

TECHNICAL BULLETIN

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Value Chain and Marketing of Safe Fruits and Vegetables

Inappropriate and unsafe post-harvest management practices on the one hand and a poor marketing system on the other are the major hindrances to the development of the fruits and vegetable sub-sectors of Bangladesh agriculture. Consequently, this inefficient production-marketing chain generates only sub-optimal outcomes: Largely unsafe food for consumers and poor economic returns to farmers, which ultimately turns out to be a huge national loss.

Against this backdrop, this action research project was designed and implemented jointly by the Bangladesh Agricultural Research Institute (BARI) and Center for



Development and Competitive Strategies Ltd (CDCS) in an effort to encourage adoption of good farming and post-harvest practices and to develop an inclusive and sustainable agribusiness model that would potentially help farmers, consumers and other stakeholders along agricultural value chains and enhance their value shares. The ultimate goal of the project was to analyze value chain efficiency, reduce post-harvest losses and create and pilot an inclusive and safe business model for major fruits and vegetables marketing in Bangladesh.

Methodology

In order to directly benefit both farmers and consumers, the project adopted a human-centered design (HCD) approach as the core component of its methodology in developing an inclusive agribusiness model. Several market access experiments were designed and tested in order to

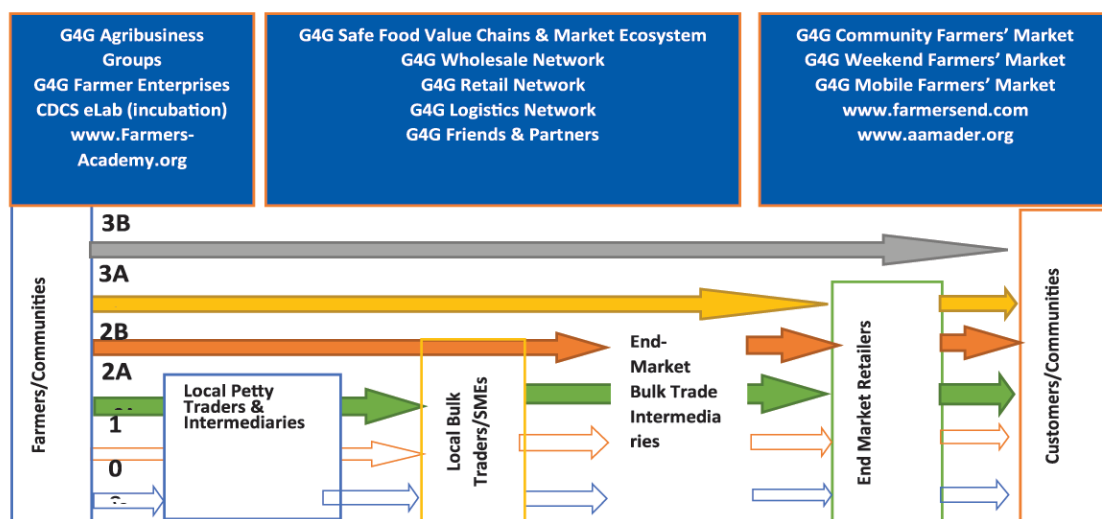


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identify the best market channels for farming communities in terms of value retention, profitability and operational sustainability.

The major activities of the project included, but were not limited to, the following: (i) field exploration and farmer mobilization, (ii) farmer and value chain actor (VCA) training, (iii) G4G agro-entrepreneurial group formation, (iv) G4G handholding (v) G4G incubation support, (vi) multi-stakeholder engagement and market-support partnerships, (vii) upstream and downstream value chain partnerships, (viii) G4G market trials, (ix) G4G agribusiness centers, (x) G4G brand building and consumer sensitization, (xi) market linkage with end-market traders, (xii) direct market access through weekend farmers’ market, mobile farmers’ market and community farmers’ market, (xiii) mass communication and awareness building, and (xiv) peer-to-peer networking among farmer groups and agro-value chain actors, and (xv) crisis time implementation trial of G4G Inclusive Agribusiness Model (G4G-IAM) amid COVID-19. Besides, numerous surveys were done, including baseline, end-line and customer surveys.



Results and Outputs

The final output of the project is the “G4G Inclusive Agribusiness Model (G4G-IAM)” for production and marketing of safe food. The model seeks to help reduce unnecessary intermediaries from the chain and enhance benefits to farmers as well as consumers in terms of fair price and quality produce. The model has two derivatives: (a) shortened value chain and (b) farmers’ direct access to the end consumers. It also offers the opportunity to farmers to get technologically integrated. The model achieved this feat through



CDCS G4G Community Farmers’ Market, G4G Weekend Farmers’ Market and G4G Mobile Farmers’ Market, and this success came even in the context of the Covid-19 pandemic proving the robustness of the model.

From the sustainability perspective, the project successfully created, equipped and activated a host of initiatives and brands. These included: (i) G4G Agribusiness Groups, (ii) G4G Agribusiness Center, (iii) G4G Community Farmers' Market, (iv) G4G Mobile Farmers' Market, (v) G4G Weekend Farmers' Market, (vi) G4G Enterprise Network, (vii) Aamader, a specialized retail shop, and (viii) FarmersEnd, a marketing e-platform. The project also equipped the Farmers Academy with a knowledge and technology dissemination e-platform.

Expected Impacts

1. First ever private investment made by farmers in safe postharvest management: G4G Kotchandpur set up a Hot Water Treatment (HWT) plant, and during the period of June-August 2020, the group hot water treated 22.5 tons of mangoes on personal accounts. Besides, it also treated mangoes of other farmers and traders under "postharvest-management-as-a-service (PaaS)" fee-based model;
2. Innovative market channels established; running on 100% self-sustaining business model: CDCS worked with DAM, BOF, Gazipur and set up a community farmers' market to serve the community with safe and fresh fruits and vegetables, particularly under Covid-induced restrictions. Despite challenges, two of the G4G farmer groups have sustainably been selling their safe produce in these G4G markets without any project subsidy;
3. G4G inclusive agribusiness model proved Covid resilience: Despite the Covid-19 pandemic, G4G agribusiness groups across the country produced and sold (in 2020): 645 tons of safe Tomato, 123 tons of safe Bitter gourd, 280 tons of safe Banana, and 345 tons of safe Mango;
4. Crowding-in effect: Farmer groups from beyond project locations also joined (and are keen to join) the CDCS G4G agribusiness network. One such group – G4G Habigonj – alone sold 13 tons of fruits and vegetables at G4G Community Market at BoF and 18 tons at the Weekend Farmers' Market in Dhaka during the period of April-August 2020;
5. Farmer value retention increased by more than projected: The study unearthed that the actual (end-line) value retention by farmers through alternative experiment value chains has been much higher than projected value (estimated with baseline data). It signifies that farmers are not only creating more value, but also fetching 'more-than-expected' prices, mostly by communicating with the customer more directly.

Lessons learnt

This action research project provided some important lessons, which would be very useful in future endeavors:

- ❖ Farmers will be motivated to adopt good farming, post-harvest and marketing practices only when the return are significant and sustainable. Mere one-off training, without continuous handholding and incubation support, will not work;
- ❖ Consumers will be willing to pay a bit more only if they are convinced that the produce is safe and offers better value for money;
- ❖ Market and value chain development requires an ecosystem perspective to agribusiness;
- ❖ All stakeholders– big and small – along the agricultural ecosystem should be brought to the same page of understanding, have confidence in and support one other.

Recommendations

Given the success of this market and value chain action research on safe agro-produce, this study recommends piloting and scaling up the implementation of the G4G Inclusive Agribusiness Model, and for this the following actions are recommended:

- ❖ Promote the G4G Forward Market Value Chain Model (G4G-FMVCM) through extensive piloting across agricultural sub-sectors, nationally. In terms of forward market linkage, replicate and scale up G4G Community Farmers' Market, G4G Weekend Farmers' Market and G4G Mobile Farmers' Market model-derivatives;
- ❖ Promote agro-entrepreneurship by scaling up G4G Agribusiness Center (G4G-ABC) Model across the country to mobilize and train farmers and to incubate and accelerate rural agro-enterprises;
- ❖ For operational efficiency and sustainability of these models, explore ways and means for ICT integration around these models. Particular emphasis should be given to safe scientific farming, technology transfer and market linkages along upstream and downstream value chain segments;
- ❖ Promote extensive multi-agency public-private collaboration to ensure skills and knowledge, quality monitoring and certification, sound transportation logistics and storage facilities, strong support industries (e.g. packaging), physical market places/outlets, innovative financial services and appropriate technologies;
- ❖ Build consumer awareness and conduct policy advocacy campaigns on safe and nutritious food.

This technical bulletin has been prepared on the basis of technical information available from a completed CGP project of KGF, the details of which are given below:

Project Code and Title: TF 31-VC/15. Market and value chain studies of selected fruits and vegetables with reference to postharvest losses and food safety in Bangladesh

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