



# HORTEX NEWSLETTER

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### *Editor's Note*

Proper packaging has multiple benefits which include post harvest loss minimization, quality assurance and food safety among others. One of the major problems of fresh fruits and vegetables is the high post harvest loss. It has been estimated that about 27% post harvest loss occur in the supply chain at different stakeholders from producers to retailers. The SCDC of NATP, Hortex Foundation has the mandate to reduce post harvest loss through improved knowledge of handling, packaging, transportation and storage of agro-commodities.

It may be mentioned here that SCDC already demonstrated the benefits of plastic crates in place of traditional packages like bamboo basket, gunny bag etc. More than 5000 plastic crates had been distributed to the farmers in the project sites for marketing the sorted and graded fresh fruits and vegetables. The use of plastic crates already provided evidence that the post harvest loss of those commodities can be reduced 10-15%. Similar information is also available in countries like India, Sri Lanka, Thailand and Philippines.

SCDC also demonstrated ice packaging in reusable Styrofoam box for vegetables & flowers, insulated corrugated fiber board (CFB) carton for flowers and passive modified atmosphere packaging in perforated plastic film for vegetables and fruits, thermo formed box/Styrofoam box for minimally processed fruits and vegetables for retail marketing. Response of these different packaging systems created positive response among the users.

However in our opinion, improved packaging system should be promoted for domestic as well as export market for post harvest loss minimization and quality retention. Private sector should come forward to manufacture and market nesting type plastic crates for easy packaging and transportation of agro-commodities.

### *Southeast Asian Packaging Experiences - Applicable to Bangladesh*

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Packaging as defined is the art, science and technology of bringing goods from its source the place of consumption at the minimum cost possible. Post harvest management, food safety including transport and logistics and storage are some of the fields of specialization where packaging extends beyond or overlaps, and product quality is the ultimate goal of these disciplines. Packaging is a quality assurance (QA) operation for the product to arrive at the intended market in its freshest state, free from dirt and foreign matter including insects, pests, spoilage microorganisms and pathogens and more importantly safe to consume.

Packaging in Southeast Asia particularly the Philippines is very much similar to that of the local conditions here. Cabbages, potatoes and carrots are bulk packed in transport systems from the farms to wholesale markets where the product is re-packed into 20kg Polyethylene (PE), Polystyrene (PS) or string bags. In some cases, traditional baskets made of bamboo lined with banana leaves and sometimes rice straw are used for packaging and transport of cabbages from the production areas to the market centers.

Washing of produce is done in some parts of the Philippines and Thailand. Bananas for export are transported by hanging bunches of bananas using a cable system brought to a small packing house for de-handing, washing, sorting, air-drying, fungicide application before packaging in plastic bags and corrugated fiber boards.

Banana exports from the Philippines to Japan, Hong Kong and Singapore are packed in cartons with fiber board on the bottom, holes on the sides for ventilation, lined with 0.02 mm polyethylene film with 4 to 6 hands, weighing 12kgs.

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