



Our National Fruit Can Do Better

The Importance of Informal Actors for Jackfruit Value Chains in Bangladesh



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Jackfruit is so important that it is the national fruit of the country and it is national government priority. This article shows the importance of informal midstream actors for jackfruit value chains in Bangladesh. At the start of value chains, small scale collectors (*Faria*) and larger collectors (*Bepari*) are the first mile connectors of the value chains, linking the production of smallholder farmers to urban centres. Without their local sourcing an even larger part of the national production would go to waste. Commission-based collectors (*Aratdars*) and wholesales (*Paikbars*) are the bulking nodes and operate more formally. At the end of the value chains, a large number of diverse retailers make the last mile connection to consumers. And all along the value chains, informally operating labourers and transporters provide their services and earn some income. Official policies focus on industrial processing, technological solutions, international standards and export potential. While these are indeed important to absorb the seasonal peak production, it is argued that engaging with the informal actors can translate positively in a reduced spoilage rate, local processing and product development, better prices for farmers and higher quality products for consumers.

Context

Introducing the jackfruit

Jackfruit (*Artocarpus heterophyllus*) is a large, spiky, tree-borne fruit that is very common in most parts of Bangladesh, especially in the South, where the climate is perfect for its cultivation. A jackfruit tree can bear 150 pieces of fruit each year (and even higher for exotic jackfruit tree species). Nice to know is that jackfruit is the biggest fruit in the world (one piece can grow up to 40–50 kgs).

Jackfruit is a very important product; jackfruits are grown all over the country, in gardens, farm fields, communal places, along roads. It ranks second in production volumes and third in area under cultivation (BBS, 2018). After India, Bangladesh is the world's largest producer of jackfruit.

Jackfruit consists of edible portions (pulp and seed) and non-edible portions (rind and rachis). Ripe jackfruit has yellow bulbs that are eaten fresh and can be dried to make jackfruit chips. Unripe young jackfruit is a basis for making curries and is increasingly known and used as a meat substitute. The seeds of the jackfruit have a high starch content and are rich in Vitamin B (Goswami and Chacrabati, 2016).



Figure 1: Jackfruit, the national fruit of Bangladesh.



Figure 2: Jackfruit bulbs and seeds.

National fruit and national priority

Jackfruit has been described as a miracle crop: it grows easily, it gives high yields at low cost, it is nutritious and has many uses. For millions, jackfruit is the source of inexpensive, healthy and nutritious food. Because of these characteristics and its popularity, the jackfruit is the national fruit of Bangladesh. Jackfruit has also been chosen as the priority product in the OCOP initiative ('One country one priority product') of the United Nations Food and Agriculture Organisation¹, mainly for the many opportunities it offers for processing, value chain development and export.

The focus of the OCOP programme is on industrial processing, technological solutions, international standards and export potential. These dimensions are definitely of high importance considering the highly seasonal production, the positive jackfruit market perspectives and its contribution to food and nutrition security. There are now indeed only a few processing companies and jackfruits are insufficiently processed for value addition or preservation. There are however other dimensions that need to be recognized and considered for promoting jackfruit value chain development. In the next sections, we follow the journeys of jackfruits from farmers to consumers, with specific attention for the role of informal actors.

“

Jackfruit is our national fruit but it is a very neglected fruit because of processing; we want to promote jackfruit processing and consumption.”

(Wahida Akter, Secretary of the Ministry of Agriculture)

The importance of informal actors

Millions of **smallholder farmers** are the main producers of jackfruit and taking care of all the operations, from planting to harvesting. The harvest season is short, concentrated in the months of May and June. This harvest season is called “*Modhu Mash*” (honey month), also because in the same period other fruits, like mango, litchi and pineapple, are also in season. A very large part (40%) of the national jackfruit production is lost to spoilage (Daniels 2024).

During the short harvest season, farmers sell most of their fruits, saving only a tiny portion for domestic use. Farmers sell their jackfruits mainly to **informal traders**, either to **Faria** (small-scale collectors who buy at the farm gate or operate at local village markets) or to **Bepari** (larger scale collectors, who source directly from farmers or from Faria). *Faria* and *Bepari* operate without a permanent location or employees. Farmers generally know the collectors they sell to. Apart from buying and selling, *Faria* and *Bepari* do first level sorting, grading and cleaning.



Figure 3: Pile of jackfruits with *faria*.

¹ For more information, see this [FAO news item](#).

Local materials are used to package fruits and vegetables for transport. Packaging often fails to maintain the freshness and quality of products. Push carts, tuk-tuks, small vans and larger open vehicles are the most commonly used means of jackfruit **transport**. Overloading with multiple sorts of products is a common practice that leads to waste and quality loss.

Bepari supply the jackfruits either to **Aratdars** (**commission-based collectors**) or to **wholesalers** (Paikars). Wholesalers are relatively large traders with permanent employees and a set location in the market. They get jackfruits via *Aratdars* or use *Bepari* to buy on their behalf. Paikars sell a lot of jackfruits in urban centers.

Retailers handle small amounts of jackfruit; they have small temporary spots or more permanent stores in town markets. They buy either directly from farmers, or get jackfruits from wholesalers, *Faria* and *Bepari*, so that they can sell to the final customers.

Fruit vendors sell fresh-cut fruits along the roadside of the villages or cities. Jackfruit pulps are nowadays also sold during the harvesting season along with other fruits. During the harvesting season, shopkeepers who sell vegetables also sell jackfruit seeds that are used for preparing different curries. These vendors provide the opportunity for the grower to sell their fruits locally without a formal business setup.



Figure 4: Tricycle transport.



Figure 5: Tuk-tuk transport.



Figure 6: Jackfruit market, Jolchotro Bazar, Madhupur, Tangail, Bangladesh.



Figure 7: Wholesale market.

Food system impact

Informal midstream 'rescue' tons of jackfruits from rotting

Non-commercial growers cannot sell their products due to the small quantity of fruits they produce. As jackfruit is seasonal and perishable, fruits need to be collected, sold and transported before rotting. *Faria* and *Bepari* play essential roles in collecting the fruits from the orchard or the farm house, and selling them to the wholesalers (*Aratdars* and *Paikars*) or even to processing industries. The *Faria* and *Bepari* collect even small numbers of jackfruits whereas the formal actors are only willing to buy large quantities. The current high spoilage rate of 40 per cent of the national production would thus even be higher if informal actors wouldn't collect jackfruits at the community and farmer level.



Figure 8: Market scene Jolchotro bazar, Madhupur, Tangail.



Figure 9: Labourers loading truck.

Informal midstream actors make the first mile and last mile connections along the value chains

Action research on fruits and vegetable value chains in Bangladesh found the lack of trust and commitment among value chain operators is a barrier for jackfruit value chain development. From the roles described above, it is clear that *Faria* and *Bepari* are the informal midstream actors that facilitate the local level collection, aggregation and transport of the jackfruits. They make the connection to the more formally operating *Aratdars* and *Paikar*, who are important bulking nodes in urban centers. These value chain connections are a precondition for further product development and diversification. The links could be improved by providing reliable market and price information, for instance with an application that farmers and middlemen can consult on their phone via SMS or web pages. At the end of the value chains, a large number of diverse retailers make the last mile connection to consumers. And all along the value chains, informally operating labourers and transporters provide their services and earn some income.



Figure 10: Laborer carrying jackfruits.

Strategic and practical action: linking the informal supply chain to the national jackfruit priority programme

As jackfruit is a seasonal fruit and cannot be kept for long, it is indeed a priority to invest in processing. Although only a few initiatives have been taken, there are significant opportunities for producing jackfruit pickles, chutneys, jam, jellies, juices, chips, green and ripe jackfruit canned products. The growing domestic and international demand for jackfruit can attract investors, who contribute to processing larger volumes, creating added value and reducing post-harvest losses. This can translate positively into better prices for farmers and better-quality products for consumers.

Other important practical interventions that support informal actors are the following:

- Research and extension services to improve jackfruit production and quality. A priority is to find jackfruit tree varieties that would have year-round fruiting. This would create a more even supply and make the yield easier to handle (Daniels 2024).
- Investment in storage spaces that can be rented at local markets, or credit facilities for investment in storage.
- Support for home processing and for Small and Medium Enterprise for producing food products for the domestic market, in addition to the current focus on industrial processing and export opportunities.
- More appropriate and affordable credit for farmers, small traders, retailers and small processing enterprises, with interest rates lower than those of informal money lenders.
- Improvement of rural roads and reduction of the unofficial tolls that collectors have to pay when transporting jackfruits from the farm gate to the market place.
- Attention and support for using jackfruit by-products (fruit peels and processing side streams).

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