

Chalakorn Wanakasem. 2003. **Production and Marketing of Health-Safety Vegetables Khon Kaen Province.** Master of Science Thesis in Agribusiness, Graduate School. Khon Kaen University.[ISBN 974-329-186-5]  
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### **Abstract**

The objectives of this research were; 1) to study the production situation, production cost and returns from the health-safety vegetable production, and 2) to study the marketing systems as well as problems in production and marketing of the health-safety vegetables. The research was based on the 2001 / 02 production year, with 40 vegetable farmers who grew health-safety vegetables under plastic net structure in comparison with those without net, 21 health-safety vegetable wholesalers and retailers in Nampong and Samsong Districts of Khon Kaen Province. The study was focused on five types of health-safety vegetables namely; Chinese kale, Chinese cabbage, spring onion, coriander and yard-long bean. The Sample groups were derived from a purposive sampling method. Data collection was carried out through structured questionnaires. The data was statistically analyzed for percentage using SPSS program and for production cost, return on investment and marketing of health-safety vegetables using Microsoft Excel program.

The research findings revealed that, for socio-economic aspect, the household heads of vegetable growers in plastic net and those without net were amounted to 80 percent and 90 percent respectively with an average age of 45 and 49 year old respectively. Most of them finished Grade 4. The average number of family members full-time engaged in farming was 2.40 and 2.60 respectively. The average farmland used for health-safety vegetable plantation was 0.64 rai and 0.58 rai respectively.

The analysis of production cost and return from the production of health-safety vegetables with and without plastic net showed that the production cost of health-safety vegetables without plastic net was higher, mainly from the cost of vegetable seeds, chemical fertilizers and labor for watering. This was because the production without plastic net setting required disease and insect resistant seeds as well as the needs for more refreshing fertilizers in vegetable plots. That resulted in higher products for spring onion

coriander and yard-long bean. In addition, the products of health-safety vegetables without plastic net were higher than that in the plastic net setting as they received more sunshine. Health-safety vegetables that should be grown in plastic net setting were Chinese kale and Chinese cabbage as they gave greener, sweeter and more crispy yield.

The research finding on the marketing showed that farmers who grew health-safety vegetables in plastic net also acted as retailers at Banglampoo Market in Muang District or Khon Kaen Province. Those vegetables would be certified by the Provincial Public Health Office or the Department of Agricultural Extension in Khon Kaen Province. The farmers who grew health-safety vegetables without plastic net setting either sold their products through middlemen or the wholesalers at Poonpon Market in Mung District of Khon Kaen Province. The prices they received were based on those of general vegetables. In case the growers acted as retailers themselves, they would sell the products at the Khon Kaen's Municipal markets. The prices of the health-safety vegetables were 35-50 percent higher than those of general vegetables. The highest marketing cost for Chinese kale, Chinese cabbage and yard-long bean for wholesalers was the marketing cost, which included the cost of containers, water and electricity, telephone, and the stall renting, The cost for spring onion and coriander was the transportation cost due to their perishable property. Main problem in marketing the health-safety vegetables was the price competition among the sellers at the same level.

Farmers should plan to grow a variety of health-safety vegetables to reduce marketing risks, They should also have sound knowledge on the use of fertilizers, herbicides and pesticides in order to reduce the amount or use no chemicals in the production. Collective market should also be practiced and planned by farmers in the growing and marketing aspects in order to reduce the over-production of health-safety vegetable, which results in unfair pricing. Health-safety vegetables that have passed safety check should be labeled as certified so that the consumers could easily observe.