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Abstract

The objective of this research was to study the socio-economic, the production and marketing situation of Khao Dok Mali 105 Rice for growers, buyers at different levels and rice mill processors. The research was based on the 2000/01 production year, with 100 Khao Dok Mali 105 Rice farmers, 14 buyers of various levels and 3 rice mill operators in Phon District of Khon Kaen Province. The Samples were derived from a purposive sampling method. Data collection was carried out through structured questionnaires. The data was statistically analyzed for percentage and standard deviation using Microsoft Excel program.

The research findings revealed that; for socio-economic aspect, 80 percent of family heads of Khao Dok Mali 105 Rice growers was men with an average age of 53.55 years old and had finished Grade 4. They had no supplementary occupation aside from agriculture. The average number of family members was 4.33, with 2.56 members full-time engaged in rice farming. The average farmland holding was 17.86 rai, of which 8.75 rai was used for Khao Dok Mali 105 Rice plantation. The farmers had 9.54 years of experience in Khao Dok Mali 105 Rice planting. Most of them used transplanting method and obtained an average yield of 245.87 kilogram per rai. The product was sold immediately after threshing. For financial situation; it was found that the average cash income from Khao Dok Mali 105 Rice was 10,468.96 baht per household, or equivalent to 1,196.45 baht per rai based on the average price of 5.90 baht per kilogram. The average case expenditures for Khao Dok Mali 105 Rice plantation was 7,033.78 baht per household, or 803.86 baht per rai, or 3.27 baht per kilogram. The average production cost for Khao Dok Mali 105 Rice in three sub-districts was 1,423.99 baht per rai, where Pekiya Sub-district showed the highest. Maximum net profit of 55.15 baht per rai could be obtained in Lomkhom Sub-district.

Khao Dok Mali 105 Rice marketing in Phon District of Khon Kaen province was seen in two levels namely local market and end market. Buyers and government institutions involved in Khao Dok Mali 105 Rice marketing were; local collectors, agricultural cooperatives, Bank of Agriculture and Agricultural Cooperatives (BAAC), rice mill operators, middlemen, wholesalers and retailers. The marketing was carried out in two techniques; measurement and weighing of whole truck. The pricing of Khao Dok Mali 105 Rice was based at local rice mills. Husk and white grain ratio was determined by rice variety, moisture content, grain characteristics and the mill efficiency. 42.87 percent of farmers sold Khao Dok Mali 105 Rice to the rice mill. Large volume of paddy rice was collected before being transformed into white grain. 55.00 percent of the milled rice was subsequently sold through wholesalers, retailers and consumers.

Transportation cost of 110 baht per ton was the highest marketing cost for buyers at different levels. The marketing margin between farmers and local collectors was 310 baht per ton, while that of local collectors and rice mill was 1,130 baht per ton. At this point, the farmers received the profit of 110 baht per ton, local collectors 88 baht per ton, and the rice mill operator received primary profit of 285 baht per ton. Aside from that, income from rice by-products of 315 baht per ton added up the net profit for the rice mill operators of 600 baht per ton.

The farmers needed assistance in the following areas; rice seed, capital for investment and product price. They encountered the following problems; rice seed, chemical fertilizers, pests and pest control, capital for investment, natural disaster particularly in rain-fed area, and the product price. The problems that buyers encountered were; insufficiency of product throughout the year, short storage due to insect pest contamination. Meanwhile, local collectors could not obtain targeted quantity because farmers were attracted by a project of BAAC that offered a higher price. The problem of the rice mill operator was that large number of rats and birds attacked the stored products.