

Project Completion Report
On
**Aquaculture Business Development through Local Service Provider (LSP) in Cox's
Bazar**



Submitted to



Bangladesh Aquaculture and Nutrition Activities (BANA)
World Fish, House 2/B, Road, Banani, Dhaka, Bangladesh

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Abbreviation and Acronomes

LSP	Local Service Provider
DoF	Department of Fisheries
GoB	Government of Bangladesh
KPI	Key Performances Indicator
DAE	Department of Agriculture
USAID	United State Agency for international Development
IOM	International Organization of Migration
MEL	Monitoring Evaluation and Learning
DIP	Details Implementation Plan
BANA	Bangladesh Aquaculture and Nutrition Activities
BDC	Business Development Coordinator
BDO	Business Development Officer
MF	Market Facilitator
CFC	Community Feed Centare
FO	Field Officer
ZoR	Zone of Resilences Coordinator

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Aquaculture market challenges in Cox's Bazar district include lack of access to information of improved aquaculture business including nutrition sensitive aquaculture, forward markets and lack of access to required capital from formal financial institutions to grow and maintain growth of their aquaculture business. For this reason Prottiyashi will start a Aquaculture Business Development through Local Service Provider with the technical support of WorlFish Bangladesh and funded by USAID Feed the Future BANA Project USAID Project. Where objective were income generation reduce nutrition deficiency through homestead aquaculture, nutrition, hygiene issues, aquaculture business development, access to the fianaces and identified the systemic constraints that has to be addressed for the sustainability of the aquaculture business through LSPs. During the project extension period (from 01 October2022 to August 2023) project also intended to establish a carp hatchery by a private sector and established one feed mills in ZoR for Community at Ramu & Chakaria for good quality inputs support.

On the Basis of Project implementation Prottiyashi made agreement with WorldFish Bangladesh after that made Details implementation Plan (DIP), Completed Staff recruitment one Business Development Coordinator, One Finance and Admin Officer, Two field Officer. After joining all staff a day long Project orientation meeting organized with BDC-1, Finance and Admin bfficer-1, Field Officer-2, program Focal-L, ED PROTTASHI-1, WF-1, Branch Manager-2). BDC prepared training modules, Leaflet etc collaboration with WorldFish Team. BDC will prepare a presentation on project activities. PROTWASHI management will prepare presentation and discuss on PROTTYASHI policies like-Human Resource policy, Gender, Sexual Harassment, Finance policy, Zero Toleranc policy. During the project extension period (from 01 October2022 to 31 August 2023) included new working area Chakaria Upazila of Cox's Bazar district under the intervension & recruited as BDO-3 & MF-3 in three Upazila for project activities smoothly implementation

For project implementation, 20 LSP (10 Nurserer, 6 fish feed trader and 4 Fingerling trader) was selected. Those LSP selected 480 family farmer collaboration FOs from Ramu and Ukhiya upazilla under Cox's Bazar District. Then Provided training on Improve Aquaculture and business development by 20 groups. FO assisted them during farmer selection and training and Prottiyashi management and WorldFish representative regular monitoring. FOs from Prottiyashi selected 120 family farmer by 7 Groups and provided training on Carp mola poly culture and dike cropping for nutrition sensitive farmer. For Business development Prottiyashi provided Sacchi disk, DO kit, P^H meter, Feed for fish, Signboard, leaflet, Oxygen cylinder, fish fry and acclimitization materials to LSPs and reducing vulnerabilities, Income generation and reducing nutrition deficiency Prottiyashi provided fish fingerling, vegetable seed etc. For awareness raising Prottiyashi organized International youth day, National fish week collobaration with DoF and Nutrition day program.

During the project extension period (from 01 October 2022 to 31 August 2023) BDOs of three upazila selected & trained new 10 LSPs now a total of LSPs 30 & they have facilitated 572 old farmers training on Improved aquaculture out of 600, new 160 farmers trained on nutrition sensitive aquaculture, & 180 new farmers trained on improved shrimp culture & BMP collaboration with BDOs & MFs & supported to distributed good quality aqua inputs to new 340 trained farmers such as fish fingerling, shrimp PLs & vegetables seeds for cultivation on the homestead pond dyke & homestead area & regular basis follow up & provided necessary technical services to the fish & shrimp famers. For Aquaculture business development & extension Prottiyashi provided to 15 LSPs in three upazila Sacchi disk, thermometer, P^H meter, DO kit, fish feed, oxygen cylender, fish fry & nursery feed.

Important Lessons Learned form the project are: 1. Due to Rohunga influx and food security is challenged and for these reason people need to provide extension support to farmer for ensuring the food security and Zero Hunger; 2. Need to established Carp Hatchery in this region; 3. More extension support will be needed from Govt. and Private sector; 4. Strengthen the linkage between different stakeholder; 5. Saline tolerable and first growing fish species should consider for aquaculture and 6. Up date survey program needed; 7. Long term programme. 8. Carp fattening technology should be adopted to ensure increase productivity of the small holder fish farmers. 09. Encourage the aquaculture farmers to stock yearling to their ponds. 10. Nursing shrimp Juvenile stock to gher/ponds practices should be developed in shrimp culture area of Ramu & Chakaria Upazila. 11. Develop carp nursery with acclimatization facilities & transport support to reduce the stress & mortality of fingerling.

Duration of Project: First phase of the project started on April 01, 2022 and closed dated September 2022 with budgeted Project Cost total BDT 3577,894 here cash contribution from worldFish 2945, 536 and in kind BDT150,000, Subgrantee contribution BDT 440,358 and in kind contribution BDT 42,000.

Project extended from 01 October 2022 to 31 August 2023 with revised budgeted total cost 15,184,885 BDT here BAA contribution was BDT 11,816,527 (78%) & subgrantee private sector Niribili Group contribution was BDT 3,368,358 (22%)

From the project 20 LSP (10 nurserer, 6 fish feed trader and 4 fingerling trader) received skill development training provide extension support to local farmer and neighbour also they improved their business activities. 600 fish farmer improved their fish culture activities after receiveing traing also they built awareness about nutrition sensitive issue and income generation.

From the project extension period a total of 30 including new & old LSPs (Nurserer 17, Feed traders-11 & Pathilwala-02) received freshers TOT & provided support to trained farmers extension materials for

aquaculture business development. 572 fish farmers, 160 new sensitive aquaculture farmers & 180 shrimp farmers improved their aquaculture activities after receiving the training & 170 farmers received the microcredit support from Prottiyashi MF program also they build awareness about small fish nutrition, personal hygiene issue.

1.0 Project Background (Maximum 4 pages)

1.1 Brief about the sectoral constraints (shortly context) that need to be addressed) and rationale of intervention

Aquaculture business development challenges in Cox's Bazar district include lack of access to information of improved aquaculture business including nutrition sensitive aquaculture, good quality inputs, cyclone, heavy rainfall, drought, high temperature due to climate change, forward markets and lack of access to required capital from formal financial institutions to grow and maintain growth of their aquaculture business. About 77.3 per cent of aquaculture farmers in the country cannot access credit from banks due to lack of collateral (Financial Express, dated on 4 October 2020). As a result, many of them are compelled to borrow from various other sources, including relatives, money lenders at a much higher rate of interest, often leading to severe hardship for them. The mean per unit aquaculture production from pond in Cox's Bazar is the lowest in Bangladesh and very poor (3.28 MT/ha) than the mean national aquaculture production (5.06 MT/ha) while the annual total aquaculture production from pond in Cox's Bazar district is reported at 4737 MT (DoF 2020). This indicates that there is a potential of rapid and huge increase of aquaculture production in Cox's Bazar by using improved aquaculture in homestead ponds to increase their income and nutritional status through increased productivity. Prottiyashi implemented different kind of development activities in different project including micro credit program and previously implemented aquaculture based project titled "Promoting Aquaculture and Nutrition Sensitive Interventions in Cox's Bazar (PANSI)" in Sadar and Ramu and Ukhiya Upazilas from June 2019 to July 2020 with the technical assistance of WorldFish Bangladesh funded by USAID Feed the Future BANA Programme in Bangladesh. So using this lesson Prottiyashi started new program with the technical assistance of WorldFish Bangladesh funded by Feed the Future USAID which started from 01 October 2022 ended 31 August 2023.

1.2 Project objectives (specific)

- Improved homestead aquaculture, nutrition, hygiene issues and identified the systemic constraints that has to be addressed for the sustainability of the aquaculture business.
- The project plans to develop the fish farmers in Cox's Bazar as aquaculture entrepreneurs addressing the systemic constraints of different market actors to aquaculture development facilitating and developing the Local Service Providers (LSPs) especially fish nurseries including Patilwala, feed agents/dealers and fish traders to ensure the supply of necessary goods and services to the producers for the successful promotion of nutrition sensitive aquaculture business in sustainable manner.
- The market actors are continued aquaculture business at commercial scale with the loan support from Prottiyashi that will bring ultimately economic benefit for the organization (Prottiyashi) as well as for LSPs.
- Adoption of carp fattening technology demonstrations & extension, establishment of carp hatchery by private sector & community feed mill by LSP(Nurserer)

1.3 Geographical coverage (a graph would be great)

Covering area Ukhiya and Ramu Upazilla under Cox's Bazar district Project

On the Basis of Project implementation Prottiyashi made agriment with WorldFish Bangladesh for 6 months project and recruited projected staff which was started dated was April 01, 2022 and closed dated September 2022.

During the project extended period Prottiyashi made revised agreement with with WorldFish Bangladesh for 11 months project from 01 October 2022 to 31August 2023 & recruited project staffs & extened this intentervension at Chakaria Upazila.

1.4 Key matrices achieved

After joining all staff a day long Project orientation meeting organized with the participants of BDC-1, Finance and Admin officer-1, Field Officer-2, Program Focal-1, ED Prottiyashi-1, WF-1, Branch Manager-2) in PROTTYASHI project Office. From the project 20 LSP (10 nurserer, 6 fish feed trader and 4 fingerling trader) received skill development training provide extension support to local farmer and neighbour also they improved their business activities 480 farmers received training on improve aquaculture and business development training through 20 LSPs in the respective groups at community level. Besides, 120 farmers received training on Improved aquaculture and nutrition sensitive training. Business development materials such as Sacchi disk, DO kit, P^H meter, Feed for fish, Signboard, leaflet, Oxygen cylinder, fish fry and acclimitization materials was distributed among the LSP and Fish farmer received fish fingerling, vegetable seed etc from Prottiyashi. For awareness raising Prottiyashi organized Internationa youth day, National fish week collobaration with DoF and Nutrition day program. Hence, 600 fish farmer improved their fish culture activities after receiveing traing also they built awareness about nutrition sensitive issue and income generation through aquaculture.

During the project extension period, after joining all staff a day long Project orientation meeting organized with the participants of BDC-1, Finance and Admin bfficer-1, BDOs-3, Program Focal-1, ED Prottiyashi-1, WF-1, Area Manager-3) in PROTTYASHI project Office. 572 farmers received on improve aquaculture and business development training for aquaculture farmers through 30 LSPs in the respective groups at community level. 160 farmers received Improved aquaculture and nutrition sensitive training, & 180 new shrimp farmers receied improved shrimp cultute & BMP training organized BDOs of Prottiyashi. Business development materials such as Sacchi disk, thermometer, DO kit, P^H meter, Feed for fish, nursery feed, Oxygen cylinder, fish fry and acclimitization materials was distributed among the LSP, Established Community feed mill at community level & a Carp hatchery established by private sector and Fish farmer received fish fingerling, PCR tested shrimp PLs, vegetable seed etc from Prottiyashi. For awareness raising Prottiyashi organized three activities Internationa youth day, National fish week collobaration with DoF and Nutrition day obvevation.

From the project 30 LSP (17 nurserers, 11 fish feed traders and 2 Patilwala) received refresherd TOT training provide extension support to local farmer and neighbour also they improved their business activities. 912 fish & shrimp farmers improved their fish & shrimp culture culture activities after receiveing training also they built awareness about nutrition sensitive issue and income generation through aquaculture.

1.5 Field implementation team

Field implementation team containing One BDC, One Finance and admin officer, two FOs form direct project and partly Director Program, Assistant Director Finance, Two Branch Manager from Credit section and 20 Local Service Provider.

Project extension period for 11 months field implementation team containing One BDC, One Finance and admin officer, three BDOs of three upazila & 03 MFs (started working from 10 May 2023) form direct project and partly Director Program, Assistant Director Finance, three Area Manager from Credit section from three upazila and 30 Local Service Provider.

1.6 Brief budget summary

With the project Cost total BDT 3577,894 here cash contribution from worldFish 2945, 536 and in kind BDT150,000, Subgrantee contribution BDT 440,358 and in kind contribution BDT 42,000. Prepared details implementation Plan (DIP) and budgets.

Project extended from 01 October 2022 to 31 August 2023 for 11 month with revised budgeted total cost 15,184,885 BDT here BAA contribution was BDT 11,816,527 (78%) & subgrantee private sector Niribili Group contribution was BDT 3,368,358 (22%)

1.7 Lesson Learned

Important Lessons Learned from the project include:

1. Due to Rohunga influx, food security of people facing challenges so need to provide extension support to farmer for ensuring the food security and Zero Hunger;
2. Need to established Carp Hatchery in this region;
3. More Extension support will needed from Govt. and Private sector;
4. Strengthen the linkage between different stakeholder;
5. Saline tolerable and first growing fish species should consider for aquaculture and
6. Up date survey program needed;
7. Long term programme will start for achieving sustainable goal such as Reducing poverty and hunger through aquaculture business development by properly using resources in sustainable manner.
8. Carp fattening technology should be adopted to ensure increase productivity of the small holder fish farmers.
9. Encourage the aquaculture farmers to stock yearling to their ponds.
10. Nursing shrimp Juvenile stock to gher/ponds practices should be developed in shrimp culture area of Ramu & Chakaria Upazila.
11. Develop carp nursery with acclimatization facilities & transport support to reduce the stress & mortality of fingerling.

2.0 Project Implementation (Not more than 6 pages)

Protyashi Team prepared aquaculture training modules, Banner, Festoon, Leaflet, purchases required materilas for organized training

2.1 A brief about the pictorial business model/activity model/ intervention model and its description

1. Facilitating and developing the LSPs:

During the first phase, a total of 20 Local Service Providers (LSPs) has been developed consisting of 10 nurserer (Five in Ukhiya and Five in Ramu), 6 feed trader (3 from each upazilla) and 4 fingerling traders who capacitated and provided technical support to the selected farmers. Later, during project extension period in 2022-2023, 10 new LSPs and 20 old LSPs a total of 30 LSPs (17-Nurserer, 11- feed traders &

2 Patilwala) received refreshers TOT from the project to facilitate training of improved aquaculture, nutrition sensitive aquaculture & improved shrimp culture & BMP. Hence, these LSPs became more capable to facilitate training to fish & shrimp farmers and also they could support to the fish farmer in area of culture consultation & water quality parameters measurement & quality inputs purchasing.

2. Facilitating access of finance to the LSPs and farmers:

Project provided a total of 170 farmers BDT 1,1203,000 credit support by Prottayshi credit program. In Ukhiya 58 fish farmers and LSPs took loan BDT 5,483,000 from Prottayshi Plongkhali, Ukhiya & Morichya branch for purchasing aquaculture inputs like fish fingerling, feeds & fertilizer to increase their aquaculture productivity. In Ramu Upazila 62 fish & shrimp farmers took loan BDT 3,252,000 from Pottyashi Ramu, Bangla Bazar & Khurniapalong branch weekly installment system repayment one year with in 46 installments. Some of the farmers took sufo loan from Prottayshi at Ramu repayment period within 5-6 month once time payment system. . In Chakaria Upazila 56 fish & shrimp farmers took loan BDT 2,468,000 from Pottyashi Illishia, branch weekly installment system repayment period one year with in 46 installments. 6 fish farmers took loan from Prottayshi two times during this period. The loan recovery percentage was approx. 99.5%.

3. Market linkages development among aquaculture actors:

Linkages were established among aquaculture market actors such as fish farmers, hatcheries, nurseries, patilwala (fry traders), feed sellers, lime & fertilizer sellers, fish harvesters, fish traders (arotdars, paikers, retailers), government extension service providers (DoF, BFRI, DAE). Two market linkage event conducted at upazila level. An inventory of different market actors with their contact details developed and disseminated among all market actors of aquaculture value chains. Different linkages like vertical and horizontal among aquaculture market actors established to share information, resources, reduce transaction costs, and finally increase the profit margins of the market actors. During project extension period, a market linkage event (16 April 2023) at hotel Prime park, Cox's Bazar has been organized by Prottayshi in district level in Cox's Bazar where participated all type of aquaculture market actors like fish farmers, LSP nurserer, feed & fertilizers traders, fry traders (Patilwala) fish arotdars, Paikpers & retailers, Govt, official DoF, BFRI. Develop a aquaculture market networking among the different level of aquaculture market actors.

4. Promote collective inputs purchase and marketing of beneficiaries' farm produces:

To reducing transaction costs and to create economics of scale, collective inputs purchase and marketing of their farm produces encouraged and promoted through formulating vertical (supplier-producer-buyer) and horizontal (producer-producer) linkages for marketing their produced.

5. Promotion of nutrition sensitive aquaculture business:

A total of 600 fish farmers selected for improved aquaculture business including nutrition sensitive aquaculture from Ramu and Ukhiya upazilas of in 27 groups. Where 39.5% beneficiaries are women and rest 60.5% male in where 40 % will be youth. The capacity of beneficiaries were developed as aquaculture entrepreneur on market driven nutrition sensitive aquaculture with dike cropping, nutrition, hygiene and gender through 5 learning sessions with practical demonstrations by LSPs. The farmers (480) got a one-day long refresher training on integrated nutrition sensitive aquaculture business with special emphasis on business and linkage development with market actors. Total 120 farmers capacitated by Union Facilitators (UFs) and they followed up beneficiaries' practices and adoption on regular basis through household visits and update their knowledge gap through counselling. As an agricultural extension inputs- fingerlings, mola fish, feed and vegetable seeds provided to the new aquaculture participants to demonstrate the benefits of nutrition sensitive aquaculture with dike cropping. The

beneficiaries linked with different aquaculture market actors to have better access of quality goods and services for sustainable promotion of nutrition sensitive aquaculture business with dike cropping.

In 2022-2023, 573 (Male-317, Female-256) out of 600 old fish farmers received refreshers training & 185 (Male-82 & Female-103) new fish farmers received training on improved aquaculture business including nutrition sensitive aquaculture development from Ukhiya, Ramu Upazilas of in 37 groups. Where 49.38% beneficiaries were women and the rest 50.62 % male in where 16 % were youth. these training facilitated by LSPs of two upazila Ukhiya & Ramu. The capacity of these beneficiaries developed as aquaculture productivity increase on market driven nutrition sensitive aquaculture with carp-mola poly culture, dike cropping, homestead gardening, hygiene & nutrition practices in the family through one learning sessions with practical session by LSPs & BDOs. Project provided among 160 new fish farmers fingerlings, kharip-2 vegetables seeds for dike cropping & homestead gardening for their family nutrition.

In 2022-2023, 190 (Male-123, female-67) new shrimp farmers received training on improved shrimp culture & BMP including business development from Ramu & Chakaria Upazilas of 10 groups. Where 35.26% beneficiaries were women and the rest 64.74% male in where 20.52% were youth. these training facilitated by LSPs of two upazila Ukhiya & Ramu. The capacity of these beneficiaries developed as shrimp aquaculture productivity increase on market driven nutrition sensitive aquaculture with dike cropping, homestead gardening, hygiene practices in the family through one learning sessions with practical session by LSPs & BDOs. Project provided among 180 new shrimp farmers PCR tested shrimp PLs , kharip-2 vegetables seeds for dike cropping & homestead gardening for their family better nutrition.

6. Facilitate a carp hatchery establishment by private sector (Niribili Group)

There was no carp hatchery in Cox's Bazar district. Nursery operator, fry traders, fish farmers were depended on other hatchery & nursery located near out of Cox's Bazar district. Due to transport cost & stress high mortality found after stocking also not got in time, quality of these fry/fingerling are not good. So the project has established a carp Hatchery by private sector Niribili Group at Eidghor, Ramu, Cox's Bazar which construction started from March 2023 and ended at July 2023 for smooth supply of good quality fish spawn/ fry & fingerling to the seeds agents, nurseries as well as fish farmers minimizing transport cost & stress. Total budget was BDT 3,368,358 in which WorldFish contribution BDT 11,00,000 rest of amount contributed by Niribili Group. Niribili carp Hatchery collected quality brood fish G3 Rui, Catla, Mriget & Silver, Common carp from three traceable sources like Govt. Raypur carp hatchery, Ma masha hatchery, Lama, Bandarban & Halda river. 13 staffs including Carp Hatchery technician received training on carp hatchery brood management & operation organized by Niribili Group facilitated by Protyashi Business Development Coordinator, BDC, ZoR Coordinator WorldFish & General Manager of Niribili Group. Niribili Group also organized 109 fish farmers training on improved aquaculture & Management (5 batches), 16 seed agents/ nurseries training on improved carp nursery management & developed communication materials leaflet, Banner & Festoon for carp hatchery products publicity.

7. Facilitate fish feed mill in Zor for community

After a long time observation & Protyashi- WorldFish team visit together finally selected LSP Md. Alauddin as fish feed owner, he was also interested to establish the Community fish feed mill at Burirpara Chakaria, Which has prepared the lowcost fish made of locally available fish feed ingredients for supply the fish feed for community fish farmers Total budget was 865,000 BDT. access amount has provided by CFC owner after installation a day training has been organized by protyashi on feed preparation & operation of CFC for CFC owner & fish farmers. We believed that CFC would contribute to encourage community fish farmers to applied feed to their fish pond for increased productivity, better income & improved livelihood

8. Business development through extension support

During the project period 15 LSPs of Ukhiya, Ramu & Chakaria provided pH meter, Dissolved oxygen kit, thermometer, oxygen cylinder, Sechidisk, fish fry, nursery feed, fish feed for promoting their business, upgrading & extension as well as support to other fish farmers. One fry trader of Ramu Upazila received two fry carrying aluminium pot for fish fry & Prawn PLs supply & business development at Ramu upazila.

9. Day observation (International women day, Nutrition week & National Fish week)

A day observation named “**International Women’s Day 2023**” (22 March 2023) was observed at at Dokkhin Sreekul of Fatehkarkul under Ramu upazilla of Cox’s Bazar. Discussion and rally were conducted by BDOs of Ukhiya and Ramu along with Finance & Admin Officer and Support Staff. A total of 85 persons (M- 08, W- 77) made a huge crowd on the occasion. Firstly, all present men and women partook in a rally near by a small road. Then, Protyashi BDO of Ramu discussed on the history of women’s day and today’s role of women in the social, economic and political aspect. BDO also talked on women’s role in aquaculture and vegetable culture in their household area. BDO also gave example of great and successful women in our country to inspire them. BDO of Ukhiya kept a special speech on women empowerment in the program.

Protyashi staffs observed National Nutrition Week 2023 (7-13 June 2023) at Ilishiya, Chakaria and Ratnapalong, Ukhiya. Total participants of both events were 68 (men-35, women-23). Protyashi PC and BDOs facilitated the event and discussed about balanced diet, culture technology & nutrition in small fishes. Also, participants were encouraged to provide nutritious diet to pregnant and lactating women and children.

Protyashi staffs observed National Fish Week 2023 (24-30 July 2023) in collaboration with Department of Fisheries at Ramu & Chakaria participated in fish week rally, Fingerling release program, discussion meeting. In Ukiya Upazila National Week observed along with DOF & community level at Pannaysia, Jaliapalong, Ukhiya. Total participants of three upazila events were 92 (men-86, women-06). Protyashi PC and BDOs facilitated the event at community and discussed about awareness of fish week, and production status, encourage them to produce safe fish, balanced diet, culture technology & nutrition in small fishes. Also, participants were encouraged to produce more fish production using safe & quality aqua inputs like fish fingerling, feed & other chemicals.

10. Exposure visit to Natore & Rajshahi

A group of 09 participants (LSP & farmers of three upazila Ukhiya-02 Ramu-04 & Chakaria-03) attended an exposure visit (09-11 May 2023) on carp fattening at Rajshahi along with Protyashi staff BDO of Chakaria. ZOR Coordinator, WorldFish was also present at the event. Participants were briefed about the technical knowledge of carp fattening and showed the result of carp fattening by harvesting fish from the ponds. After that, a brief presentation on carp fattening and its feasibility was presented by Prof. Dr. Akhtaruzzaman, Dept. of Fisheries, Rajshahi University. Bangladesh.

11. Market linkage events

On 16th April, 2023, Protyashi staff organized an event on Market Linkage Workshop with Related Stakeholders at Prime Park Hotel, Cox’s Bazar. A total of 32 participants attended the program of which 31 were men and 01 was women. The event was comprised of discussion and group work. Personnels of

Protyyashi and WorldFish were present along with District Fisheries Officer, DoF, Cox's Bazar and Principal Scientific Officer, BFRI, Cox's Bazar

This event briefly covered the objectives and significance of market linkage along with problems of different market actors and their solutions. Also, the current scenario of Bangladesh's aquaculture was discussed by govt. personnel. Different actors were divided into six groups and problem and solution were presented from their perspective. Lastly, farmers, nurserers, fry traders, feed trader, and hatchery owners were encouraged to make an agreement to promote market linkage among them through an open discussion

12. Promoting carp fattening technology

Protyyashi arranged day-long training program (20 June 2023) on carp fattening for farmers, LSPs and staffs at Upazila officer's Club, Ramu, Cox's Bazar. Total participants of the training were 31 (Male-28, Female-03). 15 carp fattening demo farmers, 2 LSPs (nurserer) were present including Marine Fisheries Officer (MFO) DoF, Ramu, ZoR Coordinator, Aquaculture Specialist and Grants Specialist of WorldFish and Protyyashi Head of Resilience & DRR, PC, and Finance & Admin, BDOs and MFs of Ukhiya, Ramu and Chakaria were present in the training. Training method included lecture and discussion, visual aids, group work and Q/A session. Training topics covered carp fattening pond preparation, stocking ratio, pond management, use of lime & fertilizers, feeding ratio & frequency, pond record book, harvesting and profit margin analysis. Training was facilitated by ZoR Coordinator, Aquaculture Specialist, Protyyashi PC, BDOs and LSPs. For Establishment of 15 (Ukhiya-05, Ramu-06 & Chakarai-04) carp fattening demo ponds project provided fish fingerling/ yearling (200-250 gram), floating fish feed & fertilizers (Urea & TSP) stocking density was 10-15 fingerling/ decimal species ratio Rui:Catla:Mrigel/C.carp: Silver- 3:3:3:1. Fingerling stocking completed in middle of July2023, demo signboard provided to each demo ponds, follow up, data record keeping updating weekly basis supplied ponds book & sampling & water quality parameters also recorded in farmers ponds book.

13. Project Learning, sharing & closeout workshop

Protyyashi organized a project learning sharing and closeout workshop at Hotel Prime Park in Cox's Bazar, dated 24.08.2023. Total participants of the workshop were 36 (men-32, women-04). Personnel from DOF, District Fisheries Officer, Principal Scientific Officer from Marine Fisheries & Technology Station, BFRI, Cox'Bazar WorldFish, ZoR Coordinator, Aquaculture specialist & MEL officer Protyyashi Director(Program), Head of Resilience & DRR, all project staffs, Protyyashi microfinance Area manager, coast foundation & private sectors actively participated in the workshop along with 7 LSPs and 4 farmers. Inaugural well come speech given by Direct (program) Protyyashi The objective of the workshop included learning sharing session- achievements, challenges, learning and opportunities Close the program given a speech by District Fisheries Officer Cox'Bazar given the thanks to all participants.

Interventions	Add value/ will address the problem/ bring changes	Results (KPI)
Facilitating and developing the LSPs	Developed 20 local extension service providers who will link farmers with backward and forward markets	479 farmers got supports from 20 LSPs

Interventions	Add value/ will address the problem/ bring changes	Results (KPI)
Facilitating access of finance to the LSPs and farmers:	Shortage of capital of LSPs and commercial farmers will be solved.	Credit group was formed for access to finances
Market linkages development among aquaculture actors	Information and resources shared among actors, increase availability and accessibility of the fingerlings/fry, fish feed and other aqua inputs, transaction costs will be reduced and finally will increase the profit margins of the market actors.	2 market linkages events were organized for and farmer linked with backward and forward markets through. Where 50 stakeholder was participated
Training on improve aquaculture and business for farmers by LSP (15 to 20 Participant per batch)	The knowledge of farmer increased on aquaculture, nutrition, vegetable cultivation, hygiene, gender and business development. They will apply the learnings in their ponds	479 Farmers (Male-277 and Female-202) adopted the nutrition sensitive aquaculture and improve their knowledge, productivity and income.
Capacity building of Aquaculture farmers on improved nutrition sensitive aquaculture	The knowledge of farmer increased on aquaculture, nutrition, vegetable cultivation, hygiene, gender and business development. They will apply the learnings in their ponds.	120 Farmers (Male-86 and Female-34) adopted the nutrition sensitive aquaculture and improve their knowledge, productivity and income.
Aquaculture extension inputs for the fish farmers and fish nurserers	As an extension inputs, the farmers provided fingerlings and vegetable seeds. The nurserers will get spawns/fry, nursery feeds and oxygen cylinders. The demo farmers will be provided with quality seeds and feeds.	120 farmer received fish fingerling and vegetable seed. 10 LSP Nurserer received Spawn, nursery feed, Oxygencylinder, DO kit, P ^H meter, Thermometer and Sacchidisk . 6 feed trader LSP received received Fish feed, DO kit, P ^H meter, Thermometer and Sacchidisk and vegetable seed 4 Fry trader received trader LSP received received Fish feed, DO kit, P ^H meter, Thermometer and Sacchidisk, Pot and vegetable seed All 20 LSP received signboard, 8 Festoon as promotional items
Nutrition days, National Fish Week and International Youth days	For creation awareness and importances of nutritious food organized Nutrition days National Fish Week observed for fish conservation and increase production International Youth days observed for Creating a World for All Ages	One Nutrition days was observed where 24 participants were participated 10 male and 14 female One national fish week observed where 20 farmer was participated where 2 female One International Youth days was observed where 27 female and 23 male were participated.

Interventions	Add value/ will address the problem/ bring changes	Results (KPI)
School level Cooking demonstration	For raising awareness about nutritious food, benefits of nutritious food and cooking procedure of small fish for preserving nutrition quality and quantity	Two Programs were organized where 64 girls students and 24 boys students were participated.

2nd phase Project interventions (01 October 2022 to 31 August 2023)

Interventions	Add value/ will address the problem/ bring changes	Results (KPI)
Bi-monthly Coordination & quarterly review meeting	Bi-monthly coordination & review meeting organized by Prottiyashi at Ukhiya project office discussed about progress, target & achievement, problem solving, planning of next month	5 Bi-monthly coordination meeting & 2 quarterly meetings participated Prottiyashi project staffs, Area manager MF & WorldFish personnel.
Facilitating and developing the old & new LSPs & staffs	Developed through ToT & refresher ToT 06 field staff & old 20, new 10 a total of 30 local extension service providers who will link farmers with backward and forward markets	976 farmers got supports from 30 LSPs as well as 30 LSPs got support from 06 staffs.
Training on improved aquaculture and business for old 600 farmers by LSP (15 to 20 Participant per batch)	The knowledge of farmers refreshed & increased on aquaculture, vegetable cultivation, hygiene, gender and business development. They will apply the learnings in their ponds	573 old Farmers (Male-317 and Female-256) adopted the nutrition sensitive aquaculture and improve their knowledge, productivity and income.
Training on improved nutrition sensitive aquaculture and business for new 160 farmers by LSP (15 to 20 Participant per batch)	Increased their knowledge on nutrition sensitive aquaculture, vegetable cultivation, hygiene, gender and business development. They have applied the learnings in their ponds	186 new farmers (Male-82 and Female-104) adopted the nutrition sensitive aquaculture and improve their knowledge, productivity and income.
Market linkages events	Information and resources shared among actors, increase availability and accessibility of the fingerlings/fry, fish feed and other aqua inputs, transaction costs will be reduced and finally will increase the profit margins of the market actors.	1 market linkage event was organized for and farmer linked with backward and forward markets through. Where 32 (M-31 F-01) stakeholder was participated
Training on improved shrimp culture & BMP and business for new 180 farmers by LSP (15 to 20 Participant per batch)	They have applied the learnings in their ponds and changed their traditional culture systems & practices, increased their production of shrimp, vegetable cultivation, hygiene, gender and business development.	190 new shrimp farmers (Male-123 and Female-67) adopted the improved shrimp culture and increased their knowledge, productivity and income.
Facilitate a carp Hatchery by private sector	Constructed the carp hatchery complex & excavation the ponds, quality brood fish has been introduced for induced breeding hatchery staffs	one carp hatchery has constructed at Eidgor, Ramu, Cox's Bazar by Niribili Group with overhead

	has trained carp hatchery will solved the scarcity of quality carp spawn, fry & fingerling of the Cox'Bazar district.	tank, 13 staff trained 800 brood stocked in 2 ponds.
Facilitate a Feed mill in ZoR by LSP	Established feed mill with the BAA budget 865000 BDT & some contribution of feed mill owner a job training has organized on prepared the fish feed for CFC owner & fish farmers. The feed will supplied the quality feed at reasonal price which encourage & increased the fish productivity & profit margin	one feed has established at Burirpara, Chakaria, Cox's Bazar
Business Development through extension support	Supported & distributed among LSPs & fish farmers water quality test kit, oxygen cylendar, nursery & fish feed fry trading/ carring pot, vegetables seeds, fingerling & Shrimp SPF/PCR tested fry acclimatization facilitues support from the project.	15 LSPs nurserer recived the water quality test kit, oxygen cylendar, nursery & fish feed One fry trader got 2 fry carring pot & 340 fish & shrimp farmers recieved the vgetable seed, fingerlings(160) & Shrimp PCR tested PLs (180) One nursery LSP got the fry acclimatization facilitues support from the project
Day observation(International Womens Day, National Nutrition Week & National Fish Week-2023	To creation awareness and importances of nutritious food organized Nutrition days National Fish Week observed for fish conservation and increase production International women days observed for creating for gender equality	3 event has been organized in the project period & participated fish farmers 235 M-129 female-106
Exposure visit to Rajshahi & Natore	Exposure visit changed farmers knowledge, skill & attitute about carp fattening from which they will make more productivity & income from their culture ponds	09 fish farmers visited along with one Project BDOs visited to Rajshahi & Natore from three upazila of Ukhiya, Ramu & Chakaria
Project learning, shareing & closeout workshop		
Training on carp fattening	farmers & staffs received the training on carp fattening & changed their traditional Practices and knowledge, This training will help increase fish production & income	15 farmers (M-13, Female-2) participated the carp fattening training
Information dissemination and awareness building for business developemnt	Training module preparation & printing, Signboard & festoon which promoting the training session.	30 aqua & 30 shrimp culture module has printed, 11 signboard one office, 10 LSPs & festoon-fish-10 shrimp-15 sets has dveloped & used.

Facilitating access of finance to the LSPs and farmers (Loan Disbursement)	Increased their investment to purchasing quality aquaculture inputs & positive changed their productivity & family income & nutrition.	170 fish farmers & LSPs got support from Protyashi MF program BDT-1,1203,000
Establish demonstration to promote Carp Fattening for 15 farmers	Supported to carp fingerling to carp fattening demo ponds, signboard floating feed & fertilizer (Urea & TSP) also supported to water quality kit box pond book for data recorded & fish sampling materials.	15 demo established Ukiya-5, Ramu-06 & Chakarai Male-13 female-02

2.2 Approved Gantt chart for the intervention (1 April-2022 to 30 September 2022)

#	Activities	Total	April	May	June	July	Aug	Sept
5A	DIP	1	1					
5.01	Staff recruitment	1	1					
5.02	Project orientation to staffs	1	1					
5.03	Monthly Coordination meeting	5		1	1	1	1	1
5.04	Capacity development /ToT Training on improve aquaculture and business development for LSP and staffs	1		1				
5.05	Training on improve aquaculture and business for farmers by LSP (15 to 20 Participant per batch)	24		5	12	7		
5.06	Training on carp mola poly culture and dike cropping for nutrition sensitive farmers (120)	6		3	3			
5.07	Business development through extension support							
5.07.1	pH meter, DO kit, thermometer, Secchi disk, etc)	20		20				
5.07.2	Pot/Thin for fry traders (2 Pot)	4		4				

#	Activities	Total	April	May	June	July	Aug	Sept
5.07.3	Spawn/fry support to nurserer (minimum 1Kg)	10		5	5			
5.07.4	Oxygen cylinder for Nurserer	10		5	5			
5.07.5	Nursery feeds to Nurserer	10		5	5			
5.07.6	Fingerling (200pic*5)	120		60	60			
5.07.7	Vegetable seeds	620		310	310			
5.07.8	Acclimation facilities for fry nursing	1		1				
5.07.9	Supports to feed LSPs pond	6		3	3			
5.08	Day observation: IYD-Aug 12, NFW (July), Nutrition day (April 23-29)	3	1			1	1	
5.09	Community/School level cooking demonstration on nutritious small fish recipe and awareness event				2			
5.10	Market linkage workshop with related stakeholders	1					1	
5.11	IEC materials							
5.11.1	Leaflet	2,000		2,000				
5.11.2	ToT Module (spiral binding)	30		30				
5.11.3	Office sign board and LSP signboard	22		22				
5.11.4	Festoon for LSP and staffs	176		176				
5.12	Attending training on environment and climate organized by WorldFish	1					1	
5.13	Learning Sharing meeting and Project Close-out	1						1

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July-23	Aug.23
5.6	Training on improved aquaculture to old 600 farmers	24		4	4	3	3				2	4	4			
5.7	Training on improved shrimp cultuer & BMP for 180 farmers	9		1	1		1				1	1	1			3
5.8	Training on nutrition sentsitve aquaculrue farmers for 160	8			1	1	2				1					3
5.9	Facilitate a carp hatchery establishment by a private sector															
5.9.1	Staff recruitment	1							1							
5.9.2	Hatchery Technician	6							6							
5.9.3	Establishment of a hatchery, a DTW for underground water source, packing area, brood & nursery pond:								-							

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July-23	Aug.23
5.9.4	Hatchery shed, Hatching jars, Rectangular tanks, Deep tube well, Overhead tank, 4HP motor with diesel engine, 4HP motor with diesel engine, Generator and other maintainance cost, Electric installation, hatchery operational others facilities (PG, chemical, etc), Seine net, hapa etc.	1							1							
5.9.5	Earth cutting & removal of black soil considering BMPs (3 ponds)	3							3							
5.9.6	Net fencing (3 ponds)	3							3							
5.9.7	Drainage system development	3							3							
5.9.8	Spawn/fry conditioning, packing & loading shed	2							2							
5.9.9	Develop better management practice facilities for safe fry packing and transportation	1							1							

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July-23	Aug.23
5.9.10	Introducing lab facilities with PH meter, Thermometer, DO meter, Ammonia and Iron testing kits etc.	1					1									
5.9.11	Introducing quality broodstock	800					800									
5.9.12	Rearing of brood stock, fish feed	10000					10000									
5.9.13	Develop entrance/exit gate (2 gates)	1					1									
5.9.14	Oxygen cylinder & refill for marketing of spawn-2	2					2									
5.9.15	Printed poly bag for spawn selling with oxygen	1					1									
5.9.16	Develop waste water treatment facility	1					1									
5.9.17	Capacity building for hatchery staffs, technicians, manager, distribution networks and farmers	1					1									

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July-23	Aug-23
5.9.18	Day long capacity building for seed agents/ nurserer and farmers	1					1									
5.9.19	Day long capacity building of 100 fish farmer and follow-up supports (food-300, conveyance-200, banner-600)	1							1							
5.9.20	Oxygen Tower	1							1							
5.9.21	Communication material development and promotional activities (Banner, festoon, leaflet, sticker, etc)	1							1							
5.10	Facilitate feed mills in ZoR for Community	1						1								
5.11	Business development through extention support (LSP-15)															
5.11.1	PH meter, DO kit, thermometer, Secchi disk, etc)	15					10							5		
5.11.2	Pot/Thin for fry traders (2 Pot)	1					1									

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July 23	Aug.23
5.11.3	Spawn/fry support to nurserer (minimum 1KG)	8												8		
5.11.4	Oxygen cylinder for Nurserer	8					5							3		
5.11.5	Nursery feeds to Nurserers	8					4							4		
5.11.6	Fingerling (200pic*5)	340												340		
5.11.7	Vegetable seeds	340					220							120		
5.11.8	Supports to feed LSPs pond	15					10							5		
5.11.9	Acclimatization facilities for fry nursing	1														1
5.12	Day Ovservation (Nutrition week and International womens day)	3									1	1			1	
5.13	Exposure Visit to Natore and Rajshahi	1										1				
5.14	Activity 14: Market linkage Events (32 Persons)	1										1				
5.15	Staff recruitmnet	2	1									1				

Grantt Chart			Mile stone-5			Mile stone-6		Milestone-7			Milestone-8				Milestone-9	
#	Activities	Total	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Apr-23	May-23	Jun-23	Mar-23	Apr-23	May-23	June-23	July-23	Aug.23
5.16	Project learning, sharing and close-out workshop (36 Person)	1												1		
5.17	Facilitating access of finance to the LSPs and farmers (Loan Disbursement)	150														
5.18	: Refresher TOT for LSP(2 days) (Protyashi-5, LSP-10, WF-3, GoB-1)	1										1				
5.19	Training on Carp Fattening	1												1		
5.20	Establish demonastration to promote Carp Fattening for 15 farmers	1										1				
	Monthly Progress Report	11	1	1	1	1	1				1	1	1	1	1	1
	Project Final Report	1														1
	Success Stories	1														1

2.3 List of activities conducted

#	Activities	Target	Achievement	Comments
5A	DIP	1	1	
5.01	Staff recruitment	4	4	
5.02	Project orientation to staffs	1	1	
5.03	Monthly Coordination meeting	5	5	
5.04	Capacity development /ToT Training on improve aquaculture and business development for LSP and staffs	1	1	
5.05	Training on improve aquaculture and business for farmers by LSP (15 to 20 Participant per batch)	24	20	Covering 479 participants out of 480
5.06	Training on carp mola poly culture and dike cropping for nutrition sensitive farmers (120)	6	7	Covering 120 farmer according to target
5.07	Business development through extension support			
5.07.1	pH meter, DO kit, thermometer, Secchi disk, etc)	20	20	
5.07.2	Pot/Thin for fry traders (2 Pot)	4	4	
5.07.3	Spawn/fry support to nurserer (minimum 1Kg)	10	10	
5.07.4	Oxygen cylinder for Nurserer	10	10	
5.07.5	Nursery feeds to Nurserer	10	10	25kg/each
5.07.6	Fingerling (200pic*5)	120	120	200fingerling/Each
5.07.7	Vegetable seeds	620	620	Bean, Sweet pumpkin and pumpkin
5.07.8	Acclimatization facilities for fry nursing	1	1	
5.07.9	Supports to feed LSPs pond	6	6	150kg/each
5.08	Day observation: IYD-Aug 12, NFW (July), Nutrition day (April 23-29)	3	3	
5.09	Community/School level cooking demonstration on nutritious small fish recipe and awareness event	2	2	

#	Activities	Target	Achievement	Comments
5.10	Market linkage workshop with related stakeholders	2	2	
5.11	IEC materials			
5.11.1	Leaflet	2000	2000	
5.11.2	ToT Module (spiral binding)	30	30	
5.11.3	Office sign board and LSP sign board	22	22	
5.11.4	Festoon for LSP and staffs	176	176	
5.12	Attending training on environment and climate organized by WorldFish	1	1	
5.13	Learning Sharing meeting and Project Close-out	1	1	
5.14	Program Progress Report	6	6	
5.15	Project Completion report	1	1	
5.18	Staffs Salary and Benefit	6	6	
5.20	Travel-	6	6	

List of Activities conducted & Accomplished in 2nd phase of the project, 2022-2023

#	Activities	Target	Achievement	Comments
5.1	Bi-monthly coordination meeting	5	5	5 meeting has held in time
5.2	Quarterly progress review meeting	2	2	Completed In time
5.3	ToT on aquaculture to old LSPs (2 days)	1	1 (21)	LSPs- 16 all are male Protyashi staffs-05 (Male-04, Female-01)
5.4	ToT on aquaculture to new LSPs (2 days)	1	1 (20)	LSPs-14, Protyashi staffs-06 M-05, Female-04)
5.5	Information dissemination and awareness building for business development			
5.5.1	Training module printing	60	60	(Aquaculture-30, shrimp-30)

#	Activities	Target	Achievement	Comments
5.5.2	Signboard	11	11	Project Office-01, LSPs-10
5.5.3	Festoon print for aqua-10, shrmpr-15 sets	170	170	
5.6	Training on improved aquaculture to old 600 farmers	24	24 (573)	Male 317 female 256 total 573 in two Upazila Ukhiya & Ramu
5.7	Training on improved shrimp cultuer & BMP for 180 farmers	9	9 (190)	Male- 123 Female- 67 Total 190 in two upazila Ramu & Chakaria
5.8	Training on nutrition sentsitve aquaculrue farmers for 160	8	8(185)	Male-82 & female-103 total 185 in three Upazila Ukhiya, Ramu & Chakaria
5.9	Facilitate a carp hatchery establishment by a private sector	-	-	Established by private sector Niribili Group at Eidor, Ramu
5.9.1	Staff recruitment	1	1	Staff recruited completed
5.9.2	Hatchery Technician	6	2	Hatchery technician joined from first July 2023
5.9.3	Establishment of a hatchery, a DTW for underground water source, packing area, brood & nursery pond:	-	-	
5.9.4	Hatchery shed, Hatching jars, Rectangular tanks, Deep tube well, Overhead tank, 4HP motor with diesel engine, 4HP motor with diesel engine, Generator and other maintainance cost, Electric installation, hatchery operational others facilities (PG, chemical, etc), Seine net, hapa etc.	1	1	Completed
5.9.5	Earth cutting & removal of black soil considering BMPs (3 ponds)	3	3	Completed
5.9.6	Net fencing (3 ponds)	3	3	Completed
5.9.7	Drainage system development	3	3	Completed
5.9.8	Spawn/fry conditioning, packing & loading shed	2	2	Completed

#	Activities	Target	Achievement	Comments
5.9.9	Develop better management practice facilities for safe fry packing and transportation	1	2	Completed
5.9.10	Introducing lab facilities with PH meter, Thermometer, DO meter, Ammonia and Iron testing kits etc.	1	1	Completed
5.9.11	Introducing quality broodstock	800	800	Quality brood fish collected
5.9.12	Rearing of brood stock, fish feed	10000	6,800	Feed applied continue
5.9.13	Develop entrance/exit gate (2 gates)	1	1	Completed
5.9.14	Oxygen cylinder & refill for marketing of spawn-2	2	2	Completed
5.9.15	Printed poly bag for spawn selling with oxygen	1	1	Completed
5.9.16	Develop waste water treatment facility	1	1	Completed
5.9.17	Capacity building for hatchery staffs, technicians, manager, distribution networks and farmers	1	1	13 staff received training including Manager & technician
5.9.18	Day long capacity building for seed agents/ nurserer and farmers	1	1	Male-15 female -01 total 16
5.9.19	Day long capacity building of 100 fish farmer and follow-up supports (food-300, conveyance-200, banner-600)	1	1	Male 96 female 13 total 109
5.9.20	Oxygen Tower	1	1	completed setted on over head tank
5.9.21	Communication material development and promotional activities (Banner, festoon, leaflet, sticker, etc)	1	1	Banner, Banner sticker & leaflet one page (2 type), folder leaflet
5.10	Facilitate feed mills in ZoR for Community	1	1	Established at Burirpara, Chakaria
5.11	Business development through extention support (LSP-15)	-	-	-

#	Activities	Target	Achievement	Comments
5.11.1	PH meter, DO kit, thermometer, Secchi disk, etc)	15	15	Ukhiya-3, Ramu-3 & Chakaria-9
5.11.2	Pot/Thin for fry traders (2 Pot)	1	1	Ramu Upazila-01, (Fry trader)
5.11.3	Spawn/fry support to nurserer (minimum 1KG)	8	8	Ukhiya-01, Ramu-02 Chakaria-05
5.11.4	Oxygen cylinder for Nurserer	8	8	Ukhiya-01, Ramu-02 Chakaria-05
5.11.5	Nursery feeds to Nurserers	8	8	Ukhiya-01, Ramu-02 Chakaria-05
5.11.6	Fingerling (200pic*5) & Shrimp PLs	340	340	Ukhiya-60 Ramu-94 (shrimp PLs-60, fingerlin—34, Chakaria-186 (shrimp PLs-124, Fing-62)
5.11.7	Vegetable seeds	340	340	Ukhiya-60, Ramu-94, Chakaria-186
5.11.8	Supports to feed LSPs pond	15	15	Ukhiya-3 Ramu-3 & Chakaria-9
5.11.9	Acclimatization facilities for fry nursing	1	1	Md. Sahab uddin, satdaliapara, Badarkhali, Chakaria
5.12	Day Ovservation (Nutrition week and International womens day)	3(240)	3(245)	Male-129, Female-116
5.13	Exposure Visit to Natore and Rajshahi	1	1(10)	09 farmers & one BDO of Chakaria all Male
5.14	Market linkage Events (32 Persons)	1	1(32)	Male-31, Female-01
5.15	Staff recruitmnet	2	2	BDC-01 & MF-03
5.16	Project learning, sharing and close-out workshop (36 Person)	1(36)	1 (36)	36 Participants attended at Closeout worshop with male-32 & female-04
5.17	Facilitating access of finance to the LSPs and farmers (Loan Disbursement)	150	170	170 farmers recieved loan amount BDT 11,203,000
5.18	: Refresher TOT for LSP(2 days) (Protyashi-5, LSP-10, WF-3, GoB-1)	1	1(21)	LSP-10 (M-09, F-01), Protyashi staffs-09 (M-08, F-01)
5.19	Training on Carp Fattening	1	1 (31)	Farmers-15, (M-13, F-2), LSP-02) Protyashi staff-10 Worldfish-03, DoF-01

#	Activities	Target	Achievement	Comments
5.20	Establish demonstration to promote Carp Fattening for 15 farmers	1	1 (15)	Ukhiya-5, Ramu-6, Chakaria-04
	Monthly Progress Report	11	11	Monthly basis submitted
	Project Final Report	1	1	Submitted in August-2023
	Success Stories	1	1	BDOs-09 & MFs-03

2.4 Activity wise implementation details with pictures (small pictures alongside the right margin of the documents)



Fig1 Fish Feed Distribution in Office to LSPs



Fig-2 Fingerling trader received Business development materials in Office



Fig. 3 Nurerer Received Materials



Fig4: Discussion meeting before distribution



Fig 5: Fingerling distribution at Mouvipara, Kuniapaleng, Ramu



Fig 6: Vegetable seed distribution at Rumkabazar, Jaliapaleng, Ukhiya



Fig 7: Monthly Coordination meeting dated on 04/09/2022



Fig 8: Tab based data collection training dated on 08/09/2022 Hotel Prime Park, Cox's Bazar



Figure:1 Training on improve aquaculture and business for Farmers by LSP at Elishiya para, Joarianala, Ramu, Cox's Bazar.



Figure 2: Training (Training on improve aquaculture and business for Farmers by LSP) at GoyalMara, Palongkhali, Ukhiya, Cox's Bazar.



Figure 3: Training on improve aquaculture and business for Farmers by LSP at Vorachorakul, Joarianala, Ramu, Cox's Bazar.



Figure 04: Training on improve aquaculture and business for Farmers by LSP at Uttor Patabari, Holudia Palong, Ukhiya, Cox's Bazar.



Figure 1: Training on improve aquaculture and business for Farmers by LSP at Haru Fokir Para, Bhalukia, Ukhiya, Cox's Bazar.



Figure 6: Monthly Coordination Meeting Ukhiya, Cox's Bazar on 10th Aug 2022



Fig 1: Oxygen Cylinder distribution in Nurserer



Fig. 2: Market Linkage workshop in Ukhiya



Fig 3; Special Meeting with WorldFish, Bangladesh



Fig 4: Environmental Compliances and Climatic risk Management Training in CSS AVA Center, Khulna



Fig: Discussion Meeting on School level Cooking demonstration Program in Ramu



Fig: Cooking demonstration in Shakh Hasina Jouranila Girls High School

Activities wise Project implementation Photographs (01 October 2022 to 31 August 2023)



Fig1 Bi-monthly Coordination Meeting



Fig-2 Quarterly Progress Review Meeting



Fig 3: ToT on aquaculture to old LSPs



Fig 4: ToT on aquaculture to new LSPs



Fig 5: Training on improve fish culture to old farmers



Fig 6: Training on improve shrimp culture and BMP



Fig 7: Training on nutrition sensitive aquaculture



Fig 8: Facilitate a carp hatchery establishment by a private sector



Fig 9: Business development through extention support



Fig 10: Business development through extention support



Fig 11 Fish fry distribution to nurserer LSPs



Fig 12 Fingerling distribution to new farmer



Fig 13 Shrimp PL distribution to new shrimp farmers



Fig 14 Acclimatization facility to nurserer LSP at Chakarria



Fig 15: Day Ovservation (Internationl womens day)



Fig 16: Day Ovservation (Nutrition week)



Fig 17: Day Ovservation (National Fish Week)



Fig 18: Exposure Visit to Natore and Rajshahi



Fig 19: Market linkage Events at Prime Park Hotel



Fig 20: Refresher TOT for LSP



Fig 21: Training on Carp Fattening



Fig 22: Juvenile fish support to 15 demo farmers



Fig 23: Feed, fertilizer support to demo farmers



Fig 24: Project learning sharing and closeout workshop at Hotel Prime Park, Cox's Bazar

3.0 Project performance and milestones (not more than 3 pages)

#	Activities	Deliverables	Submission Date	Total Activities	Remarks
5A	DIP	Approved DIP	Milestone-1, April 5, 2022	1	In time achievement
5.01	Staff recruitment	Advertisement, CVs, Appointment letter, Joining letter,	Milestone-2, July 10, 2022	1	In time achievement
5.02	Project orientation to staffs	Report, Attendance Sheet, Group Photo	Milestone-2, July 10, 2022	1	In time achievement
5.03	Monthly Coordination meeting	Report, Attendance Sheet, Group Photo	Milestone-2, July 10, 2022 Milestone-3, September 10, 2022 Milestone-4, October 31, 2022	2 2 1	April to July 2 and August to September 3
5.04	Capacity development /ToT Training on improve aquaculture and business development for LSP and staffs	Report, Attendance Sheet, Group Photo	Milestone-2, July 10, 2022	1	In time achievement
5.05	Training on improve aquaculture and business for farmers by LSP (15 to 20 Participant per batch)	Report, Attendance Sheet, Group Photo	Milestone-2, July 10, 2022 Milestone-3, September 10, 2022	17 7	Achieved in August
5.06	Training on carp mola poly culture and dike cropping for nutrition sensitive farmers (120)	Report, Attendance Sheet, Group Photo	Milestone-2, July 10, 2022	6	Achieved in August
5.07	Business development through extension support				Achieved in September
5.07.1	pH meter, DO kit, thermometer, Secchi disk, etc)	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	20	Achieved in September
5.07.2	Pot/Thin for fry traders (2 Pot)	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	4	Achieved in September

#	Activities	Deliverables	Submission Date	Total Activities	Remarks
5.07.3	Spawn/fry support to nurserer (minimum 1Kg)	Procurement package, Invoice and proof of payment Master roll, photo	Milestone-2, July 10, 2022	10	Achieved in September
5.07.4	Oxygen cylinder for Nurserer	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	10	Achieved in September
5.07.5	Nursery feeds to Nurserer	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	10	Achieved in September
5.07.6	Fingerling (200pic*5)	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	120	Achieved in September
5.07.7	Vegetable seeds	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	620	Achieved in September
5.07.8	Acclimatization facilities for fry nursing	Procurement package, Invoice and proof of payment, Report, photo	Milestone-2, July 10, 2022	1	Achieved in September
5.07.9	Supports to feed LSPs pond	Procurement package, Invoice and proof of payment, Master roll, photo	Milestone-2, July 10, 2022	6	Achieved in September
5.08	Day observation: IYD-Aug 12, NFW (July), Nutrition day (April 23-29)	Report & Group Photo	Milestone-2, July 10, 2022 Milestone-3, September 10, 2022	1 2	In time achieved
5.09	Community/School level cooking demonstration on nutritious small fish recipe and awareness event	Report & Group Photo	Milestone-2, July 10, 2022		Achieved September
5.10	Market linkage workshop with related stakeholders	Report, Attendance Sheet, Group Photo	Milestone-3, September 10, 2022	1	Achieved September

#	Activities	Deliverables	Submission Date	Total Activities	Remarks
5.11	IEC materials				
5.11.1	Leaflet	Procurement package, Invoice and proof of payment, Soft copy	Milestone-2, July 10, 2022	2,000	Achieved September
5.11.2	ToT Module (spiral binding)	Procurement package, Invoice and proof of payment, Soft copy	Milestone-2, July 10, 2022	30	In time achieved
5.11.3	Office sign board and LSP sign board	Procurement package, Invoice and proof of payment, Soft copy	Milestone-2, July 10, 2022	22	2 in July and 20 in September
5.11.4	Festoon for LSP and staffs	Procurement package, Invoice and proof of payment, Soft copy	Milestone-2, July 10, 2022	176	154 July and 22 in September
5.12	Attending training on environment and climate organized by WorldFish	Procurement package, Invoice and proof of payment, Invitation letter	Milestone-3, September 10, 2022	1	September
5.13	Learning Sharing meeting and Project Close-out	Report, Attendance Sheet, Group Photo	Milestone-4, October 31, 2022	1	In time
5.14	Program Progress Report	Report		6	In time
5.15	Project Completion report	Report		1	In time
5.16	MEL data collection, processing and submission (as applicable)	Report	if any		In time
5.17	Success story collection and dissemination (as applicable)	Story	if any		No
5.18	Staffs Salary and Benefit	Timesheet and fund transfer documents	Each month	6	In time
5.19	Equipment, Supplies and Operation Cost	Cash Purchase- Invoice, in-kind contribution purchased documents and current market value calculation Office rent agreement, contribution office memo, cellphone payment acknowledgement copy	if any	6	In time

#	Activities	Deliverables	Submission Date	Total Activities	Remarks
5.20	Travel-	Travel Report with Acknowledgement slip and others supporting travel documents (like ticket, fuel cost, accommodation, etc), if any	if any	6	In time

2nd Year Project Performance milestones (01 October 2022 to 31 August 2023)

#	Activities	Deliverables	Submission date	Total activities	Reamarks
5.1	Bi-monthly coordination meeting	Minutes, Attendance	January,2023, February,2023, July,2023, September,2023	5	Submitted in time
5.2	Quarterly progress review meeting	Minutes, Attendance	January,2023, July,2023	2	In time
5.3	ToT on aquaculture to old LSPs (2 days)	Report, Attendance	January,2023	1	in time
5.4	ToT on aquaculture to new LSPs (2 days)	Report, Attendance	January,2023	1	In time submitted
5.5	Information dissemination and awareness building for business development				
5.5.1	Training module printing (aqu-30, shrimp-30)	Sample copy	January,2023	60	In time
5.5.2	Signboard	Sample copy	January,2023	11	In time
5.5.3	Festoon print for aqua-10, shrimp-15 sets	Sample copy	January,2023	170	In time
5.6	Training on improved aquaculture to old 600 farmers	Report, Attendance	January,2023, February,2023, July,2023	24	In time
5.7	Training on improved shrimp cultuer & BMP for 180 farmers	Report, Attendance	January,2023, February,2023, July,2023, September,2023	9	In time
5.8	Training on nutrition sentsitve aquaculrue farmers for 160	Report, Attendance	January,2023, February,2023, July,2023, September,2023	8	In time
5.9	Facilitate a carp hatchery establishment by a private sector				
5.9.1	Staff recruitment		July,2023	1	In time
5.9.2	Hatchery Technician	Joining Letter	July,2023	6	In time
5.9.3	Establishment of a hatchery, a DTW for underground water				

	source, packing area, brood & nursery pond:				
5.9.4	Hatchery shed, Hatching jars, Rectangular tanks, Deep tube well, Overhead tank, 4HP motor with diesel engine, 4HP motor with diesel engine, Generator and other maintainance cost, Electric installation, hatchery operational others facilities (PG, chemical, etc), Seine net, hapa etc.	Photo, Report	July,2023	1	In time
5.9.5	Earth cutting & removal of black soil considering BMPs (3 ponds)	Photo, masterroll	July,2023	3	In time
5.9.6	Net fencing (3 ponds)	Photo	July,2023	3	In time
5.9.7	Drainage system development	Photo	July,2023	3	In time
5.9.8	Spawn/fry conditioning, packing & loading shed	Photo	July,2023	1	In time
5.9.9	Develop better management practice facilities for safe fry packing and transportation	Photo	July,2023	2	In time
5.9.10	Introducing lab facilities with PH meter, Thermometer, DO meter, Ammonia and Iron testing kits etc.	Report	July,2023	1	In time
5.9.11	Introducing quality broodstock	Report	July,2023	800	In time
5.9.12	Rearing of brood stock, fish feed	Report	July,2023	10,000	In time
5.9.13	Develop entrance/exit gate (2 gates)	Photo	July,2023	1	In time
5.9.14	Oxygen cylinder & refill for marketing of spawn-2	Report	July,2023	2	In time
5.9.15	Printed poly bag for spawn selling with oxygen	Photo, Sample Hard Copy	July,2023	1	In time
5.9.16	Develop waste water treatment facility	Photo, Report	July,2023	1	In time
5.9.17	Capacity building for hatchery staffs, technicians, manager, distribution networks and farmers	Photo, Report, Attendance	July,2023	1	August-2023
5.9.18	Day long capacity building for seed agents/ nurserer and farmers	Photo, Report, Attendance	July,2023	1	August-2023
5.9.19	Day long capacity building of 100 fish farmer and follow-up supports (food-300, conveyance-200, banner-600)	Photo, Report, Attendance	July,2023	1	August-2023
5.9.20	Oxygen Tower	Photo	July,2023	1	August-2023
5.9.21	Communication material development and promotional activities (Banner, festoon, leaflet, sticker, etc)	Sample copy	July,2023	1	August-2023
5.10	Facilitate feed mills in ZoR for Community	Handover Documents, Report, Photo	July,2023	1	August-2023

5.11	Business development through extension support (LSP-15)	-	-	-	-
5.11.1	PH meter, DO kit, thermometer, Secchi disk, etc)	Handover Documents, Report, Photo	February,2023, July,2023	15	In time
5.11.2	Pot/Thin for fry traders (2 Pot)	Handover Documents, Report, Photo	February,2023	1	In time
5.11.3	Spawn/fry support to nurserer (minimum 1KG)	Handover Documents, Report, Photo	July,2023	8	In time
5.11.4	Oxygen cylinder for Nurserer	Handover Documents, Report, Photo	February,2023, July,2023	8	In time
5.11.5	Nursery feeds to Nurserers	Handover Documents, Report, Photo	February,2023, July,2023	8	In time
5.11.6	Fingerling (200pic*5)	Handover Documents, Report, Photo	July,2023	340	In time
5.11.7	Vegetable seeds	Handover Documents, Report, Photo	February,2023, July,2023	340	In time
5.11.8	Supports to feed LSPs pond	Handover Documents, Report, Photo	February,2023, July,2023	15	In time
5.11.9	Acclimatization facilities for fry nursing	Handover Documents, Report, Photo	September,2023	1	In time
5.12	Day Ovservation (Nutrition week and International womens day)	Photo, Report	July,2023, September,2023	3	Only National Fish week-2023 in August
5.13	Exposure Visit to Natore and Rajshahi	Photo, Report	July,2023	1	In time
5.14	Market linkage Events (32 Persons)	Report, Attendance	July,2023	1	In time
5.15	Staff recruitmnet	Joining Letter	January,2023, July,2023	2	In time
5.16	Project learning, sharing and close-out workshop (36 Person)	Report, Attendance	July,2023	1	
5.17	Facilitating access of finance to the LSPs and farmers (Loan Disbursement)	Loan Disbursement Masterroll (BDT 50,000-100,000 for 30 LSPs and BDT 30,000-40,000 for each of 150 farmers)	July,2023	150	Data base In August 2023
5.18	: Refresher TOT for LSP(2 days) (Protyashi-5, LSP-10, WF-3, GoB-1)	Report, Attendance	July,2023	1	In time
5.19	Training on Carp Fattening	Report, Attendance	September,2023	1	In July2023

5.20	Establish demonstration to promote Carp Fattening for 15 farmers	Handover Documents, Report, Photo	July,2023	1	
	Monthly Progress Report	Report	January,2023, February,2023, July,2023, September,2023	11	In time
	Project Final Report	Report	September,2023	1	August-2023
	Success Stories	Report	September,2023	1	August-2023

4.0 Key Innovation of the project

This is different type of project. Have chance learning by doing and all activities relate to the sustainability because Project developed Local Service Provider (LSP) and built their capacity. After learning LSP worked in filed organized training in their local area. So by this reason linkage is developing between farmer and local Service provider, improve their knowledge and skill also project provided business development materials such as P^H meter, DO kit, Thermometer and others which is helping the water quality management and necessary suggestion to farmer. Project organized market linkage workshop and cooking demonstration program which is helpful to create linkage and strengthening the linkage between different stakeholder such as Input saler, Nurserer, Farmer, Feed trader, Fingerling trader, Arothder, Fish tdared and Department of Fisheries for extension support. But one important thing project period is too short so for sustainable development project should be long time time at five year. In Bangladesh most of the farmer are not more aware about fish culture is profitable business and Cox's Bazar remain one corner of Bangladesh. For this reason development touch was not found and ignore about technological development. So it is very much important to approve the long time project either form Department of Fisheries or NGOs.

In the project extension period, project arranged market linkage event & refreshers ToT training for new & old LSPs for developed & facilitated LSPs for more established productive connections with farmers, communities & other aquaculture market actors like feed & input traders, fingerling/ fry traders. Project another key innovations were promotion of nutrition sensitive & improved shrimp culture & BMP, vegetable cultivation on pond dyke & home stead area these initiative were taken for increase family nutrition meet up the deficiency of Vitamin A, iron, Calcium & zinc as well as increase the aquaculture production, income & livelihood improvement.

Establishment of Carp Hatchery & Community feed center are the most two important innovations of the project. In Cox's Bazar district there no semi-auto feed mill & carp hatchery so the fish farmers depends on high price manufacture feeds & for fry/fingerling they were collected from other districts which were shown high mortality after stocking due long distance transport stress. Now they will easily get quality feed & fingerlings, fry, prawn in affordable price so they could make more production from their aquaculture systems.

Another most important innovation was Carp Fattening activities taken initiatives were exposure visit to Rajshahi staff & farmers to receive practical training & establishment of carp fattening demo ponds facilitated farmers training, project supported fingerlings, feed, fertilizer, regular follow up monitoring of water quality & fish sampling for targeting production of 6-7 tons of fish per hectore with start time 4-5 month.

5.0 Sustainability of the business/ intervention model (up to 2 pages)

The project facilitated the market driven improved aquaculture businesses of nutrition sensitive and high valued fish & shrimp farming to the small producers through LSPs providing access to the information, quality inputs, markets and required capital. These business strategies facilitated backward and forward linkages of the production systems linked to continuous supply of quality inputs of aquaculture production systems and outputs to market chains, provide aquaculture farmers the better prices of their products, access of producers to the required capital at reasonable interest rate of Protyashi microfinance program for upgrading of the farming systems to improve the productivity, income of aquaculture production systems and finally to improve the livelihoods of the small producers. The project is facilitating market system development approach for aquaculture and nutrition activities with some cost sharing input supports. Market actors such as nursery owners, fry traders/patilwala (on quality fingerling, transportation of fingerlings and fish culture), fish traders (on washing, transportation, grading sorting and icing to ensure the quality of fish products) and feed agents (on supplementary feed of fishes for better growth and production) will be linked with farmers' groups with inputs and output markets organizing meetings/workshop/training. Moreover, technical support for ensuring sustainability of the project interventions will be requested from the respective government authorities i.e. Department of Fisheries and Bangladesh Fisheries Research Institute through engaging them into different linkage meetings & events.

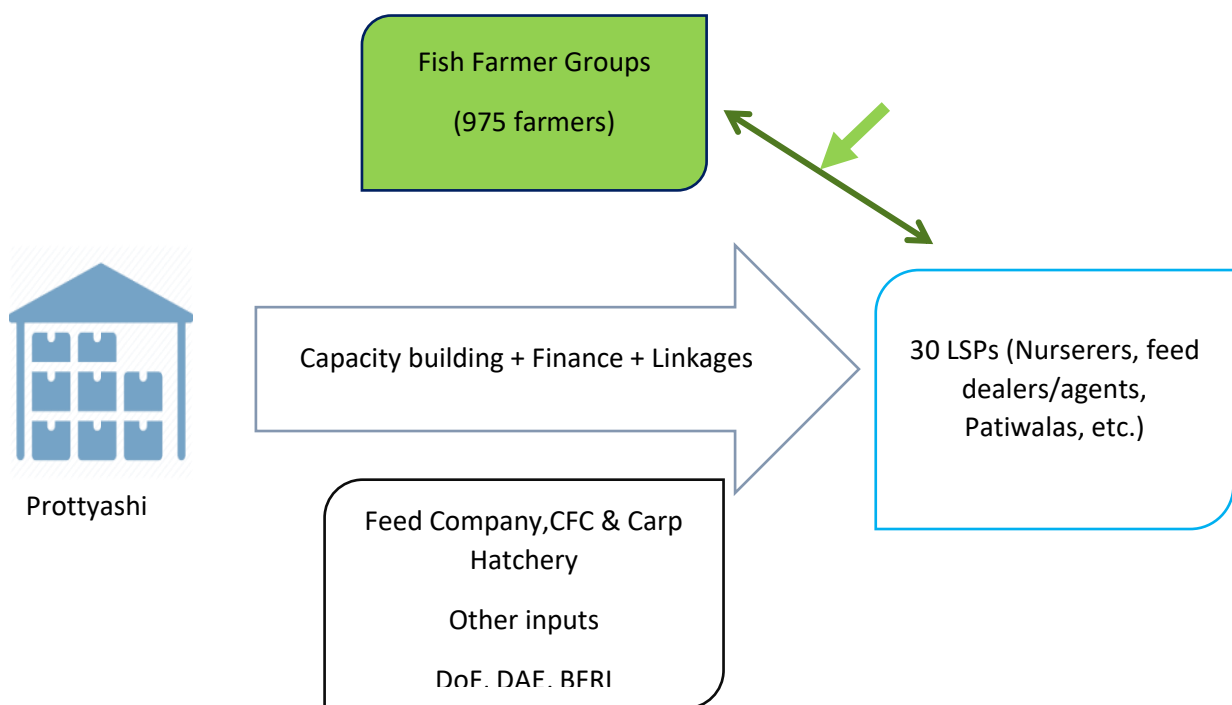


Figure 1: Business model on strengthening availability of inputs and promotion of improved aquaculture

- The proposed intervention was promoted nutrition-sensitive aquaculture among farmers. The vitamin “A” rich mola fish, power house of vitamin & minerals moringa cuttings and orange fleshed sweet potato will be promoted. During fish farmer/ beneficiary selection, priority will be given to pregnant and lactating women and child under 2 year mother.
- The intervention produced and penetrate nutritious fish and vegetable products in the local market to increased fish consumption at the household-level.

- This activity created nutritional awareness through IEC materials distribution and disseminate minimal nutrition messages during training sessions.
The intervention will also organize 2 nutrition awareness events to create awareness among mass people on nutritional aspects.
- IEC materials developed with the assistance of the Knowledge Management unit to ensure branding and promotion guidelines of WorldFish and USAID.

Under this intervention, at least 39% women and 20% were youth of the total beneficiaries. The fish farmers will participate in sessions on women empowerment, joint decision-making, workload sharing, etc.

6.0 Impact of the business/intervention model on the overall business in the intervention period

Linkage was develop between different stakeholder such as inputs saler, Nurserer, Farmer, Feed trader, fish trader, Fingerlings trader and Department of Fisheries. So people much aware about fish culture and capacity is increased better then previous.

7.0 Business Risk and Intervention Strategy

Hatchery not available in Cox's bazar rdistrict so people depended on other district, Cox's Bazar is corner of Bangladesh so communication is time being and costly. People are more vulnerable. Due to climatic hazard flesh flood, soil eroson, education, superstition, proper and lack of knowledge is challenges along with fish storage facility, Ice factory is big challenges. So considering the whole things fish business modal should improve with sufficient time.

8.0 Project budget and financial management (max. 2 page)

Contains types of financial reporting, frequency, a bit detailed budget analysis

Budget & cost variance (01 April 2022 to 30 September 2022)

Budget line	Head of Expenditure	Approved Budget		Total Expenditure		Budget Variance		Budget Variance %		Remarks
		WF	IP	WF	IP	WF	IP	WF	IP	
1	Staffs Salary	1105320	355508	927475	355506	177845	-	84%	100%	
2	Staffs Benefits	92110	29626	75197	24586	16913	-	82%	100%	
3	Equipment, Supplies and Operation Cost	281088	73224	270177	78266	10911	-	96%	100%	
4	Travel	162000	24000	144111	24000	17889	-	89%	100%	
5.01	Staff recruitment	16000	-	13500	-	2500	-	84%	-	
5.02	Project orientation to staffs	14150	-	12866	-	1284	-	91%	-	
5.03	Monthly Coordination meeting	12800	-	12441	-	359	-	97%	-	
5.04	Capacity development /ToT Training on improve aquaculture and business development for LSP and staffs	140560	-	116676	-	23884	-	83%	-	
5.05	Training on improve aquaculture and business for farmers by LSP (15 to 20 Participant per batch)	168400	-	159810	-	8590	-	95%	-	
5.06	Training on carp mola poly culture and dike cropping for nutrition sensitive farmers (120)	32800	-	31846	-	954	-	97%	-	
5.07	Business development through extension support	666000	-	652671	-	13329	-	98%	-	
5.08	Day observation: IYD- Aug 12/NFW (July)/ Nutrition Day (April 23-29)	7400	-	7522	-	-122	-	102%	-	
5.09	Community/School level cooking demonstration on nutritious small fish recipe and awareness event (2 event)	50000	-	49544	-	456	-	99%	-	
5.10	Market linkage workshop with related stakeholders	45200	-	41024	-	4176	-	91%	-	
5.11	IEC materials	103600	-	105958	-	-2358	-	102%	-	

5.12	Attending training on environment and climate organized by WorldFish	13500	-	10920	-	2580	-	81%	-	
5.13	Learning Sharing meeting and Project Close-out	44000	-	37516	-	6484	-	85%	-	
	Total	2954928	482358	2669254	482358	285674	5040	90%	100%	

Budget & Cost variances (01 October 2022 to 31 August 2023)

Budget line	Head of Expenditure	Approved Budget		Total Expenditure		Budget Variance		Budget Variance %		Remarks
		WF	Sub-grantee	WF	Sub-grantee	WF	Sub-grantee	WF	Sub-grantee	
1	Staffs Salary	2893100	-	2754912	-	138188		95%	-	
2	Staffs Benefits	241069	-	230947	-	10122		96%	-	
3	Equipment, Supplies and Operation Cost	280500	-	277,755	-	2,746		99%	-	
4	Travel and Peridium	250000	-	240,845	-	9,155		96%	-	
5.1	Activity 1: Bi-monthly coordination meeting	26500	-	27441	-	-941		104%	-	
5.2	Activity 2: Quarterly progress review meeting	10600	-	10732	-	-132		101%	-	
5.3	Activity 3: TOT on aquaculture to old LSP (2 days) (LSP-20, WF-2, Protyashi-5, GoB-1)	134400	-	122223	-	12177		91%	-	
5.4	Activity 4: TOT on aquaculture to new LSP (2 days) (Protyashi-5, LSP-10, WF-3, GoB-1)	96000	-	112561	-	-16561		117%	-	
5.5	Activity 5: Information dissemination and awareness building for business development	68910	-	68870	-	40		100%	-	
5.6	Activity 6: Training on aquaculture to old 600 farmer, Facilitator-2*24	206880	-	193807	-	13073		94%	-	
5.7	Activity 7: Training on improve shrimp culture and BMP for 120 farmers	75380	-	63417	-	11963		84%	-	
5.8	Activity 8: Training on nutrition sensitive aquaculture to 100	35610	-	32181	-	3429		90%	-	
5.9	Activity-09: Facilitate a carp hatchery establishment by a private sector	1100000	2886000	1000000	2886000	100000		91%	100%	
5.10	Activity-10: Facilitate feed mills in ZoR for Community	865000	-	865000	-	0		100%	-	
5.11	11: Business development through extension support	865000	-	833526	-	31474		96%	-	
5.12	Activity-12: Day Observation (Nutrition week and international women's day)	27800	-	27314	-	486		98%	-	
5.13	Activity-13: Exposure Visit to Natore and Rajshahi	100000	-	99952	-	48		100%	-	
5.14	Activity 14: Market linkage Events (32 Persons)	49600	-	48441	-	1159		98%	-	
5.15	Staff recruitment	30000	-	13000	-	17000		43%	-	Business Development

										Coordinator & 3 Market Facilitators are appointed by internal Circular in urgent need
5.16	Activity 16: Project learning, sharing and close-out workshop (36 Person)	56250	-	54606	-	1644		97%	-	
5.18	Activity-18: Refresher TOT for LSP(2 days) (Protyashi-5, LSP-10, WF-3, GoB-1)	117200	-	111081	-	6119		95%	-	
5.19	Activity-19: Training on Carp Fattening	37200	-	34781	-	2419		93%	-	
5.20	Activity-20: Establish demonstration to promote Carp Fattening for 15 farmers	489000	-	495705	-	6705		101%	-	
	Others cost (Overhead 10%)	805600	-	757724						
	Total	8861599	2886000	8476821	2886000	350313	-	96%	100%	

Period	Approved Budget		Total Expenditure		Budget Variance		Budget Variance %		Remarks
	WF	IP	WF	IP	WF	IP	WF	IP	
April 2022 to Sept 2022	2954928	482358	2669254	482358	285674	-	90%	100%	
October 2022 to August 2023	8861599	2886000	8476821	2886000	350313	-	96%	100%	
Total	11816527	3368358	11146075	3368358	670452	-	94%	100%	

9.0 Monitoring and reporting (max. 2 pages)

Protyashi complied with and internalize WorldFish/ Feed the Future Bangladesh Aquaculture and Nutrition Activity and USAID's relevant guidance, principles, requirements and compliances pertained to the monitoring, evaluation and reporting, MIS, GIS, DQA, KM and CLA. Worked closely with the Activity and proactively extend support in establishing an evidence based, simple, resource and time efficient and effective MEL, KM and CLA systems. They submitted monthly, quarterly and annual reports. All evidence based, fully cleaned and completed. Protyashi maintained coherent and consistence information management flow and adhere to DQA standard and surely, timelines across.

Protyashi followed the data management protocol of this Activity as well as support the MEL team members conducting various surveys and data quality assessment and address their feedback and recommendations. Since, overall MEL system is live and vivid; it adapts changes for further improvement, fostering learning and better reporting.

The MEL team of this Activity have full authority to access to Prottiyashi following data (hard copy and soft copy) and provided the following information in the pre-structured format to the MEL staff of Activity required particulars/ disaggregates:

- Training and workshop attendance documents (follow Activity MEL suggested templates)
 - Details information of reached farmers, stakeholders through Prottiyashi
 - Other relevant data/ information.
-

10.0 Challenges/ Lesson learned (max. 3 pages)

10.1 Project design and implementation challenges:

- Time constraints
- Procurement process difficulties
- Equipment are not available in this area
- When purchased any materials requirement could not full fill by vendor and some materies limited access but those vendor have no required documents
- Weather condition such as raining, flash flood, cyclone, drought etc are challenges
- People busy their other activities so during programme they could not participate in time
- People have less interest about aquaculture due to available fish in the Sea & market
- Two tilapia Hatchery have but no Carp hatchery established in Ukhiya and Ramu
- Fish Farmer depend on other district Carp fingerling so when stock carp fingerling in Pond mortality rate is high
- Fingerling as a live materials transport cost and risk
- Flash flood area, Hill region so water turbidity increase during raining;
- Fish feed cost is high

10.2 Partnership Challenges (including grants, finance, M&E, and MSD):

- Dual administration management
- Grants is not sufficient
- Financial management is challenges due to official roles

10.3 Any external Challenge

- Invitee guest could attend in time
 - Govt. People want to form a group according to their suggestion
-

11.0 Areas of Improvement/Recommendation

Prottiyashi a national NGO and is being operated in this region. After end of the project, the organization will continue its operation of micro-credit program in this region as a profit oriented program. Prottiyashi has 16 branch offices at Cox's Bazar Sadar, Ramu, Ukhiya and Chakaria upazilas under the Cox's Bazar district. A total of 120 experienced staff are working in this area and providing microfinance services to the customers

including men and women producers. So Prottiyashi will recommend to extended the program all 8 upazilla of Cox's Bazar district.

12.0 Conclusion

This is 17 month project from April 01, 2022 to 31 August 2023 . Prottiyashi completed DIP, Staff recruitment. According to project objective and target Prottiyashi completed 975 farmer and 30 LSPs selection, project orientation program, Capacity development of LSPs & staff on aquaculture ToT courses, Improved aquaculture training, Carp- mola poly culture training & Improved shrimp culture & BMP training for shrimp farmers, Business development extension support to LSPs, Fish fingerling & vegetable seed supported to 460 farmers. Organized market linkage workshop, School level cooking program, Prepared IEC materials like training modules, Festoon, Leaflet and signboard etc in time. Prottiyashi Credit team is working union level. So able to provide financial support to farmer according to their need. In this moment Prottiyashi is running 8 development project in Cox's Bazar. So Prottiyashi have enough capacity to implement any kind of development project.