

Postharvest horticulture education, research and consultancy: future challenges in the Asia-Pacific region

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Abstract

Between 2010 and 2050, the economies of China, India, Indonesia, Japan, Korea, Thailand and Malaysia could account for some 57% of the world's total population as well as 91% of the total Gross Domestic Product (GDP) in the Asia-Pacific region. In addition the region, where 80% of the world's small and marginal farmers live and work, has the potential to lose or waste up to one-third of food produced as it moves along the supply chain. These significant features require a rethink in horticultural education programming, research and consultancy training in the region. The objective of this paper is to describe the current status of postharvest horticulture education, research training and consultancy in the Asia-Pacific region with an emphasis on the universities in the region. In a recent survey conducted results show that about one-third of universities in the region have baccalaureate and/or postgraduate qualifications that target postharvest horticulture. However, there is a general consensus that there are insufficient postgraduates in postharvest horticulture currently entering the market to replace those that were retiring. There is also an emerging opportunity for training people at the vocational level to provide the necessary skills/artisan training in postharvest horticulture and food technology. Higher priority areas for research training are in quality assurance, handling, packaging and transport, maturation, ripening and product losses, and storage and in consultancy area the higher priority areas are in handling, packaging and transport, cool chain and storage, economics, market access, and quality assurance. Challenges to be faced in the research and teaching sectors of postharvest horticulture include the need to seek further investment so as to strengthen a weak research and development sector, and greater collaborative and interdisciplinary research and teaching with the institutions and institutes, both nationally and internationally.