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CONCEPTUAL FRAMEWORK FOR DECISION SUPPORT SYSTEM OF THAI FRUIT

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ABSTRACT

This article aims to propose a conceptual framework for Decision Support System (DSS) of Thai fruit's activities in Thailand. This research presents a new model with the application of Cold Chain Management, which will be integrated to the Quality Control (QC) of the fruits, harvesting to extraction, storage and transportation process, and including the export of fruits to a customer in a foreign country. The framework also focuses on forecasting method to predict the damage caused by the choice of each activity in the process. The simulation analysis on logistic model will then be designed to determine the possibilities of outcome from various parameters, for example, farmers, exporters, appropriate age to harvest, mode of transportation of clients in each country, transportation costs, fines, and the rate of loss that is expected to occur. The Decision Support System will be used to aid the farmers on the optimal reasonable sale price, provide the exporters with the information on how to manage the fruits properly during shortages or harvest season. So that the fruits are available to the needs of customers in every moment, accessible raw materials, development of domestic production, higher quality export and minimum waste.

Keywords: Conceptual Framework, Decision Support System, Thai Fruit, Cold Chain