POSTHARVEST LOSSES OF TROPICAL FRUITS IN PACIFIC ISLAND COUNTRIES

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Horticultural small-holder farmers and market vendors in tropical regions often incur high levels of postharvest loss. As domestic tropical fruit production has increased globally, so too has postharvest loss. The United Nations FAO SAVE FOOD initiative reported that fruit and vegetable loss of up to 45% of gross farm-gate production. Other authors have reported global losses of 30 to 50%, or about 1.3 billion tonnes. Postharvest loss not only equates to a loss of edible food, but an ineffectual use of critical farm inputs such as fertilizer, irrigation water, land, planting materials, energy and human labour. High postharvest loss often disincentivizes small-holder farmers from increasing production, undermining efforts to improve rural communities and build sustainable tropical fruit exports.

Postharvest horticultural value chains involve a series of critical points, including harvesting, grading, storage and transportation, each of which can adversely impact on product quality and shelf life. Tropical fruit value chains, particularly those in the Pacific region, often lack postharvest infrastructure, have limited or ineffective cool chain management, poor transport logistics, and are vulnerable to natural disasters.

Reducing tropical fruit postharvest loss, benefits farmers and vendors and contributes to food systems sustainability and regional food security. Horticultural loss can be reduced through the adoption of improved production practice including better performing cultivars, pest and disease control, increased chain coordination. This paper discusses tropical fruit postharvest loss in the Pacific, its contributors and potential pathways to reduce these losses.