

THE SECOND YEARLY PLAN OF OPERATION (YPO 2)

ITTO Project PD 737/14 Rev.2 (I)

**Developing Supply Capacity of Wood-Based Biomass Energy
through Improved Enabling Conditions and Efficient Utilization of
Degraded Forest Lands involving Local Communities
in North Sumatra Province of Indonesia**

October 2018 - September 2019

Submitted to the 2nd PSC Meeting:

Place : Jakarta
Date : 20 August 2018

THE SECOND YEARLY PLAN OF OPERATION (YPO 2) October 2018 - September 2019

Project number	: PD 737/14 Rev.2 (I)
Project title	: Developing Supply Capacity of Wood-Based Biomass Energy through Improved Enabling Conditions and Efficient Utilization of Degraded Forest Lands involving Local Communities in North Sumatra Province of Indonesia
Host Government	: Government of Indonesia
Executing Agency	: Directorate General of Sustainable Management of Production Forests (PHPL)
Collaborating Agency	: Indonesian Sawmill & Woodworking Association (ISWA)
Project Management Unit (PMU)	: Established pursuant to the MoU signed by PHPL and ISWA on 18 September 2017
Starting date	: 1 October 2017
Project duration	: 48 months
Total project costs	
• ITTO	: USD 589,863
• GOI	: USD 197,150
• Total	: USD 787,013
YPO 2 project costs	
ITTO	: USD 136,910
GOI	: USD 42,390
Total	: USD 179,300
Submitted to ITTO	: September 2018

Table of Contents

1. Project Progress Report	1
2. YPO 2 Operational Program.....	4
2.1. Logical Framework Matrix (LFM)	4
2.2. Outputs and Activities	4
2.3. 2 nd year activity program	6
2.4. YPO 2 indicators of achievement.....	8
2.5. Monitoring and reporting.....	10
3. Personnel Planning, Coordination and Institutional Relations.....	10
3.1. Project personnel, partners, and support organizations	10
3.2. Involved organizations, stakeholders and communities	10
3.3. Consultants/contractor	10
4. Budget	11
4.1. Master budget schedule.....	11
4.2. Orders of equipment	11
Annexes:	
1. Annex 1 & 2 Financial position of the project at 30 June 2018.....	12
2. Annex 3 Original and adjusted indicators for the entire period.....	16
3. Annex 4 Planned budget for YPO 2.....	19
4. Annex 5 Terms of Reference of Consultants/Experts and Contractors	20

List of Abbreviation

ASPAC Forum	Asia Pacific Regional Forum on Promoting Wood-based Bioenergy Using Wood Residues and Wastes, 14 -17 October 2008, Jakarta, Indonesia
CA	Collaborating Agency
CO	Company
CTA	Chief Technical Advisor
DG BUK	Directorate General of Forest Utilization Management
EA	Executing Agency
FS	Field Supervisor
Ha	Hectare
IC	International Consultant
ISWA	Indonesian Sawmill & Woodworking Association
ITTA	International Tropical Timber Agreement
ITTO	International Tropical Timber Organization
LEO	Local Event Organizer
LG	Local Government
MOF	Ministry of Forestry of Indonesia
NC	National Consultant
NE	National Expert
NGO	Non-Governmental Organization
NSPFA	North Sumatra Provincial Forestry Agency
PC	Project Coordinator
PF	Project Finance
PFA	Provincial Forestry Agency
PFE	Permanent Forest Estate
PLN	The State Electricity Company
PMT/U	Project Management Team/Unit
PS	Project Secretary
RDI	Research and Development Institute
RDPB	Regional Domestic Product Bruto
SCF	Stakeholder Consultation Forum
SFM	Sustainable Forest Management
UN	University
UNEP	United Nations Environment Programme

1. Project Progress Report

1.1. Description on the work implemented under YPO 1 (Oct 2017 – Sept 2018)

In total, 5 activities under 3 outputs had been planned for implementation under YPO 1, they were:

Output 1: Development of sustainable supply of energy wood initiated

- i. Activity 1.1: To identify suitable lands for development of energy forest in South-eastern of North Sumatra province covering 13 districts
- ii. Activity 1.2: To identify suitable lands on 3 KPHPs for energy forest development
- iii. Activity 1.3: To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total)

Output 2: Skillful manpower for development of wood-based biomass energy available

Activity 2.1:

To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2

Output 3: Investment in wood-based energy industry development promoted

To organize one regional workshop on wood-based energy development in Parapat/Balige

1.2. Execution of YPO 1

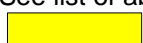
1.2.1. Workplan review

Table 1, Planned and actual implementation of activities under YPO 1

Output/activity	Responsible party *)	Planned		Actual	
		Commence	Complete	Commence	Complete
Output 1:					
i. Activity 1.1 To identify suitable lands for development of energy forests in South-eastern of North Sumatra province covering 13 districts	Consultant, PC, FS	Oct 2017	Mar 2018	Dec 2017	Mar 2018
ii. Activity 1.2 To identify suitable lands on 3 KPHPs for energy forest development	Consultant, PC, FS	Oct 2017	Mar 2018	Dec 2017	Mar 2018
iii. Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total);	PC, FS, FMU	Oct 2017	Sep 2018	Nov 2017	Aug 2018

Output 2: Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2	PC, FS, USI	Oct 2017	Sep 2018	Apr 2018	Sep 2018
Output 3: Activity 3.2 To organize one regional workshop on wood-based energy development in Parapat/Balige	PHPL, PFA, PC	Oct 2017	Dec 2017	Dec 2017	Dec 2017

*) See list of abbreviation on page iii)

 = behind schedule

1.2.2. Progress in implementation of planned activities

Table 2: Progress in implementation of activities

Output/activity	Progress (%)	Outcomes	Indicators of achievement
Output 1: iv. Activity 1.1 To identify suitable lands for development of energy forests in South-eastern of North Sumatra province covering 13 districts	100	Extent and map of suitable lands for energy forest development in 13 districts produced	Suitable lands for energy forest development in 13 districts mapped
v. Activity 1.2 To identify suitable lands on 3 KPHPs for energy forest development	100	Suitable lands for target species in 3 PMUs mapped	Suitable lands for energy forest development identified and mapped in 3 FMUs
vi. Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total);	100	36 Ha of energy forest established at 3 FMUs using 3 target species	36 Ha of demo energy forest planted using 3 species in 3 FMUs; remaining task is to monitor growth periodically starting Year 2
vii. Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2	100	Dialogues with 27 villages in 7 districts completed in Year 1 (Sep 2018)	Dialogues with 27 villages in 7 districts completed in Year 1; dialog part 2 to be completed in Year 2
viii. Activity 3.2 To organize one regional workshop on wood-based energy development in Parapat/Balige	100	A regional workshop on wood-based energy development conducted in P. Siantar in December 2017	A regional workshop on wood-based energy development organized in P. Siantar on 5 December 2017

1.2.3. Inputs applied

i. Consultant

Dr Aswandi of Aek Nauli Forestry Research Institute had been hired for 3 months to assist in implementing Activities 1.1 and 1.2. A technical report on the work assigned had been timely submitted to the project by the consultant and the report met the terms and conditions specified in the terms of reference.

ii. Contractors

To implement Activity 1.3, competent contractors had been appointed one for each site, i.e. Simalungun, Humbang Hasundutan and Tapanuli Selatan FMUs. The selection and appointment of the contractors were accomplished in accordance with existing ITTO Guidelines for the selection and employment of consultants, procurements and payments of goods and services, 2nd ed. 2009.

The contractors hired were:

- CV. Rio for Humbang Hasundutan FMU
- UD. Tunas Rimba for Padang Sidempuan FMU
- CV. Anggi for Simalungun FMU

iii. Funds

- The amount of funds received by the PMU from the ITTO as of 30 June 2018 was USD 100,000 while total expenditures for the same period was USD 79,406.83 leaving a balance of USD 20,614.00 at 30 June 2018
- The total amount of counterpart budget as of 30 June was USD 27,100 out of planned amount of USD 63,810
- See Annexes 1 and 2 for details on financial position of the project at 30 June 2018

1.2.4. Output achievement

- No output would be delivered under YPO 1 as pertaining activities to individual outputs only partially implemented, i.e. 3 activities out of 5 activities on Output 1; 1 activity out of 5 activities under Output 2 and; 1 activity out of 6 activities under Output 3
- Matching outcomes of the activities implemented with defined indicators of achievement under YPO 1 as presented in Table 2 indicates that all the activities implemented have generated the expected outcomes thus met the pre-defined indicators of achievement.

1.3. Critical analysis of project progress

- All 5 activities planned for execution have been fully implemented and expected outcomes of individual activities generated.
- The initially problematic and time consuming identification of lands for establishment of demo energy forests had been resolved through intensive consultation process involving FMUs, local communities and the ITTO Project field supervisor.

1.4. Conclusions

The project is progressing on track to achieve its desired objectives; such a progress is attributable to the support and cooperation granted by Director of Production Forest Business Development (UHP), Director of North Sumatera Forestry Agency, Chiefs and Staff of the FMUs as well as the respective community leaders.

2. Second Yearly Plan of Operation (YPO 2)

2.1. Logical Framework Matrix (LFM)

The LFM for the entire duration of the project is presented in Annex 3; no further change has been made to the LFM.

2.2. Output and activities of YPO 2 (Oct 2018 – Sept 2019)

The activities planned for implementation under YPO 2, eight in number, are presented in Table 3. Note that Activity 3.4 “to conduct feasibility study on investment in wood-based energy, including electricity and wood pellet” has been moved from year 4 to year 2 in accordance with the recommendation of the First PSC Meeting. Advancing execution of the study was thought necessary and useful in relation with identification of sites for energy forest development. In addition, Activity 1.3 will be continuously implemented but confined only to monitoring of tree growth.

Table 3: Activities planned for execution under YPO 2

Output/activity	Responsible party *)	Date to		Remarks
		Commence	Complete	
<u>Output 1:</u> Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total);	PC, FS	Oct 2018	Sep 2019	Only growth monitoring
<u>Output 2:</u> Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2 Activity 2.2 To train local communities on technical skills for energy forest development covering planting, tree nursing and harvesting techniques (100 farmers leaders of 50 villages)	PC, FS, USI	Nov 2018	May 2019	2 nd part; 1 st part already completed in year 1
Activity 2.4 To conduct comparative studies on wood-based energy industry development for executives and managers (2 overseas trips @5 days @ 3 persons)	PC, FS, Co	Oct 2018	Sep 2019	
Activity 2.4 To conduct comparative studies on wood-based energy industry development for executives and managers (2 overseas trips @5 days @ 3 persons)	PHPL, PC	Jan 2019	July 2019	

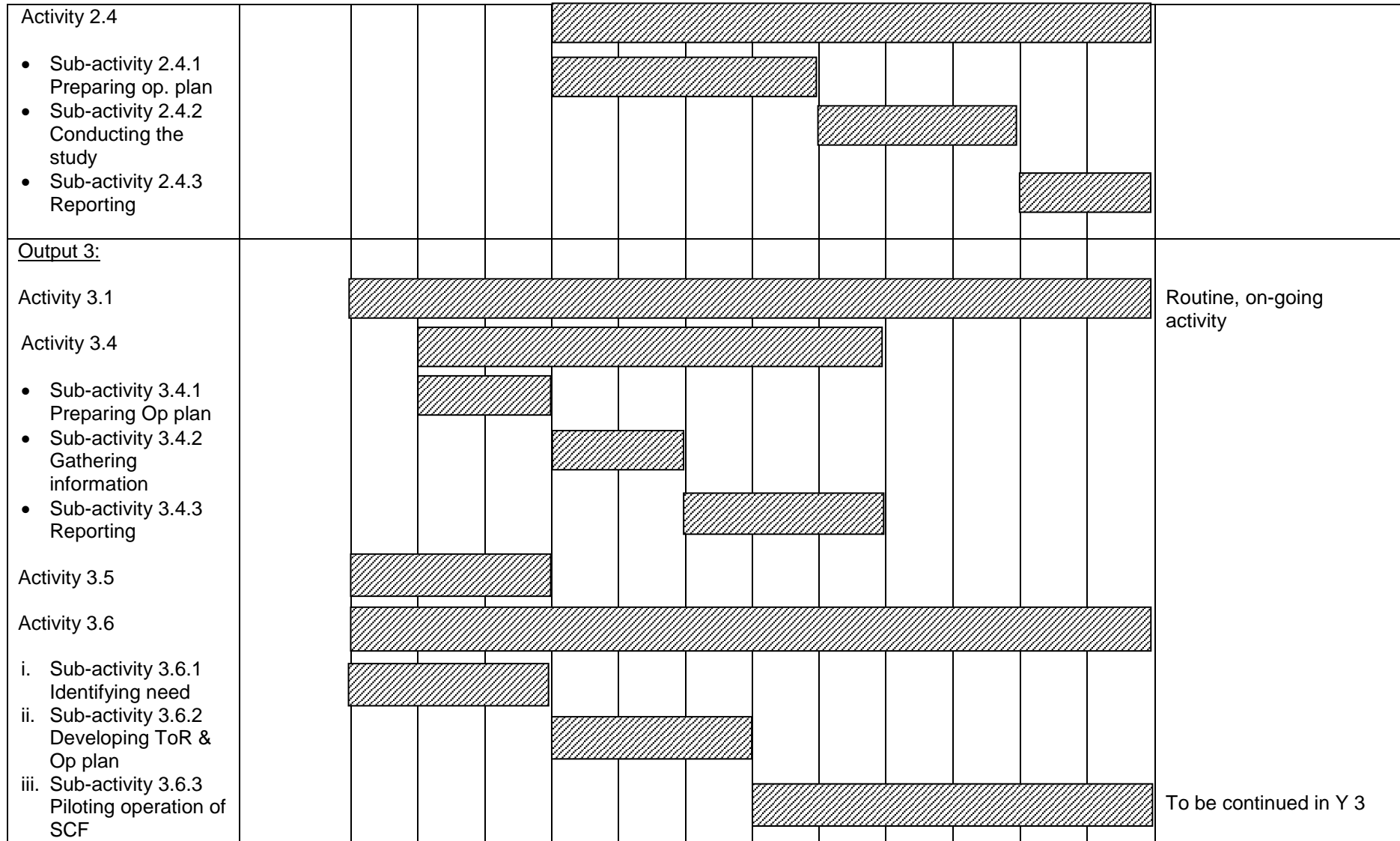
<u>Output 3:</u>				
Activity 3.1 To disseminate information on technology and market for wood-based energy through website and other means	PC	Oct 2019	Sep 2019	On-going Activity
Activity 3.4 To conduct studies of feasibility of investment in commercial manufacturing of wood-based energy including electricity and wood pellets	PC, NC	Nov 2018	May 2019	Moved from Y4
Activity 3.5 To review existing policy on wood-based biomass energy development in view of strengthening incentive for investment	PC, NE	Nov 2018	Jan 2019	-
Activity 3.6 To form and operate a consultation forum on renewable energy for enhancing communication and coordination between stakeholders	PC, NE	Oct 2018	Sep 2019	-

*) See list of abbreviations for clarity of “responsible party”.

2.3. Second year activity program

Table 4: Activity to be implemented under YPO 2 (October 2018 – September 2019)

Output/Activity *)	YPO 1	YPO 2												Remarks
		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
<u>Output 1:</u> Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total)														Demplot established in Y1; growth monitoring starts in Y2
<u>Output 2:</u> Activity 2.1 <ul style="list-style-type: none"> Sub-activity 2.1.1 Preparing operational plan Sub-act 2.1.2 Conducting dialog Sub-act 2.1.3 Reporting Activity 2.2 <ul style="list-style-type: none"> Sub-activity 2.21 Preparing op. plan Sub-activity 2.2.2 Conducting training Sub-activity 2.2.3 Reviewing the methods applied 														Part 1 completed in Y1 Part 2 carried out in Y2 To be continued in Y 3



*) See Table 3 for definition of activities

= Realized

= Planned

2.4. YPO 2 indicators of achievement

The indicators presented in Table 5 take into account the changes made to the project sites and definition of activities as outlined in Section 7 of the inception report.

Table 5: Indicators of project achievement under YPO 2

Output/activity	Indicator of achievement	Means of verification	Key assumption
<p><u>Output 1:</u></p> <p>1. Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total)</p>	<ul style="list-style-type: none"> • Av height of samples • Survival rate of species 	Field check	Planted trees exist
<p><u>Output 2:</u></p> <p>2. Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2</p>	Dialog with local communities of 23 villages in 6 districts completed	Report of contractor	Cooperative local communities
<p>1. Activity 2.2 To train local communities on technical skills for energy forest development covering planting, tree nursing and harvesting techniques (100 farmers leaders of 50 villages)</p>	100 farmer leaders trained on techniques for energy forest development	Report of trainer	Cooperative local communities
<p>2. Activity 2.4 To conduct comparative studies on wood-based energy industry development for executives and managers (2 overseas trips @5 days @ 3 persons)</p>	2 overseas comparative studies conducted with 6-8 participants	Study report	Supportive countries of destination
<p><u>Output 3:</u></p> <p>1. Activity 3.1 To disseminate information on technology and market for wood-based energy through website and other means</p>	Outreaching materials uploaded to project website continuously	Field check	-
<p>2. Activity 3.4 To conduct studies of feasibility of investment in commercial manufacturing of wood-based energy including</p>	Feasibility study on investment in wood-based biomass energy completed	Study report	-

<p>electricity and wood pellets</p> <p>3. Activity 3.5 To review existing policy on wood-based biomass energy development in view of strengthening incentive for investment</p> <p>4. Activity 3.6 To form and operate a consultation forum on renewable energy for enhancing communication and coordination between stakeholders</p>	<p>Relevant policies reviewed and reported</p> <p>A stakeholder communication forum established and operationally pilot tested</p>	<p>Review report</p> <p>Field check</p>	<p>-</p> <p>-</p>
---	--	---	-------------------

For clarity of the YPO 2 activity exhibited in Table 4, additional information by activity is presented below:

- i. Activity 1.3: Periodically monitoring of tree growth, Oct 2018 – Sep 2019
- ii. Activity 2.1:
 - Sub-activity 2.1.1: Preparing an operational plan including selection of contractor, villages and districts, development and discussion of TOR and development of technical and financial proposals. Nov 2018 – Jan 2019
 - Sub-activity 2.1.2: Conducting dialog with selected communities, (Feb – Apr 2019)
 - Sub-activity 2.1.3: Reporting, May 2019
- iii. Activity 2.2:
 - Sub-activity 2.2.1: Preparing operational plan including selection of farmer leaders, appointment of contractor, development of TOR, technical and financial proposals, Oct – Dec 2019
 - Sub-activity 2.2.2: Conducting the training. Jan – Sep 2019
 - Sub-activity 2.2.3: Reviewing the methods applied in view of its improvement for future use, Aug – Sep 2019
- iv. Activity 2.4:
 - Sub-activity 2.4.1: Preparing an operational plan including selection of destination, making contract with authorities or organization leaders, recruitment of participants and development of workplan, Jan - Apr 2019.
 - Sub-activity 2.4.2: Conducting the study, May – Jul 2019
 - Sub-activity 2.4.3: Reporting. Aug – Sep 2019
- v. Activity 3.1: On-going, routine task
- vi. Activity 3.4:
 - Sub-activity 3.4.1: Preparing an operational plan (selection of consultant, development of TOR, technical and financial proposals, signing of work contract), Nov – Dec 2018
 - Sub-activity 3.4.2: Gathering first hand and secondary data, Jan-Feb 2019
 - Sub-activity 3.4.3: Reporting, Mar – May 2019

- vii. Activity 3.5: To review existing policy on wood-based biomass energy development in view of strengthening incentive for investment, Oct – Dec 2018
- viii. Activity 3.6
 - Sub-activity 3.6.1: Identifying need for SCF (Stakeholder consultation forum) through consultation with the relevant stakeholders. Oct – Dec 2018
 - Sub-activity 3.6.2: Developing TOR and Operational Plan for SCF. Jan – March 2019
 - Sub-activity 3.6.3: Piloting SCF operation Apr – Sep 2019, as appropriate, depending on result of Sub-activity 3.6.1.

2.5. Monitoring and reporting

i. Monitoring

- Monitoring of progress in implementation of activities will be performed by the Field Supervisor continuously. Occasional monitoring will also be performed by the ITTO Rep., Project Coordinator and PHPL (Rep (s) subject to availability of funds.
- Monitoring of growth and development of the demo plots will be carried out quarterly starting Oct 2018 by the Field Supervisor. The parameters to be monitored include average height of trees and survival rate by species.

ii. Reporting

- Progress in implementation of individual activities shall be reported monthly by the Field Supervisor to the Project Coordinator whom will report to the ITTO and PHPL every six months.
- Reports on particular activities shall be submitted by the respective executors of Activities 2.1, 2.2, 2.4, 3.4, 3.5 and 3.6 in accordance with the terms of reference.

3. Personnel, Coordination and Institutional Relations

3.1. Project personnel, partners and support organizations

- Key personnel of Project Management Unit comprise Project Coordinator, Project Secretary, Field Supervisor, Database Operator and Management Advisor
- Partners will consist of University of Simalungun, NGOs, FMUs and Professionals
- Supporting institutions consist primarily of Centers for International Cooperation under MoEF and other countries of destination for the comparative studies.

3.2. Involved organizations, stakeholders and communities

- Partners in the public sector include: FMUs, North Sumatera Forestry Agency, District governments and ministry office of Energy and Mineral Resource (ESDM) in Medan
- Partners in the private sector will include: University of Simalungun, NGOs, local communities residing in and around the FMUs and member companies of ISWA.

3.3. Consultant/contractor (s)

- Consultants will be hired to assist in the execution of Activities 3.4
- Contractors will be employed to assist in the implementation of Activities 2.1 and 2.2

- Implementation of Activity 2.4 will be arranged by the Project Coordinator with the relevant institutions in countries of destination for the comparative study

4. Budget

4.1. Master budget schedule

Planned YPO 2 budget by activity is exhibited in Annex 4 with the notes below:

- ✓ Execution of Activity 3.4 has been moved from Year 4 to Year 2.
- ✓ Budget for Activity 1.3 had been entirely withdrawn in Year 1 noting that growth monitoring is part of the activity that has to be carried out till end of project.
- ✓ Budget on Activity 3.1 is to be used for payment of database operator which has been endorsed by ITTO.
- ✓ Activity 2.2 is to be executed in Years 2 and 3, not in Years 1 and 2 as shown in the project document.

4.2. Orders of equipment

No procurement of equipment is planned for YPO 2

Annex 1. Project Cash Flow Statement

PROJECT CASH FLOW STATEMENT

Project No. ITTO PD 737/14 Rev. 2 (I)

Period ending on: 30 June 2018

Project Title:

"Developing Supply Capacity of Wood-based Biomass Energy through Improved Enabling Conditions and Efficient Utilization of Degraded Forest Lands Involving Local Communities in North Sumatera Province of Indonesia"

Component	Reference	Date	Amount	
			in US\$	Local Currency
A. Funds received from ITTO:				
1 First instalment	Bank BNI	27/10/2017	\$100.000,00	Rp 1.349.100.000,00
2 Second Instalment				
3 Third instalment				
4 Fourth instalment				
Bank Interest			\$37,36	Rp 504.463,50
Total Funds Received:			\$100.037,36	Rp 1.349.604.463,50
B. Expenditures by Executing Agency:				
10. Project Personnel				
11. Project Coordinator			\$26.895,00	
12. Project Secretary			\$14.000,00	Rp 188.952.349,00
13. Finacial Staff			\$5.200,00	Rp 70.380.050,00
14. Technician			\$0,00	Rp -
15. International Consultant			\$495,00	Rp 6.735.630,00
16. National Consultant			\$0,00	Rp -
17. Field Supervisor			\$4.000,00	Rp 53.964.000,00
18. National Expert			\$3.200,00	Rp 43.310.800,00
			\$0,00	Rp -
19. Component Total:			\$26.895,00	Rp 363.342.829,00
20. Sub-contracts				
21. Sub-contract 1 (Planting)			\$43.089,78	
- Planting			\$35.748,78	Rp 485.183.151,20
- Seed procurement			\$0,00	Rp -
22. Sub-contract 2 (Specialist)				
- Sub contract 2A			\$0,00	Rp -
- Sub contract 2B			\$0,00	Rp -
- Sub contract 2C			\$0,00	Rp -
- Sub contract 2D			\$0,00	Rp -
23. Sub-contract 3 (Dialogue)				
24. Sub-contract 4 (Training)				
- Planting			\$0,00	Rp -
- Harvesting			\$0,00	Rp -
25. Sub-contract 5 (Cooperative)				
26. Sub-contract 6 (Workshop)			\$7.341,00	Rp 99.037.410,00
27. Sub-contract 7 (Wood properties)			\$0,00	Rp -
29. Component Total:			\$43.089,78	Rp 584.220.561,20
30. Travel				
31. Daily Subsistence Allowance			\$4.455,13	
31.1 DSA International Consultant(s)			\$0,00	Rp -
31.2 DSA National Consultant(s)			\$1.260,00	Rp 16.998.660,00
31.3 DSA Monev			\$870,00	Rp 11.737.170,00
31.4 DSA National Expert			\$0,00	Rp -
32. Air Ticket				
32.1 International Expert(s)/Consultant(s)			\$0,00	Rp -
32.2 Air Ticket			\$597,49	Rp 8.060.750,00
33. Local Transport Costs			\$1.727,64	Rp 23.307.555,00
39. Component Total:			\$4.455,13	Rp 60.104.135,00
40. Capital Items				
41. IT Devices (PC, Printer, etc)			\$1.942,92	Rp 26.211.883,00
49. Component Total:			\$1.942,92	Rp 26.211.883,00

50. Consumable Items			\$1.003,62	
51. Consumables			\$1.003,62	Rp 13.544.900,00
52. Document, material			\$0,00	Rp -
53. Sundries			\$0,00	Rp -
54. Utilities			\$0,00	Rp -
55. Office space and facilities			\$0,00	Rp -
59. Component Total:			\$1.003,62	Rp 13.544.900,00
60. Miscellaneous			\$2.020,39	
61. Meeting			\$1.397,38	Rp 18.852.055,00
62. Rental Provider			\$0,00	Rp -
63. Report Printing			\$0,00	Rp -
64. PSC/PTC Meeting			\$623,01	Rp 8.405.000,00
65. Financial Audit			\$0,00	Rp -
69. Component Total:			\$2.020,39	Rp 27.257.055,00
70. National Management Costs			\$0,00	
71. Executing Agency Management Costs				
72. Focal Point Monitoring				
79. Component Total:			\$0,00	
Total Expenditures To-date:			\$79.406,83	Rp 1.074.681.363,20
Bank Administration & Tax			\$16,53	Rp 158.325,00
Remaining Balance of Funds (A-B):			\$20.614,00	
Notes: (1) Amounts in U.S. dollars are converted using the average rate of exchange when funds were received by the Executing Agency				
(2) Total Expenditures To-date (in local currency) should be the same as amount shown in Sub-Total of column (C) of the Financial Statement.				

Annex 2 Project Financial Statement

PROJECT FINANCIAL STATEMENT

Project No. ITTO PD 737/14 Rev. 2 (I)

Period ending on: 30 June 2018

Project Title:

"Developing Supply Capacity of Wood-based Biomass Energy through Improved Enabling Conditions and Efficient Utilization of Degraded Forest Lands Involving Local Communities in North Sumatera Province of Indonesia"

Component	Original Amount (A)	Expenditures To-date			Available Funds (E) { A - D }
		Accrued (B) a/	Expended (C)	Total (D) { B + C }	
I. Funds managed by Executing Agency					
10. Project Personnel	\$161.150,00		\$26.895,00	\$26.895,00	\$134.255,00
11. Project Coordinator	\$84.000,00		\$14.000,00	\$14.000,00	\$70.000,00
12. Project Secretary	\$31.200,00		\$5.200,00	\$5.200,00	\$26.000,00
13. Finacial Staff			\$0,00	\$0,00	\$0,00
14. Technician	\$3.750,00		\$495,00	\$495,00	\$3.255,00
15. International Consultant	\$15.000,00		\$0,00		
16. National Consultant	\$8.000,00		\$4.000,00		
17. Field Supervisor	\$19.200,00		\$3.200,00	\$3.200,00	\$16.000,00
18. National Expert			\$0,00		
19. Component Total:	\$161.150,00		\$26.895,00	\$26.895,00	\$134.255,00
20. Sub-contracts	\$226.880,00		\$43.089,78	\$43.089,78	\$183.790,22
21. Sub-contract 1 (Planting)					
- Planting	\$42.000,00		\$35.748,78	\$35.748,78	\$6.251,22
- Seed procurement	\$2.880,00				
22. Sub-contract 2 (Specialist)					
- Sub contract 2A	\$4.000,00				
- Sub contract 2B	\$6.000,00				
- Sub contract 2C	\$8.000,00				
- Sub contract 2D	\$8.000,00				
23. Sub-contract 3 (Dialogue)	\$40.000,00				
24. Sub-contract 4 (Training)					
- Planting	\$40.000,00				
- Harvesting	\$40.000,00				
25. Sub-contract 5 (Cooperative)	\$9.000,00				
26. Sub-contract 6 (Workshop)	\$9.000,00		\$7.341,00	\$7.341,00	\$1.659,00
27. Sub-contract 7 (Wood properties)	\$18.000,00				
29. Component Total:	\$226.880,00		\$43.089,78	\$43.089,78	\$183.790,22
30. Duty Travel	\$47.420,00		\$4.455,13	\$4.455,13	\$42.964,87
31. Daily Subsistence Allowance			\$0,00	\$0,00	\$0,00
31.1 DSA International Consultant(s)	\$11.600,00		\$0,00	\$0,00	\$11.600,00
31.2 DSA National Consultant(s)	\$4.950,00		\$1.260,00	\$1.260,00	\$3.690,00
31.3 DSA Monev	\$4.480,00		\$870,00	\$870,00	\$3.610,00
31.4 DSA National Expert	\$4.550,00		\$0,00	\$0,00	\$4.550,00
32. Air Ticket			\$0,00	\$0,00	\$0,00
32.1 International Expert(s)/Consultant(s)	\$3.000,00		\$0,00	\$0,00	\$3.000,00
32.2 Air Ticket	\$10.000,00		\$597,49	\$597,49	\$9.402,51
33. Local Transport Costs	\$8.840,00		\$1.727,64	\$1.727,64	\$7.112,36
39. Component Total:	\$47.420,00		\$4.455,13	\$4.455,13	\$42.964,87
40. Capital Items	\$3.000,00		\$1.942,92	\$1.942,92	\$1.057,08
41. IT Devices (PC, Printer, etc)	\$3.000,00		\$1.942,92	\$1.942,92	\$1.057,08
49. Component Total:	\$3.000,00		\$1.942,92	\$1.942,92	\$1.057,08

50. Consumable Items	\$14.900,00		\$1.003,62	\$1.003,62	\$13.896,38
51. Consumables	\$12.300,00		\$1.003,62	\$1.003,62	\$11.296,38
52. Document, material	\$1.600,00		\$0,00	\$0,00	\$1.600,00
53. Sundries	\$1.000,00		\$0,00	\$0,00	\$1.000,00
54. Utilities			\$0,00	\$0,00	\$0,00
55. Office space and facilities			\$0,00		
59. Component Total:	\$14.900,00		\$1.003,62	\$1.003,62	\$13.896,38
60. Miscellaneous	\$33.750,00		\$2.020,39	\$2.020,39	\$31.729,61
61. Meeting	\$8.500,00		\$1.397,38	\$1.397,38	\$7.102,62
62. Rental Provider	\$6.000,00		\$0,00	\$0,00	\$6.000,00
63. Report Printing	\$7.250,00		\$0,00	\$0,00	\$7.250,00
64. PSC/PTC Meeting	\$6.000,00		\$623,01		
65. Financial Audit	\$6.000,00		\$0,00		
69. Component Total:	\$33.750,00		\$2.020,39	\$2.020,39	\$31.729,61
70. National Management Costs			\$0,00	\$0,00	\$0,00
71. Executing Agency Management Costs			\$0,00	\$0,00	\$0,00
72. Focal Point Monitoring			\$0,00	\$0,00	\$0,00
79. Component Total:			\$0,00	\$0,00	\$0,00
Sub-Total:	\$487.100,00		\$79.406,83	\$79.406,83	\$407.693,17
80. Project Monitoring & Administration					b/
81. ITTO Monitoring and Review					b/
82. ITTO Mid-term and Ex-post Evaluation					b/
83. ITTO Programme Support Costs					b/
83. Donor Monitoring Costs					
89. Component Total:					b/
90. Refund of Pre-Project Costs (Pre-Project Budget)					b/
Sub-Total:		\$0,00	\$0,00	\$0,00	b/
100. GRAND TOTAL:	\$487.100,00	\$0,00	\$79.406,83	\$79.406,83	

Note: Budget Components are those detailed in the Project Document.

a/ Accrued expenditure: expenditures committed/accrued as at the end of the reporting date, but not yet settled.

b/ Funds retained and accounted for by ITTO - details not available with Executing Agency.

ANNEX 3. Original and adjusted LFM for the entire duration

Project elements	Measurable indicators	
	Original	Adjusted
<p><u>Development Objective</u> To increase contribution of the forest sector to renewable energy supply and regional economic development through increased supply of wood-based biomass energy</p> <p><u>Specific Objective</u> To improve enabling conditions for building up capacity to supply wood-based biomass energy in North Sumatra region</p>	<p><u>3 years after project completion:</u></p> <ul style="list-style-type: none"> a. At least 100 villages in 10 districts engaged in energy forest development activities b. 2-3 companies realized investment in wood-based biomass energy <p><u>By end of project:</u></p> <ul style="list-style-type: none"> a. Approximately 36 Ha of energy forest established and used for demonstration and training b. At least 100 farmers leaders trained on skills for energy forest development and 50 leaders on community cooperative management c. 2-3 companies indicated interest in making investment on wood-based energy industry 	<p><u>3 years after project completion:</u></p> <ul style="list-style-type: none"> a. At least 25 villages in 5 districts engaged in energy forest development activities b. At least 1 company realized investment in wood-based biomass energy <p><u>By end of project:</u></p> <ul style="list-style-type: none"> a. Approximately 36 Ha of energy forest established in 3 KPHs and used for demonstration and training c. At least 1 company indicated interest in making investment on wood-based energy industry
<p>Output 1: Development of sustainable supply of energy wood initiated</p>	<ul style="list-style-type: none"> a. Available suitable lands for energy forest development identified and mapped in year 1 b. Lands for energy forests formally designated in year 1 c. 36 Ha of energy forests trial planted using 3 species in years 1-2 	<ul style="list-style-type: none"> a. Suitable lands for energy forest development in 13 districts identified and mapped in Year 1 b. Suitable lands for energy forest development on 3 KPHs identified and mapped c. 36 Ha of demo energy forests trial planted using 3 species in Year 1 on 3 KPHs.

	<ul style="list-style-type: none"> d. Estimates of sustainable energy wood supply planted on degraded lands available in year 4 e. Potential supply of energy wood from non-forest sources assessed in year 3 	
<p>Output 2: Skillful manpower for development of wood-based biomass energy available</p>	<ul style="list-style-type: none"> a. Dialogue with local communities of 50 villages in 25 districts conducted in year 1 b. 100 farmer leaders trained on energy forest development techniques in years 2-4 c. 50 farmer leaders trained on community cooperative management d. 2 comparative studies on wood-based energy development conducted in years 2-3 e. 3 technical manuals on energy forest development using suitable species formulated in year 4 	<ul style="list-style-type: none"> a. Dialogue with local communities of 50 villages in 13 districts in south-eastern region of North Sumatra province conducted in years 1 and 2 b. 100 farmer leaders trained on techniques for production of planting materials, tree planting, nursing of plantation and harvesting in years 2-4
<p>Output 3: Investment in wood-based energy industry development promoted</p>	<ul style="list-style-type: none"> a. Website of wood-based energy operational since year 1 b. One national workshop on wood-based energy development organized in Medan in year 1 	<ul style="list-style-type: none"> b. One regional workshop on wood-based energy development organized in Pematang Siantar town in year 1

	<ul style="list-style-type: none">c. Data on caloric properties of 3 planted tree species available in year 4d. Feasibility studies on investment in wood-based energy industry completed in year 4e. Existing policy on wood-based energy development reviewed and enhanced in year 2f. A stakeholder consultation forum operational since year 2	
--	---	--

Annex 4: Planned budget for YPO 2 by activity

Output/activity	Total	ITTO	Gol
<u>Output 1:</u> 1. Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total)			
<u>Output 2:</u> 2. Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2	26,000	20,500	5,500
3. Activity 2.2 To train local communities on technical skills for energy forest development covering planting, tree nursing and harvesting techniques (100 farmers leaders of 50 villages)	30,000	20,000	10,000
4. Activity 2.4 To conduct comparative studies on wood-based energy industry development for executives and managers (2 overseas trips @5 days @ 3 persons	15,600	15,600	-
<u>Output 3:</u> 5. Activity 3.1 To disseminate information on technology and market for wood-based energy through website and other means	1,980	1,980	-
6. Activity 3.4 To conduct studies of feasibility of investment in commercial manufacturing of wood-based energy including electricity and wood pellets	33,900	32,500	1,400
7. Activity 3.5 To review existing policy on wood-based biomass energy development in view of strengthening incentive for investment	3,900	2,400	1,500
8. Activity 3.6 To form and operate a consultation forum on renewable energy for enhancing communication and coordination between stakeholders	8,350	2,050	6,300
Sub-total activities	119,730	95,030	24,700
General Expenses	59, 570	41,880	17,690
Total	179,300	136,910	42,390
Originally planned budget	184,380	127,820	56,560

Annex 5. Terms of reference of Consultants/Experts and Contractors

Output/activity	Executor	Main tasks
<p><u>Output 1:</u></p> <p>Activity 1.3 To establish energy forest models in Year 1 for purpose of demonstration and training (3 sites, 3 species, 36 Ha in total)</p>	PMU	<ul style="list-style-type: none"> • To carry out monitoring of growth and development of energy demplots • To measure average height and survival rates of plantation by species
<p><u>Output 2:</u></p> <p>Activity 2.1 To conduct dialogue with local communities on benefits of energy forest development (50 villages in 13 districts) in Years 1 and 2</p> <p>Activity 2.2 To train local communities on technical skills for energy forest development covering planting, tree nursing and harvesting techniques (100 farmers leaders of 50 villages)</p> <p>Activity 2.4 To conduct comparative studies on wood-based energy industry development for executives and managers (2 overseas trips @5 days @ 3 persons)</p>	<p>Sub-contract with USI</p> <p>Sub-contract NGO, to be selected</p> <p>PMU</p>	<ul style="list-style-type: none"> • To select target local communities in close consultation with PC and local governments • To develop dialogue materials • To conduct dialogue in a friendly and interactive manner • To report on dialogue results • To develop a training program in close consultation with PC and competent resource persons • To develop criteria for selection of trainees • To conduct field training on planting and harvesting at 3 sites • To report on the training implementation • To develop ToR • To select countries of destination • To select participants • To make arrangements with the relevant institutions • To make logistical arrangements • To conduct the studies • To report on the studies
<p><u>Output 3:</u></p> <p>Activity 3.1 To disseminate information on technology and market for wood-based energy through website and other means</p> <p>Activity 3.4 To conduct studies of feasibility of investment in commercial manufacturing</p>	<p>PMU/Expert(s)</p> <p>National Consultants</p>	<ul style="list-style-type: none"> • To manage database system on a day to day basis including searching out of relevant information, uploading and downloading information • To collect reliable information on wood-based energy markets and production technologies

<p>of wood-based energy including electricity and wood pellets</p>		<ul style="list-style-type: none"> • To study information on wood properties generated under Activity 3.3 and sustainable supply of energy wood produced under Activities 1.4 and 1.5 • To assess feasibility of investment in wood-based biomass energy designed to manufacture wood pellets or electricity power • The investment feasibility is to be assessed using common economic, social and environmental criteria • The studies have to be presented before an expert panel to be established by PC for comments and improvement
<p>Activity 3.5 To review existing policy on wood-based biomass energy development in view of strengthening incentive for investment</p>	<p>Professional Expert</p>	<ul style="list-style-type: none"> • To review existing policies on renewable energy development at the national and local levels • To organize group discussions on appropriate incentive for investment • To prepare brief policy documents on proposed incentives for discussion among concerned authorities
<p>Activity 3.6 To form and operate a consultation forum on renewable energy for enhancing communication and coordination between stakeholders</p>	<p>Professional Expert</p>	<ul style="list-style-type: none"> • To carry out an analysis on the need to establish and operate a stakeholder consultation forum (SCF) • To develop terms of reference of SCF in close consultation with main stakeholders • To develop an operational plan for SCF and associated budget