



UNIVERSITI PUTRA MALAYSIA

**FACTORS RELATED TO THE PERFORMANCE OF
MALAYSIAN RUBBER MINI-ESTATES**

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FACTORS RELATED TO THE PERFORMANCE OF
MALAYSIAN RUBBER MINI-ESTATES

By

MEDIN DIALO-ONTOK

Thesis Submitted in Partial Fulfillment of the Requirements for
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March 1991

Supervisor: Assoc. Prof. Dr. Haji Saidin b. Teh

Faculty: Centre for Extension and Continuing Education

Despite the national government's great concern to improve the socio-economic plight of the rubber smallholders, they still remain one of the poor sectors in this country. The RISDA rubber mini-estate scheme was implemented in 1979 for this concern.

The major objective of this study was to identify factors related to performance of rubber mini-estate schemes. Specifically, it aimed to: determine relationships among the identified participants', officers' and contractors' characteristics with the dependent variables, i.e. the acreage replanted, first year of tapping in the scheme, income of participants during the programme and identify additional criteria for measuring performance of the mini-estates.



The survey research method using a personal interview schedule was done with the 91 mini-estate participants, 17 officers and two contractors. Additional data were derived from office records, ocular and participant observation as well as discussions with knowledgeable persons about the programme.

Frequencies, percentages and means were used to describe the data. Regression enter method was done to determine relationships among the independent and dependent variables whereas content analysis was used for qualitative data.

The regression result between the independent variables² and acreage replanted was $R^2 = .12$, indicating that 12 percent of the variance in the acreage replanted was explained by the independent variables. The officers frequency of visit to the scheme showed relative importance in the acreage replanted.

The regression result between the independent variables² and the first year of tapping was $R^2 = .36$, indicating that 36 percent of the variance in the first year of tapping was attributed to the independent variables. Technical competence of the officers showed importance in the first year of tapping.

The regression result between the independent variables² and participants' change in income was $R^2 = .41$, indicating that 41 percent of the variance in the participants' change in

income was explained by the independent variables. Officers' social competence showed importance in participants' income.

Almost all of the acreage applied for replanting/newplanting was replanted. Almost one-half of the respondents have monthly income of M\$201-500. First year of tapping in the schemes was done 6-8 years after replanting. Identified criteria for mini-estate performance were the release of dividends, participants and their household members' employment in the schemes as well as their plans after the repayment of loans from RISDA. The dividends were released 3-6 months or more. Very few participants and their household members worked in the mini-estates. Majority of the participants planned to get back their land after their repayment of loans from RISDA.

Skills development or technology transfer and direct economic benefits of the programme will accrue to mini-estate participants if they would work in the schemes. A detailed study on the identified criteria for mini-estate performance and cost analysis for an in-depth analysis of the programme was recommended.

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**FAKTOR-FAKTOR YANG BERKAITAN DENGAN PRESTASI
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Oleh

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Walaupun kerajaan mengambil perhatian berat dalam memperbaiki tahap sosio-ekonomi pekebun-pekebun kecil getah melalui RISDA dan lain-lain agensi yang berkaitan, ia masih lagi merupakan salah satu daripada sektor yang miskin di negara ini. Skim mini-estet getah adalah satu daripada program yang dilaksanakan dalam tahun 1979 untuk tujuan ini.

Objektif utama kajian ini adalah untuk mengenalpasti faktor-faktor yang berkaitan dengan prestasi skim-skim mini-estet getah. Secara khususnya, kajian ini bertujuan untuk: mengetahui perhubungan ciri-ciri peserta-peserta, pegawai-pegawai dan kontraktor-kontraktor yang dikenalpasti dengan variabel-variabel tanggungan, mengetahui prestasi mini-estet ini melalui keluasan tanam semula, tahun mula menoreh di

dalam skim dan perubahan pendapatan peserta-peserta pekebun kecil mini-estet dan mengenalpasti kriteria untuk mengukur prestasi mini-estet ini.

Kaedah penyelidikan ini menggunakan jadual temubual perseorangan yang telah dijalankan ke atas 91 orang peserta dan 17 orang pegawai di empat buah mini-estet dan juga dua kontraktor. Data tambahan didapati daripada rekod-rekod pejabat, pemerhatian 'okular' dan pemerhatian penyertaan serta melalui perbincangan dengan beberapa individu yang berpengalaman mengenai program ini.

Kekerapan, peratusan dan purata telah digunakan untuk menerangkan data. Kaedah "regression enter" digunakan untuk mengenalpasti kaitan variabel-variabel bebas dengan variabel tanggungan. Sementara itu, analisis kandungan dijalankan untuk data kualitatif.

Hasil regresi di antara variabel bebas dan luas tanaman semula adalah $R^2 = .12$, menunjukkan bahawa 12 peratus varians dalam luas tanaman semula telah diterangkan oleh variabel bebas yang dikenalpasti. Kekerapan lawatan pegawai kepada skim tersebut adalah penting dalam penanaman semula.

Hasil regresi di antara variabel bebas dengan torehan tahun pertama ialah $R^2 = .36$, menunjukkan 36 peratus varians torehan tahun pertama adalah disebabkan variabel bebas yang

telah dikenalpasti. Kemahiran teknikal pegawai-pegawai amatlah penting dalam torehan tahun pertama ini.

Hasil regresi di antara variabel bebas dengan perubahan pendapatan adalah $R^2 = .41$, menunjukkan 41 peratus varians dalam perubahan pendapatan diterangkan oleh angkuh bebas yang dikenalpasti tadi. Kemahiran sosial pegawai menunjukkan kepentingannya dalam perubahan pendapatan ini.

Hampir kesemua kawasan telah ditanam dan hampir kesemua peserta (pekebun kecil) mempunyai pendapatan sebanyak M\$201-500. Torehan tahun pertama dalam skim ini dilakukan selepas 6-8 tahun pokok ditanam. Kriteria yang dikenalpasti dalam skim ini bagi penilaian prestasi adalah pengeluaran dividen, pekerjaan peserta dan seisi keluarga juga rancangan untuk pembayaran balik pinjaman kepada RISDA. Dividen telah dikeluarkan 3-6 bulan atau lebih. Hanya sebilangan peserta dan isi keluarga saja bertugas di dalam mini-estet. Kebanyakan daripada peserta ini merancang untuk menebus balik tanah mereka dari RISDA.

Peningkatan kemahiran atau perubahan teknologi dan keuntungan ekonomi secara langsung menerusi program ini akan wujud pada peserta mini-estet skim ini. Kajian yang mendalam tentang kriteria yang dikenalpasti untuk menilai prestasi mini-estet dan penganalisa kos secara terperinci dalam analisa program ini adalah dicadangkan.

CHAPTER 1

INTRODUCTION

The Rubber Smallholders of Malaysia

In 1985, the smallholders sector covered 75 percent (1.5 million hectares) of the total area under rubber cultivation and contributed 62 percent of total rubber production. Individual smallholdings covering 52.8 percent of the total area planted with rubber was under Rubber Industry Smallholders Development Authority (RISDA) while the organised smallholdings were under land development schemes like the Federal Land Consolidation Rehabilitation Authority, and Federal Land Development Authority (Chamala, 1985: 31).

Some 3 million people (about a quarter of the country's population) are dependent directly or indirectly on rubber smallholdings for their livelihood and welfare (Chamala, 1985: 31). Of the estimated 490,560 active rubber smallholders in the country, including those on land schemes, about 70 percent were males who owned almost 3 quarters of the smallholder land; the remaining 30 percent was owned by female smallholders.

Despite the significant improvement in rubber yield since 1960, the rubber smallholders are still beset by peculiar problems related to their inability to respond to

replanting/newplanting assistance of the Government. These impeded their development and resulted in persistent poverty among them.

Identified socio-economic factors related to poverty in this sector are as follows: low level of education, lack of finance and credit facilities, dispersion, remoteness and uneconomic holdings, low yield and income, poor quality of rubber produced, limited marketing channels and unstable price of rubber (RISDA, 1988:7; Chamala, 1985:32; Abdul Ghafar, 1985: 97; and Yahil, 1982: 23). The case of smallholders registered with RISDA was not an exception particularly in land size as indicated in Table 1.

In addition, there are also identified "hard-core" replanting problems affecting the rubber smallholder sector. These are: smallholders' old age, lack of family or hired labour, inability to bear interim loss in income upon replanting, many co-owners, inability to agree on any required action, illegal cultivation on state land, farmers' inability to secure proper title and or pay the land premium, absentee landlords, reluctance to forego income arising from prevailing high rubber prices and increasing cost of replanting. The disturbing reality amidst the formulation of the Fourth Malaysia Plan (1981-1985) is that the rubber smallholders, fishermen and rice growers are still left behind compared to the success story of the urban dwellers (Musa, 1984: xiv).

Table 1

Number of Applications and Area Registered
with RISDA by Farm Size as of December 31, 1980

Farm size (ha)	Number of Applications Registered	Percent	Area Registered (ha)	Percent
0 < 2.0	286,321	62.6	340,718.8	33.5
2.1 < 2.4	51,081	11.2	118,983.0	11.7
2.5 < 2.8	26,371	5.8	69,845.4	6.9
2.9 < 3.2	18,063	3.9	55,324.3	5.4
3.3 < 3.6	15,275	3.3	56,611.2	5.6
3.7 < 4.0	18,084	4.0	69,765.6	6.8
4.1 < 6.0	24,678	5.4	114,188.0	11.2
6.1 < 12.0	12,571	2.7	103,965.7	10.2
12.1 < 40.0	4,999	1.1	88,882.3	8.7
Total	457,444	100.0	1,018,279.3	100.

Source

RISDA, Kuala Lumpur

Statement of the Problem

The smallholders' socio-economic status has been a major concern in both poverty and agricultural diversification