FINAL YEAR PROJECT REPORT

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DESIGN OF A HARVESTING DEVICE FOR OIL PALMS

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ABSTRACT

Mechanisation in the oil palm industry becomes a critical issue in plantations since the increasing of labour cost. Various parties participate in the design and development of mechanisms that can overcome this problem including the government sectors, private sectors and overseas consultants.

The development of harvesting device started early in 1983, introduced a various concept of harvesting. Most of the designs did not achieve the performance required. A few concepts that performed well, were however during infield testing are not economically at that time. The total operation cost is still found very high. ntil nowadays there are no such design that fulfils the requirement.

A new concept of harvesting device proposed here tries to fulfil the requirement of harvesting device. A few investigations and experiments were carried out during the project. The combinations of various harvesting concepts from the existing design make it perform well slightly as required performances. The aims of this project are to design and fabricate a device with which it can be a reference for the next development.

Theoretically the proposed design achieves the aims of this project and provides information for the next development. However, further investigations and detailed study on this problem should be continued in order to come up with an effective and economical harvesting device.

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