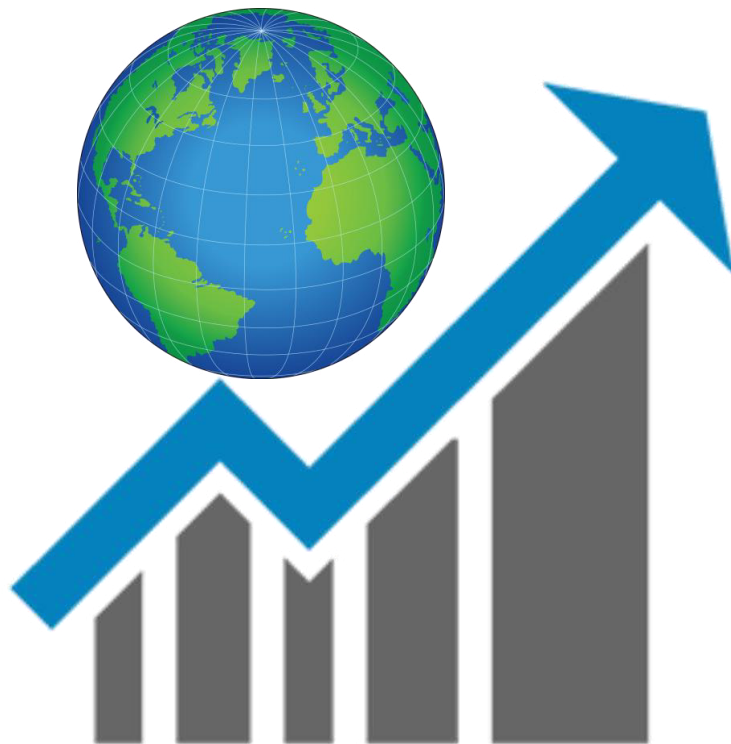


# Resource Development Foundation (RDF)

Its contribution to the  
National Economy of Bangladesh  
through Agricultural Activities  
Since 1993 to 2021



**M Golam Mostofa**  
Founder & Chief Executive Officer

**Prepared by:**

**M Golam Mostofa**

Founder

and

Chief Executive Officer

**Published in:**

June, 2022 (1st Edition)

**Published by:**

Resource Development Foundation (RDF)

**RDF Bhaban**

House-21, Road-12, Block-Kha

Pisciculture Housing Society

Adabar, Dhaka-1207

Phone: +88-02-9104643, Fax: 0448-62706

E-mail: [rfdk@yahoo.com](mailto:rfdk@yahoo.com), [info@rfdbd.org](mailto:info@rfdbd.org)

Website: [www.rfdbd.org](http://www.rfdbd.org)

## **Contents**

1. Message from the Hon'ble Former Green Governor of Bangladesh Bank
2. About RDF
3. Women's Development through Agro-based Activities (1996-2003)
4. Smallholder Livestock Development Project (SLDP)-2 (2001-2005)
5. Patuakhali Barguna Aquaculture Extension Project (PBAEP) (2006-2009)
6. Coastal Area Rehabilitation Project (CARP) (2009-2012)
7. Coastal Livelihoods Adaptation Project (CLAP) 2009-2012)
8. RDF Renewable Energy Program for Solar Irrigation Pumping System (SIPS) (2010 - continuing)
9. Strengthening Economic Security (SES) of Marginalized Young Women in Bangladesh
10. Combatting Early Marriage in Bangladesh (CEMB) Project
11. Girls Get Equal (GGE) Project (2020- Continued)

**Message from the Honorable Former  
Green Governor of Bangladesh Bank**



It gives me immense pleasure that Resource Development Foundation (RDF) is going to publish Its “Contribution to the National Economy of Bangladesh through Agricultural Activities”. From its inception in 1993, RDF has been playing key role in the development of agriculture for ensuring food security for the marginalized in the rural area of Bangladesh.

It is heartening to note that RDF is a national level development organization & acts as a potential organization in agriculture & renewable energy Sector for Sustainable Development.

I would like to extend my sincere felicitation to all staff & key personnel who are working with Resource Development Foundation (RDF).

Let us join our hands together to foster a green & sustainable future for Bangladesh with desired food security.

I wish all the best for Resource Development Foundation (RDF) in this exciting journey for inclusive sustainable Bangladesh.

A handwritten signature in black ink that reads "Atiur Rahman".

**Dr. Atiur Rahman**  
Bangabandhu Chair Professor, Dhaka University  
Former Governor, Bangladesh Bank

## CEO Speech

It is my contentment to announce that Resource Development Foundation (RDF) is going to publish its contribution to the economy of Bangladesh from 1993 to 2021. RDF has a great contribution to the agricultural sector through enhancing production, employment generation, income generation & entrepreneurship development.



RDF is not only working for their beneficiaries' social-economic empowerment, but supplementing efforts for poverty alleviation, food security, renewable energy, health and hygiene, sanitation, and awareness building of their rights. It organizes different kinds of agro-based training for its beneficiaries on disaster management intending to provide knowledge on how to protect themselves from disaster.

Making its foot in the long-run RDF always believes in a participatory approach that without integration and addressing people's needs; real development can never be attained. Microfinance is considered such a system to address various socio-cultural settings and responses which help for changing the lifestyle of underprivileged people in the society. RDF also supports accelerating employment and income of the beneficiaries that contributes significantly to the national economy. Moreover, it believes in hard work with devotion, transparency, and accountability which increases the capability of the organization and project management.

This publication is presenting the synopsis of our integrated activities. More importantly, having this confidence, we hope that this will draw the attention of the concerns including development partners, practitioners, and other related earners.

RDF in the meantime created lots of employment for its women & man beneficiaries. Their income rises significantly based on agriculture and agricultural commodity trading. Their social status already changed. Children go to school, wear good clothing, enjoying

good family life. In some cases, they are playing a leading role in society.

Having progressed so far, it is sensible to declare that this tremendous achievement and contribution of the organization has become possible due to cooperation and support from our partner organizations. On behalf of the RDF family, I would like to give my cordial thanks to our development partners and individual stakeholders. It is now recognized that RDF is the premier institution in the field of agriculture but to contain this stability, RDF needs continuous support from all its stakeholders for self-reliance.

I would like to take the opportunity to congratulate all personnel of RDF for their remarkable efforts. Finally, I am very much grateful to my friend Dr. Tapash Kumar Biswas, Director, Research, Polli Karma Sahayak Foundation (PKSF) for his wholehearted contribution for making the book presentable.

**M Golam Mostofa**  
CEO, RDF

## 1. Resource Development Foundation (RDF)

### About the organization:

Resource Development Foundation (RDF) has started its philanthropic activities as a nongovernment development organization since 1993. It is the brainchild of M Golam Mostofa, the Founder and Chief Executive Officer (CEO) of RDF.

The organization has got its physical shape in 1993 but it had been in the process of formation when the catastrophic cyclone of 1970 hit the coastal districts of Bangladesh like: Barguna resulting great miseries of the people of the affected area. At that time, RDF founder was 11 years old, who saw the devastation and the miseries of the distressed people, which touched the soft soul of Golam Mostofa. Since then, he has set up his mind to stand beside the frequently affected the people in the future.

At present, RDF has become a giant tree where more than **1,870** committed personnel are working for sustainable development of the continuous victims.

RDF believes that every human being has in built resources, potentialities and credibility. Based on it RDF has a rich justification on its title; e.g. the organization is a Foundation for Development through utilization of human and other scarce Resources. So, it is called Resource Development Foundation (RDF).

RDF got its registration from Department of Social Services (DSS) in 1995, NGO Affairs Bureau in 1996, Department of Women Affairs in 1999 and Micro credit Regulatory Authority (MRA) in 2009. RDF has established a very strong network with other national and international organizations, those are well esteemed in the country and all over the world. These organizations are: Nationalized and Private commercial Banks for internal resource mobilization, financial institutions through Bangladesh Bank (BB), GoB Research Institute, international and nationally reputed organization like BRRI, DANIDA, BLRI, BFRI, BARC, BARI, Plan International, GIZ,

Orphan Support International-USA (OSI-USA), CARE-Bangladesh, UNDP,

Since its inception, RDF has been serving the distressed people by addressing their primary needs. Based on it, it has been working for the targeted people with several renowned national and international organizations, focusing on agricultural development (crops, livestock and fisheries).

The economy of Bangladesh is predominantly agro-based therefore, without agricultural development no further development can be achieved for the targeted people. RDF is supplementing GoB efforts in reducing food deficiency in the Coastal area as well as the country. It has been trying to integrate conventional and innovative approach to resolve this Food Security Issue. Agricultural development through micro credit support, which is a conventional method and agricultural development through Solar Irrigation Pumping System (SIPS) is the most modern and innovative technologies that has been incorporated to mitigate the food crisis from targeted area & the country. These ideas and policies have been implementing by RDF with its potential team of hardworking people.

**Its Vision:**

Sustainable and prosperous livelihood.

**Mission of RDF:**

Establishment of rights of the communities and people in social, environmental, economic, educational, health and social security's ensuring essential supports.

**Geographical area**

RDF is one of the National Social Development Organizations in Bangladesh and has the recognition from the various GoB Departments, it has the right to work all over Bangladesh. Accordingly, RDF has been working in a number of 45 districts in Bangladesh like Barisal, Khulna, Dhaka, Mymensingh, Shylhet,



Chattogram, Rajshahi Division and also works in all the districts of Barishal division.

**Focus of the organization:**

RDF is also a right based and humanitarian focused organization. At present it works in multidimensional sectors. The followings are the focusing areas of RDF:

1. Child Rights and Protection including Prevention of Child marriage.
2. Livelihood Development of the poor family, especially the adolescent girls.
3. Human Rights and Social Protection.
4. Climate Change and DRR.
5. Protection of Rights of disaster vulnerable people.
6. Alternative livelihoods and technology transfer.
7. Sustainable Agricultural development.
8. Humanitarian response and disaster preparedness.
9. Adolescents Health and protection.
10. Non-Formal Education.
11. Food & Nutrition supports.
12. Water & Sanitation.
13. Renewable energy (Solar Irrigation Pumping System, Solar Street Lighting System, Solar Rooftop System, Solar Home System).
14. Infrastructure Development.

**Specific Working Experiences:**

RDF has a vast experience on the issues of social development (Child marriage, Adolescent and SRHR) and has implemented the following relevant projects:

**Social Development Arena:**

1. Strengthening Economic Security of Marginalized Young Women in Bangladesh, supported by Plan International Bangladesh.

2. Aspiration to Stop Child Marriage in Bangladesh, supported by Plan International Bangladesh.
3. Combatting Early Marriage in Bangladesh (CEMB) Project, supported by Plan International Bangladesh.
4. Bangladesh- Girls Get Equal-Preventing Child Early and Force marriage (GGE) Project, supported by Plan International Bangladesh.
5. KisoreSanglap project in Barguna district, supported by Stromme Foundation and CODEC.

**Livelihoods Arena:**

1. Women Development throw Agro base Activities, Supported by DANIDA
2. Small holder Livestock Development Project-2(SLDP-2), Supported by DANIDA
3. Patuakhali, Barguna Aquaculture Extension Project, Supported by DANIDA
4. Coastal Area Rehabilitation Project (CARP) in Barisal Division, supported by GIZ (German development Cooperation).
5. Coastal Livelihoods Adaptation Project (CLAP), supported by GIZ (German development Cooperation).
6. Poverty Reduction project, supported by Credit and Development (CDF).
7. Life and livelihood Development activities, supported by Action Aid Bangladesh.
8. Livelihood activities in Patharghataupazila under Barguna district, supported by Care Bangladesh.

**Humanitarian Supports:**

RDF has long experiences on the humanitarian supported projects which are given below:

1. Protection and Promotion of Rakhaine Peoples Rights, Supported by DANIDA and Oxfam GB.
2. Emergency Relief Activities, Supported by Care Bangladesh.

3. Strengthening Economic Security of Marginalized Young Women in Bangladesh, supported by Plan International Bangladesh.
4. Aspiration to Stop Child Marriage in Bangladesh, supported by Plan International Bangladesh.
5. Combatting Early Marriage in Bangladesh (CEMB) Project, supported by Plan International Bangladesh.
6. Bangladesh- Girls Get Equal-Preventing Child Early and Force marriage (GGE) Project, supported by Plan International Bangladesh.
7. Vulnerable Group Development (VGD) project in Bhola district, supported by Department of Women Affairs.
8. Safe Drinking Water Supply in Baruna district, supported by GIZ.
9. Core Family Shelter in Barguna district, supported by UNDP.
10. Hiring HR for Covid-19 sample collection and contract tracing project, supported by Partners in Health and Development (PHD).
11. Initiation of Capacity Building for Peaceful Stronger Cities (ICPSC) in Dhaka South City Corporation (DSCC), supported by Strong Cities Network (SCN).

**Renewable Energy Supports:**

1. Solar Home System (SHS) project in 165 upazilas of 38 districts, supported by Infrastructure Development Company Ltd. (IDCOL).
2. Solar Irrigation Pumping System (SIPS) in 5 upazilas of 3 districts, supported by Infrastructure Development Company Ltd. (IDCOL).
3. Solar Street Lighting project in rural areas of Bangladesh under TR/Kabita Program of GoB.
4. Solar Rooftop projects on Government offices & Commercial Buildings of Bangladesh.
5. Improved Cooking Stove (ICS) project in 11 upazilas of 6 districts, supported by Infrastructure Development Company Ltd. (IDCOL).

**Water & Sanitation Supports:**

1. School Sanitation activities in Barguna district, supported by Plan International Bangladesh.
2. Sanitation activities in Barguna district, supported by Muslim Aid-UK.
3. Water and sanitation program, supported by ECHO-Care-BD.
4. Water and Sanitation program, supported by DFID-Care BD.
5. Safe Drinking Water Supply in Barguna district, supported by GIZ.
6. Pure Drinking Supply & Solar System in Bandarban district, supported by Ministry of Primary and Mass Education.

**Education Development Supports:**

1. School Sanitation activities in Barguna district, supported by Plan International Bangladesh.
2. Out of School Children project, supported by Bureau of Non-formal Education.
3. School Equipment for Children project, supported by ECHO-Care- BD.
4. School cum Cyclone Shelter construction project, Supported by CSR of Grameen Phone Bangladesh.

RDF's contribution to the rural economy through agro based activities:

**2. Women's Development through Agro-based Activities (1996-2003)**

One of the major objectives of the project is to the empowerment of women in the project area. As 49% of the total population in Bangladesh is women, their active participation is needed for the development of society. RDF believes, that if women could be involved in income-generating activities to earn at a sustainable level and educate themselves in healthcare, development education, and agricultural development knowledge, they will be able to change the society in a positive direction.

The project implemented so many activities for women's development like mini poultry farm, homestead gardening, Roby crops, farming duck rearing, poultry rearing, goat rearing, small grocery shops, etc. A total of 26,700 women beneficiaries have got sustainable support from the women's development activities, resulting in women beneficiaries are benefited through agricultural activities, especially in model village poultry activities.

The scenario of the specific area of Barguna and Patuakhali districts are changed in the agricultural sector like vegetables, duck, chick, and goat rearing. All the beneficiaries are after completion of the project skilled in poultry management and disease control. Community-based crops, fisheries, poultry, and livestock management have taken place through these activities.

Besides these activities, RDF organized training on disaster management, health, and hygiene consciousness-raising, and capacity building on different income-generating activities for the female beneficiaries to ensure their sustainable development. The measurable impacts of all the development activities are positively reflected in their daily lives as well as in society. Now the beneficiaries are strong enough in any decision-making activities belonging to their families and society. Society has been changed in positive directions. Their economic condition and outlook have been changed. RDF is striving hard to bring this kind of positive change. Through these development activities, RDF has involved these isolated people in the mainstream of society.

Every woman under RDF's program has got their own identity and some of them are taking the leading role in the society by participating in local government elections presently some woman beneficiaries are acting as Union Parishad members, as well as Upazila women Vice Chairman.

It is mentioned earlier that RDF started this foreign aided women's development project primarily in 1996 which was funded by the Royal Danish ministry of foreign affairs through DANIDA.

- a. Component Activities of the Project:**
  - a. Crops diversification and cultivation.
  - b. Technology transfer.

- c. Training and technical support.
- d. Microcredit supports on IGAs.

The mentioned activities were performed efficiently with a team of consulting experts in the agricultural sector from the departments of Agriculture, Livestock, especially Veterinary, and the department of Fishery of Bangladesh Agricultural University.

Various training and technical support to the beneficiaries and the RDF staff of the project were provided on the following components and based on its tremendous growth the components were made sure.

- a. Homestead vegetable production and marketing.
- b. Seed production and preservation.
- c. Soil testing and fertility measuring.
- d. Cow rearing and management.
- e. Fish culture and management.
- f. Forestation nursery management.
- g. Small entrepreneurship development, etc.

It was a “result bearing project in AmtaliUpazila under Barguna district got the benefit in income and employment generation as well as gathered knowledge and experiences in various agro-based activities. Stakeholders of the project like local government authority, local people, community people, civil society, and the beneficiaries were more encouraged in various ways from the sub-activities of the project. No agricultural activity was in the past, before starting this project activity in the said locality. Only fishing from the sea of the Bay of- Bengal and the nearest rivers was the main source and profession of the locality in AmtoliUpazila.

#### **b. Impacts of the Project:**

After completion of the project, significant impacts have been observed:

1. *A total of 26,700 beneficiaries were directly benefited:*
  - a. Their income significantly increased.
  - b. The social status of the targeted family or households also improved.

- c. Enrolment of children in school increased.
- d. Clothing and dressing changed better than before.
- e. Food habits and feeding behavior improved.

2. *Impact on consumption as well as market-level in the locality:*

- a. Crops and vegetable items are available in the market where community people get available nutritional support.
- b. Eggs, poultry birds, cows, and milk are available in the locality.
- c. Production of fish food items increased.
- d. Positive social changes in the behavior of the community peoples as well as beneficiaries were observed.

As a result, the project was sustained, the implementing agency (RDF) was happy and DANIDA was also pleased to do work with RDF. Finally, RDF's reputation was taken place.

**c. Impact on RDF, As a Development Organization:**

The project was a “milestone” to develop RDF staff members who were very much involved in the project activities. The following impacts were created inside the organization in 2003:

- a. Reputation of RDF was built both in GOB as well as the development sector in Bangladesh.
- b. Ministry of Foreign Affairs of Denmark was pleased as well as DANIDA (Danish International Development Agency) management highly appreciated RDF and based on strong performance, DANIDA provided Management Fellowship Degree to the CEO of RDF in Denmark. Thus Mr. M. Golam Mostofa founder and CEO of RDF became a DANIDA fellow on management in Denmark.
- c. Strong and efficient trainers' team was made in RDF staff management in the agricultural sector.

Ultimately, beneficiaries of the activity area, as well as RDF, benefited and now RDF has the capacity to implement any sort of project in the agricultural sector in Bangladesh.

**2.3 Outcomes of the Project:**

- a. A total of 26,700 beneficiaries or 1,12,000 household members were directly benefited. They got food, nutrition, a peaceful family, and a good living environment.
- b. 100% of the local people got available fish food and other food items from agricultural commodities produced by the direct beneficiaries of the project.
- c. A total of 20,500 beneficiaries received practical training on fisheries, crops, and livestock. They prepared themselves as human resources in the agricultural sector.
- d. A total of 373 staff members of RDF got practical training on the various components of the agricultural sector of which 20 persons made themselves Trainers of the Trainee (ToT). Now they are organizing RDF trainings by themselves.

**Lessons Learned:**

Women in Bangladesh play a vital role in agriculture which is essential for the livelihoods, nutritional support, and well-being of the nation. However, women face persistent obstacles and economic constraints limiting their inclusion in agriculture. The common phenomenon in Bangladesh is that women are not involved in agricultural production outside the homestead. Food insecurity is further complicated by gender-related factors, as women have a very low level of land and asset ownership and do not have access to extension services or other activities. It can be defined that the empowerment status of rural women in Bangladesh can be significantly improved by increasing their involvement in income-generating activities such as the agricultural sector. Therefore, there exists huge scope to involve women in agriculture. Factors such as education, extension contact, and exposure to training can all increase a woman's technical knowledge, which in turn will increase her participation in agriculture. Appropriate extension strategies and motivational drives can be instrumental to achieve this goal.

It is understood that women played a real role in the agriculture sector through micro entrepreneurs' development in the rural economy. They are one of the major factors with other development elements. If they are empowered with social, environmental, and



financial support, they are more competent than men in the agricultural sector.

If the government along with the development partners work together in addressing these issues, rural women could more contribute to the national economy of Bangladesh, and the upliftment of the rural economy can be ensured.

### **3. Smallholder Livestock Development Project (SLDP)-2 (2001-2005)**

It was an outcomes-based project in the livestock sector in Bangladesh. The Smallholders Livestock Development Project (SLDP)-2 was a bilateral project with the Department of Livestock Services of the Ministry of Fisheries and Livestock of the Government of the Republic of Bangladesh with the Ministry of Foreign Affairs of Denmark through DANIDA.

DANIDA meanwhile, built RDF as a potential development partner in the Agricultural sector in the southern coastal area of Bangladesh giving support through (Primarily) the Women's Development in Agro-based Activities project, and based on it the Danish Ministry of Foreign Affairs has given more emphasis on RDF for implementing the project namely Smallholders Livestock Development Project (SLDP)-2 with RDF along with some other partners in Bangladesh.

The project was implemented bilaterally with a giant team of experts from the Department of Livestock of the Government Republic of Bangladesh along with foreign experts as well as an expert team of knowledge from Bangladesh Agricultural University. With the financial and technical assistance of DANIDA, RDF implemented this project from 2001 to 2005.

The project was implemented efficiently and at the end of the implementation period, it was sustained. Southern coastal people of Bangladesh got benefit in all respects in poultry and livestock through live cycle components in supplying and demanding Chick and Duck rearing as nutritional supports for the human livelihoods.

It was a unique project in the livestock department of the Bangladesh Government. There was strong expertise from agricultural universities and other GoB organizations related to the

livestock department who were directly involved and provided support to the project for fulfilling basic needs and making expertise in RDF.

SLDP-2 project was designed to provide balance support, not only for the beneficiaries' benefit but for the development of the livestock sector through preparing human resources both in the department of livestock as well as RDF. A related concern of the livestock department like Upazila and District Livestock Officer and concern personnel who were involved in providing sustainable support delivery to the consumer's end.

Poultry breeding centers of the government were always supported to supply and delivery the day-old chicks to the beneficiary level of the project. Special Cocks were purchased from Holland and Hens from Belgium through the GoB initiative.

Numerous numbers of training on a large scale were imparted for sustainable support delivery by the foreign and local experts in the poultry sector. In the following "Poultry Model Chain Activities (PMCA)" the beneficiary level was at the key entrepreneurs who were efficiently functioning on the following project components:

- a. Mini Poultry Model Breeding.
- b. Day-old chick and duck rearing
- c. Hen key rearing Unit
- d. Duck rearing Unit
- e. Vaccinator promoting and vaccinating
- f. Egg selling enterprise promotion
- g. Feed selling enterprise promotion
- h. Brood Hen and Cock rearing

Training on the following subjects was conducted for the staff and beneficiaries of the project:

1. Small Entrepreneurship Development Management.
2. Poultry Mini Firm Operation, Management, and Marketing.
3. Goat Rearing and Disease Control
4. Small Business Management
5. Cow Rearing, Management

6. Chick and Duck Rearing and Marketing
7. First Aid and Conscious Raising
8. Vaccination and Management
9. Poultry Chain Working Management

A total of 9 chain activities were rationally functioning for sustaining the project with expected outcomes:

- a. Poultry Worker and Vaccine Providers
- b. Chick Rearing
- c. Model Hen Key Breeder
- d. Hen Key Rearer
- e. Duckling Rearer
- f. Duck Rearer
- g. Food Seller
- h. Mini Hatchery Worker
- i. Egg Collectors and Sellers

Training on a large scale was provided to the beneficiary level during the project period like:

- a. Technical Management of Vaccination and Management
- b. Shelter Building and House Management of Day-old Chick
- c. Brooder House Making and Breed Management
- d. Equipment and Application and its Management for Chick Rearing
- e. Chick Management, Fooding, and Feedings
- f. Technical Management of Model Breeder (RDR) Cock Rearing
- g. Technical Management of Model (Faomi) Hen Breeder
- h. Technical Management of Breed Hen and Cock Management for Eggs Production
- i. Model Breeding Farmhouse Management and Technical
- j. Traditional Eggs Litting and Breeding Management
- k. Brooder Hen Key Rearer Management and Technical
- l. Day Shelter Making, Rearing, and Management

The project was very much popular in the locality of Patuakhali and Barguna Districts getting demandable supply in Poultry Food nutrition and sustainable income generation of the beneficiaries.

**Lessons Learned:**

It was an excellent and unique initiative of the Department of Livestock, Ministry of the Fisheries and Livestock (MOFL), which included Foreign and Local experts in the poultry sector to establish Poultry Chain Activities in the rural areas of Bangladesh. It was a model activity in the poultry sector that was created to impart nutrition as well as income and employment generation of the project beneficiaries.

From Eggs to Rearing Broods, a number of 8 cycle Chain Production Activities ensured sustainable examples in “Poultry Development” in Bangladesh. It was proven that the rural women are the key factor in any activities, if they are trained and organized themselves in an agro-based production chain. It is also proven that the national experts like the Teachers of Poultry Department of Agricultural University and other agricultural institutions in Bangladesh along with the foreign experts are ensured potential efforts with appropriate technology, there must be ensured sustainable development of the rural economy.

#### **4. Patuakhali Barguna Aquaculture Extension Project (PBAEP) (2006-2009)**

RDF in the meantime gathered knowledge and experiences in the agricultural sector and social development in Bangladesh and based on it, the concerned department of GoB and academic institutions in the agricultural sector recognized RDF as one of the experienced and prominent development organizations in the agricultural sector. Based on the best performance, the Royal Danish Embassy and DANIDA decided to give another responsibility of a project namely "Patuakhali Barguna Aquaculture Extension Project (PBAEP)" for Fisheries and Aquaculture development activities in the Patuakhali and Barguna districts.

In 2006, RDF got the aforesaid opportunity to implement the above-mentioned project with Financial and technical support from DANIDA. The project was implemented by RDF in collaboration with the Department of Fisheries Ministry of Fisheries and livestock of the Government of the People's Republic of Bangladesh. The project was also funded by the Danish Ministry of Foreign Affairs through their development agency DANIDA.

It is to be mentioned that the Resource Development Foundation (RDF) in the past, implemented the previously mentioned two projects namely Women's Development through Agro-based Activities and Smallholder's Livestock Development Project (SLDP). Based on the performance of both, the Embassy of Denmark in Bangladesh referred to the Department of Fisheries for providing funds to RDF for effective working in the fisheries sector as it has expert manpower (Human Resources) and well organizational setup as well as project management to implement the PBAEP.

##### **a. Activities Performed by the Project:**

RDF had to accumulate and organize fishponds from private water body owners and government khash water bodies. The Ministry of Fisheries provided the Local GoB water bodies with Fish and Aquaculture development activities for demandable support for fish foods. DANIDA management gave financial and technical support for implementing the project. RDF organized the local people, and

private owners, and motivated them for fish culture and management activities in an effective effort.

A strong team of fishery experts from the Local community people, National and Foreign experts supported the project by providing training and technical support. RDF motivated the people and engaged them in fish culture and management activities mentioned as follows:

1. Small Nursery Development Management.
2. Forestation and Nursery Management.
3. Basic Training on Fish Culture.
4. Microfinance Operations for Fisheries Management.
5. Training on Homestead Vegetable Production.
6. Training on Small Scale Fish Preservation Management.
7. Training in Forestation Nursery Management.
8. Basic Training on First Aid and Conscious Raising.
9. Training on Pond Fish Culture and Management.
10. Fisheries, Agriculture, and Livestock Combined Management.
11. Training in Case Culture Management.

PBAEP was a sustainable project in the fisheries sector in the southern coastal areas of Bangladesh implemented by the CBOs (Community Based Organization) at the community level of the working area. The CBOs are now well organized and experts in entrepreneurship and have gained efficiency in the fisheries sector. They are capable experts in organizing and managing individual fish farming, harvesting, marketing, and other related aquaculture activities.

A well-organized team of experts in the Department of Fisheries of the ministry who retired from the academic subject of Fisheries from the Agricultural University of Bangladesh provided the above-mentioned training supports to the entrepreneurs of the project. High-level professionals from the various Fisheries Institutions were included in training and technical support providing activities. RDF professionals and experts in this subject had worked hard to make the beneficiaries as entrepreneurs in the fisheries sector.

Most of the big fishponds, dead canals, and dead rivers under GoB-owned property in the project area of Patuakhali and Barguna districts were accumulated and organized for fish farming. Huge training was provided to the concerned beneficiaries at the community level and entrepreneurs. A total of 4050 householders and about 2450 beneficiaries got direct benefits from this project.

**b. Impact of the Project (PBAEP) at the Beneficiaries', Markets and Consumer Level:**

1. Fish production increased nutrition in the locality
2. Employment created in the fishery sector of the project area
3. Sustainable income of the beneficiaries increased
4. Huge fish supplied to other areas
5. Young miscreants are employed and involved in work.

**c. Lessons Learned:**

Aquaculture and Fisheries activities in the southern coastal area of Bangladesh where big fishponds and large water bodies in private and in the public sectors are available can be playing a major role in mitigating protein deficiency and nutrition. The project proved that income, employment, and community-based Aquaculture and Fish farming in the South Coast area of the country is a prospective activity for supplying fish food nutrition to the country as a whole.

By utilizing huge Water Resources like a dead river, dead Cannel, Fishponds and other aforesaid water bodies for Fisheries and Aquaculture PBAEP Project successfully ensured more Fish and Aquaculture Production. A lot of employment and income opportunities were ensured and established for skilled Fish Farmers for their Sustainable livelihoods. Permanent employment and sustainable income opportunities have been achieved through this sector.

It's a great opportunity for our locality as well as the government of Bangladesh that a large number of fish are coming from the South Coast of Bangladesh which is the contribution of the PBAEP Project.

## **5. Coastal Area Rehabilitation Project (CARP) (2009-2012)**

*The project was funded by the Government of the Federal Republic of Germany and Supported by German Development Cooperation (GIZ)*

### **a. Background of the Project**

On 15<sup>th</sup> November 2007 a severe cyclone, SIDR, hit the coastal districts of Bangladesh along with a high tidal wave. At least 3 million lives were lost and damaged properties, livelihoods, and infrastructures. While the recovery from the disaster was slowly taking shape, another tropical cyclone AILA hit the same areas on 25 May 2009 with a tidal surge. That caused widespread devastation and affected the lives of about 2.3 million inhabitants of the coastal areas the necessity for relief and rehabilitation was huge, and the world community also came to help the victims.

German Government came forward in response to help the livelihood-based rehabilitation support to the affected people and GIZ started a disaster-preventive rehabilitation project for a period of 3 years (9/2009-3/2012) with the aim to support the victims of cyclone SIDR and cyclone AILA with disaster-preventive reconstruction measures. That project title was Coastal Area Rehabilitation Project (CARP). RDF was selected as their implementing partner for the Barguna district.

### **b. Specific Goal of the Project:**

Specifically, the project aims to restore and develop the livelihoods and disaster preparedness of about 12,000 households located in approximately 10 most cyclone-affected coastal areas of the Barguna and Patuakhali districts.

### **c. Approach and Methodology for Implementation of the Project:**

RDF is committed to working with the poor, landless, marginal, and small farmers in the Barguna district. It has been working with the SIDR and AILA affected people of the coastal area in both these districts immediately after the disasters, as much as it could through their own or collaborative efforts. In line with its past practice, the group approach for implementing this project was followed who



formed Community Based Organizations (CBOs). In effecting the disaster preventive rehabilitation and for subsequent development, the groups along with the CBOs have the vehicles for changes. They were pivotal in receiving project advisory services, technical support, and material or cash assistance so that they can build up the required capacity in this disaster-preventive rehabilitation endeavor. The process, therefore, has participatory, bottom-up, and integrated, and have based on community mobilization and local planning with all stakeholders including women and children. Special attention was given to female-headed households, members of the deprived or socially disadvantaged minorities, and ethnic groups, particularly the *Rakhaigns*. Gender awareness was promoted and ensured throughout the project.

Immediately after the inception of the project, RDF took necessary measures to carry out the baseline assessment in the relevant communities to specify and quantify Key Performance Indicators (KPIs). Against those KPIs, which had subject to periodic evaluation, the effectiveness and success of the project interventions at the community level were measured.

The groups were formed with 25 to 30 households depending on the proximity of the constituting households and management convenience. A total of 35 groups were formed among the affected 1,000 households. They had received appropriate training for their livelihoods in agriculture, including crops, vegetables, livestock, and poultry so that their production systems could be improved for higher returns. Supports for seeds/seedlings, fertilizers, certain implements, a limited number of small animals, and poultry were provided to the affected households.

RDF had taken all technical measures to ensure that the income-generating activities (IGAs) and use of natural resources are sustainable. This is achieved through appropriate planning, cost-benefit analysis, development of concepts for use/maintenance of infrastructure, and preparation of an exit strategy.

The project was linked with the affected communities with relevant governmental agencies, e.g., the Department of Agricultural Extension (DAE), Department of Livestock Services (DLS), Bangladesh Water Development Board (BWDB), Local Government

Engineering Department (LGED), and worked closely with the local government representatives as well as the District Administration.

GIZ provided capacity development support to staff members of RDF, who received training to function as multipliers concerning the promotion of small-scale enterprises, disaster preparedness, and awareness of climate change.

RDF developed and operated a suitable Management Information System (MIS) to monitor and generate regular feedback on the implementation of project activities. They had supported, as appropriate, impact monitoring and associated data collection systems developed by CARP, and independent impact monitoring advisors/team.

**d. Livelihood Development of the Project:**

1. Identify crops and cropping patterns suitable for land prone to salinity and flooding.
2. Promote and support viable and sustainable IGAs in the field of agriculture, livestock, and alternative livelihood activities using entrepreneurial approaches.

**e. Capacity Building in Disaster Preparedness and Climate Change Adaptation:**

1. Building capacity of the communities in the field of disaster preparedness, community-based first aid, search and rescue, water rescue, etc.
2. Raising awareness in the field of climate change, its impact, and possible adaptation by cooperating with community groups, schools, local government, etc.

**f. Community-based Infrastructure:**

1. Carried out Cash-for-Work activities (rehabilitation of infrastructure), employing mostly poor women and a few men.

**g. Beneficiary Selection:**

After villages selection a social mapping was conducted with the association of Union Parishad members, elite members of the society, and teachers. In social mapping different infrastructure

houses, tube wells, roads, and canals were taken into consideration. Households were segmented into four different categories like ultra-poor, poor, standard income people, and rich. Among these four categories, ultra-poor and poor were surveyed.

**h. Activities of the Project:**

- a. Goat Rearing:** Four days of training on goat rearing were provided to fifty beneficiaries and after those two days, refreshers training was provided as well. After completion of the training Taka. 1,000 were provided to repair their goat shelter and each beneficiary got two goats. Each beneficiary had got financial support from Taka. 6,000. Among the hundred goats, all the goats have already produced kids. Goat rearing is profitable in this locality, so the beneficiaries have a keen interest in goat rearing
- b. Hen/Chick Rearing:** One hundred beneficiaries were selected for hen/chick rearing. At first, four days of training were provided to them and distributed seven local hens and one local cock to each of the beneficiaries. Taka. 1,000 each have been provided to make a shelter for the hens as well as feed for hens, medicines, and vaccines are also provided. Every beneficiary got the assistance of Taka. 5,000. Beneficiaries are making a profit by hen rearing.
- c. Duck Rearing:** Fifteen beneficiaries have been selected for duck rearing. At first, four days of training were provided to them and distributed ten 'Zingding' types of duck to each beneficiary. Taka. 1,000 each have been provided to make a shelter for the ducks as well as feed for ducks, medicines, and vaccines are also provided. Each beneficiary got financial assistance from Tk. 5,000. Beneficiaries are making a profit by duck rearing.
- d. Community Based Forestation Nursery:** One community nursery has been established. Involving twenty beneficiaries, four days of training have been provided to them. Seeds of fruit plants, medicine plants, fertilizer, polybags, and other related materials were distributed to the beneficiaries. 20,000 plants have been produced in each nursery. Members are yielding the plants by engaging themselves. While the plants will be a bit bigger the members then sell them and equally divide the money among themselves, and they will deposit the rest of the money to the

bank for the next activities. Financial assistance of Taka. 60,000 has been provided in each nursery.

- e. **Support to the Rakhine Women:** Provided support to several 51 Rakhine women who were getting loom support. Each beneficiary has got TK. 2000. for increasing their daily income.
- f. **Exchange Visit:** Project staff, beneficiaries along with self-help group members a total of 50 personnel visited WAVE Foundation activities in their project area and observed the school contingency plan, disaster preparedness action plan, and some other activities. After learning from this observation, we are planning to incorporate these things into our project in near future.
- g. **Exposure Visit:** A total of 50 project beneficiaries have visited 5 times of other beneficiaries' houses to see and learn from their activities as well as share their ideas with each other.

#### **Training:**

- Four days of IGA training have been provided to 165 members. One day of IGA refreshers training was provided to 932 beneficiaries.
- Two days of training on hygiene promotion, disaster management, climate change, and nutrition have been provided to 500 school students in three phases.
- Three days of training on First Aid (residential) have been delivered to 50 beneficiaries and staff in two batches by a trainer from the Bangladesh Red Crescent Society.
- Three days of training on Disaster Management (residential) has been delivered to 50 imported beneficiaries and staff in two batches. The training was by a trainer from Association for Disaster Management and Development (ADMD).
- Ten days of training on CEFE (Competency-based Economies through Formation of Enterprise) Literate and Semi-Literate Module were provided to 38 beneficiaries. The training was facilitated by the trainer from TARANGA.
- Search and Rescue training was provided to 50 beneficiaries and staff by the Bangladesh Red Crescent Society.

- Folk Song: A program consisting of 15 folk songs was organized to create awareness of disaster preparedness. A musical program was performed by an artist group from Association for Disaster Mitigation and Development (ADMD). In every musical program, 5,000 people were present. The songs got massive response in the locality on building consciousness of disaster preparedness.
- Organized ToT (Training of Trainers) on First Aid for 20 staff and beneficiaries.
- Advance disaster preparedness training for staff was conducted by ADMD.

During the project implementation, Project Director and the officials from GIZ visited the activities and progress of the project. They delivered some valuable suggestions which helped to implement the project smoothly.

**i. Services Provided in the Agricultural Sector under CARP:**

Agriculture technological transfer and technical supports were the important issues of this project.

Transplant Aman (T. Aman), the local varieties prevalent are:	BaleshorMota, Sademota, KarengalMota, KazolShail, KhairaMota, Lal Mota, etc.
For T. Aus, the varieties grown are:	BR-3, BR-11, BR-22, BR-23, BR-40, BR-41, Goda IRRI, etc.
Other various local rice varieties are:	Dingamoni, Raza Sail, SadaChikon, Ful Mukta, Kolabhog, Bohury, Kalokhaia, RawsainMota, Kazol Sail, KaloBinni, KeoaMota, DudhKalom, Mau lata, Sakkorkhana, Beti Chikon, Lembu, NamusiMota, etc.
Animal production and local salinity tolerant stocks were identified and promoted for goats and poultry rearing.	
In pond fishery, a lot of rehabilitation was needed as saline water intrusion affected much of aquaculture.	

**j. Objectives:**

<p><b>Short Term:</b></p>	<ul style="list-style-type: none"> <li>• Livelihood of the affected target population ensured.</li> <li>• Infrastructure (relating to livelihood and disaster preparedness) rehabilitated and strengthened.</li> <li>• The population is better prepared for future disasters including the impact of climate change.</li> </ul>
<p><b>Long Term:</b></p>	<ul style="list-style-type: none"> <li>• Save the lives of the cyclone-affected children, women, and men to support them for a certain period as the first step of the integrated program to stand on their own feet.</li> <li>• Develop and improve small farmers' capacity through improving their skills to ensure extra growth in indigenous agricultural products.</li> <li>• Ensure growth of more food grains and stable flow of those in the local market.</li> <li>• Reduce poverty and seasonal migration.</li> </ul>

**k. Impacts or Outcomes of the Project:**

It needs to fulfil the objectives are determined as follows:

<p>Impacts</p>	<ol style="list-style-type: none"> <li>1. Livelihoods of 1,150 households in Barabagi and Karaibaria unions improved, and their income increased by 40%.</li> <li>2. At least five of the communities in Amtali and BargunaSadar Upazilas were better prepared for the impacts of natural disasters and climate change through capacity building.</li> </ol>
----------------	--

## **Lessons Learned**

The Devastating Super Cyclone in 2007 SIDR destroyed lives and livelihoods of the coastal area on the South Coast of Bangladesh. Donors like GIZ of the German Development Organization come forward with others and took part in rehabilitation with RDF.

Emphasizing Agricultural Rehabilitation through involvement with the disaster-affected people immediate for their lives and livelihoods in the short-term activities were more learning issues.

People got fresh foods, clothing, shelters for their immediate needs, seeds, fertilizer, and production equipment for agricultural rehabilitation. Based on need-based support from GIZ and RDF, they started their agro-based income and employment generating activities with all efforts jointly with all concerns was one of the factors for their overcoming the destruction.

## **6. Coastal Livelihoods Adaptation Project (CLAP) 2009-2012)**

### **a. Background of the Project**

The Coastal Areas of Bangladesh have been suffering from severe cyclones and damage almost every year since cyclone records in 1984. Seasonal floods, flash floods, cyclones in different forms, river erosion, and tidal surge have been taking place. Due to the various types of disasters, most of the community people of the said area are almost poverty-stricken, vulnerable, and living in a “vicious circle of poverty”, even though they cannot afford meals thrice a day. In addition, they cannot even meet the basic needs of their daily lives.

During the period from 1960 to 1970, eight severe cyclones were recorded. It indicates that the areas have a high cyclone as well as natural disaster frequency. Accordingly, the devastating Super Cyclone ‘SIDR’ of 15th November 2007 and ‘AILA’ of 25th May 2009 destroyed the lives, livelihoods, and property of the highly populated victims of the coastal area, mostly in Barguna, Patuakhali, Perojpur, Bagerhat, and Satkhira districts. Many Donors, INGOs, National NGOs, Local NGOs, and even the Government of Bangladesh have been working intensively for the betterment of the said people, but they were scarce than needed and due to a lack of proper and methodological planning, there is no remarkable change of the victim's lives and livelihoods.

GIZ of the German Government development agency again extended their cooperation for sustainable rehabilitation of their living conditions and were trying to reduce their vulnerability to natural hazards and the impact of climate change through introducing exceptional ideas and methodologies. Resource Development Foundation (RDF) has taken their (GIZ's) innovative ideas as a challenge for the sustainable livelihood of the coastal people.

With this consequence, GIZ took the initiative to improve the living standard of the vulnerable people of the affected area like Barguna and successfully commenced Coastal Area Rehabilitation Project (CARP) in 2009 which was finished on March 31, 2012. GIZ and RDF have some findings based on the experience of CARP and as a result, GIZ take initiative to introduce Coastal Livelihoods



Adaptation Project (CLAP). CARP area and beneficiaries will be getting preferences in CLAP. Disaster is such a matter which cannot be resisted, what we can do is we can take precautionary measures to save lives and livelihoods. That is what is called adaptation which is much necessary for the living human being of the coastal Barguna district.

AmtaliUpazila was the largest of other Upazilas under Barguna District with a total area of 1,44,640 acres of land. The total population of AmtaliUpazila is 2,44,438 which is about 31% of the entire Barguna district. The average literacy ratio is 41%. This Upazila is resourceful in the form of a river, canal, Dead River, ponds, and fertile land. Despite potential resources, 91% population of AmtaliUpazila lives below the poverty line due to a lack of technology, awareness, external support services, capital, interventions, cropping pattern, use of aquaculture resources, adoption of alternation income generation activities, human resource development, credit support is likely to enhance production, economic status, nutrition of the beneficiaries at large.

Implementation of measures to cope with the impacts of climate change in the coastal area of Bangladesh in selected communities of the district Barguna implemented by RDF financial and technically assisted by GIZ (German Development Cooperation) aims to “The population in selected communities in the coastal region of Bangladesh sustainably rehabilitate their living conditions and reduce their vulnerability to natural hazards and impact of climate change” as well as improvement of Socio-Economic conditions and physical well-being of the target group of men and women belonging to Poorest of the poor, landless and marginal households is a sustainable movement.

The project exclusively aims at Livelihood Rehabilitation Supports, Adaptation to Climate Change, Community Mobilization and Infrastructure, and Households Level Disaster Preparedness of the infrastructure, such as approach roads, embankments, irrigation canals, schools, tree plantation, cyclone shelters, etc., which will enable the communities to resume their normal lives, prepare them for future catastrophic events by providing them with a functioning infrastructure for evacuation as well as economic development. The

rehabilitation of the infrastructure will be done through cash-for-work measures involving mainly female workers, who receive training, necessary equipment, and thus income generation opportunities in agriculture-based.

It will be implemented in close cooperation with the local government representatives as well as the communities, who will continue to look after the infrastructure. Training of selected community volunteers on disaster preparedness/community-based first aid will further increase the capacity of the selected communities to cope with the impact of climate change in the coastal area.

Resource Development Foundation (RDF) looks back to almost two decades of experience in development work, including livelihood, disaster management, climate change adaptation, micro-credit, renewable green energy, and support to minority groups as well as vulnerable women, including infrastructure development through cash-for-work measures. Since November 2009, RDF is already a partner of GIZ in the Coastal Area Rehabilitation Project (CARP), which deals with the impact of cyclone disasters.

**b. Objective of the Project:**

- Climate resilient agricultural production systems and income-generating measures facilitated and promoted among the targeted population.
- Livelihoods and means of production are prioritized and restored through non-farm initiatives.
- Targeted population well protected and managed to respond climatic induced disasters.
- Disaster prevention and disaster risk management introduced in targeted schools with a clear focus on climate change adaptation.

**c. Task of the assignment**

RDF was responsible for providing services and expertise concerning the rehabilitation of livelihoods through the farm and non-farm activities, community organization, awareness-raising and capacity building at the community level and at schools as well as the

participatory improvement of infrastructure covering the following thematic areas:

**i. Livelihood Development through Agricultural Activities:**

- a. Started-up support to small-scale enterprises in cash and in-kind
- b. Provided technical training and backup support in farming, fishery and poultry rearing nursery management, entrepreneurship, etc.
- c. Facilitated the formation of Community Interest Groups (CIG) and farmer's associations.
- d. Introduced new technologies in agriculture focusing on adaptation to climate change.
- e. Provided capacity support to personnel of rural extension services on climate-resilient and disaster-prevention measures.
- f. Facilitated coordination between government institutions and civil society and communities at different levels
- g. Facilitated and link-up advisory support from rural extension services and other relevant services

**ii. Livelihood Development through Non-Farm Activities:**

1. Facilitated the selection of non-farm livelihood initiatives.
2. Provided skill training and backup support to the targeted communities.
3. Provided entrepreneurship (CEFE Training) training to selected beneficiaries.
4. Facilitated the formation of Community Interest Groups (CIG) and associations.
5. Link unemployed targeted youth with TVET/other technical training institutions.

**iii. Capacity building in Disaster Preparedness and Climate Change Adaptation at Community Level:**

- a. Analyzed disaster risk status comprising both technical and participatory local analysis

- b. Sharing of information on disaster preparedness and climate change.
- c. Facilitated sessions on the preparation of HH-level disaster preparedness plans.
- d. Advocacy with government institutions related to disaster preparedness at all levels.
- e. Increased plantation in coastal regions, particularly educational institutions involving the marginalized.
- f. Facilitated the formation of community-level disaster preparedness action plans.
- g. Facilitated preparation of disaster preparedness action plans (including floodwater management).
- h. Co-operated with DMCs, CPP, and other key actors.
- i. Provided training on disaster preparedness, community-based first aid, search, and rescue, etc.

**iv. Capacity Building in Disaster Preparedness and Climate Change Adaptation at Schools:**

- a. Carried out an assessment to select schools.
- b. Facilitated training programs among students.
- c. Facilitated targeted schools to develop disaster contingency plans.
- d. Identified schools to strengthen the infrastructure against any disaster.

**d. Outputs:**

- Climate resilient agricultural production systems and income-generating measures facilitated and promoted among the targeted population.
- Livelihoods and means of production are prioritized and restored through non-farm initiatives.
- Targeted population well protected and managed to respond to climatic-induced disasters.
- Disaster prevention and disaster risk management introduced in targeted schools with clear focus on climate change adaptation.

### **Activities:**

**1. Model Farm:** Under CLAP, RDF provided 2 days of training to the 5 beneficiaries on Duck rearing, Vegetable Farming, Fish Farming, and Vermi Compost. After successful completion of training Tk. 200 were given to each beneficiary. The first time (in the year 2014) they received Tk. 25,000 for shelter making, buying duck, Feed and Medicine, fingerling, vegetable seed, and vermin. Next year they received 2 days of training, fingerling, and vegetable seed. Now they are earning money from different components and saving some money for the future.

**2. Group (Mini) Poultry Farm:** RDF provided 2 days of training to the 10 beneficiaries under 02 Group Mini Poultry Farm. After successful completion of training Tk. 200 were given to each beneficiary. They received Tk. 35,000 for shelter making, buying Chick at Tk. 10,000, Feed-24,000, and Medicine at Tk. 6,000. Total Tk. 75,000 was given for each farm. They received training, technical advice, vaccines, medicine, and treatment facility. With this IGA, now beneficiaries are changed their fate and with this increased income now they are saving some money for their future.

**3. Goat Rearing:** RDF provided 2 days of training on goat rearing for 60 beneficiaries. After successful completion of training Tk. 200 were given to each beneficiary. Beneficiaries' income levels are now moderately in good condition from goat rearing activities which they received from CLAP and now they are selling goats. They have confidence that if they get continuous support from CLAP, they would be able to make their farm bigger. In the 1st phase, they received 2 goats amounting to Tk. 6,000 and in the 2nd phase they received Tk. 1,000 for shelter making. This year they received Tk. 1,000 for goat shelter repairing. With this, each of the beneficiaries received training, technical advice, medicine, and treatment facility for their goats.

**4. Pond Fish Farming:** Under CLAP, RDF provided 2 days of training to the 80 beneficiaries on closed water fish farming. After training old 50 beneficiaries got fingerling and fed at Tk. 4,000 and New 30 beneficiaries got fingerling and feed at Tk. 5,000. This year each of the beneficiaries received Tk. 3,000 for buying fingerling and fish feed. With this support, the beneficiaries have changed their economic condition and now they are financially solvent.

**5. Hen Rearing:** Under CLAP, RDF provided 2 days of training to the 50 beneficiaries on hen rearing. After completion of training, each beneficiary received a medicine and treatment facility. In addition, they received hen, shelter for hen, medicine, and turned their fate in a positive direction. This year each of the beneficiaries received Tk. 1,000 for hen shelter repairing. Now they are earning enough by hen rearing and their family condition is much better than ever. With this IGA, now they are able to sell eggs, chicks, and hens and contribute to their families.

**6. Duck Rearing:** Under CLAP, RDF provided 2 days of training to the 50 beneficiaries on duck rearing. After completion of training, each beneficiary received a medicine and treatment facility. In addition, they received ducks, shelter for ducks, and medicine, and turned their fate in a positive direction. This year each beneficiary received Tk. 1,000 for duck shelter repairing. Now they are earning enough by duck rearing and their family condition is much better than ever. With this IGA, now they can sell eggs, chicks, and ducks and contribute to their families.

**7. Vegetable Farming:** Under CLAP, 50 beneficiaries got 2 days of modern training on summer and winter vegetable farming. After successful completion of training Tk. 200 were given to each beneficiary and each beneficiary got hybrid and improved local seeds of summer and winter vegetables, vermicompost, chemical fertilizer, and sex pheromone trap. During this year each beneficiary received a hybrid and improved variety of summer and winter vegetable seeds Tk. 2,000. With this IGA, now beneficiaries have changed their fate and with this increased income now they are saving some money for their future.

**8. Vermi Compost:** 20 beneficiaries received 02 days of training on vermin compost. After successful completion of training, each beneficiary received 2 large size buckets (for compost production) and 2000 vermin in 2 phases. With this help, beneficiaries are producing vermin compost and they are using this fertilizer in their vegetable field as well as they are selling this compost at the rate of Tk. 15-20. Now they are earning more than before.

**9. Crab Culture:** 5 Nos. of beneficiaries received two days training on crab culture. After successful completion of training each

beneficiary received Tk. 5000 for crab culture. Now they are earning more and have been changing their fate.

**10. Rice Cultivation:** 30 beneficiaries received two days of training on rice cultivation. After successful completion of training, each beneficiary received 10 Kg of High Yield Variety (HYV) rice seeds and an adequate amount of Chemical Fertilizer and Pesticides. Since gradually rice cultivation become more expensive in those circumstances CLAP came forward to assist beneficiaries' level in rice cultivation which made their livelihoods more convenient for them. Earlier beneficiaries cultivated rice using local variables and have been harvesting 6-8 Kg of rice from each decimal land but in CLAP they are using HYV seeds, saline tolerant seeds (BR 23, BRRI Dhan 41), and water-tolerant seeds (BRRI Dhan 51,52) and now they are harvesting 14-18 Kg of rice from each decimal land. With this practice, they expect to produce more yields in near future.

**11. Irrigation Machine:** The project management decides that the project will provide 15 numbers to be borne by the irrigation machines in 15 groups under CLAP. For this machine, 25% cost will bear each group and the rest 75% cost will be borne by the project. After getting this machine all beneficiaries.

**12. Disaster Preparedness:** The assigned person of the project prepared a pre-plan about disaster preparedness for 10 villages with the help of leading persons including schoolteachers, Imam, and the members of Union Parishad (UP). With this plan, people of the villages get an idea of how to save themselves and their assets in the time of natural disasters.

The Project officials provide wall painting at five school classrooms on disaster and information board of school casement area with the help of IUCN. As a result, the students become aware of disaster preparedness and they shared their experiences with their families. Besides this, the project staff distributed Sticker, and Leaflet, to the students and trained them so that they will be able to know what they will do at the time of disaster and pre or post-disaster period. The Project officials completed a mock drill about the disaster at Alirbondor AM High School.

**13. Community Interest Group (CIG) Meeting:** The project staff arranged meetings with the Community Interest Group (CIG) including Group Chairman at Taltoli Project Office after every 3 months. In this meeting, every chairman shares their group experiences. Besides this, they share their problem with each other. After that, they make a plan for resolving the problem. They also discuss the savings plan and they make a commitment that the member will keep in communication with each other if they confront any problem they will communicate with the office for solving the problem and they discuss the disaster preparedness among themselves.

**14. Union Disaster Management Committee (UDMC) Meeting:** The project staff arranged Union Disaster Management Committee (UDMC) meeting in 4 Unions. In this meeting, they discussed and shared their knowledge about what endeavors they should take at the time of disaster and what initiatives they should take during pre and post-disaster periods also they divulged their problem and tried to find out its solutions. The member of that committee committed to making aware people of the disaster preparedness of their region. For this reason, they seem that they can reduce the amount of damage of the natural calamity.

**Lesson learned:**

Goodwill, accountability, transparency, and senior activities could ensure continuous working for the weakening of the beneficiaries as well as for the nation. RDF meanwhile got the opportunities from the various development partners for sustainable supports delivery to the people based on its goodwill and accordingly, information has already been delivered to other development agencies for providing need-based support to the affected people of the coastal area on agricultural activities are happy in good and effective working with RDF.



## Success Story of Beneficiaries

### Halima, A Successful Model Farmer

#### Profile and Words of Mst. Halima Begum

**Family ties** : Md. Hasan (Husband) and two Sons  
**Occupation** : Model Farmer  
**Age** : 25 Years  
**Address** : Vill: Sobahan Para, Union: Nishanbaria, Upazila :  
Taltoli, District: Barguna.

Halima begum lives at Sobahan Para in TaltoliUpazila under Barguna district. Sobahanpara is 8 Km far from Taltoli. She is a housewife from a poor family. She got married at an early age. After marriage, she has been passing her days in a very miserable way with her family due to financial insolvency. Her husband was a carpenter. He couldn't manage his family properly because of extreme poverty. She used to think accepted her fate that being a woman she has to do household work. And accordingly, she had a perception that male members of the family will earn for a family and there is no alternate way for her to rely on the income of her husband. Even though she has been working as day labor in the locality. But after having 2 children she was surrounded by the vicious cycle of poverty and this changed situation made her realize that to run the family there is no way for her to engage herself in any income-generating activities. This proactive thinking let her small effort as a driving force and started vegetable cultivation at the household level and from which she used to earn approximately Tk. 2,000 per month.

After that, she noticed that in her area CLAP has been implemented by RDF through the financial assistance of GIZ and subsequently she became one of the beneficiaries of CLAP and received Tk. 5,000 in the 1st phase for homestead vegetable cultivation. Gradually she got seeds, insecticides, fertilizer, technical support as well as training in vegetable cultivation. With the support of CLAP and her eagerness to change her fate created some visible changes in her life. As a result, RDF considered her as a graduate beneficiary of CLAP 1st phase and in 2nd phase she got Tk. 4,000 for vegetable cultivation and Tk. 10,000 for banana cultivation from CLAP again.

She has supported several 100 banana seedlings and 92 Kg. of fertilizer.

With these supports, Halima contributed to Tk. 40,000 to her family. Besides this, she purchased 10 decimals of land by Tk. 80,000 and started fish farming in her small pond. Presently she has 140 banana trees and she is expecting to earn Tk. 60,000 from this banana cultivation and Tk. 50,000 from vegetable cultivation. This year she buys a sewing machine and makes her house with a brick wall.

It is the Halima who has not only shown us her significant change but simultaneously proved once again a universal truth that it is the person who drives her fate. Fate cannot drive a person if he/she has the dedication to do something. This changed financial condition encourages Halima to weave a new dream that she will make her banana garden bigger next year and her children will go to school.

### **Profile and Words of a Rakhain Lady Khenacin**

**Family ties** : She is a widow, with 2 daughters, and a son

**Occupation** : Semi-auto loom

**Age** : 38 Years

**Address** : Village: Kabirajpara, Union: Sonakata, Upazila: Taltoli, District: Barguna.

Khenacin is a rakhaigh lady who lives in TaltoliUpazila under Barguna district. She used to work at another house and somehow managed her family. It is always hard to work at another house on per daily payment basis. Because there was no security in her job. Any time she could be terminated or withdrawn from the job without showing any reason. In 2012, she got a semi-auto loom from RDF through financial assistance from GIZ under Coastal Livelihoods Adaptation Project (CLAP). Moreover, she received training on the semi-auto loom and the business. It is quite worthwhile to mention that hereditary this Rakhaigh community has been maintaining their families by doing the weaving. So naturally, they have the expertise in that profession. Now she is earning more than before. Through this auto loom, she is making different kinds of handmade quality products such as shirts, bags, bed cover etc. and

selling these products in the local markets. Now she can easily manage the educational expenses of her sun. She produces the aforesaid products and sells these in the market. By selling these products now she is earning BDT 5,000 per month deducting all costs. She has a plan to procure a bulk quantity of yarn from the market so that if the market price of yarn increased it will not affect her production costs. With these supports she contributed all her family expenses. Now she buys two goats from her earnings. She has a desire to set up a small factory of semi auto loom where 5-10 women will work there.

### **Story of Most. Asia Begum**

#### **Profile and Words of Most. Asia Begum**

**Family ties** : Md. SobahanForazi (Husband), one daughter, and two sons  
**Occupation** : Duck Rearing  
**Age** : 48 Years  
**Address** : Vill: Satonpara, PO: Taltoli, Upazila: Taltoli, District:Barguna.

Mst. Asia Begum lives at Satonpara village under the district of Barguna. Her house is located 5 Km far from Taltoli port. Since her husband was ill, Mst. Asia Begum had to take the responsibility of earning money for her family. Before the cyclone, she had been living on her parental land. She used to manage her family by catching fish in the river and obviously it was very difficult for Mst. Asia Begum manages her family with her negligible income.

But it was the devastating super cyclone SIDR that made a radical change in her life. Due to the tidal surge, her fishing net and other necessary materials for fishing flashed away with all her aspirations of survival. As a result, managing meals for the family members were a big challenge for her. But at that time she got some emergency reliefs from various GOs' and NGOs' which helped her and made her believe stronger that almighty Allah would be with her.

The scarcity of food, shelter, and opportunity for work in the locality made her determined to go to Dhaka, and accordingly, she went to

Dhaka. She used to work as a maidservant in the capital city Dhaka and by this work, she could barely earn Tk. 3700 per month which was very insufficient and did not allow her to manage her family. Even she was unable to send her daughter to school due to poverty.

Though she came to Dhaka for changing her fate all her endeendeavorst in vain and finally she decided to go back to her village in Taltoli. After returning back from Dhaka she came to know that CLAP is being implemented by RDF through the financial assistance of GIZ and subsequently she became one of the beneficiaries of CLAP. Being the beneficiary of CLAP, she got training on duck rearing, 8 ducks, and money for making a small shelter for duck rearing.

Nowadays, Asia Begum doesn't work as a maidservant rather she emphasized duck rearing which created a new opportunity the window for generating income. CLAP provided Asia an opportunity to explore her potential which could result in more income utilizing the available limited resources. Now she is earning Tk. 6,700 which is certainly more significant than before. From CLAP, she has been provided 8 ducks, feed for duck, and some cash amount.

Asia Begum becomes the main character of this case study because through the support of CLAP and her dedication she changed her surroundings. Now she has 80 ducks on her farm instead of 8 ducks. By selling ducks and eggs, she got Tk. 40,000 and this money encouraged her to buy 2 goats and 15 hens. After selling hens now she has 43 hens. In her words, CLAP changed her condition dramatically. Now she is sending her daughter to school and she is determined to earn Tk. 50,000 from duck rearing within the next year.

CLAP prepared Asia Begum to embrace her future. There are many people in the coastal area that lost everything in SIDR and AILA like Asia but after launching of CLAP in the coastal Barguna district they are feeling that they are not alone and abandoned. With this inspiration, Asia Begum is planning to buy a cow and a piece of land for her by selling ducks and hens.



## **Most. Sufia Begum, a Story of Successful Goat Rearer**

### **Profile and Words of Most. Sufia Begum**

**Family ties** : Late Md. Elias (Husband), one son and two daughters  
**Occupation** : Goat Rearing  
**Age** : 35 Years  
**Address** : Vill: Chaton Para, Union: Borobogi, Upazila :Taltoli, District : Barguna.

Sufia Begum lives at Chaton para at Taltoli Union under the district of Barguna. She has one son and two daughters in her family. She had been living a happy life with her family. But unfortunately, her husband died in 2004 bearing a deadly disease. After the death of her husband, she would have managed her family by serving as a maidservant in different houses. She could barely earn Tk. 2,000 only per month. But it was a very hard situation for Sufia to manage her family with this small income. But her fate smiled critically again and struck again in 2007 as SIDR. She lost everything she had and fell into a very critical position. But after the disaster as a human being, she reacted according to her natural reflex action and had been trying to survive once again.

As a consequence, one day she noticed that in her area CLAP has been implemented by RDF through the financial assistance of GIZ and subsequently she became one of the beneficiaries of CLAP and received training, technical support, financial assistance, and 2 Goats from the project. After getting goats and training on goat rearing from CLAP, she started goat rearing and now she is the owner of 10 Goats instead of two. She sold 5 goats among the 10 and earned Tk. 20,000 and with this money she bought one cattle spending Tk. 6,000. She went to the local market to verify the market price of cow and goat and found that the present market value of these cattle is approximately Tk. 10,000 and the price of the rest 5 goats is around Tk. 25,000. Now Sufia is self-reliant and she earns sufficient money rather than before. Her dedication is reflected in her income and which is Tk. 3,000 per month. She is expecting to earn Tk. 60,000 this year by utilizing the given resources.

CLAP changes the financial condition as well as social status of Sufia Begum. At the very first phase of CLAP, she got Tk. 6,000 and at the 2nd phase she got Tk. 1,000 which aggregates Tk. 7,000. Besides these supports, she received training, technical support, medical support, and medicines for her goats.

CLAP enabled Sufia to fix her destination and gave her the courage to plan for a brighter future. It is the Sufia who is planning to purchase a small piece of land now and wants to make a small hut on it as well as want to buy a cow to secure her future.

### **Md. Shakhawat Hossain Made a Magical Change in Vegetable Farming**

#### **Profile and Words of Md. Shakhawat Hossain**

**Family ties** : Salman Chaprashi (Father) and one daughter  
**Occupation** : Vegetable cultivation  
**Age** : 38 Years  
**Address** : Vill: Tati para, PO: Sobhan Para, Union:  
Nishanbaria, Upazila: Taltoli, District: Barguna.

Shakhawat Hossain lives at Tati para village which is 8km north of the seashore Sonakata Eco Park and which is 8 KM south of the TaltoliUpazila.

Before the cyclone, he used to work in day labor and with his small income, he barely managed to run his family. At that time, he had no land to live but he got 5 decimals of land and a small hut from his father and had been living there with his family. In 2007, when SIDR struck the coastal zone with its gigantic force Shakhawat lost everything including his house. All of his hens and ducks, big trees, and his house was destroyed and washed away due to high tidal surge. SIDR created innumerable destruction in the locality and destroyed crops and other income amenities. As a result, people of that area including Shakhawat Hossain lost their income opportunities and the scarcity of food was so acute that he was unable to manage three meals per day. There was only hope for Shakhawat Hossain to survive with the help of government and non-government emergency relief, but it was quite insufficient for him to manage his family. After a few days of SIDR, he had been trying to

generate some income and could have earned Tk. 3,500 per month.

It must be one of the memorable days of his life and somehow, he came to know that CLAP is being implemented by RDF through the financial assistance of GIZ and subsequently he became one of the beneficiaries of CLAP. Being the beneficiary of CLAP, he got training on vegetable cultivation, technical support, and financial assistance from the project. CLAP selected Shakhawat Hossain as the beneficiary and provided Tk.5,000 for vegetable cultivation. Besides this, he received seed, fertilizer, medicine, and *Jhajri* for watering plants. In the 2nd phase of CLAP, he got Tk. 4,000 for vegetable cultivation and Tk. 5,000 for the production of compost as worms as secondary support which includes Chari, Earthworm, and Cash amount aggregately Tk. 14,000.

With this assistance from CLAP, he leased 5 decimals of land including his land for vegetable production and cultivating vegetables in 10 decimals of land which resulted in a significant benefit for him. To date he earns Tk. 55,000 by selling vegetables and managing his family in a better way than before as well as he is sending his children to school as well. Now he has Tk. 10,000 as-deposited amount. Compost worm cultivation opened a new window of earning for him and he decided to use this compost fertilizer in his vegetable field so that he could reduce the use of chemical fertilizer. Every 3 months, he used to produce 200 Kg of compost fertilizer which he can sell in the local markets after fulfilling his demand. His efforts and dedication strengthened Shakhawat Hossain to go for a bigger attempt and accordingly he is expecting to earn Tk. 60,000 from vegetable cultivation and Tk. 10,000 from organic fertilizer.

In the future, he wants to expand his farmlands by saving money and continuing his daughter's education.



## Vagolaxmi, a Story of a Successful Entrepreneur

Profile and Words of Vagolaxmi

**Family tie** : Widow with one son age of 15 years

**Occupation** : Small business

**Age** : 28 Years

**Address** : Vill: Chaton Para, PO: Taltoli Bondor, Union:  
Borobogi, Upazila: Taltoli, District: Barguna.

Vagolaxmi lives at Chaton para village in TaltoliUpazila under Barguna District. She would have worked in day labor in a nursery of the Forestry Department at Taltoli. This job ensured per day Tk. 125. But she had been living in huge uncertainty because this work did not guarantee their sound living which resulted in a very hard and fast way of living. After that, she borrowed some money from her brother and started a small business of battle leaf beside the Forest Department of TaltoliUpazila. But it was the super cyclone SIDR of 2007 that hit the coastal zone of Bangladesh with its massive force and destroy everything including her small shop. It washed away every item in her shop. After losing everything she had nothing to do except accept her fate. Like other people in that area, she would have passed her days in a very miserable way and had been living with the emergency relief she got from various organizations.

After a few days of that devastation, she was trying to recover herself from that misery and built a shop again which was located near the fish market at Taltoli. The shop was running well but due to unstable financial dealings a few days later the shop was about to be closed. Then she had fallen again into poverty and her condition remain unchanged. At that time, she could barely earn Tk. 3,800 only per month to bear the burden of her family.

One day she noticed that in her area CLAP has been implemented by RDF through the financial assistance of GIZ and subsequently she became one of the beneficiaries of CLAP on 21/04/2012. Being one of the beneficiaries of CLAP, she received a three days training on small business and subsequently received Tk. 5,000 as financial assistance in 1st phase from CLAP. With this amount of money, she purchased some green coconuts, vegetables, and bananas for her

shop. This training and knowledge made her efficient in various matters of a small business like how to keep accounting records, when to invest, which items or materials should be procured, how to deal with a customer etc. Presently she has been running her business in a very efficient way and she does not have any problem doing business. Her intensive efforts enabled her to earn Tk. 6,200 per month.

This encouraging effort of Vagolaxmi vibrated CLAP authority and selected her once again as a beneficiary in 2nd phase of CLAP. In the 2nd phase of CLAP, she got Tk. 3,000 again and by which she has been revolving her fund in her business with an accumulation of her gathered knowledge. Now her small business is running successfully. CLAP made Vagolaxmi financially solvent and changed her socio-economic status which is the development objective of CLAP as well. With all of these supports, last year she paid Tk. 20,000 to purchase 10 decimal of land as earnest money and the rest Tk. 20,000 will be paid by Vagolaxmi after receiving the original deeds of that particular land. The land she is intended to buy is located beside the Taltoli market named the Khattarchar area. She opened a DPS account amounting to Tk. 500 per month which will be deposited each month by her. Now she can easily manage the educational expenses of her son and is expecting to earn Tk. 80,000 to Tk. 90,000 within a year from her small business.

It is the Vagolaxmi who has not only shown us her significant change but simultaneously she proved once again a universal truth that it is the person who drives her fate. Fate cannot drive a person if he/she has the dedication to do something. This changed financial condition encourages Vagolaxmi to weave a new dream. Now she is pursuing her dream which will be fulfilled if she can continue her son's studies, open a big shop in the Taltoli market and build a semi-pucca house on her land.

## **7. RDF Renewable Energy Program for Solar Irrigation Pumping System (SIPS) (2010 - continuing)**

Renewable Energy is a thrust sector of the government of Bangladesh and especially it is the prior activities of the Honorable Prime Minister Sheikh Hasina. This sector is growing very first with its potentialities, experiences, knowledge, and commitment of the implementing organizations in Bangladesh.

RDF started its Renewable activities primarily with the Solar Irrigation Pumping System (SIPS) in 2009. The then Honorable Governor of Bangladesh Bank Dr. Atiur Rahman has given opportunities to RDF by providing several 3 Solar Irrigation Pumps through Mutual Trust Bank Ltd. Which was inaugurated by Dr. Atiur Rahman on 17th January 2010 in Coastal Barguna District.

Based on the capacity of the Solar Irrigation Pumping System (SIPS), IDCOL (Infrastructure Development Company Ltd.) a government-owned organization has given RDF the same opportunities giving more SIPS projects since 2012 and now RDF has been operating 147 highest capacity (18.5 Kw) bearing pumps in Greater Kushtia District (the South-West zone in Bangladesh). RDF is the pioneer organization in Bangladesh in Solar Irrigation Pumps SIPS.

In terms of practical knowledge, experience, and study on SIPS, RDF along with the Former Governor of Bangladesh Bank Dr. Atiur Rahman, who was also co-initiator as well as a strong supporter of this green technology took initiative for doing these activities in a large scale. At present, this environment-friendly dedicated system has been disseminated in various areas of the country, which is going to contribute sustainable renewable energy to the national greed for achieving SDG in 2030 and to reduce dependency on rental electricity and bulk expenses of foreign currency of GoB. Furthermore, a diesel-based irrigation system is not environment friendly as a significant amount of greenhouse gases is being emitted to pollute the environment which directly affected the economy through rental electricity commissioning and purchase. To dive agriculture sector and to provide access to continue energy supply and supports to the farmers, diesel, and electricity-based irrigation system needed to be converted by SIPS.

## **7.1 Impact of Solar Irrigation Pumping System and Supports:**

- a. Multiple impacts in the agricultural sector have been created by this SIPS like
- b. Pollution-free environment,
- c. Provided Hassle-free supports to the farmers,
- d. Reduced dependency on electricity and diesel addressing nothing botheration,
- e. Reduced 43% irrigation cost,
- f. Created positive impacts on climate change through reducing carbon emission
- g. Saved millions of foreign currencies every year.

It is a solar PV-Module-based irrigation system creating natural electricity by sunray in cultivating areas where there are possibilities to produce three types of crops throughout the year.

Practically, it should be in the thought process that each solar pump (18.50 KW Capacity) replaces 10 to 12 diesel pumps and covers more than 40 acres of land producing three-cycle crops each year. On the basis of their life cycle costs, solar irrigation pumps are much more cost-effective than that diesel and electricity-driven pumps in the long run. In addition, solar PV pumping systems allow:

- Low operating cost,
- Unattended operation,
- Low maintenance,
- Easy installation and
- Long-lasting life cycle devices.

A solar irrigation pumping system (SIPS) is an innovative and environmentally friendly solution for the agro-based economy of Bangladesh. This system reduces dependency on fuel and demand for electricity from the national grid in irrigation seasons. The program also reduces carbon emissions and at the same time saves millions of foreign currencies.

RDF along with other 14 organizations have been working on these activities based on our potential activities and experiences. RDF is the pioneer in this sector in Bangladesh. IDCOL has now set a target of installing 50,000 Solar Irrigation Pumps in various areas in Bangladesh by 2025. RDF and some other potential POs (Partner Organizations in Bangladesh) are well capable to implement pumps to be sanctioned in the future.

Solar energy-powered pumps are reliable as an irrigation alternative for farmers where solar technology helps the country in various ways which are in the process of thought and idea management of the related concerns.

## **7.2 Initiatives of the Government of Bangladesh:**

The Hon'ble Prime Minister Sheikh Hasina has taken an initiative to accelerate the activities for growing more food as well as reducing the consumption of grid electricity for reducing Carbon emissions. IDCOL, the government-owned organization has been working with a big team of its Partner Organization (65 Partners like RDF) providing support to its implementing organizations for the fulfillment of the Hon'ble Prime Minister's "vision 2021" e.g. 10% energy by 2021 and 30% energy in "SDG-30" e.g. 2030 through Green Energy/Renewable Energy (RE) supports and SIPS is one of them.

Meanwhile, IDCOL has approved a total of 1,429 solar irrigation pumps of which 1,186 are already in operation with a cumulative capacity of about 26.59 MWp. The remaining pumps are expected to come into operation shortly. The World Bank, KfW, JICA, USAID, ADB, and BCCRF have been providing financial support with a grant for those initiatives to IDCOL Partners.

## **7.3 RDF Contribution to this Green Field:**

RDF installed a total of 147 SIPS which covered 3000 acres land, 8953 households, 36110 beneficiaries, 60 Villages, 29 Unions, 5 Upazilas and 3 Districts.

RDF already removed 1454 Diesel and Electric pumps and meanwhile, saved Diesel 30,05,226 liter per year generated 2.5 MW

electricity which saved millions of Foreign Currency per year and trained a 2149 beneficiaries by 2020.

#### **7.4 An Overview of the Solar Irrigation Pumping System (SIPS) of RDF:**

RDF is not only the Pioneer organization in Solar Irrigation Pumping System activities in Bangladesh but also the first implementer of SIPS in the country. The Former Honorable Governor of Bangladesh Bank, Dr. Atiur Rahman inaugurated RDF Solar Irrigation Pumping System (SIPS) on 17th July 2009. Governor's visit followed a significant impact on agricultural production and enriched the commitment of RDF in the long run. An uninterrupted functioning SIPS installation has been proceeding through the installation of several 147 SIPS in the southwest region of Bangladesh whose monetary value is Tk. 93,00,00,000/- (Ninety-three crore) equivalent to USD 1,09,41,176 and we are continuing for the fulfillment of "Vision-2021" and "SDG-2030".

The Government of Bangladesh has set a target to install/replace the diesel and electricity-operated pumps by a significant number of solar pumps which will ensure 150 MW energy generation from SIPS.

#### **7.5 Case Study as its impact to the user level**

##### **Kazi's initiative is a milestone for other entrepreneurs in Solar Irrigation Pumping System (SIPS)**

Ruhul Amin Kazi is a landlord as well as a farmer who lives in ChotoNilgonj village under AmtoliUpazila of Barguna district. He has approximately 20 acres of cultivable land, but the extreme unfortunate matter was that he had to depend on natural rainfall for the cultivation. He used to get plenty of rice when adequate water is available. But due to climate change and other recurrent natural disasters, and the fluctuating nature of the climate, he was not able to receive good yields in the harvest. As a result, at the end of the year in spite of having huge land he had to buy rice for maintaining his big management. After that, he identified the problem that is irregular and insufficient water supply is the major obstacle to having a good harvest.

There are so many landlords like Mr. Ruhul Amin Kazi. RDF introduced Solar Irrigation Pumping System (SIPS) under its Green Power Development Program (GPDP) in the southern part of Bangladesh to resolve this problem as well as to ensure food security and with this visionary objective, RDF makes a foot toward Kazi's doorstep.

With the joint initiative of RDF and Mr. Ruhul Amin Kazi a Solar Irrigation Pumping System (SIPS) was installed in ChotoNilganj near the Payra Port area. Some other farmers also have shaken their hands with Kazi and RDF accordingly. Now they are getting incessant and uninterrupted water supply during the whole year and are able to harvest three crops round the year. Which made them very happy and gave them a feeling of satisfaction.

The above picture reflects their present situation which is full of milestones and achievements. RDF recognizes this as Kazi's initiative and milestone which is an example for others as well as another benchmark set up by RDF.

This is the ground reality that fuel and electricity-based irrigation system is still predominant in Bangladesh and farmers rely on it for their irrigation management. About 1.34 million diesel pumps and 0.27 million electric pumps are operating across the country in the agricultural sector.

As per World Bank reports, One Million MT diesel of worthing US\$ 900 million are being consumed every year for irrigation. Obviously, this is a massive demand for fuel which GoB subsidizes at the opportunity cost of other agricultural innovations.

Furthermore, a diesel-based irrigation system is not environment friendly it also emits a significant amount of greenhouse gases to pollute the environment as well as demandable electricity bound the government to expend huge foreign currency per year, which directly affected the economy through rental electricity (commissioning) purchase.

In order to drive the agriculture (crops) sector and to provide access to energy supply and supports to the farmers, diesel and electricity based irrigation system needs to be converted by solar irrigation pumping system (SIPS).

Solar energy powered pumps are reliable as irrigation alternatives for farmers where solar technology helps the country in various ways which are in the process of thought and idea management of the related concern (GoB stockholders).

It is to be mentioned that RDF has come forward to provide essential support to the farmers in order to ensure an uninterrupted supply of irrigation water in the southern and southwest parts of the country. The prime objective of this program is to ensure surplus as well as food security through an increase in agricultural production and its value chain.

Considering the overall scenario and based on the social commitment, RDF correlated the Solar Irrigation Pumping System (SIPS) with food security issues of the south and south-west districts. Accordingly, RDF initially introduced the SIPS component under its Green Power Development Program (GPDP). RDF believes that, if adequate and proper irrigation is ensured, the crop production rate will be higher and food security will be ensured. The following outcomes correlated with SIPS.

- Low-cost irrigation supports.
- Crops diversification ensures.
- Adoption of HYV (High Yielding Variety) ensured.
- Low cost and uninterrupted water supply.
- Hassle-free and spare parts fewer operations.
- Increased cropping intensity.
- Farmers are motivated and well organized in management.
- Crop diversifications have taken place.
- Pollution and a hassle-free environment take place.

Moreover, Solar PV pumping systems allow low operating cost, unattended operation, low maintenance, easy installation, and long-lasting life cycle devices.

#### **Lessons Learned:**

Solar Irrigation Pumping System (SIPS) has been playing a vital role in improving farmers' livelihoods, increasing climate change resilience of the agriculture sector, and strengthening food security.



A smooth supply of water for irrigation helps to increase agricultural productivity. Although before the implementation of the project in its working area, farmers could not grow the crops accordingly.

SIPS project proved that it is possible to ensure more production and more development by functioning hatchel free and proper irrigation and modern cultivation knowledge. Because, SIPS has many advantages, providing a clean alternative to fossil fuels and enabling the development of low-carbon irrigated agriculture. In the areas with unreliable access to energy proper irrigation was highly expensive and now a day, it contributes to rural renewable electrification and reduces costs for irrigation and rezones diesel Dairen pumps.

It is learned from the project if GoB takes the initiative for sustaining the project and removes the all-diesel pumps from the off-grid area, SIPS is the model project in Bangladesh because there is a huge potential for *SIPS* in Bangladesh which was created multiple impacts on Agriculture Value Chain Development and national economy. Because, more SIPS, more production and more development.

Impact of SIPS is more significant e.g. it addressing the climate change affects in the world providing green and clean energy, diesel and electricity pumps have been removing by this system which is a positive message for the country.

## **8. Strengthening Economic Security (SES) of Marginalized Young Women in Bangladesh**

It is also another project on agro-based activities that have been implemented by RDF for young, adolescent, marginalized, and vulnerable women with the financial support of Plan International Bangladesh and also Plan International Japan National Office. Plan International Bangladesh started support by the project through RDF in 2017 and the project is now ongoing.

### **About the SES Project**

The project aims to promote evidence-based livelihood development strategies and financial inclusion for the most excluded sections of the population living in extreme poverty. The project is empowering mostly marginalized and out-of-school young men and women who were married before the age of 18 and reaching adolescent girls to reach economic self-reliance through financial inclusion and access to social security systems. Finally, 2,000 extremely poor young women were selected for skills development and served as self-employed in wage employment. The project has been implemented in 3 sub-districts of the Barguna district (BargunaSador, Amtoli, and Taltoli Upazilas).

### **Major Activities of SES (Strengthening Economic Security)**

#### **a. Target Beneficiaries Selection:**

After identification of marginalized HHs through Participatory Rural Approval (PRA), Field Facilitators of the project visited door to door for verifying the authenticity of identified HHs and prepared a primary list of beneficiaries considering the different situations of the most marginalized people, their present capacities and the crosscutting issues like gender, resilience, and inclusion related to selection criteria of the project. The management staff of the project also visited each primarily selected beneficiary household to finalize the list of beneficiaries. The staff of Plan International Bangladesh monitored these activities and randomly visited the finally selected beneficiaries to ensure the quality of selection. A household visit for beneficiaries' selection was successfully completed in March 2018.

A total of 2,000 beneficiaries were finally selected through the selection process this year from 64 villages and 16 unions under

three Upazilas of Barguna district. All the beneficiaries are from the poorest households in the community and are vulnerable to climate change effects. Out of 2000 beneficiaries, 69.6 percent are the victim of child marriage of which 38.2 percentage points are from the minority community, 8.1 percentage points are from female-headed families, 6.9 percentage points are from physically challenged families and 16.1 percentage points are from sponsored child family.

Though project facilitation group members started to meet together on fortnightly basis in a convenient place, the duration of these group meetings was two hours, and meetings were facilitated by group leaders with the help of Facilitators. The Facilitator facilitated a session in each meeting based on selected different issues, such as new technology for crop cultivation, about a new variety of different crops, reproductive health, hygiene, child marriage, birth registration, dowry, etc. Group members also shared their problems and opportunities to improve their livelihoods through different IGAs in these meetings.

Awareness building regarding agricultural social issues and the relationship between beneficiary-to-beneficiary was increased through this group meeting. The decisions of the meeting were documented in a resolution book.

**b. Preparation of Household Development Plan (HDP) and Business Development Plan (BDP):**

The project facilitated preparing the household and business development plan for its selected beneficiaries to contribute to increasing aspirations of their lives and to become successful entrepreneurs. HDP is micro-level planning towards the development of the family where all the family members participated in these sessions.

In the HDP sessions, through a participatory process selected participants including their family members analyzed the family situation together with the project staff members. Through these sessions, the family set a vision of where they want to reach after a certain period through their income-generating activities considering the threats and opportunities. Participants also identified the necessary skills development area including the requirement of the

training through these sessions. In BDP, they calculated the income and expenditure of IGAs according to their choice of business.

A total of 2000 Household Development Plans and Business Development Plans were developed from July to September 2018 by the selected beneficiaries.

### **c. Local Level Job Market Scanning**

The project has developed a simple format for conducting job market scans at the local level and started to collect information regarding income generation through self-employment and wage-employment opportunities. Information on the local level market scan was collected by Economic Empowerment Officer and assisted by related Field Facilitators through visiting the market, discussion with business groups/employer and their associations, community people, Union Parisad representatives, etc. A total of 15 local level market scan information was collected in the project time. This market scan information helped in selecting particular and right Income-Generating Activities through self/wage employment for the selected young women.

Information collection on local government and non-government skill development training institutes was also completed and updated from time to time during the project period.

### **d. Capacity Development through Mentor-Mentee Approach on Locally Identified Trade:**

A total of 1000 mentees completed their Enterprise Development Training on bamboo crafts making, tailoring, duck and poultry rearing, pond fish culture, vegetable cultivation, nursery, small business, making packaging material (Paper carton), and mat making (Hogla leaves) by local mentors during January 2018 to June 2019. This training was 5 days long (non-residential) and conducted at the mentor's workplace. At the beginning of the training, the mentor and mentee sit together to identify the learning issues. Project staff monitored the training activities for ensuring the quality of training. Through this training, mentees were trained on production and marketing-related issues of the related enterprise. They also learned about customer service and record-keeping procedures related to business from mentors.

**e. Training on Agriculture Related IGAs (Agriculture, Livestock, and Fisheries) for Project Staff**

The project organized a three-day long residential training of trainers (ToT) from the 12th to 14th of March 2018 on “Agriculture Related IGAs (Agriculture, Livestock, and Fisheries)” for the project staff. Fifteen SES project staff (Field Facilitator-12, Upazila Officer-1, Economic Empowerment Officer-1, and Project Manager-1) participated in this training at RDF Training and Research Center (RTRC), RDF Tower, Barguna. The training was facilitated by district and Upazila level related government officials from different departments (Department of Agriculture, Department of Livestock Services, and Department of Fisheries) and Specialist- Youth Economic Empowerment (YEE) of Plan International Bangladesh. Different participatory learning methods including participatory discussion, experience sharing, role-play, group exercise, etc. were used in this training. Facilitators from related government departments also explained their departmental services and promised to extend their support for implementing project activities during the facilitation of related issues. Participants learned about the implementation process of different agricultural-related IGAs at the field level. After this training, participants felt confident to perform their roles at the field level. The project prepared a training manual before conducting this training.

**f. Training on Agriculture Related IGAs (Agriculture, Livestock, and Fisheries) for Beneficiaries at Field Level:**

Sixty-five batches of training on “Agriculture Related IGAs (Agriculture, Livestock, and Fisheries)” were conducted for project beneficiaries during the project period. These trainings were two days long (nonresidential) and conducted at the field level. In total 1523 beneficiaries under 72 groups from different villages participated in these trainings. These trainings are jointly facilitated by field levels government officials from related departments and the Field Facilitator of the SES project. The participants were also linked with related government service providers through this training for seeking future assistance regarding related issues.

Participatory methods were followed in this field-level training and pictorial materials were used for a better understanding of the

participants. Some practical sessions were also included in these trainings to enhance the learning process. Participants learned and increased their knowledge about homestead gardening, poultry (chicken and duck), goat rearing, and carp polyculture issues through this training. During the training, participants received some vegetable seeds for homestead gardening and a seed preservation pot to preserve seeds to take their learnings into practice. The management staff of the project and staff from Plan International Bangladesh monitored the field level activities to ensure the quality of events.

**g. Assistance to Purchase Productive Asset for Beneficiaries**

A guideline has been prepared for smooth operation regarding assistance to purchase the productive asset for beneficiaries and approved by the management of Plan International Bangladesh in the month of April 2018.

A total of 1800 beneficiaries from different groups purchased their productive assets through the project assisted Tk. 10000 with bKash/mobile banking charge after receiving agriculture-related IGA training and enterprise development training by local mentors from March 2017 to March 2020. Project staff assists to purchase the productive asset for beneficiaries and ensured the quality of assets according to the approved guideline of Plan International Bangladesh. Participants received their money through bKash/mobile banking and used their money to purchase different types of productive assets like a sewing machine, goat, hen, duck, etc., and to purchase inputs for small businesses, fish culture, and agricultural cultivation, land lease, etc. Participants already involved with income-generating activities who have purchased productive assets. A passbook was completed for individual beneficiaries from April to June 2018. Passbook has been used for record-keeping of savings, income-expenditure information of IGAs, and training and monitoring related information.

**h. Training on Start and Improve Your Business (SIYB) for Beneficiaries at Field Level**

A total of 68 batches of training on “Start and Improve Your Business (SIYB)” were conducted for the project beneficiaries from

October 2018 to June 2019. These trainings were two days long (non-residential) and were conducted at the field level. A total of 1500 beneficiaries from different groups participated in this training. This training was facilitated by the Field Facilitator of the SES project.

Participatory methods were followed in these field-level training and Business games, and other training materials were used for a better understanding of the participants. Some group work was also included in this training to enhance the learning process. Participants learned and increased their knowledge about the business plan and related issues through this training. The field Facilitator of the SES project received a three days long residential ToT on related issues before facilitating these trainings. Project management staff and staff from Plan International Bangladesh monitored the field level activities to ensure the quality of events.

**i. Establishment of Demonstration Plot in Collaboration with Seed Company (Lal Teer and Ispahani):**

In collaboration with “Lal Teer”, a renowned seed company in Bangladesh the project established 45 demonstration plots in the project area in March 2019. The company provided 2 types of vegetable seeds as inputs for demonstration namely “Stem amaranth” and “Yardlong bean” which belong to “Panna” and “1070” respectively. The number of seeds was 375 gm Stem amaranth and 800 gm Yardlong bean.

Another seed company Ispahani Seed Ltd. provided 4 types of vegetable seeds as inputs for demonstration namely red amaranth (1 kg), Spinach (1 kg), Indian Spinus (800 gm), and Yardlong bean (400 gm) in December 2019. The project distributed these seeds among 121 project beneficiaries under 43 groups.

Project beneficiaries sowed these seeds in their homesteads and were able to produce vegetables successfully. Through these demo plots, beneficiaries were introduced to quality seeds and were able to know about the production technology of these vegetables.

**j. Linkage Meeting with Market Actors:**

To increase the market linkage of project beneficiaries on selected value chain (bamboo craft, vegetable, mat of Hogla leaves, poultry

and goat) projects facilitated 10 meetings with related market actors in the project period. Total 199 selected project beneficiaries from different groups and 36 market actors from related trades had participated in these meetings. Through these meetings, beneficiaries were linked with the market actors and discussed different issues like barriers to product marketing, production of quality products, barriers to getting a fair price, etc. Field facilitator, Economic Empowerment Officer, and Upazila Officer from the SES project facilitated these meetings.

These meetings supported the project participants to reduce barriers to marketing, increase market access, and improve the quality of the product.

#### **k. Livestock Vaccination Campaign at Community Level:**

To reduce the mortality of livestock of project participants as well as community people SES project organized a vaccination campaign at the community level in collaboration with the Department of Livestock (DLS). Before organizing the livestock campaign, the project had conducted a half-day long orientation on livestock vaccination campaign and primary treatment for community livestock parapat on 8 September 2019, which was facilitated by the District Livestock Officer (DLO) from the Department of Livestock Services (DLS), Barguna. In this orientation, different issues like vaccine collection, cool chain maintenance, preservation and transportation procedure, vaccination procedure, primary treatments of livestock, etc. were discussed.

A total of 41 livestock vaccination campaigns were organized in collaboration with the Department of Livestock Services (DLS), Barguna during the project period and covered 52 villages of three Upazilas under the Barguna district. In total 2326 people participated in those vaccination campaigns and vaccinated their livestock. Among them, 1002 were project beneficiaries. Five types of vaccination were used in those vaccination campaigns namely Anthrax, PPR, BCRDV, RDV, and Duck Plague. The trained para vets conducted the vaccination activities jointly with Sub-Assistant Livestock Officer (SALO). Upazila Livestock Officers of BargunaSadar and Amtoli also visited two campaign activities and gave relevant assistance and suggestions. These vaccination



campaigns played a significant role to increase the skills and confidence of para vets and introducing themselves as para vet in their locality.

### **1. Linkage Development with Government and Private Organizations to Support Beneficiaries Through Training**

The Project has linked with 25 beneficiaries to receive three days long non-residential training on “Entrepreneur Development” from “Bangladesh Small and Cottage Industries Corporation (BSCIC)”, Barguna to enhance their entrepreneurship knowledge. This training was facilitated by Deputy Manager, BSCIC on 18-20 November 2019 at RDF Tower, Barguna. After training two beneficiaries applied for a loan from BSCIC for the expansion of their business.

The project also linked 25 beneficiaries (Livestock Para vet) with “Renata Pharmaceuticals Ltd” a renowned medicine company in Bangladesh to receive a daylong training on 5 December 2019 for enhancing knowledge and receiving updated information related to livestock vaccination and primary treatment-related issues. District Livestock Officer (DLO) of the Department of Livestock Services (DLS) and Divisional Manager of this department facilitated this training and after this training department provided bags to carry vaccine and medicine, two manuals related to primary treatment and vaccination of livestock and poultry birds, note pad and pen for each participant.

#### **❖ Key Findings and Learning’s from the Training**

1. It is possible to bring the backward people of the society back into the mainstream through proper training combined with different types of income-generating activities.
2. Women, as well as men, are able to play a leading role in the economic development of the family.
3. Participation in social activities increases when both men and women share the work of the family.

#### **Lesson Learned:**

Early and Forced Marriage in Bangladesh is a national threat for our society. Plan International Bangladesh and RDF came forward to overcome the situation and got solutions to involve the young and

adolescent girls in income-generating activities for their economic empowerment and involved them in Small Scale Agricultural Activities. Based on the huge agricultural activities the targeted girls in targeted area are economically sound and familiarly empowered. It was a real decision for the management of the organization at the proper time. The Strengthening Economic Security project ensured for reduction of the vulnerability and empowerment of the vulnerable adolescent girls.

Rural Agricultural Small Activities could make the girls empowered is learning and proven issue in the activity area of the project. Its impact and outcomes have been disseminated all over the country gradually.

The vulnerable girls are now economic resources for an increase in production. Once they were a burden to their family. They are trained, organized, and contribute money to their family and relations.

## **9. Combatting Early Marriage in Bangladesh (CEMB) Project**

### **Agricultural IGA Activities**

Resource Development Foundation (RDF) has been implementing the above-mentioned project with Plan International Bangladesh since 2019 and will be continued up to 2022 through Financial and Technical assistance from the Plan International Bangladesh and Global Affairs Canada.

The project covers all the four Upazilas under Jhalakathi District namely JhalakathiSadar, Nalchity, Rajapur, and Kathalia, which covers 34 unions. It aims to promote evidence-based livelihood development strategies and financial inclusion for the most excluded sections of the population living in extreme poverty.

Empowering most marginalized young women who were married at the early age of 18 and reaching adolescent girls to reach economic self-reliance through financial inclusion and access to social security systems. Finally, 2,000 extremely poor young women were selected for skills development and served as self-employed.

To formulate a national plan of Action to eliminate Child Early and Forced Marriage (CEFM) below 15 and reduce by one-third marriages below 18 years, by 2021; end all CEFM by 2041 and address the above-mentioned issues, with the support of Plan International Bangladesh, Resource Development Foundation (RDF) have been implementing the project titled “Combatting Early Marriage in Bangladesh (CEMB)” with the financial support of Global Affairs Canada (GAC) and reduce the vulnerability of adolescents, particularly girls in Jhalakathi District since 01 July 2019. The project aims to reach both 79,570 in-school and 8,000 out-of-school (OOS) adolescent beneficiaries including aged 10 to 19 years of its Sub-district/Upazila of Jhalakathi District. The project will reach these adolescents through out-of-school Youth Economic Empowerment (YEE), Adolescent Sexual and Reproductive Health and Rights (ASRHR) groups, OOS peer leaders, classroom integrated Gender Equality Movement in Schools, in-school adolescent corners. Considering the unique risks related to violence and health that young women face, the project targets primarily unmarried, at-risk adolescents. The project aims to tackle cultural

norms more deliberately through improving community acceptance that values the girl child and actions that support delaying marriage. CEMB will use previously tested approaches such as courtyard meetings, the “champion” fathers and mothers’ approach, and BCC messaging through multiple channels to increase the ability of men and women to act, engage and support girls to remain in school and delay marriage. The moral duty bearers have been engaged through training and IGA support.

**Activities Carried Out During the Period in chronological order:**

It was an integrated project for sustainable support delivery to the adolescent boys and girls for their motivation, Income Generation, Technical know-how, Self-dependency, and Overall upliftment of the graduation for the future as well as traditional agro-based small activities.

Detailed descriptions of these activities are given below:

**a) Selection of Target Beneficiaries (the first and foremost activity).**

After identification of marginalized HHs through PRA, Field Facilitators of the project visited door to door for verifying the authenticity of identified HHs and prepared a primary list of beneficiaries considering the different situations of the most marginalized people, their present capacities, cross-cutting issues like gender, resilience, and inclusion related to selection criteria of the project. The management staff of the project also visited each primarily selected beneficiary household to finalize the list of beneficiaries. The staff of Plan International Bangladesh monitored these activities and randomly visited the finally selected beneficiaries to ensure the quality of selection. Household visits for beneficiaries’ selection were completed from March to October 2019.

Finally, a total number of 1600 beneficiaries were selected through the selection process this year from the eight most vulnerable unions under four Upazilas of the Jhalakathi district. All the beneficiaries were from the poorest households in the community and vulnerable to climate change effect.

Through project facilitation group members started to meet together on fortnightly basis in a convenient place and time of them. The duration of these group meetings was two hours and the meetings were facilitated by group leaders with the help of Field Facilitators. The field Facilitator facilitated a session in each meeting based on selected different issues, such as new technology for crop cultivation, new varieties of different crops, reproductive health, hygiene, child marriage, birth registration, dowry, etc. Group members also shared their problems and opportunities to improve their livelihoods through different IGAs in these meetings.

Awareness regarding agricultural and social issues and relationships with beneficiary-to-beneficiary increased through this group meeting. The decision of the meeting is documented in a resolution book.

**b) Formulation of Family Development (FD) and Business Development Plan (BDP):**

The project facilitated the preparation of the household and business development plan for its selected beneficiaries to contribute to increasing aspirations in their life and to become successful entrepreneurs. FDP is micro-level planning towards the development of the family where all the family members participated in these sessions.

In the FDP sessions, participants were selected through a participatory process, and family members analyzed the family situation together with the project staff members. Through these sessions, the family set a vision of where they want to reach after a certain period through their income-generating activities considering the threats and opportunities. Participants also identified the necessary skills development area including the requirement of the training through these sessions. In BDP, they calculated the income and expenditure of IGAs according to their choice of business.

Total 1600 Family Development Plans and Business Development Plans were developed from December-February 2020 by selected beneficiaries.

**c) Local Level Job Market Scanning**

The project has developed a simple format to conduct job market scans at the local level and collected information regarding income generation through self-employment and wage-employment opportunities. Information on the local-level market scan was collected by Economic Empowerment Officer and assisted by related Field Facilitators through visiting the market, discussion with business groups/employer and their associations, community people, Union Parishad representatives, etc. A total of 29 local level market scan information were collected in the project time. This market scan information helped in selecting particular and right Income-Generating Activities through self/wage employment for the selected young women.

Information collection on local level government and non-government skill development training institutes was also completed and updated from time to time during the project period.

**d) Capacity Development through Mentor-mentee Approach on Locally Identified Trade**

A total of 350 mentees were engaged with 175 mentors in bamboo crafts making, tailoring, duck and poultry rearing, pond fish culture, vegetable cultivation, nursery, small business, making packaging material (Paper cartons), and Mat making (Hogla leaves).

**e) Training on Agriculture Related IGAs (Agriculture, Livestock, and Fisheries) for the Project Staff:**

The project organized a two days long residential training of trainers (ToT) dated 13th to 14th December on “Agriculture Related IGAs (Agriculture, Livestock, and Fisheries)” for project staff. Twenty-two CEMB project staff (Field Facilitator-16, Upazila Coordinator-4, Technical Coordinator (GEE)-2) participated in this training at Upazila Resource Center (URC) JhalakathiSadar. The training was facilitated by district and Upazila level government officials from different departments (Department of Agriculture, Department of Livestock Services, and Department of Fisheries) and Specialist-YEE of Plan International Bangladesh. Different participatory learning methods including participatory discussion, experience sharing, role-play, group exercise, etc. were used in this training. Facilitators from related government departments also explained their departmental

services and promised to extend their support for implementing project activities during the facilitation of related issues. Participants learned about the implementation process of different agricultural-related IGAs at the field level and the facilitation process of training for beneficiaries. After this training, participants felt confident to perform their roles at the field level. The project prepared a training manual before conducting this training.

**f) Training on Agriculture Related IGAs (Agriculture, Livestock, and Fisheries) for Beneficiaries at Field Level:**

A total number of 48 batches of training on “Agriculture Related IGAs (Agriculture, Livestock, and Fisheries)” were conducted for project beneficiaries during the project period. The rest of the 8 batches will be conducted in the upcoming months. These two days long trainings (non-residential) were conducted at the field level. A total of 1400 beneficiaries under 98 groups from different villages participated in these trainings. These trainings were jointly facilitated by the field level govt. officials from related departments and the Field Facilitator of the CEMB project. The participants were also linked with related govt. service providers through this training for seeking future assistance regarding related issues.

Participatory methods were followed in this field-level training and pictorial materials were used for a better understanding of the participants. Some practical sessions were also included in this training to enhance the learning process. Participants learned and increased their knowledge about homestead gardening, poultry rearing (chicken and duck), goat rearing, and carp polyculture through this training. During the training, participants received some vegetable seeds for homestead gardening and a seed preservation pot to preserve seeds to take their learning's into practice. The management staff of the project and staff from Plan International Bangladesh monitored the field level activities to ensure the quality of events.

**g) Assistance to Purchase Productive Asset for Beneficiaries**

A guideline was prepared for smooth operation regarding assistance to purchase the productive asset for beneficiaries and approved by the management of Plan International Bangladesh in February 2021.

Four Hundred beneficiaries from different groups purchased their productive asset through project aided BDT 3,200,000 with bKash/mobile banking charge after receiving Agriculture, related IGA training, and enterprise development training by local mentors from February to March 2021. Project staff assists to purchase the productive asset for beneficiaries and ensure the quality of assets according to the approved guideline of Plan International Bangladesh. Participants received their money through bKash/mobile banking and used their money to purchase different types of productive assets like the sewing machine, goat, hen, duck, etc., and to purchase inputs for small businesses, fish culture, crop cultivation, land lease, etc. Participants who are already involved with income-generating activities purchased productive assets. Another 1000 beneficiaries will receive support in the next quarter.

#### **h) Admission of Beneficiaries in TVET**

A total of 168 beneficiaries are linked with TTC. They are admitted in 11 trades according to their Individual Action Plan (IAP). Using the human rights-based framework and building on lessons and best practices in the area of CEFM, the project will work within and OOS adolescent girls and boys (age 11-15 for in-school and 10-19 for OOS) to increase their knowledge about ASRHR issues including GBV, CEFM, and GE (1120). The Obsolescent will be reached by training and sensitizing peer leaders on integrated GE, life skills, ASRHR, CP, and DRR issues using a contextualized 'Champions of Change' training for adolescent girls and boys developed and piloted by Plan in several countries. Peer leaders will form peer groups and conduct peer-to-peer sessions with OOS adolescents and will be supported with SBCC materials.

#### **Train GEMS teachers on GEMS manuals:**

In total 306 educational institutions were covered by the CEMB project. To inform the Head Teachers and SMC/MMC members a total of 10 batches of inception workshop was arranged and Head Teachers were informed about our activities. Sixteen master trainers and four Upazila coordinators were trained on the GEMS manual (13 sessions of Year 1). four teachers from each EDI were selected by headteachers and trained on the GEMS manual. In total 1224 teachers were trained but it was not possible to cascade



schoolteachers because of the COVID-19 pandemic situation. To address this situation, Plan international arranged a refresher training on the year 1 module and ToT on the GEMS manual.

The project's second pillar aims to tackle cultural norms more deliberately. The expected outcome is improved community acceptance of norms that value the girl child and actions that support delaying marriage. Combatting Early Marriage in Bangladesh will use previously tested approaches such as courtyard meetings, “champion” fathers and mothers’ approach, and BCC messaging through multiple channels to increase the ability of men and women to act, engage and support girls to remain in school and delay marriage.

To achieve the outcome 612 Champion fathers and mothers were selected. Union coordinators and Upazila coordinators were trained on training packages for Champion fathers and mothers. Each of the Champion fathers and mothers trained another mother and father after receiving training.

### **Female Childbirth Celebration**

Another influencing activity of the Project was celebrating the female children of our community. We celebrated 170 birth celebrations of female children. Community people accepted the event very cordially and accepted the value of the female child.

### **Union and Sub-district Level CMPC Meeting**

It was our achievement that we have updated Union and Sub-district Level CMPC and arranged CMPC Meeting.

#### **❖ Unions learned**

1. It is possible to bring the backward people of the society back into the mainstream through proper training and combining with different types of income-generating activities.
2. Women as well as men are able to play a leading role in the economic development of the family.
3. Participation in social activities increases when both men and women share the work of the family.

❖ **Mitigation:**

- ✓ Building awareness of the beneficiaries to reduce assets before affected by seasonal diseases as well as natural disasters to minimize the risk of asset loss and increase assets through IGA.
- ✓ Vaccination campaign and increase awareness of beneficiaries on related issues at the livestock of disease and mentality state of livestock.
- ✓ Beneficiaries are encouraged to be entrepreneurs after receiving institutional skill development training.

It is also a sustainable and results-bearing project, which is implemented sustainably in a scientific manner.

Aspiration to stop child marriage through economic supports in agriculture and off-farming activities in Bangladesh.

**The Activities Carried out during the Project Period**

**(a) Target Beneficiaries' Selection**

After the identification of the marginalized HHs through the PRA field facilitators visited door to door for verifying the beneficiaries considering the different situations of the most marginalized people with a high risk of CEFM in their adolescent girls. Their present capacities and the crosscutting issues like gender, resilience, and inclusion related to the selection criteria of the project were also considered during the selection of HHs. Project management staff also visited each primarily selected beneficiary household to finalize the list of beneficiaries. In total 100 beneficiaries were finally selected (from 6 villages and 6 unions) through the selection process during this period. The staff of Plan International Bangladesh monitored these activities and randomly visited the finally selected beneficiaries to ensure the quality of selection. Finally, 100 vulnerable HHs with a high risk of CEFM in their adolescent girls were selected based on the selection criteria.

**(b) Group Formation**

Group formation is necessary for passing our project information. Five groups were successfully formulated. It raises cooperation and collaboration between beneficiaries to project staff. For achieving a project goal, group formation is very much essential.

**(e) Household Development Plan and Business Development Plan:**

We have formulated Household Development Plan and Business Development Plan for our beneficiaries. All the family members of a beneficiary are participants and put their opinions. We prepare these plans. We have completed 100 households' development plans and business development plans for 100 of our beneficiaries. This document is preserved by the beneficiaries. It's a guideline for the beneficiaries to improve their families. Every activity and support is provided by the ASCM project based on these plans. Monitoring was also conducted based on these plans.

**(d) Training on Enterprise Development by Local Mentor**

We tag one mentee with one local mentor and each mentor provides training to the mentee on different trades like tailoring, comb making by bone, bamboo craft, paper carton making, etc. Each mentor provides training to each mentee for 5 days with 5 hours every day. After successful completion of the training, each mentee got financial assistance from the project for making them an entrepreneur and earned more money for their family. Training on Enterprise development by a local mentor was held on 15-19 September 2019. A total of 30 beneficiaries under 5 groups received training on 10 trades.

**Training on Agriculture Related IGAs (Agriculture, Livestock, and Fisheries) for Beneficiaries at Field Level**

There was a total of 100 beneficiaries from different villages participated in training in five batches on "Agriculture Related IGAs (Agriculture, Livestock, and Fisheries)". These trainings were two days long (non-residential) and conducted at the field level. This training was jointly facilitated by the field level Government Officials from related departments, the Project Manager, and the Field Facilitator of the Aspiration to Stop Child Marriage project in Bangladesh. The participants were also linked with related

government service providers through this training for seeking future assistance regarding related issues.

Participatory methods were followed in this field-level training and pictorial materials were used for a better understanding of the participants. Some practical sessions were also included in this training to enhance the learning process. Participants learned and increased their knowledge about homestead gardening, poultry rearing (chicken and duck), goat rearing, and carp polyculture issues through this training. During the training, participants received some vegetable seeds for homestead gardening and a seed preservation pot to preserve seeds to take their learning's into practice. Staff from Plan International Bangladesh monitored the field level activities to ensure the quality of events.

**Table: Number of Beneficiaries Participate in Agriculture Training**

Sl. No	Names of Group	No. of Beneficiaries
01	LeamuaKalatalaUnnayan Dal	19
02	MonosataShaplaUnnayan Dal	20
03	PurpoDupatiGolapUnnayan Dal-	21
04	SonakhaliUnnayan Dal	20
05	PurakataJabaUnnayan Dal-	20
	<b>Total</b>	<b>100</b>

**The objective of the project:**

Preventing child, early and forced marriage through social development activities.

The Project aims to deliver and achieve the following outcomes:

- Outcome 1:** Retention of girls in school.
- Outcome 2:** Strengthened economic opportunities through IGAs or girls and families at high risk of CEFM.
- Outcome 3:** Communities embrace social norms that value the girl child and support them in empowerment through economic activities to delay marriage.

**Outcome 4:** Increased responsiveness of duty bearers at the national level, district, and sub-district levels to prevent and respond to child rights violations, particularly in CEFM.

**Lessons Learned:**

Plan International Bangladesh and RDF started CEMB (Combatting Early Marriage in Bangladesh) project to fight early and Forced Marriage, based on agricultural income-generating activities and they could be able to prove their active involvement in the society.

Both organizations came forward to prevent the situation and started the journey in the Jhalakathi district (which is the topmost area in Bangladesh in terms of Early and Forced Marriage) and found solutions to involve the key role players in society for preventing the situation through awareness development and involve adolescent girls in income-generating activities for their self-employment and empowerment through Small Scale Agricultural Activities.

Combatting Early Marriage in Bangladesh project was a model project because this project ensured for reduction of vulnerability and empowerment of the vulnerable adolescent girls through providing shelter services, social counseling, legal services, Self-skills development training on agricultural small entrepreneurship, and special emphasis on how adolescent girls can play more active roles in their communities to prevent and counter violent extremism.

After a long journey, the vulnerable girls are now “economic resources” for an increase in production and income generation. Once they were a burden to their family. They are trained, organized, and contribute money for their self-sustainability and family, relations. Its impact and outcomes have been disseminated all over the country.

It is learned from this project, that if Adolescent girls are ensured to engage in income-generating activities providing small financial support, they can create a strong social network, establish their rights in local communities, connect them with community groups and they become self-empowered through agro-based activities.

## **10. Girls Get Equal (GGE) Project (2020- Continued)**

The project aims to reduce the incidence of child marriage in 6 unions of TaltoliUpazila in the district of Barguna. TaltoliUpazila has been selected specifically because of its low score on SRHR indicators, such as lack of access to quality SRHR services and poor knowledge of SRHR issues. Taltoli is also a vulnerable area in terms of natural disasters, floods, and cyclones, which exacerbates child marriage. The percentage of extremely poor people living in Taltoli is 12 (while the national average is 12, 9).

The activities of the project are given below:

### **a) Orientation on Target Beneficiary Selection Process**

A three-day residential orientation workshop on the “Target Beneficiary Selection Process” for newly recruited SOYEE component staff was conducted this quarter. All SOYEE component project staff participated in this program from 21-23 November 2020 at the RDF training center, RDF Tower in Barguna. This orientation was facilitated by the Head of SOYEE and Specialists of the SOYEE team, Plan International Bangladesh through using different learning methods including participatory discussion, experience sharing, presentation, brainstorming, field exercise, etc. After this orientation, participants were able to understand the project concept, and activity implementation process and felt confident at to perform their roles to roll out the project activities at the field level. The staff of the project received an in-depth understanding of the activities and implementation strategies under outcome 3. They have broadened their skills in facilitation, group management, planning, monitoring, and reporting.

### **b) Conducting PRA for Selecting Target Beneficiaries**

A total of 42 PRA sessions were conducted in the same number of villages at 6 unions under the TaltoliUpazila of Barguna district from November 2020 to January 2021. The project used PRA tools (transact walk, social mapping, and wellbeing analysis) for selecting the target beneficiaries from the selected villages. People of all strata were actively involved with these sessions in their respective villages. These sessions were facilitated by the project staff and monitored by the project personnel of Plan International Bangladesh. Before

conducting these PRA sessions, a facilitation guideline in Bangla was developed and all staff was oriented. A total 42 numbers of PRA sessions were conducted based on the guideline. A list of the households was prepared and marked in separate groups. Households in the 'C' category were considered as target people for the project.

### **c) Household Visit for Beneficiaries Selection**

After the identification of marginalized HHs with a girl aged 11-19 through PRA, Field Facilitators of the GGE project visited door to door for verifying the authenticity of the identified HHs under the 'C' category and prepared a primary list of beneficiaries considering the different situations of the most marginalized people, their present capacities and the crosscutting issues like gender, resilience, and inclusion related to selection criteria of the project. A total of 1075 numbers of households in 42 villages at 06 unions under TaltoliUpazila were visited. Out of 1075 HHs, 850 HHs were primarily selected for the target beneficiary. The GGE project management staff also visited each of the primarily selected beneficiary families to households the list of project beneficiaries.

### **d) Orientation on Local Level Job Market Scanning**

A one-day non-residential approach to "Local Level Job Market Scanning" was conducted on 14 December 2020 at the GGE Project Office, Taltoli. This orientation was facilitated by Md. Rezwanul Haque Chowdhury, Specialist-SOYEE, Plan International Bangladesh. The project has developed a common format for conducting job market scans at the local level. After this orientation, all the staff had a deep idea about this format. As a result, they could easily collect information about income generation through wage-employment and self-employment by using this format. Information of local-level market scan was collected by Technical Officer-YEE and assisted by related Field Facilitators through visiting the market, discussion with business group/employer and their association, community people, Union Parisad representatives, etc. Fourteen local level market scan information will collect in January 2021. This market scan information helped to select to particular and right quick income-generating activities through self/wage employment for the selected beneficiaries.

**Lessons Learned:**

Girls Get Equal (GGE) is an agriculturally based economic activity for the empowerment of the vulnerable young and adolescent girls in the coastal area. The project has been implemented for protecting adolescent girls by giving financial support to livestock, fisheries, and crops-based activities through team building and group organizing. This project ensured trained and activated them in Duck Rearing, Chicken Farming, Vegetable Farming, Fish Culture, and Farming and they are now sustained and well organized.

It is learned from this project if girls can aware of their rights and their way of earning through skill development, the value of girls in society will increase. They will be considered an asset in society and the tendency of Early Marriage and Forced Marriage will be decreased for their employment and sustainable income-earning.

It's an exceptional development project to develop and project the adolescent girls and to make them assets for the wellbeing of the nation.



## Acronyms and Abbreviations

<b>ASCM</b>	Aspiration to Stop Child Marriage
<b>ASRHR</b>	Adolescent Sexual and Reproductive Health and Rights
<b>ADB</b>	Asian Development Bank
<b>ADMD</b>	Association for Disaster Mitigation and Development
<b>BDP</b>	Business Development Plan
<b>BSCIC</b>	Bangladesh Small and Cottage Industries Corporation
<b>BCCRF</b>	Bangladesh Climate Change Resilience Fund
<b>BWDB</b>	Bangladesh Water Development Board
<b>CARP</b>	Coastal Area Rehabilitation Project
<b>CLAP</b>	Coastal Livelihoods Adaptation Project
<b>CEFM</b>	Child Early and Force Marriage
<b>CEMB</b>	Combatting Early Marriage in Bangladesh
<b>CPP</b>	Cyclone Preparedness Programme
<b>CIG</b>	Community Interest Group
<b>CBO</b>	Community Based Organization
<b>CEFE</b>	Competency based Economics through Formation of Enterprise
<b>CIG</b>	Community Interest Group
<b>CR</b>	Child Protection
<b>CMPC</b>	Child Marriage Prevention Committee
<b>DRR</b>	Disaster Risk Reduction
<b>DLS</b>	Department of Livestock Services
<b>DLO</b>	District Livestock Officer
<b>DSS</b>	Department of Social Service
<b>DAE</b>	Department of Agricultural Extension
<b>DWA</b>	Department of Women Affairs
<b>EDI</b>	Educational Institute
<b>GPDP</b>	Green Power Development Program
<b>GGE</b>	Girls Get Equal
<b>GBV</b>	Gender-Based Violence
<b>GEMS</b>	Gender Equity Movement in School

<b>GO</b>	Government Organization
<b>GOB</b>	Government of Bangladesh
<b>GAC</b>	Global Affairs Canada
<b>HYV</b>	High Yielding Variety
<b>HH</b>	Household
<b>HDP</b>	Household Development Plan
<b>IGA</b>	Income Generating Activity
<b>IDCOL</b>	Infrastructure Development Company Limited
<b>IPM</b>	Integrated Pest Management
<b>IAP</b>	Individual Action Plan
<b>JICA</b>	Japan International Cooperation Agency
<b>KPI</b>	Performance Indicators
<b>LGED</b>	Local Government Engineering Department
<b>MRA</b>	Microcredit Regulatory Authority
<b>MIS</b>	Management Information System
<b>MW</b>	Mega Watt
<b>MMC</b>	Madrasah Managing Committee
<b>NGO</b>	Non-Government Organization
<b>OOS</b>	Out of School
<b>PV</b>	Photo Voltaic
<b>PRA</b>	Participatory Rural Approval
<b>PO</b>	Partners Organization
<b>AEP</b>	Aquaculture Extension Project
<b>PMCA</b>	Poultry Model Chain Activity
<b>RE</b>	Renewable Energy
<b>RDF</b>	Resource Development Foundation
<b>SLDP</b>	Smallholder Livestock Development Project
<b>SBCC</b>	Social and Behavior Change Communication
<b>SIPS</b>	Solar Irrigation Pumping System
<b>SMC</b>	School Management Committee
<b>SES</b>	Strengthening Economic Security
<b>SD</b>	Social Development
<b>SDG</b>	Sustainable Development Goal

<b>SALO</b>	Sub-Assistant Livestock Officer
<b>ToT</b>	Training of Trainer
<b>TVET</b>	Technical and Vocational Education and Training
<b>TTC</b>	Technical Training Center
<b>UP</b>	Union Parishad
<b>USAID</b>	United States Agency for International Development
<b>URC</b>	Upazila Resource Center
<b>YEE</b>	Youth Economic Empowerment