



***ASSESSMENT ON AWARENESS AND PERCEPTION OF
FOREST OFFENCES IN HULU PERAK, MALAYSIA***

NOR AZMI BIN BAHAROM

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By

NOR AZMI BIN BAHAROM

**Thesis Submitted to School of Graduate Studies, Universiti Putra
Malaysia, in Fulfilment of the Requirements for the degree of
Master of Science**

April 2019

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Abstract of thesis presented to the Senate of Universiti Putra Malaysia in
fulfilment of the requirement for the degree of Master of Science

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Chairman : Associate Professor Pakhriazad bin Hassan Zaki, PhD
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The 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 encroachment aspects. Therefore, the objectives of this study were to assess the awareness on forest offences that has been practised, issues and challenges faced by authorities in enforcing the forest law and respondents' perceptions towards authorities' role to prevent forest offences. This study was conducted in Hulu Perak, Perak which among one of the states in Peninsular Malaysia with the highest forest reserve and encroachment activities. Sampling procedure consisted of two different groups. The first group is people in village and second group consist of officials from related governmental agencies who are directly or indirectly involved in the administration and enforcement of Permanent Reserve Forest (PRF). As for the research, pre-testing was done on 20 civilian people and 20 government officers from Forest Department Peninsular Malaysia Headquarter prior to the actual data collection. There were a total of 400 respondents' welcome to the response and complete the studies. A reliability analysis has been conducted and the analysis result has shown that all sections in the research instrument are good and have a high internal consistency. Result indicated that 88% of the people in Hulu Perak have Awareness and Perception of Forest Offences. Although the people are moderately knowledge about forest offences and it will not guarantee they will compliance on law. Evidently majority of them do not feel wrong to engage in such practice. This can be associated with their opinion and strong values that justify on encroachment or other offences and have been assimilated within the communities and families for a long time. Values take more time to be changed as it involved prolong instillation of ideas, thus a systematic ways of mind conditioning is perceived to be useful to change their values. In this respect, law enforcement is unlikely the only solution, the

authorities must also emphasized on the need to incorporate educational element in their campaign or information drive.



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

PENILAIAN KE ATAS KESEDARAN DAN PERSEPSI KESALAHAN HUTAN DI HULU PERAK, MALAYSIA

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Beberapa kajian dilakukan ke atas kesan penebangan hutan, pembalakan dan perladangan yang beralih ke arah pemusnahan hutan termasuk aspek pencerobohan haram. Oleh itu, objektif kajian ini adalah untuk menilai kesedaran tentang kesalahan-kesalahan hutan, isu-isu dan cabaran yang dihadapi oleh pihak berkuasa dalam menguatkuasakan undang-undang hutan dan persepsi responden terhadap peranan pihak berkuasa untuk mencegah kesalahan hutan. Kajian ini dijalankan di Hulu Perak, Perak yang merupakan salah satu daripada negeri-negeri di Semenanjung Malaysia yang mempunyai hutan simpan dan aktiviti pencerobohan yang tertinggi. Prosedur persampelan terdiri daripada dua kumpulan yang berlainan iaitu kumpulan pertama adalah penduduk kampung dan kumpulan kedua terdiri daripada pegawai-pegawai daripada agensi-agensi kerajaan berkaitan yang secara langsung atau tidak langsung terlibat dalam pentadbiran dan penguatkuasaan Hutan Simpan Kekal (HSK). Mengenai penyelidikan, pra-ujian telah dijalankan ke atas 20 orang awam dan 20 pegawai kerajaan dari Ibu Pejabat Jabatan Perhutanan Semenanjung Malaysia sebelum pengumpulan data sebenar. Terdapat sejumlah 400 responden telah memberi respon dan menyelesaikan kajian. Analisis kebolehpercayaan telah dijalankan dan hasil analisis menunjukkan bahawa semua bahagian dalam instrumen kajian adalah baik dan mempunyai konsistensi dalaman yang tinggi. Keputusan menunjukkan bahawa 88% orang di Hulu Perak mempunyai kesedaran dan persepsi kesalahan hutan. Walaupun orang ramai mengetahui tentang kesalahan hutan dan tidak menjamin mereka akan mematuhi undang-undang. Majoriti daripada mereka tidak merasa bersalah untuk terlibat dalam amalan sedemikian. Ini boleh dikaitkan dengan pendapat mereka dan nilai-nilai yang mewajarkan pencerobohan atau kesalahan lain dilakukan dan telah diasimilasi dalam masyarakat serta keluarga untuk jangka masa yang panjang. Nilai kelakuan yang baik

memerlukan lebih banyak masa untuk diubah kerana ia melibatkan cara sistematik pemikiran yang dianggap berguna untuk mengubah nilai yang ada di dalam diri mereka. Dalam hal ini, penguatkuasaan undang-undang adalah satu-satunya penyelesaian yang mungkin menghalang kerosakan berlaku, namun pihak berkuasa juga harus menekankan pada keperluan untuk memasukkan unsur pendidikan atau mendidik di dalam kempen atau sentiasa mengingatkan mereka.



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LIST ABBREVIATIONS

PM	Peninsular Malaysia
UNCED	United Nations Conference on Environment and Development
FELDA	Federal Land Development Authority
FELCRA	Federal Land Consolidation and Rehabilitation Authority
FC	Federal Constitution (1957)
FRIM	Forest Research Institute Malaysia
MTIB	Malaysian Timber Industry Board
NFP	National Forest Policy
MTC	Malaysian Timber Council
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
ITTO	International Tropical Timber Organization
JAKOA	Jabatan Kemajuan Orang Asli
NRE	Natural Resource and Environment
FDPM	Forestry Department Peninsular Malaysia
CBFM	Community-Based Forest Management
JFM	Joint Forest Management
NFC	National Forestry Code
NLC	National Land Council
GIS	Geographical Information System
PRFs	Permanent Reserved Forests
MDF	Medium-Density Fibreboard
MC&I	Malaysia's Criteria and Indicators

PFE	Permanent Forest Estate
SBR	Similipal Biosphere Reserve
ILO	International Labour Organization
RMP	Royal Malaysia Police
MACC	Malaysian Anti-Corruption Commission



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CHAPTER 1

INTRODUCTION

1.1 General Background

Asia is the most crowded area, with a significant number of worldwide biodiversity hotspots and a few megadiverse nations, including Malaysia, with rich social and natural legacy. In this district, natural legacies inside ensured territories are under danger with the high propensity of biodiversity misfortunes. Misuse is far-reaching yet compelling conservation is hampered by the absence of deliberately powerful policies and instruments. As per Mariani and Maizatun (2015), numerous flora and fauna species are collected and sold genuinely as nourishment, pharmaceutical, adornments, pets, et cetera. Be that as it may, trade can make overexploitation the degree of making a species end up plainly debilitated or endangered if not controlled enough to control unlawful and maintain a strategic distance from the unsustainable trade.

Natural tropical rainforest in Malaysia covers 20.1 million hectares of 1.7 billion hectares of world's rich tropical rainforest and it represent about 60% of its total land area of 329,733 square kilometres (Department of Statistics, 2014). Malaysia's largest forest areas are situated in Pahang, Perak and Kelantan of the peninsula as well as Sarawak and Sabah in East Malaysia. Yet, this resource has dwindled mainly due to conversion to other land uses and illegal activities.

Forestry sector is undergoing substantial policy change in response to broader developments such as economic growth, globalization of economic, privatization and trade liberalization. For national needs, forest conversion has been a normal feature of development, which cannot be avoided. According to Aitken et al. 1982, since the British colonial period, forestry sectorial development has supported the socio-economic development of the national and states government. Throughout history, forest in Peninsular Malaysia (PM) has been managed towards the production of high economic species of industrial products such as sawn timbers, veneer logs, plywood, molding and other wood resource-based industries.

The increase of deforestation rate was also driven by the development of commercial logging, haltingly at first in the 1950s and onwards, there was and still an overlap between commercial logging and the land development schemes, as areas slated for latter were first given over to logging and then converted to agricultural use. Hasnah (2011) reported that under the First Malaya Plan in 1950s; large stretches of PM lowland forest were cleared as a result of federation government land policy on poverty eradication.

Degradation and high deforestation rate in the forested area apparently occurred seriously, as the virgin forest has been converted to large agriculture schemes and resettlements in the decades following the nation's independence in 1957 and during the post-independence period of 1960s

However, the rate of deforestation is difficult to calculate, largely because of different definitions of forest types and methods of categorizing vegetation regrowth. According to Forest Department Peninsular Malaysia Report (2017), Malaysia is the world's largest exporter of tropical forest resources in the making timber products. In that case, it is one of the major reason decreases in the number of forest from 1987 to 2006. Carol (2014) reported that 0.54% (satellite image) the rate of deforestation rate in Malaysia from 2000 to 2013 period and the average tree loss as much as 2% per annum. Deforestation in Malaysia is worsened by illegal forest activities mainly attributed to large scale commercial logging carried out under government license and regulation but conducted in destructive manner; widespread illegal logging and encroachment.

As for Perak, encroached area in the permanent forest reserve in Hulu Perak was reported to be about 180,000 hectares while the figure is expected to be higher if the land were to be included as mega project will be launch by the government (Hala Tuju Pembangunan Negeri Perak 2040, 2018). According to Zubait (2000) state that encroachment in its forest is further classified under four main categories of offences, namely illegal logging activities, slash and burn, small scale logging (sized-wood) and encroachment by irresponsible people.

As of late, stores gathered through timber export cess amounting to more than RM 350 million have been dispensed by the administration to finance forest improvement and research extends with an end goal to accelerate the attainment of the sustainable forest management objective (Ariffin, 2013). While excellent endeavours are on-going in a few perspectives, the legislature ought to likewise examine other important parts of forest policy to ensure that they supplement each other. One of these viewpoints is identified with forest law enforcement.

Where almost all violations dealing with illegal logging and sized-wood logging have been successfully alleviated, encroachment is an issue with many intricacies, prompting the government to deal with it amicably. In order to enforce the law effectively, considerations must give to awareness and perception of forest offences among the community involved. By and large, looking at Hulu Perak's demographic and socioeconomic status, knowledge and awareness regarding the forest law will have significant help to reduce encroachment and powering the enforcement in that place. Thus enforcement alone without getting to the root of the problem or without any

awareness will not be able to deter irresponsible people from encroaching again in the near future.

On the other hand, some illegal acts are unintended consequences of faulty laws. Imperfect law enforcement induces or even forces some to operate outside the law. In Perak, the management and enforcement of forestland is mostly done by the State Forestry Department, the State Land Office and in some cases the Land and Mines Office. Sound management and enforcement policies of the National Forestry Act are supposed to help manage the forest resources in the state. However, the success in the implementation of these policies is a crucial part, as conflicts do arise not only over the local people but also over the management of the forest resources itself which will eventually hinder the efficacy of enforcement activities. In other words, to solve any issues and challenges of deforestation, it is very important to understand the forest offences and the nature of enforcement activities undertaken by the enforcement agencies involved.

Forest law enforcement is a critical part of forest management since it directs the relationship between many parties, particularly timber companies, with the forest asset. Illegal and uncontrolled harvesting activities, for instance, may make irreparable harm to the forest which in this way influences its long haul productivity and sustainability. By and large, forest authority should attempt to keep forest offences to a minimum level, particularly those that cause incredible mischief to the forest and the environment. In spite of the fact that forest offences pose a threat to sustainable forest management, little has been studied about them. These offences are just those provided for in the National Forestry Act, 1984. No endeavour is made to take a gander at the idea of these offences under the general law of crime, to be specific the Penal Code.

Comprehensively, forest authorities should strive to maintain minimal forest offences, especially to individuals or irresponsible parties that cause extraordinary destruction to the forest and the environment. Despite the fact that the forest offences could risk the forest's sustainability, there is little research on them. This offense is only provided in the National Forestry Act, 1984 and there is no attempt to take action on adding the number of offences into general criminal law, to be specific, the Penal Code.

1.2 Problem Statements

Issues on Forest Crimes, for example, illegal logging and forest infringement, and other forest offences have been a national worry because of its serious impact on biodiversity, forest quality, environment and to the timber industries. The Ministry of Natural Resource and Environment (NRE), through the Forestry Department Peninsular Malaysia (FDPM) is serious in combating forest crimes in Peninsular Malaysia (Nik Mohd Shah, 2013).

Encroachment of forest in Hulu Perak primarily occurs as a consequence of many interrelated reasons that among others categorized under awareness of forest offences and lack of enforcement. It is one serious predicament faced by the authorities, as it will not only cause deforestation and resource depletion in the long run, it too will lead to unsustainable forest management practice. In addition, continued forest encroachment will result in both environmental and economic loss to government. Environmentally, the biodiversity of forest will be affected and economically wise; government is losing revenue from possible tax or timber cess.

However, of late there are reported cases whereby encroachment on a large scale basis was done by irresponsible parties. This lot would usually plant fruit trees and reap income from the activities. The current social conditions of encroachment and legalities of land ownership have gone beyond the village institution itself. Less of awareness of forest offences and lack of law enforcement changes affect the whole scenario of which encroachment activities are no more a traditional survival mechanism but has become a wide scale encroachment for investment and an economically viable activity.

Forest law enforcement in Peninsular Malaysia is a highly decentralized activity. According to the Constitution, a forest is a state matter and the State governments are responsible for forest policy formulation and implementation, including forest law enforcement. The part of the federal forestry department is particularly advisory in nature as in it gives forestry technical advice to the State governments. Each of the State Forestry Departments has a forest law enforcement unit that fills in as the core for activities identified with the prevention, detection, and suppression of forest crimes. The Unit is responsible for inspecting logging activities, checking logging licenses, inspecting mill premises, monitoring forest create in transit and investigating public complaints. Officers in the District Forest Office in Hulu Perak help in daily forest enforcement activities but there a lot of issues and challenging faced by authorities in enforcing the forest law.

In Peninsular Malaysia, offences, for example, illegal logging and forest infringement are dealt with seriously by the law. The maximum punishments for such offences are quite extreme (Talaat, 2013). In addition to control the issues perceptions towards authorities' role to prevent forest offences that is needed overwhelming penalties, the authority also have instituted different measures include conducting spot checks, helicopter surveillance, general training programs for their officers to equip them with the vital information and skills on forest law enforcement, and running public awareness campaigns. Realizing the significance of the issues and the requirement for combined endeavours in eliminating them, the Forestry Departments regularly cooperate with other government agencies, including the police and the armed force, in their enforcement operations.

As in numerous different countries, forest offences are not new issues in Malaysia. Studies done by Subramaniam (2011) demonstrated that these forest offences had over and over again been occurring during the most recent couple of decades. In this issues and challenges faced by authorities, it is not surprising that the administration introduced higher penalties for such offences through the changes made in the National Forestry Act of 1984. In spite of the introduction of higher penalties, forest offences still continue to happen and this demonstrates increasing the punishment is just a single of the factors influencing the event of forest offences. An intricate relationship of many factors influences the event of forest offences. This piece of the report briefly describes the forestry part of Peninsular Malaysia with the main motivation behind giving the setting against which whatever remains of the report is based. The constitutional setting will be first described took after by discussions on forestry administration, the status of forest asset and the part of the wood-based industries in Malaysian economy.

Under the provision of Article 74 Clause (2) of the Malaysian Constitution, land and forest are defined as state matters and are along these lines within the jurisdiction of the respective State Governments. Clause (3) of Article 76 of the Malaysian Constitution guarantees that all Acts identified with land and forest might not come into constrain in a State unless it has been embraced by a law made by the legislature of the State. All things considered each State is engaged to enact laws on forestry and to figure forest policy independently. The executive authority of the Federal Government just reaches out to the provision of advice and technical assistance to the States, training and the lead of research, and in the maintenance of experimental and demonstration stations.

According to Gani (2013) state that the incidence of forest crimes in the course of the most recent quite a long while demonstrates a declining pattern. The normal number of illegal logging cases dropped from 223 for the period 1987 - 1993 to around 28 for the 1994 - 1999 period. There were just four announced instances of forest infringement in 1999. Higher number of forest offences was accounted for in the rich forest states of the east shoreline of Peninsular Malaysia than in alternate states. No evidence has been appeared to indicate that illegal logging is an organized crime in Peninsular Malaysia.

The optimal enforcement literature's discussion of including illegal activities with positive social incentive in enforcement regimes is not necessarily reflected in practical forest policy and management. To some extent this absence of attention to livelihood needs may derive from the domination of forest management by conservation as opposed to livelihood considerations. However whether governments and secured territory supervisors incorporate the estimation of illegal activities in their decisions can prompt altogether different management strategies and raises serious equity concerns at

whatever point destitute individuals depend on forest and stop resources for their income (Cavendish, 2000).

Where people are encroaching on subsistence ground or merely for profit, it is obvious that laws and regulations are ignored or violated by these people. Hence, a study on the awareness of forest offences towards people in Hulu Perak and enforcement of forest law will help researcher/authority to determine positive perceptions among respondents towards authorities' role to prevent forest offences and their awareness regarding the forest offences.

Apart from that, another problem that stemmed from the enforcing agencies is less people and huge areas covers. This became a factor that hinders the enforcement agency namely Perak Forestry Department to any legal action against the encroachers. As such, a study among enforcement officers is also important to get a thorough understanding on the issues.

1.3 Justification of the Study

Over the years, Malaysia has evolved with regards to the management of the forest reserves through the establishment of the Forest Department. Ecologically and environmentally sound forest resources in the country are well managed.

In dealing with deforestation and land degradation, the Malaysia government through the Forestry Department in particular has been implementing three approaches namely restoration, rehabilitation and reclamation to overcome further degradation and hasten recovery process (Nik Muhamad et. al, 2000). As for Hulu Perak, the State Forestry Department has been actively involved in various rehabilitation programmes, one of which by privatizing forest plantation establishment to some government and private agencies. There are 34,387 ha of degraded forest in total which will be leased under the forest plantation schemes for a period of 35 years. (Hala Tuju Pembangunan Negeri Perak 2040, 2018).

However, these approaches will revive the biophysical aspects of the forest, and since forest encroachment (one of the causes of deforestation) is very much intertwined with human, it is obvious that the awareness of forest offences and enforcement of forest law is not addressed rightfully. As such, it is timely now for the authority to incorporate social elements into forest management plan. In providing incentive or to implement a programme (i.e. community forestry) for encroaches in order to reduce encroachment, it first requires an awareness towards forest offences to the community involved.

1.4 Objectives of the Study

The main aim of this study is to investigate the forest law enforcement and offences in the state of Perak. The objectives of this study are specified as follows:

- i. To assess the awareness on forest offences that has been practised in Hulu Perak.
- ii. To study issues and challenges faced by authorities in enforcing the forest law in the state of Perak.
- iii. To assess respondents' perceptions towards authorities' role to prevent forest offences.

1.5 Importance of the Study

- i. The study would contribute in identifying the effective way to seek Hulu Perak peoples' awareness on the forest offences and also law enforcement that happened on their surroundings. It will serve as a basis for the authorities and other responsible parties in forestry management to help in raising the awareness among Malaysian citizens.
- ii. This study would facilitate people who are handling with any activities that based on forestry in fulfilling the requirements listed in forest law.

1.6 Scope and Limitation of the Study

With the aim to achieve the objectives of this study, the scope of this study would be only focusing on Assessment on Awareness and Perception of Forest Offences in Hulu Perak. The scopes of data collection for this study will be focusing on the following aspects;

- a) The scope of this work is limited to citizens that live in some villages that located nearby with forest area in Hulu Perak. Thus, only respondents from those selected area were chosen for this research.
- b) Interviews will be conducted to identify the level of awareness among respondents.

1.7 Definition of Terms Used in the Study

1.7.1 Forest Law Enforcement

The Forest Law Enforcement is focused at partners in every one of the areas associated with forest administration, especially the enforcement of forest laws and directions. The module gives fundamental and more point by point data on the primary prerequisites for good forest law enforcement and administration, for example, institutional limit, knowledge, international participation and legal action.

1.7.2 Forest Law Offences

Forest law offences happens when forest items are reaped, transported, prepared, purchased or sold, or when forests are cleared or generally debased, infringing upon subnational, national or international laws. Debasement and poor administration give a domain that propagates illegal conduct. Conflicting forest policies, impossible laws, and lacking institutional ability to uphold laws add to unlawful activities, for example, illegal logging. Different drivers of forest illegality incorporate an absence of information of forest laws, and high household or fare showcase interest for timber.

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