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UNIVERSITI
TEKNOLOGI
MARA



FACULTY OF PLANTATION AND AGRO-TECHNOLOGY
DIPLOMA IN PLANTING INDUSTRY MANAGEMENT (DPIM)
UNIVERSITI TEKNOLOGI MARA SARAWAK

PRACTICAL TRAINING REPORT

SAMARAHAN PLANTATION SDN BHD.

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ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious, Most Merciful, Peace and blessings be upon Prophet Nabi Muhammad Ibni Abdullah SAW, the holy family and his companions selected. Alhamdulillah, I would be grateful to the Almighty God because permission, blessing and His guidance enabled me to complete an industrial training, completing the writing of this report and will entitle me to receive a diploma.

For three (3) months I undergo my internship that on early 30 November 2015 till end of 6 March 2016, I finally successfully completed my Industrial training report. For the remaining 3 months more that I have to continue my training in order to complete my course, I pray to Allah hoping my journey is in His bless. I also would like to extend my thankfulness to the most precious person in my life, my father and mother for all their moral support, financial support and also to my friends for never ending reminding me to always be honest and trustworthy during my training here. As for my supervisor from Universiti Teknologi Mara (UiTM), Mr. Muhammad Syukrie Bin Abu Talib. I thank you for all the reprimand and guidance as it is very helpful for me in completing my report. Last but not least I would like to extend my appreciation to my attachment estate (Samarahan Plantation), Mr Choo Yee Ching (Estate Manager), Mr Mambai ak Ijau (Assistant Manager) for their knowledge, guidance and support during my training. Apart from that I also would like to acknowledge Mr. Edwin Kasa, Mr. Borhan bin Mail, Nuli ak Buja (field supervisor), Mr Hendry Misan ak Minot (Chief Clerk) for their advices and patiently guiding me while I am working here as a trainee. Not forgotten for all the staffs working at Samarahan Plantation Sdn Bhd Human Resource Department. I very much appreciate for their entire kindness helping and teaching me when I'm working there. I am very lucky to have much a helpful colleagues and I never felt out in any situations.

I am entrusted to undergo my industrial training at Samarahan Plantation for three (3) months before I can complete my subject course in order to graduate. During these 3 months working here I am exposed to many new experiences which are very valuable for me to learn and carry out with devotion when I face the real world of working in the future. Undergoing for industrial training has become one of the curricular that college student compulsory to attend especially for those who studied at IPTA. The motive of this action is to expose students and let them experience the environment of the real world of working before graduating. It is also to prepare students to face the real challenge and learn how to find solution when problem

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INTRODUCTION

In order to complete my studies in Diploma Plantation Management at Universiti Teknologi Mara (UiTM) Sarawak, it was compulsory to undergo this course practical and industrial training, which require us to explore and experience the real working environment at the estate. I have decided to choose Samarahan Plantation Sdn Bhd as my practical training place as this authority has become one of the well-known authorities in estate in Sarawak.

Objective of the Industrial Training Program

It is compulsory for college student to pass the industrial training before being awarded the Diploma in Plantation Management. Student will be attached to the Government Department, Organizations or Companies for a specific period of time, to be exposed to the actual working environment whereby student will encounter many new problem and challenges. There are several specific industrial training programmed objective.

- a) To expose student to actual working environment.
- b) To enhance the student knowledge and skills.
- c) To instill the qualities, responsibilities and self-confidence.
- d) To expose student to safety practices and regulations in an industry.
- e) To instill the spirit of teamwork and good relationship between students and fellow workers.
- f) To assess the student ability and competencies in their preparations to join the workforce upon completion of their studies at college.

MORPHOLOGY OF OIL PALM

Palm oil is an edible vegetable oil derived from the mesocarp (reddish pulp) of the fruit of the oil palms, originated from West African, scientific name of oil palm *Elaeis guineensis*, and family *Palme*. Introduced to Malaysia in 1870 as an ornamental plant.

Palm oil is naturally reddish in color because of a high beta-carotene content. It is not to be confused with palm kernel oil derived from the kernel of the same fruit, or coconut oil derived from the kernel of the coconut palm (*Cocos nucifera*). The differences are in color (raw palm kernel oil lacks carotenoids and is not red), and in saturated fat content: Palm mesocarp oil is 41% saturated, while Palm Kernel oil and Coconut oil are 81% and 86% saturated respectively.

Along with coconut oil, palm oil is one of the few highly saturated vegetable fats. It is semi-solid at room temperature and contains several saturated and unsaturated fats in the forms of glyceryl laurate (0.1%, saturated), myristate (1%, saturated), palmitate (44%, saturated), stearate (5%, saturated), oleate (39%, monounsaturated), linoleate (10%, polyunsaturated), and alpha-linolenate (0.3%, polyunsaturated). Like all vegetable oils, palm oil does not contain cholesterol, although saturated fat intake increases a person's low-density lipoprotein (LDL) and high-density lipoprotein (HDL) cholesterol.

Palm oil is a common cooking ingredient in the tropical belt of Africa, Southeast Asia and parts of Brazil. Its use in the commercial food industry in other parts of the world is buoyed by its lower cost and by the high oxidative stability (saturation) of the refined product when used for frying. A recent rise in the use of palm oil in the food industry has come from changed labelling requirements that have caused a switch away from using Trans fats. Palm oil has been found to be a reasonable replacement for Trans fats; however, a small study conducted in 2009 found that palm oil may not be a good substitute for Trans fats for individuals with already elevated LDL levels.

The use of palm oil in food products has attracted the concern of environmental activist groups; the high oil yield of the trees, attractive to profit-driven investors, has led to the clearing of forests in parts of Indonesia in order to make space for oil-palm monoculture. This has resulted in significant acreage losses of the natural habitat of the orangutan, of which both species are endangered; one species in particular, the Sumatran orangutan, has been listed as "critically endangered". In 2004, the Roundtable on Sustainable Palm Oil (RSPO) was formed to work with the palm oil industry to address these concerns. Additionally, in 1992, in response to