

ABSTRACT

This study analyzes the income and marketing of premium hydroponic melons produced using Internet of Things (IoT)–based smart farming technology by Miharu Farm, the pioneer and only premium hydroponic melon business in Paya Bakong Subdistrict, North Aceh Regency. Although this business has successfully implemented IoT–based smart farming in its greenhouses, it still faces relatively high initial investment costs, fixed selling prices across marketing channels, and simple marketing practices in which all marketing costs are borne by the producer, conditions that affect the income received. This study aims to analyze the income generated from this premium hydroponic melon business and to identify and analyze its marketing practices. A case study approach was employed using quantitative data obtained through direct observation and interviews with the business owner, Mr. Abdul Hamid, supplemented by secondary data from production and farming cost records. Data were analyzed using formulas for total production costs, total revenue, and net income, along with a quantitative descriptive analysis of marketing costs, revenue, and profit across each channel. The results show that during January – March 2026, the business produced 700 kg of Sweet Lavender melons sold at IDR 40.000 per kilogram through agrotourism, online sales via WhatsApp, and the Suzuya Lhokseumawe retail store, generating total revenue of IDR 28.000.000, total production costs of IDR 20.998.815,5, and net income of IDR 7.001.184,5 per production cycle. Two marketing channels were identified, the zero–level channel (producer to consumer), accounting for 57,14% of sales with a profit of IDR 4.161.106,4 and the first–level channel (producer to retailer to consumer), accounting for 42,86% with a profit of IDR 2.840.078,1. The study concludes that the business remains profitable despite lower production volume than similar businesses, and that products sold through different marketing channels incur varying marketing costs, resulting in different profit levels for each channel.

Keywords: hydroponics, income, Internet of Things, marketing channel, premium melon