

ABSTRACT

Organic farming, which is environmentally friendly and produces healthy food, began in earnest after the appearance of environmental impact of chemical use in agriculture in the era of green revolution. Sragen regency is one of the driving force of organic farming, especially organic rice. Averagely, productivity of organic rice in Sragen in 2001 to 2008 showed a higher yield than productivity of inorganic rice. By comparing the productivity and the amount quantity of rice production in Sragen, high-productivity of organic rice production has a relatively lower number than inorganic rice production that has a low-productivity. The quantity is about 10% of the total quantity of inorganic rice production.

This study aimed to, first, to analyze the influence of factors of production of organic and inorganic rice, second, to analyze the level of efficiency as well as to determine the income and expenses of organic rice farming in Sukorejo Village inorganic rice farming in Jambeyan Village, Sambirejo district, Sragen Regency. The research method uses multiple regression analysis and frontier analysis using crosssection data sourced from the primary data.

Based on survey result, revealed that the factors of production such as land, seeds, and fertilizer, have a positive impact on the quantity of organic rice production, while labor have a positive but insignificant impact. The most influencing factor is land. While inorganic rice farming, factors of production such as land and fertilizer have a positive and significant impact o quantity of rice production, while pesticide has a negative and significant impact, and seeds and labor have positive and significant impact. Value of technical efficiency of organic rice is 0.963, it shows that organic rice farming in the study area is not technically efficient, thus, input use should be reduced. While value of technical efficiency of inorganic rice is 0.814, it shows that inorganic rice farming in the study are is also not technically efficient.. This study also notes that the R/C ratio are 4.10 for organic rice farming and 1.70 for inorganic rice farming. It shows that organic rice farming is more profitable than inorganic rice farming.

Key-words: Efficiency, organic rice, inorganic rice, production, frontier.