



**UNIVERSITI PUTRA MALAYSIA**

**SOCIAL FORESTRY AND DAIRY FARMING PRACTICES  
IN WEST JAVA WITH SPECIAL EMPHASIS ON THE  
EXAMINATION OF CONFLICT IDENTIFICATION  
AND RESOLUTION**

**GAMMA GALUDRA TRIANA RUSVI**

**FH 2003 10**

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**By**

**GAMMA GALUDRA TRIANA RUSVI**

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

**April 2003**



Abstract of thesis submitted to the Senate of Universiti Putra Malaysia in  
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**April 2003**

**Chairman : Dr. Mohamad Azani Alias**

**Faculty : Forestry**

The objective of this study was to determine the types of conflicts between dairy farming and social forestry programs in two selected villages in Lembang, West Java, Indonesia, and make recommendation on how to resolve it. Three stakeholders were involved in this conflict, namely, dairy farmers, social forestry participants, and State Forest Corporation (SFC). In order to understand the conflicts, the study surveyed the socio-economic conditions of the dairy farmers and social forestry participants, examined the dairy farming and social forestry practices by selected dairy farmers and social forestry participants. A questionnaire survey was carried in 2001 out on a random sample of 158 dairy farmers and on a purposive sample of 60 social forestry participants. In addition, data were also gathered from five purposively selected SFC officials.

Conflicts were found to exist and persist between actors as well among the members of the actors. Competition for land and forages were the sources of conflicts between the dairy farmers and social forestry participants. Among the social forestry participants themselves, conflicts arose in the course of obtaining *tumpangsari* sites as well as *tumpangsari* plots.

Conflicts between SFC officials and dairy farmers revolve around the issues of the use of state forestland by the agriculture farmers and the scope of social forestry program which pays a lot attention on agriculture plantation. The paternalistic attitude of the SFC officials as well as their underestimation of the capacity of the social forestry participants has often created conflicts between the two groups of actors. Conflicts between the two actors have also taken place due to divergence in their interests as well as the limited management rights given to the social forestry participants.

Based on the experience of other social forestry program in Java, conflicts among the social forestry participants for *tumpangsari* sites and plots could be resolved by means of a lottery system and lengthening the *tumpangsari* period. In order to resolve the conflicts between the dairy farmers and the social forestry participants, it is recommended that both parties meet and discuss in a negotiation process. One important aspect of the negotiation is the SFC officials must recognize the rights of access of the dairy farmers to the state forestland.

Other conflicts between dairy farmers and SFC officials could be resolved by identifying interested actors, who depend their livelihood to the state forestland, including their needs in social forestry, by the SFC officials. Changing the roles of SFC officials and forest management orientation might resolve conflicts between social forestry participants and SFC officials.

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

**PERHUTANAN SOSIAL DAN AMALAN LADANG TENUSU DI JAWA  
BARAT DENGAN PENEKANAN TERHADAP PENILAIAN  
PENGENALPASTIAN KONFLIK DAN PENYELESAIANNYA**

**Oleh**

**GAMMA GALUDRA TRIANA RUSVI**

**April 2003**

**Pengerusi: Dr. Mohamad Azani Alias**

**Fakulti : Perhutanan**

Kajian ini dilakukan bertujuan untuk memahami jenis-jenis konflik dalam perladangan tenusu dan program perhutanan sosial dalam dua kampung yang telah dipilih di Lembang, Jawa Barat, Indonesia dan menghasilkan cadangan dalam cara meyelesaikannya. Tiga orang pelaku yang terlibat dalam konflik-konflik ini ialah peladang tenusu, pengamal perhutanan sosial dan Syarikat Perhutanan Negeri (SPN). Dalam merangka bagi tujuan pemahaman konflik-konflik, survei terhadap keadaan ekonomi sosial bagi peladang tenusu dan pengamal perhutanan sosial, mengamati amal peladang tenusu dan pengamal perhutanan sosial yang telah dipilih. Survei soalan telah dijalankan dalam tahun 2001 secara persampelan rawak terdiri daripada 158 peladang tenusu dan 60 orang pengamal perhutanan sosial. Sebagai tambahan, data daripada lima pegawai SPN yang telah dipilih digabungkan.

Konflik-konflik didapati wujud dan berlarutan diantara pelaku sama ada di kalangan ahli itu sendiri. Persaingan dari segi mendapatkan tanah dan padang rumput merupakan punca timbulnya konflik di antara peladang tenusu dan pengamal perhutanan sosial. Di kalangan pengamal perhutanan sosial itu sendiri, munculnya konflik dalam mendapatkan kawasan tumpangsari dan juga beberapa bahagian daripada tumpangsari.

Konflik antara pegawai SPN dan peladang tenusu meliputi isu kepenggunaan tanah hutan negeri oleh peladang tanaman pertanian dan program perhutanan sosial yang mana lebih tertumpu kepada lading tanaman pertanian. Sikap pandang rendah oleh pegawai SPN dan juga di bawah kemampuan pengamal perhutanan sosial telah kerap mencipta konflik antara dua kumpulan pelaku juga berlaku disebabkan perbezaan dari segi minat dan juga hak pengurusan yang terbatas yang diberikan kepada pengamal perhutanan sosial.

Berdasarkan pengamalan beberapa program perhutanan sosial yang lain di Jawa, konflik antara pengamal perhutanan sosial bagi kawasan tumpangsari dan beberapa bahagiannya yang lain dapat diselesaikan dengan melalui system undian dan pemanjangan tempoh tumpangsari. Untuk menyelesaikan konflik antara peladang tenusu dan pengamal perhutanan, adalah dicadangkan supaya kedua-dua parti bertemu dan berbincang dalam proses perundingan. Satu aspek penting dalam perundingan ialah pegawai SPN mesti mengenal pasti hak penerokaan peladang tenusu ke atas tanah hutan negeri.

Konflik lain antara peladang tenusu dan pegawai SPN boleh diselesaikan dengan mengenalpasti pelaku yang berkepentingan yang bergantung hidup dengan tanah hutan negeri, termasuk keperluan mereka dalam perhutanan sosial oleh pegawai SPN. Mengubah peranan pegawai SPN dan orientasi pengurusan hutan mampu menyelesaikan konflik antara pengamal perhutanan sosial dan pegawai SPN.



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I certify that an Examination Committee met on 18<sup>th</sup> April 2003 to conduct the final examination of Gamma Galudra Triana Rusvi on his Master of Science thesis entitled “Social Forestry and Dairy Farming Practices in West Java with Special Emphasis on the Examination of Conflict Identification and Resolution” 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 relevant degree. Members of the Examination committee are as follows:

**Rusli Mohamad, Ph.D.**

Associate Professor,  
Faculty of Forestry  
Universiti Putra Malaysia  
(Chairman)

**Mohamad Azani Alias, Ph.D.**

Faculty of Forestry  
Universiti Putra Malaysia  
(Member)

**Nik Muhammad Nik Abd. Majid, Ph.D.**

Professor,  
Faculty of Forestry  
Universiti Putra Malaysia  
(Member)

**Lim Hin Fui, Ph.D.**

Forest Research Institute Malaysia (FRIM)  
(Member)



---

**GULAM RUSUL RAHMAT ALI, Ph.D.**  
Professor/Deputy Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date: **16 JUN 2003**

This thesis submitted to the Senate of Universiti Putra Malaysia has been accepted as fulfilment of the requirement for the degree of Master of Science. The members of the Supervisory Committee are as follows:

**Mohamad Azani Alias, Ph.D.**

Faculty of Forestry  
Universiti Putra Malaysia  
(Chairman)

**Nik Muhammad Nik Abd. Majid, Ph.D.**

Professor,  
Faculty of Forestry  
Universiti Putra Malaysia  
(Member)

**Lim Hin Fui, Ph.D.**

Forest Research Institute Malaysia (FRIM)  
(Member)



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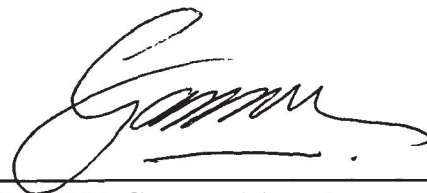
**AINI IDERIS, Ph.D.**

Professor/Dean  
School of Graduate Studies  
Universiti Putra Malaysia

Date: 19 June 2009

## 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.



**GAMMA GALUDRA TRIANA RUSVI**

Date: 21/May - 2003

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## LIST OF ABBREVIATIONS

ACIAR	Australian Centre for International Agricultural Research
BPS	Biro Pusat Statistik/ Central Bureau Statistic
FAO	Food and Agricultural Organisation
FFG	Forest Farmer Group
FMCLM	Forest Management in Cooperation with Local Community
FVCD	Forest Village-Community Development
GNP	Gross Net Product
ICRAF	International Centre of Research on Agroforestry
I-FVCD	Integrated Forest Village-Community Development
KKPH	<i>Kepala Kesatuan Pemangkuan Hutan/</i> Head of Forest District
KPSBU	<i>Koperasi Peternak Susu Bandung Utara/</i> North Bandung Dairy Farmers Cooperation
KKN	<i>Korupsi, Kolusi, Nepotisme/</i> Corruption, Collusion, Nepotism
LATIN	<i>Lembaga Alam Tropika Indonesia/</i> Indonesian Tropical Nature Council
SFC	State Forest Corporation/ <i>PT Perhutani</i>
SF	Social Forestry

# CHAPTER 1

## INTRODUCTION

### 1.1 Background

Indonesia comprises a chain of seventeen thousand islands, which spans a distance of some three thousand miles. With a population of 210.4 million in year 2000, it is the fourth most populous country in the world (after China, India and the United States), and its predominantly Islamic population ranks it as the largest Muslim country in the world (World Bank, 2000). The majority of Indonesian population (70%) lived on the island of Java where rural population densities of more than thousand per square kilometre are not uncommon.

More than 60% of rural people in Java depend on agriculture as their primary source of livelihood with the land ownership averages at about 0.30 to 0.50 ha of land per family. Most of these rural people lived in surrounding state forestland. Low-income levels and the limited size of land holdings contribute to a growing surplus of agricultural labours and high rate of unemployment. These conditions result in serious social and economic pressures being exerted on the forest (Bratamihardja, 1992; Handadhari and Sumantri, 1997).

PT Perhutani (PP), the State Forest Corporation (SFC) managing 2.9 million ha of natural forest and forest plantation in Java with the main task to serve as a



timber revenue base for the government, tried to overcome these major problems by initiating social forestry program. The main objective of this program is not only to improve the welfare of local villagers by increasing the total productivity of currently degraded forest lands through reforestation, as well as increasing the share of forest resources allocated to local communities and the length of entitlement to those resources, but also to alleviate longstanding conflicts over control of forest resources between forestry officials and forest villagers, and to serve as means of protecting the timber forest resources-base (Sunderlin, 1990; Pratiwi, 1998).

## 1.2 Problem Statement and Justification

The social forestry program has been conducted in Lembang, West Java since 1998 by employing taungya system, or in local name called *tumpangsari*, inside the state forestland. The program was the result of local villagers demanding to secure their livelihood during the economic crisis.

Many case studies have revealed the success of social forestry program to economic and social factors in Java (Atmajaya, 1989; Hudaya, 1990; Irawan, 1990; Patriono, 1989; Rochyana, 1989; Sinaga, 1990; Zuhriana, 1990). Although it is difficult to generalize from the diversity of program in terms of soil fertility, existence of water, altitude, isolation from roads and urban centres, these programs have proven beneficial for securing the local villagers livelihood and sustaining state forest resources (Perum Perhutani, 1996).



In other cases, social forestry program was found less successful. 24 ha from 160 ha of the social forestry sites in Lembang have been distributed to wealthy farmers outside the villages (Resolusi, 2001). Social forestry programs have a strategic position to improve local villagers welfare and this is why the importance to distribute the social forestry site to the villages surrounding state forestland (Saragih and Sunito, 1994; Sunderlin, 1990; Sunderlin, 1997), not to the wealthy farmers outside the villages. This case raised an issue of how the social forestry program has been conducted in Lembang. It also raised an issue of conflicts against SFC in the state forestland as the local villagers have been marginalized to obtain the social forestry site.

In these circumstances, the pressure to the state forestland has also been mounted by the dairy farmers who have been occupied the state forestland for forages. The increasing number of dairy farmers from 251 (1990) to 2912 (2001) and the decreasing land availability for cultivation from 0.21 ha per household (1990) to 0.11 ha per household (2001) led the dairy farmers to occupy the state forestland (BPS, 1990; BPS, 2001). This raised an issue of how the dairy farmers use the state forestland for forages. This situation has also generated conflict since SFC did not recognise the dairy farmers' forages cultivation inside the state forestland.

Both situations would not only lead to conflicts against SFC, but also lead to conflicts between local villagers, who participate social forestry (*tumpanghari*), and the dairy farmers, who collected and cultivated forages. These two actors would try