

- The consumption of fruits and vegetables in Bangladesh is low, negatively impacting on people's nutritional status
 - Insufficient supply and excessive prices are the main obstacles for higher consumption
 - Policies should address several inefficiencies along the value chain of fruits and vegetables, including market distortions through intermediaries, post-harvest losses, and strong seasonality of production

Improving the value chain of fruits and vegetables: A pathway to better nutrition

Malnutrition is a widespread phenomenon in Bangladesh, partly driven by people's imbalanced diets. Indeed, the per capita consumption of fruits and vegetables barely reaches half of the recommended minimum requirement of 400g per day. As a result, only about 2% of dietary energy supply comes from fruits and vegetables, compared to 78% stemming from cereals. Per capita dietary intake of four micronutrients (folic acid, Vitamin A, iron and calcium) constitute only about 60% of recommended nutrient intake. Experts believe that adequacy of folate intake can be achieved through adequate intake of a wide variety of green leafy vegetables.

Inefficiencies in the value chain a main contributor factor

Evidence suggests that the low level of consumption of horticulture products is linked to inefficiencies in the value chain that are driving up the retail prices of fruits and vegetables by 83% and 63% compared to farm prices, respectively. Among the main obstacles for better performance are food losses, market distortions through intermediaries, and the absence of modern market infrastructure.

For example, studies find that about a third of fruits and vegetables are lost during transport from producers to consumers. Prices also increase due to the absence of

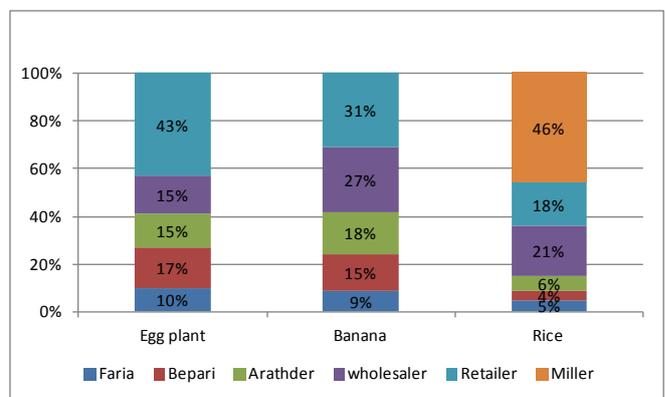


Figure 1: Profits earned by different intermediaries

modern storage and transportation facilities such as cold stores and refrigerated vans. Another reason for higher prices at the retail level are profits earned by middlemen, who play an important role in Bangladesh in bringing fruits and vegetables from producers to markets. In Dhaka City, for example, retailers capture 43% and 31% of total profits for eggplant and banana respectively compared to only 18% for rice (see figure 1).

Prices also surge because growers cannot sell their produce directly to local buyers due to informal agreements between local commission agents and buyers. What is more, local buyers frequently delay their purchase orders in order to force farmers to sell their produce at a lower price. As a result, growers on average receive only 71%

and 48% of retail prices for fruits and vegetables, compared to 79% in the case of rice.

Horticulture products are also subject to sharp seasonal price variation due to the absence of proper marketing infrastructures. For example, prices of brinjal and bananas fluctuated by 35% and 26% throughout the year, compared to only 3% in the case of rice (see figure 2). This high price variability has two main effects. For one, it lowers the consumption of horticulture products in the off season when prices tend to be high. Conversely, it discourages producers to grow horticulture products because of the lower prices during harvest.

What can policy makers do?

Several measures could be adopted for improving the value chain of fruits and vegetables. In order to encourage small and medium scale farmers to grow fruits and vegetables, the Government could promote the formation of marketing groups and cooperatives, for example by supporting initiatives like the Northwest Crop Diversion Project and by working together with non-state actors, such as the Hortex foundation under the Ministry of Agriculture and different NGOs like BRAC. These will strengthen the bargaining power of growers and help them achieve better prices for their produce. Cooperatives would also improve market access as farmers could send their produce jointly to distant markets.

Contract farming constitutes another option to increase market access of small and medium scale farmers. By facilitating the development of supermarkets and other large-scale retail centers that directly engage in agreements with local producers, small farmers could be better integrated into the value chain so that the influence of market intermediaries would be effectively reduced.

Another necessary improvement needs to tackle food losses and deterioration during transport. Strengthening the packaging sector and introducing cold transport facilities constitute essential steps in order to reduce the loss of perishable goods. For the same reason, modern post-harvest technologies like low-temperature storage facilities need to be promoted, while improved marketing facilities such as forklifts for loading and unloading and weighing

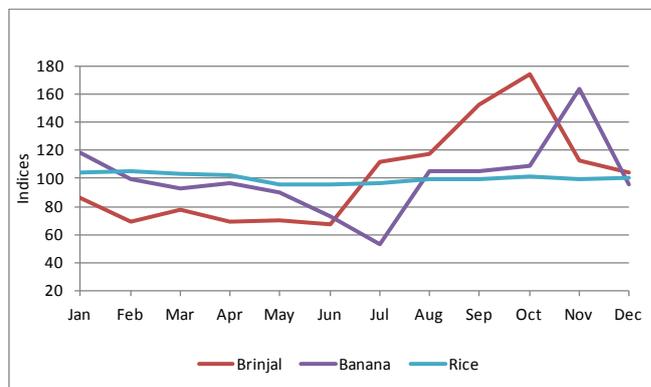


Figure 2: Seasonal price variation of Egg plant, Banana and rice

machine would further reduce loss.

In order to address the seasonal price variation of fruits and vegetables, new varieties would need to be developed by institutions like the Bangladesh Agricultural Research Institute and the Bangladesh Institute of Nuclear Agriculture so that they can be harvested in the off/slack seasons. In addition, improved market information systems, including public displays of current and forecasted price levels of agricultural commodities would increase market transparency and reduce the mismatch between production, market arrival and consumer demand ●

- Key sources:
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