to distribute among the trainees who successfully completed the two-month long training program.



Group discussion with successful trainees of skill development program at Bengal Shoe Industry Limited, Noakhali

During this quarter, 160 trainees (4 male, 156 female) completed the training successfully and joined BSIL in their export production line.

### **B.6. PRICE-LFMEAB-FB Footwear Workforce Development Program Progress**

One thousand new workers received skill development training through a tripartite agreement between PRICE, LFMEAB, and Filanto Bangladesh Footwear Ltd. (FB Footwear), which was signed in July 2010. This twelve month long skill development program was completed within 10 months and received a positive response from the participants. More than 80 percent of the workers joined FB Footwear and subsequently its business expanded due to the skills of these new workers. Since then, LFMEAB, on behalf of FB Footwear, has asked PRICE to extend the program for another new 1,000 workers. This serves as a testimony to the contributions of this structured OJT program in terms of export earnings and job creation. During this quarter, 324 (127 male, 197 female) trainees completed the course and received employment in FB Footwear. Given the impact of the initial program and continued interest of LFMEAB and FB Footwear, PRICE agreed to their request. The tripartite agreement was renewed for 10 months for skill development training of 1,000 new workers. The second phase of training started in December 2011 following the same module. The main focus of the program will include: industry safety, discipline and basics of shoe engineering; cutting direction, pairing, machine pressure, etc. for

the cutting workers; skiving, splitting, folding, edge finishing, thread, needle, machine adjustment, etc. for sewing workers; and toe and heel lasting, machine adjustment, finishing chemicals, etc. for lasting workers.

### C. OTHER

#### Success of a LTSE Leather Producer

The managing partner of a PRICE-assisted SME named “Karigar,” Ms. Tania Wahab, won the award for “Best Woman Entrepreneur” under the SME Award 2011. The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) organized a ceremony to announce this in January 2012. PRICE has been supporting Karigar in developing skills of its workers, building market linkages, getting access to formal finance, and developing its management capacity.



Ms. Tania Wahab with Prime Minister of Bangladesh

Also, Ms. Wahab visited Tripura, India in February 2012 as a member of a business delegation with the honorable Prime Minister. During this visit, she attended a joint business meeting between Bangladeshi and Indian delegates, organized by the Confederation of Indian Industry (CII). As a result, she had the opportunity to interact with lead business houses from India and Bangladesh.

### D. Results

#### Leather products

The leather products sector increased its sales by \$9.4 million in this quarter. Ninety-nine percent of this increased sale came from the export market. Apex Adelchi Footwear Ltd. and FB Footwear Ltd. have contributed the most to increased sales. In jobs creation, PRICE supported leather partners to create 669 new full time jobs, of which 73% are women. With the help of FB Footwear Ltd, Bengal Shoe Industries, and PICARD employed the most new workers in this quarter. The partners also increased their investment by \$30 thousand.

#### Partner-wise Results in Leather Products

Region	Partner	Sales Increased (\$)			No. Total Jobs Created			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
Dhak	LFMEAB - Apex Adelchi Footwear Ltd.	-	2,494,500	2,494,500	15	28	43	-

Region	Partner	Sales Increased (\$)			No. Total Jobs Created			Investment Increased (\$)
		Domestic	Export	Total	Male	Female	Total	
	LFMEAB - Bay Footwear Ltd.	-	590,625	590,625	-	-	-	-
	LFMEAB - Jennys Shoes Ltd	-	259,875	259,875	-	-	-	-
	LFMEAB - Landmark Footwear Ltd	-	937,500	937,500	-	-	-	-
	LFMEAB - Apex Leather Craft Fashion & Accessories	-	342,000	342,000	-	-	-	-
	LFMEAB - PICARD	-	1,322,000	1,322,000	48	62	110	-
	LFMEAB - Bengal Shoe Industries	-	289,965	289,965	2	148	150	-
	LFMEAB - FB Footwear Ltd	-	2,199,750	2,199,750	95	190	285	-
	Leather Technologist SME Entrepreneur (LTSE)	103,354	-	103,354	-	-	-	-
	COEL	-	814,500	814,500	18	63	81	30,120
	<b>Total Leather Products</b>	<b>103,354</b>	<b>9,250,715</b>	<b>9,354,069</b>	<b>178</b>	<b>491</b>	<b>669</b>	<b>30,120</b>

Source of data: Partner interviews

## EQUITY INTEGRATION

PRICE has been working to improve the skills of women in its three components, horticulture, aquaculture, and leather, while overcoming constraints in those value chains. PRICE has been working to maximize the full potential of the female workforce. PRICE's approach has been to work with enterprises and associations to create a more competitive business environment, while building awareness of issues surrounding women's participation in these sectors.

One of PRICE's major cross cutting objectives is to improve gender equity as well as to increase the involvement of young adults in the workforce in the horticulture, aquaculture, and leather sectors.

## 1. HORTICULTURE

Women play an important role alongside their male counterparts in horticulture production by collecting and preserving seeds for the next crop; participating in harvesting, sorting, grading, and cleaning crop commodities; and preparing to send the graded products to the market. The involvement of women in vegetable production is about 50 percent, compared to only 11-20 percent in cereal production.



Women workers sorting and grading seed potato at Konia Seed Company Ltd.

It has been observed that women are playing an increasingly important role in the commercial production in horticulture and a greater portion of their products have been going to the market in recent years. The 436 interventions in the horticulture component this quarter included direct trainings for 2,603 women. Farmers' trainings were held on 'Improved Technology on Egg-Plant Cultivation through Contract Farming,' 'Training on Modern Farming,' and 'Pre and Post-Harvest Handling of Mango,' which aimed to increase knowledge among women farmers.

Through these trainings, women are expected to be increasingly involved in vegetable and mango promotion activities. Yard meetings were held on the use of organic fertilizer use for female participants, which aimed to yield quality vegetable cultivation outcomes and promote contract farming. During this quarter, a total of 2,580 new jobs were created in the horticulture sector, of which 900 (35 percent) were for women.

## 2. AQUACULTURE

Throughout the fish and shrimp value chains, including shrimp processing plants, women's participation is traditionally low - an average of three percent. Moreover, the employment of women is largely in menial and casual roles.

PRICE's goal was to increase women's participation from the national average of three percent to 20 percent or around



Women fish farmers of Gondhamary Motshojibi Samabay Somity are harvesting fish

60,000 aquaculture beneficiaries in the project. The partners, who worked with PRICE to achieve this goal, included DESHA, Goldhamary Motshojibi Samabay Somity, JSK, Polli-Bodu Kallan Sanghtha (PBKS), and SSS. PRICE also facilitated female-dominated farmer groups and NGOs, organized and operated by housewives, to train hundreds of additional housewives in homestead aquaculture with a focus on increased household income, self-employment, opportunistic employment for personal income generation, in order to empower women.

The inclusion of women in the aquaculture component through integrated farming efforts has helped resource-poor farming families increase their fish-based consumption and limit chronic malnutrition in rural Bangladesh, with additional benefits from these differing activities supporting enhanced food security and family nutrition.

PRICE also works with young adults and women to ensure their participation in aquaculture. This quarter, a total of 12,140 participants were trained in productivity, management, and workforce development, of whom 4,425 were female (36 percent). There were 6,770 new jobs created, of which 18 were for women.

### 3. LEATHER

The leather industry is the fourth biggest export revenue earner in Bangladesh and this income plays a significant role in the national economy. Although this labor intensive industry directly and indirectly employs more than 700,000 people, the full time engagement of women in entrepreneurial and managerial levels is very limited, largely attributed to a lack of capacity (knowledge) and skills.

The main exception to this is in the sewing and prefabrication departments of footwear and leather goods subsectors, where approximately 40 percent of workers are women. One unfortunate indicator is the repeatedly high incidence of workforce dropout and discontinuation among women in the leather industry, and the underlying reasons for this are yet to be addressed by the industry.

This period, there were 830 training participants, of whom 530 were female (nearly 70 percent), in PRICE's workforce development programs. For these trainees, 670 new jobs were created, of which 490 (nearly 75percent) were secured by women. These employees receive around Tk 3,000-3,500 (i.e. US\$36 to 43) per month in salary and other benefits, and they are now proudly contributing to their household income. Since there is no minimum daily wage in the leather industry by comparison a more usual starting salary is not less than Tk 500.00 month (\$30 /month).

These female workers are improving their standard of living through these opportunities to work and generate a consistent income. Furthermore, these women receive fair compensation in exchange for their work. The training result was considered to be satisfactory, as the female participants' knowledge levels significantly increased and the majority could utilize their newly



On the job training at Bengal Shoe Factory, Noakhali

acquired skills. The trained female members are also more aware of their responsibilities and play key roles in their chosen fields of work.

## Training Activities

To strengthen and develop the competitiveness of partners in the horticulture, aquaculture and leather products' components, PRICE provided three types of training activities, with a focus on building capacity for beneficiaries.

During the reporting period, PRICE provided 930 training activities in the three components to 23,895 participants, of whom 16,300 were men and 7,595 were women (around 47 percent). Of the 930 trainings, 47 were in workforce development, 445 in productivity and improved technologies, 380 in management training, and 58 were awareness building programs. The outcomes by PRICE components are described below.

### 1. HORTICULTURE

Region	Partner name
Bogra	Gram Unnayan Karma Enterprise Development (GUKED)-2
	Grameen Krishak Sohayak Sangstha Enterprise (GKSSE)
	Kansat Mango Farmer Multipurpose Co-operative Society Limited
	Murail Rural Development Multipurpose Cooperative Society Ltd
	Riya Fertilizer
	Rural Development Academy (RDA)
	Shibgonj Upazila Farmers' Cooperative Shamitee (SUFCSL)
Jessore / Khulna	Adorsho Foundation
	Chesta Agro Enterprise
	Jagoroni Agro
	Konika Seed Company Ltd
	<b>Eggplant</b>
	Krishak Bandhu Karmashuchi
	Pride Agro Enterprise
	<b>Potato</b>

	Krishak Bandhu Karmashuchi
	Polly Prokrity-Onion
	Proshikkhito Jubo Kalyan Agro Enterprise
	Renaissance
Dhaka	<b>Eggplant</b>
	Pride Agro Enterprise
	<b>Vegetable</b>
	Pride Agro Enterprise
	<b>Seeds</b>
	Lalteer Seed Limited

During the reporting period, 510 training events were held, of which 30 were in workforce development, 215 in improved technologies, 228 in management, and 38 were awareness creation events. Participants totaled around 10,890, of whom 7,585 were men and 2,603 were women (25 percent).

Figure: 1. Horticulture training and intervention category

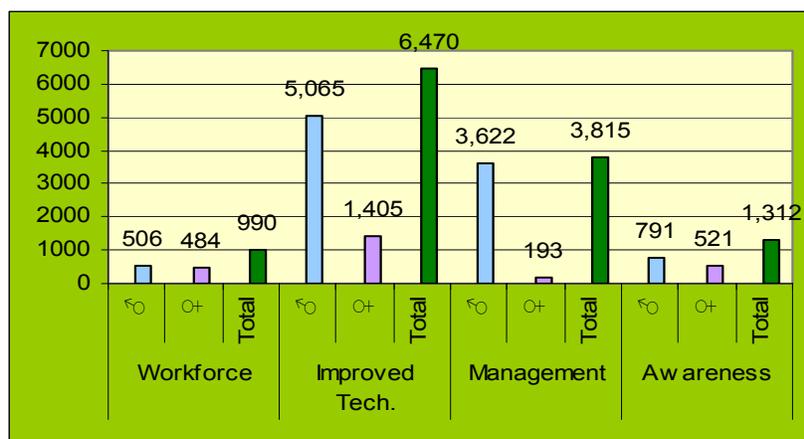


Table: 1 Horticulture component partners receiving training from PRICE

Partners considered their partnerships with PRICE to be a great opportunity to organize several training courses on "Modern Farming on Potato Cultivation," "Contract Farmers' Training on



Farmer's training on improved technology on safe vegetable production and contract farming at Renaissance, Bagerhat

Commercially Safe Vegetable Production and Marketing," "Farmers' Training on Improved Technology on Eggplant Cultivation through Contact Farming," "Farmers' Training on Improved Mango," and "Orchard Management and Contract Farming System." These trainings targeted quality vegetable cultivation and aimed to increase knowledge on organic fertilizer. The participants enjoyed the training course. They supported other farmers by sharing the technology and knowledge they gained. After completing the training, the participants remained involved in their respective fields.

## 2. AQUACULTURE

### 2.1. Fish Activities

During this quarter, all trainings were organized by partners and facilitated by PRICE-recruited consultants, with project staff providing guidance and feedback to ensure quality control. The PRICE fish component completed 322 training events, which were held jointly with 28 partners. These training consisted of four in workforce training, 155 in improved technology, and 150 in management, and 14 were awareness building programs. Participants totaled 8,345, of whom 4,245 were male and 4,103 (50 percent) were female.

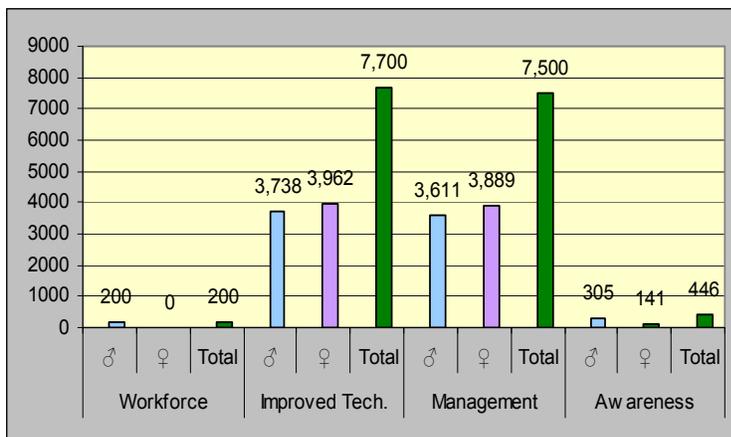


Figure 2.1. Fish component training and intervention category

Table2.1. Fish component partners receiving training from PRICE

Region	Partner name
Dhaka	SMS Feed
Mymensingh	Digherkanda Matsopona Beboshahi-Kallan Bohumukhi Somabaya Somity (DMBBS)
	Nokla Motsojibi Somity
	Phulpur Fish and Prawn Farmers Association (PFPFA)
	Trisal Fish Farmer-Business Somity (TFFS)
	Unnayn Sangha
Bogra / Rajshahi	Agriculture Advisory Society (AAS)
	Kahaloo Matshya Chashi Samoby Samity
	Murail Matsya Chashi Samoby Samity
	Palli Bandhu Kallan Sangstha (PBKS)
Barisal	Center for Integrated Social Development (CISD)
	Rakhaing Development Foundation (RDF)
Comilla	Janaseba Kendra (JSK)
	Society For Social Services (SSS)
Cox's Bazar	Niribili Telapia Hatchery
	Nizarertek Fish-dryers Multipurpose Cooperative Somity
Jessore / Khulna	Chittra Unnyan Kendra (CDC)
	Deesha Samaj Kolyan Sangstha
	Din Bijoy Enterprise
	Goldhamary Motshojibi Samabay Somity
	Modina Matshya Prokolpo
	Mondal Fish

Region	Partner name
	Razu Enterprise
	Satata Fish
	Satkhira Feed Industries Ltd
	Trinomool Krishi Unnayan Shomoby Shamitee Ltd. (TKUSS)
	Vairob Fish Agency/Global
	Vairob/Global Fish Agency-(Fish)-2



Training program on Improved Fish farming and Management at Goldhamary Motshojibi Samabay Somity, Khulna

Since the courses were held on “Improved Fish Farming and Management” for fish farmers, trainings were fully participatory. Nearly all participants were actively involved in the learning process and they were encouraged to interact in discussions, to enhance their learning experience.

The post-training evaluation revealed that most of the participants were able to utilize their newly acquired skills and gradually improve their capacity. Furthermore, they were found to be more aware of their responsibilities. Training outcomes were demonstrated by increased sales and the number of young and adult women involved. While capacity strengthening

and competency with graduated learning is still required, based on a practical assessment of the knowledge levels, the result was considered to be highly satisfactory.

## 2.2. Shrimp Activities

Training of participants on shrimp activities during this quarter totaled 80 events, of which 73 were on improved technology (i.e. shrimp/prawn farming technology and management), and two on management training, and six were awareness building programs. Participants totaled 4,544, out of whom 4,183 were male and 361 (around 9 percent) were female.



Improved shrimp farming and management training at DB Enterprise

Figure 2.2. Shrimp component training and intervention category

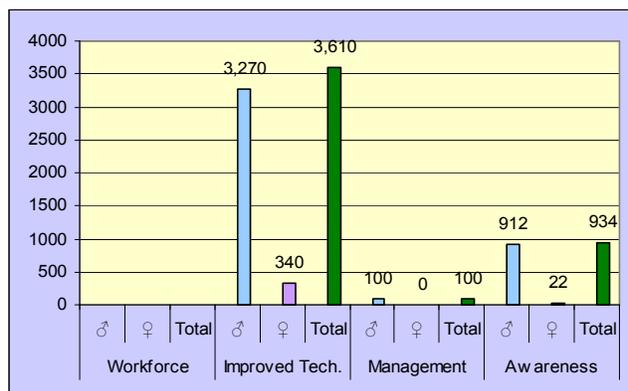


Table 2.2 Shrimp component partners receiving training from PRICE

Region	Partner name
Jessore / Khulna	Bangladesh Frozen Foods Exporters Association
	GHERS-3 2012 by the World Fish Center
Cox's Bazar	Islamia Fishing Limited
	Yunus Fishing Limited

### 3. LEATHER



Skill development training on leather sewing, cutting and lasting at Bengal shoe factory

PRICE has taken a lead in the joint development of training programs for rural women and young adults. During this quarter, 16 training events were held, of which 14 were on workforce development, one in improved technology, and one in management. Participants totaled 818, with 290 male and 528 (65 percent) female.

Figure3 Leather component training and intervention category

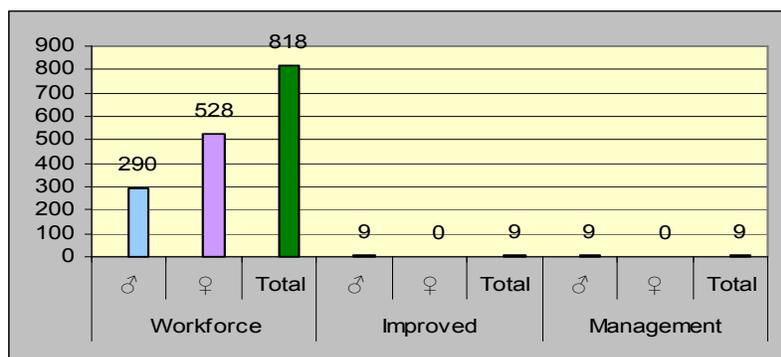


Table3. Leather component partners receiving training from PRICE

Region	Partner name
Dhaka	COEL
	Leather Goods & Footwear Manufacturers & Exporters Association (LFMEAB):
	Apex Adelchi Footwear Ltd.
	Bengal Shoe Industries
	FB Footwear Ltd
	PICARD

### Conclusions on the PRICE training program this quarter

The PRICE training and equity manager introduced the standard “training post evaluation form” to obtain direct feedback from participants in some training events for the three components. A review of findings showed 70 to 80 percent of trainees were satisfied with the training course, a rate at which we’ll strive to improve. Training programs are ‘a work in progress’ to address the trainees’ needs. Useful suggestions have been received by PRICE’s consultants and partners on making the programs more lively, enjoyable, and fruitful. Effective follow up mechanisms will be established for all courses, and institutionalization will be addressed with partners. Future options to be explored include conducting training events to industries through associations that have a legal entity and represent a supply and value chain targeted by PRICE.

Although the project has achieved positive outcomes, PRICE will strengthen its current approach next quarter. PRICE will aim to gradually formalize training needs assessments, training master plans, and curriculum and module development for graduated learning to develop competency. PRICE will also assess its external national consultants for their skills, knowledge, and ability to train and document their work in a professional manner. The project will also start formalizing approaches towards training manuals for activities in each of the three components.

## Communications

Effective communications are essential in project management. PRICE shares a common vision to share our sense of purpose, progress, and knowledge to the target audience through communications activities.

PRICE's target audiences include USAID, private sector partners, public sector partners, donors and donor funded projects, and the general public. For effective communications, PRICE utilizes tools including success stories, weekly updates, annual event and activities, progress reporting, quarterly newsletters, photographs, and print publications. Following are some of the highlighted PRICE communications activities during this quarter:

### A. PRICE Participation in America Week 2012

PRICE participated in America Week 2012 held at Chittagong from January 30, 2012 to February 1, 2012. For this event, new promotional project materials were developed and distributed among the visitors, including a project brief, sector briefs, success stories, newsletters, three new flyers on horticulture, and one flyer on the leather sector. PRICE showcased the activities of the three sectors, which included demonstrations on live leather product making, fish, dykes, tissue culture, and potato varieties. PRICE received a strong positive response from the visitors.

The U.S. Ambassador in Bangladesh and the Mission Director of USAID, Bangladesh also visited the PRICE stall, showing interest in the project activities, particularly in the live demonstrations. PRICE also made a presentation on sector activities. This was followed by a question and answer session, and PRICE received a positive response from the audience.

### C. Publications

*Information Bulletin:* The PRICE project brief and sector briefs have been updated and published this quarter. These updated information bulletins have been distributed among 1,200 visitors while they were visiting PRICE's stall in America Week. Moreover, three additional flyers were also published in January on eggplant, potato, and tomato production technology.

*Newsletter:* PRICE produces quarterly newsletters in order to reach a broad audience, which includes PRICE partners and beneficiaries. The newsletter covers sector highlights and a feature focus on at least one of PRICE's partners. PRICE published its newsletter (issue 4) this quarter.

*Success Story:* Success stories are a primary tool for sharing project impact. During this quarter, three success stories have been published. Success stories can be found in Annex D.

### C. Initiative for Increasing Visibility

This quarter, PRICE took initiative to increase project visibility through its partners' activities. The PRICE communications team had already communicated with the beneficiary partners

expectations and standards, but recognized the opportunity to strengthen this. PRICE developed clear guidelines for branding communications materials, such as a co-branded banner, signboard, and design samples for promotional material and print publications for PRICE's partners, under the guidance of the USAID communications team. Next quarter, PRICE plans to continue working towards increasing visibility in the project areas.

## **Section V. Organization and Management**

During this quarter, the organizational and management activity in PRICE have included mobilization of a new chief of party and recruitment of a new Value Chain Director. PRICE has also started to implement a change of the project geographical focus from a generally widespread national coverage for horticulture and aquaculture components to focus largely on the south and south west of Bangladesh to respond to the Feed the Future initiative of USAID, Bangladesh (USAID/B). As well, PRICE is refocusing to the original technical proposal to establish business service centers while adding value to USAID/B's requirements with a program focus to the FtF areas.

The current national and international staffing of PRICE is in annex 3 with Tim Ekin joining as incoming chief of party in February 2012. After arrival in Dhaka he was extensively briefed by the COR and USAID/B. PRICE recruits a range of national consultants for implementing the three components of the project and consultants engaged during the quarter are listed in annex 4. The position of Value Chain Director is a key personnel position and has been vacant since November 2011. The project re-advertised this role in March 2012 and recruitment is expected to be finalized during the next quarter, with the scope of work (SOW) adjusted to reflect the need for this position to support the three technical components in developing a much stronger market and business service center orientation to target supply and value chains in the FtF program.

The FtF program targets 20 districts in the south and south west of Bangladesh. The possibility exists for PRICE to be given additional funding and an extension until December 2013 by USAID/B, with a changed geographical focus from the current very broad national coverage. The technical work plan and project reorientation conceptual approach for the extension was submitted to USAID/B in late March 2012, and with confirmation by USAID/B expected during the next quarter, the project will adopt a largely FtF implementation focus from July 2012.

PRICE will strengthen the technical team based from Jessore, and this will become a key field office for the project. Implementing in the FtF geographic areas also allows a general re-focusing of PRICE to the original technical proposal submitted to USAID/B with establishment of business service centers, market and enterprise development, and strengthening the target supply and value chains. This will add value to USAID/B's requirements with a program focus to the FtF areas, moving away from the current largely production orientation in horticulture and aquaculture, thereby enhancing sustainability of PRICE's interventions. Implementation during the extension will be possible for around seven months, from April to the end of October 2013, and this requires PRICE to focus on key supply and value chains, and while recognizing a need

to set priorities for each component. The outcome from this may not include all 20 districts having a marketing and business service center orientation, however, in agreement with USAID/B the work of PRICE will set a platform for the future value chain orientations for USAID funding to the FtF target districts.

The horticulture component will receive the largest allocation of funds at around 50.0 percent, followed by aquaculture with around 30.0 percent and the leather component with the unchanged allocation of around 20.0 percent. Currently, the aquaculture component receives over 55.0 percent and the horticulture component receives around 30.0 percent of project allocations. The leather component will be expanded to include a focus on hides and skins as a key raw material to the leather industry. Adopting a focus in the FtF target locations will thereby assist to create jobs, sales and investments in the target rural districts. Considering PRICE will enter its final phase during the remainder of 2012 and in 2013, the project will require a stronger matching contribution from potential beneficiaries, and will adjust the focus of support for service delivery more to target trade associations, away from the current approach of more support to individual enterprises or producer groups. Any support to enterprises will require preparation of pre- and feasibility studies and business plans, and adopting this approach is expected to greatly contribute to more sustainable solutions in the short-term.

## ANNEX 1

### PRICE Performance: Q2'12(Jan-Mar'12) and Accumulated

Indicator & Sector	Unit	LoP Target - Contractual	Achievement till Sep'11 & Projection (Oct'11-Dec'12)	FY 2012 (Current)			Accumulated Achievement till Mar'12		
				Annual Projection	Q2 Achievement	% of Q2 achievement	Target till Sep'11 & Projection for Jan-Mar'12	Achievement till Mar'12	% of Achievement of LoP Projection
<b>Total Value of Sales Increased</b>	<b>USD</b>	<b>200,000,000</b>	<b>76,622,522</b>	<b>76,622,522</b>	<b>34,658,085</b>	<b>178%</b>	<b>153,236,658</b>	<b>249,018,200</b>	<b>90%</b>
Domestic		116,994,617	39,548,626	39,548,626	25,234,784	248%	74,539,368	174,261,967	100%
Export		83,005,383	37,073,896	37,073,896	9,423,301	101%	78,697,290	74,756,233	73%
Aquaculture		105,000,000	30,000,000	30,000,000	19,995,791	250%	82,125,000	165,778,584	97%
Horticulture		40,000,000	15,550,000	15,550,000	5,308,226	142%	26,250,000	36,810,814	94%
Leather/Leather products		55,000,000	31,072,522	31,072,522	9,354,069	120%	44,861,658	46,428,802	69%
<b>Number of Full-time equivalent Jobs</b>	<b>Number</b>	<b>40,000</b>	<b>13,780</b>	<b>13,780</b>	<b>10,016</b>	<b>311%</b>	<b>35,780</b>	<b>46,066</b>	<b>93%</b>
Aquaculture		26,000	8,900	8,900	6,769	271%	22,450	31,508	98%
Horticulture		10,500	3,700	3,700	2,578	644%	9,900	9,565	75%
Leather/Leather products		3,500	1,180	1,180	669	206%	3,430	4,993	101%
Male		34,383	11,712	11,712	8,546	312%	28,086	36,460	93%
Female		5,617	2,068	2,068	1,371	283%	7,695	9,507	92%
<b>Total Value of Investment Increased</b>	<b>USD</b>	<b>4,000,000</b>	<b>3,303,419</b>	<b>3,303,419</b>	<b>1,955,299</b>	<b>203%</b>	<b>4,630,408</b>	<b>9,058,569</b>	<b>87%</b>
Aquaculture		2,100,000	2,800,000	2,800,000	1,752,381	250%	2,700,000	7,415,315	88%
Horticulture		1,000,000	303,419	303,419	172,797	266%	850,408	856,925	82%
Leather/Leather products		900,000	200,000	200,000	30,120	15%	1,080,000	786,328	82%
<b>Number of persons participated in WF-</b>	<b>Number</b>		<b>5,621</b>	<b>5,621</b>	<b>2,008</b>	<b>122%</b>	<b>16,720</b>	<b>15,751</b>	<b>85%</b>
Aquaculture			321	321	200	143%	3,977	5,969	108%
Horticulture			1,000	1,000	990	248%	3,130	2,356	88%
Leather/Leather products			4,300	4,300	818	74%	9,614	7,426	73%
Male			3,091	3,091	996	110%	10,431	5,979	75%
Female			2,530	2,530	1,012	137%	6,289	9,773	93%

Indicator & Sector	Unit	LoP Target - Contractual	Achievement till Sep'11 & Projection (Oct'11-Dec'12)	FY 2012 (Current)			Accumulated Achievement till Mar'12		
				Annual Projection	Q2 Achievement	% of Q2 achievement	Target till Sep'11 & Projection for Jan-Mar'12	Achievement till Mar'12	% of Achievement of LoP Projection
<b>No. of workers and managers trained on Bangladesh labor laws 2006</b>	<b>Number</b>			<b>INDICATOR DISCONTINUED</b>					
Aquaculture									
Horticulture									
Leather/Leather products									
Male									
Female									
<b>Number of Firms and farmers receiving USG assistance to improve</b>	<b>Number</b>		<b>10,315</b>	<b>10,315</b>	<b>11,424</b>	<b>253%</b>	<b>20,510</b>	<b>55,548</b>	<b>124%</b>
Aquaculture			9,070	9,070	7,600	188%	17,605	41,688	112%
Horticulture			1,150	1,150	3,815	848%	2,751	13,737	192%
Leather/Leather products			95	95	9	36%	154	123	54%
Male			8,252	8,252	7,333	203%	16,033	40,201	119%
Female			2,063	2,063	4,091	453%	4,477	15,347	143%
<b>Number of Firms and farmers receiving USG assistance to access</b>	<b>Number</b>		<b>1,008</b>	<b>1,008</b>	<b>275</b>	<b>110%</b>	<b>3,058</b>	<b>6,930</b>	<b>90%</b>
Aquaculture			1,000	1,000	275	110%	2,253	3,170	80%
Horticulture			0	0	0	0	783	3,737	100%
Leather/Leather products			8	8	0	0	21	23	153%
Male			504	504	105	84%	1,629	4,564	91%
Female			504	504	170	136%	1,429	2,366	86%
<b>Number of firms and farmers receiving USG assistance to invest in improved</b>	<b>Number</b>		<b>14,565</b>	<b>14,565</b>	<b>17,789</b>	<b>284%</b>	<b>38,410</b>	<b>100,705</b>	<b>120%</b>
Aquaculture			9,070	9,070	11,310	280%	29,368	75,288	115%
Horticulture			5,400	5,400	6,470	294%	8,792	25,314	140%
Leather/Leather products			95	95	9	36%	251	103	49%
Male			11,652	11,652	12,083	241%	31,468	79,885	117%
Female			2,913	2,913	5,706	455%	6,942	20,820	136%

## ANNEX 2

### Performance Management Plan

The Monitoring and Evaluation system is the basis for quarterly and annual reports to USAID. The PRICE team collects and analyzes performance information regularly and not only collects performance and impact data, but it adds value to the raw data by performing appropriate analysis and providing context for data interpretation, thereby transforming raw data into useful information. Results from the analyses help determine whether adjustments to the project implementation plan are required. Finally, this information is conveyed to relevant internal and external parties through communications (i.e. knowledge sharing) and achieves impact as knowledge is acted upon. An understanding and agreement among all stakeholders of the project is developed to establish an effective performance management plan. Essentially, all of them are the users of the system.

#### **A. Features of the System**

The PRICE M&E system is designed to involve all technical team members and project counterparts. This approach has several benefits:

*Efficiency:* Because technical team members and counterparts have first-hand knowledge of their activities and resulting impacts, they are best suited to efficiently collect and verify basic M&E data in their respective technical areas.

*Ownership:* By being involved in project M&E efforts, technical team members can ensure that the information generated is relevant and consistent with the interests of the project while our counterparts will see the demonstrated success of reforms.

*Feedback:* Having collected and analyzed M&E information, technical team members and counterparts are aware of project progress and will be able to use M&E information to guide project implementation.

The project M&E is responsible for organizing data collection. They ensure that project team members have the necessary tools to collect data consistently and at the appropriate frequency. They verify data quality and analyze and report trends. Annually, they review the appropriateness of the PMP and make necessary additions or adjustments to the existing indicators. The Chief of Party supervises the overall M&E system.

The technical area specialists are responsible for managing the process of primary data collection and entry in their respective technical areas. Then, they use the information to make management decisions about implementation activities. These technical specialists communicate progress to PRICE counterparts informally during the course of technical

assistance and formally in quarterly reports to help them make decisions about necessary and priority interventions.

PRICE collects basic M&E data from the various administrative and technical records of the project, specially-designed surveys, and focus groups. PRICE also consults records, statistics, surveys, and databases maintained by the Government of Bangladesh (GOB), USAID, other donors, and NGOs as additional sources of data. There must be a balance between M&E data collection and technical work. PRICE M&E system is designed to allow the efficient collection of data by project staff or counterparts.

## **B. The Indicators**

The basic premise of the project is that true poverty reduction is about ensuring decent, sustainable jobs for vulnerable groups, with such jobs arising from increases in sales and investment across value chains in response to market demand. Indeed, the PRICE contract stipulates that sales, job, and investment increases are the essential project performance targets. As such, the focus of PRICE performance indicators is on sales, jobs, and investment—particularly for the benefit of women, young adults, and SMEs—to achieve equitable growth. These are the performance indicators for the overall strategic objective. All performance indicators have specific targets for the life of the project.

PRICE also uses tracking indicators that allow the project to track other aspects of its work and support requirements for overall USAID reporting. For example, tracking indicators include disaggregation of performance indicators by gender, age, sector, region, exports, and SMEs. These indicators also track the number of SMEs receiving PRICE assistance and financing, training metrics, and other measures.

PRICE primarily collects data on performance and tracking indicators relevant to activities directly implemented by the project in collaboration with counterparts. This principle of 'manageable interest' helps ensure that the results reported by PRICE's M&E system are within the project's ability to influence, particularly at the Key Result Area (KRA) level. Through these performance and tracking indicators, PRICE is able to accomplish the following:

- Capture and communicate major project impacts
- Track implementation progress against targets
- Supply information concerning major PRICE activities
- Identify problems constraining performance and resolution
- Contribute to USAID's own performance management and reporting needs

Performance of the project and of the three sectors (Aquaculture, Leather Products and Horticulture) has been measured using seven defined indicators. Two types of indicators have been used to monitor PRICE's contribution to (1) assessment of the impact of PRICE's interventions and (2) key indicators of the global U.S. Foreign Assistance Framework. The first category is called custom indicators and the second is called common indicators. *Custom*

indicators assess the impact or outcome of the project interventions. *Common* indicators are used to report on PRICE's contribution to the global results of priority program areas of the U.S. Foreign Assistance Framework. All these indicators are measured quarterly and annually throughout implementation in order to evaluate progress towards targets agreed with USAID.

While the indicators included below are intended to be reported on over the life of the project, it is likely that adjustments will be necessary over time. Annually, PRICE reviews the PMP in coordination with USAID and other counterparts, and modifies indicators as necessary.

### **Critical Assumptions**

In designing the PRICE M&E system, PRICE focused on indicators within the manageable interest of the activity. This approach allows the project to measure impacts that can, to a large extent, be attributed to the project. The project's ability to demonstrate improvement in these measures is based on the following assumptions:

- Absence of sociopolitical instability
- No major agro-climatic shocks during the project period. These include major climatic shocks such as drought, floods and other weather hazards.
- Generally stable fiscal and monetary policy
- Willingness of project counterparts and beneficiaries to carefully consider and implement project recommendations
- Access to available statistics and cooperation in conducting surveys

### **Custom Indicators**

PRICE has used four custom indicators and three common indicators. The custom indicators are:

- i. *Indicator 1*: Total value of sales increased: (contract-bound)  
Justification: Economic activities are largely measured by the creation of sales. It is the aggregation of the increase in total value of gross sales of assisted firms that can be attributed to PRICE activities. It is calculated in United States dollars and disaggregated by domestic and export sales.
- ii. *Indicator 2*: Total number of full-time jobs created: (contract-bound)  
Justification: True poverty reduction means having a decent job with jobs arising from increases in sales and investment across the value chains in response to market demand. Full-time equivalent jobs will be defined as those equal to 260 work-days per year for non- agricultural production and 150 days for agricultural production (given the seasonality associated with agriculture work). Only new jobs will be counted, calculated by taking the total number of working days and dividing by 260 or 150, as appropriate. A new job will be attributed to the year in which the job originated.
- iii. *Indicator 3*: Total value of investment increased: (contract-bound)  
Justification: Economic activities are largely measured by increased investment.

It is the aggregation of the increase in the total value of investment of assisted firms that can be attributed to PRICE activities. Investment will include loan and private equity. It is calculated in United States dollars and disaggregated by domestic and export sales.

- iv. *Indicator 4: Number of persons participating in USAID workforce development programs: Justification & Management Utility:* This indicator measures the number of individuals who enrolled in USG-funded workforce development programs. It is assumed that increased access to quality programs will result in a more skilled, adaptable workforce. It will give the number of persons participating in USG-funded workforce development programs including, technical and vocational programs and workforce readiness programs.

There was a fifth Indicator on 'Number of staff (workers and managers) trained on key issues of Bangladesh Labor Law 2006' which was itself a replacement of an older one. However this indicator is not reported from the fiscal year 2012 upon consultation with USAID.

For the first three custom indicators (Indicator 1-3), PRICE has targets set by the contract with USAID (US Embassy Contract No. 388-C-00-08-00021-00). For the other custom and common indicators mentioned here, PRICE has agreed to report on though PRICE does not have any contractually obligated targets.

### **Common Indicators**

The common indicators are as follows:

- i. *Indicator 1: Number of firms receiving USG assistance to improve management practices: Justification & Management Utility:* Firms improve their productivity, and competitiveness by adopting improved management practices. This indicator measures the number of firms that receive USG assistance to improve their management practices (financial management, strategic planning, marketing, etc.).
- ii. *Indicator 2: Number of MSMEs receiving USG-supported assistance to access bank loans or private equity: Justification & Management Utility:* Firms improve their productivity, and it turn into their competitiveness, by accessing capital and increasing investment in productive assets. Number of MSMEs who are receiving assistance from USG supported sources to obtain bank loans or private properties.
- iii. *Indicator 3: Number of firms receiving USG assistance to invest in improved technologies: Justification & Management Utility:* Firms improve their productivity, and it turn into their competitiveness, by investing in new technologies. It is the number of MSMEs who are receiving USG assistance.

Indicator reference sheets have been prepared for each indicator in order to provide more detail on indicator definition, units of measure, justification, data collection, and where possible, proposed targets.

## **C. Use of Case Studies**

In some cases, case studies are used to provide deeper understanding of progress or to complement data collected by M&E. However, this should not be confused with the qualitative indicators. This is a very subjective approach and presents a plausible case that progress is being made by using illustrative examples. This is not used as substitute to the other precise measures. Case studies are prepared by the communications personnel of the project. Sector Team Leaders and others can come up with the idea of any seemingly interesting cases being observed within the boundary of Project activities and the resulting impacts. Four types of case studies are prepared: case study, success story, first person story and, photo story. Usually 12 case studies are prepared each year which are submitted to USAID with quarterly and annual reports and then uploaded in the PRICE website.

## **D. Source of Data**

### **Secondary Source of Data**

PRICE M&E uses both primary and secondary sources of information to measure the indicators. Secondary sources can be a range of organizations including the government of Bangladesh (e.g. ministries), EPB (Export Promotion Bureau), DoF (Department of Fisheries), business associations, international organizations such as the World Bank, United Nations, universities, commercial firms, and implementing partners like BSFF, BFFEA etc. Data is collected in regular intervals maintained in a database. This is used for analyzing industry trends, as well as project and sector performance etc.

### **Primary Source of Data**

Primary sources of data are the partners or the beneficiaries themselves. For the three custom indicators (increase in sales, creation of jobs and increase in investment), the source of information is the partners or beneficiaries themselves. PRICE collects data from them directly. PRICE has contract-bound targets in these three indicators. For custom indicator 4 and common indicator 1 and 3, data is taken from the quarterly training reports produced by the project Training personnel, and adjusted for the indicators' requirement. Such adjustments include ignoring double-counting when one MSME has received training twice in the same category of assistance, i.e. improved management practices. For common indicator 2 (assistance to access bank loans or private equity), data is collected by respective sector teams through regular monitoring of the partner. Sample survey method is not used for this indicator because the extrapolation of survey results might contain high sampling error.

## **E. Baselines**

The baseline is the value of an indicator before the commencement of activities, used for comparison when measuring progress toward a result. Baseline periods are taken as one year

right before the impacts are expected on the partners. For the three custom indicators (increase in sales, creation of jobs and increase in investment), PRICE technical team collects baseline information during the process of making MoUs or growth plans with the partners. However, the quality of data collected at that time may not be optimal because the technical team has only initial idea about the partner at that point. So the data collected during the MoU process needs to be adjusted sometimes. For the producer groups or associations or cooperatives with hundreds of farmers, baseline data on the three custom indicators is collected during the first training sessions conducted for the farmers. The hired consultants as well as the technical team members presented in the training sessions collect the data from the partners in an organized way. For the other four indicators, the baseline is taken as zero.

## **F. Data Collection Tools**

### **Data Elements**

Many of the project's proposed indicators are aggregate indicators, made up of various data elements. The M&E team works with each technical team and counterpart to design database spreadsheets, forms, and surveys to capture and manage these data elements.

### **Tools**

Formats for data collection on the first three custom indicators have been designed by the PRICE M&E team, taking suggestions from the technical team. From time to time, these have been modified to fit project requirements. PRICE uses M&E-designed formats to collect data on the first three custom indicators (increase in sales, creation of jobs and increase in investment) based on the different types, sources and methods of data collection. Detailed guidelines are attached with each format. All filled out data forms are signed by the interviewees and the interviewers.

For the other four indicators which are related to training or assistance provided by PRICE, Quarterly Training Reports generated by the PRICE Training personnel is the source of information.

## **G. Methods of Data Collection**

For the three custom indicators (increase in sales, creation of jobs and increase in investment), performance of the partners is collected quarterly from the partners after the baseline period ends. The quarters are calendar quarters. Baseline and quarterly performance data are collected in two ways: partner interview, and sample survey.

The first method (partner interview) is suitable for the individual SMEs PRICE is working with. As the name suggests, the source of information for this method is the partner or client with whom the project is working with. The approach is to proceed in a way of discussion with the partner enterprise and lead the discussion according to the need for information on performance. The

partner might recall the information from memory or might check relevant business records for providing the information. Format for recording the gathered information were designed by the M&E. The interviews are conducted by the PRICE technical team who have contact with partner enterprises and thus can easily collect data from them ensuring the quality of data.

The second method for data collection, sample survey, has been used because in some cases performance data on sales, jobs and investment was not readily available from the partners. Those partners do not have any organized way of keeping records on parameters like sales, jobs or investment. Thus to collect data from those partners such as fish farmers' associations who have large number of members (from 60 to 900), sample survey method has been used. The source of information in this case are the beneficiaries of the interventions, i.e. the members of the associations etc. These surveys can be of two types: a) Large surveys with statistically viable sample size, b) Mini surveys with a minimum sample size of thirty or larger (to approach to normal distribution).

For type a survey, statistically viable sample size is calculated beforehand considering the character of population to be surveyed. Professional survey teams work for data collection after taking detailed briefing on the project and process of data collection from the PRICE technical and M&E teams. Formats for data collection are provided by PRICE M&E. Sample points are selected at random. However, the cost and time required for conducting this type of survey for each partner with combined body of micro enterprises were considered huge to be conducted quarterly. Thus it has been decided that PRICE would conduct this type of full-fledged surveys only annually, at the end of US fiscal year, September.

For type b survey, a minimum sample size of thirty or larger is taken. Statistical viability behind such decision is that when the sample size is greater than thirty, the distribution approaches normal distribution. Also the homogeneity in the population (similar type of land, weather, availability of inputs, market linkage, sharing of knowledge etc.) is considered here. For the quarterly reports, these mini surveys are conducted from 2010. However, these quarterly mini survey results are verified during the later annual survey.

### **Data Collection by Third-Party**

If necessary, PRICE may subcontract to a local research entity to conduct wide-scale surveys for this performance monitoring plan. Because of the huge size of surveys required for data collection from farmer groups (associations, cooperatives, NGOs etc.) at the end of each year, PRICE hires third party professional survey teams for collecting data. These third party survey teams ensure the integrity of data to some extent as they are not involved in the project and thus do not have any potential conflict of interests. M&E selects the surveyors from a pool of candidates, given the required qualification of a surveyor. However, in 2012, it is found that the total sample size of quarterly mini surveys has also increased to a great extent. Thus PRICE plans to conduct quarterly mini surveys also by hired third party survey teams.

## **Data Entry**

The data collected on enterprise performance in each quarter on the first three indicators, the respective sector team performs initial data entry in the soft copy of the Enterprise data format (in Excel). This is later checked by M&E and confirmed for final entry. M&E then enters the data into the M&E database.

For the sample surveys conducted, appropriate format for data entry is prepared by the M&E team. An easy to use MS Excel format is being used. For the mini surveys conducted quarterly, data entry is done by the Data Specialist. For the bigger surveys conducted by hired survey teams, data entry is done by the data entry professionals. These third party survey teams provide data in soft copy as well as the hard copies of filled out formats.

## **H. Quality Control**

### **Data Quality Analysis**

The M&E team conducts random visits to verify the collected data. Data verification is also done over telephone with the partner or beneficiary. The M&E team also talks to the partner or beneficiary and in this way, cross checks the data already collected. If any discrepancy is observed, it is consulted with the technical team before correction. At least 10 percent data verification is done as advised by USAID. If required, the M&E team takes help from the technical teams for verification.

After that, the PRICE technical team provides initial quality control for the various raw data elements. Sector teams examine the data to identify common errors including logical inconsistencies, out-of-range values, significant departures from trends, or other errors so that they can be immediately addressed.

The project M&E team is responsible for data quality control after data entry. Around 10 percent of the tabulated data is compared with the raw data forms to ensure accuracy of data entry. M&E then perform basic data analysis and tabulation to identify potential erroneous data. When errors are identified early, M&E make appropriate corrections by coordinating and consulting with counterparts as appropriate.

As the size of data verification for surveys has also increased a lot in the past year, PRICE has planned to employ third party firms for data verification from 2012.

As some indicators' information is collected from the training reports, the data quality of training report is also important. To ensure that quality, the Training Specialist conducts visits to the ongoing training sessions, consults with the partners and beneficiaries, checks the quality of training administration etc. and provides on-spot recommendations. S/he also gives the feedback to respective Sector team.

## Data Quality Criteria

Five related standards are used to examine data quality in more depth<sup>1</sup>.

### Criteria for Good Data Quality

1. Validity
2. Precision
3. Reliability
4. Timeliness
5. Integrity

(1) Validity: An indicator should clearly and adequately represent the intended result.

- Attribution. Does the indicator measure the contribution of the project?
- Bias and/or Sampling Errors. Are there any biases or sampling errors that affect the data?

(2) Precision: Data should be sufficiently precise to present a fair picture of performance and enable management decision-making at the appropriate levels. Also, there should be a sufficient degree of confidence in the data's accuracy.

(3) Reliability: Data should reflect stable and consistent data collection processes and analysis methods over time, so that changes in data are not due to changes in the data collection method. In other words, if the data collection procedure were repeated, the same result should occur.

(4) Timeliness: Data should be timely enough to influence management decision-making. There are two key aspects of timeliness. First, data must be available frequently enough to influence decision-making. Second, data should be current enough when available.

(5) Integrity: Data that are collected, analyzed, and reported should have established mechanisms in place to reduce manipulation. There are generally two types of issues that affect data integrity.

The first is inaccurate transcription. For example, a number might be incorrectly entered into a database system or recorded in a performance report. Data integrity is at greatest risk of being compromised during collection and analysis. The second, and more complex issue, is whether there is any incentive on the part of the data source to manipulate the data. For example, if a project obtains data from stakeholders who depend on funding from the project, the stakeholder may have an incentive to skew data.

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<sup>1</sup>Definitions are derived from USAID Programming Policy, ADS Chapter 203 Assessing and Learning, p. 20.

## **Data Quality Analysis (DQA) by USAID**

USAID conducts annual DQA visits to PRICE project areas and meets partners, stakeholders, consultants. The team discusses with the partners, beneficiaries and also check on some required documents on the spot. USAID also meets PRICE personnel for this and discusses the whole data collection, quality control and reporting process in detail. Based on that, USAID prepares its annual DQA report for the project. At the middle of the project life, a team from USAID Head Office has conducted the mid-term evaluation of PRICE performance.

## **Potential for Double Counting**

PRICE works to minimize potential double counting through close coordination between sectors and technical teams. The project M&E team reviews indicators with each team and identifies areas where overlapping between sectors may occur. Once identified, the teams work together to determine how the data will be monitored and reported.

Double counting may also occur between PRICE and other USAID projects operating under SO twelve. The M&E team will identify these situations and work with partner projects to determine if the results may be better reported through one or the other project. However, in some situations, it may be appropriate for both projects to monitor the same data. In these cases, the project may still monitor and report on the data but will report the magnitude of potential overlaps. With this information, USAID is able to adjust for double counting when consolidating indicators from various partners.

## **I. Data Analysis**

After ensuring data quality, the data is processed and analyzed by the PRICE M&E. MS Excel program has been used for the processing and analysis of data so far. For the three custom indicators (increase in sales, creation of jobs and increase in investment), separate processing techniques are used for data collected from enterprises directly (by using Enterprise Data Format) and the data collected from the combined body of beneficiaries, i.e. associations or cooperatives (by using sample survey method and format). Data from sample surveys is extrapolated for getting the figure for the whole populations (taking cultivable land area as the basis). PRICE is establishing software for data entry and analysis of the collected data.

However, the process of measurement of performance is the same for both comparing performance period results with the baseline period data. The performance period data is compared with the same period in the baseline and the resulting change is taken as performance. For example, while calculating quarterly increase in sales (custom indicator 1) of a partner, the gross sales of the partner in that particular quarter is compared with the baseline sales of the partner in the same quarter in the baseline year. That means:

Increase in Sales in the quarter = Value of Sales in the quarter – Value of Baseline Sales in the same quarter

For the second indicator, 'Total number of full-time jobs created', the creation of jobs are considered across the value chain/s, wherever applicable. For the jobs created directly by the partners (only one node in a value chain), data is collected from the partners. Performance calculation from this data is as stated above: performance period data is compared with the same period in the baseline and the resulting change is taken as performance.

For estimating the additional jobs created downstream or upstream or on-farm as a result of partner activities, PRICE has drafted a Job Model (with the help of a short term consultant supervised by DCOP) by September 2010. The Job Model estimates Job Factors for different types of partners (enterprise, group of farmers) in several parts: downstream, upstream and on-farm.

The *downstream Job Factor* gives the factor by which additional labor days are used by a partner for each additional unit of production in a period. The total quantity of increased production of a partner in a period is multiplied by the respective job factor and the resulting full time equivalent job is calculated. For example, if partner A has increased its production by 500 MT in a period and partner A's downstream job factor is 5 (labor days per MT of production), the resulting full time equivalent job created downstream is:  $(500 \times 5) / 150 = 16.67$ .

With the accumulated data at hand till September 2010, *the downstream job factor* has been used to calculate additional jobs created by the enterprises and farmer groups till September 2010 and reported in the annual report of FY 2010. Since then, downstream job ratio has been used in the same way.

However, this first draft of the Job Model is being strengthened more to incorporate a larger sample. The comprehensive Job Model will help to estimate the *on-farm job factors* created by the farmer groups because in the Bangladesh scenario, a major part of the labor used in agriculture is family labors for which farmers don't keep records. The on-farm job factor in the Job Model calculates the total on-farm labor requirement factors of different partners which may include hired and/or family labor. For the accumulated data at hand till September 2010, on-farm job factor has been used to calculate additional jobs created by the farmer groups and reported in the annual report of FY 2010.

In each sector, all the partners' performances are summed up for getting the aggregate performance on the 3 indicators for the sector. Then the three sectors' performances are summed up to get the project performance.

While analyzing the data, M&E focuses on the segregation required by the definition of an indicator, i.e. by sector, age, region, export-import etc. After that, the quantitative achievements are linked back to the qualitative improvements by the partners. Qualitative results are collected through regular M&E activities as well as sector activity reports. M&E takes the consent of the technical team before establishing such relationship in the analyses.

**Attribution:**

Obviously PRICE alone is not attributable for the total improvement observed by the partners at outcome level. However, considering the difficulty in isolating attribution for agro sector where there are a multitude of variables that are impossible to control or easy to predict (such as weather and commodity prices), this report simply takes PRICE as one of the attributable factors behind the outcomes. It is assumed that any possible overestimation of performance would be offset by the various multiplier effects of the project which PRICE does not measure into project performance.

**J. Data Management Software**

The existing PRICE M&E Database is designed to follow the development of appropriate recording and reporting formats and data collection tools that are consistent with the indicators and information systems and M&E plans. Project reporting requirements have determined the type of data management, processing, analyses and reporting. Though the present system uses MS Excel application for data processing and reporting, still it takes considerable time and this situation is supposed to worsen with the higher scale of the project. Thus an automated M&E Data Management System or software that captures outputs and outcome indicators using a common user-friendly software package is being developed. This will add flexibility, efficiency to and enhance reliability of the PRICE M&E system.

Relational database structure has been used to develop the Data Management System for PRICE. This structure will allow automatic navigation in the database and support query facilities. The design includes module creation, ID creation, data analyses, upload and download options etc. Around 15 users will access the system and able to see the reports. Access to the System will be secured by password. Four of these users will have access for data entry (but not uploading) to the system modules. M&E Manager will have administrative access to the system.

PRICE already signed an agreement with Grameen Solutions Ltd., a renowned software company in Bangladesh, to establish the system. They are developing the software using Apache Web Server, MySQL-5 as database and PHP-5 as the web scripting language. AJAX and Java Script frameworks are also being used.

**K. Inclusion of FTF Indicators in PMP**

PRICE is reviewing its current PMP for including possible FTF indicators or adapting current non-contractual indicators to FTF requirement for future reporting, as advised by USAID. PRICE has already submitted necessary updates to the current PMP to USAID which is being reviewed by them now.

## ANNEX 4

<b>PRICE - Long term staff assigned to the project. Chemonics International Inc. Effective March 31, 2012</b>				
<b>No.</b>	<b>Title</b>	<b>Employee name</b>	<b>Commencement date</b>	<b>Current Status</b>
<b>Bangladesh Office Staff</b>				
<b>DHAKA based proejet staff</b>				
1	Chief of Party	Tim K. Ekin	February 10, 2012	On going
2	Strategic Competitive Fund Manager	A.B.M. Nurul Islam	April 17, 2008	On going
3	Adminisration Assistant	Mosammat Shamima Afroz	March 31, 2009	On going
4	Program Information and Associate	Tahmina Hussain	June 20, 2011	On going
5	Finance Manager	Mohammad Raihan Sadaat	May 16, 2008	On going
6	Accountant	Md. Yasin Ali Shadat	August 16, 2009	On going
7	Team Leader, Aquaculture Sector	Md. Abul Hossain	July 24, 2008	On going
8	Aquaculture Specialist	Tanvir Islam	May 26, 2009	On going
9	Aquaculture Sector Advisor	ATM Akter Hossain Khan	November 15, 2009	On going
8	Team Leader, Horticulture Sector	Dr. A. B. Siddiqui	May 25, 2009	On going
9	Horticulture Specialist	Md. Mizanur Rahman	July 24, 2011	On going
10	Team Leader, Leather & Leather Products Sector	S.M. Hasan Iqbal	July 2, 2009	On going
11	Training & Equity Manager	Mahmuda Akter Khan	December 15, 2008	On going
12	Communications Specialist	Bushra Rahman	June 12, 2011	On going
13	Manager, M&E	Shafinaj Rahman	July 1, 2009	On going
14	M&E Specialist	Md. Nasirul Islam	November 3, 2009	On going
15	Data Specialist	Mohammad Mozammal Huq	July 3, 2011	On going
16	Office Helper	Zillur Rahman	May 18, 2008	On going
17	Office Helper	Mohammad Belal Uddin	June 21, 2009	On going
<b>Subcontractor staff - DEXIS, based from the PRICE, Dhaka office</b>				
1	Sector Development Advisor - Leather and Leather product , <b>Dexis</b>	Md. Amirul Islam	August 1, 2009	On going
2	Manager, Fish Subsector, Aquaculture, <b>Dexis</b>	M. Nurul Islam	May 1, 2008	On going
<b>PRICE Jessore Office 196/A (2nd Floor), Puraton Kashba, Kazipara, Kathaltala, Jessore,</b>				
1	Aquaculture Sector Advisor	Md. Abdul Mannan	January 2, 2011	On going
2	Sector Dev. Specialist-Horticulture	Md. Sazzad Hossain	January 1, 2010	Resigned March 15, 2012
<b>PRICE Bogra Office Tokyo House, (3rd Floor), H# 8, R # 27, Upashore, Bogra</b>				
1	Aquaculture Sector Advisor	Md. Abdul Baten Bhuiyan	November 22, 2009	On going

2	Horticulture Sector Advisor	Md. Abdul Mannan Sarker	December 15, 2009	On going
<b>PRICE Cox's Bazar Office</b>				
1	Aquaculture Sector Advisor	Kazi Azadur Rahman	November 16, 2009	On going
<b>USA, Home Office- Project Management Unit-PRICE</b>				
1	Director, Asia Region	Rebecca Talaga Leach		
2	Manager- Asia Region	Christopher Bergerson		
3	Associate Asia	Saman Nazami		

**PRICE. Summary of all national consultants recruited for differing durations to support the Horticulture, Aquaculture and Leather Components during January to March 2012.**

**Table PRICE. Short term national consultants to support the Horticulture Component**

#	Designation	Name	Assignment purpose	Organization supported by PRICE	# days authorized	Duration of contract	
						Start	End
1	Field Supervisor	Mr. Md. Faruk Hossain	to increase quality production of table and seed potato by following scientific potato production methods	Shibgong Upazila Farmers Cooperative Society Ltd. (SUFCSL)	110	5-Feb-12	30-Jul-12
2	Potato Agronomist	Mr. Md. Sahidul Islam	to increase quality production of table and seed potato by following scientific potato production methods	Murail Rural Development Multipurpose Cooperative Society Ltd. (MRDMCSL)	120	5-Feb-12	15-Aug-12
3	Field Supervisor	Lovely Yasmin	to increase safe and good quality vegetables particularly egg plant, bittergourd, and other high value crops through improved horticultural farming approach	Rural Reconstruction Foundation (RRF)	122	5-Feb-12	30-Aug-12
4	Field Supervisor	Mr. Sarajit Bawali	to increase safe and good quality vegetables particularly egg plant, bitter gourd, and other high value crops through improved horticulture farming approach	Rural Reconstruction Foundation (RRF)	122	5-Feb-12	15-Aug-12
5	Field Supervisor	Dapankar Biswas	to increase safe and good quality vegetables particularly egg plant, bittergourd, and other high value crops through improved horticultural farming approach	Rural Reconstruction Foundation (RRF)	122	5-Feb-12	30-Aug-12
6	Field Supervisor	Zerin Fahmi Lata	to increase safe and good quality vegetables particularly egg plant, bittergourd, and other high value crops through improved horticultural farming approach	Rural Reconstruction Foundation (RRF)	120	5-Feb-12	30-Aug-12
7	Field Supervisor	SM Abu Rasell	to increase safe and good quality vegetables particularly egg plant, bittergourd, and other high value crops through improved horticultural farming approach	Rural Reconstruction Foundation (RRF)	122	5-Feb-12	30-Aug-12
8	Field Organizer	Mr. Mahmudul Hasan	to increase quality production of vegetables through improved farming practices	Rural Reconstruction Foundation (RRF)	120	5-Feb-12	15-Aug-12
9	Field Organizer	Nirapada Barman	to increase quality production of vegetables through improved farming practices	Rural Reconstruction Foundation (RRF)	120	6-Feb-12	15-Aug-12
10	Field Organizer	Mrs. Arifa Haqu	to increase quality production of vegetables through improved farming practices	Rural Reconstruction Foundation (RRF)	120	6-Feb-12	15-Aug-12

11	Field Supervisor	Mr. Md. Abdur Rashid Sarkar	to increase quality production of table and seed potato by following scientific potato production methods. Through this assignment PRICE and GSPF will jointly work for enhancing knowledge and skill of farmers, workforce and their staffs on improved farm management (land preparation to harvesting), post harvest handling, proper packaging, storing and preservation, safe transportation and marketing.	Shibgonj Upazila Farmers Cooperative Society Ltd (SUFCSL)	110	6-Feb-12	30-Jul-12
12	Field Supervisor	Mr. Md. Tajmul Hossain	The objective of the assignment is to increase quality production of disease free potato seeds from tissue culture plantlets in the net house and further multiplication in the field for producing disease free seed potato by following standard protocol for production of seed potato.	Potato Growers Cooperative Society Limited, (SPGCSL)	88	6-Feb-12	30-Jun-12
13	Market Development Specialist	Mr. Md. Amer Sultan	to organize a marketing network for the plantlets, tuber-lets, breeder seed, foundation seed and certified seeds of potato so that the planting material reaches timely and safely to the intended users, (seed growers, companies, and potato growers).	Ferdous Biotech(pvt)Ltd	66	6-Feb-12	30-Jul-12
14	Field Organizer	Mir Mahabub Hasan	to increase quality production of vegetables through improved farming practices	Rural Reconstruction Foundation (RRF)	120	6-Feb-12	15-Aug-12
15	Field Supervisor	Mr. Md. Anwarul Islam	To increase production of potato and other high value crops of the farmers of Bogra from the available best quality seeds by following good agricultural practices and support farmers in increasing their yield and assist in market linkage	Gram Unnayan Kendra Enterprise Development (GUKED)	110	7-Feb-12	15-Aug-12
16	Field Supervisor	Mr. Md. Sohel Uddin Samad	To increase production of potato and other high value crops of the farmers of Bogra from the available best quality seeds by following good agricultural practices and support farmers in increasing their yield and assist in market linkage	Gram Unnayan Kendra Enterprise Development (GUKED)	110	7-Feb-12	15-Aug-12
17	Agriculture Consultant	Mr. Md. Khorshed Ali Talukter	To increase quality production of disease free potato seeds, table potato, tomato, egg plant, green chilli etc.	Gram Unnayan Kendra Enterprise Development (GUKED)	120	7-Feb-12	15-Aug-12
18	Field Supervisor	Mr. Md. Mosharraf Hossaon	to increase quality production of disease free potato seeds from tissue culture plantlets in the net house and further multiplication in the field for producing disease free seed potato by following standard protocol for production of seed potato.	Seed Potato Growers Multipurpose Cooperative Society (SPGMCS)	88	7-Feb-12	30-Jun-12
19	Field Supervisor	Mr. Atiar Rahaman	to increase quality production of table and seed potato by following scientific potato production methods	Konika Seed Company (Pvt.) Ltd. (KSCPL)	88	7-Feb-12	30-Jun-12

20	Field Supervisor	Mr. Md Ruhul Amin	to increase quality production of table and seed potato by following scientific potato production methods	Jagoroni Agro Industries (JAI)	120	7-Feb-12	15-Aug-12
21	Field Supervisor	Mr. Shaikh Anwar Ali	to increase safe and good quality vegetables particularly egg plant, bitter gourd, and other high value crops through improved horticulture farming approach	Environment Friendly Agricultural Development Foundation (EFADF)	122	7-Feb-12	15-Aug-12
22	Field Supervisor	Mr. Md. Golam Hossain	to increase safe and good quality vegetables particularly egg plant, bitter gourd, and other high value crops through improved horticulture farming approach	Environment Friendly Agricultural Development Foundation (EFADF)	122	7-Feb-12	15-Aug-12
23	Field Organizer	Mr. Md. Kamrul Islam	to increase quality production of vegetables through improved horticulture farming approach	Environment Friendly Agricultural Development Foundation (EFADF)	120	7-Feb-12	15-Aug-12
24	Field Supervisor	Md. Abdul Jabbar	to increase quality production of table and seed potato by following scientific potato production methods	PRIDE Agro Enterprises (PAE)	120	7-Feb-12	15-Aug-12
25	Field Organizer	Mr. Pankoj Udas Mondal	to increase quality production of vegetables through improved horticulture farming approach	PRIDE Agro Enterprises (PAE)	120	7-Feb-12	15-Aug-12
26	Field Organizer	Afia Khatun	to increase quality production of vegetables through improved horticulture farming approach	PRIDE Agro Enterprises (PAE)	120	7-Feb-12	15-Aug-12
27	Field Supervisor	Mr. Md. Sagim Uddin Sheikh	to increase quality production of table and seed potato by following scientific potato production methods	PRIDE Agro Enterprises (PAE)	120	7-Feb-12	15-Aug-12
28	Field Supervisor	Mr. MM Abdul Haque	to increase quality production of table and seed potato by following scientific potato production methods	PRIDE Agro Enterprises (PAE)	120	7-Feb-12	15-Aug-12
29	Horticulture Production Consultant	Mr. Md. Kayes Samim	to increase quality production of table and seed potato by following scientific potato production methods	PRIDE Agro Enterprises (PAE)	90	7-Feb-12	30-Jun-12
30	Market Development Specialist	Mr. Zakir Hossain	Marketig network development, linkage, market promotions, sales inventoryand logistics	Konika Seed Company (Pvt.) Ltd. (KSCPL)	50	7-Feb-12	30-May-12
31	Potato Production Expert	Mr. Md. Feroz Hossain	to increase quality production of disease free potato seeds from tissue culture plantlets in the net house and further multiplication in the field for producing disease free seed potato by following standard protocol for production of seed potato.	Unique Seed Company (USC)	50	7-Feb-12	30-Jun-12
32	Field Supervisor	Mr. Md. Sahinur Alam	to increase quality production of table and seed potato by following scientific potato production methods	Shibgong Upazila Farmers Cooperative Society Ltd. (SUFCSL)	110	9-Feb-12	30-Jul-12
33	Potato Seed Production and Tissue Culture Expert	Dr. Md. Abdus Siddique	to increase quality production of table and seed potato by following scientific potato production methods for helping in easier supply of good potato seed contributing to increased potato production	Rural Development Academy (RDA)	80	9-Feb-12	15-May-12

<b>Completed</b>							
1	Consultant Crop Production Expert	Mr. Md. Minarul Haq	to to provide training on improved farm management practices to 330 selected farmers , build capacity of the farmers on cultivation of egg plant and other horticultural crops , proper harvesting and post harvest management and and marketing.	Muktir Alo Agro Business (MAAB)	50	24-Mar-11	31-Jan-12
2	Training and Marketing Specialist	Mr. Md. Ansarul Hoque	to address the constraints faced by commercial farmers and GKSSE in marketing their produces	GKSSE	120	12-Jul-11	11-Jan-12
3	Agriculture Consultant	Mr. A.B.M. Mahmudul Hasan	to provide training on improved farm management practices to 3500 selected farmers , build capacity of the farmers on cultivation of potato egg plant and other horticultural crops , proper harvesting and post harvest management and and marketing.	GUKED	120	12-Jul-11	11-Jan-12
4	Extension and Organizational Strengthening Supervisor	Mr. Md. Moklasour Rahman	to increase quality production, harvest and post harvest handling of mango by following scientific mango production and post production methods.	KMFMCSL	120	27-Jun-11	31-Mar-12
5	Field Supervisor	Mr. Syed Abu Jafar	to increase quality production of table and seed potato by following scientific potato production methods.	Muktir Alo Agro Business (MAAB)	120	3-Jul-11	30-Mar-12
6	Field Supervisor	Mr. Shahnawaz Shaon	to increase quality production of Egg plant table and Potato by following scientific production methods.	Muktir Alo Agro Business	120	24-Jul-11	30-Mar-12
7	Market Development Specialist	Mr. A.K.M. Faruque	Organize a marketing network for the plantlets, tuber-lets, breeder seed, foundation seed and certified seeds of potato so that the planting material reaches timely and safely to the intended users, (seed growers, companies, and potato growers).	Blue Moon International (BMI)	66	1-Nov-11	28-Feb-12
8	Market development Supervisor	Mr. Md. Tarek Hasan	to organize a marketing network for the plantlets, tuber-lets, breeder seed, foundation seed and certified seeds of potato so that the planting material reaches timely and safely to the intended users, (seed growers, companies, and potato growers).	Technology for Rural Development (TFRD)	66	21-Nov-11	31-Mar-12
9	Marketing Officer	Mr. Md. Abdur Rasid	to assist in organizing a marketing network for the carbide free good quality mature mango so that the timely and safely to the intended users i.e. consumers.	Konika Seed Company (Pvt.) Ltd. (KSCPL)	90	27-Nov-11	31-Mar-12
10	Field Supervisor	Mr. Md. A. Mottaleb	to increase quality production of table and seed potato by following scientific potato production methods.	Krishok Bandhu Karmashuchi (KBK)	122	16-Aug-11	29-Feb-12
11	Field Supervisor	Mr. Md. Sha Alam Molla	to increase quality production of table and seed potato by following scientific potato production methods	Krishok Bandhu Karmashuchi (KBK)	122	16-Aug-11	29-Feb-12

**Table PRICE. Short term national consultants to support the Aquaculture Component**

1	Mr. Md. Abdus Sattar	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Society for Social Services (SSS)	120	4-Oct-11	30-Apr-12
2	Mr. Md. Nasir Uddin	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Society for Social Services (SSS)	120	4-Oct-11	30-Apr-12
3	Mr. Hasan Hafizur Rahaman	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Barisal Aquaculture Development Society (BAD)	50	13-Oct-11	30-Mar-12
4	Mr. Md. Abul Hossain Miah	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Trinomool Krishi Unnayan Samabaya Somity (TKUSS)	65	13-Dec-11	31-May-12
5	Md. Anwarul Islam	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Rakhaing Development Foundation (RDF)	55	13-Dec-11	31-May-12
6	Mr. A. M. Shahabuddin	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Rakhaing Development Foundation (RDF)	55	13-Dec-11	31-May-12
7	Mr. Md. Nazrul Islam	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Trinomool Krishi Unnayan Samabaya Somity (TKUSS)	65	13-Dec-11	31-May-12
8	Mr. Md. Aktaruzzamn Sultany	Field Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Bamunji Beel Motsojibi Somoty (BBMS)	100	13-Dec-11	31-May-12

9	Ms. Eayen	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Rakhaing Development Foundation (RDF)	70	13-Dec-11	31-May-12
10	Ms. Anar Koli	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Trinomool Krishi Unnayan Samabaya Somity (TKUSS)	120	13-Dec-11	31-May-12
11	Mr. Md. Ruhul Amin	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Rakhaing Development Foundation (RDF)	60	13-Dec-11	31-May-12
12	Mr. Md. Al – Masud	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Raju Enterprises (RE) & Mondal Fish (MF)	48	3-Jan-12	30-Jun-12
13	Mr. Md. Serajul Karim	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Ghondamari Mtsyagibi Samabaya Somity (GMSS)	35	3-Jan-12	30-Jun-12
14	Mr. Mohammed Shahajat Ali	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Center for Integrated Social Development (CISD)	40	3-Jan-12	30-Jun-12
15	Mr. Md. Shah Nawaz Munshi	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Chittra Development Center (CDC)	40	3-Jan-12	30-Jun-12
16	Mr. Md. Alam Hossain	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Center for Integrated Social Development (CISD)	40	3-Jan-12	30-Jun-12
17	Mr. S.M. Humayun Kabir	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Center for Integrated Social Development (CISD)	40	3-Jan-12	30-Jun-12

18	Mr. Saleh Uddin Ahammed	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Kahaloo Motsya Chashi Somoby Somity (KMCSS)	30	3-Jan-12	30-Jun-12
19	Mr. Sukumar Biswas	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Fish (SF)	33	3-Jan-12	30-Jun-12
20	Mr. S. Humayun Kabir	Aquaculture Consultant	to strengthen PRICE partnered fish & shrimp processing factory through training to its staff/workers and associated suppliers on food safety, cool chain management, post-harvest handlings	MFPL, RSFL, OSET, JFFL, MUSF, JSFL	57	0-Jan-00	30-Apr-12
21	Mr. Subir Obayed	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Fishtech Bd Ltd. (FTL)	50	6-Feb-12	31-Jul-12
22	Mr. Adhir Chandra Das	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Yunus Fishing Ltd (YFL.)	30	7-Feb-12	31-Jul-12
23	Mr. K.M. Alauddin	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Agriculture Advisory Society (AAS)	65	7-Feb-12	31-Jul-12
24	Mr. Md. Arifur Rahman	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Pachpir Bazar Matsya Chashi Samoby Somity (PBMCSS)	10	7-Feb-12	31-Jul-12
25	Mr. Mohammad Abdul Awal	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Pally Budhu Kallan Sanghta (PBKS)	80	7-Feb-12	31-Jul-12
26	Dr. Moin Uddin Ahmad	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Islamic Fishing limited (IFL)	25	7-Feb-12	31-Jul-12

27	Mr. A.H.M. Golam Haider Khan	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	SMS Feed Limited	15	7-Feb-12	31-Jul-12
28	Mr. Khandoker Shafiqul Islam	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security	Niribilli Tilapia Hatchary (NTH)	35	7-Feb-12	31-Jul-12
29	Mr. Md. Abul Hashem	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Bamunjee Beel Motsyjibi Somity (BBMS) and Jono Seba Kendro (JSK)	65 BBMS - 20 & JSK - 45	7-Feb-12	31-Jul-12
30	Mr. Muhammed Abdul Quddus Akanda	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institutions (ASIs), associations/enterprises at assigned location(s) through training its members on improved aquaculture practices, better food safety and rural food security.	Phulpur Fish & Prawn Farmer's Association (PFPFA)	20	7-Feb-12	31-Jul-12
31	Mr. Chandan Sarkar	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Satata Fish (SF) and Mondal Fish (MF)	120 days (MF -50 & SF - 70)	7-Feb-12	31-Jul-12
32	Miss Dipti Roy	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Razu Enterprise (RE)	60	7-Feb-12	31-Jul-12
33	Mr. Md. Anowar Hossain	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Agricultural Advisory Society (AAS)	60	7-Feb-12	31-Jul-12
34	Mr. Krishno Pada Pramanik	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Global Islami Multipurpous co-operative Society Ltd. (GIMCS)	100	7-Feb-12	31-Jul-12
35	Mr. Md. Haronur Rasaid	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Kahaloo Matsya Chashi Samoby Somity (KMCSS)	120	7-Feb-12	31-Jul-12

36	Mr. Md. Sayed Rafiqul Islam	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Murail Matsya Chashi Samoby Somity (MMCSS)	90	7-Feb-12	31-Jul-12
37	Mr. Mohammed Nurul Islam	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	SMS Feeds Ltd (SMS)	100	7-Feb-12	31-Jul-12
38	Mr. Md. Salim Ali PK	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	PBMCS	80	7-Feb-12	31-Jul-12
39	Mr. Md. Zahangir Alam Mondal	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Polli Badu Kollyan Shengastha (PBKS)	100	7-Feb-12	31-Jul-12
40	Mr. Md. Abdul Hamid Shaikh	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Banchte Shekha (BS)	40	7-Feb-12	31-Jul-12
41	Mr. Md. Masudur Rahman	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Banchte Shekha (BS)	40	7-Feb-12	31-Jul-12
42	Mr. Md. Mazibur Rahman	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Mourail Motsy Chashi Somity (MMCS)	25	7-Feb-12	31-Jul-12
43	Mr. Md. Mursheduzzaman	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Din Bijoy Enterprise (DBE)	35	7-Feb-12	31-Jul-12
44	Mr. Md. Anowar Hossain	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Agricultural Advisory Society (AAS)	60	7-Feb-12	31-Jul-12

45	Mr. Subrota Kumar Ghosh	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Agricultural Advisory Society (AAS)	60	7-Feb-12	31-Jul-12
46	Mrs. Krishna Rani Mondal	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Din Bejoy Enterprise (DBE)	120	8-Feb-12	8-Aug-12
47	Mr. Mohammad Mosabbir Hasan	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Deesha Samaj Kolyan Sanghtha (DEESHA)	35	10-Feb-12	31-Aug-12
48	Mr. Satchidananda Biswas	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Shushilan	40	15-Feb-12	31-Aug-12
49	Mr. Sudhindra Nath Sarkar	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Global Islami Multipurpose Cooperative Society Ltd (GIMCS)	70	15-Feb-12	31-Aug-12
50	Mr. Md. Surat Ali	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	for Modina Motsya Prokalpa (MMP)	35	15-Feb-12	31-Aug-12
51	Mr. Md. Harun -Ar-Rashid	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Agricultural Advisory Society (AAS)	25	15-Feb-12	31-Aug-12
52	Mr. A.H.M Rezaul Haq	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Banchte Shekha (BS)	40	15-Feb-12	31-Aug-12
53	Mr. S.M. Abul Basar	Aquaculture Consultant	to strengthen PRICE partnered Aquaculture support institution (ASI)/enterprises at assigned location(s) through training its members/beneficiaries on improved aquaculture practices, better food safety and rural food security.	Nokla Motsyajibi Somity (NMS)	30	15-Feb-12	31-Aug-12

54	Ms. Shahina Perveen Anny	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security	SHUSHILAN	60	15-Feb-12	31-Aug-12
55	Mr. Md. Mahabub Alam	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Centre for Integrated Development (CISD)	60	15-Feb-12	31-Aug-12
56	Ms. Sumona Mortoja	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Banchte Shekha (BS)	60	15-Feb-12	31-Aug-12
57	Md. Masum Belal	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Banchte Shekha (BS)	60	15-Feb-12	31-Aug-12
58	Mrs. Sufia Begum	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	DEESHA	90	15-Feb-12	31-Aug-12
59	Mr. Tapas Mondal	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Centre for Integrated Development (CISD)	60	15-Feb-12	31-Aug-12
60	Mr. Sarder Abdul Hai Miha	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Chittra Development Center (CDC)	60	15-Feb-12	20-Aug-12
61	Ms. Rupsana Khatun	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Chittra Development Center (CDC)	60	15-Feb-12	20-Aug-12
62	Ms. Madhabilata Roy	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Gondhamari Matshyajibi Somabaya Somiti (GMSS)	80	15-Feb-12	31-Aug-12

63	Mr. Nripen Maitra	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Modina Matshya Prokolpo (MMP)	100	15-Feb-12	31-Aug-12
64	Mr. Ruhul Amin	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Niribili Tilapia Hatchery (NTH)	70	15-Feb-12	31-Aug-12
65	Mr. Md. Saifuddin	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Islamiya Fishing Limited (IFL)	50	15-Feb-12	31-Aug-12
66	Mr. Md. Salimuzzaman	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	SHUSHILAN	60	15-Feb-12	31-Aug-12
67	Mr. Shah Md.Hasin Shad	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Yunus Fishing Limited (YFL)	60	15-Feb-12	31-Aug-12
68	Mr. Sujit Kumar Roy	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Mulia Matshyajibi Samittee (MMS)	90	15-Feb-12	31-Aug-12
69	Mr. Muhammed Ariful Huq	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Digerkanda Mostapona Beboshahi Bohumoki Somabaya Somitoi (DMBBSS)	90	15-Feb-12	30-Sep-12
70	Mr. Md. Rabekul Islam	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	FishTech (FTL) Ltd.	100	15-Feb-12	31-Aug-12
71	Zahidul Islam	Aquaculture Group Organizer	to strengthen PRICE partnered Aquaculture support institution (ASI) at assigned location(s) through backstop assistance its members for arrange of training, field monitoring of improved aquaculture/fish processing practices and rural food security.	Jono Seba Kendro (JSK)	90	15-Feb-12	30-Sep-12

**Table PRICE. Short term national consultants to support the Leather Component**

#	Designation	Name	Assignment purpose	Organization supported by PRICE	# days authorized	Duration of contract	
						Start	End
1	Assistant Trainer	Mr. Md. Anwar Hossain	The objective of the assignment is to assist the lead trainer and to carry out the training of participants.	Bengal Shoes Industries Ltd	120	25-Jul-11	23-Feb-12
2	Lead Trainer	Mr. Md. Atiqul Islam	The trainer will train unskilled workers in sewing, cutting and lasting operations both theoretically and practically in the footwear industry to make them able to adjust with mechanized mass production system.	Bengal Shoes Industries Ltd.	120	25-Jul-11	23-Feb-12
3	Assistant Trainer	Mr. Md. Moshir Rahman	The objective of the assignment is to assist the lead trainer and to carry out the training of participants.	Bengal Shoes Industries Ltd	120	25-Jul-11	23-Feb-12
4	Sector Expert	Mr. Sikder Abu Naser	The expert will capitalize his expertise in preparing and delivering a power point presentation to train 40 participants of 20 producers of Aarong on proper/modern shoe and leather-goods making and impact of proper manufacturing process	Aarong	5	22-Aug-11	27-Aug-12
5	Lead Trainer	Mr. Debdulal Ray	to train unskilled workers in sewing, cutting and lasting operations both theoretically and practically in the footwear industry to make them able to adjust with mechanized mass production system.	Filanto Bangladesh Footwear Limited. Apex Leather Craft. Fashion Accessories Limited	180	20-Nov-11	19-Aug-12
6	Trainer	Most. Suraya Begum	to provide hands on training and TOT to apprentice machine operators and to carry out the training of new trainees at PICARD, Savar, Dhaka.	Picard Bangladesh ltd.	190	15-Nov-11	30-Aug-12
7	Trainer	Mr. Md. Arifur Rahman Bhuiyan	The objective of the assignment is to provide hands on training and TOT to apprentice machine operators and to carry out the training of new trainees at COEL, Gazipur.	COEL	120	2-Jan-12	30-Jun-12
8	Trainer	Mr. Md. Nahiduzzaman	The objective of the assignment is to provide hands on training and TOT to apprentice machine operators and to carry out the training of new trainees at COEL, Gazipur	COEL	120	2-Jan-12	30-Jun-12
9	Training Coordinator	Mr. Shakir Elahi Md. Fahim	The objective of the assignment is to provide hands on training and TOT to apprentice machine operators and to carry out the training of new trainees at COEL, Gazipur.	COEL	120	2-Jan-12	30-Jun-12

10	Coordinator and Facilitator	Mr. Ariful Bashar	The consultant will assist 16 enterprises to develop new product line for the DITF-2012 and will also coordinate the activities/development of the participating members and post evaluation of the DITF, 2012.	16 leather enterprises	25	5-Jan-12	31-Mar-12
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