

Reducing postharvest losses of fruit and vegetables

One outcome of economic development is changes in the dietary preferences of the people with a greater demand for fruit and vegetables. This sector, however, suffers greatly from postharvest losses. Some estimates suggest that about 30–40% of fruit and vegetables harvested perish and/or are discarded after leaving the farms. Obviously, the quality of postharvest management affects food quality and safety, competitiveness in the marketplace, and the income of the producers. Some countries like Japan, the Republic of Korea, and Republic of China have put in place effective postharvest management systems. However, in most developing countries in the region the situation is far from satisfactory. In light of huge postharvest losses and new challenges posed by trade liberalization and globalization, serious efforts are needed to reduce postharvest losses, especially of fruit and vegetables.

To examine this important issue and to identify strategies and measures to remedy it, the APO organized a seminar on “Reduction of Postharvest Losses of Fruit and Vegetables” in India in October this year. It was attended by 14 participants from 10 member countries. The participants received presentations by experts on: 1) Recent developments in postharvest losses of fruit and vegetables in the Asia-Pacific region; 2) Processing of fruit and vegetables for reducing postharvest losses and adding value; 3) Successful conservation of fruit and vegetables in cold storage; 4) Packaging and transportation of fruit and vegetables for reducing postharvest losses and better marketing; and 5) The Indian horticulture postharvest management scenario.

The country papers presented by the participants reviewed the current status of postharvest losses of fruit and vegetables in the region; recent developments in postharvest management; major problems in reducing losses; and measures undertaken by governments to address them. For a first-hand observation of postharvest management in the host country, the participants visited the fruit and vegetable unit of Mother Dairy Food Processing Limited and the fruit and vegetable market in Azadpur. At the end of the seminar, the participants made the following observations:

1. APO member countries are at different stages of postharvest system development and there is a wide scope for sharing of expertise, knowledge, and information among them.
2. Since postharvest management focuses on preserving the fruit and vegetables harvested and the improvement of their characteristics, effective preharvest management to obtain the best-quality produce before putting it in the postharvest supply chain is gaining the attention of all stakeholders.
3. Value addition through the processing of fruit and vegetables is not the only solution to reducing postharvest losses. The causal factors are spread over the entire supply chain, from farmers to consumers, and they need to be addressed in a holistic way through integrated postharvest management.



Participants visiting the Azadpur market

4. Development of harvest indices, on-farm sorting, grading, packaging, pre-cooling, and storage and transportation are key starting points of any effective postharvest management system. Planners, policymakers, and researchers should pay adequate attention to address these issues.
5. Time is of the essence in any perishable product supply chain, and fruit and vegetables are no exception. To keep the time lag between production and consumption to a minimum, the development of infrastructure is essential.
6. When a geographical area is large and distances are huge, cold chains are vital in extending the shelf life of fruit and vegetables. Since such facilities involve huge investments, willing investors should be provided incentives like soft loans, subsidized power costs, and duty exemptions until the operations become viable.
7. Practices like minimal/primary processing before sending the fruit and vegetable produce to the market should be promoted as they improve the presentation of products, reduce field-level losses, and increase efficiency in space usage and transportation.
8. The use of biotechnology to develop new varieties and improve on existing ones to meet prolonged storage requirements and withstand damage and stress during handling and transportation should be accorded high priority.
9. The starting point for effective postharvest management must be quality-conscious and demanding consumers who would not mind paying a little more for high-quality products. Educating consumers to be more quality conscious is one way to kick-start postharvest management improvement at farmer, distributor, wholesaler, and retailer levels.
10. Harmonization of local standards of fruit and vegetable products and their packaging with international standards like those of CODEX should be encouraged for better food quality and greater competitiveness in the export markets. 