Effectiveness and Impact of SafaL Program: A Study of Jagoroni Chakra Foundation, Jessore

ROCKSHANA ANWAR



FACULTY OF AGRIBUSINESS MANAGEMENT SHER-E-BANGLA AGRICULTURAL UNIVERSITY SHER-E-BANGLA NAGAR, DHAKA-1207

DECEMBER, 2016

AN INTERNSHIP REPORT ON

Effectiveness and Impact of SaFaL Program: A Study of Jagoroni Chakra Foundation

BY ROCKSHANA ANWAR REGISTRATION NO.: 10-04094

An Internship Report
Submitted to the Faculty of Agribusiness Management
Sher-e-Bangla Agricultural University, Dhaka,
In partial fulfillment of the requirements
for the degree of

MASTER OF BUSINESS ADMINISTRATION (MBA) IN AGRIBUSINESS

SEMESTER: JULY-DECEMBER, 2016

Approved by:

Prof. Md. Zulfikar Ahmed Reza Supervisor

Department of Agricultural Statistics Faculty of Agribusiness Management Sher-e-Bangla Agricultural University Sher-e-Bangla Nagar, Dhaka-1207 Associate Prof. Md. Abdul Latif Chairman

Examination Committee Sher-e-Bangla Agricultural University Sher-e-Bangla Nagar, Dhaka-1207

Letter of Transmittal

25 September, 2017

To

Md. Zulfikar Ahmed Reza

Professor

Department of Agricultural Statistics
Faculty of Agribusiness Management
Sher-e-Bangla Agricultural University, Dhaka-1207.

Subject: Submission of Internship Report.

Dear Sir,

I am very pleased to submit you this internship report entitled "Effectiveness and Impact of SaFaL Program: A Study of Jagoroni Chakra Foundation" with due gratitude and appreciation. As per partial fulfillment of the requirements for the MBA Degree. I have completed the internship from Jagoroni Chakra Foundation, Jessore. The internship program has given me the opportunity to learn about different aspects of this well reputed organization. Before facing the corporate world, I have gathered general idea about the organizational culture and activities.

I, sincerely hope that you will be satisfied with this report. If you have any query, I will be pleased to answer that. I hope and pray that you would be gracious enough to accord approval to this report.

Yours	Faith	fully,			
	• • • • • • •	• • • • • •	 	 • • • • •	• • • • • •

Rockshana Anwar

Registration No.: 10-04094

MBA in Agribusiness Faculty of Agribusiness Management Sher-e-Bangla Agricultural University.



Md. Zulfikar Ahmed Reza

Professor
Department of Agricultural Statistics
Faculty of Agribusiness Management
Sher-e-Bangla Agricultural University
Sher-e-Bangla Nagar, Dhaka-1207, Bangladesh

SUPERVISOR'S CERTIFICATE

This is to certify that an internship report entitled, "Effectiveness And Impact Of Safal Programme: A Study Under Jagoroni Chakra Foundation" submitted to the Faculty of Agribusiness Management, Sher-e-Bangla Agricultural University, Dhaka, in partial fulfillment of the requirements for the degree of MASTER OF BUSINESS ADMINISTRATION (MBA) IN AGRIBUSINESS, embodies the result of a piece of bona fide internship work carried out by ROCKSHANA ANWAR bearing Registration No. 10-04094 under my supervision and guidance. No part of the paper has been submitted for any other degree or diploma.

I further certify that such help or source of information, as has been availed of during the course of this investigation has duly been acknowledged.

Dated: Place: Dhaka, Bangladesh	(мd. Zulfikar Ahmed Reza)

Supervisor

Student Declaration

I hereby declare that the internship report entitled "Effectiveness and Impact of

SaFaL Program: A Study of Jagoroni Chakra Foundation" has been prepared by me under the supervision of **Md. Zulfikar Ahmed Reza**, Professor, Department of Agricultural Statistics, Faculty of Agribusiness Management, Sher-e-Bangla

Agricultural University, Dhaka-1207.

I also declare that the matter and information embodied in this report is original and

neither this report nor any part of this report has been submitted elsewhere for the

award of any other degree or any other purpose.

Rockshana Anwar

Registration no: 10-04094

MBA in Agribusiness

Faculty of Agribusiness Management

Sher-e-Bangla Agricultural University.

Dedicated to My Beloved Parents

ACKNOWLEDGEMENT

At first, I would like to express my deepest gratitude to Almighty God for giving me

the strength to finish the task within the scheduled time.

I would like to offer my deep gratitude, compliments and heartfelt thanks to

respectable teacher and my internship supervisor Md. Zulfikar Ahmed Reza,

Professor, Department of Agricultural Statistics, Faculty of Agribusiness

Management, Sher-e-Bangla Agricultural University, whose constant supervision and

guidance enabled me to prepare this internship report. I am indebted to him for his

excellent support and guidance throughout the study.

My gratitude also goes to Md. Touhidur Rahman (project director), SaFaL for

providing necessary help and guidance. Special thanks to Taposh Paul, Senior

Officer and Md. Samsul Haque, Senior Officer for facilitating me to learn from

saFaL.

I also express my warm gratitude and cordial thanks to the management and all

officials of Jagoroni Chakra Foundation, Jessore, who have given me the opportunity

to work with them and helped a lot by providing the information and enabling me to

prepare this report. I have received their generous help and support.

I am ever grateful to some of my friends who helped me to complete this internship

report. My deepest apology goes to those names that I have mistakenly omitted here. I

would like to express my heartiest gratitude to those people who have helped me to

not to get lost during the preparation of this internship report. I acknowledge all

those who helped me to bring this internship report to reality.

Finally, a silent stream of gratitude is for my most adorned parents whose blessing is

always with me in this world.

December, 2016 The Author

i

Effectiveness and Impact of Safal Program: A Study of Jagoroni Chakra Foundation, Jessore

EXECUTIVE SUMMARY

This report is expecting to strive the effectiveness of SaFaL program which is implementing in Jessore and Narail through implementing partner JCF along with the Technical Assistance of Solidaridad Network Asia-SNA. On the way of SaFaL's journey as a partner JCF has played significant roles against it 'prospective result, change and market stability. In fact, farmers are able to mobilize their physical asset through different sorts of capacity buildings activities by getting support from SaFaL. JCF-SaFaL program is working for enhancing food and nutrition security of small farmers and landless workers in Southwest Bangladesh with a focus on developing resilient livelihoods through promoting sustainable agricultural production and market chain development. SaFaL mandate is to be increased productivity and build vibrant market system which has been obtained already. Farmers satisfaction regarding SaFaL is much more high as they think SaFaL as their proper guideline. Increased productivity with high profit, sustainable livelihood, food security and safety, reducing post harvest loss, reducing child mortality, training facilities, health care services etc are the achievement of SaFaL.

LIST OF CONTENTS

CHAPTER	TOPICS	PAGE
	ACKNOWLEDGEMENTS	i
	EXECUTIVE SUMMARY	ii
	LIST OF CONTENTS	iii-iv
	LIST OF TABLES	\mathbf{v}
	LIST OF FIGURES	v
	LIST OF APPENDICES	vi
	ABBREVIATION	vii
1.	INTRODUCTION	01-02
	1.1 Origin of the Study	01
	1.2 Objectives of the Study	01
	1.3 General Objective	01
	1.4 Specific Objectives	02
	1.5 Limitation of the Study	02
2.	REVIEW OF LITERATURE	03-04
3.	METHODOLOGY	05-06
	3.1 Research Design	05
	3.2 Sources of Data	05
	3.3 Sampling Technique	05
	3.4 Method of Data Collection	06
	3.5 Analytical Technique and Tools	06
4.	PROFILE OF JAGORONI CHAKRA FOUNDATION	07-11
	4.1 An Over View of Jagoroni Chakra Foundation	07
	4.1.1 History	07
	4.1.2 Governing Body	08
	4.1.3 Structure & Decision-making Process	08
	4.1.4 JCF is Registered with	08
	4.1.5 Sustainability consciousness	09
	4.1.6 Workplace Ethics	09
	4.1.7 List of Policy	10
	4.2 Vision & Mission	10
	4.3 Objectives	10
	4.4 Sectoral Focus	11

CHAPTER	TOPICS	PAGE
5.	SUSTAINABLE AGRICULTURE, FOOD SECURITY AND LINKAGES (SaFal)	13-21
	5.1 Basic information	13
	5.2 How SaFaL works	16
	5.3 Sectors of working	16
	5.4 Technology Adaptation status in PG	17
	5.5 Market linkages—symbiotic relationships between producers and buyers	18
	5.6 Collection Centres - Byers at door step	19
	5.7 Business linkages-Technical and Financial Support	20
	5.8 Challenges	21
	5.9 Learning	21
6.	RESULT & DISCUSSION	22-36
	6.1 Increased Productivity	22
	6.2 Increased income from improved farm management	22
	6.3 Women's involvement	23
	6.4 Sustainable farming technologies-key to increased farm production	24
	6.5 Pilots of Technologies	25
	6.6 Questionniare for Measuring the success level of SaFaL	26
7.	FINDINGS, RECOMMENDATION AND CONCLUSION	37-38
	7.1 Findings of the Study	37
	7.2 Recommendations	37
	7.3 Conclusions	38
	REFERENCES	39
	APPENDICES	40-41

LIST OF TABLES

	TITTLE	PAGE
Table 1	Sectors of working	16
Table 2	Technology Adaptation status in PG	18
Table 3	Total earning from collection centre	19
Table 4	Business linkages-Technical and Financial Support	20
Table 5	Female Positioning in Producer Group, EC Committee	23
	and Lead Farmer	
Table 6	Technology piloting status	26
Table 7	Age of respondents	27
Table 8	Gender of the respondents	27
Table 9	Farmer's working sector	28
Table 10	Image of SaFal to respondents	30
Table 11	Profitability of technologies provided by SaFaL	31
Table 12	Aspects of collection centre	32
Table 13	Training understandability easy	33
Table 14	CNVs health service	34
Table 15	Providing grace period loan	35
Table 16	Farmer's perception of SaFaL benefit	35

LIST OF FIGURES

	TITTLE	PAGE
Figure 1	Basic information	13
Figure 2	SaFal's activity cycle	16
Figure 3	Decrease in Post Harvest Loss	20
Figure 4	Increased production over baseline	22
Figure 5	Women participation in EC Committee	24
Figure 6	technology adaptation in Producer Group	25
Figure 7	Age of respondents	27
Figure 8	Gender of the respondents	28
Figure 9	Farmer's working sector	29
Figure 10	Image of SaFal to respondents	30
Figure 11	Profitability of technologies provided by SaFaL	31
Figure 12	Aspects of collection centre	32
Figure 13	Training understandability easy	33
Figure 14	CNVs health service	34
Figure 15	Providing grace period loan	35
Figure 16	Farmer's perception of SaFaL benefit	36

LIST OF APPENDICES

	TITTLE	PAGE
Appendix	Questionnaire for farmer	40-41

ABBREVIATION

JCF Jagorono Chakra Foundation

SaFaL Sustainable Agriculture, food security and linkages.

PG Producer Group

LF Lead Farmer

EC Executive Committee

CNV Community Nutrition Volunteer

ED Executive Director

CEO Chief Executive Officer

PD Project Director

HH Household

FHHs Farmer Household

MT Metric Ton

HYV Hybrid Variety

AI Artificial Insemination

CHAPTER 1

INTRODUCTION

1.1 Origin of the Study

In today's world only academic education does not make a student perfect to become competitive with the outside world. Internship is highly needed to gain idea, knowledge and experience. From the internship program student get the opportunity to learn facing the real business world. As a qualification of obtaining Masters of Business Administration (MBA) degree, every student has to go through an internship program. The main reason of this course is to experience the reality of the corporate life and relate it with the knowledge get from academic curriculum with practical situation. This course is taken as a four months program which creates opportunities for every student to work different organizations where they work different working environment and gather practical knowledge.

This report named "Effectiveness and Impact of SaFaL Program: A Study of Jagoroni Chakra Foundation" has been made as a part of my internship at Jagoroni Chakra Foundation. The report includes my work experiences at SAFAL, project of Jagoroni Chakra Foundation, as an intern. During this period, I learned how the host organization works with the help of the internal supervisor. On the basis of working experience in this period I have prepared this report and I have tried my level best to relate the theoretical knowledge with the practical work situation. This Internship Report is generated under the academic supervision of Md. Zulfikar Ahmed Reza, Professor; Dept. of Agricultural Statistics, Sher-e-Bangla Agricultural University, Dhaka.

1.2 Objectives of the Study

The objectives of the report are divided in two parts. One is general objectives and another one is specific objectives.

1.3 General Objective

The overall objective of this report is to measure the performance of JCF-SAFAL.

1.4 Specific Objectives

Specific objectives of this report are -

- 1. To examine the overall increase in production level.
- 2. To find out the women enrollment related to this programm.
- 3. To find out the level of technology used by farmers after SaFaL.
- 4. To find out the overall success levelof SaFaL programme by measuring customer satisfaction.

1.5 Limitation of the Study

Though I have given utmost effort to prepare this paper but there are some limitations of the study. Such are as follows-

- ➤ The main constrain of the study was insufficiency of information, which was required for the study. There are various information the organization's employee can't provide due to security and other corporate obligations.
- ➤ The another obstacle while preparing this report was time. As the tenure of the internship program was only four months, it was not possible to highlight everything deeply.
- Unavailability to required published documents.
- The topic is a vast area of studying. More detailed study was not possible.
- ➤ In this report, the work is done on a sample of small respondents. It is not possible to collect whole data within a short time for survey.
- > Since the organization personnel were very busy, they could not provide enough time to me.
- Lack of opportunity to visit more upazilla.
- Lack of knowledge and experience among the officials.
- Lack of knowledge and experience of respondents.
- Analyzing with financial data is much more confusing and complicated than any other data.
- Large-scale research was not possible due to constraints and restrictions posed by the organization.

CHAPTER 2

REVIEW LITERATURE

Doss, C. (2011) tried to highlight The Role of Women in Agriculture. Agriculture can be an important engine of growth and poverty reduction. But the sector is underperforming in many countries in part because women, who are often a crucial resource in agriculture and the rural economy, face constraints that reduce their productivity. Women's participation in rural labour markets varies considerably across regions, but invariably women are over represented in unpaid, seasonal and part-time work, and the available evidence suggests that women are often paid less than men, for the same work.

Islam, M.N. (2012) had shown the Impact of Modern Technology on Food Grain Production in Bangladesh in his study. He noted that agricultural development could not be achieved without the proper implication of agricultural inputs in the form of HYV of seeds, fertilizers, irrigation water either individually or in their suitable combination. The farmers of Bangladesh have been largely using modern irrigation technology as its inherent advantages are being affordable. A steady rise of irrigation technology has been influencing the use of HYV of seeds, chemical fertilizers and pesticides.

Zaman, S. (2002) conducted a survey. The participation of women in agriculture is not new. In many parts of Bangladesh, agriculture is the chief occupation of women. Many ethnic groups, for example Santal, Chakma, Garo have been for centuries working as agricultural labour force. Until very recently, the female labour force was mostly confined to agriculture. Only during eighties, the country's female labours have emerged as the largest industrial labour force in the garments sector. But still, 88% of the female labour force work in agriculture. In the household, women provide 80% of the food, whereas the male men make only 20%.

Victoria, M.V. (2007) conducted a study regarding agricultural technology on non-farm labor and adoption by gender in Bangladesh. This study particularly looks at the effects of HYV adoption on time allocation and labor force participation of men and

women in non-farm activities. The empirical findings suggest that the decision to adopt HYV technology is determined primarily by farm size, value of total assets of the household, ratio of yield per decimal of land of high-yielding to traditional variety of rice, and the ratio of variance of yield per decimal of land of high-yielding to traditional variety of rice.

Jaim, W.M.H. and Hossain, M. (2011) found rapid increasing participation of women in economic activities. The progress is attributed to poverty, empowerment of women by NGOs, and migration of male members from agriculture to non-farm occupation. The results show that 66 percent of women participated in agricultural activities in 2008, an increase from 58 percent in 2000. The allocation of time has also increased from 1.11 to 1.28 hours per day although this was less than 1988 level.

CHAPTER 3

METHODOLOGY

The study requires a systematic procedure from selection of the topic to preparation of

the final report. To perform the study, the data sources were to be identified and

collected, to be classified, interpreted and presented in a systematic manner and key

points were to be found out. The overall process of methodology has been given as

below.

3.1Research Design

This is a descriptive type of research. Information collected to furnish this report is

both from primary and secondary sources.

3.2 Sources of Data

i) The Primary Data Sources

Questionnaire Survey on farmers of SaFaL.

ii) TheSecondary Data Source

Annual reports of Jagoroni Chakra Foundation.

Annual reports of SaFaL.

Different publications of Jagoroni Chakra Foundation.

Official website of the Jagoroni Chakra Foundation.

Internet

3.3 Sampling Technique

Target Population:

Farmers under SaFaL-JCF

Sample Size: 50

Sampling Method: Simple random sampling method was used.

3.4Method of Data Collection

For the purpose of the study, the following methods have been applied to collect primary data:

- Questionnaire method to contact with the respondents.
- Face to face conversation with the officers and respondents during internship period at SaFaL-Jagoroni Chakra Foundation.

3.5 Analytical Technique and Tools

All the necessary data are taken and analyzed in a systematic manner. I used mainly Microsoft office, Microsoft excels for data analysis and making all the graphs and charts to the related parameter.

CHAPTER 4

PROFILE OF JAGORONI CHAKRA FOUNDATION

4.1 An Over View of Jagoroni Chakra Foundation

4.1.1 History

At the end of 1975 some jubilant youths of Jessore formed Jagorani Chakra Foundation (JCF) to develop the situation of poor communities. They also identified that the problem is more social and political than economical. JCF started its journey with adult literacy program and developed its own adult literacy curriculum which was a unique example at that time.

In 1976, JCF implemented its first development intervention and started non-formal education centre for the children and in 1977 got the registration from Directorate of Social Welfare. JCF still believes education is the key to all development and it is the first priority in taking any new intervention. In 1981, a new horizon opened before JCF when it started working with the untouchable community, the sweeper community. The success of this intervention gave JCF courage to go with community development approach and later JCF successfully implemented a number of community development projects whose beneficiaries are now running their own people's institution by themselves.

Basic Information

1	No	o. of Districts: 33	
2	No	o. Villages: 15,033	
3	No	o. of Beneficiaries: 1,107,406 (male: 390,325; female: 7,17,081)	
4	No	o. of Employees: 4,293	
5	Number of Offices: 402		
6	Tra	aining Center: 02	
7	To	tal Budget (2016/17):	
	A	BTD TK. 25,807,038,098	
	В	USD \$326,671,368	

4.1.2 Governing Body

JCF has a 7 members' Executive Committee and 22 members' General Committee. The honorable members are mostly social worker, retired govt. officials, businessman, teacher, lawyer, cultural activist and non-political person. Actually, people from different sectors are involved with the organization and they all have the expertise in social work and are representing their own community as a whole. The Executive Director of the organization is appointed by the Executive Committee. He is the Chief Executive Officer of the organization.

4.1.3 Structure & Decision-making Process

The Executive Director is leading the organization with a team of one Deputy Executive Director and five Directors. They are the top most authority in taking policy and strategic decisions for all projects. The Directors as Team Leader of their assigned projects guide the specific project team according to the proposal and requirement by the donor. The project team implements the project in the specific working area(s). This team is lead by the Project Director (PD) who is responsible for day to day implementation of the project activities. He is also responsible to share the progress with the Director of Programs through different means. The Project Directors raise the issues and place it to Director of Programs, then he includes that as agenda in PIC and after discussion the decision is taken by the PIC. This decision is implemented by the PDs accordingly. These are mostly the programmatic issues. In case of policy level issues, Director of Programs places the issue to the highest decision making committee and after discussion this issues goes to the executive body as agenda. Then the executive body give their decision on the certain issue. In some cases executive body refers to the general committee for final decision.

4.1.4 JCF is Registered with-

- Directorate of Social Welfare
- NGO Affairs Bureau
- Joint Stock Company
- Micro Credit Regularly Authority

4.1.5 Sustainability consciousness

Continuous growth
Flexible to accept and employ the Change Management
Development of Knowledge Management System (KMS)
Paperless office
Help to reduce 30% carbon emission by 2015 & 50% by 2020
Corporate Transformation as 'Green Bank' as per commitment to the Green Banking Policy
Employee awareness, engagement, training/advocacy/coaching
motivation by appreciation/recognition
Leadership Development Program/Succession Planning
Performance based career growth

4.1.6 Workplace Ethics

Fortified Service Rule

Fortified Code of Conduct

Fortified Policies

4.1.7 List of Policy

- 1. Service Rule
- 2. Accounts manual
- 3. Savings and credit policy
- 4. Professor Sharif Hossain Education Scholarship Policy
- 5. Gender Policy
- 6. Child Protection Policy
- 7. Health Assistance Fund Policy
- 8. Money Laundering Prevention Policy
- 9. T.A/D.A Policy
- 10. Audit Manual
- 11. Monitoring & Evaluation Guideline

4.2 Vision & Mission

Vision

Jagorani Chakra Foundation has a vision of socially just; economically sustainable and environmentally balanced communities, where poverty has been overcome and people live in dignity and security.

Mission

Jagorani Chakra Foundation will continue to operate local, regional and national programmes based on the demands and potential of ultra-poor, poor and disadvantaged communities to foster their confidence and builds the capacity to share resources and also to develop, control and sustain their endeavours to find greater prosperity and improve the material conditions of their lives.

4.3 Objectives

- HID, capacity building and Sustainability
- Human Rights and Social Justice
- Organization Sustainabilit

4.4Sectoral Focus



4.5 JCFin2015-2016

In the FY 2015-2016 JCF implemented a total of 40 development projects including Microfinance Program and 3 Social Business interventions. The interventions were spread out to 33 districts, 174 upczilos. 1,865 UPs and 15,073 villages. The projects covered 1,133,027 direct beneficiaries (mole: 417,255; female: 71 5,772) through 4,927 stoff and 402 offices. The organization was successful to add 11 new interventions in last year. The Founder and Executive Director of Jagorani Chakra Foundation (JCF) Mr. Md. Azadul Kabir Arzoo have been awarded the 16th Mother Teresa International Award on 30th January, 2016 in a colourful ceremony at Eastern Zonal Cultural Centre Auditorium, Salt Lake, Kolkata, Indio. The Arch Bishop of Kolka ta Mr. Thomas D'Souza as the Chief Guest of this ceremony handed over the crest to him for his contribution in the field of Social Work. Every year this award is presented worldwide to the renowned individuals & institutions who have excelled in the fields of Education, Science, Culture, Songs, Music, Sports, Social Work, Medicine, Industry and Politics. The overall financial health of JCF was satisfactory, where growth rate in net income was 29.84%, growth rate in turnover was 4.68%,

increase in income and surplus was respectively 4.67% & 29.83% and positive change in equity was 26.65%. JCF went through some rearranging process in this year and reviewed its HR Policy, Financial & Accounts Manual, Organogram and almost finish the strategic plan 2016 - 2020. Emphasis is being given on Nutrition and Health, Youth Employment and Capacity Building, Technical Support in Agriculture and Intervention.

CHAPTER 5

SUSTAINABLE AGRICULTURE, FOOD SECURITY AND LINKAGES (SaFaL)

5.1 Basic information



Figure 1: Basic information

JCF-SaFaL program is working for enhancing food and nutrition security of small farmers and landless workers in Southwest Bangladesh with a focus on developing resilient livelihoods through promoting sustainable agricultural production and market

chain development. JCF-SaFaL program is implementing its activities within 24219 vulnerable HH in Jessore and Narail district with the Technical Assistance of Solidaridad Network Asia –SNA. For achieving the project objective, SaFaL working five major areas.

This Annual progress Report is showing the effectiveness and impact of SaFaL Program specially to see where the program is now staying to achieve the objectives. To increase Farm productivity, SaFaL developed 200 Lead Farmers who are now equipped where 150 male and 50 female. They are giving support to 412 Producer Group as a lead farmer. Lead farmers trained 87% of Aquaculture PG Farmers, 86% of Dairy PG Members and 87% of HorticulturePG Members during this reporting period. Women enrollment is now 70% after formation new PG in 2016. 68% have in EC Committee and 25% in Lead Farmer from total. 96% participants attended the Annual General Meeting from producer group. Farmers adapted the new technology to ensure safe food production. Technology adaptation by the sub sector is 92% (4801HH) in Horticulture, 92% (11394 HH) in Dairy, 96 % (6343 HH) in Aquaculture as per 2016 PG List calculation. Golda Production in base line was 0.17 MT per hector where present production is 0.22 MT. Pangasius production in baseline was 1.53 MT per hector and now 2.2 MT per hector, Tilapia 1.38 MT per hector was baseline where present production is 1.68 MT per hector and Fin Fish production was baseline 2.20 MT per hector where now 3.18 MT Per Hector. Tomato production was baseline 12.6 MT per hector where present production is 15.3 MT, Bitter gourd was 20.6 MT per hector where present showing 25.44 MT, Cucumber 31 MT per hector where present production is 37.19 and Brinjal production in baseline was 23.8 MT Per Hector where present production is 29.47 MT Per Hector. Milk 1.9 Liter per day per cow in baseline where present production is 2.60 Liter. Household level milk production per day in Baseline is 2.30 where now production is 3.06. Farmer's income is increasing due to reduce post harvest loss and collectively input purchase.

Strengthening market and market chain, SaFal developed 12 categories 316 Entrepreneurs and 5 categories 231 Sill Labor who are mostly landless and marginalized people. In this reporting period, their profit margin is 1219-13350 taka per person per month. Few entrepreneurs get invitation from Government department as a training facilitator. SaFal developed 6 vegetables, 1 Fish and 3 Milk collection center to operate market supply chain smoothly. Brac dairy, ACI, Bashar Agro and

MU Sea Food linked up with SaFaL as big buyers. SaFaL is trying to make a win win relationship with private sectors and Farmers through linkages. Farmers is getting fair price from company and company is getting safe production as per need. SaFaL has established business linkages with 13 over private companies for strengthening backward and forward market. During this reporting period, 16185over farmers purchased collectively from service providers in three sub sector that means 69% from total. Moreover 319 Producer groups linked with this communication especially backward market. More than 50% (12097 FHHs) farmers linked with forward market. 2943 Farmers that means 12 % from total farmers received service from public service providers. Moreover 18548 FHHs (79%) received service from Public and Private Sectors. Farmers received loan from deferent microfinance institution line JCF, ASA, brac, Department of Social Welfare, ektibariektikhamaretc for farming. Farmers Received loan amount is 73272000 taka within 4230 SaFaL Farmers up to October'16.

Lead farmers, CNV and the farmers are playing their respective role with a view to contribute the excellence of its prospective result. At the same time CNV's are playing a vital role to reduce child mortality rate through interacting nutritional activities in 400 PG in the reporting period. Targeted Farmers HH are receiving awareness on pregnant mother's health, Child Health care, importance of diversified food, hygiene and SRHR. SaFaL's one of the core principle to promote market linkages in order to offer the producer for market opportunities so that the members can easily get fair price of the production and can pay more attention for growing production.

5.2 How SaFaL works



Figure 2:SaFal'sactivity cycle.

5.3 Sectors of working

Sector Name	Total PG	Male	Female	Total
Aquaculture	112	3679	2954	6633
Dairy	210	1370	10982	12352
Horticulture	90	2097	3137	5234
Total = 3	412	7156	17073	24219

Table 1: Sectors of working

5.4 Technology Adaptation status in PG

Horticulture		
Types of Technology	Number of FHHs Adopted	% of FHHs
Proper land preparation with good agricultural practices	4613	88
Appropriate use of fertilizers with recommended doses	3776	72
Use of organic manure	4529	87
Use of quality seeds with recommended seed rate	3956	76
Appropriate irrigation management with LEISA principle	4002	76
Apply IPM method for pest and disease management	3151	60
Proper intercultural operation	3137	60
Appropriate harvesting and post-harvest management to reduce Crop Loss	3798	73
Cultivation of early/off-season crops/ varieties	1257	24
Adoption of mixed cropping, inter cropping and multilayer Cropping Technology	2688	51
Aquaculture		1
Types of Technology	Number of FHHs Adopted	% of FHHs
Pond/gher preparation maintaining GAP	5324	80
Stocking of quality seeds (PL/fry)	4545	69
Recommended stocking density of PL and fry	3987	60
Pre stocking nursing of PL and fry	3843	58
Use of probiotic in nursery and grow out pond	1678	25
Use of quality feed with recommended doses	4215	64
Regular testing of soil and water quality	2740	41
Regular growth monitoring	3235	49

Use of tea seed cake and Molasses instead of cow dung	1550	23
No use of antibiotic in grow out ponds	4309	65
Maintenance of personnel and farm level hygiene	4703	71
Good harvesting and post- harvest management	3967	60
Cultivation of high yielding mono sex tilapia species	2632	40

Dairy

Types of Technology	Number of FHHs Adopted	% of FHHs
HYV Napier Fodder Production	2745	22
HYV green fodder feeding	3988	32
Hygienic cowshed management	7662	62
Regular de-worming	9510	77
Regular vaccination (minimum one time vaccinated)	10192	83
Regular cattle health checkup & management	6425	52
Using Artificial Insemination (AI)	8821	71
Hygienic milking practice	8381	68
UMS, silage & hay using practices (improved feeding)	1673	14
Feeding clean & safe water in appropriate doses	10616	86
Health care & management of new born calf in appropriate way	8228	67

Table 2: Technology Adaptation status in PG

5.5 Market linkages—symbiotic relationships between producers and buyers

SaFaL established formal collaboration with private sector companies to support PG farmers. ACI, Laal Teer, Ispahani, R. Rahman Agro, Pran Dairy, Brac, Bashar Agro, Anik Hatchery, ACI Cropex, Novertise, Advanta, ACI Godrej, Mega Feed, Eon Animal Health, Advance Agro Tech, Uni Bio Care, MU Sea Food, NafcoAgrovet,

Lily feed. In these linkages, SaFaL is able to link with MU Sea food, ACI, Bashar agro and brac for forward linkage and others are established as backward linkage. MU Sea Food Ltd. Buy our farmers Golda Fish through fair price and give support on transportation from farmers area. Moreover 319 Producer groups linked with this communication especially backward market. More than 50% (12097 FHHs) farmers linked with forward market. 2943 Farmers that means 12 % from total farmers received service from public service providers. Moreover 18548 FHHs (77%) received service from Public and Private Sectors where the project life time target was 80%.

5.6 Collection Centres - Byers at door step

SaFaL supported collection centres are making positive impacts on the livelihoods of the smallholder farmers. SaFaL supported producers including other farmers and local entrepreneurs are now linked to local, regional, national and niche market actors. Collection centres are playing a key role for purchasing bulk volume from a single spot. Farmers are now familiar with grading, sorting and packaging the produces. Altogether, 17 collection centres are established and so far 5,751 members (Male-3,479 and Female-2,272) have been linked.

Table 3: total earning from collection centre

Types of collection Centre	No. of Collection Centre established	No.of PG involved	No. of Farmers involved	Volume Sold (MTs/ MLs)	Total Taka
	6	33	988	564.11	8237993
Vegetables Collection Centre	0	33	900	304.11	6231993
Aquaculture	1	24	584	16.64	10285172
Collection Centre					
Dairy	3	27	327	209.55	8382000
Collection					
Centre					
Total	10	84 (20%)	1899 (8%)	790.30	26905165

During the reporting period, trade volume was 1,988.97 MT and total turnover is BDT48,775,212 (Euro 58,0657). The farmers are getting market competitive price, accurate weight of produces and cash payment. The buyers including Bashar Agro Ltd, Agora, Rahim Afrooz, CIC Agro, BRAC Dairy, MU Sea Foods Ltd, and National Sea Foods Ltd. Purchased SaFaL commodities. Through establishment of collection centres, both the sellers (producers) and buyers are benefited.

Decrease in Post Harvest Loss

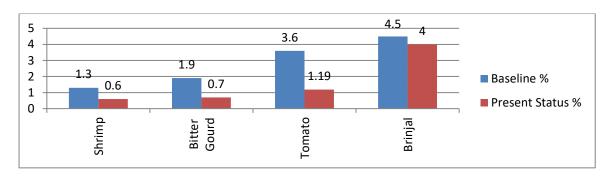


Figure 3: Decrease in Post Harvest Loss

5.7 Business linkages-Technical and Financial Support

SL	Name of MFI	Loan Amount(BDT)	No.of farmers getting loan	No. of PG linked
1	JCF customized agri loan with grace period	6615000	195	16
	JCF general & agri loan	25730000	1651	91
2	JuboUnnayan	380000	20	4
3	BRDB	455000	44	5
4	Ekti Bari EktiKhamar	7170000	423	21
5	Social welfare	995000	78	7
6	Bank (BKB, Sonali)	5327000	61	3
7	Others MFI (Asa, Grameen Bank, BRAC)	26600000	1758	115
	Total:	73272000	4230	262

Table 4:Business linkages-Technical and Financial Support

5.8 Challenges:

- -Water logging
- BRAC impose discrimination during fat content measurement
- Corporate business thinking not favorable of producers
- Micro finance staff has mild interest to provide grace period loan

5.9 Learning

- -Sustainable business model can change the livelihood
- -Proven or result oriented technology spread out rapidly among the farmers
- -Visibility always inspire to farmers and donor also

CHAPTER 6

RESULT & DISCUSSION

6.1Increased Productivity

The target was average 20% increase in commodity harvest.SaFaL achieved satisfactory level. An analysis of 400 FHHs (Aquaculture-112, Dairy- 202 and Horticulture- 86) shows that average production for all selected commodities has increased over baseline. The below graph chart shows the base line production and the present production level of some products of three sectors:

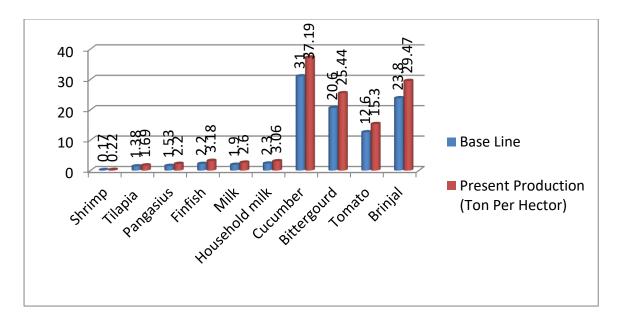


Fig 4: Increased production over baseline

6.2 Increased income from improved farm management

By applying improved farm management practices, targeted households have increased farm production. Average fish production increased 40%, Milk production increased 35% and vegetable production increased 25% where the target was 20%. The farmers also took various actions to minimize post-harvest losses of Aquaculture and Horticulture production and marketing. As a result, post-harvest losses have been reduced significantly. The aquaculture farmers were trained on harvest and post-harvest management, transportation, marketing and fish disease and health management through effective technical sessions and they applied the gained

knowledge for farming practices to increase income. The dairy farmers are aware of high yield fodder cultivation and feeding the cow to enhance milk production through technical sessions. The farmers practiced the feeding of cows with green grass, resulting in the reduction of feeding cost and increased of milk production. The horticulture farmers gathered technical knowledge on adaptation of new technologies and improved farm management through different technical sessions. They applied their gained knowledge for modern farm management and adaptation of improved technologies towards increasing income by reducing production cost and increasing farm production. Some farmers have created opportunities to sell the produces at farm gate level to the collectors and sellers while some others sold their produces through the nearest collection centers. Collectively input purchase decreases their cost for production and ultimately improving net profit.

6.3Women's involvement

SaFaL is able to include a vast amount of women ,70% in PG. Encouragement of the project staffs and lead farmers also rules of involvement in PG group and EC Committee as priority basis. Women get first priority when any replacement occurs in Producer group. Women can quick spread information with others women in their local community. Women participate in Producer group actively and have enough time to take new learning from project. In producer group, Women enrollment is now 70% after new PG formation 2016. 68% have in EC Committee and 25% in Lead Farmer from total. The present situation has been shown in the below figure.

Particulars	Total Population	Female Participation	Female Participation %
Producer Group	24219	17073	70 %
EC Committee	2800	1904	68 %
Lead Farmer	200	50	25 %

Table 5:Female Positioning in Producer Group, EC Committee and Lead Farmer

From the table we can see that,in all posts either it is vice president or general member women are ahead from men. But in top most segment it is a little lower.

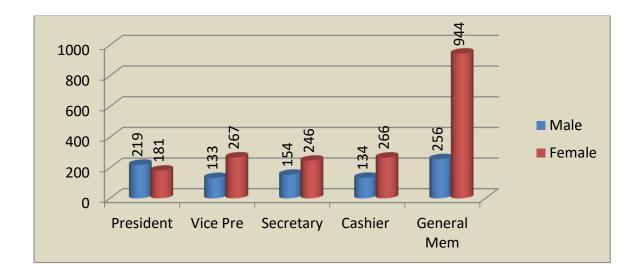


Figure 5: Women participation in EC Committee

6.4 Sustainable farming technologies-key to increased farm production

Technology adaptation is gaining day by day to develop sustainable farm production, sustainable farming technologies adopted among the SaFaL farmers. 93% out of 24219 farmers adopted technology in Jessore and Narail Region in three sub-sectors. Technology adaptation by the sub sector is 92% (4801HH) in Horticulture, 92% (11394 HH) in Dairy, 96 % (6343 HH) in Aquaculture as per 2017 new PG List calculation. In horticulture, IPM and bio-fertilizer use, high value crop cultivation, in Dairy, de-worming and vaccination and in Aquaculture, proboitics is most effective in community level during the reporting period. The below chart shows the overall percentage of technology adaptation.

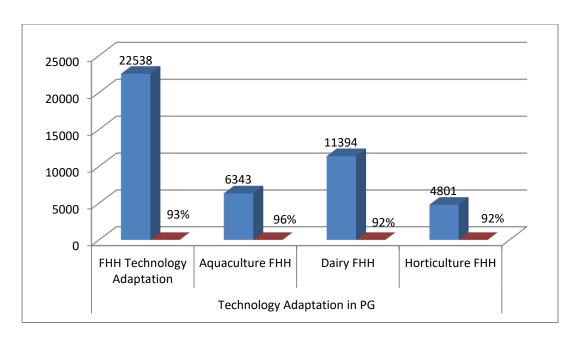


Figure 6: technology adaptation in Producer Group

6.5 Pilots of Technologies

A total 61 pilots were made in the aqua, dairy and horticulture sub-sectors of which, 10 were under Aqua,45 were under dairy and six were under horticulture. 57% pilots were conducted by the women members. The below table shows the piloting status with the percentage of participation of both male and female.

Table 6: Technology piloting status

Sub-sector wise types of technologies		Female	Total	Female %
Aquaculture Total Piloting	8	2	10	25%
FaST Strain Tilapia by using Green Water Technology	7	2	9	29%
Fisibility on premium pangasius (Pangasiuspangasius) production by removing off flavor and introducing white muscle pangasius fry.	1	0	1	0%
Dairy Piloting	24	21	45	47%
Hydroponic cultivation	16	12	28	75%
Alfa alfa production	3	4	7	57%
Improving conception rate		5	10	50%
Horticulture Piloting	6	0	6	0%
Performance of Bio-demo in Brinjal (Chaina-3) Cultivation.	6	0	6	0%

6.6 Questionniare for Measuring the success level of SaFaL

Q1. How old are you?

- 30-40
- 40-50
- 50-60

Most of the respondents are 30-40 years old energetic people(54%).24% people are of 40-50 years and rest are of 50-60 year old. The below table shows the age percentage of respondents.

Table 7: Age of respondents

30-40	40-50	50-60
27	12	11
54%	24%	22%

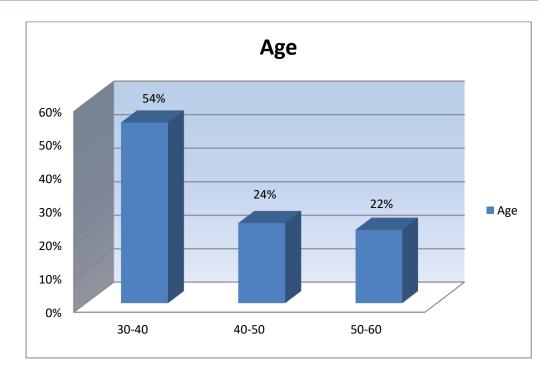


Fig 7: Age of respondents

Q2. Gender

- Male
- Female

Most of the respondents are female as SaFaL works hard for women enrollment. The below table shows that 60% of the respondents are female and 40% are male.

Table 8: Gender of the respondents

Male	Female
20	30
40%	60%

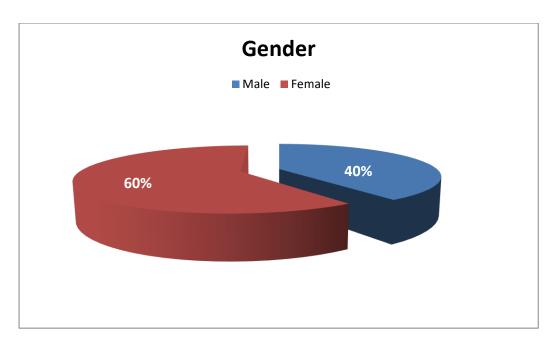


Fig 8: Gender of the respondents

Q3. At what sector you work under SaFaL?

- Horticulture
- Aquaculture
- Dairy
- Mix

The below table shows the percentage of respondents producing under three different sector of SaFaL-horticulture, aquaculture, dairy or mix of any two or three. It shows the mix culture at high rate than others.

Table 9: Farmer's working sector

Horticulture	Aquaculture	Dairy	Mix
9	6	7	28
18%	12%	14%	56%

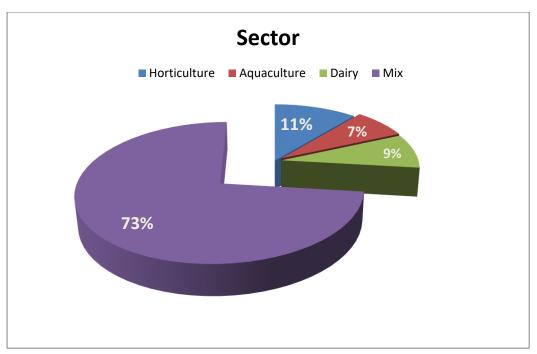


Fig 9: Farmer's working sector

Q4. Do you think SaFaL is helpful to you?

- Of course
- Yes
- Not interested
- No
- absolutely Not

SaFaL has been able to create a helpful image to its respondents.64% of therespondents think it as very much hepful.36% are somehow satisfied with it.

Table 10: Image of SaFal to respondents

Of course	Yes	Not interested	No	Absolutely not
32	18	0	0	0
64%	36%	0%	0%	0%

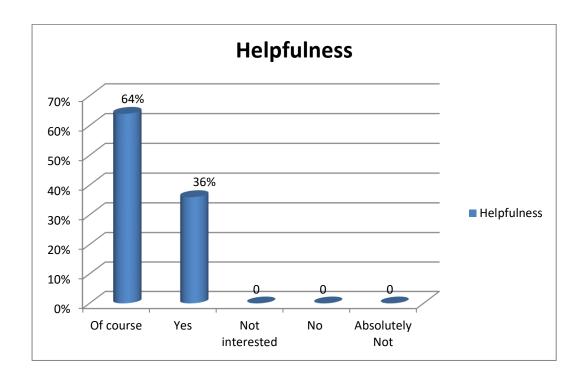


Fig 10: Image of SaFal to respondents

Q5. Do you think technologies suggested by SaFaL is profitable to you?

- It's profitable
- Not profitable
- It difficult to manage
- It's costly
- It's risky

Technologies adapted by the respondents are resulting in great profitability. The below table shows that around 92% respondents are being very much profitable from the suggested technologies and only 8% found it difficult to manage.

Table 11: Profitability of technologies provided by SaFaL

It's profitable	Not profitable	It difficult to manage	It's costly	It's risky
46	0	4	0	0
92%	0%	8%	0%	0%

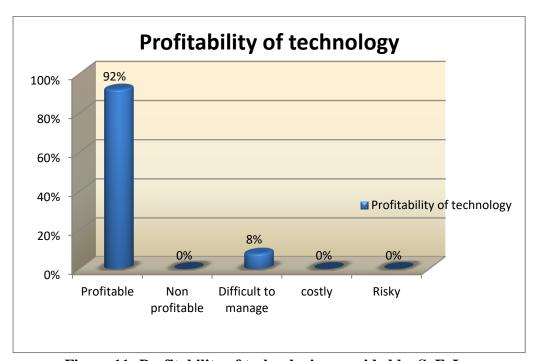


Figure 11: Profitability of technologies provided by SaFaL

Q6. As a producer/farmer how much you are being benefited from the collection center of SaFaL?

- Highly benefited
- Benefited
- Moderate benefited
- Not so benefited
- Looser

The collection centre of SafaL develops a symbiotic relationship between buyers and producers. 26% of the respondents think themselves as highly benefited,38% are benefited, 22% are moderately benefited and 14% are not so benefited from the collection centre. But no one is looser here.

Table 12: Aspects of collection centre

Highly benefited	Benefited	Moderate benefited	Not so benefited	Looser
13	19	11	7	0
26%	38%	22%	14%	0%

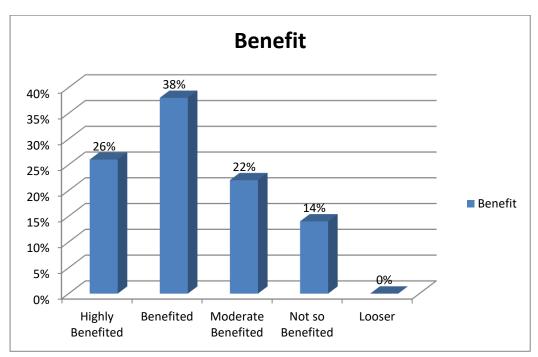


Figure 12:Aspects of collection centre

Q7. Training provided by SaFaL on food nutrition issue is easily understandable. Do you agree with it?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

The table shows that 44% respondents can easily understand the training session provided by SaFaL,52% understand it at moderate level and only 4% are unable to understand it.

Table 13: Trainning understandability easy

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
22	26	0	2	0
44%	52%	0%	4%	0%

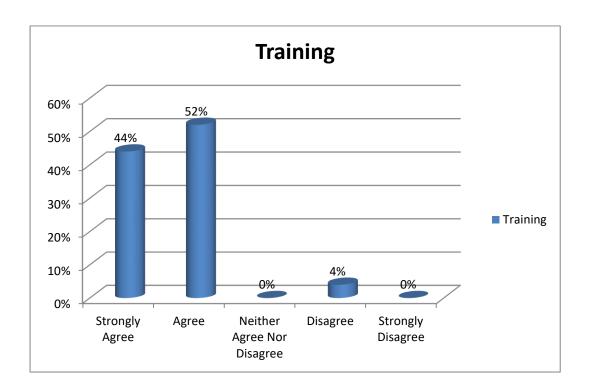


Figure 13: Trainning understandability easy

Q8. Primary health care services provided by CNV of SafaL is very much helpful to you. Do you agree with it?

- Highly helpful
- Helpful
- Neither Helpful nor harmful
- Not so helpful
- Harmful

90% respondents are getting the benefit of community nutrition volunteer (CNV), only 10% are being deprived of it for various reasons.

Table 14: CNVs health service

Highly helpful	Helpful	Neither Helpful nor harmful	Not so helpful	Harmful
45	5	0	0	0
90%	10%	0%	0%	0%

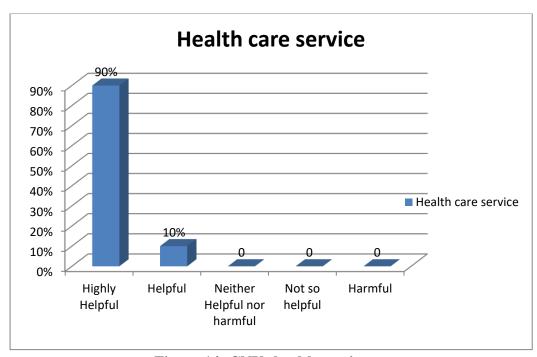


Figure 14: CNVs health service

Q9. Micro finance staff has high interest to provide grace period loan to farmers. Do you agree with it?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

SaFaL has a negative mark on providing grace period loan to farmers by the microfinance department. Only 10% farmer can enjoy the grace period loan but90% farmer are fully deprived of it.

Table 15: Providing grace period loan

Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
0	5	0	10	35
0%	10%	0%	20%	70%

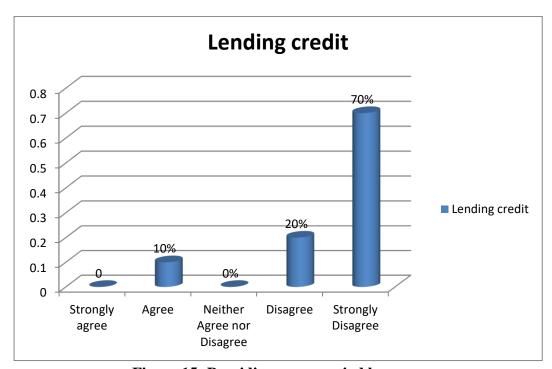


Figure 15: Providing grace period loan

Q10. What do you think about the benefits of SaFaL?

- Increase profit from production
- Increasing the sustainable livelihoods
- Proper use of land
- Improved household nutrition status
- Reduced child malnutrition

The below table shows the various benefit's percentages gained from SaFaL. A large percent of farmer gets increased production and profit.

Table 16: Farmer's perception of SaFaL benefit

Increase profit from production	Increasing the sustainable livelihoods	Proper use of land	Improved household nutrition status	Reduced child malnutrition
18	13	5	8	6
36%	26%	10%	16%	12%

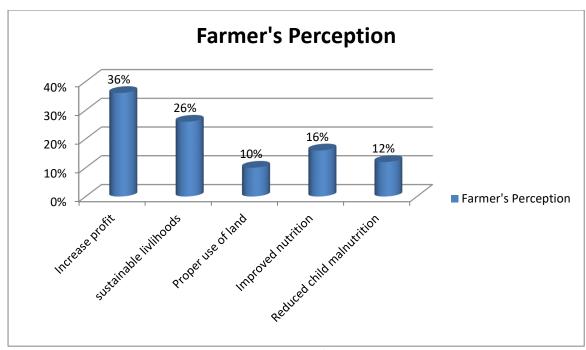


Figure 16: Farmer's perception of SaFaL benefit

CHAPTER 7

FINDINGS, RECOMMENDATION AND CONCLUSION

7.1 Findings of the Study

The finding of the overall study is given below as per objectives.

- ♣ The target rate of increase in all the three sectors was set at 20% by SaFaL. It has crossed the target rate in all sectors. Average aqua production increased by 40%, dairy production increased by 35% and horticultural production increased by 25%.
- ♣ In producer group, Women enrollment is now 70% after new PG formation 2017. 68% have in EC Committee and 25% in Lead Farmer.so,in every sphere,women are participating at high rate. 57% pilots were conducted by the women members.
- ♣ Technologies are being adapted by around 100% of the farmers under SaFaL.
 Women are doing very well here also. Some technologies are much more proven to be profitable.
- ♣ SaFaL is successful at a large rate as it has increased women participation, increased productivity, successful training and health care services. Respondents also found the programme very much beneficial to them. Total sustainability level is increasing in Jessore and Narail district through SaFaL.

7.2 Recommendations

- The time period of the project should be lesser to draw the accurate result and much more beneficial. Pilot grouping will shorten the work time thus will make the programme more effective.
- ♣ The officials should focus on monitoring and supervision rather than paper work.
- ♣ The officials should try harder to make the technology adaption rate 100% by growing confidence within the farmers.
- ♣ Grace period loan helps the farmers to overcome the cost of production.It should be made available.

- ♣ For speeding up their service they should go for automation where they need to improve.
- **4** They should increase the number of computer equipments.
- ♣ The structure of employee set up should be more organized.
- **♣** Online activities should be increased
- ♣ The recruitment system should be re organized and they should recruit specific people whom they need. They should emphasize on specialized people.

7.3 Conclusions

In the FY 2015-2016 JCF implemented a total of 40 development projects including Microfinance Program and 3 Social Business interventions. Among them, SaFaL is running very smoothly achieving more than their target rate. They have been able to fulfill their objective enhancing food and nutrition security of small farmers and landless workers in Southwest Bangladesh with a focus on developing resilient livelihoods through promoting sustainable agricultural production and market chain development. SaFaL mandate is to be increased productivity and build vibrant market system which has been obtained already.

REFERENCES

- Doss, C. (2011). The Role of Women in Agriculture. Pp 2-12.
- Islam, M.N. (2012). Impact of Modern Technology on Food Grain Production in Bangladesh.
- Jaim, W.M.H. and Hossain, M. (2011). Women's Participation in Agriculture in Bangladesh 1988-2008: Changes and Determinants, 12, October.
- Victoria, M.V. (2007). Agricultural Technology in Bangladesh: a Study on Non-Farm Labor and Adoption by Gender, 16, July.
- Zaman, S. (2002). Women's role and status in Bangladesh agriculture, 14, March. pp. 7-12.

www.jcf.org.com

www.bbs.bd.com

WWW.SAFAL.COM

APPENDICES **Questionnaire for farmer**

JAGORONI CHAKRA FOUNDATION, JESSORE

Questionnaire No.: _____

Name of the respondent:

• Not profitable

It's costlyIt's risky

• It difficult to manage

Q1. How old are you?

Date of Interview: ___/__/___

• 30-40
• 40-50
• 50-60
Q2. Gender
Male
Female
Q3. At what sector you work under SaFaL?
Horticulture
Aquaculture
• Dairy
• Mix
Q4. Do you think SaFaL is helpful to you?
Of course
• Yes
Not interested
• No
absolutely Not
Q5. Do you think technologies suggested by SaFaL is profitable to you?
It's profitable

Q6. As a producer/farmer how much you are being benefited from the collection center of SaFaL?

- Highly benefited
- Benefited
- Moderate benefited
- Not so benefited
- Looser

Q7. Training provided by SaFaL on food nutrition issue is easily understandable. Do you agree with it?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

Q8. Primary health care services provided by CNV of safaL is very much helpful to you. Do you agree with it?

- Highly helpful
- Helpful
- Neither Helpful nor harmful
- Not so helpful
- Harmful

Q9. Micro finance staff has high interest to provide grace period loan to farmers.Do you agree with it?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly Disagree

Q10. What do you think about the benefits of SaFaL?

- Increase profit from production
- Increasing the sustainable livelihoods
- Proper use of land
- Improved household nutrition status
- Reduced child malnutrition