

Challenges and potential solutions to social inclusion in an aggregator model to promote weather index insurance in Bangladesh



Distribution of bundled insurance in a claim payout ceremony in 2019
(photo: Maruf Hossain, Green Delta Insurance Company Limited [GDIC])

Bangladesh is located in the low-lying river delta formed by the Ganges, Brahmaputra and Meghna rivers, and is considered as the country most vulnerable to climate change in the world (World Bank 2012). Furthermore, the country's geography, population density and extreme poverty make Bangladeshi people highly vulnerable to other natural hazards, which often turn into disasters. Among the various risks and disasters, flooding is the most common and frequent, and is considered to be one of the principal threats to development. Approximately 70% of Bangladesh's population is at risk of flooding.

Nearly two-thirds of Bangladeshis are employed in the agriculture sector with paddy as the single most important product (GoB 2010). The main cause of

farm income instability is weather-related risks, with no recourse to buffering or risk transfer mechanisms. Development and introduction of crop insurance is often hindered by several factors. These include higher operational and distribution costs, assessment of losses at the farm level associated with traditional insurance products connected to smallholdings, poor infrastructure, the remoteness of the farms and dispersed farmer locations. Therefore, government or donor support is often relied on for the development of insurance products and introduction into the market. In contrast, index-based insurance does not require the assessment of losses at the farm level. Thus, it minimizes asymmetric information, and drastically reduces the delays and costs associated with traditional crop insurance (Barnett and Mahul 2007).

KEY MESSAGES

- In the aggregator model, mutually beneficial partnerships between insurers and local input suppliers/ nongovernmental organizations (NGOs) made the delivery of insurance products more efficient, reducing transaction costs for the insurer and helping to build trust in the product among farmers. It also provided small, marginal and women farmers with access to index insurance.
- The key limitation of the model is that only members of the partner organization (PO) (e.g., a micro-credit organization) can access the insurance, leaving out important groups such as landless and large farmers, who are non-members.
- Even though the model increases access to insurance for women, who are mostly members of POs, they struggle to understand the product and therefore try to convince their husbands, who may still be the decision-makers regarding cultivation, of the value of purchasing insurance.
- The entry barriers to Weather Index-based Crop Insurance (WIBCI) are centered on illiteracy, gender norms, capital availability and eligibility criteria, and these apply even in the aggregator model, unless appropriate stakeholder engagement occurs in the rollout process.
- Access to the insurance product could be increased by involving farmers beyond the PO membership through a process to certify leases taken by the landless using a third party, and by adopting digital technologies for cash transfers to reduce the premium and transaction costs.

In the recent past, index insurance has been seen as offering a potential solution for promoting the development of a viable agricultural insurance market in Bangladesh. This is despite the existence of several structural and capacity barriers, and higher distribution costs (IFAD and WFP 2010), given that farms tend to be small and widespread, and there is a lack of established branch or agent networks in rural areas to promote, market and administer the insurance. Developing an insurance agent in remote, rural areas is also difficult. Only a few small-scale agricultural index insurance pilots have been completed to date: a fully subsidized flood index insurance product tested in Sirajganj

district by Oxfam through a private insurer, Pragati Insurance Limited; and a partially subsidized weather-based index insurance program funded by the Asian Development Bank (ADB) with the collaboration of public insurer Sadharan Bima Corporation (SBC). This dearth of schemes in Bangladesh may reflect a lack of confidence among all key stakeholders in WIBCI schemes; farmers' inexperience with insurance; insurers' unfamiliarity with local communities; and the absence of a national policy or enabling environment to promote any kind of crop insurance. Consequently, private insurers are not keen to take risks due to high transaction costs and payout rates compared to the potential revenue,

which presents a weak business case. The low margins of the insurance schemes have prompted a search for cheaper channels that are able to reach clients in large numbers.

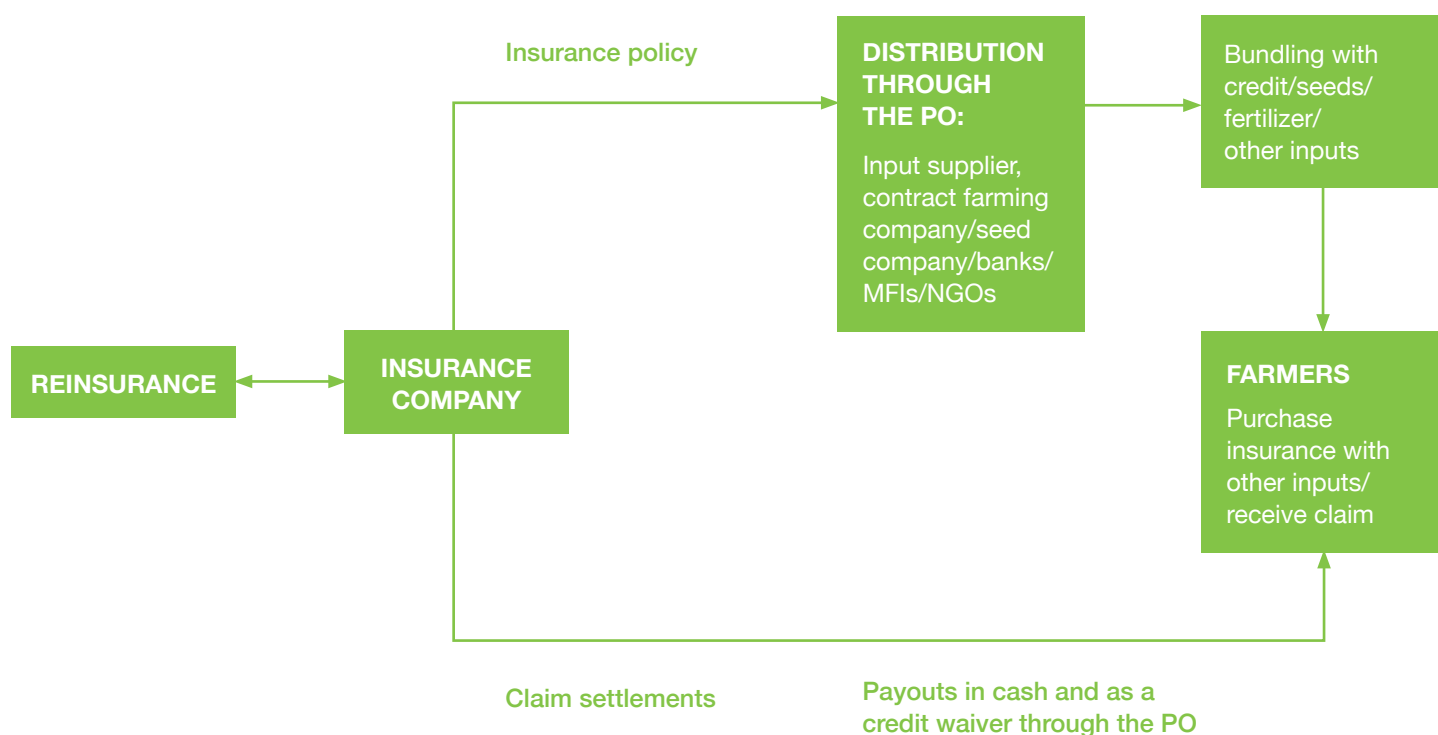
This brief explores how the Green Delta Insurance Company Limited (GDIC) adopted an aggregator¹ model to address some of these challenges during implementation of a WIBCI product among farmers. Data were collected through Focus Group Discussions (FGDs) and Key Informant Interviews (KIIs) in selected villages in Bogura, Dinajpur and Nilphamari districts in northern Bangladesh, where this WIBCI product was implemented (Figure 1).



FIGURE 1: A GROUP OF SMALL AND MARGINAL FARMERS DISCUSSING WIBCI AT A FOCUS GROUP DISCUSSION IN DOHONDA VILLAGE, DINAJPUR DISTRICT, BANGLADESH (PHOTO: MOHAMED AHEEYAR).

¹ The insurer, GDIC, works with a partner organization that purchases crop insurance for its participating members as an insurance aggregator, and conducts farmer awareness, provides product information, registers the clients, collects the premium and supports payout distribution.

FIGURE 2: AGGREGATOR MODEL ADOPTED BY THE GREEN DELTA INSURANCE COMPANY, BANGLADESH.



Source: Adapted from <https://green-delta.com/products-services/agriculture-insurance-2/>

MODEL ADOPTED BY GDIC IN PROMOTING WEATHER INDEX INSURANCE

GDIC has piloted and promoted WIBCI with technical support from the International Finance Corporation (IFC) since 2015, as a tool to assist farmers without providing any subsidies. GDIC has reached around 24,000 farmers covering 140,548 acres (1 acre = 0.404686 hectares) with crop insurance in 11 districts by October 2019. This covers both weather index and yield index crop insurance². The insurance covers drought, excess rainfall, heat waves and cold spells for different seasonal crops, including *boro* (winter) rice, *aman* rice,

tomato and potato. The schemes have settled the insurance claims of 5,025 farmers during the period 2015-2019 (Ahmed 2019).

Usually, insurance is intangible at the time of enrollment and the salesperson used by the traditional insurance programs is a stranger to the villagers, but the premium is tangible. This creates mistrust among the farmers about the insurance product. Therefore, the model adopted by GDIC did not sell WIBCI directly to farmers using insurance agents. This was done through a partnership with organizations that have direct dealings with farmers. These POs included input suppliers, contract farming companies, seed companies, microfinance institutions (MFIs), microcredit service providers,

banks, donors and NGOs, who serve as insurance distribution partners, similar to the recommendation made by IFAD and WFP (2011).

GDIC has been able to reach farmers with the WIBCI product without much effort and distribution cost through this value chain 'bundled' approach that presents insurance as an additional input. The product was sold to the distribution PO as group insurance, and the PO (insurance aggregator) sells to the individual farmers (Figure 2). Since the insurance is targeted at poor farmers, each of whom will purchase only a small amount of insurance, the PO aggregates the needs of many small farmers and administers the insurance on behalf of the insurance company. This includes the

² Yield index insurance is based on average losses at the village level for a specific crop, rather than losses at farm level. Payout compensates for lower than expected yield. Weather index insurance is based on weather parameters (such as rainfall, temperature, soil moisture, etc.) correlated with farm-level yields or revenue outcomes. The payout may be triggered when the index hits a low value (deficit rainfall) or high value (flood/high winds).



Gendered roles in food systems
(photo: Sanjiv de Silva/IWMI)

collection of premiums and settlement of claims (if any) of a group of farmers.

Since the insurance is integrated with other interventions of POs, such as input supply, credit provision and contract farming, there is no significant cost increase in handling the insurance, even for a smaller group of farmers. This approach not only reduced transaction costs, but also helped the insurer create a network effect, reaching scale and delivering value to the farmers through the PO. This network can be leveraged to communicate with and educate prospective client farmers, and to bundle the micro-insurance scheme with the products of POs. The POs also benefitted since the approach provided opportunities to achieve their primary business objectives through marketing the insurance with their inputs, thereby reducing the risk of businesses associated with unpredictable weather events.

1. Conduct FGDs at village level to collect information of farmers and their cultivation practices. This helps to identify the weather-related risks to the village and to design appropriate weather index insurance. The FGDs help farmers to clarify some of the basic questions they have regarding the insurance product.
2. Awareness creation at the community level through public meetings on the importance of agricultural insurance and its benefits.
3. Awareness creation for the field officers of POs (training of trainers) on the insurance product, trigger points, premium and settlement of claims.
4. Yard meetings for farmers organized by POs to increase awareness and promote the particular insurance

product, highlighting how it works and the contribution needed by farmers. GDIC officers also participated in the yard meetings to directly communicate and build trust with farmers.

5. Farmers are reached individually with the insurance policy through the field officers of the POs.

The POs have used multiple tools to promote the insurance product, which includes small group meetings, large group community meetings, house-to-house visits and distribution of leaflets. As the POs have long-standing relationships with the communities, there is a high level of trust between them. The institutional arrangement created by the POs at the village level and availability of field officers for the PO activities ease the insurance rollout process without the requirement of much extra effort.



A farmer carrying fertilizer to the field
(photo: Mohamed Aheeyar/IWMI)

INSURANCE BENEFICIARIES

Although GDIC could partner with a range of organizations, the selected POs in this instance were MFIs working with small and marginal farmers, with a specific focus on women members of the households. Therefore, large farmers are not included in the scheme and majority of the insurance purchasers are members of the partnering local NGOs across the seasons, except for the beneficiaries reached by the PO Syngenta Foundation, which is extending the insurance facility to any farmer living in the target area. The farmers received detailed information on the insurance product at regular member meetings organized by the partnering local NGOs as part of routine activities. This approach, though focusing on

small and marginal farmers, does not fully address inclusiveness because the beneficiaries are only members from POs (NGOs), and there are large numbers of vulnerable and landless farmers who are not members. Field officers working for the microfinance NGO were able to help member farmers to prepare the necessary documents and also collect the premium.

Farmers have a general understanding that they will not receive a payout if there are no losses. They have basic knowledge of the product design, but lack a clear understanding of how payment is triggered or not triggered. Illiteracy (inability to read and write), especially among small/marginal and landless farmers, was a significant impediment in understanding the insurance product. Yet, the continued purchase of insurance despite the 'no payment' trigger in every

season, and the interest shown by non-members to purchase the insurance indicate the development of trust in the product over the years. Sufficient farmers appear to have experienced the real value of the insurance when the payment was triggered. Farmers have used their earnings or savings to purchase the insurance without the need for borrowing.

The aggregator model adopted by GDIC has succeeded in reaching the remote farmers without much added cost and in building the trust of farmers in the insurance product, even without providing a subsidy. The arrangements made to distribute the insurance in a claim payout ceremony gave more visibility to the product, and generated trust among non-members who also want access to the scheme through peer learning.

ISSUES AND CHALLENGES IN MAKING THE INSURANCE PRODUCT MORE INCLUSIVE

Ensuring that different classes of farmers sufficiently understand the technically complex index insurance product is one of the greatest and more expensive challenges. This is due to the socioeconomic diversity, social norms, small or geographically dispersed landholdings, poor infrastructure, lack of a formal finance sector and other structural barriers prevailing in rural areas. Farmers reported that they have limited understanding of how payout was triggered or not triggered, despite the admirable initiative undertaken by the PO to display the relevant weather data on a daily basis in a community location to increase transparency of the product. This deficiency in understanding creates slowing of future upscaling of the product due to potential misconceptions/unwanted expectations among the farmers.

The insurance product is marketed without any subsidies and with different premium rates depending on the crop, season, product design and type of risk covered. This restricts the affordability of the product among the marginal farmers, limiting the purchase of insurance for approximately 10-15% of the total area of cultivation. At present, farmer enrollment, collection of premiums and making payouts are done in person with a cost added to the premium. The premium can be reduced, if digital innovations are introduced for premium collection, provision of weather information, awareness creation and distribution of payouts.

Though women's involvement in rice cultivation is limited to post-harvesting and processing activities at the household level, they play a

dominant role in the cultivation of vegetables and other field crops, although landownership is mostly vested in male farmers. Since the product is operated through the POs that are mostly working with women's groups, insurance is mostly purchased under the name of women, and payouts were distributed to women. Discussions with farmers indicate that these women farmers struggle to transfer the imparted knowledge of WIBCI to male farmers and convince them of the benefits of crop insurance. In most cases, there was a gap between the knowledge provided and what women communicated to their male counterparts, and consequently, in some cases, the women have failed to convince their spouses.

The involvement of POs in the insurance business has led to a positive impact on the microfinance activities of the organizations, increasing the initiative of members without a significant increase in the cost of operation. GDIC is of the view that marketing the insurance through the POs has tremendously reduced the distribution cost. The cost of distribution would otherwise be potentially higher than the premium, given the remoteness of the farms, dispersed individual smallholder farmers and the small scale of operations. According to the POs, the fact that weather insurance products currently marketed are complex, difficult to understand and explain to the beneficiaries highlights the importance of developing appropriate visual and graphical tools for promoting the product.

SOLUTIONS TO OVERCOME THE CHALLENGES

- The insurance company has an opportunity to use the aggregator model to enroll 20-30% of landless

farmers, who are currently excluded from benefitting from the risk transfer mechanism, through a third-party certification of the area and type of crop cultivated. A similar mechanism has been adopted to distribute post-disaster relief, such as seeds and fertilizers, through government machinery to affected farmers including landless farmers, recognizing their cultivation via the field officers and village-level farmer groups.

- The introduction of digital innovations, such as the use of satellite technology for damage assessment, and application of mobile cash transfers for premium payment and claim distribution, would reduce the insurance distribution and transaction costs, resulting in a reduced premium. The use of a bank transfer system is not recommended since most of the farmers do not have a bank account, and accessing banks could lead to significant transaction costs for farmers.
- The government also has the opportunity to bundle the agricultural and disaster relief subsidies with the insurance to reduce the cost of the premium. Another option is to bundle the insurance with ongoing microfinance that would provide a portion of the loans to finance the premium.
- Organizing separate and dedicated awareness programs to educate male farmers about index insurance is an additional cost to NGOs, and mobilizing these farmers to participate in daytime meetings has an opportunity cost due to the loss of labor time. Possible options to solve this problem include organizing separate awareness meetings for men in the evenings and/or produce small video clips or YouTube videos so that these can be viewed by men and women who have smartphones when they have spare time.



Woman assisting her spouse in the rice field
(photo: Mohamed Aheeyar/IWMI)

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SOURCE

This brief is based on research conducted by Mohamed Aheeyar, Sanjiv de Silva and Sonali Senaratna Sellamuttu, all from the International Water Management Institute (IWMI) (www.iwmi.org).

ACKNOWLEDGEMENTS

The research team is extremely grateful to Green Delta Insurance Company Limited (GDIC) and Syngenta Foundation in Dhaka, Bangladesh, Gram Unnayan Karma (GUK) in Bogura, Bangladesh, and Eco-Social Development Organization (ESDO) in Dinajpur, Bangladesh, for arranging and facilitating the fieldwork, and sharing information and knowledge. Special thanks are due to Ms. Nafisa Tasnim Khan (GDIC) for helping to conduct the field interviews and discussions. The support provided by farmers and community members in the villages of Parvabanipur and Udaykuri in Bogura district, Mirganj in Nilphamari district, and Dohonda, Aliga Sharkarpara and Choto bottoli Chawalia in Dinajpur district is also gratefully acknowledged. Feedback and valuable inputs provided by Dr. Giriraj Amarnath (Research Group Leader - Water Risk to Development and Resilience, IWMI) and Dr. Matthew McCartney (Research Group Leader - Sustainable Water Infrastructure and Ecosystems, IWMI) on earlier drafts of this brief are highly appreciated.

This research was carried out as part of the CGIAR Research Program on Water, Land and Ecosystems (WLE) and supported by Funders contributing to the CGIAR Trust Fund (<https://www.cgiar.org/funders/>). CGIAR is a global research partnership for a food-secure future.

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CONTACTS

Mohamed Aheeyar, Researcher, IWMI (m.aheeyar@cgiar.org)

Sanjiv de Silva, Researcher - Natural Resources Governance, IWMI (s.s.desilva@cgiar.org)

Sonali Senaratna Sellamuttu, IWMI Country Representative - Southeast Asia and Myanmar (s.senaratnasellamuttu@cgiar.org)

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