

Report on Mid-term Evaluation of Taninthayi Nature Reserve Project Myanmar

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ACRONYMS

CAS	California Academy of Sciences
CF	Community Forest
CFDTC	Central Forestry Development Training Centre
EEC	Environmental Education Centre
FD	Forest Department
FEC	Foreign Exchanged Currency
GPS	Global Positioning System
HSE	Health, Safety and Environment
IUCN	International Union for Conservation of Nature
LFA	Logical Framework Approach
LOU	Local Operating Unit
METT	Management Effectiveness Tracking Tool
MGTC	Motamma Gas Transportation Company
MIST	Management Information System
MMK	Myanmar Kyat
MOE	Ministry of Energy
MOECAF	Ministry of Environmental Conservation And Forestry
MOGE	Myanmar Oil and Gas Enterprise
MP	Management Plan
NC	National Consultants
NTFP	Non Timber Forest Products
NWCD	Nature and Wildlife Conservation Division
PA	Protected Area
PAS	Protected Area System
PCC	Project Coordinating Committee
PD	Project Director
PPSCS	Parks in Peril Consolidation Scorecard
PQPR	Project Quarterly Progress Report
PTTEP	PTT Exploration and Production Public Company Limited
PW	Park Warden
RAPPAM	Rapid Assessment and Prioritization of Protected Area Management
RMT	Reserve Management Team
TA	Technical Advisor
TC	Technical Committee
TEMP	Total Exploration And Production
TNRP	Taninthayi Nature Reserve Project
TOR	Terms of Reference
TPC	Taninthayi Pipeline Company
UE	United Engineering
USD	United State Dollar
USG	User Group
VCP	Village Consultation Process
VUZ	Village Use Zone
VZP	Village Zonation Process
WCPA	World Commission on Protected Area
WCS	Wildlife Conservation Society

SUMMARY

This report is a synthesis of all evaluations conducted by the evaluation team from 1st July 2011 to 31st July for a period of one month. The team used interviews, focus group meetings, on site visits, observations, reviewing records and reports during the evaluation mission. Among various evaluation methods for the assessment of Management Effectiveness in Forest Protected Areas such as Management Effectiveness Tracking Tool (METT), Parks in Peril Consolidation Scorecard (PPSCS), Rapid Assessment and Prioritization of Protected Area Management (RAPPAM) and International Union for Conservation of Nature - World Commission on Protected Area (IUCN-WCPA), METT was adopted in this study using score cards modified to suit the requirements of TNR because of its broader scope and comprehensiveness compared to other methods. The total score of 74 indicated that the performance of the project up to the mid-term is satisfactory. However, there is still room for improvement during the subsequent stages of the project.

This project is the second phase of the Taninthayi Nature Reserve Project (TNRP) initiated in 2005 with funds provided by Motamma Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) in order to support the planning, establishment and operation of the tropical rainforests and their constituent biodiversity in the Taninthayi region of the southern Myanmar.

After the termination of the first phase of the project in March 2009, a bridge period of 6 months was designated for the preparation of a Management Plan for the second phase. The Management Plan for TNRP was developed by the Core Unit in September 2009, for the effective management and implementation of the project and accordingly annual work plans are developed for each year. To provide assistance to Reserve Management Team (RMT) in implementing project activities, monitoring and evaluation are conducted based on TNR Operational Management Plan.

The project was overseen by the Project Coordinating Committee (PCC) and implemented by Reserve Management Team (RMT). In order to speed up the implementation process, a project Technical Committee (TC) was formed in line with the decision made by the 14th PCC meeting, held on 24th August 2009. TC is made up of at least one representative each from FD, MGTC and TPC; preferably NWCD representing FD.

Wildlife Conservation Society (WCS) is recruited for another 4-year term as Technical Advisory team for providing advisory support to all aspects of the reserve development and management based of best international practices.

During the evaluation stage 8 national consultants were recruited to carry out the following tasks:

- Marketing study of non-wood forest products
- Report on Tree and Bamboo Species Survey
- Biological Research for Wild Elephants distribution and abundance

- Community Forestry
- Forest Dynamics Research on Endemic Tree Species in TNR
- Study of Appropriate Forest Fire Management in TNR
- A Report on Malayan Tapir Survey in TNR, and
- Evaluating the Status of Tigers and Their Preys

For the time being the funding provided by MGTC and TPC appears to be sufficient for running the project without any financial constraint. However, it can be clearly noticeable that the FEC exchange rate in Jan 2010 (1 FEC = MMK 1000) nosedive in June 2011 by a reduction in 31% (1FEC=MMK 690) which seriously affects the allotted funds for the effective implementation of the project.

Reserve Management Team (RMT) consists of 21 permanent staff from Forest Department (FD) and 25 locals, including 10 patrols and 6 extension staff. The staff position seems to be quite sufficient compared to other protected areas in the country.

With the initiation of Community Forestry Program, local communities are quite eager to join the program as land tenure is a problem for the villages at the vicinity of TNR as they are living quite close to the reserved forests with some of their orchards encroaching the reserved forests. The recipient of 5 Community Forest certificates is a great achievement for the 5 User Groups from 4 villages, viz., Migyaunglung (old), Zinba, Yebone and Thayarmon villages. RMT will help assist on the proper management of the CF after awarding certificates by Forest Department with additional support such as provision of cash crop seedlings and forest tree seedlings for the CF User Groups based on users' preference.

Nevertheless, the legal status of the reserve is constituted through notification as well as demarcation of boundaries for improved public recognition and support. Regular patrols and surprised checks are carried out in and around TNR: also along the water courses and along the TNR reserve boundary based on information of illegal logging and illegal wildlife trade informed by the patrolling staff.

Based on the key findings, the recommendations are made which will help assist the successful implementation and management of TNR.

REPORT ON MID-TERM EVALUATION OF TANINTHAYI NATURE RESERVE PROJECT MYANMAR

1. PROJECT EVALUATION TEAM

The following team was assigned as mid-term Project Evaluation Team by the Ministry of Environmental Conservation and Forestry (MOECF).

1. U Saw Win, Environmental Consultant (Vice Chairman of BANCA)
2. U Maung Maung Pyone, Forestry Consultant (Secretary of BANCA)
3. Daw Phyu Mon Theint, Computer and Language Specialist (Trainer at Spectrum International)

2. PROJECT DESIGN AND STRATEGY

Primarily, the Taninthayi Nature Reserve Project is designed to support the planning, establishment and operation of the Taninthayi Nature Reserve (TNR). The reserve area encompasses 1,700 km² of primarily pristine tropical evergreen forest and moist deciduous forests. TNR was established and legally notified by Ministry of Environmental Conservation and Forestry (MOECF) on the 30th of March 2005 with the aim at conserving tropical rainforests and their constituent biodiversity in the Taninthayi region of southern Myanmar.

The basic strategy of TNR Project is to use funding derived from the operation of Motamma Gas Transportation Company (MGTC) and Taninthayi Pipeline Company (TPC) pipelines to support the establishment and long term management of TNR. Based on the estimated life of the pipelines' operation, support for funding could be expected to be approximately 30 years. The presence of pipeline-related facilities (roads, camps, landing strip, socio-economic program facilities) also provides the opportunity for sharing some logistical support.

The size of TNR is one of the largest protected areas (PAs) in Myanmar and is also comparable to the largest protected areas in the region. TNR with its extensive rainforests made a significant contribution as an integral part of Myanmar's Protected Areas System.

Since the start of the project, it has been expected that TNR will be planned and managed by the existing staff of FD's Nature and Wildlife Conservation Division (NWCD), supplemented as necessary by staff from FD's other Divisions.

Salaries and normal benefits for staff from TNR will continue to be provided by the government. As the staffs are posted to TNR and or travel to remote places during the field operations, MGTC/TPC has contributed field allowances as an incentive and to compensate for additional living costs.

The role of MGTC and TPC is for providing funds and to participate in overall coordination of the project through the Project Coordinating Committee (PCC) and will normally not involved in day to day role in the project.

The intent of TNR is to be planned, established and managed using recognized international best practices, adapted to the Myanmar situation, while contributing to the sustainable livelihood of local communities by getting involved in the conservation works. In order to fulfill the above requirements, Wildlife Conservation Society (WCS) has been involved with the project as Technical Advisory Team, since the first phase of the project.

TNR has been declared as managed nature reserve (function: protection and sustainable management of significant ecosystems and rare wildlife species) since 2005. The first 4-year project period was from 2005-2009. The current project period is from 2010 to 2013.

In order to effectively managed TNR, a Management Plan was drawn up in September, 2009 and implemented by the Reserve Management Team (RMT) of the Forest Department.

This is the first collaborative project between Ministry of Environmental Conservation And Forestry (MOECAF) represented by the Forest Department and International Corporate (Corporate Social Responsibility) namely, the Moattama Gas Transportation Company Limited (MGTC) representing Total E&P Myanmar (TEPM) and Taninthayi Pipeline Company LLC (TPC) representing PETRONAS Carigali Myanmar Ltd (PCML) along with Myanmar Oil and Gas Enterprise (MOGE) representing Ministry of Energy (MOE) for conserving natural resources through the participation of local people.

3. ORGANIZATION OF THE PROJECT

The project has been overseen by Project Coordinating Committee (PCC) consisting of representatives from the following parties:

- Ministry of Environmental Conservation and Forestry (MOECAF)
- Motamma Gas Transportation Company (MGTC)
- Taninthayi Pipeline Company (TPC)
- Ministry of Energy (MOE)

MOECAF has three representatives, MOE two representatives, and MGTC and TPC two representatives each to form PCC (see organization chart in fig.1). PCC will act as "Board of Directors" overseeing, reviewing and evaluating the work progress of the RMT and safeguarding the interest of all of the parties. PCC meetings are to be held at least semi-annually, with the aim at reviewing the project progress.

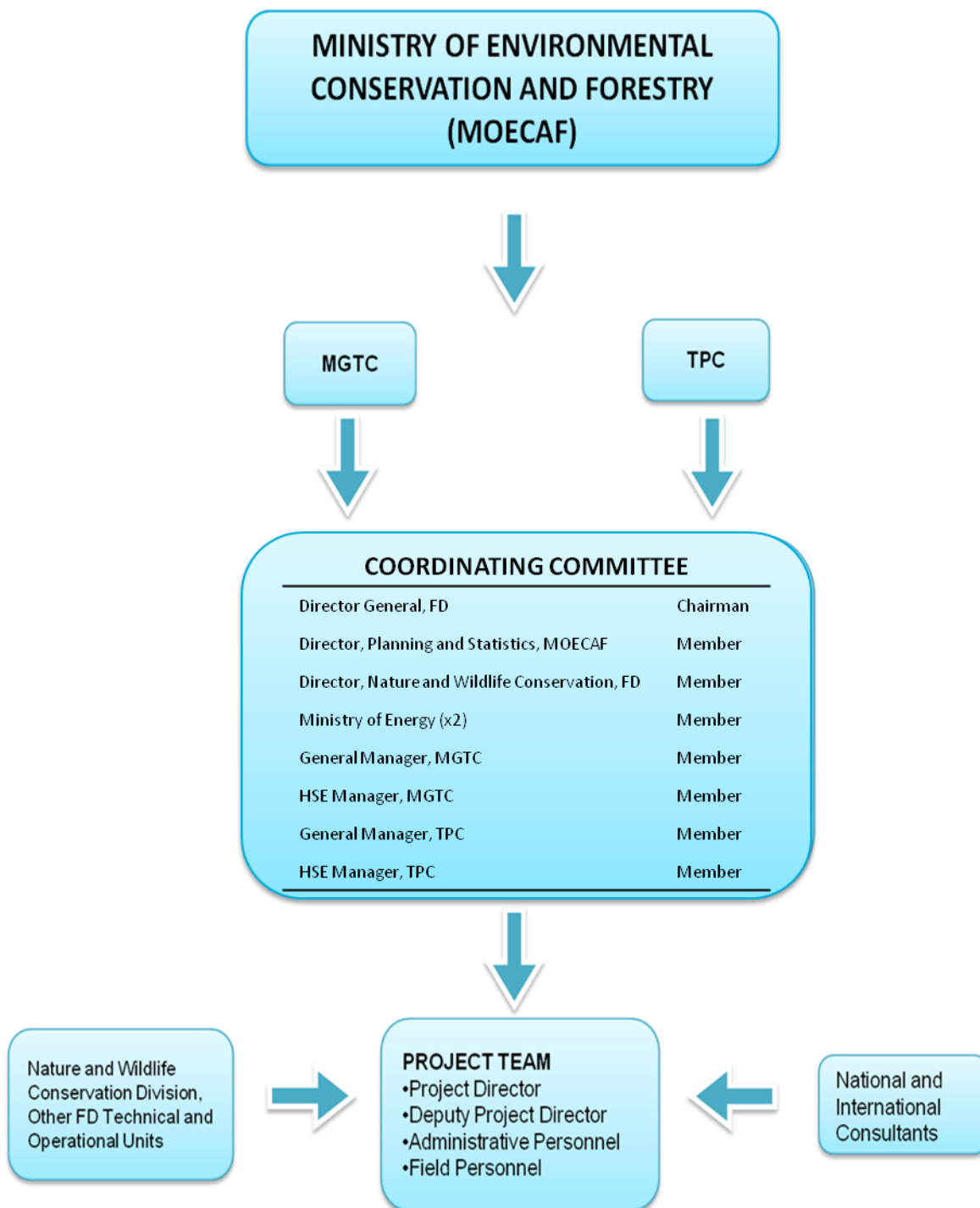


FIG.1 PROJECT ORGANIZATION CHART

PROJECT EVALUATION STRATEGY FOR TANINTHAYI NATURE RESERVE

1. PROJECT GOAL

To effectively conserve and maintain the biodiversity of nature reserve, while contributing to the sustainable livelihood of local communities by getting involved in conservation works and to contribute to the establishment of Myanmar's Protected Areas net work (total coverage 5% of total country area in the medium-term, 10% in the long term).

2. MANAGEMENT OBJECTIVES OF TNR

The management objectives of TNR as mentioned in TNR Management Plan are as follows (TNR Management Plan, 2009)

- To preserve all natural habitat types and populations of important native species and globally- threatened flora and fauna,
- Improve appreciation and understanding of biodiversity and socio-economic values of TNR amongst stakeholders at all levels,
- Effectively engage local communities in management planning and implementation of conservation activities at the Village Use Zone of TNR,
- Enhance the capacity of TNR management team so as to effectively manage the natural resources of the TNR and successfully implement conservation activities
- Conduct targeted biological survey/research to obtain relevant data that are essential for reviewing and revising TNR Management Plan at four-year interval.
- To implement the conservation activities, law enforcement activities with the aims of reducing threats to TNR

3. EVALUATING EFFECTIVE MANAGEMENT OF PROTECTED AREAS

Good management of a protected area needs a thorough understanding of the activities related to a cyclical process with six stages or elements. It should be carefully planned and implemented which requires regular monitoring, leading to changes in management as required (Hocking et al., 2000).

It begins with the understanding of the following elements of evaluation and criteria to be assessed:

TABLE1. ELEMENTS OF EVALUATION AND CRITERIA

Elements of evaluation	Explanation	Criteria that are assessed	Focus of evaluation
Context	<i>Where are we now?</i> Assessment of importance, threats and policy environment	<ul style="list-style-type: none"> ▪ Significance ▪ Threats ▪ Vulnerability ▪ National Context ▪ Partners 	Status
Planning	<i>Where do we want to be?</i> Assessment of protected area design and planning	<ul style="list-style-type: none"> ▪ Protected areas legislation and policy ▪ Protected areas system design ▪ Reserve Design ▪ Management Planning 	Appropriateness
Inputs	<i>What do we need?</i> Assessment of resources need to carry out management	<ul style="list-style-type: none"> ▪ Resourcing of agency ▪ Resourcing of site 	Resources
Processes	<i>How do we get about it?</i> Assessment of the way in which management is conducted	<ul style="list-style-type: none"> ▪ Suitability of management processes 	Efficiency and appropriateness
Outputs	<i>What were the results?</i> Assessment of the implementation of management programmes and actions: delivery of products and services	<ul style="list-style-type: none"> ▪ Results of management actions ▪ Services and products 	Effectiveness
Outcomes	<i>What did we achieve?</i> Assessment of the outcomes and the extent to which they achieved objectives	<ul style="list-style-type: none"> ▪ Impacts: effects of management in relation to objectives 	Effectiveness and appropriateness

4. EVALUATION METHODS

The following methods are frequently applied in evaluating management effectiveness of protected areas. These methods are as follows:

- Management Effectiveness Tracking Tool (METT)
- Parks in Peril Consolidation Scorecard (PPCS)
- Rapid Assessment and Prioritization of Protected Area Management (RAPPAM)
- IUCN-WCPA

Among various evaluation methods, “Management Effectiveness Tracking Tool” will be adopted in this study using score cards modified to suit the requirements of TNR because of its broader scope and comprehensiveness compared to other methods.

TABLE2. COMPARISON WITH MANAGEMENT EFFECTIVENESS TRACKING TOOLS AND VARIOUS EVALUATION METHODS

Sr.	Framework	Management Effectiveness Tracking Tool ¹	Parks in Peril (PPSCS) ²	RAPPAM ³	IUCN-WCPA ³
1.	Context	1. Legal status	Land tenure/ Policy development	Threats, Biological importance, socioeconomic importance, Vulnerability, Protected area policies, Policy environment	Assessment of importance, threats and policy environment
2.	Planning	2. Protected Area regulation 3. Protected Area objectives 4. Protected Area design 5. Management Plan 6. Monitoring and evaluation	Reserve Zoning and buffer zone management Threat analysis /Management Plan Monitoring plan development and implementation /Management committee	Protected area objectives Legal security, Site design and planning, Protected area system design	Protected area design and planning

¹ WWF 2007: *Management Effectiveness Tracking Tool*

² The Nature Conservancy 1999: *Measuring Success: The Parks in Peril Site Consolidation Scorecard Manual*

³ Hosking et. Al. 2006: *Evaluating Effectiveness: A framework for assessing management effectiveness of protected areas. 2nd edition*

Sr.	Framework	Management Effectiveness Tracking Tool ¹	Parks in Peril (PPSCS) ²	RAPPAM ³	IUCN-WCPA3
3.	Inputs	7. Law enforcement 8. Resource Inventory 9. Staff numbers 10. Staff training 11. Current budget 12. Security of budget	/Technical advisory On-site personnel Training Long term financial plan	Staff communication and information Infrastructure Finance	Resources needed for management
4.	Processes	13. PA boundary demarcation 14. Research 15. Resource Management 16. Management of budget 17. Maintenance of equipment 18. Education and awareness 19. Indigenous people 20. Local communities 21. Personnel Management	Physical infrastructure/PA status Science and information needs assessment Physical infrastructure Environmental education programme NGO self sufficiency plan/ Community involvement in resource use	Research Monitoring and evaluation Management practices	Assessment of the way in which management is conducted
5.	Output	22. Regular work plan		Threat prevention, site restoration, wildlife management, Community outreach, Infrastructure outputs, planning outputs, monitoring, training, research	Assessment of the implementation of management programmes and actions, delivery of products and services
6.	Outcomes	23. Protection systems 24. Economic benefit 25. Communication and Outreach	Pressures		Effects of management in relation to objectives

5. PERFORMANCE ASSESSMENT

The assessment scores for the performance of the TNR project is presented in table 1. The assessment is made by assigning a simple score ranging between 0 (poor) to 3 (excellent). A series of four alternate answers are provided against each question to help assessors to make judgments as to the level of score given. In addition there are supplementary questions which elaborate to key themes in the previous questions and provide additional information and points. Questions that are not relevant to a particular protected area are omitted.

Hence, the maximum score of 25 questions and 6 supplementary questions is (75+6) 81. A final total % score from completing assessment can be calculated as 73% which indicated that the performance of TNRP is satisfactory. However, there is still room for improvement at the later stages of the project.

TABLE3. ASSESSMENT SCORES (MANAGEMENT EFFECTIVENESS TRACKING TOOL)

Issues	Score
1. Legal status	3
2. Protected area regulations	2
3. Law enforcement	2
4. Protected area objectives	2
5. Protected area design	1
6. Protected area boundary demarcation	2
7. Management plan	3
7a. Planning process	1
7b. Planning process	1
7c. Planning process	1
8. Regular work plan	2
9. Resource inventory	1
10. Protection systems	2
11. Research	2
12. Resource management	2
13. Staff numbers	3
14. Staff training	3
15. Current budget	2

16. Security of budget	3
17. Management of budget	2
18. Equipment	2
19. Maintenance of equipment	2
20. Personnel management	2
21. Education and awareness	2
22. Communication and Outreach	2
23. Local communities and Indigenous people	2
23 a. Impact on communities	1
23b. Impact on communities	1
23c. Impact on communities	1
24. Monitoring and evaluation	2
25. Economic benefit	3
Total score	60
Maximum score	81
(%) Total Score	74%

6. EVALUATION RATING

Evaluation of TNR Project is assessed on a five - point scale with the following scores:

TABLE4. EVALUATION RATING

Scores	Rating
> 40	Unsatisfactory
41-55	Moderately unsatisfactory
56-70	Moderately satisfactory
71-85	Satisfactory
> 85	Highly Satisfactory

Detail scores are provided in Tracking Tool Assessment for easy reference.

7. FINDINGS

7.1 FINANCE

- a) The budget and expenditure of TNRP for 2009-2010 and 2010-2011 is appended below:

TABLE5. BUDGET AND EXPENDITURE OF TNRP (FROM 2009-2010 TO 2010-2011)

PARTICULARS	2009-2010 (Budget) US\$	2009-2010 (Expenditure) US\$	2010-2011 (Budget) US\$	2010-2011 (Expenditure) US\$
Project Evaluation	-	-	6000	-
Technical Advisor	24000	-	12000	24000
National Consultants	19200	-	18000	22800
PERSONAL	43200	-	36000	46800
Office equipment	24000	5006	4000	4298
Field equipment	19200	12412	9000	9875
Vehicles	24000	26230	30000	50683
Facilities Construction	19200	14812	11500	36131
INVESTMENT	24000	58460	54500	100897
Nursery	4500	7772	2000	2241
Boundary demarcation	7500	7141	7500	4781
Patrolling	8200	4286	8200	3110
Communication	3360	3706	8360	5540
Vehicle, Fuel, Maintenance	10000	22953	10000	27811
Training	28800	3718	11800	7280
Logistical Support	5010	2205	2700	4138
Staff Allowances	90030	85271	122760	123655
Field Survey Mapping	4600	5865	6200	8174
Socioeconomic Surveys	4400	7914	4400	3569
PCC Meeting	1500	1450	1500	658
Outreach Buffer zone Development	10500	3162	14500	11443
OPERATION COST	178400	155443	199920	202400
Signboards, stamps etc.	1500	13377	-	-
Contingency / others	10000	-	9580	12083
CONTINGENCY	11500	13377	9580	12083
TOTAL EXPENDITURE	300000	227400	300000	362180

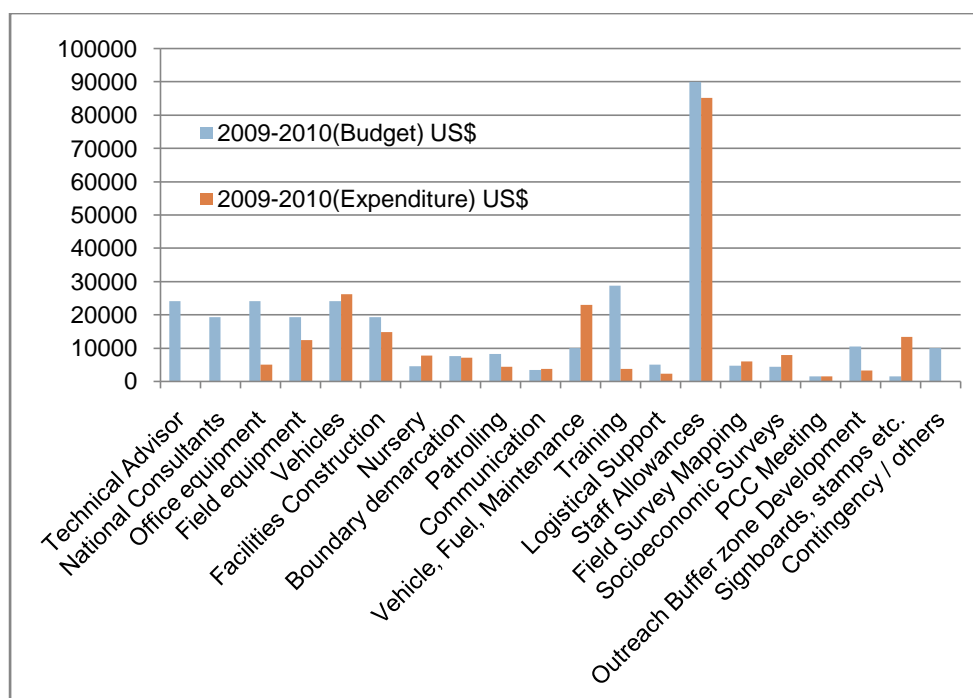


CHART2. ALLOTTED BUDGET AND EXPENDITURE OF TNR IN 2009-2010

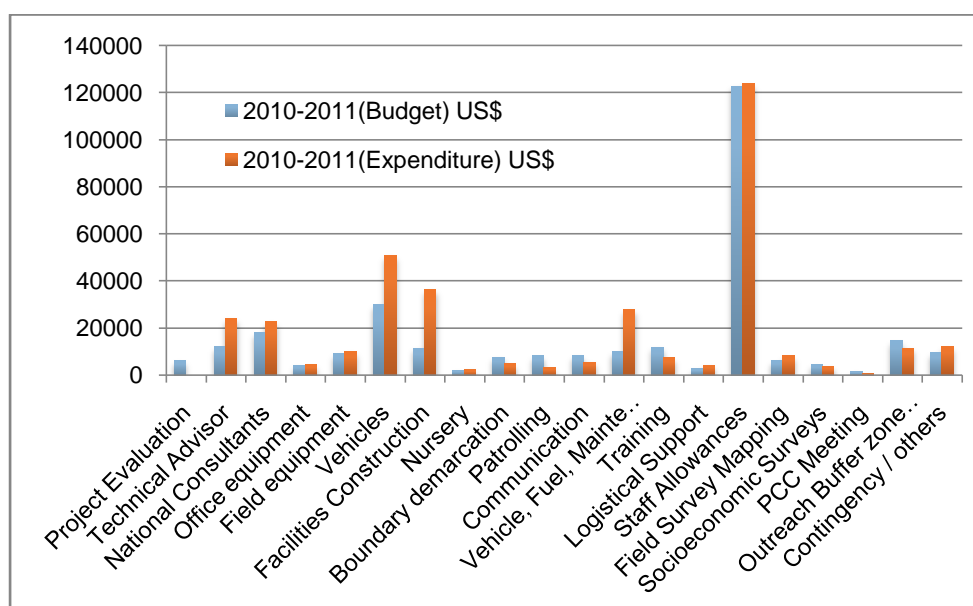


CHART 3. ALLOTTED BUDGET AND EXPENDITURE OF TNR IN 2010-2011

- b) It can be seen from the table 5 and chart 2 that during 2009-2010 the allotted budget could not be spent as expected (Project evaluation, technical advisor, national consultants, outreach buffer zone developments were not accounted for). According to donor's financial procedure, the funds left unspent will not be available the next year. However, due to PD's request, the funds left over from 2009-2010 were accrued to the next year as a special case. Consequently, the

expenditure during 2010-2011 (table 5 and chart 3) was up to the mark at US\$ 362,180 which exceeds US\$ 62,180 with the excess funds accumulated from previous year.

- c) It can be clearly depicted from table 5 and chart 3 that the investment on infrastructure development and purchase of vehicle greatly surpass the allocated funds. Likewise, for the operation costs, vehicle, fuel and maintenance costs were almost double in 2009-2010, while in 2010-2011 the expenditure surge to triple the amount planned. In terms of operations, nursery works and patrolling were not up to the expected results. Funds on outreach buffer zone management were used appropriately in 2010-2011 which is in line with donor's expectations to use for rural development activities. Also, it can be clearly observed from the table that boundary demarcation operation was not up to the mark in 2010-2011.
- d) Although budget provision is stated in US\$ the project team received funds in terms of FEC.
- e) The current budget for managing TNR is provided in the following table:

TABLE 6.CURRENT BUDGET OF TNRP (AS OF 31-9-2011)

Taninthayi Nature Reserve Project				
Status of Budget				
No.	Particulars	Revised 2011-12 Budget	Expenditure to 31.9.11	% of Budget Spent
1	PERSONNEL			
1.1	External consultancy- Project evaluation	6000	6000	100.00%
1.2	External consultancy- Technical Advisor (2 mm)	24000		
1.3	National consultancies	22800	8400	36.84%
	Subtotal - Personnel	52800	14400	27.27%
2	INVESTMENTS			
2.1	Office Equipment	3700	2011	54.35%
2.2	Field Equipment	6000	4188	69.80%
2.3	Vehicles	-	-	-
2.4	Facilities Construction	33600	51	0.15%
	subtotal - Investments	43300	6250	14.43%
3	OPERATION COSTS			
3.1	Nursery Practice	2000	771	38.55%
3.2	Boundary Demarcation	5900	1625	27.54%
3.3	Patrolling	7080	1852	26.16%
3.4	Communications	7800	4817	61.76%

3.5	Vehicle fuel and maintenance	41300	23364	56.57%
3.6	Training	5000	2961	59.22%
3.7	MGTC/TPC logistical support	2000	1556	77.80%
3.8	Staff allowances	126010	60030	47.64%
3.9	Field survey/ Mapping	2000	1514	75.70%
3.10	Socio-economic surveys, Workshops, Public education	3000	1843	61.43%
3.11	Project Coordinating Committee Meeting	1000	234	23.40%
3.12	Outreach/ Buffer Zone development Programmes	6350	2149	33.84%
	subtotal - Operating Costs	209440	102716	49.04%
4	CONTINGENCIES			
4.1	Signboards, Contingencies, others	8556	5594	65.38%
	subtotal - Contingencies	8556	5594	65.38%
TOTAL EXPENDITURE		314096	128960	41.06%

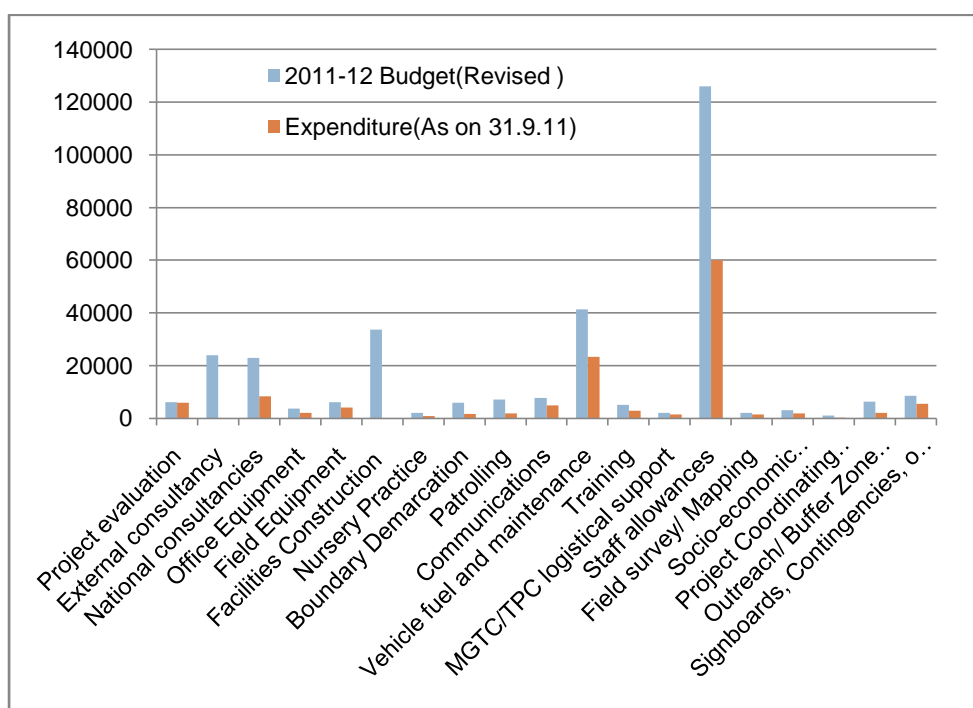


CHART4. CURRENT ALLOTTED BUDGET AND EXPENDITURE (AS OF SEPTEMBER 2011)

- f) It can be observed from table 6 and chart 4 that about 41.06% of the revised budget of US \$ 314,096 up to the second quarter of 2011-2012 had been already spent. Out of which 49.04% was used as operation costs while investment costs was still at 14.43 % of the budget provided. The lower % of investment is due to delay of facilities

construction during this period. Personnel costs accounted for the assignment of national consultants with 27.27% already spent. Among the operation costs, staff allowances was well within the target by having 47.64% spent, while for field operations such as nursery operation, boundary demarcation and patrolling, it was observed as 38.55%, 27.54% and 26.16% respectively. For patrolling and boundary demarcation operations, during the rainy season most of the operations were not been able to carry out effectively. Nursery operations were found to be within the target. For vehicle, fuel and maintenance, the revised allotment was US\$ 41, 300 which is over 4 times the allotment made during 2009-2010 and 2010-2011 respectively. The actual expenditure was US\$ 22,953 and US\$ 27,811 for 2010 and 2011 respectively. This specific surge in expenditure and revised budget may be due to rise in fuel cost (diesel + petrol) / maintenance costs as well as the increase of 1 additional vehicle and 10 additional motorcycles during the reporting period. The percentage of vehicle maintenance and fuel cost is 13.15% of the overall budget of TNR for 2011-2012. Hence, a detailed study should be made by RMT by comparing expenditures from previous years to find out whether it is due to diesel consumption for vehicles or diesel consumption for office use or petrol consumption by motorbikes or due to vehicle maintenance costs.

- g) It was quite prominent that funds spent for PCC meetings including TC meetings were not up to the mark. This may probably be due to only 3 TC meetings held during the reporting period with none for PCC. Apart from that the remaining activities were found to be performing satisfactorily.
- h) As the staffs are posted to TNR and or travel to remote places during the field operations, MGTC/TPC has contributed field allowances as an incentive and to compensate for additional living costs for the staff according to the project document. It can clearly be noticeable that the FEC exchange rate in Jan 2010 (1 FEC = MMK 1000) nosedive in June 2011 by a reduction in 31% (1FEC=MMK 690) which seriously affects the allotted funds for the effective implementation of the project that a pragmatic solution is urgently needed to contain the situation.

7.2 PERSONNEL

Concerning personnel, it covers activities of Project Coordinating Committee (PCC), Reserve Management Team (RMT), Technical Advisors (TA) and National Consultants (NC).

7.2.1. PROJECT COORDINATING COMMITTEE

PCC acts as "Board of Directors" providing oversight and guidance to the project. It is quite surprising to find out that since the 14th PCC meeting held on 24th August, 2009, no PCC meeting has been initiated by RMT. This a very serious drawback for RMT to clarify all matters faced with during their implementation of the project for nearly 20 months. This will have serious affect on vertical and horizontal communication, supervision and overall progress of the project.

7.2.2. TECHNICAL COMMITTEE

Technical Committee (TC) meetings were held thrice on 23rd August 2010, 15th December 2010 and 13th September 2011. Actually, these meetings are to be held on a regular basis (minimum 4 times a year) to review the project activities and progress and to hold special meetings whenever required.

TC meetings are organized:

- To provide assistance to Reserve Management Team (RMT) in implementing project activities, monitoring and evaluation based on TNR Operational Management Plan.
- To approve the Project Key Performance Indicators in line with Logical Framework Approach based on ITTO Format.
- To identify the area of improvement and gaps and recommend the mitigation plan.
- To advise the Project Coordinating Committee on the progress and issues for deliberation at the PCC Meeting.
- To ensure all funds allocated are utilized effectively and efficiently. It was also noticed that recommendations made during these meetings were not been properly followed up (e.g., to conduct a workshop at Yangon to make executive levels of partner companies better understand on activities of TNRP).

As explained for the elements of evaluation and criteria to be assessed Evaluating Effective Management of Protected Areas, TNRP has also developed the Logical Frame Work Approach based on the same criteria:

1. **Input:** the timely availability of Inputs, e.g. personnel, equipment, funds,
2. **Output:** delivery and quality of the Outputs (direct results), using indicators as presented in the logical framework matrix in the Project document
3. **Outcome:** the extent to which the specific objective has been achieved, using indicators as presented in the logical framework
4. **Impact:** is a fundamental and sustainable change in conditions after project

The Logical Framework Matrix provides the basis for the monitoring activities by RMT. This Logical Framework Approach was not implemented during the first phase of the project and is the new initiative during this second phase of the project. This kind of monitoring is the continuous process of collecting and analyzing data (indicators), with a view to identifying any need for corrective actions to ensure project execution towards attaining its objective. However, the Logical Frame Work has not been finalized yet.

During the Technical Committee meeting the issue on Transportation Corridor was raised by RMT. As Zawtika (PTTEP) is going to lay out pipeline along the Transportation Corridor (TC) it will be necessary to find out what kind of environmental impacts it will have occurred during the operation. PTTEP has

already submitted their ESHIA report to RMT. Likewise MGTC and TPC have already provided RMT their EIA reports in response to PD's request.

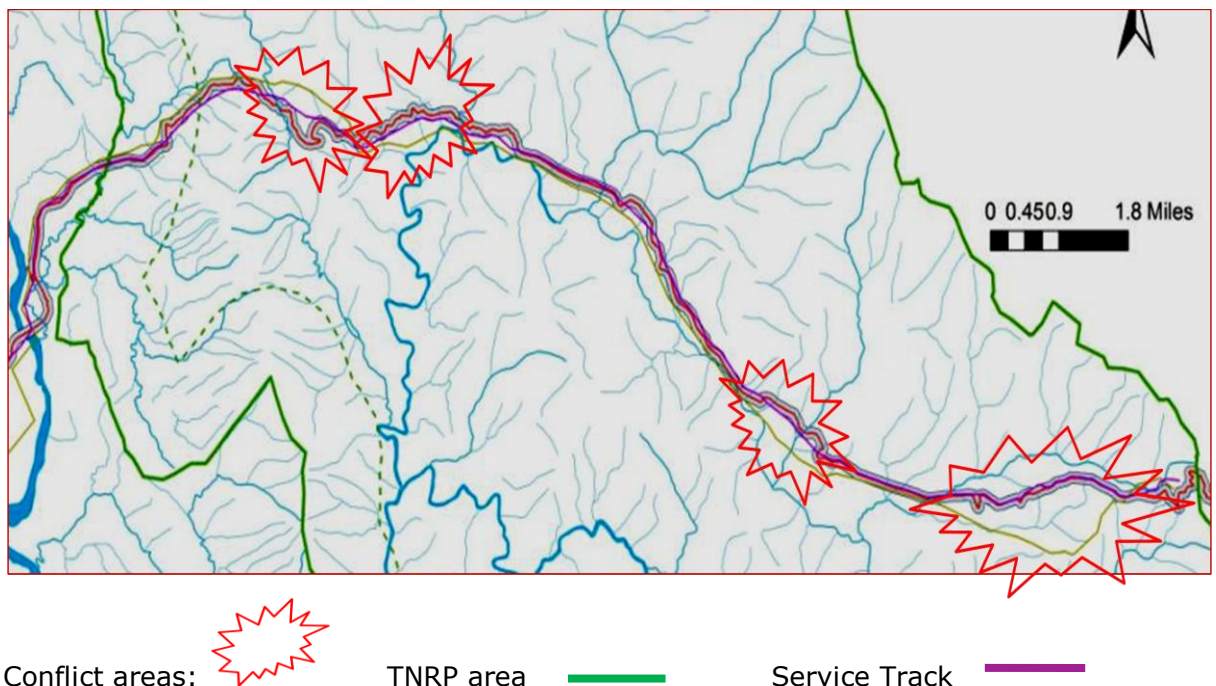
According to the TNRP Operational Management Plan (2009), Transportation Corridor is designated as 100m width on both sides of service track. In line with the Management Plan the following activities are permitted in Transportation Corridor:

- Hydrocarbon exploration/ production with mandatory EIA for new facilities
- Land rehabilitation
- Reforestation (native species)
- Roads (restricted access)
- Scientific studies

As existing pipelines (MGTC and TPC) are beyond the designated 100m corridor in some places the extent of Transportation Corridor should be reconsidered. This issue has been already discussed at TC meeting and amendment for Right of Way (ROW) is postponed until the alignment of Zawtika pipeline is finalized.

Based on preliminary area designated by Zawtika (PTTEP) for pipe laying operations, FD (Dawei), TNRP and PTTEP had conducted inventory of trees existing along the pipeline ROW track of 32.3 kilometer length by 25 m width and completed on 26/4/2011 with 60 total working days. Altogether 27,235 trees were found to be existed along the track.

On the eastern side of Dawei river, Zawtika pipeline will pass through Migyaunglaung Community Forest and has to consider compensations for land as well as existing crops there in.



MAP. 1 PIPELINES ARE BEYOND THE DESIGNATED 100M CORRIDOR IN SOME PLACES

During the relocation of Transportation Corridor it should not only be solely responsible for RMT for delineating and managing the corridor. MGTC, TPC as well as PTTEP should join RMT to form a task force consisting of technical experts to work together to arrive at a meaningful wildlife corridor that will be in consonance with the environmental protection policies of the said Oil & Gas companies.

7.2.3. RESERVE MANAGEMENT TEAM

TABLE 7. TNRP STAFF AS OF 30SEP 2011

Sr.	Designation	Required Staff	Existing Staff	Vacant	Remarks
1	Project Director (Director)	1	1	0	Dual Charge
2	Park Warden (DD)	1	1	0	
3	Project Staff Officer (SO/RO)	1	1	0	
4	Project Admin Officer (SO/RO)	1	1	0	
5	Range Officer (RO)	3	1	2	
6	Head Clerk (HC)	1	1	0	
7	Deputy Rangers (DR)	8	7	1	
8	Computer and Accountant	1	1	0	
9	Forester (Ftr)	9	7	2	
10	Driver/ Coxswain	3	2	1	
11	Nursery Worker	2	2	0	
12	Camp Watcher	12	8	4	
13	Law enforcement staff	10	10	0	
14	Extension staff	7	6	1	
15	Office Helper	2	2	0	
	Total	62	51	11	

According to the approved Management Plan by PCC, the strength of RMT consisted of a total of 62 staff. Existing Reserve Management Team (RMT) consists of 21 permanent staff from Forest Department (FD) and 30 locals, including 10 patrols and 6 extension staff. Some of the vacant permanent posts are not filled up yet. The vacant permanent posts need to fill in as soon as possible to meet the approved strength. For the time being trained locals are used as permanent staff so as to run the project activities as smooth as possible.

Some of the trained locals start leaving the project to more remunerative places while some trained staffs are also looking forward to leave soon. One option to secure this situation is to absorb the locals as permanent staff so that they will have more stable lifestyle than before. The drastic drop in FEC exchange rate is

downgrading the situation with the staff allowances and salaries of locals do not meet the existing escalating commodity prices. A solution is urgently needed to contain the situation.

The staff of first phase (2005-2009) had been totally replaced by a new team since the start of the second phase. During March, 2011, 11 permanent staffs from FD were transferred again just after receiving training in January 2011 by WCS. The inclusion of 15 locals as 10 patrol staff and 6 extension staff greatly assist during communication with the local communities. Moreover, as they are staying at the villages, RMT can get location information such as illegal logging activities, illegal poaching as well as security conditions of the locality. One advantage of locals working as patrol staff is that once they are trained to handle GPSs and camera traps they can be sent to remote locations to set up camera traps and determine the locations with GPS where normal forest department staff are not allowed to enter due to security constraints.

PD of TNR was promoted to full-fledged Director in March 2011 and at the moment he is taking dual charge as PD as well as Director, Forest Department, Taninthayi Region. This is not in line with the requirement in the project document to have a full-time Director chosen and mutually agreed by all parties (i.e., FD, MGTC and TPC).

A six-day study tour for 3 senior TNR project staffs to Western Forest Complex (WEFCOM) Thailand was a good opportunity for sharing the experiences with Thailand PA staff. This will be a good start for a future program with WEFCOM, Thailand, for trans-boundary conservation issues such as illegal logging, illegal poaching and illegal wildlife/wild plants trade. Also the team got a chance to learn participatory fire management training in WEFCOM. RMT also made contact with concerned persons from WEFCOM and let them organized an excursion trip to Nat-ein-taung village, along Myanmar /Thai border to observe a broom making process using local grass to find out whether this kind of initiative can be a potential income generation activity for local communities. There is also an illegal wildlife trade information exchange at executive level, between WEFCOM and TNRP through internet communication.

In cooperation with WCS Myanmar program, a team of 3 junior staff from TNRP went on study tour to learn the experiences of 'Hukoung Tiger Conservation area' as a model for its unique Participatory Conservation Program. The team gained knowledge on different types of Park Management System, Extension Programs, Resource Based Management System, Zoning System practiced in Hukoung Tiger Conservation area. This was the very first time for project staff to study the management of other Protected Areas in the country.

Through Park Warden's initiative, one extension staff had a chance to attend a 3-month training program organized by a local NGO, Myanmar Egress on Social Entrepreneurship certificate course. The course was attended by 96 young

graduates of all walks of life such as lawyers, doctors, NGOs, IT staff, business and those interested in politics, etc. This is a good initiative for training locals who will be staying at the project far more stable compared to permanent staff likely to transfer after a few years time. The trained staff will become a nucleus for disseminating the knowledge accrued from such kind of training. It is learnt that two new locals get a chance to attend similar course on Social Entrepreneurship. The Social Entrepreneurship course covers the following topics: development and development economics, transformational leadership, communication and advocacy, governance and toolkits for management. As these locals are extension workers, the courses will enhance their ability to communicate with villagers as competent facilitators after attending the course.

7.2.4. TECHNICAL ADVISORS

Wildlife Conservation Society (WCS) acts as Technical Advisors (TA) since the initiation of the project. During the second phase they have been assigned as TA with the approval from MGTC and TPC for another 4-year period with a total of 5 man-months. WCS conducted 1 training in 2010 and 2 trainings in 2011. The first training on Village Consultation Process (VCP) and Village Zonation Process (VZP) [20-29 September 2010] and the two trainings in 2011 were Patrolling and Wildlife Training Workshop on [25-31 January 2011) and lastly from 4-11 July 2011 for evaluating patrol strategies and wildlife protection in TNR. Generally the trainings organized by WCS are heavily oriented towards law enforcement and wildlife conservation. Upon request made by PD, VCP and VSP trainings were organized with participatory approach which gives the villagers good opportunity to participate in the decision making process thereby creating mutual trust between TNR and communities. However, the consultation process between WCS and National Consultants for biodiversity surveys did not materialize for all national consultants, except, elephant, Tapir and mid-term project evaluation consultancy team had a chance to discuss the methodology with WCS technical advisor.

7.2.5 NATIONAL CONSULTANTS

There are altogether 8 national consultants appointed for conducting the following tasks:

TABLE 8. NATIONAL CONSULTANTS AND THEIR FIELD OF RESEARCH

No.	NC Name	Subjects	Duration
1	U Aung Ko Thet	Marketing Study of Non-Wood Forest Products	2 mm
2	U Nyo Maung	Report on Tree and Bamboo Species Survey in TNR	4 mm
3	U Hla Myo Aung	Biological Research for Wild Elephants distribution and abundance of TNR	4 mm
4	U Bo Ni	Community Forestry	4 mm
5	Dr. Myint Aung	Forest Dynamics Research on Endemic Tree Species in TNR	2 mm
6	U Saw Win	Study of Appropriate Forest Fire Management in TNR	2 mm
7	U Nay Myo Swe	A Report on Malayan Tapir Survey in TNR	4 mm
8	U Myint Maung	Evaluating the Status of Tigers and Their Preys In TNR	4 mm

National consultants had been assigned to all research studies and their TORs seemed to be quite appropriate. It was learnt that PD had a chance to discuss

with WCS concerning the TORs of national consultants. The only drawback noticed was the timing of the recruitment of consultancies. Though Tiger survey was conducted in November, 2010 the other two similar surveys like Tapir survey and Elephant survey were not able to arrange in time that they had to start their work from March, 2011 and completed in June, 2011 which included the rainy season that greatly disrupted their field work as the rain started early this year in the first week of May.

It was noticed that the recruitment of national consultancies seemed to be a bit inappropriate. The selection process required more time than expected and could not adopt according to the plan in the assignment of the national consultants. This kind of similar case had occurred during the 1st phase of the project and also pointed out in the report on terminal evaluation of the project.

All consultants had submitted their consultancy reports or drafts or interim reports, except Community Forestry consultant who still need to submit his consultancy report which has been long overdue. NC reports are found to be appropriate in terms of comprehensiveness and assist to planning, establishment and operation of TNR, except that due to security reasons the study areas had mostly covered about 20% of the total area of TNR and rationally not representative of the entire project area with vast unexplored areas still remaining.

7.3 INFRASTRUCTURE

7.3.1 BUILDINGS

During the second phase of the project one Environmental Education Centre (EEC) was established together with two family quarters with “green management principles”. There is also one more LOU to be established in the very near future. The location of the new LOU will be at the southern border of the reserve not far from Dawei Industrial Zone. This LOU will become a pivotal place for the control of activities that will not be in line with conservation objectives during the construction of the road/rail system to Thailand and afterwards.

The EEC will be instrumental for future trainings and workshops for communities as well as stakeholders for participating in participatory field level conservation programs. Also EEC will become an exhibition centre for students as well as for communities. EEC has now been furnishing with necessary panels for displaying materials relating to wildlife conservation, forest products, and non-forest products and also concerning Information, Education and Communication materials (IEC). Plans are also made for renovating the previous training-shed into accommodation hall for the villagers who will be attending the training courses or workshops in the near future. The audiovisual facilities for EEC had already been purchased and used effectively for training and occasions such as Mass Meeting Ceremonies or award giving ceremonies.

There are two nursery sheds with a capacity of 50, 000 seedlings each at the Migyaunglaung nursery. Out of the two, one was removed from its original place for the construction of Environmental Education Centre and reconstructed at the

same nursery compound. Up to 31st March 2011, about 34, 800 seedlings of different sizes have been nursed at TNRP Nursery in Michaunghlaung. Cash crop seedlings like Shaw Byu, were raised at the nursery and start distributing seedlings to the CF User Groups.

7.3.2 FIELD EQUIPMENTS

Additional field survey equipments (e.g., GPS, Camera traps, digital cameras, etc) were purchased for assisting field surveys. Field equipments are kept at Gantgawtaung office and distributed to LOUs when field activities such as boundary demarcation, patrolling, and establishment of Community Forestry program etc are conducted. Moreover, during the inspection of LOUs, it was noticed that although there are quite a number of reference books on wild mammals, tortoises and birds etc., in Myanmar language at Gangawtaung office, they are not made available at LOUs as reference materials.

The new batch of digital type camera traps is found to be more effective than the previous ones consisting of film type cameras. Most of the field staffs are now acquainted with installing camera traps which they learnt from National Consultants. Photos from camera traps are archived at the Gantgawtaung office for future reference.

7.3.3 VEHICLES AND MOTORCYCLES

Regarding vehicle a local made 4x4 vehicle (Grand Tiger) was purchased during the second phase. Due to the fall of exchange rate, the new vehicle costs much more than the one imported from overseas (Toyota 4 x4) during the first phase. In addition to the 7 motorcycles purchased during the first phase, 10 additional motorcycles were purchased to be allotted to LOUs so as to assist during patrols, law enforcement and smooth access between LOUs and Gantgawtaung office. One serious constraint encountered during the project implementation in 2011 is that due to the rise in price of gasoline for motorcycles and vehicles that makes the budget allotted for vehicle, fuel and maintenance does not meet the actual situation. In 2010 it was twice the allotted amount while in 2011 it becomes much higher. In response to this RMT had revised the allotment in September at the 3rd TC meeting to reflect the existing price trend. During the first phase of the project diesel oil was purchased from MOE and received from Dawei by fuel bowser. During the second phase MOE stopped supplying diesel oil, due to privatization of fuel distribution system and have to purchase locally from Kanbaw at high price. One drawback of diesel oil from Kanbaw is that the fuel quality is not assured and gives a lot of problem to the Electronic Fuel Injection System (EFI) of the two new vehicles and generators. If problems cropped up the vehicles have to send back to Yangon to get it fixed at a very high maintenance costs as well as time elapsed because local mechanics cannot handle such kind of problem. According to the project document it is stated that there will be an opportunity for sharing some logistical support from MGTC/TPC. If MGTC/TPC can consider supplying diesel for the two vehicles and office use at cost part of the problem will get solved.

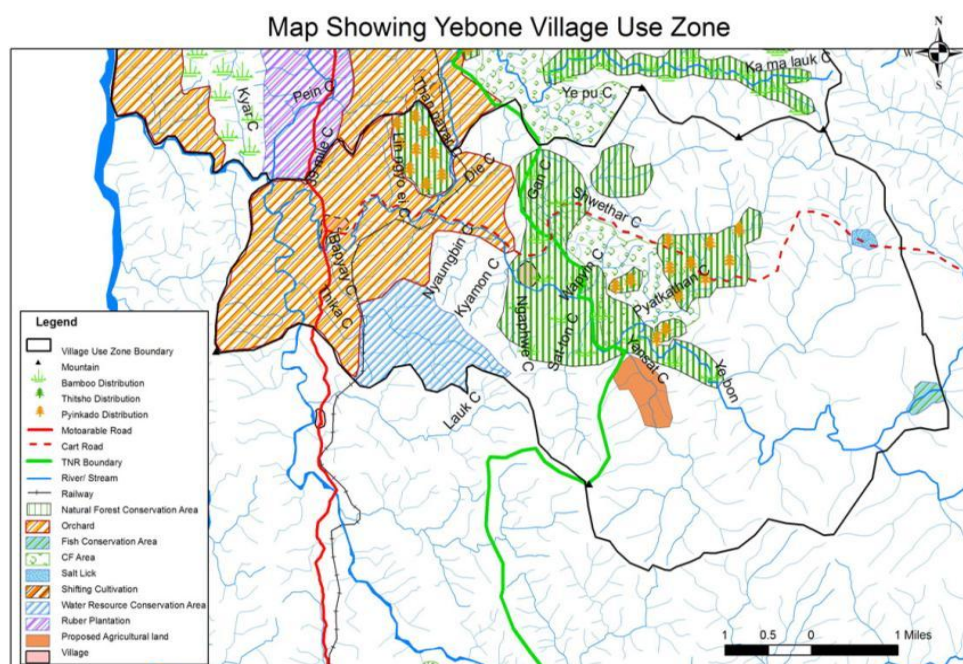
7.3 INSTITUTIONALIZATION

7.4.1 MANAGEMENT PLAN

A management plan for TNR was prepared by the core unit and approved by PCC in 2009 September. Based on the management plan Logical, Framework Approach (LFA) was developed (see appendix 1). For implementing the management plan a work plan has been developed annually. A four year work plan was prepared by RMT after the first technical committee meeting had been organized in 2010 (see appendix 2).

The following objectives had been approved by PCC (TNR Management Plan, 2009) and managed by RMT since 2009:

- To preserve all natural habitat types and populations of important native species and globally- threatened flora and fauna,
- Improve appreciation and understanding of biodiversity and socio-economic values of TNR amongst stakeholders at all levels,
- Effectively engage local communities in management planning and implementation of conservation activities at the Village Use Zone of TNR (see the following map),



MAP 2: MAP SHOWING YEBONE VILLAGE USE ZONE

- Enhance the capacity of TNR management team so as to effectively manage the natural resources of the TNR and successfully implement conservation activities
- Conduct targeted biological survey/research to obtain relevant data that are essential for reviewing and revising TNR Management Plan at four-year interval
- To implement the conservation activities, law enforcement activities with the aims of reducing threats to TNR
- Due to security constraints and access, only part of TNR is under proper management to meet the objectives set in the management plan.

RMT worked according to the Management Plan and most of the activities are being undertaken as scheduled. The yearly plan of operation (YPO) is the annual operational plan for the implementation of the project. The YPO presents the coming operational year in greater detail than in the Management Plan. The YPO is prepared, on a yearly basis, by the PD. The first YPO was to be attached to the Management Plan. The subsequent YPOs have to be submitted before the beginning of the following year of project implementation by PD.

Progress in implementation of the activities set in the management plan are executed and reported the progress in terms of percentage executed in the Project Quarterly Progress Report (PQPR). This PQPR is the new development of reporting format, compared to previous project period for work progress. The progress report is the quarterly, formal and objective account of the RMT on the executed activities, expenditures and achieved outputs in the period covered by the report meant for main stakeholders.

Most of the activities have been undertaken as scheduled according to the management plan whereas some are still behind the schedule due to security as well as institutional constraints.

During the first Technical Committee meeting it was decided to replace 'microfinance program' with 'Livelihood Support Program' and to formulate necessary terms and conditions for support; in line with that decision a consultancy earmarked for evaluation of microfinance program should also be replaced with socioeconomic survey program before the end of the project period to find out whether there is any progress in food security and poverty alleviation due to the intervention of the project activities for the communities.

Progress in implementation of the activities**TABLE 9. A SAMPLE PROJECT ACTIVITIES IN PROGRESS (AS ON 30TH JUN 2011)**

Activities	Percentage executed	Originally planned completion date	Estimated completion date
Output 1. Land Conversion to Shifting Cultivation Controlled			
A1.1 Establish Community Forestry			
A1.1.1 Formation of User's Group	100	30 June 2010	Completed in June 2010
A1.1.2 Survey CF area- Traverse Survey	100	31 December 2010	31 December 2010
A1.1.3 Submission of application	100	31 December 2010	31 December 2010
A1.1.4 Village Meeting	85	31 March 2011	31 March 2011
A1.1.5 Management Plan Formulation	60	28 February 2011	28 February 2011
A1.1.6 Certification	14	31 March 2011	31 March 2011
A1.1.7 Implementation			
Survey annual plot	100	30 May 2010	Completed in 30 May 2010
Agro-forestry plantation	100	30 June 2010	Completed in June 2010
Fire protection	0	31 March 2011	31 March 2011
A1.1.8 Village Use Zone Formation			
Meeting with Local village authority	80	31 March 2011	31 March 2011
Discussion with villagers	85	31 March 2011	31 March 2011
Participatory exploration of Village Use Zone	100	31 December 2011	31 December 2010

The aim of Project Progress Reports is:

- To ensure that PCC has a clear picture of the extent to which the project activities are proceeding according to plan (e.g. tasks which have been started or concluded the percentage of the work carried out) and the expenditures and progress is being made to date in the production of outputs and the achievement of specific objectives)
- To relate the activities and purchases already carried out to the expenses from donors funds which have provided to the RMT; and as appropriate; and,
- To justify any request for further installments of funds in terms of the timing and amount of future work and related resource requirements, as now foreseen.

7.4.2 LAW ENFORCEMENT

Law enforcement activities (patrolling) have been conducted 119 times in and around TNR. During the patrolling from April 2009 to date, 112.85 tons of timber / poles were confiscated and handed over to the forest department, Yebyu Township for further action.

During the training in 2011 January, conducted by WCS, it was instructed that when conducting patrols, MIST forms should be used for reporting of illegal activities. Since then 28 patrols were documented of which 13 were fully documented. All patrolling staffs were trained for proper use of GPS for tracking and way point location during the patrols. The staff officer at Gantgawtaung is currently assigned as database officer responsible for downloading these GPS locations and recorded as GPS database at the site for future use.

Regular patrols and surprised check are carried out in and around TNR: also along the water courses and along the TNR reserve boundary based on information of illegal logging and wildlife trade informed by the patrolling staff. During the patrolling in 2009 about 11 tons of illegal logs were confiscated while in 2010 about 90 tons of illegal logs were handed over to Yebyu township forest department for further action.

Reserve boundary demarcation process was supposed to be completed during the first phase. That was why during the drawing up of management plan there was no allocation of funds for boundary demarcation. 61 boundary pillars were demarcated between Latitude 14°20.617' and 14°46.407', along the western side of TNR, about 42 Miles in length. Boundary pillars are still needed to demarcate the Village Use Zone, such that villagers maybe aware of the extent to which they can exercise their CFs. Due to various consultative meetings villagers are now quite reflective upon the value and upkeep of boundaries particularly after the VDZ and VUZ mapping exercises for the allotment of land area for CF programs. PD had revised the current budget already to cover the expenses for demarcation during the second four year period. However, the demarcation of boundary along the Northern part of the reserve is not feasible up till now due to prevailing security reasons.

7.4.3 COMMUNITY FORESTRY

The Community Forestry program was initiated in 2009 at Migyaunglaung (Old) village and the very first certificate of 105 acre was awarded in 2010. The aim of that particular CF is to convert the ad hoc shifting cultivation with no plan towards economically promising and socially acceptable sedentary farming with proper plan.

Evolution of CF

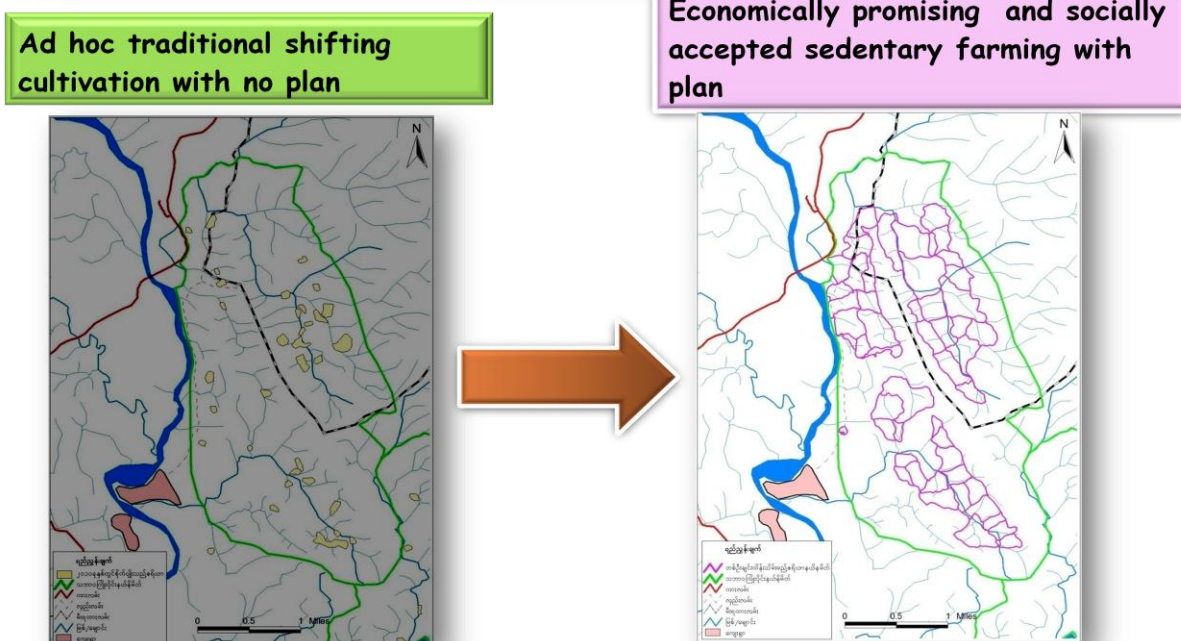


CHART 4. EVOLUTION OF COMMUNITY FOREST

The formation of Village Use Zone is also quite interesting. According to the Operational Management Plan of TNR, VUZ is designated as areas surrounding established villages, usually within a radius of 1-2 km, where traditional land use, including agriculture, gathering of forest products are allowed except hunting of protected species.

The VUZ formation includes the following processes:

- Socioeconomic surveys
- Data collection of supply and demand of forest products for the communities
- Area to be designated as VUZ
- Inventory of tree species in the VUZ
- Development of village use maps using participatory methods
- Prescription of annual yield for sustainable supply of forest products for the villagers

In VUZ reserved tree species are not allowed to fell and extract in the natural forests. Other than that trees felled during the land clearing operations are allowed for local use. According to the Working Plan of Heinze-Kaleinaung

Reserve (1926) villagers were allowed to extract some forest products such as *Taunghtan*, rattan, posts and poles per household on annual basis. Also according to forest rule 25, of Forest Act (1902) within 20 miles from the vicinity of the villages, local people are allowed to extract unreserved tree species for their farm and piscatorial use with the permission of the forest department. This precedent is still active in the current Forest Law (1992) for allowing subsistence use of forest products and non-wood forest products for the villagers (Local Supply Working Circle / Community Forests Working Circle) with the permission of the forest department.

Activities allowed in the Village Use Zone according to the Management Plan (2009) are as follows:

- Agriculture (subsistence)
- Agroforestry (timber and fuelwood)
- Burning with proper control
- Dwellings (temporary)
- Fishing (subsistence)
- Gathering Non Timber Forest Products (NTFP)
- Land rehabilitation
- Livestock grazing
- Logging subsistence (woodlots)
- Reforestation (native species).

The following steps are necessary for the development of the VUZ:

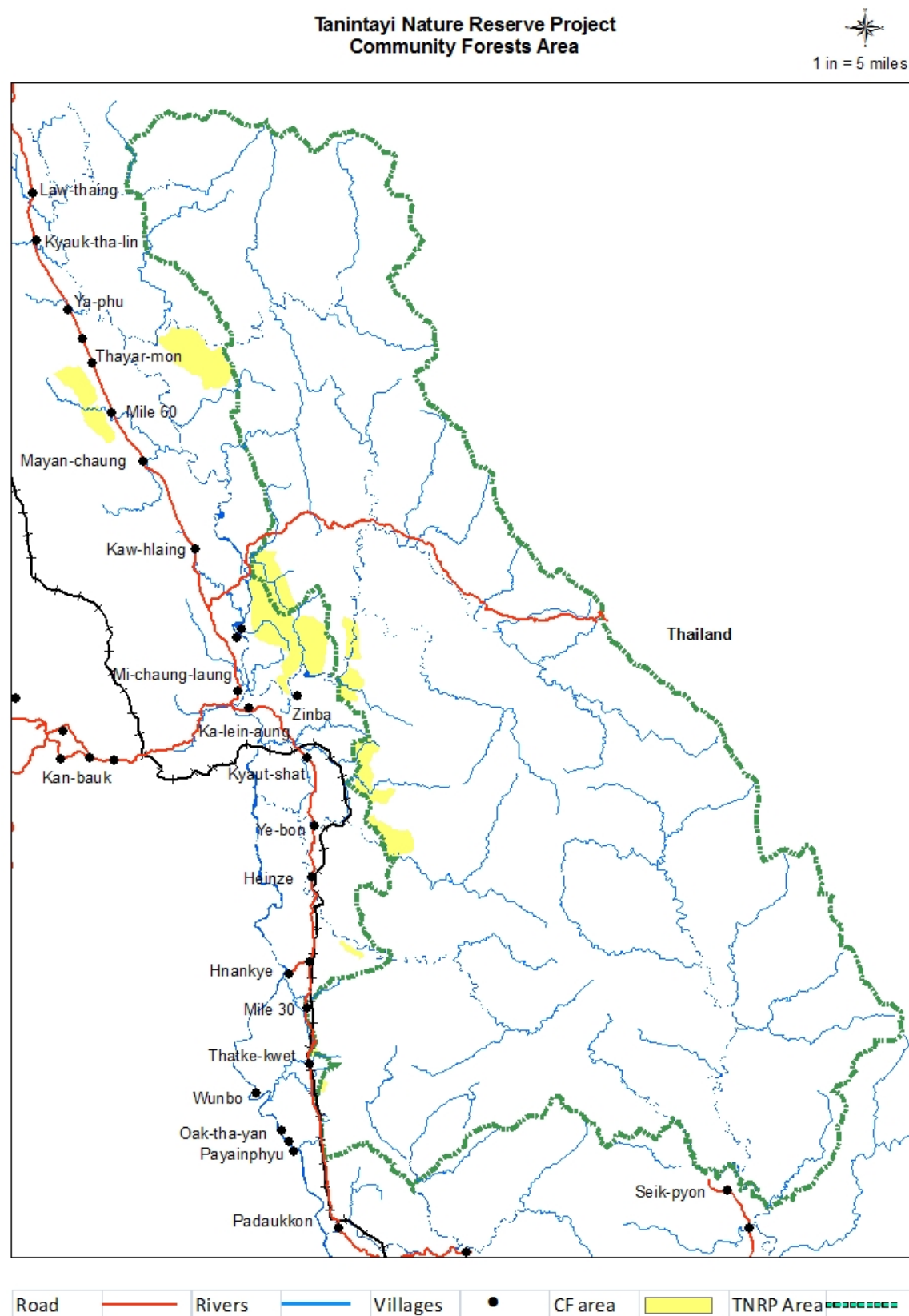
- Discussion at township level
- Discussion at village management level
- Ground survey with Village User Groups
- Inspection of VUZ map with villagers
- Meeting with Villagers
- The development of VUZ
- Development of important resource base from VUZ
- Development of VUZ map.
- Development of face value ticket for extraction of forest products from the VUZ.

This process is one of the most important parts for the evolution of CF aiming at economically promising and socially acceptable sedentary farming which will eventually replace age-old shifting cultivation practices in future. This sort of activities will keep the villagers engaged in the VUZ and thereby refraining from activities that will have serious impact to the core zone. CF program was initiated in TNRP by getting one CF certificate of 105 acres awarded to Migyaunglaung village in 2010.

Consequently, some other villages in the vicinity of TNR took interest in applying CF program for the respective villages with the assistance of RMT and current status of CF is as follows:

TABLE. 10.THE CURRENT STATUS OF COMMUNITY FOREST IN TNRP

Sr. No.	Village	Area (acres)	No. of User Group	Status	
				TRNP	FD
1	Michaunlaung (Old)	3332	76	MP Submitted (2009)	(Certificate awarded 105 ac: new certificate awarded)
2	Zinbar (1)	2167	60	MP Submitted (3/11)	Certificate awarded
3	Zinbar (2)	751	30	MP Submitted (5/11)	Certificate awarded
4	Yebone	1128	76	MP Submitted (5/11)	Certificate awarded
5	Tharyarmon	1052	73	MP Submitted (5/11)	Certificate awarded
6	Zinbar (3)	1281	20	Survey, check	-
7	Hnankye	168	17	2011-12	-
8	Thetkekewet	300	19	2011-12	-
9	Padaukkone	280	16	2011-12	-
10	Kyaukshat	2127	86	Preparation MP	Prepare for MP
11	Yarphu (new)	2923	65	Preparation MP	Prepare for MP
12	Mile 60	787	30	2011-12	Formation of USGs
	Total	16296	568		



MAP 3. COMMUNITY FORESTS IN TNRP

Normally for delineating CF boundaries plane table surveying has been used. Currently with the availability of a good quality GPS, CF mapping process can be speed up and a map produced easily if you have staff acquainted with GIS software facilities. One advantage of drawing up maps for VUZ using GPS tracking and surveys is due to the presence of a staff officer who is conversant with GIS software for producing reliable maps. That is the reason why within a short period, 5 CF proposals could be submitted to the Forest Department, Dawei for issuing CF certificates. This position is an important position for TNRP and when the existing staff is transferred back to the Forest Department one competent staff from GIS section of Forest Department should replace his place as database officer so as to run the project smoothly.

The recipient of 5 CF certificates is a great achievement for the 5 User Groups from 4 villages, viz., Migyaaunglung (old), Zinba, Yebone and Thayarmon villages and credit goes to PD (as well as Director FD, Dawei on dual charge) and NCs (CF) during first and second phase for their concerted efforts.

TABLE 11. USER GROUPS OF TNRP

Sr. No.	Village	Area (acres)	No. of User Group	Objectives	
				Agro-forestry (acres)	Natural Forest Management (acres)
1	Michaunlaung (Old)	3332	76	346	2986
2	Zinbar (1)	2167	60	61	2106
3	Zinbar (2)	751	30	34	717
4	Yebone	1128	76		1128
5	Thayarmon	1052	73		1052 (Water resources)

With the initiation of Community Forestry Program, local communities are quite eager to join the program as land tenure is a problem for the villages at the vicinity of TNR as they are living quite close to the reserved forests. Under the Community Forestry initiative the communities are allowed a parcel of land which they can manage with legal permission and technical support from the forest department. This community forestry program effectively engaged in management planning and implementation of conservation activities at the Village Use Zone of TNR. Apart from land, RMT will provide communities with forest tree seedlings and cash crop seedlings raised at TNRP nursery for the formation of forest gardens (trees, cash crops, medicinal plants and any income generating plants grown together) created and owned by local people. This will assist poverty alleviation and livelihood improvement and thereby eliminating very destructive shifting cultivating practices in the very near future. RMT organized CF trainings with the assistance of Community Forestry staff from CFDTC Patheingyi, Mandalay, Forest Department. A recent training on Village Consultation Process (VCP) and Village Zonation Process (VZP) for TNR organized by WCS was quite

successful for villagers as they could engage in participatory land use exercises using community mapping approaches.

In order to be successful with the CF program the close monitoring by the staff of TNRP is quite essential. As the turnover rate of TNR staff is quite high it is quite likely that TNR staff after getting training in CF may transfer at any time. This will become a real technical drawback for the implementation of CF programs. Forest User Groups need better support if they are to overcome the problems of effective enforcement and benefit sharing. There are NGOs all over the country with vast experiences of Community Forestry knowledge with good success stories. The experiences of these NGOs are of great help if RMT can organize them for assisting the establishment of CF in TNR by conducting on-job trainings for User Groups.

7.4.4 Fire Protection

During the hot season in March 2011, to protect 3,327 acres of CF in Michaunglaung (old village) from the wildfire, firebreaks of 2 miles in length were constructed by CF users' group with the financial support of RMT. 74.2 miles in length of fire breaks were also constructed along the Nature Reserve boundary. Internal regulations and procedures for villagers to control wildfire were also developed. The Forest Fire Consultant had studied the root causes of forest fire incidences in the vicinity of TNR and to mitigate and improve the situation. It is also necessary to study the success and failures of fire use among different stakeholders for initiating management and development of proper fire use to improve outcomes and reduce the incidence of agricultural burnings, beyond the areas of intention by developing appropriate fire management plans, particularly in and around the locations of high biodiversity value, adjacent to Village Use Zone of TNR. Special control measures may be needed to access, plan and implement such that the long-term integrity of the reserve and its core and buffer zone is assured. As the problem of forest fire lies beyond the capacity of TNR to handle alone, this study aims at a multiple stakeholder approach to better understand the forest fires in TNR.

7.5 COMMUNICATION, EDUCATION AND PUBLIC AWARENESS

7.5.1 Communication

Site level meetings are organized by RMT with all stakeholders during 2010 and 2011. Monthly meeting for TNR staff are organized for reviewing activities carried out within the month and plans for the next month. Bi-monthly meeting are also held with stakeholders at site level.

TABLE 12. BI-MONTHLY SITE LEVEL MEETING AT GANGAWTAUNG OFFICE

Sr.	Date	Attendees						Total
		MOGE	MGTC	TPC	PTTEPI	Others	TNR	
1.	9-3-2010	2	1	-	-	3	4	10
2.	3-7-2010	4	2	4	-	-	2	12
3.	23-8-2010	1	-	4	-	-	4	9
4.	4-10-2010	4	3				4	11
5.	12-2-2011	3	4	2	1		5	15
6.	17-6-2001	4	3	1	7	1	4	20
	Total	18	13	11	8	4	23	77

TABLE 13. RESPONSIBLE PERSONS ATTENDING THE MEETING

9-3-2010	TNR: PW; MGTC: Supervisor (Community); Others: Geocomp, Range Officer Yebyu township
3-7-2010	TNR: PD, PW; MGTC: Supervisor (Community); PCML: Site Manager
23-8-2010	TNR: Staff Officer; POC: Site Manager
4-10-2010	TNR: PW, NC (CF); MGTC: HSE (Supervisor)
12-2-2011	TNR: PW; MGTC: Supervisor (Socio-eco); TPC: Security Officer; PTTEPI: LAQ
17-6-2001	TNR: Staff Officer, NC (Elephant), NC (Tapir); MGTC: Agri/Vet Supervisor; Supervisor (Community); PTTEPI: Site Manager, Construction Engineer, Project Engineer; Others: Operation Manager- UE

It is quite apparent from the above tables that site level meetings are quite interesting for partners such as MGTC and TPC. Site Authorities like Site Managers and Supervisors took keen interest in attending the said meetings. It

can also be observed that since the beginning of 2011, PTTEP has taken keen interest to participate in these site level meetings so as to find out what necessary measures should be taken during the construction of the new gas pipe line along the MGTC / TPC pipeline route as future pipe laying activities will be concentrated within the transportation corridor of TNR.

Project Quarterly Progress Reports (PQPRs) are also distributed with percentage accomplishments against planned targets to monitor the progress of the TNR Project.

Technical committee meetings are also organized for discussing technical matters on project progress to be in line with logical framework and annual plan of operation on quarterly basis.

Project Coordinating Committee meetings are to be held bi-yearly for acting as “Board of Directors” to provide oversight and guidance to the project and safeguarding the interest of all stakeholders. However, since the 14th PCC meeting held in 24th August 2009, there has been no PCC meetings organized by RMT yet.

Likewise, Projects Monitoring Committee meetings are held at Director General Office, Naypyitaw, chaired by Director General, Forest Department and experiences and knowledge are shared among all managers of other external funded projects administered under the forest department.

The Deputy Director General of the Forest Department had visited TNRP in March 2010 and had provided guidelines for future actions to be followed up apart from inspecting TNRP facilities and Local Operating Units.

7.5.2 Environmental Education

Forestry extension program has been organized well in 2010 compared to 2011. An awareness teams consisting of 5 locals have been formed in line with the suggestions made by the report on terminal evaluation of TNRP in 2009. Most of the extension programs in 2011 are meant for villagers while the environmental education at schools is so far none.

During 2010 and 2011 the following activities were carried out by the extension staff in project villages.

TABLE 14. EXTENSION ACTIVITIES OF TNRP IN 2010-2011

Sr.	Particulars	2010		2011		Total no of times
		No of times	Attendance	No of times	Attendance	
1.	Community Forestry	4	505	1	44	5
2.	Environmental Education (Villages/Schools)	2	74	-	-	2
		7	622	-	-	7
3.	Wildlife Law	3	193	-	-	3
4.	Village Use Zone	11	569	1	65	12
5.	TNR Project	3	166	-	-	3
6.	Bamboo Charcoal	-	-	7	276	7
7.	Forest Fire	1	48	5	75	6
8.	Tiger	1	54	-	-	1
	Total	32	2235	14	460	46

7.5.3 Training

7.5.3.1 In-house training

Apart from technical trainings organized by WCS, RMT has organized in-house training for its staff.

TABLE 15. IN-HOUSE TRAINING

Training Course	Attendance		Remarks
	2010	2011	
Introduction to Computer	5	-	Extension staff
Community Forestry Training/workshop	29	11	Training organized by Park Warden
Forestry Extension	7	-	Park Warden/Project Staff Officer
GPS / Compass	17		Project Staff Officer
Camera Trap training	39		National Consultant (Tiger)

7.5.3.2. Training provided by Stakeholders (Socio-Eco, MGTC)

Scio-eco department of MGTC also help provide trainings to RMT. With an aim to build up the capacity of local staff, a two-day training course on team work building was conducted for newly recruited 16 local staff by Socio-eco program of TEPM during last week of January 2010. It was reported that this course was very fascinating and new to them and during the course they realized the importance of mutual understanding, cooperation and coordination among everyone in the team for achieving the common goal. A training program on gender issue was also organized by Socio-eco department.

The knowledge gained from such kind of trainings were imparted to villagers during the VDU and VDZ processes which is more or less related to communities and found to be very receptive by the villagers.

TABLE 16. SOCIO-ECO TRAINING AT TNRP

Training Course	Attendance		Remarks
	2010	2011	
Capacity Building	17	-	Extension staff/Patrolling staff (17)
Gender Issue	8		Patrol (1)/Extension(7)

RECOMMENDATIONS

Based on the findings the following are recommended:

1. Approved budget of 1.2 million for 4 years seems to be not appropriate for effective implementation of the project activities due to the drastic drop of FEC exchange rate currently being faced in 2011 fiscal year. The budget should be revised at the nearest PCC meeting.
2. There has been no financial audit performed up till now. A third party audit should be carried out as soon as possible. This audit will justify whether the allotted funds are spent appropriately in line with the financial procedures imposed by the donors.
3. PCC meeting has been long overdue. Since 2009 August, no PCC meeting has been held to review the progress of the project and evaluating the work of the implementing team. PCC meeting should be held as soon as possible to review the project progress as well as financial constraints.
4. Technical committee meetings should also be held regularly on quarterly basis so as to monitor the work progress of the project as well as assistance to the Reserve Management Team (RMT) in implementing project activities. Decisions made during the TC meetings should be followed up regularly and promptly.
5. A dedicated full time Director should be appointed as earliest as possible so as to manage the reserve effectively and in line with the requirements of the project document.
6. The staff turn-over rate is quite high: almost half of the staff has been transferred after receiving technical training that is essential for reserve management. Staff transfer should be considered, only at least one year after receiving any kind of technical training so that the experience gained from such kind of trainings could be effectively applied for the project.
7. Forest department staff with experience in GIS facilities should be assigned to the project as database officer on rotational basis for the production of database and digital maps for effective management of TNR.
8. Study tour programs to conservation areas in the neighboring countries, particularly related to trans-boundary programs should be organized for senior staff to share knowledge and experiences, as it does not cost so much. Also, organize training and study tours to Regional Community Forestry Training Center (RECOFTC) for receiving additional knowledge and experience on Community Forestry.
9. If funds are available, study tour to other protected areas inside the country should be organized for junior staff to share new experiences and learning different conservation techniques and methodologies. Also, some staff should be sent to successful Community Forestry centers which have been managed responsibly and effectively.
10. Up to the mid-term evaluation period, 3 trainings have been organized by WCS. One good opportunity for the trainees is the arrangement to bring in in-country WCS staff as co-trainers who have a lot of experiences in training. As they performed their training as interpreters in Myanmar language together with international staff, the participants have better chance of understanding than before. This kind of arrangement should be organized for future trainings.

11. It is felt that there should be more coordination between Technical Advisory team and RMT for the assignment of consultancies in future such that a thorough discussion and review take place before the implementation of the actual survey in order to have more productive outcomes.
12. The national consultants should be recruited in a timely manner so that they do not face any constraints during their field surveys.
13. User Groups are interested to grow fast growing forest tree species like Mahawgany as well as cash crop seedlings like Shaw Byu, which is a new species introduced this year by RMT. According to the recommendations made by NC for NWFP, Wa-U (Round Yam) a potential crop in TNR, was distributed for trial planting program for CF User Groups this year. As the intention of RMT is to replace the age old practice of shifting cultivation with agro-forestry plantations under CF program more varieties of cash crop seedlings should be raised at the nursery as suggested by NC of NWFP. The preferred species for agro-forestry plantations in future can also be identified through consultations with the User Groups well in advance such that the required species and number of seedlings can be readily available by the next planting season.
14. Fixed assets register should be filled up and updated regularly and keep one copy at Yangon office and a spare copy at Gantgawtaung office.
15. There are equipments and facilities, but still some gaps that constrain management. If funds are available, field equipments like compass, GPS, clinometers etc., should be procured and allocated to each LOU to expedite field operations.
16. Vehicles and motorcycles should be maintained regularly and kept maintenance registers properly. Likewise generator sets, both stationary and mobile should be maintained regularly so that all equipments will have extended service life and be ready to use these in time without frequent break down.
17. Starting from August 2010 Ministry of Energy (MOE) stopped supplying diesel oil from Dawei and have to purchase locally from Kanbauk at a higher price. One drawback of diesel oil from Kanbauk is that the fuel quality is not assured. If MGTC/TPC can consider supplying diesel in terms of logistical support as mentioned in the project document for the two vehicles and office use with the pay back system or other financially acceptable system for foreign purchase.
18. Review gasoline consumption pattern of vehicles, motorbikes and office use to meet optimum requirements for the project.
19. The Management plan for TNRP should be updated with available information so that all necessary data will accrue at the time of next revision.
20. During the first phase of the project land use assessment was made using satellite scenes acquired in 2006. In order to conduct change assessment, satellite scenes of 2010 were acquired and change assessments studies organized by Planning and Statistics division of the Forest Department. A field check was already performed for assisting interpretation of the satellite data. Due to incomprehensible reasons the final land use map has not yet finalized. In order to find out the changes that takes place during the two time periods RMT should contact head office to expedite the process.

21. Patrolling is one of the major activities of law enforcement at TNRP. WCS has trained law enforcement training twice and demonstrated how to use MIST form during patrols. In future MIST forms must be used during the patrols and all information should be stored in MIST database for reference. Incentive scheme should be introduced for the patrolling staff to get quality MIST data in future.
22. The final report of NC Community Forestry is still outstanding. It should be completed by now.
23. Out of 12 CF programs initiated by RMT, 5 got certificates in 2011. RMT should organize training / workshops with User Groups on how to effectively manage CF in line with the management plan developed and with the assistance from CFTDC or other renowned NGOs in the field of CF.
24. Communities rely heavily on timber and bamboo resources for their day to day needs which they can tap from Village Use Zone. However, for effective management of the VUZ, resource inventory have to be carried out to determine the potential yield for the villagers. The Planning and Statistics division, of Forest Department should be contacted to assist the design of the resource inventory.
25. Project Quarterly Progress Report (PQPR) is a good indicator for monitoring the project progress. However, PQPR 24 is long overdue and it should be released in time to the donors for determining the overall progress of the project.
26. EEC building is in place and trainings and workshops as well as awareness talks should be organized for the local communities who have received CF certificates on how to effectively manage CF with cooperation from the Forest Department, particularly for the effective management of natural forests.
27. Renovate previous training-shed at Migyaunglaung nursery as accommodation hall for trainees during the trainings at EEC building.
28. Awareness programs at schools in 2010 are quite sufficient. However, in 2011 it has been observed that more awareness programs need to be organized so as to meet the targets.
29. Boundary demarcation program in secure area is almost completed except in the north where the security is not assured. Boundary demarcation for Village Use Zone should be concentrated in the coming open season. Locations of boundary should be recorded with GPS readings and database developed for easy reference.
30. The extent of Transportation Corridor need to be re-determined as PTTEP is going to lay new pipelines in the very near future. The existing corridor is based on the 100 m distance from both sides of service track according to the Management Plan. In actual ground conditions this does not cover the pipelines Right Of Way. ROW alignment charts (routes) from pipelines companies should be acquired and the best possible corridor extent should be determined and located (most probably either 100m on either side of service track or 100m on both sides of pipeline ROW).
31. Reference materials such as reference books on wild mammals, tortoises and birds etc. in Myanmar language at Gantgawtaung office, should be made available at LOUs as reference materials.
32. The drastic drop in FEC exchange rate is downgrading the moral of staff as well as locals with the staff allowances and salaries of locals reduced by

30% in 2011 July, that do not meet the existing escalating commodity prices. A pragmatic solution is urgently needed to contain the situation.

33. Study tours to WEFCOM and other PAs in-country should be organized so as to share the experiences and also to have good contacts for future cooperation programs, particularly for trans-boundary conservation issues.
34. Instead of consultancy for microfinance, organize consultancy for socioeconomic survey before the end of the second phase of the project to find out whether the intervention made by RMT really support livelihood of communities and thereby enhancing poverty alleviation or not.
35. Compared to 2010, trainings in 2011 are quite few. Trainings should be organized on awareness training at schools as well as participatory trainings for User Groups, who already received CF certificates as well as those who are at varying stages of CF certification process.
36. More technical training should be made for User Groups (which have already received CF certificates) in managing their land in proper ways according to the management plan for long-term benefits of Community Forest.
37. With the recipient of CF certificates it is advisable to demarcate the perimeter of the Village Use Zone boundary so that there will be no conflicts with the User Groups regarding the extent to which they can perform the CF activities mentioned above for their livelihood. Incentive schemes should be initiated such as providing User Grants for CF program to get better motivation and effective participation from User Groups.
38. Research studies on Herpetology carried out by California Academy of Sciences (CAS) jointly with NWCD of Forest Department is a good initiative of cooperative research by other agencies at TNR. This kind of activity should be encouraged in future.

CONCLUSION

This mid-term evaluation study had been organized with the effective participation of all stakeholders with mutual support and transparency. Most of the evaluations were performed using the standard evaluation approach developed by METT: based on standard criteria and indicators. One of the strong points of this project was the legal status of the Nature Reserve after promulgation in 2005. In addition to that the scores received from the evaluation indicated that the strong points of the project are the secure provision of funds by the donors as well as the number of sufficient forestry department staff being assigned to the project. Moreover the appointment of 16 locals as extension staff and patrols give good job opportunities as well as support in terms of information and effective communication through their own dialects. Moreover, the recipient of 5 CF certificates will induce a major flow of economic benefits to local communities from activities associated with the Community Forestry Program. FD should play lead support role together with RMT in the post certification scenario and also need to monitor FUGs on an ongoing basis to include the following (Springate-Baginski, et al. 2011):

- awareness raising and leadership support,
- technical forestry training and guidance
- renewal of management plans,
- harvesting checking and approval,
- community based enterprise development,
- protection enforcement support,
- conflict management
- promotion of equity,
- pro-poor
- gender sensitivity
- membership reform, etc.

In order to accomplish the above mentioned tasks additional expertise is deemed essential for effectiveness of the post certification program. Staff training and development of additional skills aligned with the management needs of the community development and conservation of forest biodiversity through community forestry should be given prior consideration before the completion of the second phase.

For such kind of diversified expertise, one way of obtaining support program is to find out service providers in country or overseas including NGOs and Community Based Organizations or specifically from Regional Community Forestry Training Center (RECOFT) for integrating Conservation and Community Forestry. As local communities continue to rely on forests for food, fiber, construction material and income a balance has to be found between the need to use forest resources to maintain the livelihood of the pro-poor and the need to maintain protected forest for conserving biodiversity.

However, the task of integrating conservation and community development is not an easy one. The equal footing of both objectives proved to be especially difficult; often one objective usually conservation, predominated. **“One strong belief is that a community will conserve the forest if it benefits from it”.**

A thrust between the government (RMT) and the community must be strengthened; the traditional adversarial relationship must be replaced by a partnership and a shared vision that encompass both conservation and development.

It can also be observed that there is a strong cooperation among the main stakeholders in terms of funding and support in which a training organized by Socio-eco department of MGTC was outstanding. It is expected for such kind of support from other stakeholders also for the benefit of the project.

Concerning biodiversity status of the reserve, the NC for tiger survey had reported that *"The findings confirmed the presence of tigers and sufficient prey mammals in TNR using questionnaire survey and track and sign surveys. A certain level of hunting pressure and habitat disturbances caused by peripheral villages was also encountered during the survey"*.

The NC for Tapir survey also made the following comments. *"A total of 3 individuals of tapir were recorded by camera traps in 2 different sites at Khotama and Make Byat ka than salt licks. The Yebone salt lick and its vicinity had been defined as tapir presence area by previous year's camera trap data and foot prints recorded by tiger survey consultant as well in 2011"*.

Likewise, the NC for the tree and bamboo survey had reported that *"A total of 84 species belonging to 70 genera were found in the 9 study areas of TNR. A total of 384 tree species and 30 bamboo species were recorded. The main vegetation types in this area can be grouped into three formations i.e. evergreen forest, mixed deciduous forest and bamboo forest. According to IUCN Red Data List there are 21 tree species listed as endangered which include 15 Dipterocarpus species. The forests in the study areas (most accessible areas) are under high pressure due to encroachments for logging, hunting, plantations establishment, seasonal fire, erosion, landslides and seasonal strong wind due to storms. These disturbances are very sensitive to dynamic processes, species diversity, community structure, population development and habitats of the wildlife. These may lead to the deteriorating and breaking down the web life of ecosystem which may lead to the extinction of species"*.

Based on the above findings the biodiversity status of TNR is facing many challenges now for keeping TNR well protected. Among the challenges, more compliance of local people with forest law, wildlife law and cooperation of other line government departments are the most pressing needs for the effective management of TNR. It is hoped that the goal of TNR could become a reality when all stakeholders including district and divisional level authorities of the Forest Department, local communities, and O&G companies join hand in hand in appreciation of the Reserve' values with the active leadership role of RMT. In addition, the support, cooperation and active participation from local communities play a key role for the successful management of the reserve.

As the government is looking forward for rural development and poverty alleviation through socioeconomic wellbeing of the rural people, the CF program

will play a major role in creating new livelihoods opportunities, increased control of resources by local people and developing new markets for forest products. Incentive schemes should be initiated in line with Outreach Buffer Zone development program such as initiating User Grants for those who really are in need of support.

According to the carrot and stick principle, not only programs for supporting livelihood of communities are being developed by RMT but also conduct effective law enforcement through regular patrolling is one of the major activities implemented by RMT. Trainings on effective law enforcement were organized by WCS twice and demonstrated on how to use MIST form during patrols. MIST data forms must be used during the future patrols and all information should be stored in MIST database for reference. Incentive scheme should be introduced for the patrolling staff to get quality MIST data in future. During patrols illegal loggings as well as bush-meat selling at shops are thoroughly examined and taking immediate actions in case of violations. The O&G stakeholders are in favor of carrying out such kind of patrols along the service track and already took immediate actions for those involved in such illegal cases.

Likewise, some weakness has also been observed. A final report on land use changes has not been reported yet. Hence, there is no up to date information concerning deforestation, unrestricted burning and destructive agriculture practices that may have significant threats on wildlife decline and extent on loss of natural habits which will have serious impact on the design of the project. In addition to that information on the available resources such as timber, bamboo NWFP etc., is not sufficient to support planning and decision making process for the Village Use Zone.

A final report from NC Community Forestry is still pending. It should be completed by now.

PCC meeting should be held as soon as possible to discuss about financial implications of the project funds, including review of staff allowances and salary for locals, due to the drastic fall of FEC exchange rate and enquire for the best possible solution for the effective implementation of the project.

The above statements of the project indicate that there are strong and weak points in implementing the project. However, a systematic review of the project using METT approach indicated that the project performance is so far satisfactory. One good opportunity for mainstreaming the project is to have a dedicated Project Director for effective implementing of the project so as to be in-line with the requirements of the project document.

TRACKING TOOL ASSESSMENT OF TNR PROJECT

1. LEGAL STATUS

Issues	Criteria	Score: Highlight only one box per question	
Does the protected area have legal status (or in the case of private reserves is covered by a covenant or similar)?	The protected area is not gazetted /covenanted	0	
	There is agreement that the protected area should be gazetted/covenanted but the process has not yet begun	1	
Context	The protected area is in the process of being gazetted/covenanted but the process is still incomplete (includes sites designated under international conventions, such as Ramsar, or local/traditional law such as community conserved areas, which do not yet have national legal status or covenant)	2	
	The protected area has been formally gazetted/covenanted	3	

COMMENTS / EXPLANATION

- a) TNR Project area was decreed as “Taninthayi Nature Reserve” in accordance with the Notification No. (18/2005), Yangon, Ministry of Forestry, Minister’s Office, Government of Myanmar, dated 30th March 2005.

NEXT STEPS

- a) To make sure that all stakeholders are aware of the status of the Reserve and rules and regulations being enforced.

2. PROTECTED AREA REGULATIONS

Issues	Criteria		Score: Highlight only one box per question
Are appropriate regulations in place to control land use and activities (e.g., poaching controlled)?	There are no regulations for controlling land use and activities in the protected area	0	
	Some regulations for controlling land use and activities in the protected area exist but these are major weaknesses	1	
Context	Regulations for controlling land use and activities in the protected area exist but there are some weaknesses or gaps	2	
	Regulations for controlling inappropriate land use and activities in the protected area exist and provide an excellent basis for management	3	

COMMENTS / EXPLANATION

- a) The following laws in relation to forest resources as well as protection of wildlife, wild plants and conservation of protected areas were promulgated as follows:
- Forest Law (Law No. 8/92, 1992)
 - Protection of Wild Life, Wild Plants and Conservation of Protected Areas Law (Law No. 6/94, 1994)
- b) RMT has organized 3 meetings for explaining "Wildlife Law" to the villagers in 2010 and 193 attended. There has been so far no village meetings organized for explaining about *"Do's and Don'ts about wildlife and forest regulations"*.

NEXT STEPS

- a) Organize regular meeting for those living in the vicinity of TNR and explain about "Do's and Don'ts" about wildlife and forest rules and regulations.

3. LAW ENFORCEMENT

Issues	Criteria	Score: Highlight only one box per question	
Can staff (i.e. those with responsibility for managing the site) enforce protected area rules well enough?	The staff have no effective capacity/resources to enforce protected area legislation and regulations	0	
	There are major deficiencies in staff capacity / resources to enforce protected area legislation and regulations (e.g. lack of skills, no patrol budget, lack of institutional support)	1	
Context	The staff have acceptable capacity/resources to enforce protected area legislation and regulations but some deficiencies remain	2	
	The staff have excellent capacity/resources to enforce protected area legislation and regulations	3	

COMMENTS / EXPLANATION

- Law enforcement activities (patrolling) have been conducted 119 times in and around TNR.
- During the patrolling from April 2009 to date, 112.85 tons of timber / poles were confiscated and handed over to the forest department, Yebyu Township for further action.
- Patrol staff started recording patrols using MIST forms after the training in January, 2011. Out of 28 patrols performed only 13 were fully reported using MIST formats.
- Twenty one signboards representing Wildlife Hunting and Trade prohibition as well as prohibition of taungya cutting, hunting, village encroachment, burning and grazing have been placed at road junctions and at village crossings along Ye-Dawei road.

NEXT STEPS

- In future all patrol forms should be filled up using MIST forms during any kind of patrols. More signboards should be placed at strategic places, access routes leading to the interior area of the reserve such that communities are aware of the existence of TNR.
- The project should initiate incentives to patrol staff to collect quality MIST data consistently on each patrol.
- Responsible person for law enforcement team should be able to make clear that threats, targets and zoning restrictions for patrol staff to facilitate decision making in the field.

4. PROTECTED AREA OBJECTIVES

Issues	Criteria	Score: Highlight only one box per question	
Is management undertaken according to agreed objectives?	No firm objectives have been agreed for the protected area	0	
	The protected area has agreed objectives, but is not managed according to these objectives	1	
Planning	The protected area has agreed objectives, but is only partially managed according to these objectives	2	
	The protected area has agreed objectives and is managed to meet these objectives	3	

COMMENTS / EXPLANATION

The protected areas objectives are:

- To preserve all natural habitat types and populations of important native species and globally- threatened flora and fauna,
- Improve appreciation and understanding of biodiversity and socio-economic values of TNR amongst stakeholders at all levels,
- Effectively engage local communities in management planning and implementation of conservation activities at the Village Use Zone of TNR,
- Enhance the capacity of TNR management team so as to effectively manage the natural resources of the TNR and successfully implement conservation activities
- Conduct targeted biological survey/research to obtain relevant data that are essential for reviewing and revising TNR Management Plan at four-year interval
- To implement the conservation activities, law enforcement activities with the aims of reducing threats to TNR
- Due to security constraints and access, only part of TNR is under proper management to meet the objectives set in the management plan.

NEXT STEPS

- RMT could manage effectively in the secured areas for the time being and when situation improves, extend the services to meet the set objectives, particularly in the northern part of the reserve..

5. PROTECTED AREA DESIGN

Issues	Criteria	Score: Highlight only one box per question	
Is the protected area the right size and shape to protect species, habitats, ecological processes and water catchments of key conservation concern?	Inadequacies in protected area design mean achieving the major objectives of the protected area is very difficult	0	
	Inadequacies in protected area design mean that achievement of major objectives is difficult but some mitigating actions are being taken (e.g. agreements with adjacent land owners for wildlife corridors or introduction of appropriate catchment management)	1	
Planning	Protected area design is not significantly constraining achievement of objectives, but could be improved (e.g. with respect to larger scale ecological processes)	2	
	Protected area design helps achievement of objectives; it is appropriate for species and habitat conservation; and maintains ecological processes such as surface and groundwater flows at a catchment scale, natural disturbance patterns etc	3	

COMMENTS / EXPLANATION

- a) Based on available information, current land use and security conditions prevailing at TNR, the following zones are considered for effective conservation of the reserve, for the time being based on 2006 satellite scenes (TNR Management Plan, 2009):
 - Core Zone (CZ)
 - Village Use Zone (VUZ)
 - Integrated Buffer Zone and
 - Transportation Corridor (TC)
- b) New satellite scenes have been acquired and analyzed. However, a final report on land use changes has not been reported yet. Hence, there is no information concerning deforestation, unrestricted burning and destructive agriculture practices that may have significant threats on wildlife decline and extent on loss of natural habitats in TNR since 2006.

NEXT STEPS

- a) The report on land use changes and deforestation rate is urgently needed to reflect the major threats such as shifting cultivation, forest degradation and cultivation encroachment. It is deemed essential for updating land use classes in TNR.

6. PROTECTED AREA BOUNDARY DEMARCATION

Issues	Criteria	Score: Highlight only one box per question	
Is the boundary known and demarcated?	The boundary of the protected area is not known by the management authority or local residents / neighboring land users	0	
	The boundary of the protected area is known by the management authority but is not known by local residents / neighboring land users	1	
Process	The boundary of the protected area is known by both the management authority and local residents / neighboring land users but is not appropriately demarcated	2	
	The boundary of the protected area is known by the management authority and local residents / neighboring land users and is appropriately demarcated	3	

COMMENTS / EXPLANATION

- 61 boundary pillars were demarcated between Latitude 14°20.617' and 14°46.407', along the western side of TNR, about 42 Miles in length.
- Boundary pillars are still needed to demarcate the Village Use Zone, such that villagers maybe aware of the extent to which they can exercise their CFs.
- There are examples from all over the world that demonstrate the immense strain protected areas receive from developed rural areas nearby. Activities allowed in the Village Use Zone are mentioned in TNR Management Plan (2009) as follows:
 - Agriculture (subsistence)
 - Agroforestry (timber and fuelwood)
 - Burning with proper control
 - Dwellings (temporary)
 - Fishing (subsistence)
 - Gathering Non Timber Forest Products (NTFP)
 - Land rehabilitation
 - Livestock grazing
 - Logging subsistence (woodlots)
 - Reforestation (native species),

It is thus advisable to demarcate the perimeter of the Village Use Zone boundary so that there will be no conflicts with the villagers regarding the extent to which they can perform the activities mentioned above for their livelihood.

NEXT STEPS

- a) RMT should concentrate their effort for demarcating Village Use Zone boundary for effective management of TNR.
- b) All boundaries marked on ground should be transferred on to maps using GPS coordinates in the form of database developed for assisting revision of Management Plan.

7. MANAGEMENT PLAN

Issues	Criteria	Score: Highlight only one box per question	
Is there a management plan and is it being implemented?	There is no management plan for the protected area	0	
	A management plan is being prepared or has been prepared but is not being implemented	1	
Planning	A management plan exists but it is only being partially implemented because of funding constraints or other problems	2	
	A management plan exists and is being implemented	3	

ADDITIONAL POINTS

7a. Planning process	The planning process allows adequate opportunity for key stakeholders to influence the management plan	+1	
7b. Planning process	There is an established schedule and process for periodic review and updating of the management plan	+1	
7c. Planning process	The results of monitoring, research and evaluation are routinely incorporated into planning	+1	

COMMENTS / EXPLANATION

- a) During the bridge period of first and second phase of the project a Management Plan for TNR was prepared by the Core Unit and approved by Project Coordinating Committee (PCC) in 2009 September.
- b) Since then RMT has been implementing the Management Plan using Logical Framework Approach (LFA).
- c) Work progress on the implementation of the management plan by RMT is provided in Project Quarterly Progress Report in terms of percentage accomplished which has been circulated to concerned partners.

NEXT STEPS

- a) During the implementation of the management plan, it will be necessary to periodically review and collate information that are relevant for the revision of the management plan before the end of the project period in 2013.

8. REGULAR WORK PLAN

Issues	Criteria	Score: Highlight only one box per question	
Is there a regular work plan and is it being implemented	No regular work plan exists	0	
	A regular work plan exists but few of the activities are implemented	1	
Planning	A regular work plan exists and many activities are implemented	2	
	A regular work plan exists and all activities are implemented	3	

COMMENTS / EXPLANATION

- a) A regular work plan has been developed annually and approved during the Technical Committee (TC) meetings.
- b) Actions are monitored against this; however some activities still need to be completed.

NEXT STEPS

- a) Annual Work plan should be monitored closely by RMT and if there is any problem during the implementation it should be put up to the TC for further action.

9. RESOURCE INVENTORY

Issues	Criteria	Score: Highlight only one box per question	
Do you have enough information to manage the area?	There is little or no information available on the critical habitats, species and cultural values of the protected area	0	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is not sufficient to support planning and decision making	1	
Planning	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient for most key areas of planning and decision making	2	
	Information on the critical habitats, species, ecological processes and cultural values of the protected area is sufficient to support all areas of planning and decision making	3	

COMMENTS / EXPLANATION

- a) Assessment of land use / land cover has been carried out using updated satellite images. However, updated land use map is not available up till now due to technical constraints.
- b) In order to find out the existing stock of timber and bamboo resources in the Village Use Zone (VUZ) a preliminary survey has been carried out in 2 villages. The information obtained from these surveys will be of great help in developing inventory design for estimating timber and bamboo potential in the VUZ.

NEXT STEPS

- a) The status of land use / land cover using satellite images should be explored and find out the best possible solution to produce land use / land cover in time for effective planning of the reserve.
- b) The inventory design for estimating for estimating timber and bamboo resources of VUZ should be carried out with the assistance of inventory specialist from Planning and Statistics Division of the Forest Department for effective management of VUZ.

10. PROTECTION SYSTEMS

Issues	Criteria	Score: Highlight only one box per question	
Are systems in place to control access/resource use in the protected area?	Protection systems (patrols, permits etc) do not exist or are not effective in controlling access/resource use	0	
	Protection systems are only partially effective in controlling access/resource use	1	
Process/outcome	Protection systems are moderately effective in controlling access/resource use	2	
	Protection systems are largely or wholly effective in controlling access / resource use	3	

COMMENTS / EXPLANATION

- Patrolling system is in place. Regular patrols carried out by teams based on Rangers from Local Operating Units (LOUs). There is also a mobile patrol team headed by one Range Officer from Gangawtaung Office. LOU staffs conduct periodic patrols but not regular patrols in buffer zone and boundary of the TNR.
- Patrol staff could not able to conduct patrols, particularly the northern and southern most areas of TNR due to security reasons
- Though funds are available for patrolling programs due to institutional constraints patrolling program seems to be not effective.

NEXT STEPS

- LOU and Mobile team staff should be closely managed by the project staff.
- Appropriate funds and effective logistical support (e.g., additional provision of patrol boat and additional motor bikes, vehicle for mobile team during surprised checks) should be provided.
- Each LOU should have a monthly work plan based on the framework developed in line with the annual work plan.
- The project should initiate incentive scheme to collect "Quality MIST Data" consistently on each patrol so as to develop database for the revision of management plan.

11. RESEARCH

Issues	Criteria		Score: Highlight only one box per question
Is there a programme of management orientated survey and research work?	There is no survey or research work taking place in the protected area	0	
	There is a small amount of survey and research work but it is not directed towards the needs of protected area management	1	
Process	There is considerable survey and research work but it is not directed towards the needs of protected area management	2	
	There is a comprehensive, integrated programme of survey and research work, which is relevant to management needs	3	

COMMENTS / EXPLANATION

- a) The following research programs are being conducted during the 2nd phase of the project by National Consultants (NCs) for obtaining relevant information to assist for the revision of the Management Plan.
- Marketing study of Non-Wood Forest Products.
 - Tree and Bamboo resource survey
 - Community Forestry
 - Forest Dynamics Study
 - Tiger survey
 - Forest Fire Management
 - Tapir survey
 - Elephant survey
- b) A joint study on Herpetology by California Academy of Sciences (CAS) and NWCD of Forest Department was carried out in 2009-2010 at Taninthayi Nature Reserve with 3 visits. Currently, CAS has identified 82 species of amphibians (37) and reptiles (45) in TNR.

NEXT STEPS

- a) Research study carried out by CAS is a good example of cooperative research by other agencies. This kind of activity should be encouraged in future.
- b) For future research program to be carried out by NCs, it is advisable to meet WCS and scrutinized about the research design so that the program will be more effective and productive.
- c) Future surveys should have proper timeline to get relevant data for the management planning process.

12. RESOURCE MANAGEMENT

Issues	Criteria	Score: Highlight only one box per question	
Is active resource management being undertaken?	Active resource management is not being undertaken	0	
	Very few of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented	1	
Process	Many of the requirements for active management of critical habitats, species, ecological processes and cultural values are being implemented but some key issues are not being addressed	2	
	Requirements for active management of critical habitats, species, ecological processes and, cultural values are being substantially or fully implemented	3	

COMMENTS / EXPLANATION

- a) Due to security reasons the northern most part of TNR is still not accessible. However, during the second phase of the project the southern part of TNR become accessible and surveys and patrolling activities can be extended to the southern part of the reserve.
- b) One outstanding event is the control of illegal logging activities inside TNR boundary, A timber company got concession close to the boundary of TNR. However, logging activities were found carrying out inside TNR, instead Through the concerted effort of TNR patrolling staff, the existing situation was reported to FD, Dawei, with supporting documents such as, GPS locations of the concerned area, tracking data of logging routes and relevant photos, etc. As a result there is no more logging permits granted close to TNR by the Forest Department, Dawei anymore.

NEXT STEPS

- a) Local communities should be effectively engaged in management planning and implementation of conservation activities at the Village Use Zone under the leadership of TNR staff.
- b) Assist Community Forestry Programs effectively that if the resources can be made sufficiently valuable to local people then they will have enough interest to conserve the resource. Initiate incentive schemes for CF program to get better motivation and effective participation from user groups.

13. STAFF NUMBERS

Issues	Criteria	Score: Highlight only one box per question	
Are there enough people employed to manage the protected area?	There are no staff	0	
	Staff numbers are inadequate for critical management activities	1	
Inputs	Staff numbers are below optimum level for critical management activities	2	
	Staff numbers are adequate for the management needs of the protected area	3	

COMMENTS / EXPLANATION

PAs Name	Area km2	No of Rangers	Responsible area/ ranger (sq km2)
Hkakaborazi National park	3812	2	1906
Hukaung Wildlife sanctuary	6371	6	1062
Htamanthi Wildlife Sanctuary	2150	4	538
Rakhine Yoma Elephant Sanctuary	1756	5	351
Inlay Wildlife Sanctuary	641	2	320
Taninthayi Nature Reserve	1700	6	283

- The total staff of TNR consists of 21 permanent staff from Forest Department and 30 locals, including 10 patrols and 6 extension staff.
- Among the permanent staff majority are graduates or received training at Myanmar Forest School. On the other hand, out of locals only 5 are graduates.
- The staff of first phase has been totally replaced by a new team since the start of the second phase. During March, 2011, 11 permanent staff has been transferred again just after receiving training in January 2011 by WCS.
- More staffs have indicated that they are planning to leave or have recently submitted transfer requests, indicating that staffs are dissatisfied with their jobs. (probably due to low FEC exchange rate which makes field allowances not quite remunerative).

NEXT STEPS

- a) The staff turnover rate is quite high: almost half of the staff has been transferred after receiving technical training that is essential for reserve management. Staff transfer should be considered, only at least one year after receiving any kind of technical training so that the experience gained from such kind of trainings could be effectively applied for the project.

14. STAFF TRAINING

Issues	Criteria	Score: Highlight only one box per question	
Are staffs adequately trained to fulfill management objectives?	Staff lack the skills needed for protected area management	0	
	Staff training and skills are low relative to the needs of the protected area	1	
Process	Staff training and skills are adequate, but could be further improved to fully achieve the objectives of management	2	
	Staff training and skills are aligned with the management needs of the protected area	3	

COMMENTS / EXPLANATION

- a) Staff training has been provided by WCS during the second phase. Trainings include the followings:
- Training on Village Consultation Process (VCP) and Village Zonation Process (VZP) for Taninthayi Nature Reserve (20-29 September,, 2010).
 - Patrolling Wildlife Protection Training Workshop (25-31 January 2011)
 - Evaluating Patrol Strategies and Wildlife Protection in TNR (4-11 July, 2011)
- b) Community Forestry (CF) Training provided by Central Forestry Development Training Centre, Forest Department is a good training opportunity for TNR staff. Seven extension staff from TNR attended the training while 10 permanent staff joined as observers.
- c) During the first phase of the project, WCS organized trainings mostly oriented towards law enforcement and matters related to wildlife. However, during the second phase, apart from law enforcement, trainings are more attuned towards community participation (VCP & VZP) which is a very good initiative for poverty alleviation through rural development activities such as Community Forestry Programs.

NEXT STEPS

- a) It is quite clear that different kinds of training were organized in 2010, whereas to date the training programs in 2011 are quite few compared to 2010. As it is learnt that 5 CF certificates are being awarded to Zinba, Thayarmaon, Yaphu, and Migyaunglaung villages, it will be a good opportunity to conduct trainings and workshops on how to implement CF effectively in line with the management plans being developed.

15. CURRENT BUDGET

Issues	Criteria	Score: Highlight only one box per question	
Is the current budget sufficient?	There is no budget for management of the protected area	0	
	The available budget is inadequate for basic management needs and presents a serious constraint to the capacity to manage	1	
Inputs	The available budget is acceptable but could be further improved to fully achieve effective management	2	
	The available budget is sufficient and meets the full management needs of the protected area	3	

COMMENTS / EXPLANATION

The funds allotted in the management plan of TNR for 2011-2012 did not reflect the actual situation during the implementation of the project and had been revised at the 1st Technical Committee meeting in 2010. With the drastic drop in FEC exchange rate the assigned budget will not meet the actual situation and will need to probe in so that all activities could be performed effectively to meet the targets set for the successful implementation of the project.

NEXT STEPS

- a) The budget allotment should be revised as soon as possible to meet the current situation.

16. SECURITY OF BUDGET

Issues	Criteria	Score: Highlight only one box per question	
Is the budget secure?	There is no secure budget for the protected area and management is wholly reliant on outside or highly variable funding	0	
	There is very little secure budget and the protected area could not function adequately without outside funding	1	
Inputs	There is a reasonably secure core budget for regular operation of the protected area but many innovations and initiatives are reliant on outside funding	2	
	There is a secure budget for the protected area and its management needs	3	

COMMENTS / EXPLANATION

- a) In line with the project document it is learnt that the project will be supported from funds derived from the operation of MGTC and TPC pipelines on the estimated life of the pipelines, which is expected to be approximately 30 years.

NEXT STEPS

- a) At the moment the fund is fixed at 1.2 million US\$ for the four year plan period. This should be flexible and if feasible, additional funds should seek from other sources of financial support (e.g., PTTEP) due to the shortfall of funds arising from drastic drop in exchange rate.

17. MANAGEMENT OF BUDGET

Issues	Criteria	Score: Highlight only one box per question	
Is the budget managed to meet critical management needs?	Budget management is very poor and significantly undermines effectiveness (e.g. late release of budget in financial year)	0	
	Budget management is poor and constrains effectiveness	1	
Process	Budget management is adequate but could be improved	2	
	Budget management is excellent and meets management needs	3	

COMMENTS / EXPLANATION

In terms of provision of budget, an overall budget of US\$ 1.2 million has been allotted for the second phase project. Cash calls have to make every 3 months to either MGTC / TPC based on work plans developed and approved yearly. If any adjustments have to be made it can be arranged through Technical Committee meeting. However, during the first technical committee meeting the microfinance program was replaced with 'livelihood support program' and necessary terms and conditions has to be formulated for support which will provide additional funds for operations. A consensus was arrived also in the first technical meeting to skip 'Thai Border Wildlife Trade Survey' as well as "Gurney's Pitta Survey" which contribute additional funds for smooth operation of the project.

No third party financial audit has been done so far despite the project has been undertaken for more than 20 months period.

NEXT STEPS

- Annual budget should be based on approved work plans every year and consider all aspects of activities pertaining to effective use of budget being provided.
- If situation calls for, the budget should be revised at the nearest PCC meeting or upon special request, to be more logical and realistic; otherwise, work performances would not be up to the mark.
- Third-party financial audit should be organized as soon as possible such that the allotted budget is spent in line with the financial mechanism of the funding agencies.

18. EQUIPMENT

Issues	Criteria	Score: Highlight only one box per question	
Is equipment sufficient for management needs?	There are little or no equipment and facilities for management needs	0	
	There are some equipment and facilities but these are inadequate for most management needs	1	
Inputs	There are equipment and facilities, but still some gaps that constrain management	2	
	There are adequate equipment and facilities	3	

COMMENTS / EXPLANATION

- a) There are fixed assets registers at Yangon and Gangawtaung Offices at TNRP. During the first four years project period the fixed assets register was systematically organized with code no., description / commodity name, quantity and remarks. However, it was observed that the current fixed register was found to be not following the previous format and moreover not properly updated. Apart from that the fixed assets register of Gangawtaung office was not available in Yangon Office.
- b) Regarding field equipment during the second phase of the project new field equipments such as 8 GPSs (60 CSX 1, 76 CS 2, and 72H 5), 11 camera traps (digital type), 6 digital cameras and jungle outfits such as rain coat, sleeping bags (24), jungle boots (56), hammock (28), mosquito nets (56) etc were procured for supporting field operations.

NEXT STEPS

- a) In line with recommendations made by WCS consultant the following items of additional assets / equipments need to be procured for smooth working conditions:
 - Motorcycles
 - Head light and high power flashlights
 - Mobile phones for communication LOUs and mobile teams, 1 for each team
 - Hammocks, sleeping bags, leech socks
 - Fly sheets
 - Backpacks
 - Sylva compass
 - 1 more boat for patrolling along water courses
 - Batteries for GPS and digital cameras

19. MAINTENANCE OF EQUIPMENT

Issues	Criteria		Score: Highlight only one box per question
Is equipment adequately maintained?	There is little or no maintenance of equipment and facilities	0	
	There is some ad hoc maintenance of equipment and facilities	1	
Process	There is basic maintenance of equipment and facilities	2	
	Equipment and facilities are well maintained	3	

COMMENTS / EXPLANATION

- a) The generator (Elemax) at Gangawtaung office has been in use since the first phase of the project. The generator has been in a running condition. However, no proper maintenance has been done so far.
- b) The two vehicles, 17 motor cycles and portable generators are being maintained as and when needed. However, there are no proper maintenance records traceable, even for the important assets like 2 vehicles.

NEXT STEPS

- a) There should be a proper maintenance plan / register for all important assets such as vehicles, motorcycles, generator sets, both stationary and mobile, water pumps, copier etc and maintenance records should fill in promptly after maintenance and updated regularly.

20. PERSONNEL MANAGEMENT

Issues	Criteria	Score: Highlight only one box per question	
Is the staff managed well enough?	Problem with personnel management significantly constrain management effectiveness?	0	
	Problems with personnel management partially constrain management effectiveness	1	
Process	Personnel management is adequate but could be improved	2	
	Personnel management is excellent and aids effectiveness	3	

COMMENTS / EXPLANATION

- a) After the termination of the first phase in 30th November, 2009, all previous staff from TNRP had been replaced by a new team consisting of 1 Project Director, 1 Park Warden and other forest department staff, consisting of 26 personnel. The fact is that the new staff has to start from scratch. Again in 2011 March, 11 staff was transferred back to Forest Department after attending training in 2011 January organized by WCS. The frequent turnover rate gave an indication that staffs are dissatisfied with their jobs and it has been heard that staffs are planning to leave or have recently submitted transfer requests.
- b) This may be aggravated by the fact that the nosedive in FEC rate significantly affects the staff field allowances (IFEC=MMK 1000 in Jan 2010; 1FEC=MMK 690 in June 2011) which greatly impacts their motivation.

NEXT STEPS

- a) It is envisaged that the staff, by staying in place longer than one year would ensure their ability to implement project activities and gain valuable experience that can be utilized in future position.
- b) According to the project document, the intent of providing field allowances is for incentive for working in remote areas as well as to compensate for additional field costs. As the staffs are being paid by FEC it is now necessary to compensate the loss in exchange through revising the staff allowance or subsidize by additional cost of living allowance to sustain the situation.

21. EDUCATION AND AWARENESS

Issues	Criteria	Score: Highlight only one box per question	
Is there a planned education Programme linked to the objectives and needs?	There is no education and awareness programme	0	
	There is a limited and ad hoc education and awareness programme	1	
Process	There is an education and awareness programme but it only partly meets needs and could be improved	2	
	There is an appropriate and fully implemented education and awareness programme	3	

COMMENTS / EXPLANATION

Forestry extension program has been organized by RMT in 2010 and 2011. An awareness team consisting of 6 locals has been formed in line with the suggestions made by the report on terminal evaluation of TNRP in 2009. Most of the extension programs in 2011 are meant for villagers in association with CF while the environmental education at schools is so far lacking.

NEXT STEPS

- a) Local people have not enough knowledge about the regulations concerning protected areas, particularly about what are rights and privileges for them and what are the prohibitions. It is quite essential to improve the awareness and understanding of local communities together with all stakeholders about TNR so as to generate overall cooperation and collaborative support for its effective conservation through extensive education and awareness programs, particularly, in 2011 as they have received 5 Community Forestry (CF) certificates already.
- b) Environmental Awareness and Education at schools should also be organized so as to be accountable for sustenance of TNR.

22. COMMUNICATION AND OUTREACH

Score: Highlight only one box per question

Issues	Criteria		
Is there a planned communication and outreach program	There is little or no communication between managers and stakeholders involved in the protected area	0	
	There is communication between managers and stakeholders but this is adhoc and not part of a planned communication program	1	
Process	There is a planned communication programme that is being used to build support for the protected area amongst relevant stakeholders but implementation is limited.	2	
	There is planned communication programme that is being used to build support for the protected area amongst relative stakeholders	3	

COMMENTS / EXPLANATION

- Site level meetings have been organized by RMT with all stakeholders during 2010 and 2011.
- It can be observed that site level meetings are not organized on regular basis. The responsible persons like Project Director (PD) and Park Warden (PW) were not present on all occasions, despite the presence of responsible persons from all stakeholders like, Site Managers and Supervisors, who are expecting sound clarifications during the meetings.

NEXT STEPS

- Site level meetings should be held bi-monthly (once every two months) regularly and on TNRP site, At least PD or PW should present at such meetings so as to be more effective and accountable.

23. LOCAL COMMUNITIES (INCLUDING INDIGENOUS PEOPLE)

Issues	Criteria	Score: Highlight only one box per question	
Do local communities (including indigenous people) resident or near the protected area have input to management decisions?	Local communities have no input into decisions relating to the management of the protected area	0	
	Local communities have some input into discussions relating to management but no direct role in management	1	
Process	Local communities directly contribute to some relevant decisions relating to management but their involvement could be improved	2	
	Local communities directly participate in all relevant decisions relating to management, e.g. co-management	3	

COMMENTS / EXPLANATION

- In TNRP Village Use Zone has been designated as areas surrounding established villages, usually within a perimeter of 1-2 km along the western boundary of TNR.
- However, the current land use reveals that areas in the vicinity of the villages are being occupied with farm lands, fallow lands and remnant forests that has extended quite close to the edge of the boundary of TNR.
- Within the Village Use Zone RMT has initiated Community Forestry (CF) Program for several villages.
- The training program organized by WCS concerning Village Consultation Process (VCP) and Village Zonation Process (VZP) through participatory approach gives a good insight for the villagers in future CF processes. Through this approach RMT can achieve thrust building process with villagers, particularly for CF process which will provide secure land tenure for 30 years period for the villagers.
- One of the outstanding contributions of local villagers towards management of TNR is the appointment of 17 locals based in local villages as extension and patrolling staff starting from 2011.

NEXT STEPS

- The award of 5CF certificates is gaining impetus for the remaining 6 villages that are in the various stages of CF process. CF User groups should work hand in hand with TNR using Village Consultation Process

(VCP) and Village Zonation Process (VZP) through participatory approach for receiving CF certificates in the very near future.

ADDITIONAL POINTS LOCAL COMMUNITIES/INDIGENOUS PEOPLE

Issues	Criteria	Score	Highlight only one box per question
Impact on communities	There is open communication and trust between local and/or indigenous people, stakeholders and protected area managers	+1	
Impact on communities	Programmes to enhance community welfare, while conserving protected area resources, are being implemented	+1	
Impact on communities	Local and/or indigenous people actively support the protected area	+1	

COMMENTS / EXPLANATION

- a) All activities pertaining to CF, including natural forest management are openly discussed with local communities and authorities. Local communities have been involved in the preparation of Management Plan for CF and will work according to the plan being developed with the assistance of RMT.

NEXT STEPS

- a) Continue building open communication and thrust between User Groups (local communities) and TNRP staff.

24. MONITORING AND EVALUATION

Score: Highlight
only one box per
question

Issues	Criteria		
Are management activities monitored against performance?	There is no monitoring and evaluation in the protected area	0	
	There is some ad hoc monitoring and evaluation, but no overall strategy and/or no regular collection of results	1	
Process	There is an agreed and implemented monitoring and evaluation system but results do not feed back into management	2	
	A good monitoring and evaluation system exists, is well implemented and used in adaptive management	3	

COMMENTS / EXPLANATION

- a) For monitoring purposes there is a system in place at TNRP. The following are instrumental for monitoring of the project:
- Monthly meeting for TNR staff for reviewing activities carried out within the month and plans for the next month.
 - Bi-monthly meeting with stakeholders at site level.
 - Project quarterly progress reports with percentage accomplishments against planned targets.
 - Technical committee meetings for discussing technical matters on project progress to be in line with logical framework and annual plan of operation (on quarterly basis).
 - Project Coordinating Committee meeting for acting as "Board of Directors" to provide oversight and guidance to the project and safeguarding the interest of all stakeholders.
- b) Monthly meetings as well as bi-monthly meetings at site level have been held regularly. Project Quarterly Progress Report 24 for the month of Jan 2011 to March 2011 has been long overdue.
- c) Project Technical Committee has been held three times only: the first in 23 Aug 2010 and the second in 15 December 2010 , and the last in 13th September 2011.
- d) Project Coordinating Committee meeting has not been held since 14th PCC meeting on 24th August 2009, particularly not during the second phase. According to the project document PCC meetings should be held at regular intervals at least semi-annually or at other times as may be required.

NEXT STEPS

- a) Project Quarterly Progress Report should be distributed in time to inform the donors as well as concerned authorities on the progress of the project.

- b) PCC meeting should be held as soon as possible to discuss about financial implications to the project funds, due to the drastic fall of FEC exchange rate and enquire for the best possible solution for the effective implementation of the project.

25. ECONOMIC BENEFIT

Issues	Criteria	Score: Highlight only one box per question	
Is the protected area providing economic benefits to local communities, e.g. income, employment, payment for environmental services?	The protected area does not deliver any economic benefits to local communities	0	
	Potential economic benefits are recognized and plans to realize these are being developed	1	
Outcomes	There is some flow of economic benefits to local communities	2	
	There is a major flow of economic benefits to local communities from activities associated with the protected area	3	

COMMENTS / EXPLANATION

CF from the respective villages has the following objectives for applying the CF program:

- Three villages will switch from practicing shifting cultivation to agro-forestry practices in future which will check the shifting cultivation areas that have serious negative impacts on the existing forests as well as biodiversity. TNR has been supplying cash-crop seedlings to those engaged in agro-forestry practices.
- The remaining forests will be conserved properly so that they can get day to day needs of timber, firewood, and other non-wood forest products from these forests and in addition they can get additional income for the community by selling the surplus with the arrangement of the Forest Department concerned.
- Tharyarmon village is quite different from other villages. The village is situated quite far away from TNR. However, during the village consultative meetings they approached RMT to help assist obtaining CF program such that they can conserve the existing forests in the form of watershed management for the supply of water for the village which is their urgent requirement.

NEXT STEPS

- a) Natural forest management is quite complicated process for the villagers. TNR staff should assist the villagers on how to effectively manage the

forests so that benefits will be sustainable. The main problem that will be encountered is the benefit sharing of common property resources. Authorities from the project should consider this issue as a serious issue.

- b) During the implementation of the Community Forests program, RMT should take great care for monitoring the activities whether User Groups follow the management plans properly or not. If problems arise, RMT should immediately take care to improve the situation.

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LIST OF DOCUMENTS AND REPORTS REVIEWED DURING EVALUATION PROCESS

DOCUMENTS

1. Notification for establishment of Taninthayi Nature Reserve
2. Project document for Taninthayi Nature Reserve Project
3. Taninthayi Nature Reserve Operational Management Plan
4. Financial Procedure for Taninthayi Nature Reserve Project
5. Fixed Assets Registers of TNRP

REPORTS OF PROJECT TECHNICAL ADVISORY TEAM (WCS)

1. Myint Myint Oo, Kyaw Thin Latt and Robert Tizard (2010): Training Report on Village Consultation Process and Village Zonation Process for Taninthayi Nature Reserve
2. Lynam, A.J. and Saw Htun (2011): Patrolling and Wildlife Protection Training Workshop
3. Lynam (2011) Evaluating patrol strategies and wildlife protection in the Taninthayi Nature Reserve (draft)

REPORTS OF NATIONAL CONSULTANTS

1. Aung Ko Thet (2010): Marketing Study for Non Timber Forest Products
2. U Bo Ni (2010): Community Forestry (Interim report)
3. Dr. Myint Aung: (2010): Forest Dynamics Research on Endemic species in TNR (Interim report)
4. U Myint Maung: (2011) Tiger abundance, distribution and ecology survey
5. U Nyo Maung: (2011): Tree species and bamboo survey (4mm)
6. U Saw Win (2011): Study of Appropriate Fire Management Strategy (Interim report)
7. U Hla Myo Aung (2011): Elephant abundance, distribution and ecology survey
8. U Nay Myo Shwe (2011) Tapir abundance, distribution and ecology survey

EVALUATION REPORT

Evaluation Team (UoF) (2009) : Report on Terminal Evaluation of Taninthayi Nature Reserve Project.

PROJECT QUARTERLY PROGRESS REPORTS (PQPR)

PQPR 17 (Apr-Jun 2009)

PQPR 18 (Jul-Sep 2009)

PQPR 19 (Oct-Dec 2009)

PQPR 20 (Jan-Mar 2010)

PQPR 21 (Apr-June 2010)

PQPR 22 (Jul-Sep 2010)

PQPR 23 (Oct-Dec 2010)

TECHNICAL COMMITTEE MEETING MINUTES

TC Meeting 1, (2010, August)

TC Meeting 2 (2010, December)

TC Meeting 3 (2011, September)

PROJECT COORDINATION COMMITTEE MEETING

PCC Meeting No. 14 (2009, August)

OTHER DOCUMENTS

- Office order of TNRP PIT Staff 2009
- Office Order for TNRP RMT Staff 2009
- Office Order for TNRP RMT Staff 2011
- RMT team starting date / order
- Coordinating meeting with partner organizations (TEPM / PCML / PTTEP) at Site Level
- Monthly meeting at TNRP RMT Gantgawtaung Office
- Development of internal regulations and procedures for villagers to control wildfire.
- Cooperation with scientists from California Academy of Science-CAS in Herpetology survey for temporal variance.
- Setting camera traps to take records of presence of mammal species.
- Boundary demarcation registers (Number of pillars and length in km)
- Study Tour and Training records
- On-job trainings
- Annual work plans (4 years work plan)

LIST OF PERSONNEL INTERVIEWED IN THE COURSE OF EVALUATIONS

LOCAL COMMUNITY

No.	Date	Village	Name	Post	Number of attendees
1	2/7/2011	Thayarmon	U Maung Kyan	Chairman(CF)	54
2	2/7/2011	Yar-phu	Saw Phi Yaw	Chairman(CF)	14
3	3/7/2011	Kyauk-shut	U Than Oo	Chairman(CF)	68
4	3/7/2011	Ye-bon	Saw Eh Se Wa	Chairman(CF)	34
5	4/7/2011	Michaunghlaung	U Gaw Key	Chairman (CF)	29
6	4/7/2011	Zinba	U Tun Wai	Chairman (CF)	25

TNRP STAFFS

No.	Date	Name	Destination	Location
1	6/7/2011	U Zaw Win Myint	Project Director	Dawei
2	28/6/2011	U Tint Swe	Park Warden	Yangon
3	1/7/2011	U Sein Moe	Staff Officer	TNR
4	1/7/2011	U Soe Min Tun	Range Officer	TNR
5	28/6/2011	Daw Ei Sandi Set	Admin Officer	Yangon
6	2/7/2011	U San Tun,	Range Officer	TNR
7	2/7/2011	U Khet Khet Kyaw, Ranger	Ranger	TNR
8	2/7/2011	U A. Khwin Shein, Ranger	Ranger	TNR
9	2/7/2011	U Sai Zaw Lat, Ranger	Ranger	TNR
10	2/7/2011	U Hay Man Linn, Forester	Forester	TNR
11	2/7/2011	Saw Sa Ka Paw, Patrol	Patrol Team	TNR

OTHER SECTORS

No.	Date	Name	Destination	Location
1	8/7/2011	Mr. David	Site Manager	TPC
2	8/7/2011	Mr. Arraya Chamtim	Supervisor	PTTEP
3	8/7/2011	Mr. Paul Bourged	Site Manager	MGTC
4	10/7/2011	Lt .Col Ye Thu Aung	Area Commander	Nateintaung
5	13/7/2011	U Kyaw Zin Win	Staff Officer	TNR
6	2/7/2011	U Kan Zaw	Forester	TNR

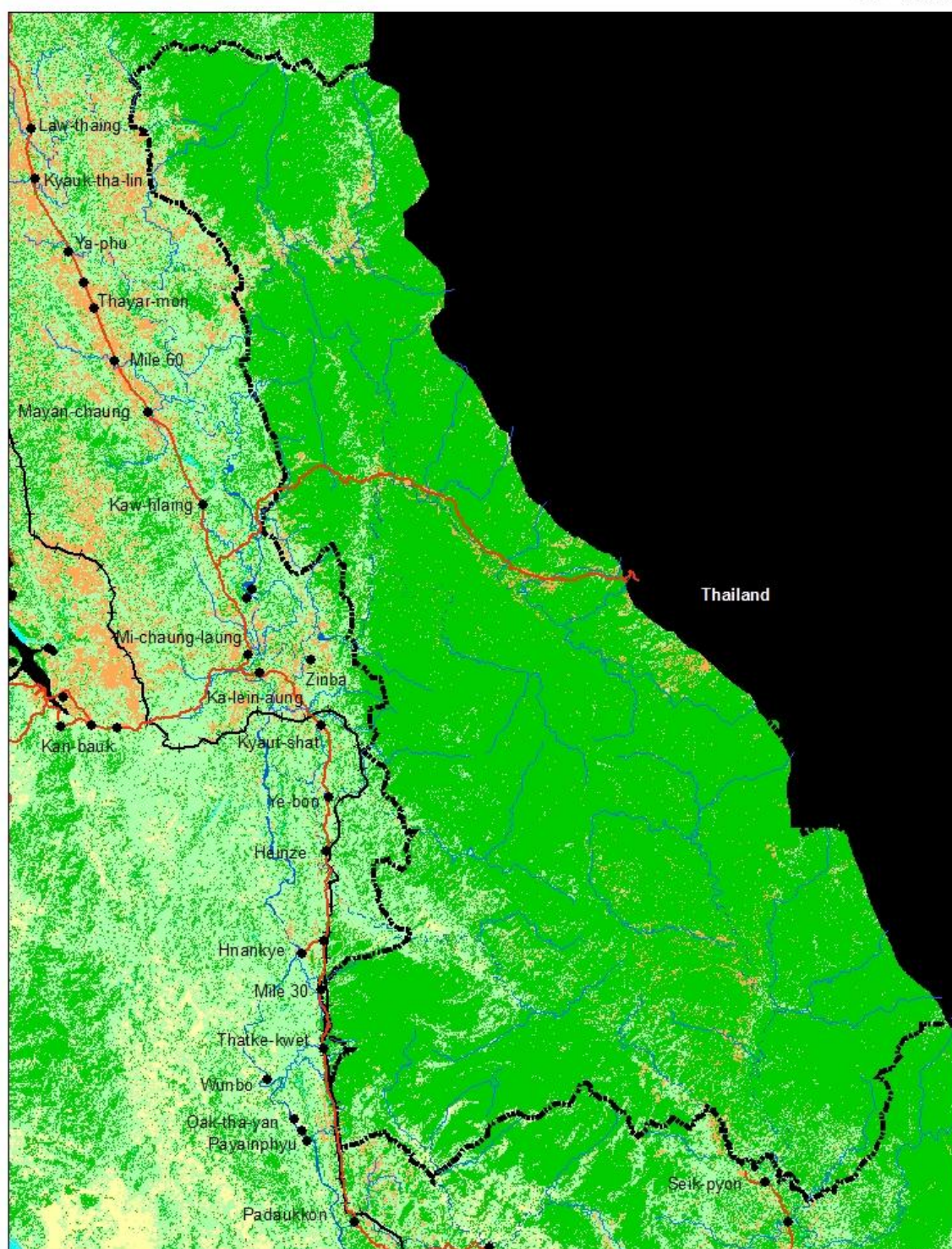
TNRP CONSULTANTS

No.	Date	Name	Destination	Location
1	18/7/2011	Mr. Robert Tizard	Technical Advisor	Yangon
2	4/7/2011	Mr. Tony Lynam	Technical Advisor	TNR
3	18/7/2011	U Than Myint	Director (WCS-Myanmar)	Yangon
4	4/7/2011	U Saw Htoo Tha Po	Tiger coordinator	TNR
5	2/7/2011	U Nay Myo Shwe	National Consultant	TNR
6	2/7/2011	U Hla Myo aung	National Consultant	TNR

MAPS

Tanintayi Nature Reserve Project
Forest Cover Map

1 in = 5 miles



TNRP Area	-----	Closed Forest	Open Forest	Cultivation	Open Space
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PHOTOS SECTION



TNRP Main Office at Gangawtaung Village



Education Center at Michaunglung Village



TNRP Nursery at Michaunglung Village



TNRP LOU at Kyaukshat Village



TNRP Signboard



TNRP Signboard for Local Community



TNRP signboard to Protect Misconduct in the Nature Reserve



Boundary Pillar of Reserved Forest



TNRP Evaluation Team meeting with Local CF User Group



Meeting with PTTEP Official



Discussion with TNRP Project Director



Discussion with Technical Consultant and TNRP Staff Officer

APPENDIX 1

LOGICAL FRAMEWORK FOR TNRP (2009-2010 TO 2012-2013)

Strategy of Intervention	Measurable indicators	Means of verification	Key assumptions
<u>Development objective</u> To effectively conserve and maintain the biodiversity of nature reserve, while contributing to the sustainable livelihood of local communities by getting involved in conservation works .	<u>Impact indicators</u> - Forest cover unchanged -Total forest cover in 2006: 132409 ha (77.89%). 103983 ha of primary forest. 28426 ha of secondary forest. Increase incomes	- Forest resources assessment - Socio-economic survey - Reports/records	-Government and communities remain supportive of conservation. -The occurrence of natural disasters doesn't worsen. -The financial sources remain stable. -Land use remains unchanged. Migrations to Thailand don't increase. Price of commodities doesn't fluctuate greatly.
<u>Specific objective</u> 1. To reduce rate of degradation, deforestation and loss of biodiversity in TNR.	<u>Outcome indicators</u> By the year 2013 - Rate of deforestation and degradation reduced from 3.12 % to 2 .5% and from 12.57% to10%.	- Change analysis - Reports/proposals - Records - CF Certificates	Government and communities remain supportive of conservation. The occurrence of natural disasters doesn't worsen. The financial sources remain stable. Land use remains unchanged. The financial sources remain stable. Land use remains unchanged. Migrations to Thailand don't increase. Price of commodities

Strategy of Intervention	Measurable indicators	Means of verification	Key assumptions
2. To make local communities effectively engage in management planning and implementation of conservation activities of TNR and enjoy the benefits of project intervention.	<p>By the year 2013</p> <ul style="list-style-type: none"> - 12 more CF, 10 VUZ and homegardens upgraded in 10 villages - 25% of villages around TNR will involved in conservation activities 	<ul style="list-style-type: none"> - Reports/proposals - Records 	doesn't fluctuate greatly.

Strategy of Intervention	Measurable indicators	Means of verification	Key assumptions
<p><u>Specific objective (1)</u></p> <p>To reduce rate of degradation, deforestation and loss of biodiversity in TNR.</p>	<p><u>Outcome indicators</u></p> <p>By the year 2013</p> <ul style="list-style-type: none"> - Rate of deforestation and degradation reduced from 3.12 % to 2 .5% and from 12.57% to 10 %. 	<ul style="list-style-type: none"> - Change analysis - Reports/proposals - Records - CF Certificates 	Government and communities remain supportive of conservation. The occurrence of natural disasters doesn't worsen. The financial sources remain stable. Land use remains unchanged. Migrations to Thailand don't increase. Price of commodities doesn't fluctuate greatly.

<u>Outputs 1</u>	<u>Output indicator</u>		
1.1 Land conversion to shifting cultivation controlled.	By the year 2013 - 25% of User's Group has established agro-forestry plantation. - 12 User's Groups has been certified.	- CF Progress report - Nos of CF Certificate	Risks : Migration , landuse change, security constraints,
1.2 Subsistence Hunting reduced.	By the year 2013 -15% of hunter has involved in alternative livelihood program.	- Reports	Risks : Security constraints, weak law enforcement
1.3 Subsistence logging reduced	By the year 2013 - Legal extraction of timber has started at 25% of village use zone.	- Reports - Record	Risks : Security constraints, weak law enforcement, landuse changes,

1.4 Commercial Hunting and logging minimized.	By the year 2013 <ul style="list-style-type: none"> - 25% of illegal logging reduced in peak theft season. - 60% restaurants will be found to be free from bushmeat. - 30% decrease in trans-boundary wildlife trade. 	<ul style="list-style-type: none"> - Reports - Records - Wildlife trade survey 	Risks : Security constraints, weak law enforcement , high timber demand, decrease of forest cover outside TNR, limited access to border
1.5 Village encroachment controlled	By the year 2013 <ul style="list-style-type: none"> - 80 % of village encroachment identified. 	<ul style="list-style-type: none"> - Collection of information - High resolution satellite data 	Risks : Funding restriction , security constraints,
1.6 Forest fire under control.	By the year 2013 <ul style="list-style-type: none"> - 75% of villages in and around TNR has been informed the danger of fire and its impact. - Participatory fire management has been established in 10 villages. 	<ul style="list-style-type: none"> - Reports - Records 	Risks : Natural disasters, Financial constraints, Security constraints, weak law enforcement

1.7 Local people's awareness improved.	<p>By the year 2013</p> <ul style="list-style-type: none"> - 30 educational talks have been conducted in villages and schools. - 12 CF Users' Group has been certified. - 10 village use zones have been formed. - 16 planting campaigns have been launched. - 4 workshops and 6 trainings have been conducted. - 60% of residents have been participated in meeting. 	<ul style="list-style-type: none"> - Certificate - Reports - Records 	<p>Risks : Staff rotation, landuse change, funding restriction, security constraints</p>
1.8 Boundaries demarcated. (reserve & zone)	<p>By the year 2013</p> <ul style="list-style-type: none"> - 40 mile of reserve boundary demarcated. - 140 mile of zone boundary demarcated 	<ul style="list-style-type: none"> - Reports 	<p>Risks : Security constraints, funding restriction,</p>

1.9 Stakeholders' involvement in conservation.	By the year 2013 <ul style="list-style-type: none"> - 12 CF users' group has been certified. - 16 planting campaign - Homegardens of 10 villages has been upgraded. - 4 workshop and 6 trainings has been conducted. - 10 village use zones have been formed. 	<ul style="list-style-type: none"> - Certificate - Reports - Records 	Risks : Financial constraints, Security constraints, landuse change, migration, staff rotation
1.10 Infrastructure developed	By the year 2013 <ul style="list-style-type: none"> - RMT has been equipped with 2 more LOU and 5 family quarters, 2 more unit of car, 10 more units of motorbike. 	<ul style="list-style-type: none"> - Reports - Records 	Risks: funding restriction, inflation,
1.11 Staff's capacities built up.	<ul style="list-style-type: none"> - 7 trainings and 4 study tours have been conducted. 	<ul style="list-style-type: none"> - Reports 	Risks : staff rotation,
1.12 Performance of RMT periodically monitored and	<ul style="list-style-type: none"> - 5 TC, 3 PCC meetings, 2 evaluations, 2 more 	<ul style="list-style-type: none"> - Reports - Records 	Risks: funding restriction, staff rotation,

evaluated.	assessment of forest cover and land use change assessment have been conducted.	<ul style="list-style-type: none"> - Satellite Image - Meeting minutes 	security constraints, funding restriction,
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strategy of Intervention	Measurable indicators	Means of verification	Key assumptions
<u>Specific objective (2)</u> To make local communities effectively engage in management planning and implementation of conservation activities of TNR and enjoy the benefits of project intervention.	<u>Outcome indicators</u> By the year end of 2010 <ul style="list-style-type: none"> - 12 more CF, 10 VUZ and homegardens upgraded in 10 villages - 25% of villages around TNR will involved in conservation activities - More people participate in conservation activities - Increase incomes through alternative livelihood opportunities 	<ul style="list-style-type: none"> - Reports/records 	Government and communities remain supportive of conservation. The occurrence of natural disasters doesn't worsen. The financial sources remain stable. Land use remains unchanged. The financial sources remain stable. Land use remains unchanged. Migrations to Thailand don't increase. Price of commodities doesn't fluctuate greatly.

<u>Outputs 2</u>	<u>Output indicator</u>		
2.1 Land conversion to shifting cultivation controlled.	- Refer to output 1	-	
2.2 Subsistence Hunting reduced.	Refer to output 1		
2.3 Subsistence logging reduced	Refer to output 1		
2.4 Forest fire under control.	- Refer to output 1		
2.5 Presence and abundance of biodiversity recorded.	By the year 2013 - more new species are recorded through 10 biological surveys.	- Survey reports - Camera trap records - Records	Risks : Security constraints, staff rotation
2.6 Local people's awareness improved.	- Refer to output 1		
2.7 Boundaries demarcated. (reserve & zone)	- Refer to output 1		
2.8 Infrastructure developed	- Refer to output 1		

2.9 Stakeholders' involvement in conservation.	- Refer to output 1		
2.10 Staff's capacities built up.	- Refer to output 1		
2.11 Performance of RMT periodically monitored and evaluated.	- Refer to output 1		

<u>Activities for specific objective (1)</u>	<u>Indicator</u>	<u>Means</u>	<u>Management assumptions</u> <u>linking activities to outputs</u>
1.1 Establish community forest	- Number of CF certificates	- CF Progress report / Survey	
1.2 Monitor village use zone for effective management	- Number of village use zone formation	- NC Report/ Reports	
1.3 Inventory wood and non-wood resources available inside village use zone	- Number of villages	- Reports	
1.4 Monitoring and Evaluation for land cover and land use change assessment using satellite images	- RMT/ GIS	- Reports	
1.5 Assign National Consultant for			

Community Forestry Development	- N C	- Reports	
2.1 Conduct effective law enforcement and patrolling around nature reserve	- Frequency of Law enforcement activities	- Reports	
2.2 Initiate and propagate alternative livelihood program	- Number of Villages	- Reports	
3.1 Conduct effective law enforcement and patrolling in and around nature reserve	- Frequency of Law Enforcement activities	- Reports	
3.2 Study patterns of exploitation of wood and non-wood products for subsistence use	- Number of villages	- Records	
3.3 Raise awareness amongst local communities of the impacts of unsustainable exploitation of wood and NTFPs and potential benefits of regulated exploitation	- Number of villages	- Reports	
4.1 Coordinate local authorities and other enforcement agencies to	- Number of workshop	- Reports	

control of guns			
4.2 Conduct effective law enforcement and patrolling in and around nature reserve	- Frequency of Law enforcement activities	- Reports	
4.3 Survey Wildlife Trade at Myanmar/ Thai border crossings	- Frequency of Wildlife Trade Survey	- Reports	
4.4 Educate and initiate alternative livelihood program	- Number of villages	- Reports	
5.1 Collect information concerning settlement of new villages through the personnel form LOUs at the Northern and Southern part of TNR	- Frequency of collect information for new village encroachment	- Reports	
5.2 Monitor disturbance patterns regarding human settlement based on recently available satellite data	- Frequency of assessment of satellite data	- Reports	
6.1 Educate local communities on the dangers of fire and its impacts	- Frequency of educational talks	- Reports	
6.2 Negotiate agreements with household/ villages in the village		- Reports	

<p>use zone to prevent accidental fires</p> <p>6.3 Conduct studies on appropriate fire management strategies</p>	<ul style="list-style-type: none"> - Number of villages - NC 	<ul style="list-style-type: none"> - Reports 	
<p>7.1 Conduct environmental education talks, discussions and exhibitions at villages and schools</p> <p>7.2 Implement education program by using different media (Pamphlets, posters, T-shirts, calendars and other appropriate media)</p> <p>7.3 Erect education and warning sign boards</p> <p>7.4 Organize livelihood training for local people using NTFPs to promote value added products</p> <p>7.5 Organize annual tree planting ceremony/ seedling distribution program</p>	<ul style="list-style-type: none"> - Frequency of educational talks, meeting - Frequency of different media - Number of signboards - Number of training 	<p>Reports</p> <p>Reports</p> <p>Reports</p> <p>Reports</p>	

	- Frequency of planning ceremony	Reports	
8.1 Continue TNR boundary demarcation program(40miles)	- Number of mile	- Reports	
8.2 Delineate buffer zone and transport corridor boundaries	- Number of mile	- Reports	
9.1 Introduce Micro Finance(MF) as incentive for improvement of livelihood of communities through promotion of alternative income generation activities	- Number of villages	- Reports	
9.2 Increase coordination with stakeholders at local level (decision, makers at local level, village leaders, mass organizations etc.)	- Frequency of workshop, meeting etc...	Reports	
9.3 Recruit and engage local staff for law enforcement program			
9.4 Recruit and engage local extension staff(2 Mon+ 5 Kain)	- Number of local staffs	Reports	
9.5 Initiate home gardens and woodlots	- Number of local staffs		

9.6 Conduct market study for NFTP's	<ul style="list-style-type: none"> - Number of home gardens and woodlots - NC 	Reports Reports Reports	
10.1 Establish Environmental Education Centre (EEC)/ Community Training Centre (CTC) 10.2 Establish two Local Operating Units with "green management" principles at Thet Ke Kwet and Mayanchaung, 10.3 Establish family quarters with "green management" principles 10.4 Purchase additional field and survey equipments 10.5 Extend nursery sheds and facility to cope with more seedlings	<ul style="list-style-type: none"> - RMT - RMT - RMT - RMT 	<ul style="list-style-type: none"> - Reports - Reports - Reports - Reports 	

requirement			
10.6 Construct medicinal plant gardens	- RMT	- Reports	
10.7 Acquire additional transport facilities		- Reports	
10.8 Internet access installation at Project director Office / Communication facilities	- RMT	- Reports	
	- RMT	- Reports	
	- RMT	- Reports	
11.1 Organizes staff training and study tour to other Protected Areas within the country	- RMT	- Reports	
11.2 Organize staff training and study tour to other countries(PA adjacent to TNR) for future collaboration of Tran- boundary Conservation Programs (WEFCOM)	- RMT	- Reports	

11.3 Train extension and law enforcement staff			
11.4 Conduct GIS training (MIST /GPS/ Mapping)	- RMT	- Reports	
11.5 Conduct CF training for staffs and user groups	- RMT	- Reports	
11.6 External Consultancy for Technical Advisors	- RMT	- Reports	
	- RMT	- Reports	
	- Technical Advisors	- Reports	
12.1 Project Coordination, Workshop, Meeting	- Frequency of workshop, meeting	- Reports	
12.2 Monitor and evaluate for all activities, External Consultancy- Project Evaluation.	- Project Evaluation Team	- Reports	

12.3 Monitoring and evaluation for land cover and land use changes assessment using satellite images	- GIS/ RMT		
12.4 Review, revise and draw up the TNR management plan for 4 years (phase III)	- RMT	- Reports	
		- Reports	

<u>Activities for specific objective (2)</u>	<u>Indicator</u>	<u>Means</u>	<u>Management assumptions</u> <u>linking activities to outputs</u>
1.1 Establish community forest	- Number of CF certificates	- CF Progress report / Survey	
1.2 Monitor village use zone for effective management	- Number of village use zone formation	- NC Report/ Reports	
1.3 Inventory wood and non-wood resources available inside village use	- Number of villages	- Reports	

<p>zone</p> <p>1.4 Monitoring and Evaluation for land cover and land use change assessment using satellite images</p> <p>1.5 Assign National Consultant for Community Forestry Development</p>	<p>- RMT/ GIS</p> <p>- N C</p>	<p>- Reports</p> <p>- Reports</p>	
<p>2.1 Conduct effective law enforcement and patrolling around nature reserve</p> <p>2.2 Initiate and propagate alternative livelihood program</p>	<p>- Frequency of Law enforcement activities</p> <p>- Number of Villages</p>	<p>- Reports</p> <p>- Reports</p>	
<p>3.1 Conduct effective law enforcement and patrolling in and around nature reserve</p> <p>3.2 Study patterns of exploitation of wood and non-wood products for subsistence use</p> <p>3.3 Raise awareness amongst local</p>	<p>- Frequency of Law Enforcement activities</p> <p>- Number of villages</p> <p>- Number of villages</p>	<p>- Reports</p> <p>- Records</p> <p>- Reports</p>	

communities of the impacts of unsustainable exploitation of wood and NTFPs and potential benefits of regulated exploitation			
4.1 Educate local communities on the dangers of fire and its impacts 4.2 Negotiate agreements with household/ villages in the village use zone to prevent accidental fires 4.3 Conduct studies on appropriate fire management strategies	- Frequency of educational talks - Number of villages - NC	- Reports - Reports - Reports	
5.1 Conduct Forest Dynamics Research on endemic tree species like Dipterocarpus in TNR. 5.2 Assess the abundance, distribution and ecology of Tiger in TNR 5.3 Tree Species and Bamboo species survey and distribution Survey 5.4 Exploring Gurney's Pitta presence	- NC NC		

in and around potential areas of TNRP using tape play back method			
5.5 Tapir abundance, distribution and ecology survey with national consultant	NC		
5.6 Elephant abundance, distribution and ecology survey with national consultant			
5. Taninthayi Langur abundance and distribution survey with national consultant	NC		
5.8 Rattan survey with national consultant	NC		
5.9 Orchid survey with national consultant	NC		
5.10 Medicinal Plant survey with national consultant	NC		
	NC		
	NC		
6.1 Conduct environmental education talks, discussions and exhibitions at	- Frequency of educational	Reports	

<p>villages and schools</p> <p>6.2 Implement education program by using different media</p> <p>6.3 Erect education and warning sign boards</p> <p>6.4 Organize livelihood training for local people using NTFPs to promote value added products</p> <p>6.5 Organize annual tree planting ceremony/ seedling distribution program</p>	<p>talks, meeting</p> <p>- Frequency of different media</p> <p>- Number of signboards</p> <p>- Number of training</p> <p>- Frequency of planning ceremony</p>	<p>Reports</p> <p>Reports</p> <p>Reports</p>	
<p>7.1 Continue TNR boundary demarcation program(40miles)</p> <p>7.2 Delineate buffer zone and transport corridor boundaries</p>	<p>- Number of mile</p>	<p>- Reports</p> <p>- Reports</p>	

	- Number of mile		
8.1 Introduce Micro Finance(MF) as incentive for improvement of livelihood of communities through promotion of alternative income generation activities	- Number of villages	- Reports	
8.2 Increase coordination with stakeholders at local level (decision, makers at local level, village leaders, mass organizations etc.)	- Frequency of workshop, meeting etc...	Reports	
8.3 Recruit and engage local staff for law enforcement program			
8.4 Recruit and engage local extension staff(2 Mon+ 5 Kain)	- Number of local staffs	Reports	
8.5 Initiate home gardens and woodlots	- Number of local staffs	Reports	
8.6 Conduct market study for NFTP	- Number of home gardens and woodlots		
	- NC	Reports	
		Reports	

9.1 Establish Environmental Education Centre (EEC)/ Community Training Centre (CTC)	-	- Reports	
9.2 Establish two Local Operating Units with "green management" principles at Thet Ke Kwet and Mayanchaung,			
9.3 Establish family quarters with “green management” principles			
9.4 Purchase additional field and survey equipments			
9.5 Extend nursery sheds and facility to cope with more seedlings requirement			
9.6 Construct medicinal plant gardens			
9.7 Acquire additional transport facilities			

9.8 Internet access installation at Project director Office / Communication facilities			
10.1 Organizes staff training and study tour to other Protected Areas within the country 10.2 Organize staff training and study tour to other countries(PA adjacent to TNR) for future collaboration of Tran- boundary Conservation Programs (WEFCOM) 10.3 Train extension and law enforcement staff 10.4 Conduct GIS training (MIST /GPS/ Mapping) 10.5 Conduct CF training for staffs and user groups 10.6 External Consultancy for			

Technical Advisors			
<p>11.1 Project Coordination, Workshop, Meeting</p> <p>11.2 Monitor and evaluate for all activities, External Consultancy- Project Evaluation.</p> <p>11.3 Monitoring and evaluation for land cover and land use changes assessment using satellite images</p> <p>11.4 Review, revise and draw up the TNR management plan for 4 years (phase III)</p>	<ul style="list-style-type: none"> - Frequency of workshop, meeting - Project Evaluation Team - GIS/ RMT - RMT 		

TNRP WORK PLAN FOR 2009-2010 TO 2012-2013

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Outputs/activities	Responsibl e parties	Target	Unit	Year 1				Year 2				Year 3				Year 4				Remark
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
A.13.1 Project Coordination, Workshop, Meeting	RMT																			
A13.1.1 Logical Framework Approach Workshop	PD	1	Time																	
A13.1.2 TC Meetings	TC Member	11	Time																	
A13.1.3 PCC Meetings	PCC Member	3	Time																	
A13.2 Monitor and evaluate for all activities, External Consultancy- Project Evaluation.	Project Evaluation team	2	Time																	
A13.3 Monitoring and evaluation for land cover and land use changes assessment using satellite images (purchase of satelite scene, ground truth checking and mapping)	RMT+GIS	2	Time																	
A13.4 National consultant for evaluation of Micro finance program(1200 x 1 month)	RMT	1	Time																	
A13.5 Draw up the TNR management plan for 4 years (phase II)	RMT	1	Time																	
A13.6 Review, revise and draw up the TNR management plan for 4 years (phase III)	RMT	1	Time																	