

**ENCROACHERS' PERSPECTIVE ON FOREST ENCROACHMENT IN
KELANTAN, MALAYSIA**

By

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**Thesis Submitted to the School of Graduate Studies, Universiti Putra
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August 2004

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Faculty : Forestry

There have been several studies conducted on the effects of deforestation, logging and shifting cultivation on Malaysia's forest and yet little has been done on illegal forest encroachment aspects. Therefore, the objectives of this study were to assess socio-economic background of encroachers, their motivation to encroach as well as identifying factors influencing encroachment. This study was conducted in Kelantan, among one of the states in Peninsular Malaysia with the largest forest reserve and encroachment activities. Ninety-nine heads of households were selected through purposive sampling method. Data obtained were mainly analyzed through cross tabulations and frequencies tables; Kruskal Wallis test was performed to determine socio-economic differences among the territories while Multiple Disriminant Analysis (MDA) was conducted to identify

variables which best predict encroachers' choice of motivation to encroach. Results indicated that 63.6% of the encroachers fall in the lowest income range of RM250 - RM500 per month, lower than Malaysia's poverty Line threshold of RM510. Result on knowledge on land encroachment issues demonstrated most settlers are moderately aware of the issues pertaining to land encroachment. Nevertheless, they appear to have strong values and opinions that dismissed any wrongdoings in encroaching upon the forest which thus justify the encroachment behaviour. Kruskal Wallis test showed significant differences between territories in the aspects of distance of land from home, house value, and income level. The main motivational factor for encroachment as claimed by most of the settlers is poverty (40.4%). MDA analysis provided a weak model to predict on motivation to encroach hence signify on the needs to acknowledge on the influence of underlying factors towards encroachment behaviour such as individual perception and enforcement agencies' limitation. Encroachment behaviour will be better understood if similar studies could be expanded to other states in Malaysia.

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

**PERSPEKTIF PENCEROBOH KE ATAS PENCEROBOHAN HUTAN DI
KELANTAN, MALAYSIA**

Oleh

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Ogos 2004

Pengerusi : Profesor Madya Rusli Mohd, Ph.D.

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Telah banyak kajian tentang kesan kemusnahan hutan, pembalakan dan pertanian pindah dijalankan di Malaysia, tetapi jarang sekali dari sudut pencerobohan hutan. Dengan itu, objektif kajian ini adalah untuk menilai aspek sosio-ekonomi penduduk yang menceroboh, motivasi untuk menceroboh selain mengenalpasti faktor-faktor lain yang mempengaruhi pelakuan pencerobohan. Kajian dijalankan di Kelantan, salah satu negeri yang mempunyai hutan simpan terbesar dan mengalami masalah pencerobohan yang serius. Seramai 99 orang penceroboh (ketua isirumah) telah dipilih melalui Kaedah persampelan- bertujuan. Keputusan kajian dilaporkan dalam bentuk *cross tabulations* dan frekuensi; ujian Kruskal Wallis dijalankan untuk mengenalpasti perbezaan sosio ekonomi bagi setiap kawasan, manakala analisis Multiple Discriminant (MDA) telah dijalankan untuk

mengenalpasti faktor pembolehubah yang boleh meramalkan pemilihan motivasi untuk menceroboh oleh responden. Keputusan menunjukkan 63.6% penduduk mempunyai pendapatan terendah di antara RM250 - RM500 sebulan; lebih rendah daripada garis kasar kemiskinan Malaysia, RM510. Keputusan tahap pengetahuan menunjukkan kebanyakan penduduk mempunyai tahap pemahaman yang agak baik terhadap isu-isu berkenaan pencerobohan hutan. Bagaimanapun secara amnya, mereka tidak menganggap pencerobohan hutan sebagai satu salahlaku disebabkan pendapat dan nilai individu yang telah tertanam sejak sekian lama. Analisis Kruskal Wallis menunjukkan terdapat perbezaan yang signifikan di antara kawasan terhadap jarak tanah yang diceroboh dan rumah, nilai rumah, dan pendapatan. Faktor motivasi utama untuk menceroboh adalah kemiskinan (40.4%). Analisis MDA menghasilkan satu model yang lemah bagi meramal motivasi untuk menceroboh, jesteru perlunya untuk mengambilkira pengaruh faktor-faktor tersirat seperti persepsi individu dan limitasi agensi-agensi penguatkuasa. Pelakuan pencerobohan hutan boleh difahami dengan lebih mendalam jika kajian ini diperluaskan di antara negeri-negeri lain di Malaysia.

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I certify that an Examination Committee met on 12th July 2004 to conduct the final examination of Nor Khafizah Masri on her Master of Science thesis entitled "Encroachers' Perspective on Forest Encroachment in Kelantan, Malaysia" in accordance with Universiti Pertanian Malaysia (Higher Degree) Act 1980 and Universiti Pertanian Malaysia (Higher Degree) Regulation 1981. The Committee recommends that the candidate be awarded the relevance degree. Members of the Examination Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UPM or other institutions.

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