

Title A quantitative analysis at an operational level for sopropro (*Mimordica charantia* L.) from Suriname to the Netherlands using supply chain characteristics and performance indicators

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Abstract

Globalization may offer opportunities to solve the problem of rural poverty by increasing the accessibility of markets for horticultural products from the transitional economies. However, bottlenecks within supply chains have to be solved for such economies to benefit. Standard analysis methods have to be developed to evaluate the performance of supply chains for these regions. From Suriname to the Netherlands, the supply chain for sopropro (*Mimordica charantia* L.) was analysed based on product volume, flow rate, prices, activity based costs and profitability as performance indicators. It was concluded that the number of businesses, number of business owners and product owners were relatively small. However, the transport distance was relatively long and the rate of product cooling relatively low when compared to a theoretical reference chain. Losses were 5.5% (of 360 kg) at the exporters and 4.1% (of 340 kg) at the importers and 9.3% (of 54 kg) at the retail store. The time lapse in the chain varied from 42 to 99 hours, depending on when the product was sold in a retail store. Selling prices increased from US\$1.31/kg for the grower to US\$1.85/kg, US\$3.44/kg and US\$4.38/kg at the retail store. Activity based costs were US\$0.38/kg for the grower and US\$0.25/kg, US\$1.01/kg and US\$0.00/kg for exporter, importer and retailer respectively. Profitability, based on activity based costs, was 71%, 53%, 37% and 100% respectively. It was suggested that statistical analyses of single chains using a proper set of chain characteristics as independent variables and performance indicators as dependent variables, may offer a method to analyse supply chains from the developing countries.