

Title Mapping stone fruit supply chains in North West Vietnam
Authors S.M. Newman, V.V.V. Ku, S.D. Hetherington, T.D. Chu, D.L. Tran, R.J. Nissen
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Abstract

Stone fruit production is an emerging industry in North-West Vietnam. In 1995, the area under production was estimated at 32,000 hectares. In line with Government planning, this is set to increase to 100,000 ha by 2010 to meet projected domestic demand and export opportunities. To facilitate the development of this industry, high quality varieties and modern fruit production practices have been introduced. However, with post-harvest losses remaining high (25-40%), capitalising on this development will require significant improvements to be made to existing supply chains. In this study, supply chains have been mapped to gain a better understanding of where the major losses occur along the supply chain and to identify where technology or supply chain modifications can best be made to address these issues. Quality deficiencies were identified using a number of approaches including: tracking consignments from farm to market; undertaking a quality audit of local, regional and city markets; and surveying supply chain partners (growers, collectors, wholesalers and retailers). In 2005 and 2006, 10 consignments of Tam Hoa plum were tracked through the supply chain from Bac Ha to Long Bien Fruit Wholesale market in Hanoi. Each consignment, comprising 5 cartons of fruit (30kg) included temperature and shock loggers to monitor the environment and quality assessments were carried out at each transit point in the supply chain. Whilst overall firmness changed little during transit, sorting and packaging practices led to significant physical damage (28%). Following the 14 hour trip to Hanoi, bruising (24%) and disease incidence (11%) increased dramatically. Quality audits of city, regional and local markets clearly demonstrated a premium for large fruit, with the major defects being bruising, poor colour and poor texture. Surveys of supply chain partners revealed more on the interrelationships between supply chain partners and some of the reasons for current supply chain practices. The implications of these findings on opportunities for modifying Vietnamese temperate fruit supply chains are discussed.