

Ned-Pak introduces use of MAP bags in Pakistan

Dutch NEDGLISH has opened office in Karachi, Ned-Pak, which was established in 2011 to export fresh produce by sea instead of by air from Pakistan over long distances. It is offering readily solutions for the post-harvest technology. Such facilities are now available for the first time in Pakistan. The aim of the firm Ned-Pak is to improve the quality and packaging of the post harvest supply chain for the domestic and export market of fresh fruit, vegetable and flowers. It shall enhance the quality levels to meet the international standards, as well as those of the local market.

In 2012, services for the "Post Harvest Technology & Solutions" were initiated in order to support the fresh produce exports for "extending the shelf life", as well as to improve the cool chain management and packaging. These specialized bags and cartons extend the shelf life of perishables, which are produced in the EU. Supporting materials include temperature data loggers and Anti-sprouting (Ethylene), which are inducted to support potatoes, apples, etc. Web shop has become a very important feature providing instruments which are not easily available in Pakistan at one platform.

The most important factors today are the post harvest treatments, which includes maintenance of cool chain management systems while preserving the visual appeal. The growers can enjoy a significantly good rate of return, not by altering the prices, but by reducing their spoilage, which is estimated at almost 40% in every variety.

The awareness of wastage, escalating high prices, inflationary impacts on all classes in Pakistan and alarming shortages have been the reasons that have made the farmers and distribution channels consider amendments to the existing practices.

Modified Atmospheric Packaging (M.A.P)

Modified Atmosphere Packaging (MAP) simply means an alteration to the internal atmosphere or packaging goods, so that it is different to the composition of the air we breathe. Modified Atmospheric Packaging includes vacuum packaging, which consists of a range of low or non-permeable films (barrier films) or containers. When food items are placed into the pack, the air is removed and the pack is hermetically sealed under a vacuum. No other gases are added to replace the space created by the removed air. Vacuum packaging is probably the most commonly used form of modified atmosphere packaging for food products.

Fresh produce when packed with MAP has the following advantages:

- ❖ It slows down ripening.
- ❖ Reduces weight loss, decay, incidence of jelly seed, lenticels spots and chilling injury.
- ❖ Preserves firmness and smoothness.
- ❖ Slows breakdown.
- ❖ Prolongs storage life.
- ❖ Reduces waste in supply chain.

Controlled Atmosphere Packaging (CAP)

CAP is another form of packaging widely used by the food industry. This system requires the maintenance of certain atmospheric

conditions around a product. This is mostly used for the bulk storage of perishable food like fresh produce.

As per the prerequisites provided by EU importers,



MAP bags are a suitable substitute for CA containers, palletizing, data loggers in the CA containers as well in-house data logging for temperatures and different other properties regarding shelf life and its extension are acceptable criteria for imports.

Successful results on kinnow have proven shelf life extension for two months in ambient temperature, therefore, the packaging in MAP Bags is expected to bring a saving amounting to over US \$20 million on the electricity bill in 2013/14. It will make kinnow more competitive in the international markets and common people in domestic markets will also find 20% decline in prices.

Mangoes have likewise been targeted with the "Bags & Cartons" project for the long distance exports with a target of 200 tons and another 1000 tons for domestic distribution and network. The open top ledge tray will bring savings of up to 25% in terms of logistics cost. It shall allow a large part of the Pakistani population to enjoy the seasonal fruit for a longer time span than previously, with 10% lower prices.

Fresha Bags

Fresha Bags, specially designed for the domestic kitchen are expected to offer 20% savings in the vegetable and fruit budget, along with an additional saving on the electric bill of the household. The wastage which shall be controlled by using this technology can save Pakistan US \$1 billion for the year 2013. ♦

