

**COMPARISON BETWEEN MINI TRACTOR TRAILER WITH GRABBER
AND TRACTOR ASSISTED IN FIELD FFB COLLECTION AT LADANG
KETENGAH PERWIRA CENNEH TERENGGANU: A CASE STUDY**

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ABSTRACT

CASE STUDY ABOUT COMPARISON BETWEEN MINI TRACTOR WITH GRABBER AND TRACTOR ASSISTED IN FIELD FFB COLLECTION TRANSPORTATION AT LADANG KETENGAH PERWIRA SDN BHD

Mini tractor with grabber (L28000) and tractor (M9000) used in field FFB collection. This mechanization helps to increase labour productivity for in field FFB collection in the oil palm plantation. Case study was conducted to test the comparison of total cost per month for both mechanizations. Based on data collected, the total cost per month for mini tractor with grabber results is Rm6, 877.19 cost per month and Rm6052.91 cost per month for tractor assisted in FFB collection. The factor that affects the total cost for both mechanizations is the type of soil, topography, handling of workers and cost in implementation on tractor such as grabber and trailer. The result shows that mini tractor with grabber higher in total cost per month than tractor assisted in field FFB collection transportation

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CHAPTER 1

INTRODUCTION

1.1 OVERVIEW OF AGRICULTURE MECHANIZATION IN MALAYSIA

Areaceae palm family consist of two species that known originated at the tropical rain forest of West Africa and also Malaysia is well known as fourth largest contributor to the national economy. It's become the most important community crops and reached as the most highly organized sector in Malaysia. Now days, Malaysia is on the second place of producer in the world after Indonesia on the top. Based on the oil palm commodity, the estimate production of palm oil in 2014 was 19,800.00 (1000MT) (Agriculture, 2014). Oil palm matured areas has been forecast around 4.79 MnT Ha with the CPO production which is 20.09 MnT (2015) up from 19.67 MnT (2014). This has put Malaysia as the second bigger producer and exporter of oil palm in the world.

Oil palm industry in Malaysia based on export oriented industry that depend on situation in world market and mostly oil palm industry production is exported to the outside countries of foreign countries and only 10% of the production is consumed by local market (Yik Nam, 2011). Oil palm industry in Malaysia believe and able to become a major economic sector for revenue of the country. In agricultural and plantation sector the agricultural mechanization implementation is still fresh also new and still under research and development. Mechanization became necessary in the process of trying to remove the tedious aspect of the oil palm cultivation down to processing stage of the fruits (Fatai Akande, 2013)