

Promoting Risk Mitigation Measures for Climate Change Adaptation (Surokkha)



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Abbreviations and acronyms

AWS	Automatic Weather Station
BMD	Bangladesh Meteorological Department
DAE	Department of Agricultural Extension
ED	Executive Director
ESDO	Eco-social Development Organization
GDIC	Green Delta Insurance Company
GUK	Gram Unnayan Karma
IDRA	Insurance Development and Regulatory Authority
IMC	International Micro-insurance Conference
IRI	International Research Institute
MA	Managing Agent
MIS	Management Information System
PIL	Pragati Insurance Limited
SDC	Swiss Agency for Development and Cooperation
SFSA	Syngenta Foundation for Sustainable Agriculture
UAO	Upazila Agriculture Officer

Executive Summary

During 14th months project periods from 15 September 2018 to 15 November 2019, a total of 3 agreements have been signed with the aggregators and insurers. Five weather index insurance products were designed & modified and piloted e.g. late blight for potato, excess rainfall for boro rice and deficit rainfall for aman rice. A total of 5,936 farmers were insured in five seasons and 10,046 with overlap farmers were reached through the meetings, group discussions and other events. 150 boro farmers who purchased excess rainfall product received the payout at Birganj upazila, Dinajpur and 675 aman farmers who purchased deficit rainfall product received the payout at Sherpur upazila, Bogura. There were seven capacity building trainings for the aggregators and one basic training on agri-insurance for the insurers and aggregators arranged and conducted. The insurers, aggregators, stakeholders (BMD, DAE etc) visited India, Mumbai for an exposure visit. An agronomy study was conducted to provide the agronomic support to the farmers. Moreover, two end season analyses were conducted on potato and boro rice season to collect feedback from different stakeholders on the developed products and project activities. Two automatic weather stations from RainWise have been installed to measure and record daily weather data. Resilience engine, the IT platform which will be serving as the MIS for insurance business has been developed to a beta version and it was tested during the aman rice season in Sherpur district.

Being as a new concept, weather index based insurance faced challenges in marketing the concept. The distribution channel yet to leverage the pertaining market opportunities. Besides, the lack of trust undermined the client-insurer relationship. More value chain actors need to be on boarded to achieve the scale, more business models need to be tested and piloted to maximize incentive of the supply chain actors.

Introduction:

Agriculture has been playing a major role in ensuring inclusive growth in Bangladesh. 48% of the workforce is dependent on the sector as main income source. Small farms account for 96% of the operational holdings, with a share of 69% of the total cultivated land.¹ The geography of Bangladesh makes the country extremely vulnerable to floods and cyclones, and weather risks are exacerbated by climate change. Smallholder farmers in Bangladesh face considerable risks. Droughts, floods, winds, temperature shocks, pests and diseases can destroy their livelihoods and leave them indebted for years. Due to their limited savings and limited access to social protection, smallholder farmers are disproportionately affected by weather-related damage to crops. To cope with such catastrophic losses, smallholder farmers often have no other choice than to resort to negative coping strategies which affect their health and compromise their future. Such strategies include reducing expenditure on food and education, distress borrowing at high interest to cover consumption needs or selling off productive assets. This will cause the non-poor to fall back into poverty, and for those already poor it can destroy any hope of ever escaping poverty.

Project Background:

‘Promoting Risk Mitigation Measures for Climate Change Adaptation’ (Surokkha) project funded by the Swiss Agency for Development and Cooperation (SDC) started since 16 September 2018. This annual report (16 September 2018 – 15 November 2019) highlights the project’s accomplishment, its learning and challenges, and strategies to move forward. Surokkha aims to provide 233,000 farmers with adequate risk mitigation measures, farmers’ literacy trainings and agricultural extension services. The phase 1 of Surokkha focuses on piloting and testing different products and distribution channels to identify and develop appropriate index-based insurance products and risk mitigation methods for the agriculture sector in Bangladesh. Surokkha also aims to disseminate the knowledge and experience of these pilots. The project envisions that these actions will help to develop farmer’s resilience against weather and disease shocks for crop and therefore they will be able to pursue higher returns on riskier investments.

Working Areas:

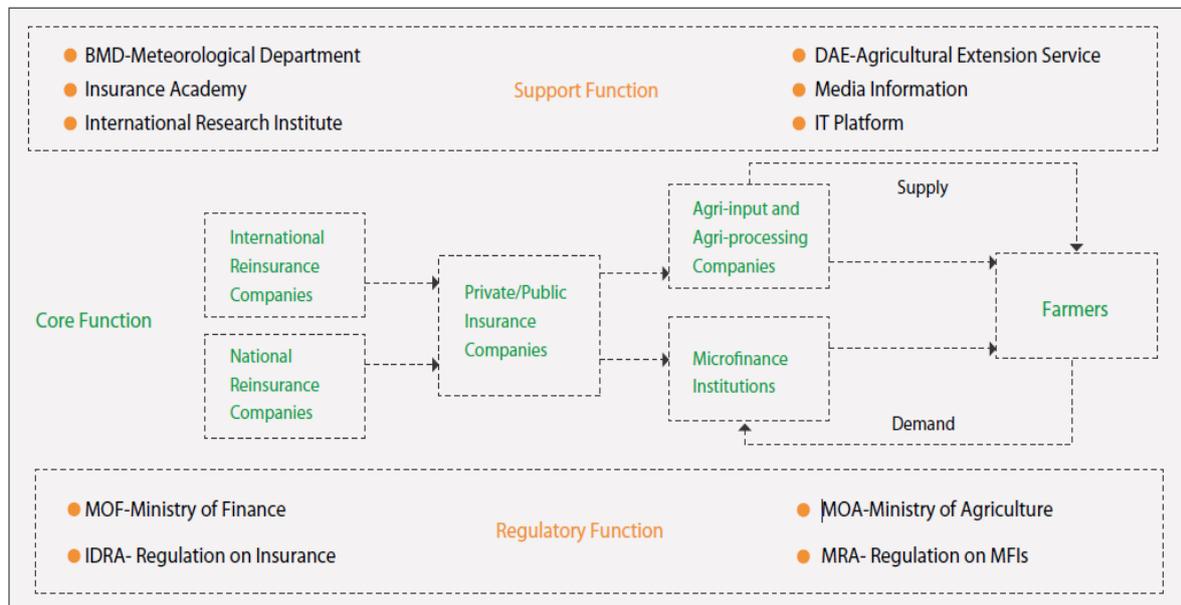
10 sub districts under five districts were covered in 14th months.

District	Sub District
Dinajpur	Birganj, Parbatipur
Nilphamari	Jaldhaka
Bogura	Sherpur, Shibganj, Dhupchanchia
Thakurgaon	Pirganj, Thakurgaon Sadar
Joypurhat	Kalai, Akkelpur

¹ Project Document: Bangladesh Agriculture and Disaster Insurance Programme

Business Model:

During the periods, the project followed aggregator model utilize MFI as insurance distributor considering market system change as below:



Target

Surokkha aimed to pilot and test different products and distribution channels appropriate indexed crop insurance products and risk mitigation methods for farmers growing Boro Rice and Potato.

Summary of Achievement:

Particular	Target	Achievement	Outreach	Remarks
District Coverage	5	5	-	-
Crop Insured	4	5	-	Potato (2), Aman (1) and Boro Rice (2)
Insurer step in	1	2	-	One has not been functioning
Aggregator step in	2	9	-	-
Re Insurer Step in	1	2	-	-
Insurance Product Development and modification	4	5	-	Potato, Aman and Boro Rice
Farmer Insured	1,000 (Up to 15 September)	5,936 (up to 15 November)	5,936	Potato (171), Boro rice (303), Aman rice (1052), Potato (3704), and Boro Rice (706)
Access Outreach	-	-	10,046	With Overlap
Total Land under insurances (Acre)	-	202.4	-	up to 15 November
Total Premium Collected (BDT)	-	199,957	-	up to 15 November

Partner/ Service Provider Involvement

Broad Area	Market Players/ Stakeholders/ service provider name
Aggregator	Eco-social development, Organization Gram Unnayan Karma (GUK), Farmers' Hub
Insurer	Greed Delta Insurance Company Limited (Working), Pragati Insurance Limited (not yet started implementation)
Re Insurer	Swiss Re, CICRA RE
Product Index Provider	International Research Institute (IRI)
Data Provider	Bangladesh Meteorological Department, Santa Barbaba for satellite data, Automated Weather Station
Digital Support/ IT platform developer	EnVeve

Project Implementation:

The project follows 11 milestones which results are given below:

Milestone 1: Contract signing

Surokha has signed off contracts with different organizations like Green Delta Insurance Company Limited (GDIC), Pragati Insurance Limited (PIL), Eco-Social Development Organization (ESDO), Gram Unnayan Karma (GUK) in May 2018 and on boarded Mirganj Farmers' Hub, Berubond Farmers' Hub, and Chowronagi Farmers' Hub in first year. Till November 2019, Surokha continued partnership with the existing aggregators and on-boarded three more Farmers Hubs (Kandurar Moar Farmers' Hub, Dighir Par Farmers' Hub, Gabrul Kasari Farmers' Hub) and Ejab Group.

Partnership meeting on crop insurance held with Syngenta Limited, East West Seed and Sadharan Bima Corporation. A concept note aimed to act as underwriter has been developed and shared with Sadharan Bima Corporation.

Milestone 2: Product Design

Five products were developed and modified on potato (index based on late blight-2), Boro rice (index based on excess rainfall-2) and Aman rice (deficit rainfall-1) with support from International Research, Institute (IRI) and with involvement of Swiss Re, CICRA RE and GDIC. Flyers for potato and Boro rice crop insurance had been shared to the farmer for raising awareness on insurance. Besides, X Banner (for insurance education) had also been developed and distributed to the stakeholders e.g. ESDO, GDIC, and Farmers' Hubs.



Figure1: Flyer for boro rice

Milestone 3: Distribution Bipartite Agreement

Linkage had been established between GDIC and the aggregators (GUK, ESDO and Farmers' Hubs). GDIC shared policy paper for potato, boro rice and aman rice with all the aggregators.

Milestone 4: Product notification to Insurance Development and Regulatory Authority (IDRA)

GDIC notified IDRA regarding the potato, boro rice and aman rice Weather Index Insurance (WII) products and got approval on Policy Wording.

Milestone 5: Capacity Building

To build capacity of insurer and aggregators on WII, a basic training on agri-insurance was arranged at the Professional Advancement Bangladesh Limited on 5 August 2019. A total of 17 participants from SBC, GDIC, ESDO, GUK and SFSA Bangladesh participated in the training. There, basics of weather index insurance, basic concept of Index design (Index, trigger and exits), data module, basic concept of premium/payout calculation, were discussed. Mr Wycliffe Kiplagat, Actuarial Analyst, SFSA Kenya, facilitated the sessions. Participants shared that the training was so helpful to understand the WII product development.



Figure 2: Participants of the basic training on agri-insurance



Figure 3: ESDO's staff training

To capacitate aggregator staff on potato crop insurance product, one aggregator's staff training was conducted for ESDO. PIL and Upazila Agricultural Officer (UAO) under the Department of Agricultural Extension facilitated the training. PIL mainly trained them up on the crop insurance and basic structure of a potato product. UAO mainly discussed about the potato production technique and climate change adaptation issues.

To inaugurate the boro rice product, two aggregators' staff trainings have also been arranged for ESDO and GUK. Management team and field staffs of both aggregators were there. Insurer (GDIC) and Upazila Agricultural Officer (UAO) were the trainers. GDIC facilitated the session on the insurance and weather index insurance product. UAO ran the session on boro rice production technique and climate change adaptation issues.

Additionally, an aggregator’s staff training has been conducted for GUK on aman rice product (deficit rainfall) and Resilience Engine from 2-3 July 2019 at Sherpur, Bogura. A total of 27 participants of GUK, BRAC and SFSA Bangladesh participated in the training.

Moreover, another aggregators’ staff training has also been arranged to introduce the aman rice crop

insurance product with the ESDO staff in July 2019 at Birganj, Dinajpur. A total of 16 participants joined the training.



Figure 4: Training on Resilience Engine



Figure 5: Exposure visit participants in the field, Mumbai, India

An exposure visit was arranged for insurers, aggregators, stakeholders relevant to WII (BMD, BRAC BANK, BRAC MFI, SBC) to learn the insurance market and its practice in India from 22-25 July 2019 in Mumbai, India. A total of 12 participants from Sadharon Bima Corporation, GDIC, ESDO, GUK, BRAC, Bangladesh Meteorological Department,

BRAC Bank Ltd. and SFSA Bangladesh joined the visit. In this visit, participants had a meeting with Swiss Re on the business plan

for agri-insurance in Bangladesh. They participated in the sessions on Weather Index Insurance facilitated by Mr Alok Shukla, Head of Agri Insurance, Bharati AXA; Mr P. Nagarjun, Crop Insurance Advisor, Govt. Agricultural Project and Ex General Manager, Agriculture Insurance Company of India; Mr Suresh Kumar, Head of Agriculture and Rural Insurance Portfolio, State Bank of India; and Mr Vikram Sarbajna, CEO, Credible (www.credible-india.com). Participants also visited fields to gain experiences on agri-insurance activity at Mumbai.

Four Surokkha staff participated in the training on ‘Introduction to Climate Service’ from 21-25 October, arranged by the Bangladesh Academy for Climate Services (BACS) at the Bangladesh Meteorological Department (BMD), Dhaka. BACS is a joint initiative of International Centre for Climate Change & Development (ICCCAD) at Independent University, Bangladesh (IUB); International Research Institute for Climate and Society (IRI) at Columbia University; the International Maize and Wheat Improvement Center (CIMMYT); and the Bangladesh Meteorological Department (BMD).

Actuarial Associate participated in a two days long international event titled “Transmitting Global Knowledge for Promoting Crop Insurance in Bangladesh” organized by Professional Advancement Bangladesh Ltd. (PABL) and Insurance Foundation of India (IFI) at PABL on 26-27 February 2019 in Dhaka.

A staff training had been conducted on Monitoring and Results Measurement, market system, weather based crop insurance and Surokkha project's orientation. The training held at SFSA Bangladesh Head Office, Dhaka, from 12-13 May 2019 where nine Surokkha staff



Figure 6: Participants of staff training

participated. The training was facilitated by Mr Aminul Moven, Project Manager, Surokkha, SFSA Bangladesh; Abdur Rouf, MRM Manager, SFSA Bangladesh; and Krishno Gopal Sen, Finance and Admin Manager, SFSA Bangladesh.



Figure 7: Actuarial Associate with the trainer

product creation.

An Actuarial Training was arranged for Actuarial Associate which was conducted by Mr Wycliffe Kiplagat, Actuarial Analyst, SFSA Kenya in August 2019.

Moreover, Actuarial Associate participated in the Resilience Engine workshop held in Kenya from 25 October – 2 November 2019. The training was facilitated by EnvEve and SFSA, and the contents covered the insurance basic theories, weather

insurance key concepts and types of insurance products, using Resilience Engine platform for

Two batches of aggregator staff training was conducted on 25 and 26 October 2019 at the ESDO training center, Thakurgaon. The training objectives were to introduce year-2 potato and boro rice products among the aggregator's field staff, and to make them understand about Weather Index Insurance (WII), insurance product and insurance distribution channel. Green Delta Insurance Company Ltd. (GDIC) and SFSA Bangladesh jointly facilitated the sessions. A total of 93 participants actively participated in the trainings.



Figure 8. Aggregator's staff training for ESDO

Another two batches of aggregator's staff training was conducted on 22 November 2019 at the GUK Tower, Banani, Bogura. The training objectives were to introduce year-2 potato and boro rice products among the aggregator's field staff, and to make them understand about Weather Index Insurance (WII), insurance products and insurance distribution channel. SFSA Bangladesh facilitated the sessions. A total of 148 participants actively participated in those two batch trainings.

Four staffs from Surokkha (Project Manager, Insurance Technical Coordinator, MRM Specialist and Field Coordinator), three from SFSA global (Head of Global Insurance Solutions, Asia Insurance Coordinator, Actuarial Officer) and two from partners (ED of ESDO and Director of GUK) participated for learning and networking in the 15th IMC held at the Pan Pacific Sonargaon Hotel from 5-7 November 2019.



Figure 9. 15th Int. Micro-insurance Conference

Actuarial Associate participated in the 'Data for Climate Risk Insurance Workshop' facilitated by the International Research Institute (IRI) on 3 November 2019 in Dhaka. Data challenges faced by the insurance community, and identify the opportunities and pathways to jointly address the challenges - were the key contents of the workshop.

Milestone 6: Selection of Target Group

Target group i.e. farmers were selected to reach considering the intervention area. For potato, Aggregators played the lead role in the selection process. A total of 752 farmers were selected through three Farmers' Hubs and ESDO's farmers' network in the Jaldhaka and Birganj Upazila. For boro rice season, 2041 farmers were selected through GUK and ESDO in the Sherpur and Birganj Upazila. For aman rice season, 4619 farmers were selected through GUK and ESDO in the Sherpur and Birganj Upazila.

Milestone 7: Awareness & Farmer Literacy training

To educate farmers about the crop insurance, SFSA Bangladesh arranged farmers' literacy meeting with the support from aggregators. There are two parts in the training, one part was for improved cultivation technique & climate change adaptation which was conducted by Sub Assistant Agricultural Officer of Department of Agriculture and the insurance part was conducted by ESDO/GUK field staff with support from SFSA Bangladesh staff.

Table 2: Farmers’ meetings and group leaders’ meetings for potato, boro rice and aman rice

Crop insurance	No. of farmers’ meeting	No. of farmers accessed (with overlap)	No. of group leaders’ meeting	No. of group leaders accessed (with overlap)
Potato	29	752	-	
Boro rice	88	2,041	-	
Aman rice	3	79	6	158
Potato	55	1,333	23	568
Boro rice	8	164	23	569

To raise awareness among mass rural people on weather index insurance and its benefits, mechanism, distribution, etc., the project team planned to develop a communication strategy first for effective awareness campaign, and later the campaign will be implemented. Hence, to hire firm meetings held with three organizations. Based on the discussions on ToR in the meeting, they have been asked to send proposal with revised budget.

Milestone 8: Piloting and Monitoring

SFSA Bangladesh developed an output monitoring tool for Monitoring and Results Measurement (MRM). To develop the MRM plan, Managing Agent (MA) hired a Consultant, Mr Mohammad Muaz Jalil. There was a meeting with the Consultant for initial discussion and understanding the project. Followed by the meeting, MRM Specialist attended a day long workshop with the Consultant and MA to develop the MRM plan. Later, a discussion meeting held among Surokha, MRM Consultant and MA based on the draft MRM plan.

During the 14th month’s duration, weather index crop insurance was implemented for potato, boro rice and aman rice season, and the insurance coverage details are given in below table.

Table 3: Insurance coverage during project year 1 and two months

Crop insurance	No. of farmers insured	Gender of insured farmer	Aggregator wise insured farmers	Total premium (BDT)	Sum insured amount (BDT)	Total land insured (Acre)	No. of farmers received claim	Total claim paid (BDT)
Potato (late blight)	171	Woman: 45 Man: 126	ESDO: 105, Famers' Hubs:66	80,947	2,946,364	48.62	0	0
Boro rice (excess)	303	Woman: 183	ESDO: 150 GUK: 153	21,810	391,056	12.91	150	16,818

rainfall)		Man: 120						
Aman rice (deficit rainfall)	1052	Woman: 746 Man: 306	ESDO: 377 GUK: 675	97,200	2,113,050	140.87	675	164,343
Potato (late blight)	3704	-	ESDO: 2710 GUK: 915 Farmers' Hubs: 79	-	-		TBD	TBD
Boro rice (excess rainfall)	706	-	ESDO: 238 GUK: 468	-	-		TBD	TBD

For the first time ever in the Surokha project, the history of hitting trigger point for the payment of claim, happened for the boro rice product (excess rainfall). ESDO's 150 farmers of Birganj received the payout which amount was BDT 16,818 from GDIC. An event was organized on this claim settlement on 16 July 2019 at the Birganj Upazila, Dinajpur.

Representatives from GDIC, SDC, SFSA Bangladesh, Swisscontact, Upazila Parishad, Admin, DAE and all 150 payout farmers were present there. This event was covered by both print and electronic media. Farmers were given a demo cheque in the event and later they had been provided the payout through another event at their place. In the end season analysis, farmers shared



Figure 10: Group photo of the claim settlement event on boro rice (excess rainfall)

that they are satisfied with the boro rice product as they received payout and this payout inspired them to become insured for others crop insurance products in future. A video was produced on the boro rice claim settlement event.

Another claim settlement event on aman rice crop insurance was arranged by GUK on 3rd November 2019 at the Zila Parishad Auditorium, Sherpur, Bogura. GUK's 675 farmers of Sherpur received the payout of BDT 164,343 from GDIC. Likewise the previous event, farmers were given a demo cheque.



Figure 11: Aman rice claim settlement event

Addl. Managing Director & Company Secretary of GDIC, Deputy Director of Cooperation of SDC, Head of Global Insurance Solutions of SFSA Global, Country Director of SFSA Bangladesh, Team Leader of BMMDP of Swisscontact, Vice-Chancellor of BSMRAU, Executive Director (Additional Secretary) of IDRA, Executive Director of GUK, Upazila Nirbahi Officer, Upazila Agriculture Officer of DAE, Officer in Charge of BMD and about 200 payout farmers were present there. This event was also covered in both

print and electronic media.

Milestone 9: Crop insurance product and project development (PPD)

During a dry run, crops are observed for the entire cropping season in order to reflect the crop cycle. It's usually done when venturing into new regions, new crops or both new crops and new regions. During the project year 1, no dry run was conducted. But before inaugurating Surokkha project, SFSA Bangladesh conducted dry runs funded by SDC, on three major crops i.e. rice, maize and potato in three districts and nine sub-districts. A total of 174 farmers were studied (84 in Dinajpur, 60 in Bogura and 30 in Nilphamari) during the period of 2016-17.

For product development, FGD particularly conducted with farmers as they are mostly aware of the historical data, know when and what type of crop damage happen, and they are directly involved with the expenditure, harvesting etc.

A total of 15 FGDs were conducted for aman rice product development by Surokkha field team at Birganj and Sherpur Upazila in May 2019 where 296 farmers (59 women and 237 men) participated. Average 16 farmers were present in each FGD, and data were collected through Kobo toolbox.



Figure 12: FGD participants for aman rice

Besides, a total of 33 FGDs were conducted covering six districts covering 12 upazilas in August and September 2019 for the product development on boro rice, potato, maize and aman rice for the project year 2 where 582 farmers (60 women and 522 men) participated.

Demo version of Resilience Engine - RE (a global IT platform for making the entire insurance policy developing, selling and monitoring process digital) is developed by EnvEnv, and demo testing of RE is done in July 2019 at the Sherpur upazila, Bogura.

The screenshot shows the Agronomeet website interface. At the top, there is a green navigation bar with the logo 'AGRONOMEET' and links for 'Products', 'Contracts', and 'Logout'. Below the navigation bar, the page title is 'Insurance Products'. There is a search bar labeled 'Search products'. The main content area features a table with the following data:

Product	Total	Contracts	Farmers	Sum Insured	Premium	Payout
Aman Rice Bangladesh 2019 Claim Ratio: 240.43%	Open	---	---	---	---	
	Paid	1	675	1,408,650 BDT	56,698.16 BDT	136,320.97 BDT
	Total	1	675	1,408,650 BDT	56,698.16 BDT	136,320.97 BDT

Below the table, there is a section for 'Customer import detail templates' with three buttons: 'Download XLSX template', 'Download XLS template', and 'Download CSV template'. A green button labeled 'IMPORT FARMERS DETAILS' is also visible next to the table data.

Figure 13. Resilience Engine online site

To identify and recommend agronomic support for rice, potato and maize in Bangladesh, an agronomic study was conducted by Dr Md. Abdul Kader, Professor, Department of Agronomy, Bangladesh Agricultural University, in June 2019. He shared his findings with SFSA Bangladesh and Managign Agent, and prepared a report. The findings from this study will be used in the educational events for the farmers.



Figure 14. FGD for agronomy study

International Research Institute/Columbia University (IRI) supported the development of potato, boro rice and aman rice product for risk of late blight, excess and deficit rainfall respectively. Checklist for Kobo Toolbox for developing products on potato, maize, aman rice and boro rice for project year 2, have been developed in July 2019.

Milestone 10: Weather Data Infrastructure

To create and maintain the relevant data for product development and implementation, a total of seven Automatic Weather Stations (AWS) have been installed at five upazilas under four districts.

It was planned to procure 10 more AWS but BMD required a certification /declaration from the manufacturer on the specification and performance of the AWS. All the legal and specification related documents have been submitted to Mr Shamsuddin Ahmed, Director of BMD in March 2019.

Project continuously maintaining the stations under supervision of Mr Mahendar Kola, Manager, eeMAUSAM Weather Risk Management Services Private Ltd, India. Mr Kola visited Bangladesh in April 2019 and checked all seven AWS, identified maintenance issues and took necessary actions like changing and/or fixing battery, modem, cable, antenna, consoler etc. All the AWS are now working well, and field team has also been capacitated for maintenance and they are monitoring all AWS in every month.

Milestone 11: End Season Analysis

Two comprehensive 'End Season Analysis' were conducted on the potato and boro rice weather index insurance products. Three categories of farmers were interviewed for these analyses like farmers who purchased insurance product, farmers who attended the farmers' literacy training on insurance but didn't purchase the product, and general farmers who didn't attend the farmers' literacy training nor purchased the crop insurance. A total of 60 farmers were interviewed for potato and boro rice season and those were selected randomly. Among them 40 were men and 20 were women. Different category farmers were studied to see how they perceived the potato and boro rice products, and variations of understanding and attitude to the crop insurance. The findings will be incorporated in the product development/project designing for the second year's improved, scalable and feasible product and intervention design.



Figure 15. Face to face interview with

At the service provider level, Farmers' Hubs, ESDO and GUK staff, staff of ESDO and GUK who received training on the potato and boro rice products and played the role of trainer, and GDIC's staff were interviewed to see their experiences of implementing these two products. Their feedback on the products, challenges they faced in the product distribution channel and suggestion to move forward were captured in these analyses as well so that all these learning can be considered in next seasons for the betterment of the project.



Figure 16. Interviewing aggregator

Staffs of Department of Agricultural Extension were also interviewed in Sherpur and Birganj who were involved with the farmers' literacy training during the potato and boro rice season. Their suggestions and experiences were also captured for the improvement of the potato and boro rice crop insurance products and implementation in the next seasons.

Challenges and way forwards

The fundamental objective of the project is to develop the market for weather index-based insurance in Bangladesh. The project is and in future will be facing the challenges as developing a new market has its own opportunities and bottlenecks. However, unlike the market development of consumer goods or commodities, insurance being a “unsought goods²” where buyers do not normally think of buying the product aggressive “Selling Concept” has to be adopted as the marketing management orientations for the industry. The limitation of “selling concept” is it focuses more on creating sales transaction rather than creating long term profitable customer relationship. The concept itself implies the obsolete idea that, the consumers will not buy enough of the firm’s products unless large scale selling and promotional effort. On top of the nature of insurance as a product and its marketing “by large” strategy Porter’s five forces³ are also prevailing challenges for the development of the market. Especially since the insurance market in Bangladesh as low penetration as 0.55% (insurance premiums as a share of GDP) in 2017 and has mostly been on a downward trend since 2009⁴, both the bargaining power of the supplier (insurer- re-insurer) as well as the customers/clients the suppliers are playing significant role to add on the existing challenges. On the backdrop of the existing situation of the market and nature of market, the challenges the project is facing now can be categorized into five segments:

The Insurance Market of Bangladesh: Currently there are 46 general insurance companies registered in Bangladesh and 32 life insurance companies. Two state owned corporations are also working of which SBC (Sadharan Bima Corporation) is playing the more dominant role in non-life sector⁵. Among the 46 corporations only three (Green Delta Insurance Company, Pragati Life Insurance Limited and SBC) are engaged in non-life insurance focusing agriculture insurance. The project has approached the private companies both Green Delta and Pragati. SBC even though has started the first crop insurance endeavor, the experience was not commercially viable (loss ration more than 700%). Pragati dropped out from the project before the starting of the season and the project is currently dependent only on underwriter. Single sourcing is always risky and the project has not experienced any keen interest from other corporations to underwrite WII products till to date.

The scale of the market: From the first year experience of the project, the total business volume in terms of premiums collected was around USD fifteen hundred only. The total non-life insurance premium collected in 2018 was USD 397million which stands 86th in the world ranking⁶. This is very natural for any product at its introduction phase where sales is minimal and profit can be negative⁷. However, for re-insurer and insurer are yet to be sensitized to invest their resources for this introduction phase will shift to growth phase.

² Principles of Marketing, 16th Edition, Philip Kotler, Gary Armstrong

³Michael E. Porter, "How Competitive Forces Shape Strategy," Harvard Business Review, May 1979 (Vol. 57, No. 2), pp. 137-145.

⁴ Potential for growth: Transforming Bangladesh’s insurance sector, PwC, June 2019

⁵ Bangladesh Insurance Association (BIA) Year book 2018

⁶ Sigma report, Swiss Re Institute, Volume number 3 , 2019

⁷ Product Life cycle Model, Raymond Vernon, 1966

Clients experience with Insurance Products: According to a study conducted by [PwC](#), the clients of Bangladesh (at least a majority of them) do not trust life insurance agents since they have faced bitter experience in getting their insurance claim. This lack of trust seriously have undermined the client-insurer relationship which is severely decelerating the rate of priming to actual enrollment in practical sales. In addition, the WII concept being very new to the market, clients, distributors and even too some extent suppliers lack the conceptual clarity, confidence on the product's utility /USP(unique selling point). The scale of the current market itself has vested insurers/reinsurers (suppliers)and clients higher bargain power.

Regulatory framework and Infrastructure: IDRA (Insurance development and regulatory) is the governing body of Bangladesh. Currently GDIC has an active portfolio of WII and having a single underwriter is not giving IDRA options to compare the developed products. However other than crop/agriculture sector, the non life insurance is pre dominantly marketed though obligation. For example to import through L/Cs, marine cover is an obligation without which L/C will not be issued and customs will not release the goods that are imported. For any vehicle ownership, motor insurance is an obligation without which the owners have to face civil court for violation or settle the offence by paying fine. However, crop insurance is not made obligatory with any agricultural loan as off now. A regulatory obligation would increase the “buy in”. At present Bangladesh Meteorological Department has is running a network of 44 AWS and has planned to 200 more AWS in future. But the number is not sufficient enough to meet the future demand of weather data that will be required to design commercially viable WII products with minimal basis risk.

Distribution Channel: So far only one distribution channel (reinsurer-underwriter- micro finance institution) for insurance market development could be tested in the first year. This also de- limited the scope of testing different business models. The current incentive modality on which the channel is working is piloted only but to devise commercially viable model, the incentive modality must be optimized.

Underlying strategy for second year of “Promoting Risk Mitigation Measures for Climate Change Adaptation (Surokkha)”

The project envisions a mixed market systems development approach and “the marketing” approach” to infuse quick and effective vibration in the marketing eco system so that the value chain actors could see the STAR in the market from question mark. As off now the WII portfolio is high growth low share business portfolio. A lot of cash is required by every business counter parts to hold their share. To accelerate the growth in a commercially viable manner so that, companies can capture high market share and enjoy the high growth rate.

The strategy is to develop the WII market following market development approach by on boarding more value chain actors, piloting and testing more business models to maximize incentive of the supply chain actors. The core of the activity will be developing demand for WII products by large scale promotion (Selling concept) and designing products that is attractive for the clients.

The following steps are the underlying strategies based on which the project will be implemented in the second year. The assumption is working in market systems development approach.

Conclusion

Increasing the attractiveness of the WII Market is the key to overcome the challenges. When the market is attractive, the potential of “BUSINESS” in the market alone will drive the market system development activities in a sustainable manner. However, the mix modality should be adopted as the product itself is “unsought goods” and unlike consumer/convenient products a pure “marketing model” or standalone “m4p” approach might not do justice, and the hypothesis is to be tested. However the learning from the first year indicates that, in the second year of the project, the key focus areas should be:

- I. Develop/ Scale up the developed market in a commercially viable manner
- II. Develop the right distribution channel and the right marketing mix and
- III. Develop sufficient awareness among clients on the benefit of enrolment
- IV. Continued investment in ground data infrastructure for development of products

Annex 1

Activity Summary:

Sl. no.	Milestones and Activities	Planned (no.)	Achieved (no.)	Source	Remarks
1	Partner contract signing				
1.1	Tripartite agreement	2	4	Agreement paper	One tripartite agreement: ESDO, Pragati and SFSA Bangladesh, Three Bipartite agreement: SFSA Bangladesh and GUK; SFSA Bangladesh and Pragati; SFSA Bangladesh and GDIC
1.2	MoU	1	0	-	-
1.3	Staff recruitment	10	13	Contract papers	At present: 1 PM, 1 MRM Specialist, 1 Actuarial Associate, 1 Field Coordinator, 1 Account & Admin officer, 6 project officers and 1 office aide. Insurance Technical Coordinator has resigned.
2	Product Design				
2.1	Weather index-based insurance product development	4	5	Term sheet	2 Potato, 2 Boro rice and 1 Aman rice
2.2	WII product flyer development	2	2	Flyer	Potato and Boro Rice
3	Distribution Bipartite Agreement	2	9	Email	GDIC is working with ESDO, GUK, Ejab group and 6 farmers Hubs in mutual understanding and/or email correspondent. In the second year, GDIC will conduct the signing with them.
4	Product notification to IDRA	3	3	Product notification letter by GDIC	Three products on potato, boro rice, and aman rice have been notified to IDRA
5	Capacity Building				
5.1	Capacity development training for insurer	1	1	Training attendance sheet	Participants were from GDIC, SBC and SFSA Bangladesh
5.2	Training of Trainers for aggregator	2	0	-	Activity had been cancelled
5.3	Aggregator's staff training	5	7	Training	1 training for potato, 2 for boro rice, and 2 for Aman

				attendance sheet	rice
5.4	Exposure visit	1	1	Picture, Invitation letter, Plan, Participants list	Conducted in Mumbai, India. Participants were from GDIC, SBC, GUK, ESDO, BRAC MF, BRAC Bank, BMD
5.5	Project staff training	6	7	Photos	Introduction of climate service; Transmitting global knowledge for promotion crop insurance in Bangladesh; Project staff orientation; Actuarial Associate Training; Resilience Engine Workshop; International Microinsurance Conference; Data for climate risk insurance workshop,
6	Selection of target group	1,000	10,046	Meeting lists	
7	Awareness & Farmer Literacy training				
7.1	Farmer literacy meeting	60	183	Meeting attendance sheet	Up to November 2019
7.2	Awareness campaign (Pilot crop and general WII) (Development and activation)	30,000	10,046	Meeting attendance sheet	With Overlap
8	Piloting and Monitoring				
8.1	Intervention plan development and other documentation	1	1	Draft MRM Manual	MRM Manual development is going on by the consultant of BMMDP
8.2	Inception workshop	3	0	-	Not organized
8.3	Insurance coverage	1,000	5,936	Insured farmers list	Potato - 171 (Woman: 45, Man: 126) Boro rice – 303 (Woman: 183, Man: 120) Aman rice – 1052 (Woman:746, Man:306) Potato – 3704 Boro rice - 706
9	Crop insurance product and project development				
9.1	IT platform development/Resilience Engine Development	1	1	Resilience engine's site address	Demo version developed
9.2	Baseline Survey	1	0	-	This activity will be conducted once the MRM

					plan is developed by MA.
9.3	Surokkha Launching Workshop	1	0	-	Activities cancelled
9.4	Project progress review workshop/meeting	1	0		Activities cancelled
9.5	Assessment on effective insurance business plan development for aggregator	1	0		Activities cancelled
9.6	Partner staff recruitment for project coordination/Coordinator	2	13	Contract	ESDO and GUK recruited their 13 th staffs for the project
9.7	Climate Smart Agriculture module development and training	1	1	Agronomy study report	This study done by Dr. Kader, Professor of Bangladesh Agricultural University
9.8	Project communication and documentation	1	4	Report	Quartile reports
9.9	Assistance from International Research Institute/Columbia University	1	3	Email communication	Potato, Aman rice and Boror rice product development
10	Weather Data Infrastructure (WDI)				
10.1	AWS and other infrastructure procurement & Installation	10	2	Picture	RainWise installed in December 2018. A total of 7 AWSs available including these 2.
10.2	Data Purchase	Lumpsum	Purchased according to the requirement	Payment record	
10.3	Infrastructure maintenance	7	7	Picture	
11	End season analysis				
11.1	Farmer's feedback	1	2	Report for Potato and study plan of Boro rice	Potato end season analysis report generated and report for Boro rice end season is going on
11.2	Service provider's feedback	1	2		
11.3	Other stakeholder's feedback (DAE, IDRA, etc.)	1	2		

Annex 2

Few Print Media Coverage on claim settlement at Bogura:



► DHAKA THURSDAY NOVEMBER 7, 2019

'Surokkha' ensures compensation to Aman farmers in Bogura

► AA Correspondent

A joint venture of Syngenta Foundation for Sustainable Agriculture (SFSA) and Swiss Agency for Development and Co-operation (SDC), a 'Claim Settlement Event' on Aman rice crop insurance of 'Surokkha' project was held recently at Sherpur Zilla Parishad auditorium in Bogura which was organized by Gram Unnayan Karma (GUK).

The event has been inaugurated by Bangabandhu Sheikh Mujibur Rahman Agricultural University Vice Chancellor Professor Dr Md Giashuddin Miah. Insurance Development and Regulatory Authority Executive Director Khalil Ahmed was present as the chief guest.

Khalil Ahmed pointed out that 'today a total of 675 farmers received payout. In Bangladesh, over 10 million people are being insured through micro insurance. We want to ensure the foreign delicate that, Bangladesh will achieve the highest feat in inclusion of insurance.' Embassy of Switzerland in



Syngenta Foundation for Sustainable Agriculture (SFSA) Head of Global Insurance Solutions Olga Speckhardt speaking at a claim settlement event at Sherpur Zilla Parishad auditorium in Bogura recently.

Bangladesh SDC Director Derek George addressed that Bangladesh progress is miraculous despite the ill effect of climate change. He urged the farmers to spread the news from word to mouth to boost up the scaling of agro-insurance.

SFSA Head of Global Insurance Solutions Olga Speckhardt emphasized on 'Creating a better world requires teamwork, partnership, and collaboration.'

SFSA Bangladesh Country Director Md Farhad Zamil said, "For the adverse impact of climate change and bad weather, crop insurance can reduce the economic losses of farmers potentially."

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