



Cultivate potato example

SMALL FARMERS WHO SUPPLY THE TUBER TO PEPSI HAVE BENEFITED A LOT

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WHEN POTATO PRICES CROSSED THE Rs 20-per-kg mark a few months ago, the consumer had to pay through her nose and cried for relief. In tandem with general expectation, arrival of the new crop in February-March 2010 doused the fire. This is largely due to the bumper crop of 9.5 million tonnes in West Bengal, which is almost 73% higher than last year's production of 5.5 million tonnes. By April, wholesale prices in Kolkata hovered around Rs 300 a quintal, a third of that a year ago. The retail prices have dropped to Rs 6-8 a kg compared to Rs 22-25 a kg in December-January 2009-10.

But now, these are trying times for farmers. In March, Bengal potato farmers reported selling their produce at Rs 3.00-3.50 a kg, almost half of last year's price. By the first week of April, farmers in Bardhaman, the leading potato producing district in West Bengal, could hardly find buyers at prices below Rs 2 a kg. All the 402 potato cold storages in the state, with a 5.6-mt capacity, are full. Yet, about 30% produce lies exposed. Farmers wonder how to sell the stock.

To ease the situation, the state government has intervened. It has procured potatoes worth Rs 400 crore directly from farmers at Rs 3.50 a kg, to be distributed through the public distribution system at subsidised prices. It has also announced transport subsidy of Rs 11 crore, at Rs 20 per quintal, for export of Bengal potatoes to other states and neighbouring countries. But such subsidies are only temporary relief.

Around 60% of potato price — and perhaps of most vegetables — is formed in the post-farmgate segment of marketing chains. This segment is fragmented with many middlemen operating on low volumes and high margins. An IFPRI survey, in 2009, across 90 traders in the potato marketing chain from Agra to Delhi saw wholesalers' margins around 30%, and those of retailers at 20-40% in Delhi.

Another IFPRI-ADB study in 2009 based on a primary survey of vegetable farmers in Uttarakhand found that brokers in *mandis* charge higher commission than the rate mandated by the Agricultural Produce Marketing Committee. This widens the spread between producer and consumer prices, and subsidies

cannot address this aspect of price volatility.

What is the way out? Compress value chains and dovetail producers with demand-driven market forces. The IFPRI-ADB study observed this to work out for farmers of the Rawain valley to the north of Dehradun. Local non-governmental organisations facilitated these farmers to dovetail with organised food retailing from Delhi, and adopt cultivation of off-seasonal vegetables that are in demand in Delhi markets. Farmers reported benefit from this change.

Similar has been the experience of 6,500 potato farmers across six districts in West Bengal, contract farming with PepsiCo India Holdings. In 2010, the company had procured 22,000 tonnes of potato in the state for its processing plant at Sankrail, near Kolkata.

Association with PepsiCo has transformed these farmers' cultivation pattern towards chip-grade potato such as ATL and Atlantic beyond

on advanced farming practices help maintain quality norms, and have been instrumental in saving around 85% of PepsiCo variety potatoes from the havoc of late blight infestation in 2008-09. The company bears the cost of transportation and storage, reducing farmers' transactions costs. In a farmers' focus group discussion in Bamunpara village of Bardhaman, PepsiCo farmers reported that the cost of cultivating ATL variety is 20% more than the conventional varieties, being about Rs 12,000 per *bigha*. A *bigha* is a third of an acre in West Bengal.

About 50% of this accrues to seeds and chemicals. However, there are assured returns, usually of Rs 6-8 a kg, accounting for an about 15% premium for quality. In 2010, while Jyoti variety could fetch only Rs 70-80 per 50-kg bag — accounting for farmers' cost of transportation — it has been Rs 300 for ATL variety. At these rates, a PepsiCo farmer gets a return of about Rs 2 on each rupee spent on cultivation, which is approximately three times higher than that for a non-PepsiCo farmer. This seems attractive to farmers to adopt an unconventional variety, to produce more of it and to invest more on farms.

PepsiCo in just one example, more of its kind is required to overhaul inefficiencies in the existing marketing system. This would call for initiatives to dovetail farmers with organised food processing and retailing; provide incentives to farmers to fine-tune their cultivation patterns with emerging food demand patterns; incentives to form commodity groups to supply quality produce, in volume, directly to organised retailers and processors; incentives to form farmer groups to clout for benefits; investments in product innovation for food processing industries; investments in cold storages; and initiatives to compress value chains.

Can policymakers take up the challenge of mainstreaming the small farmer in organised value chains, as has been done by Pepsi for potato farmers in West Bengal, on a priority basis for scaling up this experiment to several perishable commodities at all-India level and save the farmer from the sudden price crash due to increasing production?

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the conventional — Jyoti and Chandramukhi — varieties in the state. Under PepsiCo's operational set up, these farmers form local groups under a lead farmer, called the vendor.

They benefit from the technology, knowhow and enabling environment created through PepsiCo's partnership with (i) Central Potato Research Institute (CPRI) and International Potato Centre (CIP) for processing grade seed potato, (ii) chemical companies such as Bayer and DuPont for crop chemicals kits at subsidised prices, (iii) State Bank of India for loans at 8% annual interest rate, (iv) Agricultural Insurance Co (AIC) and ICICI Lombard for crop insurance and weather insurance, at special premium rates, and (v) ETA, a multinational cold chain from Dubai, for a new cold storage of 10,000 tonnes in Howrah, leading to higher procurement in the state in 2010.

Extension services by company agronomists