

Postharvest management of horticultural products

Recent regional economic growth and changes in dietary patterns have made the production, consumption, and trade of fruit and vegetables increasingly important. This trade is vital for producers to improve their farm incomes and for many countries as a significant source of hard-currency earnings. This sector, however, suffers greatly from postharvest losses. Postharvest management determines food quality and safety, competitiveness in the market, and profits for producers.

Postharvest management in most developing countries in Asia and the Pacific is far from satisfactory. Losses resulting from inadequate handling, storage, and distribution result in diminished returns for producers. International markets reject fruit and vegetables containing unauthorized pesticides, with pesticide residues exceeding permissible limits, and with inadequate labeling and packaging. Similarly, there have been increasing concerns over food-borne diseases and poisoning such as *Escherichia coli* or *Salmonella* outbreaks. In the face of changing demand, globalization, and trade liberalization, serious efforts are needed to reduce postharvest losses, improve quality, and modernize the marketing of fruit and vegetables. In addition to addressing problems in each stage of the postharvest process, it is crucial to improve the management and operation of the entire marketing chain.

To share new information on marketing and food safety issues and challenges in the postharvest management of fruit and vegetables in member countries, the APO held a seminar on “Marketing and Food Safety: Challenges in Postharvest Management of Horticultural Products” in Tehran, Islamic Republic of Iran, 23–28 July. The National Iranian Productivity Organization and Agricultural Planning and Economic Research Institute of the Ministry of Jihad-e-Agriculture implemented the program. Twenty participants from 12 member countries and six observers from the host country attended the program. Six resource persons from the Food and Agriculture Organization Rome office, Australia, Canada, and Iran made lead presentations on: 1) Improving postharvest management and marketing of fruit and vegetables—issues and challenges in Asia and the Pacific; 2) Postharvest management of fruit and vegetables for better food quality and safety; 3) New techniques of drying as an efficient method of food preservation; 4) Linking production and marketing of fruit and vegetables for better farm incomes; 5) New roles of government in improving fruit and vegetables marketing at national and local levels; and 6)



Participants visiting the Cold Storage Complex of Arjomandi Trading Company

Measures to assure better food safety, marketing, and consumer satisfaction for fruit and vegetables.

The papers presented by participants reviewed the postharvest management situation in their respective countries. To obtain firsthand information on postharvest facilities in the host country, the participants visited the Cold Storage Complex of Arjomandi Trading Company; Green Plants of Life Co. Ltd. (a greenhouse facility for research on ornamental, herbal, and medicinal plants and a processing plant for medicinal/herbal plants); and the Fruit and Vegetable Market of the Municipality of Tehran.

In the workshop group discussions, the participants identified issues and problems in horticultural chain management and formulated recommendations to address them. The main ones identified were: inadequate two-way dialogue between the government and stakeholders; poor decision making by all chain participants; poor basic infrastructure affecting production planning and postharvest infrastructure; inappropriate use and lack of adequate technology; low level of organization; small and scattered nature of horticulture; poor quality and unsafe food; inability to initiate and sustain linkages with international markets; and low and erratic producer prices. 🌱