CRITICAL SUCCESS FACTORS OF PADDY PRODUCTION AT KEMUBU AGRICULTURAL DEVELOPMENT AUTHORITY (KADA)

Mohamad Safri Ya, Asry Yusoff, Nik Maheran Nik Muhammad

ABSTRACT

The research was conducted to understand the factors that can affect production of paddy. In this study, the researcher has narrowed down the scope by focusing on the paddy farming area in Kelantan. The research will be specifically conducted on the KADA paddy granary, which is the largest paddy granary. The study is important to help farmers increase their income by increasing production of paddy. In addition, increase in production of paddy is necessary since it can solve a few problems such as poverty rate, shortage of rice and deficit in trade balance. The data that has be used in this study are comes from both primary and secondary data. The results will be obtained by running a specific test by using SPSS 14. The result of this research is important in identifying the variables that has affect on the paddy production. Thus, its can help farmers and government in increasing paddy production. Since researcher provides several recommendations in order to increase the paddy production, researcher hopes that this will help farmers and government solving the problem that related with the paddy farming and boost the production of paddy in Malaysia.

1.0 INTRODUCTION

Production of rice is an important agricultural sub-sector of the economy. Apart from the major food crop for the people of this country, it has also created employment opportunities and income to those who live in rural areas. In 2008, the country has a total of 2384 million tonnes of paddy with an area of 670.524 hectares of planted area. Rice planting has taken 97.69% of total output and 89.72% of the total crop area. The rest are upland rice crop is mostly grown in Sabah and Sarawak. On average, every hectare of rice field can produce 3.556 kg of rice per season (Jabatan Pertanian, 2009a).

In the meantime, due to price hikes in fuel leads to many problems face by farmers. Cost of production increase in order to produce paddy and it is affect on paddy farmers' net income. Therefore, success factors in agriculture particularly in paddy farming must be identified as soon as possible so that, its production level can be increase and reduce the dependence on rice imports. This would raise paddy farmers' income levels and at the same time reduce the poverty rate at the rural area especially among the paddy farmers itself.

2.0 LITERATURE REVIEW

2.1 Irrigation

Liao et al. (2008) in their studies in China have emphasized that it is very important to include irrigation as a production factor in the analysis of global agricultural production. English et al. (2002) believe that good irrigation has boosted the supply of food to the people of the world.

Tesfaye (2008) describes irrigation has helped farmers in explore new technologies which can lead to increased productivity, large-scale production of agricultural products is higher.

2.2 Poison

Rother et al. (2008), Jors et al. (2006), Lu et al. (2006) and Saffron (2002) through their study is important to explain that unlicensed use of poisons in agricultural spending. Allpress et al. (2008) in a study of spending corn in Illinois found that the use of poisons to increase productivity. In one other study conducted by Morse & Mannion (2009) in Africa found that the use of poisons to increase productivity expenditure and so on farmers' income.

Atreya (2008) has made a study on farmers in Nepal. Although the use of poisons may give a negative impression on stage of health farmers but it is also to assist them in increasing productivity and income.

2.3 Chemical fertilizer

Over time it involves a change in the field of science has helped the agricultural sector. Ryan (2008) emphasized the key factors that influence agricultural production is the use of chemical fertilizers. The use of chemical fertilizers helped a lot in increasing agricultural production (Cutler, 1978; Foster, 1999a; Mazoyer & Boudart, 2006).

2.4 Machinery

Adewumi (2008) explains that the use of machinery, not only can reduce the use of force but also to increase production. In the United States, there are fewer than five percent of the populations engaged in agriculture, but food supplies sufficient to sustain the population and the rest is exported. Instead of more than 70% of the total African

population is involved in food production but food supplies are insufficient. This is because agricultural practices that use the machinery is not practiced widely in Africa.

2.5 Modern varieties of seeds

Chatrath et al. (2007) in his study found that the use of modern varieties of seeds have an important role in determining the production of wheat in South Asia. Meanwhile, Mujica et al. (2003) study the production of quinoa in Peru found that the increase in crop production is caused by the use of modern varieties of seeds.

2.6 Subsidies

In all modern economies, agricultural activity is difficult to sustain on a commercial basis without some kind of government support due to the uncertainties associated with this sector. This becomes particularly important in the context of the concern for food safety. Subsidies may per se not be bad or undesirable; they are a reality the world over. Farm subsidies granted by OECD countries in 2001 were \$311 billion, that is, almost one billion dollars a day.

2.7 Loan

Studies on the determinants of agricultural loans are numerous that liquidity levels (assets) is an important determinant of rural credit in Australia while the interest rate is not. Iqbal (1983) on the other hand concluded that the expected return from agricultural investment is an important factor that determines the amount of loans demanded. Bagi (1983) included farm size as a determinant of agricultural loans and found that it is significant and positively correlated suggesting that the larger the farm size, the more loans are needed. In our study, all the factors discussed above are incorporated into one equation to see whether they can explain agricultural loans demand in Malaysia.

2.8 Number of workers (labor)

Labor is one of the factors of production (Hailu, 2008; Nelson, 1981). It is very important in a production process. Labor offers services such as energy and ideas. Factors of production such as land, capital, entrepreneurship and raw materials will produce with energy and ideas are in the process of producing goods and services.

2.9 **Land**

The relationship between land size and productivity had been debated since 1960s. Literature often mentions an inverse correlation between land size and productivity (Sen, 1962; Chaynov, 1966: Bhagwathi & Chakravarty, 1969; Saini, 1969; Bharadwaj, 1974). It was observed that small land on an average employed more input (per unit area) and as a result had a higher output. Cornia (1985) analysed the relationship between factor inputs, yields, and labour productivity for farms of different sizes in 15 developing countries. These results showed a positive relationship between farm size and productivity in Bangladesh, Peru, and Thailand.

2.10 Education

Education can increase the productivity potential of an individual. According to Al-Hassan (2008), level of education whether formal or informal is very useful where it is a good mechanism to improve efficiency in paddy farming.

Hanushek & Kim (1995) found that there was a significant relationship between education and growth in labor productivity and quality. The study found that education in the United States to encourage workers to think and communicate in improving production processes and improve productivity.