

**Title** Improving the safety of marketed horticultural produce in Asia with particular reference to Vietnam

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### **Abstract**

Produce safety can be affected in numerous ways. Soils can contain heavy metals and water can be polluted. Untreated manure can spread pathogens. Dirty vehicles and packaging materials introduce microbial contamination. Chemicals for ripening and surface decontamination at the post-harvest stage can affect food safety, as can waxes, colouring agents and insecticides. Markets and marketing practices are often unhygienic. Furthermore, farmers face socio-economic, price and informational constraints to improve product safety. Most consumers are unaware of food safety issues and are reluctant to pay more for “safe” produce. Unreliable marketing channels and uncertainty about price discourage improved practices. Risk-averse farmers believe that reducing pesticide use will lower yields. Farmers are often unaware of the correct pesticide or dose and their knowledge of microbial contamination is negligible. Regulatory controls suffer from lack of compliance, high costs and poor coordination between the agencies involved. Several countries have introduced programmes to promote “safe” vegetable production, but much produce still fails to meet minimum standards. In Vietnam there are many reported incidences of food poisoning caused by microbial infections, chemical contamination and natural toxins. Banned chemicals continue to be used and legal chemicals misused. However, a new law goes some way towards overcoming problems of lack of coordination. Farmers following the Government’s “safe” vegetable programme often produce more than the market can presently absorb as consumers resist vegetables grown with no or limited pesticides if they give evidence of infestation. At the same time, “safe” vegetable yields are lower than traditional production practices and production costs can be higher. The paper concludes that changing practices to improve safety will require recognition that farmers and traders need incentives to make changes. Ways in which some of the constraints faced can be overcome are suggested.