



UNIVERSITI PUTRA MALAYSIA

**ECONOMIC ANALYSIS OF OIL PALM FRESH FRUIT BUNCH
PRODUCTION AMONG INDEPENDENT SMALLHOLDERS IN JOHOR,
PAHANG AND PERAK, MALAYSIA**

BUSAYO RASHIDAT YUNUS-JUNAID

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By

BUSAYO RASHIDAT YUNUS-JUNAID



**Thesis submitted to the School of Graduate Studies, Universiti Putra Malaysia, in
Fulfillment of the Requirements for the Degree of Master of Science**

July 2013

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DEDICATION

This thesis is dedicated to my beloved ones

My Mother

My Husband

&

My Sisters



Abstract of thesis presented to the senate of Universiti Putra Malaysia in fulfillment of
the requirements for the degree of Master of Science

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Faculty: Agriculture

The study analyzed the comparative advantage of Fresh Fruit Bunch (FFB) production among independent smallholders. The independent smallholders have been found to contribute significantly to FFB production despite facing the same input and output market prices as the other categories of plantation owners. At present in Peninsular Malaysia, there is no longer room for land expansion for oil palm; this makes it necessary to increase yield on the existing land. The independent smallholders form the focus of this research because they are the first to be adversely affected if there are downward pressure on prices of CPO and upward pressure on prices of inputs. However, they will be spared if they produce efficiently and at reasonable returns. The study will

assist in determining the area where improvement can be effected in order to increase private profitability.

The analytical framework used for this research was the Policy Analysis Matrix (PAM). It was used to measure resource use efficiency (DRC), social profitability (SCB) of the independent smallholders as well as to estimate the indicators of government policy interventions like the Nominal Protective Coefficient (NPC) and the Effective Protection Coefficient (EPC). Farm budget on input requirements was important for this analysis and data was collected from 147 independent smallholders in three states through the use of questionnaires. Secondary data were also collected from government ministries, departments, bulletin and various agencies. The result of the estimation of the ratios revealed that the DRC of Johor, Pahang and Perak was 0.02, 0.03 and 0.04 while the SCB of the three states was 0.04, 0.05 and 0.07 respectively. The study proves that both methods provide similar ranking where Johor emerges as the most efficient state. Thus, independent smallholders were found to have comparative advantage in FFB production and were socially profitable and private profit is positive in all the states. After 50% decrease in output and 55% increase in input price simulations, the independent smallholders in the different states were still having comparative advantage.



The result of the analysis of government protection indicators showed that in terms of NPC of output, Johor, Pahang and Perak have the values of 1.03, 1.01 and 1.05 respectively which indicate that there is implicit subsidy to the production of the output

of the independent smallholders. The NPC of input is 1.15 for each of the states which imply that the independent smallholders are paying 15% more for their tradable input than they would if they had been able to obtain them at their parity prices. The result suggests that government policy is increasing input cost for the production of FFB. The result of the EPC is 1.03, 1.00 and 1.05 respectively for Johor, Pahang and Perak. The EPC for all the state is approximately 1, this shows there is no intervention or the net impact of various distortions in both the input and output markets result in a neutral effect on the value added. It implies that FFB production of the independent smallholders under export parity condition is competitive.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai
memenuhi keperluan untuk ijazah Master Sains

**ANALISIS EKONOMI PENGELUARAN BUAH TANDAN SEGAR KELAPA
SAWIT DI KALANGAN PELEDAH KECIL PERSENDIRIAN DI JOHOR,
PAHANG DAN PERAK, MALAYSIA**

Oleh

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Kajian ini bertujuan untuk menganalisa kelebihan perbandingan dalam pengeluaran Buah Tandan Segar (BTS) di kalangan pekebun kecil bebas. Pekebun kecil bebas didapati telah menyumbang dengan ketara kepada pengeluaran BTS walaupun menghadapi harga pasaran input dan output yang sama seperti pemilik ladang kategori lain. Pada masa kini tiada lagi penambahan kawasan bagi penanaman kelapa sawit di Semenanjung Malaysia; ini menyebabkan perlunya peningkatan hasil pengeluaran di atas tanah sedia ada. Pekebun kecil bebas menjadi fokus utama kajian ini kerana mereka merupakan orang pertama yang akan terjejas jika berlakunya penurunan mendadak ke atas harga minyak sawit mentah (MSM) serta kenaikan mendadak harga input di pasaran. Walau bagaimanapun, mereka tidak akan terjejas jika mereka dapat

menghasilkan pengeluaran yang cekap pada pulangan yang munasabah. Kajian ini akan dapat membantu dalam menentukan kawasan di mana penambahbaikan boleh dilaksanakan dalam usaha untuk meningkatkan keuntungan sosial.

Kerangka analisis yang digunakan dalam kajian ini ialah Matriks Polisi Analisis (PAM). Ia telah digunakan untuk mengukur kecekapan penggunaan sumber (DRC) dan keberuntungan sosial (SCB) pekebun kecil bebas serta untuk menganggarkan penunjuk campur tangan dasar kerajaan seperti pekali nominal perlindungan (NPC) dan pekali perlindungan berkesan (EPC). Belanjawan ladang berkaitan keperluan input adalah penting dalam analisis ini dan data telah dikumpulkan daripada 147 pekebun kecil bebas dari tiga buah negeri dengan menggunakan borang soal selidik. Hasil anggaran nisbah mendedahkan bahawa DRC bagi Johor, Pahang dan Perak adalah 0.02, 0.03 dan 0.04 manakala SCB bagi tiga negeri tersebut pula adalah 0.04, 0.05 dan 0.07. Kajian ini membuktikan bahawa kedua-dua kaedah memberikan kedudukan yang sama di mana Johor muncul sebagai negeri yang paling efisien dalam pengeluaran BTS. Oleh itu, pekebun kecil bebas didapati mempunyai kelebihan berbanding dalam pengeluaran BTS serta memprolehi nilai keberuntungan sosial dan keberuntungan swasta yang positif di ketiga negeri. Walau bagaimanapun, selepas beberapa simulasi harga dan input dijalankan, didapati bahawa pekebun kecil bebas di negeri-negeri tersebut telah berhenti dari mempunyai kelebihan berbanding pada tahap harga output dan harga input yang berbeza.

Hasil analisis penunjuk perlindungan kerajaan pula menunjukkan bahawa NPC dari segi output bagi Johor, Pahang dan Perak masing-masing mempunyai nilai sebanyak 1.03, 1.01 dan 1.05 yang menunjukkan bahawa tiada subsidi diberikan kepada pekebun kecil bebas dalam pengeluaran hasil. NPC input yang diperolehi bagi ketiga-tiga negeri pula adalah sama iaitu sebanyak 1.15 yang menunjukkan pekebun kecil bebas membayar lebih 15% input yang diniagakan bagi membolehkan mereka mendapatkan input tersebut pada harga pariti. Hasil kajian menunjukkan bahawa dasar kerajaan adalah untuk meningkatkan kos input dalam pengeluaran BTS. Hasil EPC pula adalah sebanyak 1.03, 1.00 dan 1.05 bagi Johor, Pahang dan Perak. EPC yang diperolehi untuk semua negeri adalah lebih kurang 1, ini menunjukkan bahawa terdapat cukai bersih. Ia menunjukkan bahawa pengeluaran BTS oleh pekebun kecil bebas adalah tidak berdaya saing di bawah keadaan pariti eksport. Nilai EPC untuk semua negeri adalah kira-kira 1, ini menunjukkan tidak ada campur tangan atau kesan bersih daripada pelbagai gangguan dalam pasaran input dan pasaran output mengakibatkan kesan yang neutral kepada nilai tambah. Ia menunjukkan bahawa pekebun kecil bebas berdaya saing dalam pengeluaran BTS di bawah keadaan pariti eksport.



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