Pertanika J. Soc. Sci. & Hum. **17(1)**: 25-31 (2009) ISSN: 0128-7702

Punishing Forest Offenders: Out of Court or by the Court?

Rusli Mohd[1*] and Miskon Simin[2]
[1]Faculty of Forestry, Universiti Putra Malaysia, 43400 UPM, Serdang, Selangor, Malaysia
[2]Sabah Forestry Department, Sandakan, Sabah, Malaysia
[*]E-mail: rusli@forr.upm.edu.my

ABSTRACT

This study compared the extent of compounded and court cases and the penalties charged for the two categories of offences. Data on 119 offences, of which 73% were compounded cases covering the period 1998 to 2002, were analysed. It was found that the mean penalty charged per offence was higher for compounded cases (RM37,180) than court cases (RM26,988). The mean penalties for illegal logging, evasion of royalty and encroachment compounded cases were RM91, 690, RM27, 932 and RM147, 000, respectively. Meanwhile, the corresponding values for the court cases were RM39, 500, RM12 668 and RM47, 760, respectively. Further analysis revealed that there was no significant difference in the mean penalties between the three types of offences for the court cases. However, there were significant differences in mean penalties for the the compounded cases. In addition, the regression model developed showed that for every unit increase in the cubic meter of illegal logging, there was a corresponding increase in the penalty by RM4692.39 for the courts cases and RM3151.17 for the compounded cases. The results suggested that, in terms of deterrence, the courts are the better means for punishing forest offenders.

Keywords: Forest offenders, illegal logging, court cases, penalty

INTRODUCTION

Forest offences are any activities which contravene the provisions of the forestry law of the state and they are a hindrance to sustainable forest management. The forest law prohibits many activities relating to the taking of forest produce, however, the major ones are felling outside concession boundaries, removing more timber than stipulated in concession contracts, felling in protected areas, cutting protected tree species, encroachment into forests for cultivation and evasion of royalty. Forest offences are parts of a wider spectrum of illegal forestry practices, which cover not only forest offences but the entire market chain, from illegal transport to industrial processing and trade operations, all the way down the line to markets.

Globally, the World Bank has estimated that illegal forestry practices cost the legal forest industry more than US$10 billion per year and deprive governments of about US$5 billions in revenue (World Bank, 2005). In addition, the problems of illegal forestry activities are not confined solely to the tropics. In the US, illegal logging on public lands is estimated to cost more than US$1 billion per annum (Humphreys, 2006).

Forest offences, particularly illegal logging, are not new issues in the local forestry scene. The problem was particularly critical in the early 1990s at the time when the economy of the country was recovering from economic recessions. Logging activities accelerated to take opportunities of the buoyant demands for timber in overseas markets. In order to address the issue of illegal

Received: 7 July 2008
Accepted: 30 December 2008
[*]Corresponding Author

logging, the Federal government amended the National Forestry Act in 1993 to incorporate higher penalties for such activities. Studies have shown that illegal logging cases have since been declining, but they still haunt the forestry authority (Rusli and Amat Ramsa, 2003).

Tackling illegal logging activities is one of the priorities of the State Forestry Department, which is the focus of the study. In addition to incorporating higher penalties in the amendments of the State forest law, the authority also established the Monitoring, Control, Evaluation and Enforcemen (MCEE), Special Investigation Team, Illegal Logging Task Force and Mobile Crack Unit (Miskon, 2003). The establishment of these machineries has brought positive results in the detection of illegal logging and related activities throughout the state (Dilimin, 2003, Personal communication).

Punishment for Forest Offenders

The Forest Enactment 1968 is the legal base for forest law enforcement in the State. The Enactment essentially contains provisions on establishment and excision of forest estate, its management, collection of revenue, as well as enforcement and penalties. The amendments made thus far provide for, among other matters, higher penalties for all offences, particularly illegal logging. Among the main offences prohibited by the law include illegal felling [S. 20(2) and S. 23(2)], evasion of royalty [S. 30(1) and S. 30A(1)], encroachment [S. 20(1) and S. 23(1)], illegal possession [S. 30(1)], illegal removal [S.23(1)) and cheating in the taking of forest produce [S.30(1)(a) to (f)]. The rationale for introducing higher penalties is to curb the occurrence of these offences.

Depending on the nature and seriousness of the offence, the Forestry Authority has either offered the offences to be compounded or brought the offenders to courts for trial. Compounding of forest offences is only an option and this is handled by the the Authority, particularly for offences which are committed for the first time [S. 35(2)]. However, the offender can also be brought to court for committing a serious offence even for the first time. This is particularly so for offences like illegal logging and forest encroachment involving a large forest area or a large quantity of logs (Dilimim, personal communication). The courts, on the other hand, can impose fines or jail sentence or both on those found guilty committing forest offences.

According to the Enactment, forest offences can be compounded with any amount which is less than the maximum fine for that particular offence and it has to be paid within a specified time [S.35 (1)]. For offences involving illegal taking or removing forest produce, those who commit them may be asked to pay, in addition to compounds, a sum not exceeding ten times the royalty, premium and cess; a sum not exceeding ten times the value of the produce; the costs of repairing any damage in respect of the offence committed, and any other charges payable to the state authority. Therefore, theoretically, the amount of fines is influenced by volume of logs illegally removed, their prices, rate of royalty, rate of premium, amount of damage done to the forest.

The maximum penalty for illegally taking and removing forest produce is quite punitive. The offence is liable to be punished with fines to a maximum of RM500,000 and be sent for imprisonment for a maximum period of twenty years or both. In addition, the offender can be asked to pay compensations, which is a sum not exceeding ten times the royalty, premium and cess, and a sum not exceeding ten times the value of the produce.

Past Research on Forest Offences

No previous research has been carried out to look at the roles of courts in punishing forest offenders. Several research have been done, however, to understand some factors affecting the occurrences and severity of punishments for forest offenders. The predictors which have been investigated include forestry factors, such as the size of forest area, number of enforcement officers and price of logs (Rusli, 1999; Rusli and Faridah, 2003). In addition to these, some macro-economic factors, such as rate of unemployment, per capita GNP and rate of inflation have also been analysed (Rusli, 2001, unpublished). The results of these research works revealed that the price of logs had a significant negative correlation with forest offences, particularly illegal logging. It means that the incidence of forest offences is higher when the economy slides down and, vice versa. Further analysis indicated that the price of logs, belonging to the heavy hardwood and medium hardwood species, were better predictors of illegal logging in permanent reserved forests. It was also found out that certain macro-economic factors, such as the rate of unemployment, had a positive correlation with illegal logging as well as other

forest offenders. Once again, this suggests that forest crimes are committed in times of economic recession.

Some other research have also looked at the impacts of some factors influencing the severity of punishment for forest offenders, particularly the impacts of volume and the price of logs, as well as the roles of the forestry authority. One particular study by Rusli and Nik Suraya (2004) found that all the three factors mentioned earlier significantly explain the variations in the amount of fines. The study showed that the amount of punishment increased with the increasesd in volume and price of illegal logs, and varied between different State Forestry Directors. Therefore, this suggests that the severity of punishment commensurate with severity of offences committed.

MATERIALS AND METHODS

This study used records on forest offences covering the period from 1998 to 2002 kept at the State Forestry Authority. These records are compiled by the relevant divisions based on the reports submitted by District Forest Officers. Details which are recorded for each of the offences include the investigation officer, nature and location of offences, equipment seized, volumes of logs involved, mode of settlement (compounding or court decisions), as well as fines imposed and logs auction value.

The records on forest offenders also contain explanatory notes on the decisions made for not pursuing further certain offences. In most cases, no further actions were taken on the offences because of the lack of evidence. Explanations are also given on the status of the stolen logs. It was observed that most stolen logs were auctioned out. However, in instances when there were no interested buyers, the logs were destroyed.

The data were subjected to both descriptive and inferential analytical techniques. The descriptive technique was used to analyse data on fines imposed in order to understand the severity of punishment relative to what are provided for by the law. In particular, the Weighted Least Squares (WLS) Regression Model was used to determine the effects of log volumes and the mode of settlement on the amount of fines. This technique was also used to overcome the problem of heteroscedasticity of the scatter diagram found in the Ordinary Least Squares (OLS) regression model. The use of OLS technique for the data would give less accurate results (Gujarati, 2003).

The WLS regression model is of the following format:

$$F_1 = \alpha + \beta_1 V_1 + \beta_2 D\_Type + \varepsilon_1$$

Where:

F_1 = Total amount of fine imposed (Ringgit Malaysia)
V_1 = Volume of illegal logs (m^3)
D = Dummy variable for mode of settlement (1=court; 0=compound)

α β are parameters, ε is random error in the zero mean

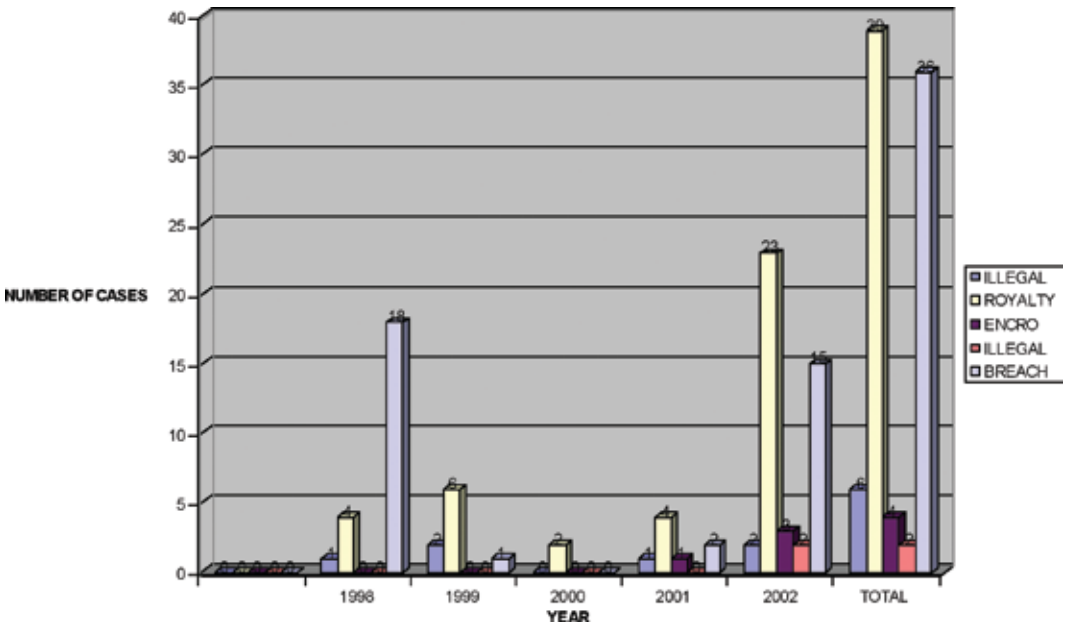
The model suggests that the amount of fines, or the compounds in the case of compounded cases, is a function of the volume of logs illegally removed and the mode of settlement, namely by court (D=1) or by forestry authority (D=O). The amount of fine was hypothesized to increase with volume of logs, both for the compounded and court cases. However, the marginal increase in fine was expected to be higher for the court cases as compared to the compounded cases. This hypothesis was made with the understanding that courts should be more deterrent than the forestry authority in handling forest offenders.

RESULTS AND DISCUSSIONS

The Occurrence of Forest Offences

Fig. 1 shows the occurrence of various categories of forest offences for the period of 1998 – 2002. The highest incidence was recorded in 2002, while the lowest was in 2000. The increase in the number of recorded offences after 2000 could be attributed to the stepping up of the efforts in the detection of illegal activities since the establishment of the MCEE unit (Miskon, 2003).

Evasion of royalty and breach of license conditions seemed to occur most frequently among the various categories of offence. These two types make up more than 86 percent of the total number of offence. The results showed that most offences were committed by licensed timber operators and not by those without license, for example, the local community. The greater tendency of license holders than non-license holders to commit forest offences could be due to their belief that (through their experience) the expected punishment for such offences is not punitive (Rusli, 1998).



ILLEGAL = Illegal Logging
ROYALTY = Evasion of Royalty
ENCRO = Encroachment into Forest Areas
ILLEGAL = Illegal Removal of Timber
BREACH = Breach of License Conditions

Fig. 1: Occurrence of various forest offences, 1998-2002

The Comparison of Fines for Forest Offences

Table 1 shows the breakdown of cases by mode of settlement (court or compounded) while Table 2 presents the comparison on the mean amount of fines by types of offences.

Information presented in Tables 1 and 2 suggest that the courts do not punish the offenders more severely than the Forestry Department. The average fine for court cases, committed for the five-year period, is approximately RM27,000 while that for the Department is about RM37,180. Likewise, the mean fines for the three types of offences for court cases are lower than the compounded cases.

The findings are not quite as expected because the courts are hoped to punish more

TABLE 1
Breakdown of the court and compounded cases and their fines, 1998 - 2002

Year	Court cases		Compounded cases		Average Fine (Court)	Average Fine (Cpd)
	No	Amount of Fines	No	Amount of Fines		
1998	6	67660.00	23	262748.70	11276.66	11423.85
1999	6	13600.00	9	220114.63	2266.66	24457.18
2000	6	18500.00	2	3000.00	3083.33	1500.00
2001	10	330860.00	8	521226.00	33086.00	65153.25
2002	4	433000.00	45	2227577.52	108250.00	49501.72
TOTAL	32	863620.00	87	3234666.85	26988.12	37180.07

TABLE 2
Comparison of the mean amount of fines for three types of forest offences, 1998-2002

Case Type	Type of offences		
	Illegal logging	Evasion of Royalty	Encroachment
Court	39500.00	12668.00	47760.00
Compounded	91690.00	27932.00	147000.00

severely than the forestry authority for every case brought to them. In addition to imposing fines, the courts are empowered to pass jail sentences to those found guilty of committing forest offences. Presumably realising that fact, the authority took even first-time offenders to courts and did not offer them any compounds.

Further analysis showed that there was no significant difference in the mean fines, between the three categories of offences, as handled by the court ($F=1.075$, $p=0.35$). However, unlike the court, there were significant differences in the mean fines for the compounded forest offences as handled by the Authority ($F=5.64$, $p=0.00$). These findings suggest that, whether intentional or otherwise, the court does not seem to look at the severity of the offences as measured by the maximum legally prescribed penalty when giving out their punishment. In other words, the decision to punish an offence, with a certain amount of fines, is not influenced by the maximum penalty of that particular offence. As stipulated in the law, the maximum fine for illegal logging is more severe than forest encroachment than for evasion of royalty.

Factors Influencing/Determining the Amount of Fines

Table 3 shows the results from the regression analysis on the effects of illegal log volume and the mode of settlement on the amount of fines. As can be seen, both variables significantly affect the amount of fines. The WLS regression model developed indicates that for every unit increase in the volume of log illegally removed, there will be a corresponding increase in fine by RM4692.39 for the court cases. However, the corresponding increase in fine for the compounded cases is lower by RM1541.22. This means that the court punishes more severely that the Department for every cubic meter of stolen logs.

The findings appear to suggest that the court's decisions on the amount of fines are guided more by the volume of stolen logs rather than by the maximum penalty as prescribed in the law. Consequently, the severity of offences seems to be measured by the volume of illegal logs.

One of the main objectives of punishment is to hurt offenders so that they will not commit the same offence and that the society is protected from the impacts of their wrongdoings. In the case of forest offenders, the goal of punishment should be to deter the occurrence of such offences so that the forests are protected and the society will continue to enjoy the benefits from the forests. The impacts of illegal forestry activities, as highlighted earlier, can be very costly to the government and the industry and for these reasons, such activities must be checked. Those who commit illegal forestry activities should be appropriately punished, by either the court system

TABLE 3
Results of the WLS regression analysis

Variable	Constant	Volume	Settlement Mode**	F value
Value of coefficients	124.88	3026.29*	1541.22*	25.17

$R^2 = 0.326$;
* Significant at 0.05 level of confidence
** Differences in fines imposed by court and amount of compounding by forestry authority

or the forestry authority. However, should the forestry authority compound offenders or bring them to court for sentencing?

The results on the comparison of punishment between the two modes of punishment show that the average fines for compounded offences are greater than the court cases by about RM10, 000 per case. It appears, therefore, compounding forest offences is justified if the basis for doing it is to generate income to the forestry authority and the government. There is even better justification for compounding if the income generated could be invested for forest development activities, particularly to rehabilitate the areas left degraded by illegal forestry activities, specifically illegal logging and encroachment.

The results of the regression analysis show that the court system penalizes more severely than the forestry authority for every cubic meter of log illegally taken out from the forest by a factor of about 1.5:1.0. In other words, the court system ensures greater severity of punishment for forest similar offences than the Authority. The goal of deterrence, therefore, is better achieved through the court system than through compounding. Moreover, greater deterrence can even be created if the court system imposes penalties other than fines on those found guilty of committing illegal forestry activities. One of these penalties should definitely be jail sentences, no matter how short these may be.

CONCLUSIONS

Illegal forestry activities can seriously harm the government and forest industry and such activities have to be closely monitored for the future benefits of the society as a whole. One of the strategies which can be used to handle illegal forestry activities is to punish the offenders severely so as to deter them from repeating the offences in the future. The forestry authority in this country has taken the right step in that direction by amending the forest law and incorporating higher penalties for forest offenders. However, enacting the law is one step and implementing it is another one. There must be greater commitment to see that those committing the offences are punished to the tune, as prescribed by the law.

The results presented earlier show that it is not enough to compound forest offenders if the goal is to create deterrence among future offenders. Compounding forest offenders appears to be justified if the goal is to generate income from these forest offenders. The court system, however, punishes forest offenders according to the severity of the offences, as measured by the volume of logs illegally taken out. Therefore, if all the evidences are available, those committing forest offences should be brought to courts for trial, because the court system is more likely to prevent forest offences being repeated in the future by similar or other offenders.

Earlier analysis did not consider any costs which have to be expended, either in the process of compounding or in taking cases to the court system. The analysis only compared the fines (or revenue) through compounding and the court system. As such, the true costs and benefits of the two modes of handling forest offences have not been obtained and compared. The costs and benefits of jail sentencing will also need to be investigated. Therefore, it is recommended that further research be carried out to determine all the costs associated with compounding and the court system of handling forest offences.

REFERENCES

Dilimin, W. (2003). *Personal Communication.*

Gujarati, D. N. (2003). *Basic Econometrics* (4th Edition). West Point, USA: US Military Academy.

Humphreys, D. (2006). *Logjam: Deforestation and the Crisis of Global Governance*. London: Earthscan Publications.

Miskon Simin. (2003). Analysis of forest offences in Sabah. Master in Tropical Forest Resource Management Project Report, Faculty of Forestry, Universiti Putra Malaysia.

Rusli Mohd. (1998). Higher penalties for forest offenses: Will it work? Paper presented at the National Workshop on *Forestry economics and policy: Towards achieving sustainable forest management*. Organised by Forest Policy and Economics Group, Faculty of Forestry, Universiti Putra Malaysia, 10-12 November, Serdang, Selangor.

Rusli Mohd. (1999). Factors influencing the occurrence of forest offences in a Peninsular Malaysia state. *Pertanika Journal Social Sciences and Humanities, 7*(2), 91-96.

Rusli Mohd and Amat Ramsa Yaman. (2001). *Overview of Forest Law Enforcement in Peninsular Malaysia.* Country Report. WWF and World Bank.

Rusli Mohd. (2001). *Forest Offences in Four Selected States of Peninsular Malaysia.* Sabbatical Report to Universiti Putra Malaysia. Unpublished.

Rusli Mohd and Nik Suryana Nik Mat. (2004). Some factors influencing the amount of fines for forest offenses. In Siti Zaiton M. S. *et al.* (Eds.), *Prosiding Seminar Kebangsaan Sains Teknologi & Sains Sosial*, (Jilid 1, pp. 276-280). Published by Printco Marketing, Kuantan, Pahang.

Rusli Mohd and Faridah Abdul Wahab. (2004). Effects of logs price on illegal logging in permanent reserved forest. In Norhayati M.T. *et al.* (Eds.), *Proceedings of KUSTEM 3rd Annual Seminar on Sustainability Science and Management* (pp. 570 -573), 4 – 5 May, Kuala Terengganu. Published by Kolej Universiti Sains dan Teknologi Malaysia.

World Bank. (2005). Governments commit to actions on forest law enforcement and governance in Europe and North Asia. Press Release, 25 November 2005.