CONTRIBUTING FACTORS TOWARD THE PERCENTAGE INCREMENT OF OIL PALM EXTRACTION RATE (OER)

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ABSTRACT

Oil Extraction Rate (OER) is one of the important aspects that can contribute to the income of a plantation. It represents the revenue from their production. The OER is used as an assessment unit to measure the performance of a mill or plantation and is influenced by the amount of oil realized for each hectare of land under cultivation. In simpler terms, a higher percentage in the OER would mean that more oil could be extracted from the fruits. This study will help the oil palm plantation to maximize their profit by maximizing the OER of their palm oil. The research method is designed to determine the effect of plantation management on the percentage of oil palm extraction rate. The independent variables are Harvesting, Loose fruit collection, Length of talk and Transportation. This study took place at FELDA all across the state of Negeri Sembilan. The descriptive approach was used in this study to determine factor increasing of OER toward the increasing revenue of the plantation. This research will analyze data by using Statistical Package for Social Sciences (SPSS). Purpose of this study is to find what factor contribute more in the increment of OER percentage. The research conclude that harvesting is the most significant factor in increasing the OER.

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CHAPTER 1

INTRODUCTION

1.1   Background of study

Oil palm*(Elaeis guineensis)* originates from West Africa. Oil palm industry in Malaysia was started when four seedlings from the Africa was planted at Botanical Garden in Bogor, Indonesia in 1848. After that, the seedlings were planted on the side of the road for ornamental plant at Deli, Sumatera at 1870 and Rantau Panjang, Kuala Selangorin 1911 until 1912. Oil palm plantation is a major crop that is planted in Malaysia since 1917 in Ladang Tenmaran at Kuala Selangor(Pakpahan, 2013). The plantation used Dura Deli seedling from Rantau Panjang. Oil palm is a crop that can produce oil. The oil can be used to produce many products such as cooking oil, soap, cosmetic product, detergent and biodiesel. Palm oil is oil extracted from the palm kernel which has non-glyceride components such as kernel shell pieces, product of oxidation and trace metals((Crude Vegetable Oil, 2005)). It contains high amount of saturated fat compared to other vegetable oil such as corn oil, coconut oil, and sunflower oil which are high in unsaturated oil.

Nowadays, Malaysia is a second largest producer of oil palm after Indonesia (Malaysian Palm Oil Industry, 2011). They are the largest producer of palm oil in world. Ninety percent of global palm oil production is from these two countries. After Indonesia and Malaysia, other country in top five of palm oil production is Nigeria, Thailand and Colombia. The industry of palm