



ITTO Project PD 110/01 Rev.4(l)

# PROGRAM TO FACILITATE AND PROMOTE ADOPTION OF REDUCED IMPACT LOGGING (RIL) IN INDONESIA AND THE ASIA-PACIFIC REGION

MARCH 2004 - JULY 2006



## COMPLETION REPORT

ITTO  
International Tropical Timber Organization  
Yokohama  
Japan

Published by

CFET  
Center for Forestry Education and Training  
Ministry of Forestry  
Republic of Indonesia

BOGOR, AUGUST 2006



ITTO Project PD 110/01 Rev.4(I)

**PROGRAM TO FACILITATE AND PROMOTE ADOPTION OF  
REDUCED IMPACT LOGGING (RIL) IN INDONESIA AND  
THE ASIA-PACIFIC REGION**

MARCH 2004 - JULY 2006

**COMPLETION REPORT**

Published by

ITTO  
International Tropical Timber Organization  
Yokohama  
Japan

CFET  
Center for Forestry Education and Training  
Ministry of Forestry  
Republic of Indonesia

BOGOR, AUGUST 2006

---

**Editorial Team:**

Dr. I Gusti M. Tantra  
Dedi Haryadi  
Art Klassen

**Design Layout:**

Siti J. Nooryasyini (Yusyi)

**Address:**

Project Coordination Unit (PCU) ITTO PD 110/01 Rev. 4 (I)

“Program to Facilitate and Promote Adoption of Reduced Impact Logging in Indonesia and the Asia-Pacific Region”

Center for Forestry Education and Training (CFET)

Jl. Gunung Batu PO BOX 141 Bogor 16610

West Java Indonesia

Telephone : +62 251 322 809

Fax : +62 251 322 809

E-mail : [pcu\\_ril@yahoo.com](mailto:pcu_ril@yahoo.com)

**Center for Forestry Education and Training (CFET)**

**Ministry of Forestry (MoF), Republic of Indonesia**

Jl. Gunung Batu PO BOX 141 Bogor 16610

West Java Indonesia

Telephone : +62 251 312 841; +62 251 313 622

Fax : +62 251 323 565

E-mail : [dikhutan@telkom.net](mailto:dikhutan@telkom.net)

Website : [www.pusdiklathut.com](http://www.pusdiklathut.com)

**Tropical Forest Foundation (TFF)**

Mangala Wanabhakti Build., Block IV, Floor 7, Wing B

Jl. Jend. Gatot Subroto, Jakarta 10270, Indonesia

Telephone : +62 21 573 5589

Fax : +62 21 5790 2925

E-mail : [tff@cbn.net.id](mailto:tff@cbn.net.id)

Website : [www.tff-indonesia.org](http://www.tff-indonesia.org)

**Front cover:** Training course and field activities during RIL implementation.  
(Photographs by TFF)

## PREFACE

This Completion Report of ITTO Project PD 110/01 Rev. 4 (I): "Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific region" was prepared with reference to the format provided in Annex D of the ITTO Manual for project Monitoring, Review and Evaluation, second edition, ITTO, May 1999.

The heading in the Contents, as well as the content of the Completion report, follow the heading and subject matter as stated in aforementioned Annex D.

The Project Coordinator has compiled this Completion report mainly based on the Completion Reports submitted by the Implementing Agencies i.e. The Center for Forestry Education and Training (CFET) Ministry of Forestry of the Republic of Indonesia and The Tropical Forest Foundation (TFF) Regional Office, Jakarta, Indonesia.

The Project Coordinator, The Center for Forestry Education and Training, Ministry of Forestry, Republic of Indonesia, as the Executing Agency of the Project and at the same time as the Implementing Agency together with TFF, wish to thank all partners and collaborators including the Netherland, Japan and the United State of America Embassy as donor countries, for their support in the implementation of the Project.

Bogor, July 2006



Dr. I Gusti M Tantra  
Project Coordinator

# TABLE OF CONTENTS

PREFACE .....	iii
TABLE OF CONTENTS .....	iv
PROJECT IDENTIFICATION .....	vi
<b>PART I: EXECUTIVE SUMMARY .....</b>	<b>1</b>
Background Information about the Project .....	1
Project Achievements .....	4
Target Beneficiaries Involvement .....	7
Lessons Learned .....	8
Recommendations .....	9
<b>PART II: MAIN TEXT .....</b>	<b>10</b>
Project Content .....	10
Project Context .....	16
Project Design and Organization .....	17
Project Implementation .....	21
Project Results .....	23
Synthesis of the Analysis .....	30
<b>PART III: CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>34</b>
<b>APPENDICES .....</b>	<b>37</b>
<b>Appendix 1. RIL Training Courses .....</b>	<b>37</b>
Training of Trainers (ToT) on Contour and Tree Position Mapping and RIL Planning .....	38
Training Course on Contour and Tree Mapping in RIL Planning at Regional CFET Offices .....	47
<b>Appendix 2. Technical Procedures Manuals for Reduced     Impact Logging .....</b>	<b>57</b>
Manual 1. Technical Procedures for Topographic Forest Surveys .....	57
Manual 2. Planning Considerations for Reduced Impact Logging .....	58
Manual 3. Operational Considerations for Reduced Impact Logging ....	59

Manual 4. Planning, Location, Survey, Construction and Maintenance for Low Impact Forest Roads .....	59
Manual 5. Management Consideration for Reduced Impact Logging ...	60
<b>Appendix 3. Project Organization .....</b>	<b>63</b>
Project Organization and Staffing .....	63
<b>Appendix 4. Minutes of Project Steering Committee (PSC) Meetings .</b>	<b>65</b>
Minutes of The 1 <sup>st</sup> PSC Meeting .....	65
Minutes of The Special PSC Meeting .....	69
Minutes of The 3 <sup>rd</sup> PSC Meeting .....	73
Minutes of The 4 <sup>th</sup> PSC Meeting .....	77
<b>Appendix 5. RIL Field Training Courses Conducted By TFF under ITTO PD 110/01 Rev. 4 (I) .....</b>	<b>83</b>
<b>Appendix 6. ITTO - MoF Regional Workshop Proceeding “RIL Implementation in Indonesia with Reference To Asia – Pacific Region: Review and Experiences” .....</b>	<b>85</b>
<b>Appendix 7. List of Reports .....</b>	<b>91</b>
<b>Appendix 8. List of Acronyms .....</b>	<b>95</b>

## PROJECT IDENTIFICATION

a. Title	:	Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific Region	
b. Serial Number	:	PD 110/01 Rev.4 (I)	
c. Implementing Agency	:	Center for Forestry Education and Training, Ministry of Forestry (MoF)	
d. Host Government	:	Republic of Indonesia	
e. Starting Date	:	March 15, 2004	
f. Duration	:	24 Months	
g. Project Costs	:	Source	US\$
		ITTO	611,873
		Forest Industry & Others	261,000
		TFF Contribution	81,400
		Government of Indonesia (CFET)	74,500
		<u>Total</u>	<u>1,028,773</u>

# PART I: EXECUTIVE SUMMARY

## 1. Background Information About the Project

### (a) Problem identification/ The Key Problem

It has long been recognized that even selective logging in the tropical rain forests, frequently results in major environmental and social impacts, thus undermining the objective of achieving sustainable forest management. Apart from the heavy machinery, which is typically used to extract logs, it is also recognized that much of the impact results from poor planning, poor operational control, and an absence of mitigating measures.

It is now well understood that through careful planning, more environmentally sensitive standards, better operational control, proactive preventative measures, and training in all of these aspects, impact of the logging operation can be greatly reduced. In many cases, this reduction of impact can also lead to a reduction in operational costs and an improved economic outlook for the second rotation.

The problem is that few forest concessions in Indonesia have actually taken on the challenge of changing to a reduced impact management regime. The reasons for this appear to be partially related to a lack of information and a lack of technical know-how. This, essentially, was the situation, which prompted the formulation of a project in the promotion and training of reduced impact logging (RIL).

### (b) Objectives and outputs

The project document proposed two specific objectives with a series of targeted outputs that would begin to address the problem of poor understanding and lack of adoption of RIL.

Specific Objective 1: Increase awareness and understanding of RIL implementation techniques.

Output 1.1 RIL information and promotional material developed, published and disseminated.

Output 1.2 Management staff of key forest industries groups and



senior regional forest department officers briefed on RIL requirements, benefits, costs and opportunities for forest certification.

Output 1.3 Regional cooperation on RIL enhanced.

Specific Objective 2: Build national capacity to implement RIL training.

Output 2.1 Selected instructors from 6 CFET regional campuses trained in key RIL curriculum modules.

Output 2.2 Training programs to support RIL implementation initiated at 6 CFET campuses.

Output 2.3 Supervisory, planning and operations staff of key forest industry groups trained in RIL methods in practical training sessions conducted at operating forest concessions.

To achieve each output, the Project Document identified specific activities (Table 1 of the PD).

### **(c) Implementation strategy and organization**

In order to achieve the objectives of the project, a number of strategic activities were identified, namely:

- Awareness raising through the publication of newsletters, creation of a website, and information sessions.
- Training of trainers for instructors from the regional campuses of Indonesia's Centre for Forest Education and Training (CFET).
- Training in contour and tree position mapping for forest harvest planners and technicians at the regional campuses of CFET.
- Practical RIL field training and demonstrations at forest concessions (including the development of technical guidelines).

Overall project coordination was provided by the Project Coordinator who served as chief liaison with ITTO and who also had the responsibility for organizing the end of project workshop.

CFET had responsibility for delivering training courses of the RIL information collection module concerned with contour and tree position mapping at 6 of its regional campuses. CFET was appointed the official executing agency for the project.

The Tropical Forest Foundation (TFF) ran the field training aspects of the project and had the responsibility for virtually all other aspects of project implementation.

#### (d) Project duration and overall costs

This has been a two year project running from March 15, 2004 to March 15, 2006. TFF has, however, requested and received a four month extension to complete the publication of a series of technical procedures manuals and RIL newsletters. Accordingly PCU has also been extended up to the end of July 31, 2006 without budget extension. This will bring the project to a close at the end of July, 2006.

New ITTO funds for the implementation of this project were allocated according to the agencies involved and according to their activities under the project as follows and as identified in the original Project Document.

Project Coordination Unit	\$ 76,900
CFET	\$ 69,600
TFF	\$300,300
<u>Total</u>	<u>\$446,800</u>

Since this project was officially designated an output of the ITTO Pre-Project PPD 19/99 Rev.1(F), it has also absorbed Pre-Project costs. Together with ITTO project support allocations, this brings the ITTO project value to \$611,873.

At the time of project formulation in 2001, Indonesia was still the worlds' biggest producer of tropical plywood and administered its natural forests through a system of around 500 forest concessions. The Ministry of Forestry holds the responsibility of forest management and grants the right to harvest to forest companies through a concession system with individual concession licenses typically issued for 20 years.

Authority for the issuance of industrial licenses for the forest sector, however, rested with the Ministry of Industry and Trade. It has long been recognized, that this separation of authority over the forest sector has resulted in the development of a large industrial overcapacity.

The financial crisis, which hit Indonesia in 1997/98, not only resulted in major political changes in the country, but also had a major destabilizing effect on

the forest sector. One of the negative and more persistent problems exacerbated by these changes, was the rapid increase in illegal logging and the acceleration of forest loss.

## 2. Project Achievements

In 2001 when this project was first formulated, many forest practitioners had heard of RIL but there was little understanding of what had to be done to change to an RIL system. There was also a lot of misunderstanding regarding the costs and benefits associated with the adoption of RIL.

As a result, there were no forest concessions in Indonesia who were effectively implementing a RIL management regime although a few had initiated the first steps in modifying their conventional approach to harvest planning and implementation.

The project set out to correct this situation by focusing on the promotion of RIL through information dissemination and through field training and demonstrations in RIL.

### (a) Outputs achieved

Outputs achieved have been described in detail in Part II, Section 5, of this report. Some of the highlights of the project achievements include:

- A significant feature of the project has been the publication of quarterly newsletters dealing with RIL, certification, and sustainable forest management topics. Up to May 2006, seven of the proposed 8 newsletters have been published and widely disseminated in both Bahasa Indonesia and English. The last one is published in July 2006.
- Two brochures have also been printed in both languages and widely circulated. A website has been developed under the project as [www.tff-indonesia.org](http://www.tff-indonesia.org).
- A two day, end of project workshop has been held. Approximately 100 persons attended the workshop. Attendants also included participants from Malaysia, Vietnam, Myanmar, Philippines and Papua New Guinea. The Executive Director of TFF especially come from USA to present a paper in the workshop.
- During the course of the 24 month project, TFF made 46 separately documented field visits involving a wide range of trainings, demonstrations,

assessments, audits, and technical consultations.

- TFF also participated in a number of Regional conferences, workshops and seminars on RIL and related topics.
- Early in the project, TFF in cooperation with CFET delivered a training-of-trainers course for 20 instructors from CFET. The course featured the techniques and procedures for forest inventory and contour mapping. CFET instructors subsequently delivered 9 sessions of this same course at six of the CFET campuses around Indonesia.
- Up to March 2006, TFF has completed 3 of the 5 planned technical procedures manuals which constitute a set of “how to” guides for implementing the different aspects of RIL. The remaining 2 manuals were published during the 4 month project extension period approved by ITTO.
- TFF has implemented 15 separate training sessions as part of the 46 field visits during the past two years. Topics of the training sessions ranged from contour and tree position mapping, RIL planning and implementation, post harvesting evaluation, financial modelling, use of forest engineering software, preparations for certification, and chain of custody. All training related to the RIL field program.
- TFF has implemented 4 major RIL demonstrations. Three demonstrations featured RIL planning and implementation at an operational scale in working concessions. The fourth demonstration featured RIL deactivation, post harvesting evaluation, operational research, and an assessment of logging waste.

Details of these activities are presented in Table 2 under Section 5, Project Results.

## **(b) Specific objectives achieved**

The specific objectives of this project have been to “increase awareness and understanding of RIL implementation techniques” and, to “build national capacity to implement RIL training”.

There is no doubt that after two years, all players in the Indonesian forestry sector, now have a much better understanding of what RIL means in terms of improved forest management. In this sense, it can be said that the first objective has been fully achieved.

Not stated as one of the outputs but probably one of the most significant achievements of the project, is that it can now be said with confidence that at

least five major concessions are substantially implementing RIL practices and at least a half a dozen others are at varying stages of RIL adoption, in large part due to the implementation of this project.

Another major achievement of TFF related to this project, is the FSC certification of the second forest concession in Indonesia on September 23, 2005. TFF has been providing certification support services to this concession, including RIL training, for the past two years.

However, the majority of forest concessions in Indonesia have yet to take serious steps to adopt RIL practices although there is now a much better understanding of what changes are needed for the adoption of RIL.

There are already clear indications that the series of five technical procedures manuals being produced by TFF will provide much needed technical guidance to forest managers and staff of the forest concessions to assist their efforts at adopting RIL.

Similarly, with the second objective of building national capacity. CFET has developed the capacity to train for the data collection aspects of RIL but has no financial resources to continue with this activity, consequently, it would be most accurate to say that the national capacity building as represented by a government institution, has been achieved but is still in need of continued assistance.

TFF has demonstrated the capability of conducting field training and related activities and has transferred skills required to implement RIL to a significant number of concessions. Since forest concessions are part of the national capacity, it could be said that this objective has been achieved, however, a great deal still needs to be done to expand the adoption of RIL to the majority of forest concessions.

### **(c) Contribution to the achievement of development objective**

There is no doubt that within the timeframe of this project, major progress has been made in achieving the goals set out in the project's development objective.

*Improve forest harvesting practices through effective training and demonstration of Reduced Impact Logging (RIL), in order to advance sustainable forest management and opportunities for forest certification.*

There are now forest management units, which have made significant and measurable progress in achieving sustainable forest management. The most significant of these accomplishments under this project was the September 2005 certification of PT Erna Djuliawati, a 184,200 hectare natural forest management concession in Central Kalimantan, which received direct certification support from TFF under this project.

#### **(d) Situation after project completion**

As already discussed in the preceding two sections, major progress has been made in promoting and stimulating the adoption of RIL in Indonesia. This project has played an important role in stimulating and assisting this progress.

Government oversight has improved significantly. This in turn is creating a climate of greater willingness born out of a perception of necessity that forest management must improve.

The majority of forest concessions still need to make a serious effort to improve their practices and the adoption of RIL is probably one of the easiest improvements they could make. With the improving oversight climate in the forest sector in Indonesia, the climate for on-the-ground improvements such as the adoption of RIL, is probably greater now than it has ever been. This argues strongly for continued support of this type of training program.

### **3. Target Beneficiaries Involvement**

One of the key underlying premises of the TFF field training program in Indonesia, even prior to the ITTO project, was that field training engagement must be at the request of the forest concession company and that they must cover the cost of local travel and accommodation. In addition, in all of the field training and demonstrations, the companies have supplied substantial in-kind support by making available all machinery and equipment needed for field training and demonstrations.

This significant 'buy-in' to the training has ensured that it receives strong support from company management and that the recommendations coming out of the training are viewed with a sense of ownership. In such a situation, direct field training has the highest probability of leading to successful adoption of RIL.

## 4. Lessons Learned

### (a) Development Lessons

- The design of the project which combined a strong field orientation with information dissemination and institutional strengthening of training capabilities, was appropriate for the subject matter and for the target audience receiving the training.
- There were no changes in intersectoral links, which influenced the implementation of the project.
- Sustainability of the project after completion, is directly linked with the availability of funding. Government support does not appear to place high enough priority on field training to ensure continued funding, due to budget limitation. TFF is now attempting to secure additional funding for a continuation of the field training activities.

### (b) Operational Lessons

- The roles of the implementing agencies (CFET and TFF) were clearly defined in the project document. This clarity of definition resulted in a smooth implementation of the project and the achievement of all planned outputs.
- Project organization and management roles were clearly defined in the project document. Clearly this avoided potential problems regarding jurisdiction and project implementation.
- Project outputs in the form of newsletters, brochures, CD's and technical procedures manuals, have been published and widely circulated. Demand for the technical procedures manuals is growing as the project reaches completion. Two manuals and two newsletters were published during the four month extension of the project.
- All RIL trainings conducted by CFET were well documented.
- For TFF, this project has been a continuation of existing field activities. Planning arrangements were already well established at the time of project initiation.
- TFF has developed a set of criteria and indicators for RIL which are now being used to evaluate the degree of RIL adoption and to monitor progress in implementation.
- Significant variations between planned and actual implementation occurred on two instances. The first is when CFET requested that its commitment

to conduct training session be reduced for 18 to 9 due to changes in CFET's funding support. The second variation was a 4 month extension of the project requested by TFF in order to complete the preparation and publication of major outputs.

- External factors, such as the dramatic reduction of the national AAC and the number of operating concessions, obviously resulted in a reduction of the target training audience and also introduced a great deal of uncertainty into the forestry sector. TFF responded to the reduction in the training audience by developing a forest-market linking mechanism which linked RIL adoption to enhanced market access as a pilot project. This had the desired effect of stimulating greater interest in RIL training and adoption.

## 5. Recommendations

As the first project in Indonesia on RIL training, this project has delivered clear and measurable outputs in an efficient manner. This highlights the importance of a well constructed project document in which responsibilities and budget entitlements are unambiguously defined.

- \* Experience in implementing this project has clearly shown the effectiveness of linking training in RIL with issues such as market access promotion, legality verification, and the establishment of chain-of-custody systems. It is the opinion of PCU and TFF that ITTO should consider funding a "Phase II" of this project which would combine these issues with an expanded field training program.
- The capacity to carry out RIL trainings for other aspects such as RIL Implementation, RIL evaluation and RIL economy, needs to be developed by CFET.



## PART II: MAIN TEXT

### 1. Project Content

#### (a) A Brief History

This two year project was formulated and implemented with the primary intention of promoting the adoption of Reduced Impact Logging in Indonesia. The project also provided scope for connecting with other similar initiatives in the SE Asia and Pacific Region.

The Tropical Forest Foundation originally submitted a funding request to the ITTO through the Bureau of Foreign Affairs (KLN) in the Ministry of Forestry (MoF), in early 2001. This proposal was submitted in partnership with the Centre for Forestry Education and Training (CFET) and proposed a training program in RIL almost identical to what has been implemented under PD 110/01 Rev.4(I).

In the same submission period, two other funding proposals related to RIL promotion i.e. one project proposal was the product of ITTO pre-project PPD 19/99 Rev. 1 (F) "Strengthening Sustainable Management of Natural Forest in Asia-Pacific" and the other one was submitted by Dr. Elias from Faculty of Forestry, Bogor Agricultural University, were submitted for consideration by the ITTO technical review panel. All three funding proposals were returned with a request to consolidate these proposals into one.

This consolidation was finally accomplished and a new proposal submitted to meet the Spring 2003 submission deadline. The existing project proposal was subsequently granted funding approval at the November 2003 session of the ITTO. Additional administrative requirements by ITTO delayed the start-up of the project till March 15, 2004.

The consolidated proposal was formulated as an outcome of ITTO Pre-Project PPD 19/99 Rev.1 (F). As a result, the project which was finally approved by the ITTO (PD 110/01 Rev.4(I)), included a repayment requirement carried over from the original ITTO Pre-Project.

## (b) Rationale

Most natural forest harvesting operations in Indonesia and the rest of the Asia-Pacific region, are carried out using conventional, ground-based harvesting systems. Inadequate planning and lack of control over harvesting operations has resulted in severe damage to soil, water and residual forests.

Previous RIL studies and operational trials have demonstrated that damage to forest, soils and water resources, can be significantly reduced by applying simple techniques, such as:

- pre-harvesting planning,
- topographic survey and mapping,
- identification of trees to be harvested and future crop trees,
- vine cutting,
- design and location of skid-trails,
- directional felling,
- careful use of the tractor's blade and winch in constructing roads and skid-trails and in log skidding.

Results of these studies have shown that soil, water and residual forest damage can be reduced by up to 50%, compared to damage caused by conventional forest harvesting methods.

However, a number of impediments have prevented widespread adoption of RIL. These impediments were clearly identified at a three day international conference held in Kuching, Sarawak, in February/March 2001. They include:

- Lack of acceptance by forest managers, many of whom presume that RIL is inherently more expensive than conventional logging;
- Lack of awareness and appreciation of the environmental, economic and social benefits of RIL due to inadequate information transfer from RIL research projects to forest operations
- Lack of trained planners, loggers and supervisors.

These problems, their underlying causes, and proposed solutions, formed the basis for this project titled, "*Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific Region*".

### (c) Objectives

In order to effectively address the perceived problems and to achieve the intended outcomes, the project was structured around a broad development objective which stated:

*Development Objective: Improve forest harvesting practices through effective training and demonstration of Reduced Impact Logging (RIL), in order to advance sustainable forest management and opportunities for forest certification.*

The structure of the project was formulated around two specific objectives as follows:

Specific Objective 1: Increase awareness and understanding of RIL implementation techniques.

Specific Objective 2: Build national capacity to implement RIL training.

### (d) Outputs

These specific objectives were given substance by formulating a series of specific outputs, each of which had clearly stated activities designed to assure achievement of the desired output. The outputs and their associated activities are best summarized by replicating the original table from the Project Document as follows:

Table 1. Matrix of Specific Project Objectives, Outputs and Activities

Specific Objectives (2)	Outputs (6)	Activities (10)
Specific objective 1: Increase awareness and understanding of RIL techniques.	Output 1.1: RIL information and promotional developed, published & disseminated	1.1.1 Develop and publish articles on RIL and certification and disseminate these through Indonesian forest industry assn. Journal, newsletters, and RIL website. 1.1.2 Review and discuss project experiences at end of project review workshop. (see 1.3.2)
	Output 1.2: Management staff of key forest industries groups and senior regional forest department officers briefed on RIL requirements, benefits, costs and opportunities for forest certification	1.2.1 Conduct RIL/certification seminars and demonstrations for forestry group managers & key officers of government forestry agencies. (3 demonstrations plus 6 briefings x 20 participants per sessions =180 participants)

	<b>Output 1.3:</b> Regional Cooperation on RIL enhanced.	<p><b>1.3.1</b> Disseminate information on project-supported RIL activities, training materials, courses, demonstrations to regional forest industry representatives through RIL website and links to Asia-Pacific Forestry Commission &amp; FAO-RAP's RIL Net facility</p> <p><b>1.3.2</b> Invite regional representatives to review and discuss project experiences at project review workshop/Regional workshop. (see 1.1.2)</p>
	<b>Output 2.1:</b> Selected instructors from 6 CFET regional campuses trained in key RIL curriculum modules	<p><b>2.1.1</b> Develop RIL training modules and course materials for use in surveying mapping and logging planning courses at CFET regional training centres.</p> <p><b>2.1.2</b> RIL training for Instructors from 6 CFET regional Training centres.</p>
<b>Specific Objective 2:</b> Build national capacity to implement RIL training.	<b>Output 2.2:</b> Training programs to support RIL implementation initiated at 6 CFET campuses	<b>2.2.1</b> Conduct training courses in surveying, mapping and logging planning at 6 CFET regional training centres.
	<b>Output 2.3:</b> Supervisory, Planning and Operations staff of key forest industry groups trained in RIL methods in practical training sessions conducted at operating forest concessions.	<p><b>2.3.1</b> Develop practical RIL field guides, operating procedures and other course materials for use in RIL training at forest concessions. Five technical procedures manuals will be produced</p> <p><b>2.3.2</b> Conduct RIL field training and demonstrations on planning &amp; implementing RIL for staff at 20 forest concessions.</p>

### (e) Project Strategy

The project strategy included a number of component activities, each of which addressed a different aspect of the objectives.

- **Awareness Raising**

The first project component involves awareness raising activities, including a regular RIL newsletter, website, and briefings on RIL, certification and related issues. Some of these activities were aimed at informing non-operational personnel in the forestry sector about RIL's benefits, organizational and operational requirements, and implementation status. Target beneficiaries of these activities included: forest managers (private sector and government),

media, NGOs, community leaders and other stakeholders, with an interest in the forestry sector.

- **Training of Trainers of the Centre for Forestry Education and Training (CFET)**

The second project component was implemented within the existing structure of Indonesia's Centre for Education and Training (CFET), where selected staff received training in the techniques of surveying and mapping to support planning of roads, skid trails and logging systems. A total of 20 CFET staff received this training, during 7 - 12 June 2004.

- **Training for Forest Harvesting Planners and Technicians at Regional CFET Campuses**

The third project component supported the establishment of scheduled training courses in surveying and mapping at 6 regional CFET campuses. The original planned 18 courses were reduced to 9 early in the implementation of the project with PSC (including ITTO) approval.

The RIL Training courses were conducted as follows: 1). Pematang Siantar, 6-11 September 2004, with 15 participants, 2) Samarinda, 24 - 28 January 2005, with 30 participants, 3) Pekanbaru, 31 January - 4 February 2005, with 28 participants, 4) Makassar, 26 - 30 July 2005, with 20 participants, 5) Manokwari, 1 - 6 Agustus 2005, with 20 participants, 6) Pematangsiantar, 12-17 September 2005, with 20 participants, 7) Samarinda, 12-17 September 2005, with 20 participants, 8) Bogor, 16 - 21 January 2006, with 20 participants and 9) Pekanbaru, 28 February - 4 March 2006, with 22 participants.

- **Practical RIL Field Training at Forest Concessions and other Forest Management Units (FMU)**

The fourth component of the project, was conducted at forest concessions. Experienced RIL training staff of the Tropical Forest Foundation (TFF) prepared and delivered training modules and deliver on-site training and demonstrations in response to training requests by forest concessionaires. Target groups for these training sessions were the camp managers, supervisors, forest harvesting planners and equipment operators.

- **Workshop**

Near the end of the project, about 100 participants from Indonesia and other major timber producing countries of the Asia-Pacific region meet to share experiences in Reduced Impact Logging (RIL). The workshop included presentations of the main findings and recommendations of this project, as well as discussions on the latest RIL research; technologies and equipment; RIL training; and RIL costs. The workshop was organized by the Project Coordination Unit (PCU) and hosted by Indonesia's MoF, DG Production Forest Management.

### **(f) Project Location and Target Audience**

The primary focus of this project has been Indonesia, and specifically the Indonesian forest concession companies. TFF has implemented this aspect of the project through field training and extension services program and has engaged forest companies in a multi-faceted program of RIL training, demonstrations, technical advice, briefings, and promotions.

CFET has implemented its component of the project by providing technical training to a mixture of forest concession personnel and government forestry officials.

A limited component of the project resulted in an active engagement with other Regional initiatives at promoting RIL. This aspect of the project developed beyond initial expectations and culminated in a Regional workshop on RIL.

### **(g) Operational Arrangements**

The fact that the project is a combination of three different projects is partly responsible for the operational arrangements.

CFET, as the representative government institution, has been the executing agency for the project and has also implemented a specific training program at its campuses across Indonesia.

TFF has carried the bulk of the activities which revolved around a field training and extension services program delivering training and demonstrations directly to working forest concessions. The extension services also involved technical

advice for related activities such as forest certification, establishment of chain-of-custody systems, and achieving legality status.

TFF has also developed a website under this project and has published quarterly newsletters as well as developing a series of technical procedures manuals to guide the implementation of RIL.

General oversight of the project was provided by a Project Coordinator who formed the primary contact point for ITTO and the liaison between TFF and CFET, and who was also responsible for organizing the end of project workshop.

The project document clearly defined the roles of each entity involved in the project and provided a discrete budget for each of the organizations involved in project implementation. Budget details were focused on activities and outputs and left little room for ambiguity.

## **2. Project Context**

Although in its implementation, this project has been heavily focused on the Indonesian forest sector, it has had a strong Regional orientation in both its formulation and implementation. This orientation can be traced back to the Asia-Pacific Forestry Commission (APFC) led initiative to formulate and foster the adoption of both Regional and country specific Code of Practices for Forest Harvesting.

This project is also partly the follow-up of an ITTO Pre-Project (PPD 19/99 Rev. 1 (F)) in "Strengthening Sustainable Management of Natural Forests in Asia-Pacific". Many of the recommendations from this Pre-Project have been incorporated into the current project on RIL promotion and training.

The formulation of this project was given further impetus with the APFC hosting of a three day international workshop on Reduced Impact Logging held in Kuching, Sarawak, at the end of February, 2001.

The projects relevance to the Indonesian forestry sector has been very clear from the outset and has become even more relevant during the course of project implementation. From the time of inception of this project concept in 2001 to the actual initiation of the project in March 2004, major changes have occurred in the Indonesian natural forest management sector.

The number of forest concessions have been cut in half. Government has halved the annual allowable cut. Illegal logging has become a major national issue, which has only been seriously addressed in the last year.

Almost half of the original plywood industries are now shut down due to a rapidly shrinking wood supply.

The socio-economic impact of a shrinking forest sector based on natural forests has had a major impact on local communities which have traditionally dependent on employment generated by this sector.

The government has gradually begun to realize the importance of achieving sustainable forest management and has in the past few years, repeatedly supported the adoption of RIL as a means of achieving better forest management. Forest concessions companies have become more motivated to improve their practices as they see a rapidly shrinking wood supply and a forest regulatory system which is increasingly linking improvements in forest practices to the issuing of annual cutting permits.

This project, therefore, has been both timely and relevant in promoting the development objective of improving forest harvesting practices through effective training and demonstration of RIL, in order to advance sustainable forest management and opportunities for forest certification.

### **3. Project Design and Organization**

#### **(a) Definition of problems**

The project document elucidated the underlying problem, which formed the basis for formulation of this project concept. Forest harvesting practices in Indonesia (and the Asia-Pacific region in general), cause excessively high damage to soil, water and forest resources. Excessive soil erosion, sedimentation of rivers, and loss of future forest productivity have serious negative social, economic, and environmental repercussions. In summary, existing poorly planned and executed logging (as well as illegal logging) impedes achievement of sustainable forest management.

The underlying causes of this problem were identified as a lack of awareness and appreciation of the environmental, social and economic benefits of RIL



and the need for appropriate training of logging personnel at all levels, specifically in the organizational and operational skills of RIL.

This problem analysis led to the set of proposed actions which constituted this project.

During the implementation of this project, it has remained very clear that the problem analysis at the formulation stage had been correct and that the actions being implemented were very relevant and appropriate.

### **(b) Conceptual foundation**

The underlying concept for the project implementation rested on two main pillars. The first was to conduct field training and demonstrations in the working concessions. This required the development of a modular approach to the training where individual modules were delivered according to the identified needs of the forest management units.

The second, was to institutionalize the training for a limited aspect of the entire RIL training agenda. In this regard, CFET was partnered to implement the training of an RIL module developed previously by TFF and covering the data collection aspects of an RIL system.

The technical skills which this module sought to develop were largely missing from the Indonesian forest concessions, yet they are essential for the creation of accurate contour and tree position maps which, in turn, are crucial for detailed operational planning and control which is the core of an RIL system.

This concept called for CFET to deliver this course to a large audience drawn primarily from the forest concessions, and introduce the technical skills needed to create the essential information base. This was intended to accelerate the technical capabilities of the concession staff who could then tap into the field training and extension services offered by TFF under this program, to develop the necessary planning and implementation skills and management systems.

### **(c) Appropriateness of project implementation mode and roles of the implementing institutions**

Both partners in this project (CFET and TFF) are suited to the implementation role defined by the project document.

CFET operates training campuses around Indonesia and has a large staff of instructors. The campuses are equipped with appropriate classrooms and dormitories and occupy large areas suitable for the field survey exercises required for the delivery of the contour and tree position mapping module.

The delivery of the contour and tree position module by CFET, was considered to be the most efficient method of delivering this module and at the same time, it was intended to strengthen the institutional capacity of CFET to engage in technical training, an activity for which it was not originally set up.

TFF's strength lies in its experience in conducting field training in the tropical world and in working directly with active forest management units. TFF trainers also have a broad base of experience in tropical forest operations.

By delivering training in planning, operational, and post harvesting aspect of RIL directly to the working concession, it was felt that greater relevance could be achieved. In addition, such on-site training eliminated the need for expensive expenditures on equipment rental and infrastructure support since all of these requirements could be provided by the forest concession at great cost savings to the funding agency.

Since most forest concessions belong to larger corporate groups who control more than one concession, it was common practice for training in one concession to be attended by participants from other concessions within the same corporate group, thus developing the capacity for further internal training with the corporate group.

#### **(d) Beneficiary involvement in project implementation**

This training project in RIL could not have been possible without the strong involvement and in-kind support of the participating forest concession companies.

Although the services of the trainers was funded by the ITTO grant, virtually all local costs of the trainers were covered by the forest concession company receiving the training. In addition, the concessions provided the training site, support personnel, and equipment for all RIL training and demonstrations.

TFF has maintained detailed records of all in-kind support and has prepared monthly and year-to-date summaries of these in-kind values. Contributions in

in-kind values attributed to the forest management sector totalled \$89,366 by the end of the project.

### **(e) Adequacy of time and funding**

Training for the modification of the operational practices of the entire forest sector in a country such as Indonesia is surely a longer term undertaking than two years.

At the time of project initiation in March 2004, TFF had already been running an RIL training project in Indonesia for over four years. During the early years of its involvement in Indonesia, TFF had developed and field tested a field training strategy which became the basis of its continued training activities with ITTO funding support.

The ITTO project provided 71% of the entire TFF operating budget for the two years of this project with the remainder coming from other TFF revenue sources. With the support of other funding sources, TFF has been able to meet all of its objectives and outputs as identified in the ITTO Project Document.

Since the demand for field training activities was stronger than anticipated at the formulation of the project, and since various documentary outputs such as the technical procedures manuals and the newsletters, took longer than expected, TFF has requested (and received) ITTO approval to extend the project period to the end of July, 2006.

Similarly, the CFET training component has just begun to address the capacity building requirements for the technical aspect of RIL. Concession personnel who complete the CFET course were meant to take this skill back to their concession begin developing this capacity in their inventory crews. However, so far there has been no indication that this is actually happening.

During the intervening period between formulation of the project document and actual implementation of the project, CFET's funding base from the Ministry of Forestry was substantially reduced, making it unable to carry out the full number of training sessions as originally proposed. CFET, therefore, requested and received approval from the PSC including ITTO to cut the number of training sessions in half under its allocated budget.

## 4. Project Implementation

### (a) Variations between planned and actual

Section 5 provides a detailed summary of the project results as measured against the planned Outputs and Activities identified in the project document.

The main variation is a 50% reduction in the number of planned training courses to be run by CFET. Reasons for this variation are explained in Section 3(e).

Activities under the control of TFF, have been implemented as planned. A much reduced forest concession sector mean a much reduced target audience for field training. Early in the project implementation, TFF developed a forest-market linking program aimed at stimulating interest in RIL adoption. This pilot project was successful in stimulating serious interest in RIL and helped to offset the potential reduction in interest for field training due to a downsizing of the forest concession sector.

TFF has also been implementing a separate certification support program partly supported by the Dutch government. Participants in this program had a strong interest in RIL adoption.

TFF's engagement in Regional initiatives at promoting RIL and sustainable forest management, also turned out to be more successful than anticipated and consequently occupied more time and financial resources than originally budgeted.

In general, TFF's expenditures have corresponded with the planned budget line items. Minor adjustments to budget line items were made in the first and second annual operating plans approved by ITTO.

TFF's Outputs in two specific activities, have however, fallen behind schedule prompting the request for a four month time extension of the project to the end of July 2006. These four additional months were used to finish the writing and printing of the remaining two newsletters and two technical procedures manuals which are firm output commitments of TFF as stated in the project document.

## **(b) Appropriateness of assumptions and identification of risks**

In the project document, few assumptions concerning risks are presented. While government appeared to be lukewarm at the outset, support from the Ministry of Forestry has become noticeably stronger, particularly in the last six months of the project implementation period.

Initially, a great deal of emphasis was placed by ITTO on the need to have a memorandum of understanding involving the Association of Indonesian Forest Concession Holders. Support of the association was seen as crucial to the success of the project.

Although the role of the Association in the implementation of the project turned out to be much smaller than anticipated due to internal problems in the Association, this has not had a detrimental effect on the implementation of the project. TFF successfully expanded its engagement with a wide range on forest concessions and was able to actively engage in field training as originally planned despite the difficulties within the Association.

## **(c) Project sustainability**

Training for RIL is clearly not a self financing activity and depends on government funding or funding from other philanthropical sources. There does not appear to be an intent or ability on the part of the Ministry of Forestry to provide funding for continued RIL training, therefore, it is expected that the CFET involvement in RIL training will end with this project.

TFF's field training program continues to experience a strong demand for further training, demonstrations, and operational research. In addition, there has been a noticeable increase in the interest for establishing chain-of-custodies to verify supply chains and to establish verification of legal origin.

TFF is anticipating continued engagement in Indonesia and the Asia-Pacific Region and is now attempting to secure follow-up funding to continue the RIL field training activities. TFF's evaluation of training needs, indicates that as pressure on the existing forest concessions increases as a result of improvements in government oversight and a sharp reduction of illegal logging, the interest of forest companies in field training will increase since performance in forest operations are becoming increasingly linked to the granting of cutting rights.

## (d) Appropriateness of project inputs

Primary inputs into the implementation of this project involved the staff and trainers of CFET and TFF. Availability and performance of members of both organizations were known quantities prior to initiation of the project and all performance expectations were met in the implementation of the project.

Major support for the project implementation was provided by the participating forest companies. This support came in the form of direct payment of all local travel and accommodation costs for TFF trainers. In addition, the companies provided all equipment, training facilities and personnel need to effectively deliver RIL field training and demonstrations.

Although not part of the in-kind calculations but equally important, was the substantial time commitment of the management, staff, and production personnel of the forest concession companies who participated in the field training.

## 5. Project Results

This section provides a detailed summary of achievements during the original two year time period of the project. Some of TFF's Outputs and Activities have carried over into the four month extension approved by ITTO.

In the following table, the main achievements have been described according to Output and the supporting Activities.

Table 2. Project Achievements by Output and Activity

<b>Output 1.1</b>	<b><i>RIL information and promotional material developed, published &amp; disseminated</i></b>
<b>Achievements:</b>	<b><i>Activity 1.1.1 - Articles on RIL and certification disseminated ...</i></b>
As of March 15, 2006, TFF had published six "RIL and Certification" newsletters in both English (250 copies) and Bahasa Indonesia(650 copies). These newsletters have been distributed by mail to all forest concessions in Indonesia, all forestry faculties in Indonesian Universities, over 70 District and Provincial forest department offices across Indonesia, NGOs, forestry projects, plus a wide range of Regional and International agencies and individuals. A complete mailing list for each newsletter is available in the TFF office. Ten copies of each newsletter have also	

<p>been submitted to ITTO. Two issues of the "RIL and Certification" newsletter have been published during the 4 month project extension.</p> <p>TFF has published two brochures. A general information procure was prepared describing the ITTO project. A second brochure described the forest-market linking project which was developed by TFF to stimulate adoption of RIL. These brochures have been published in both English and Bahasa Indonesia.</p> <p>TFF has also developed a website on RIL <a href="http://www.tff-indonesia.org">www.tff-indonesia.org</a> on which all of the project activities have been posted. On completion of the project, TFF will take over the maintenance costs of this website.</p>	
<b>Achievements:</b>	<i>Activity 1.1.2 - Review and discuss project experiences at end of project workshop</i>
<p>The Project Coordinator, together with CFET, organized a two day end of project workshop which was held in Bogor, Indonesia, on February 15-16, 2006. Approximately 100 participants attended the workshop including invited delegates from the SE Asia Region.</p>	
<b>Output 1.2 ... briefings on RIL requirements, benefits, costs, and opportunities for forest certification</b>	
<b>Achievements:</b>	<i>Activity 1.2.1 - RIL and certification seminars and demonstrations (also see Activity 2.3.2)</i>
<p>During the 24 months of the ITTO project, TFF made 24 separate field visits related to the outputs specified under Objective 1.</p> <p>6 of these field visits related to information briefings on <b>RIL and/or certification</b>. These information briefings had a combined attendance of over 100 participants.</p> <p>7 visits related to the <b>chain-of-custody</b> issues associated with the "RIL Verified", forest-market linking initiative of the TFF.</p> <p>An additional 11 field visits were focused primarily on <b>RIL audits and assessment of RIL training needs</b>.</p> <p>TFF has also participated in a continuing series of workshops and meetings aimed at <b>harmonizing a legality standard for Indonesia</b>. This has become an increasingly significant activity, particularly in the context of the "RIL Verified" program.</p> <p>All details of duration, objectives, specific activities, participation, and in-kind contributions credited to these 24 field visits are maintained in the TFF and the PCU office.</p>	
<b>Output 1.3                      Regional cooperation on RIL enhanced</b>	
<b>Achievements:</b>	<i>Activity 1.3.1 - Distribute information on project supported RIL activities, training materials, courses, demonstrations, to regional forest industry representatives through RIL website and links to Asia-Pacific forestry Commission &amp; FAO-RAP's RIL Net Facility.</i>

TFF's efforts at Regional promotion of RIL, includes an international mail distribution of newsletters and project brochures. Records of mailings to some 35 separate institutions and individuals are maintained in TFF's office. TFF has also distributed training materials to contacts in the Asia-Pacific Region in Vietnam, Lao P.D.R., and Papua New Guinea through participation in conferences and workshops.

During March 25-31, 2005, TFF participated in a **Regional workshop on "RIL and Biodiversity"** held in Ho Chi Minh City, Vietnam. The workshop was organized by CIFOR, a Swedish University and a Vietnam University under a Swedish Government funding grant. This first workshop identified broad biodiversity issues which will have to be considered when developing biodiversity guidelines for RIL.

The **second Regional workshop** on "RIL and Biodiversity" was held in Bogor, Indonesia during January 31 - February 4, 2005. TFF's participation was focused on providing input, which would ensure the practicality of RIL and biodiversity logging guidelines. Proceedings of this workshop have been prepared by CIFOR. TFF's involvement in this process was solicited in recognition of TFF's practical experience in RIL training and demonstration.

In addition, TFF participated in a related **Regional workshop on High Conservation Value Forests** held in Bali in August, 2005.

TFF participated in a **Regional workshop on the Adoption of the Forest Practices Code and RIL** held in Vientiane, Lao. This meeting was sponsored by the APFC/FAO and involved participants from Thailand, Myanmar, Lao, and Vietnam. TFF was invited to present its experience in RIL training, promotion, and demonstration in Indonesia and to explore possibilities of further collaboration.

This connection with the APFC/FAO has led to further Regional collaboration in the form of two **training courses** sponsored by TFF and FAO during July, 2005, in Jakarta. These courses focused on training in the use of the **RIL financial analysis program**, 'RILSIM' and brought in 57 forest practitioners from all over Indonesia.

During the project period, the TFF Executive Director visited Indonesia on three separate occasions in his role as **International Promotion and Marketing Expert**. Efforts at expanding and strengthening the effectiveness of the RIL program, particularly as it relates to the promotion of the forest-market linking aspects, have been the focus of the third quarter of the project

TFF participated in a three day **workshop on illegal logging** organized 'The Forest Dialogue' in Hong Kong.

TFF also actively participated in two workshops on the development and promotion of the **Global Forest and Trade Network** sponsored by WWF. The first was held in Hong Kong and the second was held in Bali in November, 2005.

TFF actively participated in a two day **workshop to harmonize the Indonesian Legality Standard**. This marks the ongoing and active involvement of TFF in this issue. During the past two years, TFF has participated in numerous meetings and workshops on this issue.

In a separate Regional endeavour, TFF responded to a request from the PNG Forest Authority,



<p>to explore the possibility of assisting in the formulation of a National RIL training funding proposal. A Pre-Project Proposal has been prepared and submitted through the PNG FA.</p> <p>Finally, in January 2006, TFF undertook a promotion trip to the UK and Holland in support of its RIL Verified and certification support efforts. Costs of the trip were met by the Dutch Government.</p>	
<b>Achievements:</b>	<b>Activity 1.3.2 - Invite Regional representatives to ...discuss project experiences at project review workshop</b>
<p>The end of project workshop organized by Project Coordination Unit was held in February 15-16, 2006. Representatives from Papua New Guinea, Vietnam, Myanmar, Malaysia and the Philippines were invited to make presentations at the workshop which was attended by approximately 100 persons.</p>	
<b>Output 2.1</b>	<b>Selected instructors for 6 CFET regional campuses trained in RIL curriculum modules</b>
<b>Achievements:</b>	<b>Activity 2.1.1 - Develop RIL training module and course materials for use in surveying, mapping, and logging planning courses ...</b>
<p>In mid-June, 2004, CFET in cooperation with TFF delivered a Training-of-Trainers course to a group of 20 CFET instructors and representatives from universities and institutions. This course was delivered during the course of one week at the Gunung Batu campus of CFET and the Gunung Walat research forest. Completion of this training-of-trainers course, marks the start of the CFET component of the ITTO project.</p> <p>TFF developed and published a procedures manual for "Contour and Tree Position Mapping" for the Training of Trainers Course (Output 2.1.2) as well as detailed training notes and materials. All course materials have been placed on a CD and made available to each course participant. These materials constitute the Contour and Tree Position Training Module.</p>	
<b>Achievements:</b>	<b>Activity 2.1.2 - Training-of-Trainers course delivered for CFET instructors.</b>
<p>A Training-of-Trainers course was delivered to CFET instructors and participants from other educational and research institutions during the week of June 6-12, 2004. A detailed report of the course has been prepared and published in the "RIL and Certification Newsletter", July 2004 issue.</p>	
<b>Output 2.2</b>	<b>Training programs to support RIL implementation initiated at 6 CFET campuses</b>
<b>Achievements:</b>	<b>Activity 2.2.1 - Conduct training courses in surveying, mapping and logging planning at 6 CFET regional training centres</b>
<p>CFET has delivered 9 courses in contour and tree position mapping at 6 of its regional campuses</p>	

<p>as follows: Pematang Siantar(2), Pekanbaru(2), Samarinda(2), Makassar(1), Manokwari(1), Rumpin Bogor(1). A total of around 200 participants received this training. Participants were drawn from forest concessions, district and provincial services of forestry offices, and other forestry related institutions.</p> <p>TFF has also participated in delivery of the CFET course in Manokwari, Irian Jaya, and has provided technical back-stopping support.</p>	
<p><b>Output 2.3</b>                      <i>Supervisory, planning, and operations staff of key forest industry groups trained in RIL methods in practical training sessions conducted</i></p>	
<p><b>Achievements:</b></p>	<p><i>Activity 2.3.1 - Develop practical field guides, operating procedures and other course materials for use in RIL training at forest concessions.</i></p>
<p><b>Five procedures manuals</b> on the various aspects of RIL which were planned under the ITTO project, have been published within the duration of the original project period plus a 4 month extension as follows:</p> <p>Manual #1    “Technical Procedures for Topographic Forest Surveys and Tree Mapping”</p> <p>Manual #2    “Planning Considerations for Reduced Impact Logging”</p> <p>Manual #3    “Operational Considerations for Reduced Impact Logging”</p> <p>Manual #4    “Planning, Location, Survey, Construction and Maintenance for Low-Impact Forest Roads”</p> <p>Manual #5    “Management Considerations for Reduced Impact Logging”</p> <p>A summary of these five manuals is provided in Appendix 2.</p> <p>TFF has developed a program linking RIL adoption with market access. TFF has appointed an executive committee to develop detailed <b>guidelines</b> using a ‘<b>criteria and indicator</b>’ format. A draft version of these C &amp; I are now available directly from TFF.</p> <p>A draft manual providing a detailed RIL <b>Standard for participation in the “RIL Verified” program</b>, has been prepared as an output of the International Marketing and Promotion Expert budget line item.</p>	
<p><b>Achievements:</b></p>	<p><i>Activity 2.3.2 - Conduct RIL field training and demonstrations on planning and implementing RIL for staff at forest concessions</i></p>
<p>Activity 2.3.2 represents the most significant aspect of TFF’s activities under the ITTO project. Under this activity, TFF is promoting widespread adoption of RIL practices through <b>active engagement with working forest concessions</b>.</p> <p>The situation in the forestry sector in Indonesia has changed dramatically since this ITTO project was first conceived and formalized into a project document. Many of the incentives for forest concessions to adopt RIL practices have disappeared due to these changes, consequently, TFF has had to develop different strategies to more effectively promote the adoption of RIL.</p>	

Development of new strategies, which are more responsive to the evolving situation in the Indonesian forest concession sector, has meant an expansion of the activities included under project outputs. These changes together with a brief summary of activities carried out under Activity 2.3.2 are presented below.

- RIL training using a **modular approach** focused on addressing existing gaps in management capabilities or technical skills.
- **Evaluation of RIL training needs** (see Output 1.2.1): 12 field visits focused on an assessment of training needs and/or an audit of RIL adoption.
- Developing and **promoting forest-market links**, where market access is used as a lever to promote the adoption of RIL. This has become a very significant initiative in promoting the adoption of RIL. TFF has prepared a brochure under the ITTO project, describing this concept. The "RIL Verified" program which formalizes this effort to promote adoption of RIL, now has 3 concession participants which manage a combined natural forest area of over half a million hectares. To-date over 10,000 cu.m. of plywood has been shipped under this mechanism.
- **Monitoring and evaluation** visits. (see evaluation of RIL training needs above)
- **Information sessions, briefings, and workshops** on RIL, forest certification, and sustainable forest management: To-date, 6 such workshops/technical meetings have been held (see Output 1.2.1). An article on the role of RIL in forest certification, has been published in the December issue of the "RIL & Certification Newsletter).
- Within the 24 months project period, 8 training sessions, evaluation visits, and technical advice on the **establishment of chain-of-custody systems** in support of forest-market linking and certification support programs, have been carried out.
- TFF has been actively engaged in a separate, certification support program with funding from the Dutch Government. ITTO funds also contributed to this project. The most significant development of this initiative to-date, was the announcement on September 23, 2005, of **FSC certification achieved by one of the forest concession participating in the TFF program**. This was the second forest concession to achieve FSC certification in Indonesia and is a major milestone in efforts to promote sustainable forest management in the country.

During the 24 months of the project, TFF conducted **46 separate field visits**. Of these, **15 visits were concerned with core RIL training** as follows:

- 1 collaboration with CIFOR on RIL training and socialization for local community, government, and company officials. This training was carried out in the CIFOR-Seturan field camp in East Kalimantan and involved 30 participants including a TFF instructor.
- 2 training sessions for contour and tree position mapping, one in Maluku Province for a timber concession and one for the forestry faculty at the University of Nusa Bangsa. A total of 57 participants received this training.
- 2 training sessions on planning and implementation of RIL. This was combined with a major demonstration in each case and involved approximately 100 personnel.
- 2 training and demonstration sessions for forest concessions involving post harvest

evaluation training and chain-of-custody training with a total of 69 participants receiving the training.

- 1 training of trainers session for CFET (activity 2.1.2).
- 1 Community development training in the context of forest certification. This training involved some 20+ forest community leaders, company staff, and government officials and focused on community empowerment and the development of a mutually beneficial relationship between forest communities and a forest concession.
- 2 RILSIM training courses for 57 participants from around Indonesia. This training marks a significant collaboration between TFF and FAO in the promotion of RIL.
- 2 Chain of Custody training sessions.
- 1 certification training and workshop.
- 1 training in the use of ROADENG, a forest engineering software program which can be used for processing general surveys, contour maps, and road design.

Details of these and other field activities organized by TFF, are contained in the individual training and field visit reports on file in the TFF and the PCU office. A tabular summary of these field training activities is provided in Appendix 5.

- **RIL planning and operational demonstrations:** These are major engagements with working concessions, which combine training in RIL, with demonstrations of operational planning and the implementation of logging activities according to RIL standards, at an operational scale. Each training session lasts from 10 days to two weeks.

During the project to-date, TFF has organized and delivered three such RIL training and demonstrations in RIL **planning and operations**, two in Central Kalimantan and one in South Maluku Province. Just over 100 staff and management participated in these training and demonstration sessions. In addition, an estimated 50+ more participants took part in some of the field activities.

Core participants included a wide range of concession management, staff, and workers. Participants in the training and demonstrations came from 4 different concessions.

All three RIL demonstrations involved classroom and field exercises in RIL planning and implementation. This included the use of contour maps, preparation of RIL plans, field location of the plans, opening of skid trails, felling and skidding activities, and a review of monitoring, evaluation, and general management considerations for the full adoption of RIL practices.

The demonstrations were carried out in logging blocks totalling approximately 430 hectares. Detailed records of the training and demonstration activities, list of participants, accrued in-kind value, etc. are maintained in the TFF office.

- **RIL post harvesting demonstrations:**

This was a major demonstration of post harvesting activities and involved impact evaluation and operational research into RIL productivity and avoidable logging waste.

The demonstration and training session lasted 10 days and involved approximately 29 participants.

All RIL training and demonstrations were initiated at the request of forest concessions. In all cases, TFF prepared and submitted a written training proposal and a training report on completion of field activities. These are 'in-house' reports designed to assist the specific company and are not published documents.

## 6. Synthesis of the Analysis

This section briefly reviews to what extent the various aspects of the project have been realized.

### (a) Specific Objectives Achieved

The specific objectives of this project have been to "increase awareness and understanding of RIL implementation techniques" and "build national capacity to implement RIL training".

There is no doubt that all players in the Indonesian forestry sector, now have a much better understanding of what RIL means in terms of improved forest management. In this sense, it can be said that the first objective has been **realized**. It can be said with confidence that at least 5 major concessions are now substantially implementing RIL practices and at least a half a dozen others are at varying stages of RIL adoption. This still leaves the majority of concessions who, although they may have some understanding of RIL, have not yet made a serious attempt to implement improved practices. Consequently, in the larger picture, it would be more accurate to say that the first objective has been **partly realized**.

Similarly with the second objective of building national capacity, CFET has developed the capacity to train for the data collection aspects of RIL but has no financial resources to continue with this activity, consequently, it would be most accurate to say that the national capacity building as represented by a government institution, has been only **partly realized**.

TFF has demonstrated the capability of conducting field training and related activities and has transferred skills required to implement RIL to a significant number of concessions. Since forest concessions are part of the national capacity, it could be said that this objective has been **realized**, however, since still a great deal needs to be done to expand the adoption of RIL, it might be more accurate to categorize national capacity building as **partly realized**.

## (b) Outputs

Details of achievements under Outputs and Activities have been provided in Section 5. A brief synthesis of whether the indicated outputs have been realized or not is provide below.

Table 3. Realization of Outputs

Output	Summary	Status
<b>Output 1.1</b> <i>RIL information and promotional material developed, published and disseminated</i>	Website on-line; newsletters published; papers delivered at international workshops. TFF is currently working with a private initiative to write and publish a comprehensive book on RIL. End of project workshop held.	<b>Realized</b>
<b>Output 1.2</b> <i>Management staff of key forest industries groups and senior regional forest department officers briefed on RIL requirements, benefits, costs and opportunities for forest certification</i>	24 field visits made related to this Output	<b>Realized</b>
<b>Output 1.3</b> <i>Regional cooperation on RIL enhanced.</i>	Extent of engagement in Regional activities and initiatives related to RIL issues greatly exceeded expectations.	<b>Realized</b>
<b>Output 2.1</b> <i>Selected instructors from 6 CFET regional campuses trained in key RIL curriculum modules</i>	Course delivered to 20 instructors early in the project as planned.	<b>Realized</b>
<b>Output 2.2</b> <i>Training programs to support RIL implementation initiated at 6 CFET campuses.</i>	9 or the 18 originally planned courses delivered in 6 campuses. Deviation from original target approved by ITTO	<b>Realized</b>
<b>Output 2.3</b> <i>Supervisory, planning, and operations staff of key forest industry groups trained in RIL methods in practical training sessions conducted at operating forest concessions.</i>	5 technical procedures manuals published. 15 separate training sessions in various aspects of RIL delivered. 4 of these were also major RIL demonstrations.	<b>Realized</b>

## (c) Schedule

All programmed training activities were realized as planned.

At the end of the 4 month extension period, one newsletter and one technical procedures manual are still being prepared for printing.

#### **(d) Actual Expenditures**

Expenditures have been tracked on a monthly basis and adjusted at the end of the first year of the project to correct minor variations in some budget line items.

At the end of June, 2006, \$8,493.20 of ITTO funds allocated to TFF, remained unspent. This will be used to cover the remaining printing costs for the last newsletter and technical procedures manual.

#### **(e) Potential for Replication**

There is clearly a potential for replicating this project into a second phase. The demand for field training remains strong and the scope for expanding the adoption to more forest management units remains huge.

There is, however, strong indication that RIL adoption by itself does not afford the clear financial and economic rewards that the RIL training program seems to transfer to its participants in Brazil. The distortions in the Indonesian forest administration system and the disincentives embedded in government regulations are major disincentives for major improvements in forest management.

The main motivating reason why a forest management unit would chose to adopt RIL in the current regulatory environment, would be:

- To avoid Ministry of Forestry sanctions, although this is probably a rather weak reason since it is still cheaper to buy off such sanctions in most cases,
- To establish a credible claim for sound stewardship in response to market concerns. This is particularly relevant for companies who have market exposure in the more critical European and North American markets. Credibility is deeply linked to the establishment of legality and the establishment of chain-of-custody systems which will allow independent third part verification. The demand for this type of linkage between RIL, legality, and chain-of-custody as piloted by the TFF "RIL Verified" program, has received strong interest from the Indonesian forest management companies and appears to provide a significant incentive to further the cause of RIL adoption, hence a concerted move towards sustainable forest management.

## (f) Potential for Scaling-Up

TFF has had to defer numerous requests for training due to funding constraints during the past two years. Clearly there is a potential to increase the scale of any future funding which targets the adoption of improved forest management practices such as RIL.

Recruitment of additional trainers is constrained only by the availability of funding.



## **PART III: CONCLUSIONS AND RECOMMENDATIONS**

### **(a) Development Lessons**

The field training aspect of this project has clearly demonstrated that forest concession companies can be positively influenced to improve their management practices through training and close technical collaboration.

The development objective of improving forest harvesting practices led to the conceptualization of a RIL project where a major focus was the working forest concessions. This was clearly the appropriate approach since it is the working concessions who are the practitioners of forest management.

In the promotion and implementation and the RIL field training program, it has become increasingly obvious that some of the biggest obstacles to the adoption of RIL, are deeply rooted in inappropriate, restrictive, and excessive forestry regulations. Until the inappropriate aspects of the existing regulatory framework are reformed, there is no realistic reason to expect large scale adoption of RIL within the Indonesian forest concession sector.

### **(b) Operational Lessons**

The RIL field training and demonstration aspects of this project were implemented on the request of the individual forest concessions. Almost without exception, companies who willingly participated in such training and committed significant financial other resources to facilitate the RIL training activities, demonstrated clear and measurable progress in the adoption of RIL.

Major barriers to the adoption of RIL remain. These barriers are primarily rooted in restrictive regulatory requirements through which companies have to navigate at significant direct and indirect cost. The better understanding of these barriers to RIL adoption in the Indonesian context, can serve as a useful guide to structuring any future projects of this nature.

### (c) Recommendations for Future Projects:

- **Identification:**

Future projects in RIL promotion and training, should expand the scope to include issues and activities related to market linking. This could include legality concerns, chain-of-custody requirements, and market promotion. It is also necessary to identify RIL Training Needs of other aspects such as RIL Implementataion, RIL Evaluation, Supervision after logging and Economical Aspects of RIL.

There are major obstacles for improvements in various aspects of RIL. Many necessary improvements are effectively blocked through inappropriate regulations. These need to be taken into account in any new project design.

- **Design:**

The combination of field and institutionalized training is considered to have been an effective approach to implementation of this project.

- **Implementation:**

CFET has demonstrated the ability to implement a training program for field and classroom activities that could be packaged into clearly defined modules. However, training in operational aspects of RIL are clearly more effective if delivered in the context of a working concession.

- **Organization:**

The organization of the project was in line with the working arrangements of the ITTO and accommodated local political considerations.

- **Management:**

The delegation of management authority to the implementing institutions CFET and TFF, and the clear identification of implementation responsibilities and budget requirements, worked well for this project. There is no doubt that had the implementation responsibilities not been clearly stated in the project document, serious problems in implementation could have arisen. Two Regional CFET campuses in Samarinda and Makassar could be developed to become institutes capable of conducting expanded RIL training activities.

Responsible for the project,



Dr. I Gusti M. Tantra

Project Coordinator



# APPENDICES

## APPENDIX 1. RIL TRAINING COURSES

The activity of this project is to conduct training courses in surveying, mapping and logging planning at 6 CFET regional training centres (Activity 2.2.1). CFET has delivered 9 courses in contour and tree position mapping at 6 of its regional campuses, participants were recruited from forest concessionaires, district and provincial forest service offices, and other forestry related institutions, as follows:

1. Training of Trainers (ToT) in Bogor, CFET office at 7-12 Juni 2004 followed by 20 participants.
2. Training courses of Contour and Tree Position Mapping in RIL Planning at Regional CFET Offices and its list of participants of each of the Training Courses are mentioned under the Executive Summary of TRAINING COURSE CONTOUR AND TREE MAPPING IN RIL PLANNING at Regional CFET Offices.

TFF has also participated in delivery of the CFET course in Manokwari, Irian Jaya, and has provided technical back-stopping support.

**Training of Trainers (ToT)**  
**ON CONTOUR AND TREE POSITION MAPPING AND**  
**RIL PLANNING**

**EXECUTIVE SUMMARY**

CFET in cooperation with Tropical Forest Foundation (TFF) has organized ToT on Contour and Tree Position Mapping and RIL Planning. The ToT was held at the Centre for Forestry Education and Training (CFET), Jl. Gunung Batu, P.O. Box 141 Bogor. The practice and theory course was at CFET and Gunung Walat, while the field practice was at Gunung Walat, Sukabumi. The training course was organized on 7-12 June 2004 and was opened by the Head of CFET.

The objective of ToT Course “Contour and Tree Position Mapping and RIL planning” is to improve the human resource ability at the region who are trained and professional to become trainer/instructor in contour and tree position mapping and RIL planning course.

Bases for the implementation are:

1. Project Agreement ITTO PD 110/01 Rev.4 (I): Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and Asia-Pacific Region;
2. Yearly Plan of Operations - Year 1 (2004) ITTO PD 110/01 Rev.4 (I);
3. Decision Letter of the Head of the Centre for Forestry Education and Training No. 48/Dik-2/2004 regarding the Implementation of the ToT on Contour and Tree Mapping and RIL planning.

The Instructors of ToT Contour and Tree Position Mapping and RIL planning are from Tropical Forest Foundation (TFF) 2 persons, they are Mr. Arthur W. Klassen and Mr. Hasbillah.

Curriculum, with total 52 unit hours (each 45 minutes), of ToT Contour and Tree Position Mapping and RIL planning are:

1. Theory : Reduced Impact Logging Introduction, Survey Procedure of the Contour and Data Collection of Tree Position, RIL Planning and Selecta Capita

## 2. Practice : Contour and Tree Position Data Collecting, and Mapping Procedure

Curriculum Program, materials and their time sequence had been implemented as planned.

### a. *Theory Learning*

The theory learning was conducted in the class room which include the subject of RIL Introduction, Contour Survey Procedure and Tree Position Data Collection, RIL Planning and Capita Selecta.

### b. *Practice Learning*

Practice learning was conducted in the field and in the class room. The practice subject in the class is: Map drawing procedure. Mapping procedure was performed after collecting contour and tree position data in the field during Contour and Tree Position Data collection. During field work, the participants divided into 4 (four) groups.

### c. *Training Evaluation*

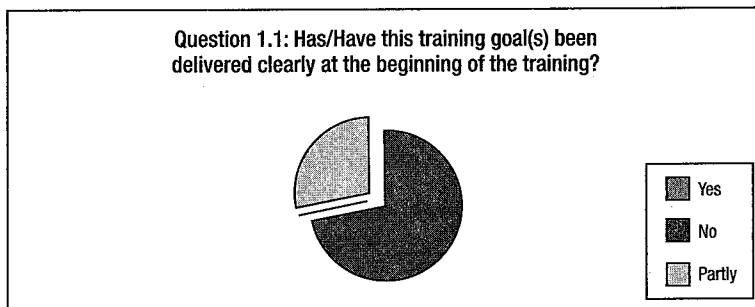
Training Evaluation was focused on 4 (four) aspects; evaluation of implementation training, evaluation of instructors by participants, evaluation of the capability of participants to absorb training materials.

This evaluation was conducted to show the success of the training implementation which includes educative, administrative, and training logistic.

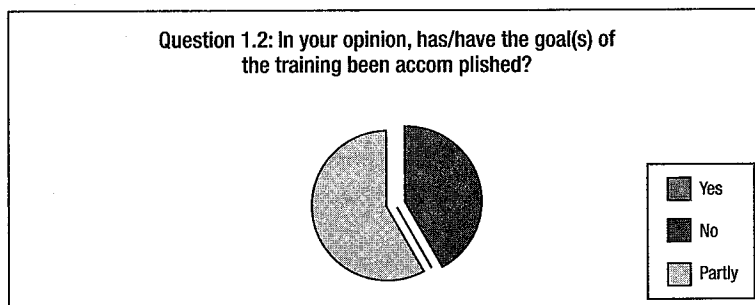
During the training each participants receives facilities, such as accommodation and consumption-refreshements, block note, 30 cm ruler, pencil, ballpoint, transportation (return tickets), transportation and practical field refreshments, training pocket book, training material from TFF, RIL reference book from CFET and PCU, bag, t-shirt, cap, and stocking.

The evaluation of the *training objective* is mainly focused in the presentation of the goal, goal attainability and participants expectation.

Concerning the presentation of the training goal at the beginning of the course, 70% of them say 'yes', and 30% say only half of the training objective has been presented. The last reason i.e. (1) only few of RIL had been given, and (2) language problem (English).

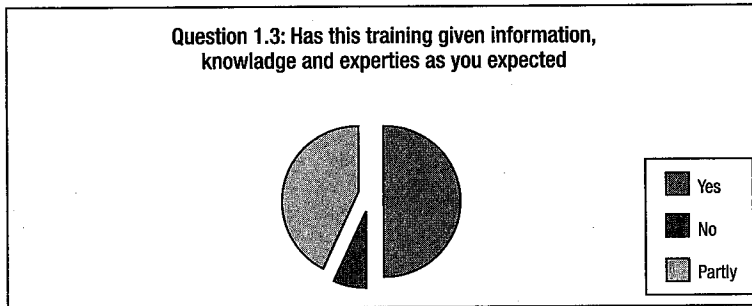


Most of the participants (60%) stated that only part of the training goal was accomplished. The reasons according to them, are: (1) incomplete materials; (2) RIL planning topic has only partly been given; (3) presentation of materials have not finished yet; (4) data processing with computer software was not given; and (5) limited sample cases.



Most of the participants (55%) said that the course has provided information, knowledge and the capability they needed, while 40% said that it was only partly, and 5% stated it did not provide information, knowledge and capability they expected. According to the opinions of the 2 (two) last groups, they were because of:

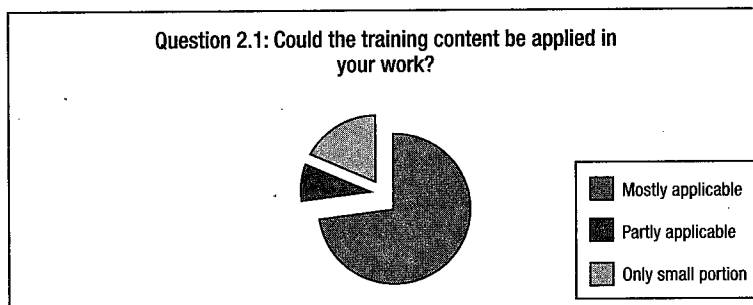
- (1) the training material is very basic;
- (2) additional RIL planning topic and computerized data processing program are needed;
- (3) practice on skidding, felling and planning only in class room;
- (4) training material have been learned before.



Evaluation of the *training content* was focused in 4 (four) aspects, i.e: relevance of the training content, systematic of material presentation, useful/not of the training content, and the main subjects needed for the following training.

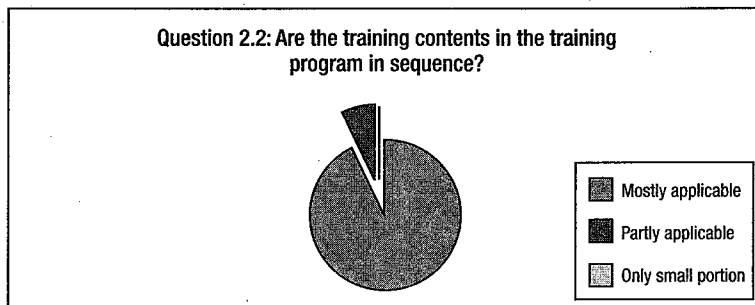
Concerning the relevance of the training content, most of the participants (70%) stated that most of them are applicable in their work. The rest (10%) said only part could be applicable to their work, and 20% of the participants stated only a small part could be applicable to their work.

The reasons of these two last group: (1) the training is too minimum and (2) the number of the Forest Concessionaire at present is limited.



Concerning the systematic of the training material presentation, almost all participants (90%) said that the training content was given in order.



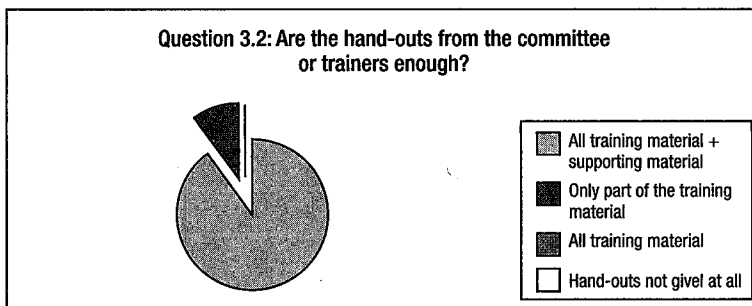


According to them the important and useful lessons during the course are: (1) improve their knowledge, especially in dealing with RIL, contour and tree position mapping; (2) refreshing, have new friends and know each other; (3) getting RIL books and hand-outs training material, and practical field work.

While the material which are not very useful to them are: (1) part of the material was just repetition; (2) mapping with simple method; (3) simple measurements of topographic mapping. Nevertheless, most of the participants expressed that the main subject should not be reduced.

The main subjects which are needed by the participants if there will be a next training are (1) RIL main subject, especially RIL planning technique, RIL operation (felling and skidding technique), up to economic calculation and RIL activities evaluation; (2) subject on data processing software and computerize designing in RIL planning; (3) skidding road network design on contour and tree position map, skidding road construction; (4) forest road network design; (5) how to plan RIL by involving society around the forest, and (6) use and kinds of logging tools.

The evaluation of *hand-outs* was focused on time delivery, and completeness of the material. Almost all participants (95%) indicated that the hand-outs materials were delivered during the first day training or before the course begun. This meant delivery time is good. While the evaluation of the participants concerning the completeness of the material they received, they were very satisfying. Where 90% of them indicated that the hand-outs included in all training material plus supporting materials and 10% indicated that the hand-outs are included in all training materials only.

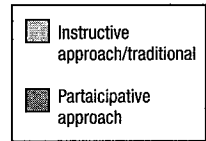
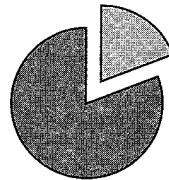


They were satisfied with the material they received from the training committee, the Project Coordination Unit, lots of references, first of all the logging and skidding pocket books and proceeding concerning result of RIL research, and giving material and program of the Training on Survey Techniques and Mapping as well as RIL Planning, which will be organized on each in 6 campuses in their BDK/BLK (Regional Forestry Training Centre). The materials were prepared by CFET for training at HPH (Forest Concessionaire), Forestry Government staff, NGOs and other stakeholders.

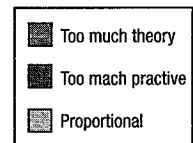
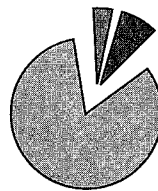
Evaluation of the *training method* was focused on the method of the training approach, balance of the theory and practice, and preparation of all materials for exercises in the field as well as in the classroom.

Most participants (80%) mentioned that the trainer used participative training approach /active participants, 20 % of the participants stated that the trainer more often using instructive approach/traditional/passive participants. Regarding the proportion between theory and practice, 85% participants assumed they were already proportional; 10% said too much practical work and 5% said too much theory. Regarding the necessary preparation for practical field work and class room, 70-75% participants stated that it was well prepared; the rest stated that it was partly well prepared and suggested that the following items should also be prepared: (1) complete mapping equipments, such as drawing table and ruler longer than 30 cm; (2) field shoes; and (3) stick to be used as marker for measuring azimuth and slopes.

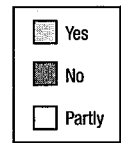
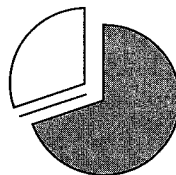
Question 4.1: Generally, wich training approach mostly was used by the trainer?



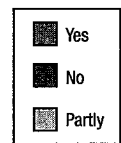
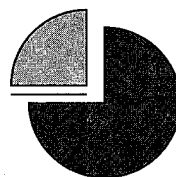
Question 4.2: What is your opinion regarding the proportion between theory practice?



Question 4.3: Were all equipments for field practice well prepared?



Question 4.4: Were all necessity for practical works in class room well prepared?



Evaluation for the trainer was done using participant scores of 10 parameters, i.e.: (1) to encourage participation; (2) having good communication with participants; (3) friendly and easily accepted; (4) enthusiastic in delivering training materials; (5) clear and easily understood; (6) using various and good quality teaching support materials or equipments; (7) working in accordance with the ability level of the participants; (8) explaining clearly subjects which are learned; (9) giving opportunity to the participants to expand their thinking; (10) language used should not be the handicap.

Overall *result of the evaluation to the* International Instructor (Mr. A. Klassen) and National Instructor (Mr. Hasbillah) was recorded on a graph which include recapitulation results of training of the TOT. **In general participants stated good appreciation to both Instructors** in all ten parameters mentioned above. However, some participants stated as follows: (1) for the International Instructor: not so clear and not so easy to be understood (10%); not so clear about the studied subjects (10%); did not give chance to the participants to broaden their thinking (5%) and the language (English) used was as handicap (30%); and (2) to the National Instructor: not so clear and not so easy to be understood (5%); not using various and good quality teaching support materials or equipments (10%).

Table 4. List of Participant on Recapitulation Of ToT Evaluation Result at Gunung Walat Forest Training and Centre for Forestry Education and Training, West Java, on 6 - 12 June 2004

No	Name	Institution
1	Bernard Terry F. Pangaribuan, S. Hut	FTC Pematang Siantar
2	Charles Hardi P. Sihotang, S. Hut	FTC Pematang Siantar
3	Ir. Temmy Nuryeni K	FTC Pekanbaru
4	Nana Supena, S. Hut	FTC Pekanbaru
5	Kusnadi	FTC Pekanbaru
6	Ir. Iwan Setiawan, MPd	FTC Makasar
7	Ir. Hendra Gunawan	FTC Makasar
8	M. Syahlan	FTC Makasar
9	Enggar Setiabudi, S. Hut	FTC Samarinda

10	Setya Gunawan S. Hut	FTC Samarinda
11	Ahmad Yunani, S. Hut	FTC Samarinda
12	Iman Santosa S. Hut	FTC Manokwari
13	O. Pieter Matani, S. Hut	FTC Manokwari
14	Ir. Arif Bastaman	FTC Rumpin
15	Ir. Nugroho In Saputra, MM	FTC Rumpin
16	Ir. Cipta Santosa	FTC Rumpin
17	Ir. Priyambudi Santosa, MSc.	Centre for Forestry Education and Training
18	Ir. Sona Suhartana	Agency of Forest Product Research and Development
19	Diah Mitarani, S. Hut	Winaya Mukti University, Bandung
20	Ir. Rusdi Angrianto	Papua State University, Manokwari

## Training Course

### CONTOUR AND TREE MAPPING IN RIL PLANNING at Regional CFET Offices

#### EXECUTIVE SUMMARY

CFET as one of the Implementing Agency in this project has delivered 9 RIL training courses at 6 Regional CFET offices. The objective of this training implementation are to increase awareness and understanding of RIL techniques as precondition of Sustainable Management of Natural Production Forest; and to be able to conduct survey for contour and tree mapping and RIL planning.

Targets for the participants after following this activity are able:

- a. to explain the principle of Sustainable Management of Natural Production Forest
- b. to explain how important RIL implementation within Sustainable Management of Natural Production Forest
- c. to explain the benefit and limitation of RIL components
- d. to conduct the activity of contour and tree mapping; and RIL planning.

The methods of study are including lecture, theory explanation and practice, display mode/ visual, working group and discussion, and field practice. The training process were implemented in class room and field.

Training courses of Contour and Tree Mapping in RIL Planning at Regional CFET Offices are as follows:

- a. RCFET Pematang Siantar at 6-11 September 2004, followed by 15 participants.
- b. RCFET Samarinda at 24 - 28 January 2005, followed by 30 participants
- c. RCFET Pekanbaru at 31 January - 4 February 2005, followed by 28 participants
- d. RCFET Makassar at 26 - 30 July 2005, followed by 20 participants
- e. RCFET Manokwari at 1 - 6 Agustus 2005, followed by 20 participants
- f. RCFET Pematangsiantar at 12-17 September 2005, followed by 20 participants

- g. RCFET Samarinda at 12-17 September 2005, followed by 20 participants
- h. RCFET Bogor at 16 - 21 January 2006, followed by 20 participants
- i. RCFET Pekanbaru at 28 Februari - 4 March 2006, followed by 22 participants

Requirements for the participants are: maximum age 45; minimum educational level are high school, good health; 3 years experience on working as surveyor/ technician/planner/implementer in forest inventory, mapping, forest planning, wood harvesting and operational forest harvesting.

The instructors are from CFET and other institution.

Table 5. List of participants on Training courses of Contour and Tree Mapping in RIL Planning at Regional CFET Offices.

a. RCFET Pematang Siantar on 6 - 11 September 2004

No	Name	Forest Concessionaire / Institution
1	Arya Jansson M. Sitepu	PT. Panel Lika Sejahtera
2	Ir. Benteng H. Sihombing	PT. Keang Nam DEV.IND
3	Effendi Sitorus	PT. Inanta Timber
4	Faisal	Forestry Service of Nangroe Aceh Darussalam Province
5	Gunawan	PT. RAPP
6	Karsani, S.Hut	PT. Acehnusa Indrapuri
7	Kristian Manullang	PT. Keang Nam DEV.IND
8	Nazri	PT. Keang Nam DEV.IND
9	Riyadin Hendratno	PT. RAPP
10	Syafaruddin, SP	Forestry Service of Nangroe Aceh Darussalam Province
11	Syahrin Hidayat	Forestry Service of Simalungun District
12	Tigor Siahaan	Forestry Service of Simalungun District
13	Tularji	PT. Inanta Timber
14	Yusmad Amsori	PT. Panel Mitra Makmur
15	Lailatul Kadri S.Hut	PT. Acehnusa Indrapuri

b. RCFET Samarinda on 24 - 28 January 2005

No	Name	Forest Concessionaire / Institution
1	M. Arief Hidayat	Forestry Service of East Kalimantan Province
2	Fajeriani	Forestry Service of South Kalimantan Province
3	Indra Gunawan	PT. Wanasokan Hasiindo
4	Agus Riyanto	PT. Sarang Sapta Putra
5	Amung Hidayat	Forestry Service of West Kalimantan Province
6	M. Khairan	PT. Sumpol Timber
7	Nargito	PT. Limbang Ganeca
8	Amin	PT. Erna Djuliawati
9	Gufrani	PT. Aya Yayang Indonesia
10	Agustaf Samber	PT. Gunung Gajah
11	Azis Sarupudin	PT. Harapan Kaltim Lestari
12	Suardi	Certification and Extension Institute, Region XII Palangkaraya
13	Agus Sudarto	PT. Purtuna Cipta Sejahtera
14	Wawan Wardo	PT. Gunung Satyagraha Agrindo
15	Hartono	FTC Samarinda
16	Hendrawan	PT. Rata Timber
17	Bahrudin	PT. Wana Rimba Kencana
18	Dedi Fahrizal	PT. Indowana Arga Timber
19	Rahmadi	Forestry Service of Kutai Kartanegara District
20	Sumarno	PT. Balikpapan Forest Industries
21	Sofyan	PT. Indexim Utama Corp
22	Wahyu Kuswantoro	PT. Segara Indochem
23	Thoyib Wiratmaji	PT. Rima Karya Rayatama
24	Eddi Samson	PT. Timberdana
25	Hari Priatna	Certification and Extension Institute, Region XII Palangkaraya
26	Maryati	FTC Samarinda
27	Hikmatullah	Forestry Service of East Kalimantan Province
28	Slamet	Forestry Service of East Kutai District
29	Jaya	PT. Anugerah Alam Barito
30	Jamal	PT. Dasa Intiga



c. RCFET Pekanbaru on 31 January - 4 February 2005

No	Name	Forest Concessionaire / Institution
1	Herpiandi	Forestry Service of South Sumatera Province
2	Sugiyanto	PT. Diamond Raya Timber
3	Armidi, S.Pi	PT. Diamond Raya Timber
4	Jarwoto	PT. Diamond Raya Timber
5	Adronifalza, A.Md	Forestry Service of Rokan Ilir District
6	Isra Meddy	PT. Perawang Sukses Perkasa Industri
7	Indrarmoko	PT. Arara Abadi
8	Ir. Yanto Suhermanto	PT. Karunia Hutan Lestari
9	Dedi Setiawan, S.Hut	Forestry Service of Siak District
10	Suryanto	PT. Putra Duta Indah Wood
11	Soekiran	PT. RAPP
12	Danang Puspandriyo	PT. Arara Abadi
13	Annur Qodri Laksana	PT. Arara Abadi
14	Martinho Pinto	PT. Rimba Peranap Indah
15	Ir. Heru Iskandar	Koperasi Andalas Madani
16	Martunius	Forestry Service of Jambi Province
17	Alimunir	PT. Andalas Merapi Timur
18	Ahmad Yusuf	Forestry Service of Jambi Province
19	Khairunnas, SST	Forestry Service of Indragiri Hulu District
20	Sugiono	PT. Ekawana Lestari Dharma
21	Wahyu Idris, S.Hut	Forestry Service of Pelalawan District
22	Khairul Amri	PT. Rimba Rokan Perkasa
23	Jhono Purnomo	PT. Rimba Rokan Perkasa
24	Capra Sriwanita, S.Hut	Forestry Service of Riau Province
25	Dwi Gusrima Wijayanti	Forestry Service of Riau Province
26	Wawan Aman Setiawan	PT. Sinar Belantara Indah
27	Rusderfian, S.Hut	Forestry Service of Kuantan Singingi District
28	Ir. Rizal Bustani	PT. Finantara Intiga

d. RCFET Makassar on 26 - 30 July 2005

No	Name	Forest Concessionaire / Institution
1	Siti Nurmasita Achsin, S.Hut	Forestry and Estate Service of East Luwu District
2	Ahmad, S.Hut	Forestry and Estate Service of East Luwu District
3	Husain Sany	PT. Sulwood Export Development
4	Ir. H. Abdul Rasyid	PT. Sulwood Export Development
5	Nana Suryana	PT. Rante Mario
6	M. Rusmi S.	PT. Inhutani I
7	Sattari	PT. Inhutani I
8	Suhardhi S.	Forestry and Estate Service of Mamuju District
9	Asep Supriyadi, S.Hut	Forestry and Estate Service of Maros District
10	Iswanu Priharsanto, SP	Forestry and Estate Service of Mamuju District
11	Naharuddin Abdullah, S.Hut	Forestry and Estate Service of Gowa District
12	Mohamad Titi, SP	Forestry and Estate Service of Tojo Una-una District
13	Dianto Mangiri	Forestry and Estate Service of Tojo Una-una District
14	Medi Riyanto	PT. Tri Tunggal Eboni Corp
15	Dertinus Tangase	PT. Kalhold Base Camp Salusu Pande Toli-toli
16	Lukman, S.Hut	Forestry and Estate Service of Poso District
17	Agus Setiawan, S.Hut	Forestry and Estate Service of Buru District
18	Ady Cahyono	PT. Gema Hutan Lestari
19	Abdul Hamid Soo	PT. Wana Potensi Nusa Camp Makin
20	Indra Gunawan	PT. Tunggal Agathis Indah Wood Industries

e. RCFET Manokwari on 1 - 6 Agustus 2005

No	Name	Forest Concessionaire / Institution
1	Donny Ahmad Setiano	Pt. Wapoga Mutiara Timber
2	Fernando J. Latumanase	PT. Hanurata Coy Ltd
3	M. Rizal Sangadji	PT. Hanurata Coy Ltd
4	Marjono	PT. Intimpura Timber Co.
5	Budi Suryanajaya	PT. Bangun Kayu Irian
6	Jemmy Runtuboy	PT. Bangun Kayu Irian
7	Machlin Maninemwarba	PT. Arfak Indra
8	Manimbul Silalahi	PT. Teluk Bintuni Mina Agro Karya
9	S. Jerry Saleda	PT. Teluk Bintuni Mina Agro Karya
10	Dwi Laksono	PT. Agoda Rimba Irian
11	Sigit Prihono	PT. Yosefa Sarana Timber
12	Yanny Ayal	PT. Yosefa Sarana Timber
13	Wilhalmus Lamera	PT. Wukirasari
14	Mustahar Tafakur	Agriculture, Forestry and Estate Service of Raja Ampat District
15	Robert N. Kawuwung, Sp	Forestry and Estate Service of Sorong District
16	Pieter Bahamba	Forestry and Estate Service of Fakfak District
17	Agustini J.S. Batviano	Forestry and Estate Service of Manokwari District
18	Priyono Setyobudhi	Agriculture, Forestry and Environment Service of Teluk Wondama District
19	Evron Ayomi, S.Sos	Forestry Service of Yapen Waropen District
20	Mafelen D.R Satia, S.Hut	Forestry Service of Waropen Industries District

f. RCFET Pematangsiantar on 12-17 September 2005

No	Name	Forest Concessionaire / Institution
1	Aguntar Pohan	PT. Toba Pulp Lestari
2	Azhar	Forestry Service of Bireun District
3	Charles Sinaga	PT. Keang Nam Dev, Indonesia
4	Edi Azhari, S.ST	Forestry Service of Aceh Tengah District
5	Djut Akbar	Kompontren Najmussalam
6	Hajali Amna	Forestry Service of Bener Meriah District
7	Ikhsan Harahap, S.Hut	Forestry Service of NAD Province
8	Ir. Bustami	PT. Tusam Hutani Lestari
9	Jamin Linting	Forestry and Estate Service of North Aceh District
10	Jhon Ferry Silaen	PT. Panel Lika Sejahtera
11	Jon Piter Damanik	Forestry and Estate Service of Simalungun District
12	Mayzaldi	Forestry Service of NAD Province
13	Naspan Rangkuti	PT. Keang Nam Dev, Indonesia
14	Salamat Marbun	PT. Panel Lika Sejahtera
15	Wahyu Sidaya, BSc.F	PT. Panel Mitra Makmur
16	Aris Djati Dwi Iswanto, S.Hut	FTC PematangSiantar
17	Dewi Septika Yulia	FTC PematangSiantar
18	Ferry Hamonangan Saragih	FORDA Sumatera Aek Nauli
19	Erwin Patriot Manik	FORDA Sumatera Aek Nauli
20	Wendra Salomo Manik	FORDA Sumatera Aek Nauli

g. RCFET Samarinda on 12-17 September 2005

No	Name	Forest Concessionaire / Institution
1	Adi Hermawan, S.Hut	Forestry Service of Kutai Timur District
2	Agung Ananto	Forestry Service of East Kalimantan Province
3	Ishak Karangan, S.Md	Forestry Service of Kutai Barat District
4	Kowino Alkabi, S.Sos	Forestry Service of Tabalong District
5	Mohammad Sidik	Forestry and Estate Service of Pulang Pisau District
6	Sukma Mulyadi, S.Hut	Forestry and Estate Service of Kotabaru District
7	Yunario, S.Hut	Forestry Service of Barito Selatan District
8	Zulkasrin, SE	UPTD KPH Berau
9	Ir. Bahran Ajimi	PT. Aya Yayang Indonesia
10	Budi Widiyarto, S.Hut	PT. Gaung Satyagraha Agrindo
11	Ciptadi	PT. Aya Yayang Indonesia
12	Hanadi, A.P	PT. Sarang Sapta Putra
13	Harpoyo, S.Hut	PT. Roda Mas Timber Kalimantan
14	Herman Ngau	PT. Gunung Gajah Abadi
15	M. Tajuddin, A.Md	PT. Sumalindo Lestari Jaya
16	Misba Syarifudin	PT. Erna Djuliawati
17	Murniansyah, A.Md	PT. Inhutani I Unit Balikpapan
18	Suprpto Suryo	PT. Balikpapan Forst Industries
19	Vanny Sumolang	PT. ITCI Kartika Utama
20	Yanni Arbiyanto	PT. Indowarna Arga Timber

h. RCFET Bogor on 16 - 21 January 2006

No	Name	Forest Concessionaire / Institution
1	Abdul Farid	Forestry Service of Sintang District
2	Abdul Khalik Junaidi, S.Hut	Forestry Service of Sintang District
3	Abul A'la Maududie	Forestry Service of Tanjung Jabung Barat District
4	Acep Saripudin	Forestry Service of Purwakarta District
5	Adang Juanda	Forestry Service of Purwakarta District
6	Agus Sutrisna, S.Hut	Forestry Service of West Java Province
7	Asep Yuhana	Forestry Service of Bengkulu Province
8	Bernardus Manaik S.	Forestry Service of Batanghari District
9	Dadang Kostaman, SP	Forestry Service of Bogor District
10	Dedi Hudaedi	FTC Bogor
11	Edi Hendro	PT. Bumi Raya Utama Wood
12	Herlanto	PT saung Satya Graha
13	Khairil Anwar, SIP	Forestry Service of Pontianak District
14	Ma'sum	Forestry Service of Pandeglang District
15	Noor Djajadi Crisna	PT. Sarmiento Parakantja Timber
16	Rokhmat	Forestry Service of West Kalimantan Province
17	Samroni	PT. Dwima Jaya Utama
18	Samultius	PT. Wanasokan Hasilindo
19	Wahyu Rahman Dedy	Forestry and Land Conservation Service of Kerinci District
20	Yeyen Utari	Forestry Service of West Kalimantan Province

i. RCFET Pekanbaru on 28 Februari - 4 March 2006

No	Name	Forest Concessionaire / Institution
1	Ahmady Zulhanafiah Nasution, S.Hut	Forestry Service of Siak District
2	Aliyudin, A.Md	Forestry Service of Rokan Ilir District
3	Amrizal Anara, S.Sos	Forestry and Estate Service of Dumai City
4	Andri Yam Putra, S.Hut	Forestry Service of Kuantan Singingi District
5	Aswin Bovita, SP	Forestry and Estate Service of Indragiri Hilir District
6	Burhanuddin, S.Hut	Agriculture, Forestry and Veterinery Service Riau Island Province
7	Dian Wahyuni, A.Md	Forestry Service of Rokan Hulu District
8	Faizal	Forestry Service of Kampar District
9	Hamizar	Forestry Service of Kampar District
10	Indra Hasyim Badu	Forestry and Estate Service of Bengkalis District
11	Junaidi, S.Hut	Forestry Service of Rokan Ilir District
12	Muhammad Pasri, S.Hut	Forestry Service of Kuantan Singingi District
13	Mulyanto, ST	Forestry Service of Rokan Hulu District
14	Sumardi	Forestry and Estate Service of Indragiri Hilir District
15	Suryadi	Forestry Service of Riau Province
16	Trijanri Yusman Wahyudi, SF	Forestry Service of Karimun Province
17	Wiwin Sumutriyanto	Forestry Service of Pelalawan District
18	Yosfarialdi	Forestry and Estate Service of Indragiri Hilir District
19	Zulhidayat	Nature Resource Agency of Tanjung Pinang City
20	Zulkarnain	Forestry Service of Pelalawan District
21	Zulkifli Siregar	Forestry Service of Riau Province
22	Zulnasril	Forestry Service of Siak District

## **APPENDIX 2.**

### **TECHNICAL PROCEDURES MANUALS FOR REDUCED IMPACT LOGGING (Output 2.3.1)**

One of the main impediments to the adoption of RIL has always been the lack of understanding of what constitutes RIL and of what specific action a forest management unit needs to take to modify its practices in order to meet the objectives of a RIL management regime.

ITTO Project PD 110/01 Rev. 4(I) has addressed these shortcomings with the publication of five "Procedures Manuals for RIL" These manuals provide detailed implementation guidance for the main activities which make up an RIL system.

These manuals have also been used as 'text books' in the delivery of field training on various aspects of RIL ranging from contour and tree position mapping to post harvesting evaluation.

Brief synopsis of the RIL Procedures Manuals are provided below. All manuals have been published in both English and Bahasa Indonesia.

#### **Manual # 1**

### **TECHNICAL PROCEDURES for TOPOGRAPHIC FOREST SURVEYS**

In the Indonesia forest concession system, two important realities made this manual the obvious starting point for a series of 'how to' manuals covering the implementation of RIL.

The first reality relates to the fact that in virtually all forest concessions, topography is by far the most important factor affecting operational planning and implementation of reduced impact logging practices. In the broken topography typical of the Indonesian and Malaysian forest situation, detailed operational scale contour maps are, therefore, mandatory before effective implementation of RIL practices can begin

This basic information is currently not available for most concession.

The second reality is that Indonesian regulations require that concessions conduct a 100% inventory two years prior to logging. Most concession



companies conduct such inventories by following the Ministry of Forestry procedures for systematic sampling and produce tree position maps at an operational scale as a pre-condition to receiving their annual cutting permits. Unfortunately, these tree position maps do not include accurate planimetric or topographic detail and are, consequently, of little operational value.

This first manual starts with the Ministry of Forest requirement to conduct a 100% inventory of commercial tress and provides technical guidance on how to modify existing field survey procedures to include the collection of elevation data. The manual takes the reader through the field data collection procedure and places particular emphasis on error reduction.

The manual then takes the reader through a step by step procedure for processing the field data and for producing an accurate contour and tree position map.

The manual builds on existing regulatory requirements and existing field survey procedures and requires no new technology to implement..

## **Manual # 2**

### **PLANNING CONSIDERATIONS for REDUCED IMPACT LOGGING**

This manual provides practical, step by step guidance for the development of detailed reduced impact logging plans.

This manual assumes the existence of operational scale contour and tree position maps on a starting point for RIL planning.

The manual takes the reader through the basic planning considerations, through to the detailed planning of a skid trail network, to the actual field location of a detailed logging plan.

The importance of developing company specific operational and environmental standards is emphasized.

Planning and field location activities are described in a practical step-by-step approach. Sample standard operating procedures covering the various planning considerations and activities are included in the appendix.

### **Manual # 3**

## **OPERATIONAL CONSIDERATIONS for REDUCED IMPACT LOGGING**

This third manual in the RIL series, deals with general logging activities.

The starting point for the manual is the assumption that detailed logging plans exist and that all skid trails have been located according to operational and environmental guidelines.

The manual starts with the opening of the skid trails prior to felling and then provides detailed technical guidance on the basic operational activities of felling, bucking and skidding.

Special emphasis is placed on the development of appropriate company-specific utilization policies as this is seen as a particular weakness in the Indonesian forest administration system.

Worker safety also receives special attention in this operational manual.

In the Indonesian selective logging operations, the faller is the ultimate decision maker as to which trees above the legal diameter limit are actually felled. The manual provides an easy to understand decision making framework for the fallers as well as before providing basic guidance for the felling and bucking activities.

The manual also discussed the RIL activities of monitoring, deactivation and post harvesting evaluation and provides a simple but clear rational and implementation guidance for these activities which are typically not part of a conventional logging operation.

### **MANUAL # 4**

## **PLANNING, LOCATION, SURVEY, CONSTRUCTION and MAINTENANCE for LOW IMPACT FOREST ROADS**

This 'stand-alone' manual deals with the broad topic of forest roads from the perspective of formulating policies and practices which seek to mitigate the environmental impact and operational cost of forest roads.

It is important to note that this is not an engineering manual and consequently, does not set out to provide exhaustive guidance on all the activities and technical information which goes into the establishment of a forest road system.

Reducing the impact of forest roads starts with the development of standards and with good planning. The technical skills associated with planning and forest road engineering can play a significant role in reducing the overall impact of forest roads as well as the reducing the cost of construction. Proper planning also influences the long term costs of using the road system.

The manual goes on to deal with simple location, survey and design considerations which can influence the outcome of road construction

The manual deals with a broad range of construction and maintenance considerations, which are crucial to the mitigation of both impact and cost

Finally, the manual closes with discussion of practical considerations and measures for road deactivation as an important but commonly overlooked aspect of forest road administration.

## **Manual # 5**

### **MANAGEMENT CONSIDERATION for REDUCED IMPACT LOGGING**

It is often quite easy to convince technical staff of the benefits of adopting RIL practices. It is also a relatively straight forward matter to develop training modules to address technical gaps in the skills needed to adopt RIL.

However, the most serious impediments to the adoption of RIL practices can most commonly be attributed to factors controlled by the senior management of a concession company.

This manual focuses on these management considerations in an effort to bring a better understanding to the challenge of promoting the adoption of RIL practices.

Introductory discussions review the elements of RIL and how traditional practices need to be modified to achieve RIL objectives.

In Indonesia the government plays a major role in determining how a forest concession is managed and how the private sector management perceives its responsibilities and its opportunities for improvement. A brief discussion of the role of government is a necessary introduction to the more specific management considerations.

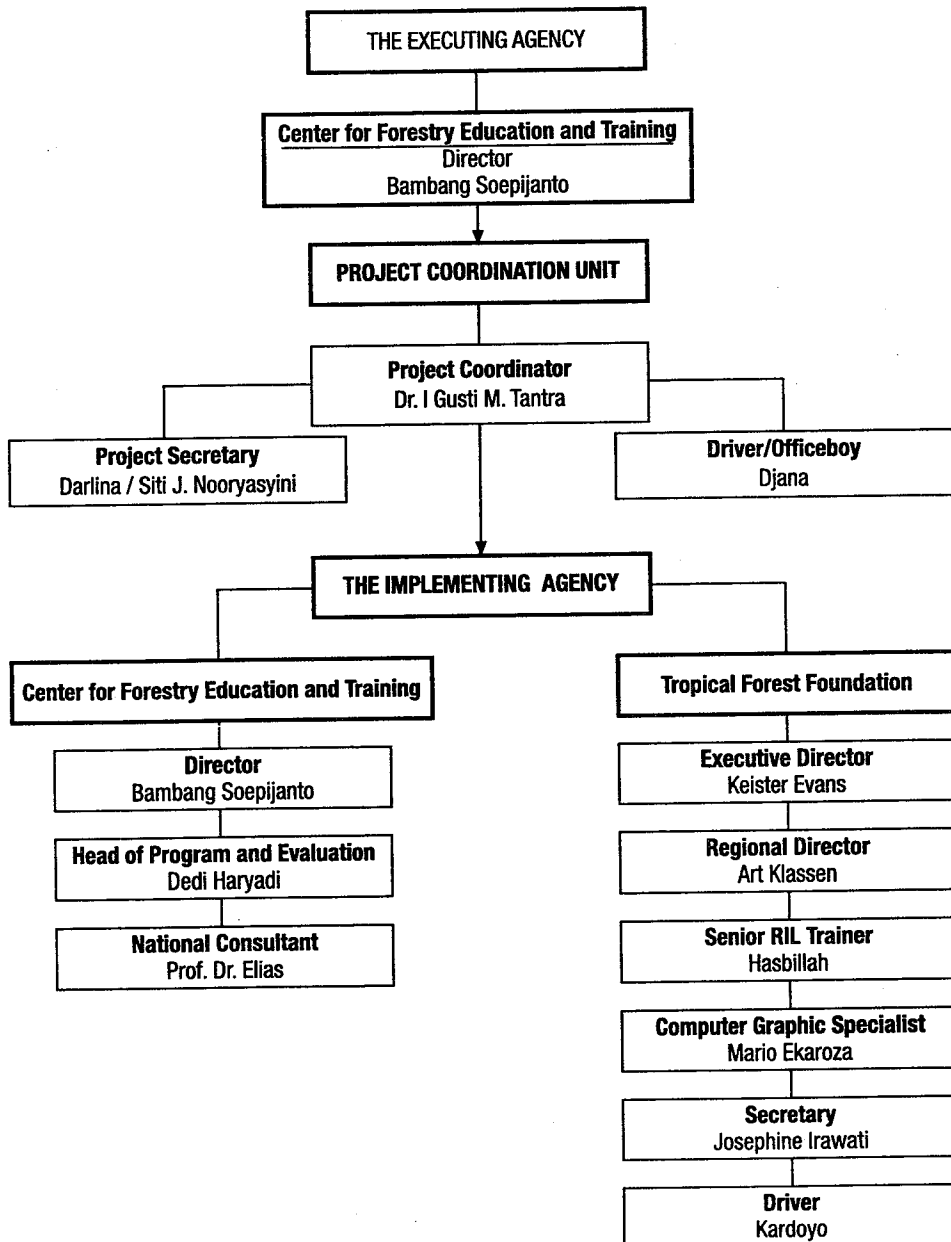
The structure of a typical forest concession company and the functional arrangements within such a company, are management issues which frequently result in barriers against the successful adoption of RIL practices. Removal of these barriers requires active management intervention.

A significant portion of the manual is devoted to developing a set of core standard operating procedures which can serve as a template for forest management companies to institutionalize changes in their internal working arrangements. Such changes are the fundamental requirements for a RIL management regime and can only be implemented by proactive intervention of an informed and progressive senior management.



# APPENDIX 3. PROJECT ORGANIZATION

## PROJECT ORGANIZATION AND STAFFING





## **APPENDIX 4. MINUTES OF PROJECT STEERING COMMITTEE (PSC) MEETINGS**

### **MINUTES of THE FIRST MEETING OF PSC**

**Venue: Meeting Room Utama Manggala Wanabakti,  
Blok I Lantai 4, Jakarta, Indonesia  
23 July 2003**

#### **Item 1. Opening of the Meeting**

The meeting was chaired by Dr Hilman Nugroho, Head of the Center of Forestry Training and Education, Ministry of Forestry, as the Executing Agency of the ITTO Project PD 110/01 Rev.4 (I). He welcomes all the participants, particularly Dr Hwan Ok Ma, Projects Manager, ITTO, Yokohama, Japan.

He mentioned that this first PSC meeting was conducted as suggested by Dr Hwan Ok Ma, while he was in Indonesia to attend PSCs meeting of ITTO projects in Indonesia.

#### **Item 2. Review of Project Structure and Progress**

In accordance with the Project Document PD 110/01 Rev.4 (I) "PROGRAM TO FACILITATE AND PROMOTE ADOPTION OF REDUCED IMPACT LOGGING IN INDONESIA AND THE ASIA-PACIFIC REGION", A Project Agreement has been signed between The International Tropical Timber Organization (ITTO), signed by Excellency Mr. Manoel Sobral Filho, Executive Director, dated March 19, 2003, Yokohama, Japan; and The Government of Indonesia, signed by Excellency Mr. Deddy Sudarman, Charge d' Affaires ad interim, Indonesian Embassy, dated 13 February 2003, Tokyo, Japan; and The Centre for Forestry Education and Training (CFET), signed by Mr. Bambang Uripno, Director, dated 28 January 2003, Bogor, Indonesia.

A Project Steering Committee (PSC) has been established in accordance with Section 2.06 of the Agreement. The PSC was established by a Secretary General Decree No. 64/Kpts/II-KLN/20-03, dated 8th May 2003. The composition of



the PSC, Chairman: Forestry Secretary General (Mr. Wahjudi Wardoyo); Vice Chairman: Head of CFET (Dr Hilman Nugroho); Secretary: Head of Technical Cooperation Division, Bureau of International Cooperation (Mr Hardjono); Vice Secretary: Head of Program and Evaluation Division, CFET (Mr Dedi Haryadi); members, from organizations or institutions as suggested by ITTO, shown in the List of Participants of the Meeting, below.

As stated in the project document, a Project Coordinator, on part time basis, should be appointed by the Executing Agency. Dr I Gusti M. Tantra, CFET, was proposed to the Executive Director, ITTO, Yokohama, Japan, to be engaged as Project Coordinator. Taking various considerations, finally Dr Manoel Sobral Filho, sent "A No Objection Letter" Ref. No. F.03-0652, dated 16 June 2003, to Dr Hilman Nugroho, Director, CFET, Ministry of Forestry Indonesia. Accordingly, an Assignment Letter (Surat Perintah Tugas) No. : 16/SPT/Dik-1/2003, dated 4th July 2003 was issued by Dr Hilman Nugroho, Director CFET to assign Dr I Gusti M. Tantra, NIP 080030294, as the Project Coordinator of the ITTO project PD 110/01 Rev. 4 (I) "Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific Region".

### **Item 3. Review of Yearly Plan of Operation and associated Budget**

Dr I Gusti M. Tantra as Project Coordinator (PC) briefed the meeting on the various aspects of the project by presenting an highlight of the Project Document. The project will be implemented by three agencies, i.e.: PC, CFET and the Tropical Forest Foundation (TFF). Mr Art Klassen, Regional Director, TFF Jakarta, presented the Yearly Plan of Operation (YPO) and the associated budget, followed by discussion and suggestions by present PSC members. Important recommendations are summarised below.

### **Item 4. Other Business**

Next PSC meeting, date and venue. The second PSC meeting to be held within first half of 2004, January or March, to be decided later, preferably in Kalimantan, otherwise in Jakarta.

### **Item 5. Recommendations**

Recalling the importance of the project objective aiming at facilitating the adoption of reduced impact logging in the country, the Committee suggested

that the Executing Agency incorporate the following recommendations in project implementation:

1. The Committee recommended that the Executing Agency should revise and submit the first Yearly Plan of Operation and its associated budget in accordance with the ITTO Manual for Project Review, Monitoring and Evaluation (1999) by providing (i) measurable indicators for the outputs in the logical framework matrix, (ii) information on the current programmes on RIL or logging of CFET, TFF, APHI, CIFOR and other relevant agencies, and (iii) the contributions of the counterparts (CFET, TFF, APHI and Forest Industry). It was suggested that the project should minimise possible duplicated efforts in training RIL.
2. The Committee recommended that the official commencement date for the project implementation should be the date for receiving project funds from ITTO.
3. The Committee recommended that the Executing Agency should undertake the necessary consultations with ITTO on the selection of project personnel such as (i) an international consultant, (ii) national consultants (experts) and (iii) project assistants (secretary and driver) with their detailed terms of reference and estimated costs.
4. The Committee recommended that the Executing Agency consider preparing a project brochure and a one-year project calendar (one page) to increase awareness of RIL.
5. The Committee recommended that the first seminar on RIL planned on 28 August 2003 should prepare detailed terms of reference and include policy makers and senior managers of important forest concessions.
6. The Committee recommended that the Centre for Forestry Training and Education should organise annual RIL training programs at its selected regional Centres with the co-operation of APHI. It was suggested that the Forestry Training Centre / Forestry High School (FTC/FHS) Samarinda and Pekanbaru should organise intensive and frequent RIL training programmes as part of their annual work programmes.
7. The Committee recommended that the Executing Agency should prepare detailed training programmes with the co-operation of TFF and APHI. The participants in the proposed "Training-of-Trainers (TOT)" programme should include academicians at the regional forestry colleges who can jointly deliver RIL training with the regional Centres for Forestry Training and Education. It was suggested that the Executing Agency should review the feasibility of inviting 10 instructors from the regional Centres and each 5 trainers from the regional forestry school and FORDA, respectively.

8. The Committee recommended that the Executing Agency should review the number of target audience for the training courses and the project budget to cover relevant costs for the training courses.
9. The Committee recommended that the Executing Agency should prepare the conduct of an annual auditing for the project budget in accordance with the ITTO guidelines for auditing. The selection of an independent audit firm should be consulted with ITTO in January 2004 and its report should be submitted to ITTO by the end of March 2004.
10. The Committee recommended that the next PSC meeting be organised in the first half of 2004 (either January or May/June 2004) at a selected regional Centre for Forestry Training and Education with a one day filed visit to the project sites.

#### Item 6. Closing of the Meeting

The meeting adjourned at 17:00 PM.

#### Attendance List:

No	Name	Position
1	Hilman Nugroho	MoF
2	Hwan Ok Ma	ITTO Projects Manager, Forest Industry
3	Hardjono	MoF
4	Budijono	MoF
5	Muhandis Natadiwiry	Forest Concessionaire, APhi
6	Art Klassen	Jakarta Regional Director of Tropical Forest Foundation (TFF)
7	IGM Tantra	Project Coordinator ITTO PD 110/01 Rev. 4 (I)
8	Anthony Woods	USA Embassy
9	Dedi Haryadi	Head of Program and Evaluation of Centre for Forestry Education and Training (CFET)
10	Yogi Tryoestoto	MoF
11	Udi Triastoto	MoF
12	Hasbillah	Senior RIL Trainer, TFF
13	Petrus Gunarso	CIFOR

## MINUTES of THE SPECIAL MEETING OF THE PSC

Venue: Meeting Room, Bureau of International Cooperation and Investment, Ministry of Forestry, Manggala Wanabakti Bld., Block VII Floor 6, Jakarta, Indonesia

3rd February 2004

### Item 1. Opening of the Meeting

Mr. Bambang Murdiono, Head of Bureau of International Cooperation and Investment, Ministry of Forestry called the meeting to order at 14.00 and welcomed members to the PSC, particularly Dr. Hwan Ok Ma, Projects Manager, Forest Industry, ITTO, Yokohama, Japan. The adopted agenda and list of participants are attached to the minutes (see Annexes 1 and 2).

Because the meeting was not attended by all members of the PSC, the Chairman proposed that the meeting was called the Special Meeting of the Project Steering Committee.

After welcoming the participants, he mentioned the purpose of the meeting. The meeting was intended to speed up the commencement of the project.

### Item 2. Review of the project structure and progress

The Executing Agency (presented by the Project Coordinator) gave brief summary of the current status of ITTO Project PD 110/01 Rev.4(I) and includes: 1) Report on actions taken to address the 10 recommendations made at the first PSC meeting, and 2) A chronology of events that have occurred since the first PSC meeting on July 23, 2003.

1. Report on actions taken to address the recommendations made at the first PSC meeting

Regarding the recommendations made at the first PSC meeting, the Project Coordinator pointed out that all recommendations would be in effect when the project commences.

2. Chronology of events that have occurred since the first PSC meeting on July 23, 2003.

In accordance with the requirements contained in the PA, Section 3.03 (a), at the first PSC meeting ITTO advised the establishment of an additional Memorandum of Understanding between CFET, TFF and APhi. Regarding this, a draft of MOU between CFET, TFF and APhi was formulated. TFF and APhi signed four copies of the MOU and forwarded them to CFET. However, CFET has not endorsed the MOU due to the September 29, 2003 letter from the Secretary General to ITTO advising of the Ministry's decision to postpone implementation of the project until revisions to the PA were made.

A meeting between KLN/MoF, CFET, and TFF was held to deal with the issue of project initiation and revision of the PA. Another meeting was also held to make a draft letter to ITTO proposing amendments to the PA which would address both the concerns of the ITTO in terms of responsibilities for the in-kind contribution and at the same time avoid the sensitive issues blocking the start-up of the project.

In responding the issue Dr. Hwan Ok Ma proposed two alternatives to deal with the problem: 1) Stick to ITTO proposal to establish an additional Memorandum of Understanding between CFET, TFF and APhi, 2) Delete APhi in the PA.

He further elaborated that the first option might be difficult to implement considering the situation of APhi. The second option would take time. This option would require the changes in the PA. Changing of PA is a very significant modification and it requires the changes to be submitted to the Committee in July 2004. If the changes are approved by the Committee, the result would be accepted in November 2004. He also mentioned that deletion of APhi would be a set back of the project and it would be very difficult to be understood by other member countries of ITTO, because APhi is one of the key players in the project.

Mr. Rukmantara argued that the idea to withdraw APhi from the project was quite sensitive. He mentioned that APhi had no reason not to support the project. APhi first conducted training on RIL in 1992 in East Kalimantan and invited TFF to promote the activities.

Mr. Hardjono cited Secretary General notes on the importance RIL and the commencement of the project. He also proposed an alternative to solve the problem. The proposal is to establish two separate two-party MOU between CFET and TFF (already exist), and between TFF and APhi (particularly regarding this project).

On Mr. Hardjono proposition, Dr. Hwan Ok Ma commented that the option might be reasonable alternative to solve the problem. Further he suggested

that the MOU should indicate the contribution and responsibilities of the collaborating agencies. The implementing or executing agency should be clearly indicated and should only be one agency, the CFET. The TFF in this regard is the collaborating agency.

### **Item 3. Review of the project finance and inputs applied: NA**

Since the project has not started yet, there is no discussion on the project finance and inputs applied.

### **Item 4. Consideration of next Yearly Plan of Operation/work programme and associated budget**

The EA presented the Yearly Plan of Operation/work programme for the next period and its associated budget. The Project Coordinator highlighted the minor changes of the YPO. The changes were related to the commencement date caused by the change of time schedule.

Dr. Hwan Ok Ma suggested that table on page 7 should be elaborated to include more details on output and activities. He also recommended that all experiences regarding RIL should be compiled and utilized to minimize duplication, and use the time and efforts effectively.

### **Item 5. Recommendations and Decisions**

The Committee made the following recommendations and decisions regarding project implementation:

1. The Committee recommended that the Executing Agency should revise the first Yearly Plan of Operation to incorporate more details on output and activities of the project. It was suggested that more information on current programmes on RIL or logging of CFET, TFF, APhi, CIFOR and other relevant agencies should be compiled. The committee also suggested that the project should minimize possible duplicated efforts in RIL training.
2. The Committee recommended that additional MOU should be established between TFF and APhi. The MOU should clearly indicate the contributions and responsibilities of the collaborating parties.
3. The Committee recommended that the next PSC meeting be organized on August 2004 at a selected regional Center for Forestry Education and Training with one day field visit to the project sites.

## Item 6. Other Business

The next PSC meeting is scheduled tentatively on August 2004 preferably it may be conducted for half day and followed by one-day field visit.

## Item 7. Closing of the Meeting

The meeting adjourned at 16.30.

### Attendace list:

No	Name	Position
1	Hilman Nugroho	Vice Chairman of PSC
2	Hwan Ok Ma	Member of PSC; Projects Manager, Forest Industry, ITTO
3	Hardjono	Secretary of PSC; MOF
4	Art Klassen	Member of PSC; TFF
5	Dedi Haryadi	Member of PSC; TFF
6	Petrus Gunarso	Member of PSC; CIFOR
7	I Gusti M. Tantra	Project Coordinator
8	Yogi Setiadi Halim	MoF
9	Hasbillah	TFF
10	rsyal Yasman	PT.Inhutani
11	Rufi'ie	MoF
12	Rukmantara	APHI

## MINUTES of The 3RD PSC MEETING

Venue: Meeting Room, Secretariat General, Ministry of Forestry,  
Mangala Wanabakti Bld., Block I Floor 3, Jakarta, Indonesia

8th September 2004

### Item 1. Opening of the Meeting

The Chairman of the Committee, represented by Mr. Bambang Murdiono, Director of Bureau of International Cooperation and Investment Ministry of Forestry called the meeting to order at 14.00 and welcomed and thanked participants to the PSC, particularly Dr. Hwan Ok Ma, Projects Manager, Forest Industry, ITTO, Yokohama, Japan. He reminded the Committee that the main purpose of the meeting is to monitor the progress of the project implementation and to find ways to solve problems that occurred due to the present conditions of the forest concessionaires and others which affect the project.

Participants who present in the Committee introduced themselves at the Meeting. The adopted agenda and list of participants are attached to the minutes.

### Item 2. Review of the Minutes of the last PSC Meeting

The Project Coordinator, Dr. IGM Tantra made a presentation on follow-up actions to the recommendations made at the Second (Special) PSC meeting held on 3rd February 2004. The Committee was satisfied with the actions taken by CFET and TFF. In particular, it commended the MOU between TFF and APHI to facilitate the organization and implementation of the project activities in accordance with the project document.

However, the Committee noted that the YPO for 2004 could be further improved in the Section 2. Output and Activity Schedule. These include further details on the project Activity 2.1.1 "Develop RIL modules and course materials for use in courses at CFET Regional Campuses and Activity 2.3.2 "Develop practical field guides, operating procedures and other course materials to support for RIL training at forest concessions.

The Committee was informed that ITTO project PD 68/01 Rev.2 (I) "Training in RIL Guyana" has published more than 15 modules for the RIL training courses being conducted by the Forestry Training Centre of Guyana. It felt that



there is a need to facilitate the publication of comprehensive modules for RIL training courses to be used by the CFET as a matter of priority.

Concerning the title of the last PSC meeting, the Committee agreed that it should be regarded as "Second" without putting "Special".

### **Item 3. Review of the project structure and progress**

The Project Coordinator, Dr. IGM Tantra made a presentation on the current status and progress of the project. Mr. Hasbillah, representing TFF, made also a presentation on the implementation of the project activities conducted by TFF since the commencement of the project.

The Committee noted that the TOT training course on contour and tree position mapping and RIL planning was successfully organized on 7-12 June 2004 with the attendance of 20 participants from Regional CEFT and Universities. The manual on "Contour and Tree Mapping" was published and used as a basic text for the TOT course in connection with Outputs 2.1 and 2.2. Six courses will be delivered in the first year.

The Committee further noted that TFF conducted 2 RIL training and demonstrations in forest concessions in Central Kalimantan in relation to the project activities 1.2.1 and 2.3.2. The Committee was pleased to learn that all the project activities planned in the YPO for 2004 have been implemented by CEFT and TFF.

On the publication of the training manual on "Contour and Tree Positioning Mapping" published by TFF, Mr. Tantra pointed out that there were printing errors on the cover such as the year 2003 (second edition) and a temporary sticker of an ITTO logo. It was suggested that the printing errors should be corrected in due course.

The Committee was also concerned about ways to increase the benefits of training and demonstrations for forest concessionaires. In this connection, it felt that efforts to invite interested companies should be made more widely in a more transparent way.

### **Item 4. Review of the project finance and inputs applied:**

The Committee was briefed on the current status of the project account since the receipt of the first installment. It was recommended that future presentation

on financial aspects of the project account should be made based on the ITTO standard format for project financial statement and cash flow. It was also informed that the next installment will be transferred with an official request with supporting documents such as project progress reports and project financial statement and cash flow.

#### **Item 5. Consideration of next Yearly Plan of Operation/Work programme and associated budget**

The EA presented the Yearly Plan of Operation/Work programme for the next period and its associated budget. The Project Coordinator highlighted the minor changes of the YPO.

It was suggested that the table on page 7 should be further elaborated to include more details on the outputs and activities planned. The Committee also felt that it is time to request to transfer the disbursement of the second installment in order to cover the costs foreseen in late 2004 and 2005.

The Committee was briefed on the importance of conducting an annual auditing work in accordance with the ITTO guidelines. The transfer of the third installment will be subject to receipt of this annual audit report.

The Committee further reviewed the proposal to adjust remuneration for the project driver and secretary due to exchange rates and the training courses to be delivered by CFET. It was agreed with the proposed adjustment and the number of the participants in the CFET training courses should be reduced.

#### **Item 6. Recommendation and Decisions**

The Committee made the following recommendations and decisions:

1. The YPO for 2004 should be further improved by specifying the activities 2.1.1, 2.3.1 and 2.3.2. It was also recommended that CFET and TFF should specify the scope of training modules, manuals and associated materials to be published by the project as technical reports.
2. Facilitate the development of RIL modules, manuals and training materials taking into account the recommendation 1 above as a matter of priority.
3. Submit a brief report on the attendance of the regional workshop on "RIL and Biodiversity" held on March 25-31.
4. Elaborate the criteria for the selection of individual company who will receive RIL training from TFF.

5. Improve the presentation on the financial aspects of the project budget by using the ITTO standard format for financial statement and cash flow.
6. Request the transfer of the second installment with supporting documents.
7. Prepare an annual financial audit report in accordance with the ITTO guidelines.
8. Approved the proposal to adjust remuneration for the project driver and secretary.
9. Agreed to reduce the number of the participants in the training courses to be organized by CFET due to insufficient budget allocated for this purpose in the project document.

#### Item 7. Other Business

The Committee agreed to tentatively schedule the next PSC meeting in February/March 2005 with a one-day field visit to the project sites.

#### Item 8. Closing of the Meeting

The meeting adjourned at 17.30.

#### Attendance list:

No	Name	Position
1	Bambang Murdiono	Chairman of the PSC Meeting
2	Bambang Soepijanto	Vice Chairman, PSC
3	Hwan Ok Ma	Member PSC, Projects Manager Forest Industry, ITTO
4	I Gusti M Tantra	Project Coordinator
5	Elias	National Consultant
6	Petrus Gunarso	Member PSC, CIFOR
7	Hasbillah	TFF
8	Basoeki Karyaamadja	MoF
9	Dedi Haryadi	Member PSC, CFET
10	Irsyal Yasman	INHUTANI I
11	Abdul Hakim	CFET
12	Fathrah	PT. Alas Kusuma Group
13	Endjang Muchtar	MoF
14	Agus Ismanto	BPK
15	Yogi Setiadi Halim	MoF

## MINUTES of THE 4TH MEETING OF PSC MEETING

Venue: Manggala Wanabhakti Build, Jakarta, Indonesia

24th - 25th November 2005

### Item 1. Opening of the Meeting

The Chairman of the Committee, represented by Mr. Bambang Murdiono, Director of Bureau of International Cooperation Ministry of Forestry called the meeting to order at 13.30 and welcomed and thanked participants to the PSC, particularly Paul Vantomme, Assistant Director, Forest Industry, ITTO Yokohama, Japan.

He reminded the Committee that the main purpose of the meeting is to monitor the progress of the project implementation.

The ITTO representative, Paul Vantomme was very pleased and thanked to be involved in the PSC meeting of this important project for ITTO.

### Item 2. Review of the Minutes of the 3rd PSC Meeting on 8th September 2004

The Project Coordinator, Dr. IGM Tantra made a presentation on follow-up actions to the recommendations made at the Third PSC meeting held on 8th September 2004. The delay of this 4th PSC Meeting originally scheduled in February 2005, was requested by Dr. Hwan Ok Ma due to tight work schedule in ITTO Yokohama, Japan.

Basically, the Committee was satisfied with the actions taken by CFET and TFF, with a lot of activities done by TFF and CFET as mentioned in Yearly Plan of Operation - Year 2. TFF proposed to extend the project time for 4 months to finalize the manuals. It will be until 31 July 2006 and the 3 remaining manuals will be published by July 2006. During the project time, CFET has done 4 RIL training courses in semester 3. The remain 2 RIL training courses will be delivered in December 2005 - January 2006, in Bogor and Pekanbaru CFET regional campuses.

Paul Vantomme reminded the meeting that all 4 installments have been transferred to PCU. Dr. IGM Tantra informed that TFF and CFET already have received their budgets.

Due to the 4 months extension request, originally without extra funding, but now Dr. IGM Tantra informed the meeting for an additional request of US\$ 5,750 to cover for the costs of running the PCU. Dr. IGM Tantra informed that it will need more budget for PCU according to PC, Secretary and Driver remuneration also for communication and vehicle cost which is total USD 5,750.00. Paul Vantomme informed that one should first check if the amount requested could be taken from potential savings in the financial budget of the project.

### **Item 3. Review of the project structure and progress**

The Project Coordinator, Dr. IGM Tantra made a presentation on the current status and progress of the project. Mr. Art Klassen, Regional Director TFF as one of the implementing agencies of this project, made also a presentation on the implementation of the project activities conducted by TFF during the second year of the project.

Mr. Art Klassen reported on the activities done and planned by TFF for year 2 including and informed that 81 % of the project period already completed and with the remaining US\$ 70,000 (approx.) earmarked for the completion of project activities.

### **Item 4. Review of the project finance and inputs**

Dr. IGM Tantra made the presentations of expenditures since the project received all fourth instalments, and he proposed the additional budget for the 4 (four) months extension.

The committee agreed and approved the adjustment of remuneration for Secretary and Driver/Officeboy for semester 4 started from September 2005 to March 2006, (and including the 4 month extension) due to update exchange rate of USD to Rupiah (local currency).

There were some questions for clarification in budget line for TFF expenditures in line 32 and 34. Mr Klassen provided the meeting with further information regarding the non-planned expenditure for international travel (budget line 32) in view of the regional component of the project activities for collaboration with countries like Vietnam, Mynanmar or PNG.

### **Item 5. Consideration of Yearly Plan of Operation/work programme and associated budget**

Due to the extension of the project time, Dr. Paul Vantomme has requested the PCU to revise the YPO Year 2 as the additional activity until July 2006.

### **Item 6. Preparation of Regional Workshop**

Dr. Elias (Organizing Committee representative) informed on the progress of preparation for the regional workshop, which will be held on February 15 - 16, 2006, in Bogor. The original dates February 8 - 9, were changed upon request by Dr. Hwan Ok Ma. For the reason that during the second week of February, ITTO Secretariat will organize the Expert Panel meeting.

The participants will be invited from Indonesia and the Asia-Pacific region. For the reason of limited budget, PCU only covers for some limited number of invited participants to present a paper.

### **Item 7. Recommendations**

1. The meeting took note of the table provided by the PCU "Summary of the Follow-up to the Recommendations of the 3rd PSC meeting" and agreed with the proposed Actions to be taken by the project. It recommended the project implementing agencies to take all effort needed for the timely implementation of the remaining project activities within the agreed timeframe.
2. The original request for a 4 months extension of the project without extra funding is agreed. However, in view of the new demand for covering the costs of the PCU during the 4 month extension period, the meeting agreed to explore all possible options for finding the finance for the extension (amount USD 5,750.00), including by looking at possible savings in the project budget.
3. ITTO representative Dr. Paul Vantomme ask to CFET to review the contract with the auditor for covering the 4 months extension within the last and final auditing.
4. Agreed to adjust the remuneration of Secretary and Driver/Officeboy for the semester 4
5. Agreed that all publications and technical reports (list to be identified in the completion report) resulting from work financed by the Project shall give appropriate recognition to the roles of ITTO, the Host Government

(Ministry of Forestry) and the project implementing agencies by including their logo's and a copyright right statement on the project outputs (website, manuals) done by this project.

6. The Project Steering Committee agreed with the proposed programme and organization of the regional workshop on February 15-16, 2006.
7. The Project Steering Committee agreed that this would be the last PSC Meeting for this project.

#### **Item 8. Other Business**

One of the participants of the meeting informed that Myanmar is interested in the experiences of Indonesia on RIL and that this project offers the potential for regional collaboration in RIL.

#### **Item 9. Closing of the Meeting**

The meeting adjourned at 25 November 2005, 11.05 P.M.

#### **Attendance list:**

<b>No</b>	<b>Name</b>	<b>Position</b>
1	Bambang Murdiono	Bureau of International Cooperation, Ministry of Forestry (MoF)
2	Bambang Soepijanto	Director of Center for Forestry Education and Training (CFET), MoF
3	I Gusti M. Tantra	Project Coordinator PD 110/01 Rev. 4 (I)
4	Paul Vantomme	ITTO Yokohama, Japan
5	Sri Murniningtyas	Bureau of International Cooperation, MoF
6	Dedi Haryadi	Center for Forestry Education and Training (CFET), MoF
7	Elias	National Consultant PD 110/01 Rev. 4 (I)
8	Gina G. Anandadin	Bureau of International Cooperation, MoF
9	Nurwanto	Center for Forestry Education and Training (CFET), MoF
10	Heru Wibowo	Bureau of International Cooperation, MoF

11	Art Klassen	Regional Director of Tropical Forest Foundation (TFF)
12	Nana Supama	Director of PT. SBK
13	Hasbillah	Tropical Forest Foundation (TFF)
14	Heru Sularso	Natural Forest Development Management, MoF
15	Untoro Wisnu	Center of Standardization and Environment for Forestry, MoF
16	Teguh Rahardja	Bureau of International Cooperation, MoF
17	Dian S.R. Kusumastuti	Center of Standardization and Environment for Forestry, MoF
18	Siti J. Nooryasyini	Project Secretary PD 110/01 Rev. 4 (I)





## APPENDIX 5.

### RIL FIELD TRAINING COURSES (ACTIVITY 2.3.2) CONDUCTED BY TFF UNDER ITTO PD 110/01 REV. 4 (I)

TFF as the main field implementation agency, conducted 46 separate field visits during the 24 months of the project. These field visits included technical consultation, field workshops, training needs evaluation, RIL training and demonstrations, and related field activities.

Of these 46 field visits, 15 were primarily concerned with core RIL training as follows:

Field Activity #	Date	Focus of the Training	Participating Organization	Participants
05	May 10-24, 2004	Demonstration and training of RIL planning and operational activities in a working environment.	PT Erna Djuliawati	32
06	Jun.7-11, 2004	Training-of-Trainers for contour and tree position mapping	CFET	20
09	Jul.12-20, 2004	Demonstration and training of RIL planning and operational activities in a working environment.	PT Indexim Utama & PT Sindo	36
11	Aug.31-Sept.1, 2004	Chain-of-Custody training	PT Suka Jaya Makmur	13
12	Sept.3-4, 2004	Chain-of-Custody training	PT Sari Bumi Kusuma & PT Harjohn Lumber	15
15	Sept.27-Oct.2, 2004	Post harvesting evaluation training: sampling, SOPs, management role in RIL adoption	PT Indexim Utama & PT Sindo Lumber	21
19	Jan. 8-17, 2005	RIL training workshop (CIFOR) socializing RIL	Representatives of local communities, local government, and forest companies	18
27	Apr.25-May 2, 2005	Training in social aspects of community development and empowerment.	PT Erna Djuliawati & local community members	39

29	Jun.16-24, 2005	Training in contour and tree position mapping	PT Gema Hutani Lestari	30
30a	Jun.26-27, 2005	Training in the use of RILSIM financial analysis program for RIL	Participants from concessions, MoF, research, NGOs, consultants, universities,	26
30b	Jun.28-29, 2004	Training in the use of RILSIM financial analysis program for RIL		31
32	Aug.8-12, 2005	Training in contour and tree position mapping	University of Nusa Bangsa & Litbang	22
35	Sept.5-13, 2004	Demonstration and training in RIL planning and operational activities in a working environment	PT Gema Hutani Lestari	51
40	Dec.13-22, 2005	Training and demonstration in post harvesting evaluation and operational research	PT Gema Hutani Lestari	29
41	Jan.16-21, 2006	Training in the use of ROADENG software for mapping and road design	PT Indexim Utama	5

Details of these and other field activities organized by TFF, are contained in the individual training and field visit reports on file in the TFF and the PCU office.

## **APPENDIX 6.**

# **ITTO - MOF REGIONAL WORKSHOP PROCEEDING “RIL IMPLEMENTATION IN INDONESIA WITH REFERENCE TO ASIA - PACIFIC REGION: REVIEW AND EXPERIENCES”**

## **EXECUTIVE SUMMARY**

The proceeding of the workshop has been published in May 2006, with 215 pages. The preface and recommendation have provided the overall picture of the workshop process from the beginning to the end.

The followings are the copies of those parts.

## **PREFACE**

The “ITTO-MoF Regional Workshop on RIL Implementation in Indonesia with reference to Asia-Pacific Region: Review and Experiences” was held in Bogor on 15th -16th February 2006, organized by the Project Coordination Unit (PCU) of the ITTO project “PD 110/01 REV. 4(I): Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific Region”. The workshop was participated besides by Indonesian participants, has also been participated by participants from Brunei Darussalam, Papua New Guinea, the Philippines, Malaysia, Myanmar, USA and Viet Nam.

This workshop proceeding has been compiled based on, in sequence, the workshop welcome address by the organizer, opening remarks presented by the ITTO representative and the Secretary General of the Ministry of Forestry, followed by papers presented by invited speakers from CIFOR; from Indonesia forest concessionaires which have been practicing RIL; from Implementing Agencies of the project i.e. CFET and TFF; from the Bogor Agricultural University and invited speakers from some Asia-Pacific countries i.e. Viet Nam, Myanmar, Malaysia, the Philippines and Papua New Guinea (PNG). There were two other papers included, i.e. one Voluntary paper and one RIL Note. In the Annexes are also included Workshop Programme, List of Participants, Project Steering Committee and Organizing Committee of the workshop.

The Regional Workshop recognized the importance of implementing Reduced Impact Logging (RIL) as one of the ways to achieve sustainable forest management. The RIL practice was convinced to be able to enhance sustainable harvesting practices with low impacts to forest soils and residual stands. Therefore, the Ministry of Forestry through the Directorate General of Forest Utilization had issued Decree No. 274/VI-PHA/2001, which requires training of loggers on RIL techniques during harvesting practices by concession holders, in order to achieve sustainable forest management.

During the workshop sessions, firstly the PCU presented an overview of the project implementation, followed by papers on "RIL Promotion and Marketing, by Project Advisory of Tropical Forest Foundation (TFF); Training of Trainers (ToT) on Contour and Tree Position Mapping, and RIL Demonstration and Practical RIL Field Training at Forest Management Units, by TFF; Training on Survey Techniques, Contour and Tree Position Mapping and RIL Planning, by National Consultant of Center for Forestry Education and Training (CFET); Evaluation of Training of Trainers on Contour and Tree Position Mapping and RIL Planning, by Director of CFET and National Consultant of CFET; RIL Training and Implementation Experiences in Myanmar, by General Manager (Planning) Myanma Timber Enterprise of Myanmar; RIL Training and Implementation Experiences in Viet Nam, by Senior Forest Officer of Viet Nam; Development and Implementation of Philippine Code of Practice for Forest Harvesting in Community - Based Forest Management Areas, by Project Coordinator Enhancing Sustainable Forest Harvesting in Asia, Philippines; The Experience of Reduced Impact Logging in Papua New Guinea, by PNG Eco-Forestry Program, Papua New Guinea; The Logfisher - Its Development and Application in New Ground Based Reduced Impact Logging System in Peninsular Malaysia, by Logfisher International, Johor, Malaysia; Problems in RIL Practices In Indonesia, by Director of PT. Alas Kusuma Group; Reduced-impact Logging (RIL) Research and Development in Malinau Research Forest, East Kalimantan: A Challenge of RIL Adoption, by CIFOR; Financial Analysis of RIL Implementation in the Forest Concession Area of PT. Suka Jaya Makmur, West Kalimantan and Its Future Implementation Options, by the Faculty of Forestry, Bogor Agricultural University.

It was demonstrated by some speakers, by forwarding evidence through presenting data and analysis, that RIL implementation was superior to conventional logging (CL) in various aspects such as environmental and economical aspects. It was also revealed that traditional logging systems using indigenous technology consider having Low Impact Logging and labor intensive, especially in Myanmar, Viet Nam, Papua New Guinea, and Indonesia, although

“logfisher” technology has also been developed by Malaysia, which is also superior to CL.

Special note should be mentioned on RIL linkage and its market access. This should be conducted in proactive and in favorable conditions in order to have better understanding about RIL and its implementation in the field for the policy maker, government officers, RIL implementer, NGO, and community.

One of the important issues discussed during the workshop sessions was the importance of raising public awareness where the environmental problem could be overcome by, among other ways, practicing RIL during the harvesting of natural production forest.

The fact that the number of trained person to master RIL system is still inadequate, therefore the project on “Program to Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and the Asia-Pacific Region” made an imperative.

It may be concluded, that the participants of the workshop were aware that the national capacity building, particularly on RIL technology and its implementation, should be continuously done in Asia-Pacific Region.

## **WORKSHOP RECOMMENDATION**

### **Introduction**

The ITTO-MoF Regional Workshop on RIL Implementation in Indonesia with reference to Asia-Pacific Region: Review and Experiences was held in Bogor on 15-16 February 2006 and participated by 101 participants coming from Indonesia (82), and 19 foreign participants from Brunei Darussalam (1), Japan (1), Malaysia (9), Myanmar (1), Papua New Guinea (1), Philippines (1), USA (1) and Viet Nam (4).

The Regional Workshop recalled the importance of implementing Reduced-Impact Logging (RIL) towards sustainable forest management, as it enhances sustainable harvesting practices with low impacts to forest soils and stands.

It is shown that RIL implementation is superior to conventional logging (CL) in the following aspects: minimizing the environmental damages and increasing economically feasibility with improvement of timber utilization efficiencies.

The workshop noted that traditional logging systems using indigenous technology consider having low impact logging and labor intensive, especially in Myanmar, Viet Nam, Papua New Guinea, and Indonesia. However, "logfisher" technology has also been developed by Malaysia, which is environmentally friendly technology.

In developing countries, it is necessary to facilitate the implementation of RIL in wider aspects, including plantation forests such as fast-growing species plantations and conversion forests using appropriate techniques including semi-mechanized logging techniques.

The harvesting of small diameter log should use manual system, which is integrated with small wood based industry to minimize the transport cost.

RIL linkage and its market access should be conducted in proactive and favorable conditions in order to have better understanding about RIL and its implementation in the field for the policy maker, government officers, RIL implementer, NGO, and community.

It is known that Reduced-Impact Logging (RIL) system is able to minimize the environmental impacts, but some external factors become barrier for the implementation of RIL, among them are uncertainty of security in investment and low incentive system, weak of law enforcement in preventing illegal logging and forest encroachment, including land tenure. Some other obstacles were also identified such as tree data transparency and sustainable business commitment, etc.

Public awareness to the environmental problem put in place RIL system is a necessity, but the number of trained person to master RIL system is still inadequate. Therefore, national capacity building should be continuously done in Asia-Pacific Region.

Noting the urgent need to promote the efficient implementation of RIL, the Regional Workshop recommended, among others, the following:

### **Recommendation**

- I. Increase the public awareness of the multiple-values of sustainable management of tropical forests, which are being enhanced by the implementation of reduced impact logging practices in many countries in the Asia-Pacific region.

- II. Analyze the need of RIL training of each Asia-Pacific country to complement the existing RIL development and implementation, as well as its National Code of Forest Harvesting.
- III. Promote the establishment of a comprehensive, regular and structured programme for RIL training in the training programmes of national forestry training institutes. In this regard, it is strongly recommended that the Center for Forestry Education and Training, Indonesia should establish and implement RIL training courses as part of its annual training programme.
- IV. Improve enabling conditions for the implementation of RIL in Indonesia by conducive forest policies such as by offering incentive and measures to enforce the existing Decree of DG Forest Utilization, No. 274/VI-PHA/2001, which requires training of loggers on RIL techniques during harvesting practices by concession holders, in order to achieve sustainable forest management.
- V. In order to adopt RIL, some silvicultural rules must be improved to increase the residual stand volume due to the specific environmental forest ecosystem of each site.
- VI. In order to achieve successfully and effectively training of trainer and training course results: (1) regular, structured and comprehensive of RIL training program is a must, (2) Manual of RIL training subjects and module of the subjects should be well prepared.

Bogor, 16 February 2006  
Workshop Participants





## APPENDIX 7. LIST OF REPORTS

These reports below are well documented and maintained by PCU:

- 1) Project Document
- 2) Yearly Plan of Operation Year 1
- 3) Yearly Plan of Operation Year 2
- 4) First Progress Report 1st Semester August 2004. Program To Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Draft. 2004. PCU. 2004.
- 5) Second Progress Report, Bi-Annual Report. Program To Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Period: September 2004 - February 2005. PCU. 2005
- 6) Third Progress Report, Bi-Annual Report. Program To Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Period: March - July 2005. PCU. 2005.
- 7) Third Progress Report, Bi-Annual Report. Updated. Program To Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Period: March - October 2005. PCU. 2005.
- 8) Fourth Progress Report, Bi-Annual Report. Program To Facilitate and Promote Adoption of Reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Period: November 2005 - July 2006. PCU. 2006.
- 9) Financial Report As of December 31, 2004. Program To Facilitate and Promote Adoption of reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Independent Auditor's report & PCU. 2005.
- 10) Financial Report As of December 31, 2005. Program To Facilitate and Promote Adoption of reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Independent Auditor's report & PCU. 2006.
- 11) Financial Report As of July 31, 2006. Program To Facilitate and Promote Adoption of reduced Impact Logging (RIL) in Indonesia and The Asia-Pacific Region. Independent Auditor's report & PCU. 2006.
- 12) RIL Workshop Proceeding : RIL Implementation in Indonesia with Reference to Asia-Pacific Region: Review and Experiences. ITTO - CFET. 2006.

- 13) Manual Procedure 1 : Technical Procedures for Topographic Forest Surveys and Tree Mapping (Prosedur Survei Topografi Hutan dan Pemetaan Pohon). Klassen, A., and Hasbillah. 2004.
- 14) Manual Procedure 2 : Planning Consideration for Reduced Impact Logging. (Pertimbangan Dalam Merencanakan Pembalakan Berdampak Rendah). Klassen, A., and Hasbillah. 2005.
- 15) Manual Procedure 3 : Operational Considerations For Reduced Impact Logging. (Pertimbangan Operasional untuk Pembalakan Berdampak Rendah). Klassen, A., and Hasbillah. 2006
- 16) Manual Procedure 4 : Planning, Location, Survey, Construction And Maintenance For Low Impact Forest Roads. (Perencanaan, Lokasi, Survey, Konstruksi dan Pemeliharaan Bagi Pembuatan Jalan Logging Berdampak Rendah). Klassen, A., and Hasbillah. 2006.
- 17) Manual Procedure 5 : Management Consideration For Reduced Impact Logging. (Pertimbangan Manajemen untuk Pembalakan Berdampak Rendah). Klassen, A., and Hasbillah. 2006.
- 18) RIL Training of Trainers Report by CFET. 2004. (Laporan Penyelenggaraan Pelatihan ToT Substansi Pemetaan Kontur dan Posisi Pohon Serta Perencanaan RIL)
- 19) RIL Training Course Report at RCFET Pematang Siantar by CFET. (Laporan Penyelenggaraan Pelatihan Teknik Survei dan Pemetaan Posisi Pohon dan Kontur serta Perencanaan Reduced Impact Logging (RIL). Pusklat Kehutanan, BDK Pematang Siantar. 2004.)
- 20) RIL Training Course Report at RCFET Samarinda by CFET. (Laporan Penyelenggaraan Pelatihan Pemetaan Kontur dan Posisi Pohon serta Perencanaan RIL Tahun 2005. Pusklat Kehutanan, BDK Samarinda. 2005.)
- 21) RIL Training Course Report at RCFET Pekanbaru by CFET. (Laporan Penyelenggaraan Diklat Pemetaan Kontur dan Posisi Pohon Tahun 2005. Pusklat Kehutanan, BDK Pekanbaru. 2005.)
- 22) RIL Training Course Report at RCFET Makassar by CFET. (Laporan Penyelenggaraan Diklat Pemetaan Kontur dan Posisi Pohon Angkatan I Tahun 2005. Pusklat Kehutanan, BDK Makassar. 2005.)
- 23) RIL Training Course Report at RCFET Manokwari by CFET. (Laporan Penyelenggaraan Diklat Pemetaan Kontur dan Posisi Pohon serta Perencanaan RIL Angkatan I di BLK Manokwari Tahun Anggaran 2005. Pusklat Kehutanan, BDK Manokwari. 2005.)

- 24) RIL Training Course Report at RCFET Pematang Siantar by CFET. (Laporan Penyelenggaraan Diklat Pemetaan Kontur dan Posisi Pohon serta Perencanaan Reduced Impact Logging (RIL) Tahun 2005. Pusdiklat Kehutanan, BDK Pematang Siantar. 2005.)
- 25) RIL Training Course Report at RCFET Samarinda by CFET. (Laporan Penyelenggaraan Pelatihan Pemetaan Kontur dan Posisi Pohon serta Perencanaan Reduced Impact Logging (RIL). Pusdiklat Kehutanan, BDK Samarinda. 2005.)
- 26) RIL Training Course Report at RCFET Bogor by CFET. (Laporan Penyelenggaraan Diklat Pemetaan Kontur dan Posisi Pohon serta Perencanaan RIL Tahun 2006. Pusdiklat Kehutanan, BDK Bogor. 2006.)
- 27) RIL Training Course Report at RCFET Pekanbaru by CFET. (Laporan Penyelenggaraan Pelatihan Pemetaan Kontur dan Posisi Pohon serta Perencanaan RIL Tahun 2006. Pusdiklat Kehutanan, BDK Pekanbaru. 2006.)
- 28) Program Pelatihan Teknik Survey dan Pemetaan Serta Perencanaan RIL. Elias. 2004
- 29) Contoh Modul Pelatihan Reduced Impact Logging. Elias. 2004
- 30) Table Training Plan Organizer for CFET Training Courses. Elias. 2004
- 31) Conflict Forest Area and Implication of Reduce Impact Logging (RIL) in Dayak Community in Central Kalimantan. Handen, B., and Saptawartono.



## APPENDIX 8. LIST OF ACRONYMS

AAC	Annual Allowable Cut
APFC	Asia-Pacific Forestry Commission
BPK	Bina Produksi Kehutanan (Forestry Product Management)
BSc.F	Bachelor Science Forestry
CD	Compact Disc
CFET	Center for Forestry Education and Training
CIFOR	Center for International Forestry Research
DG	Directorate General
EA	Executing Agency
FAO	Food and Agriculture Organization
FORDA	Forestry Research and Development Agency
FSC	Forest Stewardship Council
FTC	Forestry Training Center
ITTO	The International Tropical Timber Organization
Ir.	Insinyur (Engineer/Bachelor Degree)
KLN	Kerjasama Luar Negeri (International Cooperation)
KPH	Kawasan Pemangkuan Hutan (Forest Management Unit)
MoF	Ministry of Forestry
MPd	Master Pendidikan (Master Degree in Educational Study)
NGO	Non Government Organization
PCU	Project Coordination Unit
PD	Project Document
PNG	Papua New Guinea
PSC	Project Steering Committee
RAP	Regional Asia-Pacific
RAPP	Riau Andalan Pulp and Paper
RCFET	Regional Center for Forestry Education and Training
RIL	Reduced Impact Logging
RILSIM	Reduced Impact Logging Simulator
S.Hut	Sarjana Kehutanan (Forestry Degree)
SE	South East

S.E	Sarjana Ekonomi (Degree in Economics Study)
S.P	Sarjana Pertanian (Degree in Agricultural Study)
S.Sos	Sarjana Sosial (Degree in Social Science Study)
S.St	Sarjana Statistik (Degree in Statistical Study)
S.T	Sarjana Teknik (Degree in Technical Study)
TFF	Tropical Forest Foundation
ToT	Training of Trainer
UPTD	Unit Pelaksana Teknis Daerah (Regional Technical Operational Unit)







