

Report on Monitoring & Evaluation of CAMPA Works Implemented by the Department of EF&CC Government of Mizoram

Under CAMPA APO (2018-2019, 2019-2020 & 2020-2021)



**Monitoring Agency:
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General Headquarters, Aizawl, Mizoram
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**REPORT ON MONITORING AND EVALUATION OF CAMPA WORKS
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I. INTRODUCTION:

With a cover of 23% of Geographical area of the country, forest in India comprise of a number of diverse forest types and reserved areas designated as National Parks and Wildlife Sanctuaries. In India, forest meet the livelihood needs of people living in and adjoining the forests in about 1, 73,000 villages. Forests also act as carbon sinks and regulators of water regime.

Many development and industrial projects such as erection of dams, mining, and construction of industries or roads require diversion of forest land. Any project proponent, government or private must apply for forest clearance from Ministry of Environment, Forests & Climate Change (MoEFCC), before the conversion of land take place. This proposal is to be submitted through the concerned forest department of the state government. If clearance is given, then compensation for the lost forest land is also to be decided by the ministry and the regulators.

Due to certain discrepancies in the implementation of compensatory afforestation, some NGOs had approached The Hon'ble Supreme Court for relief. The Hon'ble Supreme Court on 10th July 2009 issued orders that there will be a Compensatory Afforestation Fund Management and Planning Authority (CAMPA) as National Advisory Council under the chairmanship of the Union Minister of Environment, Forests & Climate Change for monitoring, technical assistance and evaluation of compensatory afforestation activities.

II. OBJECTIVES OF CAMPA:

Compensatory Afforestation Fund Management and Planning Authority (CAMPA) are meant to promote afforestation and regeneration activities as a way of compensating for forest land diverted to non-forest uses. National CAMPA Advisory Council has been established as per orders of The Hon'ble Supreme Court with the following mandate:

- (1) Lay down broad guidelines for State CAMPA.
- (2) Facilitate scientific, technological and other assistance that may be required by State CAMPA.
- (3) Make recommendations to State CAMPA based on a review of their plans and programmes.
- (4) Provide a mechanism to State CAMPA to resolve issues of an inter-state or Centre-State character.

III. STATE CAMPA MONITORING:

The Environment, Forests & Climate Change Department, Government of Mizoram has appointed the Association for Environmental Preservation (ASEP) to undertake monitoring and evaluation of various works implemented by the Department under CAMPA APO for the year 2018-2019, 2019-2020 and 2020-2021. The Monitoring and Evaluation has to be executed as per MoU/ToR covering 10 Territorial Forest Divisions, 3 Wildlife Divisions and 3 Autonomous District Councils covering all plantations with 10% random sapling for evaluation. Thus, the M&E has encompassed some nurseries and plantations such as Compensatory Afforestation (CA), Catchment Area Treatment Plan (CATP), Net Present Value (NPV) ANR plantation and so on.

IV. OBJECTIVES OF MONITORING AND EVALUATION:

- (i) To make the physical assessment of works done, to judge the quality and standard attained.
- (ii) To study the limitations and deficiencies in the implementation with a view to suggesting modifications in techniques and financial provisions.
- (iii) The ultimate objective is to ensure maximum efficiency in the implementation and safeguard against infructuous expenditure and take timely and remedial measures wherever necessary.

V. LISTS OF PROJECTS/WORKS MONITORED:

(1) Darlawn Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Tuivai Hydel Project	5 th Year maintenance	32.57 ha	2018-19
2	BG Railway line between Bairabi to Sairang	3 rd Year maintenance	27.933 ha	2018-19
3	Tuerial HEP	3 rd Year maintenance	591 ha	2018-19
4	Tuerial HEP	Creation	346.5 ha	2018-19
5	Tuerial HEP	Advance work	1462.5 ha	2018-19
6	BG Railway line between Bairabi to Sairang	2 nd Year maintenance	46.555 ha	2018-19
7	NH-44 A (Lengpui – Langkaih)	2 nd Year maintenance	56.633 ha	2018-19
8	Improvement of Chhumkhum to Chawngte Road	2 nd Year maintenance	3.85 ha	2018-19
9	MSRP –II (Gr-I) Tlabung – Kawrpuichhuah	Creation	4.98 ha	2018-19
10	Tuerial HEP (CATP)	1 st Year maintenance	300 ha	2018-19
11	Tuerial HEP (CATP)	3 rd Year maintenance	323 ha	2018-19
12	Tuerial HEP (CATP)	Advance work	300 ha	2018-19
13	Tuerial HEP	4 th Year maintenance	591 ha	2019-20
14	Tuerial HEP	1 st Year maintenance	346.5 ha	2019-20
15	BG Railway line between Bairabi to Sairang	4 th Year maintenance	27.933 ha	2019-20
16	BG Railway line between Bairabi to Sairang	3 rd Year maintenance	46.555 ha	2019-20
17	NH-44 A (Lengpui – Langkaih)	3 rd Year maintenance	56.633 ha	2019-20
18	Improvement of Chhumkhum to Chawngte Road	3 rd Year maintenance	3.85 ha	2019-20
19	MSRP –II (Gr-I) Tlabung – Kawrpuichhuah	1 st Year maintenance	4.98 ha	2019-20
20	Tuerial HEP (CATP)	2 nd Year maintenance	300 ha	2019-20
21	Tuerial HEP (CATP)	4 th Year maintenance	323 ha	2019-20
22	Tuerial HEP	Creation	432.5 ha	2020-21
23	Tuerial HEP	5 th Year maintenance	591 ha	2020-21
24	Tuerial HEP	2 nd Year maintenance	346.5 ha	2020-21
25	BG Railway line between Bairabi to Sairang	5 th Year maintenance	27.933 ha	2020-21
26	BG Railway line between Bairabi to Sairang	4 th Year maintenance	46.555 ha	2020-21
27	NH-44 A (Lengpui – Langkaih)	4 th Year maintenance	56.633 ha	2020-21
28	NH-150 Zemabawk to E. Phaileng	Advance Work	23.69	2020-21
29	Improvement of Chhumkhum to Chawngte Road	4 th Year maintenance	3.85 ha	2020-21
30	IBB Fencing inside DTR	Advance Work	717 ha	2020-21
31	MSRP –II (Gr-I) Tlabung – Kawrpuichhuah	2 nd Year maintenance	4.98 ha	2020-21
32	Widening of NH-54	Advance work	12.09 ha	2020-21
33	Tuerial HEP (CATP)	3 rd Year maintenance	300 ha	2020-21
34	Tuerial HEP (CATP)	5 th Year maintenance	323 ha	2020-21

(2) Kolasib Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Serlui 'B' Hydel Project	5 th Year maintenance	632 ha	2018-19
2	400 KV Transmission Line (Silchar to Sakawr-tuichhun)	2 nd Year maintenance	768.062 ha	2018-19
3	400 KV Transmission Line (Dwarf Plantation)	4 th Year maintenance	8.5ha	2018-19
4	400 KV Transmission Line (Dwarf Plantation)	3 rd Year maintenance	21.5 ha	2018-19
5	Tuirial HEP (CATP)	1 st Year maintenance	300 ha	2018-19
6	Tuirial HEP (CATP)	3 rd Year maintenance	350 ha	2018-19
7	Tuirial HEP (CATP)	Advance work	300 ha	2018-19
8	400 KV Transmission line	3 rd Year maintenance	768.062 ha	2019-20
9	Tuirial HEP (CATP)	2 nd yr maintenance	300 ha	2019-20
10	Tuirial HEP (CATP)	4 th year maintenance	350 ha	2019-20
11	400 KV Transmission Line (Dwarf Plantation)	5 th yr maintenance	8.5ha	2019-20
12	400 KV Transmission Line (Dwarf Plantation)	4 th Year maintenance	21.5 ha	2019-20
13	400 KV Transmission line	4 th Year maintenance	768.062 ha	2020-21
14	Tuirial HEP (CATP)	5 th yr maintenance	350 ha	2020-21
15	Tuirial HEP (CATP)	3 rd yr maintenance	300 ha	2020-21
16	Tuirial HEP (CATP)	Creation	300 ha	2020-21
17	400 KV Transmission Line (Dwarf Plantation)	6 th Year maintenance	8.5ha	2020-21
18	400 KV Transmission Line (Dwarf Plantation)	5 th yr maintenance	21.5 ha	2020-21

(3) Aizawl Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Champhai – Hnahlan – Khuangphah road	5 th Year maintenance	110.195 ha	2018-19
2	20 MW HFO Thermal Power Plant	5 th Year maintenance	3.57 ha	2018-19
3	Petrol Pump at Sairang	5 th Year maintenance	0.36 ha	2018-19
4	Tuirial HEP (CATP)	1 st Year maintenance	150 ha	2018-19
5	Tuirial HEP (CATP)	3 rd Year maintenance	400 ha	2018-19
6	Tuirial HEP (CATP)	Advance work	200 ha	2018-19
7	Tuirial HEP (CATP)	2 nd Year maintenance	150 ha	2019-20
8	Tuirial HEP (CATP)	4 th Year maintenance	400 ha	2019-20
9	Aided Natural Re-Generation (NPV)	Advance Work	60	2020-21
10	Tuirial HEP (CATP)	3 rd Year maintenance	150 ha	2020-21
11	Tuirial HEP (CATP)	5 th Year maintenance	400 ha	2020-21
12	Tuirial HEP (CATP)	Creation	248.871 ha	2020-21
13	Forest fire Prevention & Control (NPV)	Creation of fireline	8 km	2020-21
14	Nurseries (NPV)	1st year seedlings	2778	2020-21

(4) Champhai Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Bridge over river Tuivawl	5 th Year maintenance	0.2817 ha	2018-19
2	Aided Natural Re-Generation (NPV)	Advance Work	40	2020-21
3	Forest fire Prevention & Control (NPV)	Creation of fireline	8 km	2020-21
4	Nurseries (NPV)	1st year seedlings	2778	2020-21

(5) Lunglei Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Bridge over Kawrawng lui	Creation	0.2424 ha	2018-19
2	Bridge over Kawrawng lui	1 st Year maintenance	0.2424 ha	2019-20
3	Aided Natural Re-Generation (NPV)	Advance Work	60 ha	2020-21
4	Bridge over Kawrawng lui	2 nd Year maintenance	0.2424 ha	2020-21
5	Forest fire Prevention & Control (NPV)	Creation of fireline	20 km	2020-21
6	Nurseries (NPV)	1st year seedlings	11667	2020-21

(6) Thenzawl Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Improvement & Widening of Serchhip – Buarpui Road	3 rd Year maintenance	2 ha	2018-19
2	Improvement & Widening of Serchhip – Buarpui Road	4 th Year maintenance	2 ha	2019-20
3	Improvement & Widening of Serchhip – Buarpui Road	5 th Year maintenance	2 ha	2019-20
4	Aided Natural Re-Generation (NPV)	Advance Work	40 ha	2020-21
5	Forest fire Prevention & Control (NPV)	Creation of fireline	8 km	2020-21
6	Nurseries (NPV)	1st year seedlings	2778	2020-21

(7) Kawrthah Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	50 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	15 km	2020-21
3	Nurseries (NPV)	1st year seedlings	9444	2020-21

(8) Mamit Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	60 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	20 km	2020-21
3	Nurseries (NPV)	1st year seedlings	11667	2020-21

(9) Tlabung Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	45 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	15 km	2020-21
3	Nurseries (NPV)	1st year seedlings	9444	2020-21

(10) North Vanlaiphai Forest Division

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	45 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	15 km	2020-21
3	Nurseries (NPV)	1st year seedlings	9444	2020-21

(11) DCF (WL), Aizawl

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	15 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	22 km	2020-21

(12) DCF (WL), Khawzawl

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	15 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	22 km	2020-21
3	Nurseries (NPV)	1st year seedlings	12222	2020-21

(13) DCF (WL), Lawngtlai

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	10 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	18 km	2020-21

(14) MADC

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	20 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	10 km	2020-21

(15) LADC

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	20 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	10 km	2020-21

(16) CADC

Sl.No	Name of Project	Work Description	Area	Year
1	Aided Natural Re-Generation (NPV)	Advance Work	20 ha	2020-21
2	Forest fire Prevention & Control (NPV)	Creation of fireline	10 km	2020-21

VI. FIELD OBSERVATIONS:

All records such as Plantation journals, Treatment map, Plantation register, Cash book, etc. have been examined during the course of monitoring and evaluation. Discussions and interactions have been held with the Territorial DFOs and staffs, leaders of partner organizations and Village councils. The detail reports of field observation are the following (in division wise):

AIZAWL FOREST DIVISION**1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:**

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
Champhai – Hnahlan – Khuangphah road (110.195 ha)							
1.	Maipawl ram Maite Saitual Range	110.195 ha. 2013-14	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Gomari</i> , etc.	-	-	23°29'30.31"N 92°58'45.37"E	It was saddening to make a negative comments when the plantation had a bad impression on encroachment issue. The plantation can not continue due to this reason after the year 2017.
20 MW HFO Thermal Power Plant (3.57 ha.)							
1.	Durtlang Durtlang Aizawl (Sadar) Range	3.57 ha. 2013-14	<i>Michelia champaca</i> , <i>Tectona grandis</i> , etc.	70%	5m	23°47'447"N 92°43'137"E	Last maintenance in 2018-19. Plantation in-charge continue to display new signboard during the time of visit.

Petrol Pump at Sairang (0.36 ha.)							
1.	Mel 11 luikam Sairang Sairang Range	0.36 ha. 2013-14	<i>Michelia champaca</i> , <i>Tectona grandis</i> , etc.	(-) 50%	3m	23°47'51.16"N 92°40'3.27"E	This plantation had a serious issue regarding encroachment of land with nearby one villager. It resulted in the low survival percentage and it could results the total failure of the plantation.
CATP - Tuirial HEP (400 ha.)							
1.	Beraw lui kam Zemabawk Aizawl (Sadar) Range	90 ha. 2014-15	<i>Michelia champaca</i> , <i>Toona ciliata</i> , <i>Bischofia javanica</i> , etc.	82%	3m	23°44'03.08"N 92°46'07.80"E	The overall activities of the staffs right from advance works to last maintenance is found satisfactory and appreciated their performances. Plantation signboard is erected and journal is maintained properly.
2.	Sakawrhmutuui Sihphir Aizawl (Sadar) Range	60 ha. 2014-15	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i> , <i>Toona ciliata</i> , etc.	81%	3.5m	23°51'41.84"N 92°44'26.57"E	Plantation signboard is erected and maintained plantation journal properly. Plantation is well maintained.
3.	Phulraw pang Maubuang Aibawk Range	100 ha. 2014-15	<i>Michelia champaca</i> , <i>Toona ciliata</i> , <i>Bischofia javanica</i> , etc.	80%	2.5m	23°30'56"N 92°42'96"E	This plantation is far from the main road about 2 kms. The site is good natural vegetation, protection is most important. Signboard is damaged. Journal is properly maintained.
4.	Tungur ram Sesawng Seling Range	150 ha. 2014-15	<i>Michelia champaca</i> , <i>Toona ciliata</i> , <i>Bischofia javanica</i> , etc.	80%	3m	23°48'11"N 92°48'48"E	The plantation site is too far from the main road and so, this is the main problem to maintain the plantation area. Journal is maintained properly.

CATP - Tuirial HEP (150 ha.)							
1.	Phulraw pang Maubuang Aibawk Range	150 ha. 2017-18	<i>Michelia champaca</i> , <i>Duabanga</i> , <i>Bischofia javanica</i> , <i>Emblica officinalis</i> , etc.	80%	3m	23°30'01"N 92°42'57"E	This plantation is far from the main road about 2 kms. The site is good natural vegetation, protection is most important. Signboard is erected and Journal is properly maintained.
CATP - Tuirial HEP (200 ha.)							
1.	Bemual Sateek Aibawk Range	50 ha. 2019-20	<i>Michelia champaca</i> , <i>Toona ciliata</i> , <i>Bischofia javanica</i> , etc.	85%	1m	23°32'54.11"N 92°42'37.52"E	The area was covered with very old dense evergreen. Any available trees species was planted on the blank areas. The overall condition of the vegetations within this plot is quite satisfactory. Signboard is erected and maintained journal properly.
2.	Far tlang Hlimen Aizawl (Sadar) Range	100 ha. 2019-20	<i>Toona ciliata</i> , <i>Bischofia javanica</i> , <i>Emblica officinalis</i> , <i>Ligustrum robustum</i> , etc.	90%	1m	23°39'54"N 92°43'14"E	The area was mixed vegetation of trees, tall grass and bamboos. Planting was done after clearing tall grass. Signboard is erected and maintained journal properly. Prevention from fire is the most important for the success of the plantation.
3.	Biak in tlang hnuai Hmawngkawn Seling Range	50 ha. 2019-20	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i> , <i>Bischofia javanica</i> , <i>Ligustrum robustum</i> , etc.	82%	1m	23°29'59.95"N 92°49'17.15"E	The area was covered with dense forest. Any available trees species was planted on the blank areas. Signboard is erected and maintained journal properly.

2. NET PRESENT VALUE (NPV) ANR PLANTATIONS (60 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Chuhvel ram Tachhip Aibawk Range	15 ha. 2020-21	<i>Ligustrum robustum</i> , <i>Lagerstroemia speciosa</i> , etc.	80%	2 ft	23°33'58.46"N 93°41'58.68"E	The whole area is covered by bamboos and a few trees. Seedlings was planted in the gap. Prevention of fire is needed for the success of the plantation. Signboard is erected and maintained journal properly.
2.	Ruanzawl ramhnai Hmawngkawn Seling Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i> , <i>Bischofia javanica</i> , <i>Ligustrum robustum</i> , etc.	81%	2 ft	23°29'32.68"N 93°49'25.60"E	Plantation site is good natural vegetation. Coordination with the Village community is excellent. Signboard is erected and maintained journal properly.
3.	Mualkhang ram Mualkhang Sairang Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Mesua ferrea</i> , <i>Artocarpus chama</i> , <i>Syzygium cumini</i> , etc.	80%	1.5 ft	23°52'48"N 92°40'45"E	The large part of the area is covered by tall grass. Proper maintenance is needed for the success of the plantation. Signboard is erected and maintained journal properly.
4.	Tuilak hnar Dilkhan Saitual Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Ligustrum robustum</i> , etc.	82%	1.5 ft	23°46'43.47"N 93°57'10.47"E	Plantation site is good natural vegetation. Conservation of the natural vegetation was the most important. Seedlings was planted in the gap. Signboard is erected and maintained journal properly.

3. NET PRESENT VALUE (NPV) NURSERY:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Tuirial Central Nursery Aizawl Sadar Range	3000	<i>Bischofia javanica</i> , <i>Michelia cham-paca</i> , <i>Duabanga grandiflora</i> , <i>Toona ciliata</i> , <i>Parkia timoriana</i> , <i>Artocarpus heterophyllus</i> , <i>Mangifera indica</i> , etc.	Nursery under Aizawl Division is well maintained. Nursery have good water tank, water distribution point and nursery hut. Nursery is covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.

KOLASIB FOREST DIVISION

1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/ Remarks
CA - Serlui 'B' Hydel Project (632 ha)							
1.	Thohuang ram Bukpui Bukpui Range	210 ha. 2013-14	<i>Michelia champaca</i> , <i>Tectona grandis</i> , etc.	70-80%	10 mts.	24°09'27"N 92°44'52.2"E	Last maintenance in 2018-19. Successful plantation.
2.	Mausin ram Saipum Saipum Range	212 ha. 2013-14	<i>Michelia champaca</i> , <i>Artocarpus chaplasi</i>	70-80%	10 mts.	24°11'4.72"N 92°44'39.7"E	Last maintenance in 2018-19. Successful plantation.
3.	Thohuang ram N. Hlmen N. Hlmen Range	210 ha. 2013-14	<i>Michelia champaca</i> , <i>Tectona grandis</i> , etc.	70-80%	10 mts.	24°09'27"N 92°44'52.02"E	Last maintenance in 2018-19. Successful plantation.
CA - 400 KV Transmission Line - Silchar to Sakawrtuichhun (768.062 ha)							
1.	Phulrawlian kawn Bukpui Bukpui Range	200 ha. 2014-15	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	75-80%	6 m	24°6'12.094"N 92°46'22.279"E	Signboard erected and maintained plantation journal properly. Overall condition is found satisfactory.
2.	Chemlui kam Kolasib Kolasib Range	190 ha. 2014-15	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	75-80%	4-5 m	24°13'37.4"N 92°43'26.5"E	Plantation is properly maintained. Prevention of fire is necessary for the betterment and success of the plantation.
3.	Arkhuanglo ram Kawnpui Kawnpui Range	180.062 ha. 2014-15	<i>Michelia champaca</i> , <i>Parkia timoriana</i> , etc.	75-80%	4-5 m	24°57'41.6"N 92°37'47.6"E	Signboard is erected and maintained journal properly. Prevention of fire is necessary for the success of the plantation.
4.	Tlangpuilian Phaisen Buhchang Range	198 ha 2014-15	<i>Tectona grandis</i> , <i>Michelia champaca</i> , <i>Gomari</i> , etc.	75-80%	5m	24°24'59.3"N 92°40'46.8"E	Signboard is erected and maintained journal properly. The area is previously covered by thatches, brooms, trees and bamboos. It will become a successful plantation.

CA - 400 KV Transmission Line - Dwarf Plantation (8.5 ha.)							
1.	Eldorado chhuah lam Vairengte Vairengte Range	2 ha. 2014-15	<i>Oroxylum indicum</i> , <i>Emblica officinalis</i>	(-) 50%	2m	24°23'43"N 92°43'30"E	Signboard damaged. Protection is much necessary due to encroachment.
2.	N. Chhimluang Kharzawl Bilkhawthlir Range	2 ha. 2014-15	<i>Michelia champaca</i>	(-) 50%	3m	24°23'26"N 92°43'16"E	Since the area is private land, the owner also planted areca palm in this area. Signboard is not erected, plantation journal is properly maintained.
3.	Chhungbawnga camp luikam Kolasib Kolasib Range	2 ha. 2014-15	<i>Bischofia javanica</i> , etc.	60- 70%	2m	24°17'15.9"N 92°42'03.5"E	Proper maintain is much necessary for this plantation.
4.	Thingdawl luikam Kawnpui Kawnpui Range	2.5 ha. 2014-15	<i>Costus speciosus</i> , <i>Oroxylum indicum</i>	75- 80%	1.5m	24°49'06.3"N 92°40'42.5"E	The survival of <i>Costus speciosus</i> is good but <i>Oroxylum indicum</i> is very low. Signboard is erected and maintained journal properly.
CA - 400 KV Transmission Line (Dwarf Plantation) 21.5 ha.							
1.	Chhungbawnga camp luikam Kolasib Kolasib Range	6 ha. 2015-16	<i>Bischofia javanica</i> , <i>Oroxylum indicum</i> , etc.	75- 80%	1.5m	24°17'15.9"N 92°42'03.5"E	Proper maintain is much necessary for this plantation.
2.	Thingdawl luikam Kawnpui Kawnpui Range	7.5 ha. 2015-16	<i>Costus speciosus</i> , <i>Oroxylum indicum</i>	70 - 80%	1.5m	24°49'14.3"N 92°40'59.8"E	The survival of <i>Costus speciosus</i> is good but is <i>Oroxylum indicum</i> very low. Signboard is erected and maintained journal properly.
3.	N. Chhimluang Kharzawl Bilkhawthlir Range	4 ha. 2015-16	<i>Michelia champaca</i>	(-) 50%	3m	24°23'30"N 92°43'26"E	Since the area is private land, the owner also planted areca palm in this area. Signboard is not erected, plantation journal is properly maintained.
4.	N. Chhimluang dai Vairengte Vairengte Range	4 ha. 2015-16	<i>Oroxylum indicum</i> , <i>Emblica officinalis</i>	(-) 50%	2m	24°23'47"N 92°43'10"E	Signboard damaged. Protection is much necessary due to encroachment.

CATP - Tuirial HEP (350 ha.)							
1.	Rohai ram Bukpui Bukpui Range	116 ha. 2014-15	<i>Michelia champaca, Tectona grandis, etc.</i>	75 - 80%	3.5m	24°5'22.287"N 92°50'6.73"E	Plantation is properly maintained. Preven- tion of fire during the fire season is necessary for the betterment and suc- cess of the planta- tion. Signboard is not erected.
2.	Theichangbung tlang N. Hlimen N. Hlimen Range	116 ha. 2014-15	<i>Tectona grandis, Go- mari, etc.</i>	75 - 80%	4m	24°16'55.9"N 92°50'53.6"E	Plantation is properly maintained. Sign- board is erected and maintained journal properly.
3.	Suarhliap ram Saipum Saipum Range	118 ha. 2014-15	<i>Michelia champaca, Toona ciliata, etc.</i>	70 - 80%	3.5m	24°18'45"N 92°49'50"E	Not erected sign- board. Proper main- tenance is needed.
CATP - Tuirial HEP (300 ha.)							
1.	Uikaih lui Bukpui Bukpui Range	130 ha. 2016-17	<i>Michelia champaca, Bischofia javanica</i>	75 - 80%	3.5m	24°05'19.0"N 92°50'09.0"E	Plantation is prop- erly maintained. Prevention of fire during the fire season is necessary for the betterment and success of the plantation. Sign- board is erected and maintained journal properly.
2.	Theichangbung tlang N. Hlimen N. Hlimen Range	85 ha. 2016-17	<i>Tectona grandis, Go- mari, etc.</i>	75 - 80%	4m	24°16'47.64"N 92°50'52.29"E	Plantation is properly maintained. Sign- board is erected and maintained journal properly.
3.	Suarhliap ram Saipum Saipum Range	85 ha. 2016-17	<i>Michelia champaca, Toona ciliata, etc.</i>	70 - 80%	2.5m	24°18'3.00"N 92°49'45.01"E	Not erected sign- board. Proper main- tenance is needed.
CATP - Tuirial HEP (300 ha.)							
1.	Sakhisih ram Bukpui Bukpui Range	100 ha. 2019-20	<i>Toona ciliata, Bischofia javanica</i>	78 -85%	1m	24°5'45.00"N 92°50'30.00"E	Protection of the natural vegetation is important. Sign- board is erected and maintained journal properly.

2.	Theichangbung tlang N. Hlimen N. Hlimen Range	100 ha. 2019-20	<i>Michelia champaca, Bischofia ja- vanica, etc.</i>	82%	1m	24°17'54.63"N 92°51'4.284"E	Good natural veg- etation. Signboard is erected and maintained journal properly.
3.	Uvai zau Saipum Saipum Range	100 ha. 2019-20	<i>Michelia champaca, Bischofia ja- vanica, etc.</i>	77 -84%	1m	24°24'43.68"N 92°51'32.60"E	Plantation is proper- ly maintained. The overall condition is found satisfactory. The plantation site is too far from the Range headquarters, it is difficult to visit.

DARLAWN FOREST DIVISION

1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/ Remarks
Tuivai Hydel Project (32.57 ha.)							
1.	Tuiriza/Chithar ram Suangpuilawn Suangpuilawn Range	32.57 ha. 2014-15	<i>Gomari, Bischofia javanica, etc.</i>	80%	5m	23°54'49.84"N 93°0'58.998"E	Plantation ended in 2019-20. ANR method of plantation is practised. This plantation had a bad issue regarding encroachment of land with nearby the village Zawngin.
BG Railway line between Bairabi to Sairang (27.933 ha.)							
1.	Lenhmui zawl N. Serzawl Darlawn Range	27.933 ha. 2014-15	<i>Tectona grandis</i>	81%	6m	23°58'17.4"N 92°51'28.5"E	The area was previously covered by grasses, thatching, bamboos, small shrubs, etc. Plantation journal is properly maintained.
BG Railway line between Bairabi to Sairang (46.555 ha.)							
1.	Lenhmui zawl N. Serzawl Darlawn Range	46.555 ha. 2015-16	<i>Tectona grandis</i>	80%	5m	23°58'17.4"N 92°51'28.5"E	The area was previously covered by grasses, thatching, bamboos, small shrubs, etc. Plantation journal is properly maintained.
CA - Tuirial HEP (591 ha.)							
1.	Phaitlang ram N. Serzawl Darlawn Range	200 ha. 2014-15	<i>Tectona grandis, Gomari, etc.</i>	80%	4.5m	23°59'21.08"N 92°50'26.76"E	Plantation ended in 2019-20. Plantation journal is properly maintained.
2.	Chhanchhuahna Darlawn Range	200 ha. 2014-15	<i>Tectona grandis, Gomari, etc.</i>	80%	6m	23°57'14.2"N 92°50'42.0"E	Plantation ended in 2019-20. Plantation is well maintained. No signboard erected. Journal is maintained.
3.	Talan mual Hmunghak Khawruhlian Range	67 ha. 2014-15	<i>Tectona grandis.</i>	82%	4m	23°55'13"N 92°49'50"E	Plantation ended in 2019-20. ANR method of plantation is practised.
4.	Ngaizel Khanpui Khawruhlian Range	70 ha. 2014-15	<i>Tectona grandis</i>	80%	4m	23°53'33"N 92°51'41"E	Plantation ended in 2019-20. ANR method of plantation is practised.

5.	Phaitlang ram Ratu Ratu Range	28 ha. 2014-15	<i>Tectona grandis and Toona ciliata</i>	81%	4.5m	24°7'43.766"N 92°52'55.238"E	Plantation ended in 2019-20. ANR meth- od of plantation is practised.
6.	Chengkawl lui Suanglawn Zohmun Range	26 ha. 2014-15	<i>Tectona grandis</i>	80%	4m	24°17'59"N 92°56'53"E	Plantation ended in 2019-20. ANR meth- od of plantation is practised.
CA - Tuirial HEP (346.5 ha.)							
1.	Chhanchhuahna ram tlak lam Darlawn Range	200 ha. 2017-18	<i>Tectona grandis, Go- mari, etc.</i>	80%	3m	23°57'13.06"N 92°49'33.34"E	Plantation is well maintained. Journal is properly maintained.
2.	Phaitlang ram N. Serzawl Darlawn Range	100 ha. 2017-18	<i>Tectona grandis</i>	81%	3m	23°57'11.3"N 92°50'45.1"E	Plantation is well maintained. Journal is properly maintained.
3.	Ngaizel Khanpui Khawruhlian	46 ha. 2017-18	<i>Prunus cera- soides</i>	82%	3m	23°50'54.93"N 92°55'54.04"E	ANR method of plan- tation is practised. Journal is properly maintained.
CA - Tuirial HEP (1462.5 ha)							
1.	Chhanchhuahna Darlawn Range	432 ha. 2018-19	<i>Tectona grandis, Go- mari, etc.</i>	80%	3m	23°58'16.56"N 92°51'9.52"E	ANR method of plan- tation is practised. Journal is properly maintained.
2.	N. Serzawl Darlawn Range	339.5 ha. 2018-19	<i>Tectona grandis, Go- mari, etc.</i>	80%	3m	23°59'22.96"N 92°51'18.27"E	ANR method of plan- tation is practised. Journal is properly maintained.
3.	Talan mual Hmunghak Khawruhlian Range	80 ha. 2018-19	<i>Gomari, Bischofia ja- vanica, etc.</i>	82%	3m	23°50'57.68"N 92°52'10.75"E	ANR method of plan- tation is practised. Journal is properly maintained.
4.	Buhban Khawruhlian Range	211.5 ha. 2018-19	<i>Gomari, Bischofia ja- vanica, etc.</i>	80%	3m	23°48'39.32"N 92°58'9.04"E	ANR method of plan- tation is practised. Journal is properly maintained.
5.	Khanpui Khawruhlian Range	211.5 ha. 2018-19	<i>Gomari, Bischofia ja- vanica, etc.</i>	81%	3m	23°51'35.42"N 92°58'0.97"E	ANR method of plan- tation is practised. Journal is properly maintained.
NH-44 A (Lengpui – Langkaih) 56.633 ha							
1.	Kawipui chung New Vervek Ratu Range	56.633 ha. 2015-16	<i>Michelia champaca</i>	80%	4m	24°12'15"N 92°59'30"E	Plantation is well maintained. Sign- board is erected and maintained journal properly.
Improvement of Chhumkhum to Chawngte Road (3.85 ha.)							
1.	Sasaw tlang Sawlung Darlawn Range	3.85 ha. 2015-16	<i>Tectona grandis</i>	81%	4m	23°16'29"N 92°53'35"E	ANR method of plan- tation is practised. Journal is properly maintained.

MSRP –II (Gr-I) Tlabung – Kawrpuchhuah (4.98 ha.)							
1.	Sasaw tlang Sawleng Darlawn	4.98 ha. 2018-19	<i>Michelia champaca, etc.</i>	80%	2m	23°58'58.5"N 92°57'34.69"E	ANR method of plantation is practised. Journal is properly maintained.
CATP - Tuirial HEP (323 ha.)							
1.	Kelzam tlang Darlawn Darlawn Range	73 ha. 2014-15	<i>Tectona grandis, etc.</i>	80%	4m	23°58'04.9"N 92°51'28.3"E	Plantation is well maintained. This plantation had a bad issue regarding encroachment of land with nearby the village.
2.	Mualkir Khawruhlian Khawruhlian Range	120 ha. 2014-15	<i>Tectona grandis, etc.</i>	81%	4m	23°51'28"N 92°51'41"E	Plantation is well maintained. Sign-board is erected and maintained journal properly.
3.	Buallawn Ratu Ratu Range	70 ha. 2014-15	<i>Tectona grandis, Gomari, etc.</i>	80%	4m	23°16'29"N 92°53'35"E	This plantation had a bad issue regarding encroachment of land with nearby the village.
CATP - Tuirial HEP (300 ha.)							
1.	Buallawn Ratu Range	150 ha. 2018-19	<i>Toona ciliata, Bischofia javanica</i>	80%	2m	24°06'36"N 92°53'29"E	This plantation had a bad issue regarding encroachment of land with nearby the village.
2.	Suenglawn Zohmun Range	150 ha. 2018-19	<i>Toona ciliata, Bischofia javanica</i>	81%	2m	24°18'17"N 92°56'40"E	Plantation is well maintained. Sign-board is erected and maintained journal properly.
CATP - Tuirial HEP (300 ha.)							
1.	Phaitlang ram Ratu Range	100 ha. 2016-17	<i>Tectona grandis, Gomari</i>	80%	3m	24°7'43.766"N 92°52'55.238"E	Plantation is well maintained and maintained journal properly.
2.	Chengkawl lui Palsang Zohmun Range	200 ha. 2016-17	<i>Tectona grandis, Gomari</i>	81%	3m	24°17'59"N 92°56'53"E	Plantation is well maintained and maintained journal properly.
NH-150 Zemabawk to E. Phaileng (23.69 ha.)							

1.	Mualkawi hla Damdai Ratu Range	23.69 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	45 cm	85%	24°8'39.65"N 92°58'23.56"E	Plantation is well maintained. Sign-board is erected and maintained journal properly. Proper maintenance is needed.
IBB Fencing inside DTR (717 ha.)							
1.	Buhban Khawruhlian Range	126.7 ha. 2020-21	<i>Michelia champaca</i> , etc.	54 cm	86%	23°49'47.30"N 92°57'49.99"E	The overall condition of the plantation is found satisfactory. Signboard is erected and maintained journal properly.
2.	Khawhmun tlang E. Phaileng Khawruhlian Range	31.02 ha. 2020-21	<i>Michelia champaca</i> , <i>Tectona grandis</i> , etc.	51 cm	90%	23°54'39.19"N 92°56'17.00"E	Plantation is well maintained. Needs prevention of fire during fire season. Journal is properly maintained.
3.	Thereng ngaw Hmunghak Khawruhlian Range	32.55 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i>	54 cm	89%	23°51'33.35"N 92°53'9.45"E	Plantation is well maintained. Weeding and cleaning at the right time is needed. Journal is properly maintained.
4.	Hmawngkar ram Khanpui Khawruhlian Range	45.84 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	50 cm	91%	23°50'10.60"N 92°54'1.12"E	Plantation is well maintained. Weeding and cleaning at the right time is needed. Journal is properly maintained.
5.	Mualkir ram Khawruhlian Khawruhlian Range	158.05 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	48 cm	92%	23°53'50.81"N 92°49'52.80"E	The overall condition of the plantation is found satisfactory. Signboard is erected and maintained journal properly.
6.	Hmarcha hmun Lailak Khawruhlian Range	127.53 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , etc.	52 cm	92%	23°49'16.59"N 92°53'46.16"E	Plantation is well maintained. Weeding and cleaning at the right time is needed. Journal is properly maintained and signboard is erected.

7.	Khawhmun tlang Pehlawn Khawruhlian Range	31.64 ha. 2020-21	<i>Michelia champaca, Bischofia javanica.</i>	53 cm	93%	23°54'14.01"N 92°55'46.80"E	Plantation is well maintained. Weed- ing and cleaning at the right time is needed. Journal is properly maintained and signboard is erected.
8.	Selemual Lungsum Ratu Range	30 ha. 2020-21	<i>Michelia champaca, Bischofia ja- vanica, etc.</i>	47 cm	91%	24°8'59.17"N 92°57'50.89"E	The overall condition of the plantation is found satisfactory. Signboard is erect- ed and maintained journal properly.
Widening of NH-54 (12.09 ha.)							
1.	Khawten tlang Suangpuilawn Suangpuilawn Range	12.09 ha. 2020-21	<i>Prunus cerasoides, Bischofia javanica, Ligustrum robustum</i>	42 cm	91%	23°58'00"N 93°02'16"E	Plantation is well maintained. Weed- ing and cleaning at the right time is needed. Journal is properly maintained and signboard is erected.

CHAMPHAI FOREST DIVISION

1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
CA - Bridge over river Tuivawl (0.2817 ha)							
1.	Mualzen Champhai Champhai Range	0.2817 ha. 2014-15	<i>Michelia champaca</i> , <i>Toona ciliata</i> , etc.	60%	3.5m	23°28'8.82"N 93°16'3.42"E	Last maintenance in 2018-19. The area is small and planted 309 seedlings.

2. NET PRESENT VALUE (NPV) ANR PLANTATIONS (40 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Mualzen zau ram Kelkang Champhai Range	5 ha. 2020-21	<i>Parkia timoriana</i> , <i>Artocarpus heterophyllus</i> <i>Emblica officinalis</i> , <i>Terminalia myriocarpa</i> .	85%	1 ft	23°24'45.95"N 93°19'7.60"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and plantation journal is properly maintained.
2.	Hnarsari ram Farkawn Farkawn Range	5 ha. 2020-21	<i>Parkia timoriana</i> , <i>Artocarpus heterophyllus</i> <i>Emblica officinalis</i> , <i>Prunus cerasoides</i> .	86%	1 ft	23°06'57"N 93°17'12"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and plantation journal is properly maintained.
3.	Mubu ram Khawbung Khawbung Range	5 ha. 2020-21	<i>Parkia timoriana</i> , <i>Artocarpus heterophyllus</i> - <i>Mangifera indica</i> .	88%	1.5 ft	23°10'59"N 93°14'30"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and plantation journal is properly maintained.
4.	Darsam ram Khawhai Khawhai Range	5 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Michelia champaca</i>	86%	1ft	23°21'06"N 93°06'47"E	Good natural vegetation. Signboard is erected and plantation journal is properly maintained.

5.	Tingmun ram N. Diltlang Hnahlan Range	5 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Duabanga</i> , etc.	89%	1.5 ft	23°39'35"N 93°22'11"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and plantation journal is properly maintained.
6.	Hlingsi ngaw Neihdawn Khawzawl Range	5 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Duabanga</i> , etc.	87%	2 ft	23°30'2.79"N 93°12'45.53"E	The area is semi-evergreen, thatching grass and broomstick are also found. Signboard is erected and plantation journal is properly maintained.
7.	Bevuak Kawlkulh Kawlkulh Range	5 ha. 2020-21	<i>Toona ciliata</i> , <i>Michelia champaca</i> , etc.	85%	2 ft	23°38'54"N 93°04'23"E	Good natural vegetation. Signboard is erected and plantation journal is properly maintained. The overall condition is found satisfactory
8.	Teikhang ram Teikhang Ngopa Range	5 ha. 2020-21	<i>Toona ciliata</i> , <i>Michelia champaca</i> , etc.	78%	2 ft	23°56'55"N 93°18'41"E	Good natural vegetation. Signboard is erected and plantation journal is properly maintained.

3. NET PRESENT VALUE (NPV) NURSERIES:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Range Complex Farkawn	1550	<i>Bischofia javanica</i> , <i>Michelia champaca</i> , <i>Duabanga grandiflora</i> , <i>Toona ciliata</i> , <i>Parkia timoriana</i> , <i>Artocarpus heterophyllus</i> , etc.	All these Nurseries under Champhai Division are well maintained. All nurseries have good water tank, water distribution point and nursery hut. Nurseries are covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings.
2.	Range Complex Khawbung	1210		
3.	Range Complex Hnahlan	1000		
4.	Range Complex Ngopa	1100		

KAWRTHAH FOREST DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (50 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Tuidam – Darlak NH-44A roadside Darlak Kawrthah Range	10 ha. 2020-21	<i>Artocarpus hetero-phyllus</i> , <i>S. indica</i> , <i>Mangifera indica</i> , etc.	90%	2 ft	23°54'85.82"N 92°22'07.4"E	Good natural vegetation, prevention of fire is necessary. Sign-board is erected and Plantation journal is properly maintained.
2.	Zailui leh R. Langkaih inkar ram Tumpanglui Kawrthah Range	10 ha. 2020-21	<i>Michelia champaca</i> , etc.	85%	1.5 ft	23°55'41.6"N 92°19'82.8"E	Good natural vegetation, fire prevention is necessary. Signboard is erected and Plantation journal is properly maintained.
3.	Dilte bul Zamuang Zamuang Range	10 ha. 2020-21	<i>Willughbeia edulis</i>	81%	1ft	24°08'29.6"N 92°24'32.4"E	Good natural vegetation. Sign-board is erected and plantation journal is properly maintained.
4.	Sailui kam M ualthuam Kawrtethawveng Range	10 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Michelia champaca</i>	81%	1ft	23°51'27"N 92°18'54"E	The whole plantation is covered with bamboos. Signboard is erected and plantation journal is properly maintained.
5.	Zawlnuam cemetery Zawlnuam Kanhmun Range	10 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Duabanga</i> , etc.	80%	1 ft	24°08'09"N 92°20'00"E	All area is covered by tall grass and trees. Signboard is erected and plantation journal is properly maintained.

2. NET PRESENT VALUE (NPV) NURSERIES:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Darlak Kawrthah Range	10000	<i>Parkia timoriana</i> , <i>Delonix regia</i> , <i>Syzygium cumini</i> , <i>Litchi chinensis</i> , <i>Michelia cham-paca</i> , <i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Tectona grandis</i> , <i>Mangifera indica</i> etc.	All these Nurseries under Kawrthah Forest Division are well maintained. All nurseries have good water tank, water distribution point and nursery hut. Nurseries are covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.
2.	Range Complex Kawrtethawveng Range	2550		
3.	IB hlui tlang Zamuang Range	1250		
4.	Range Complex Kanhmun Range	3000		

MAMIT FOREST DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (60 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	W. Serzawl ram W. Serzawl Lengpui Range	30 ha. 2020-21	<i>Homalomena aromatica</i> , <i>Raintree</i> , <i>Michelia champaca</i>	85%	1 ft	23°54'18"N 92°37'46"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and Plantation journal is properly maintained.
2.	BSF Camp mual Pukzing Marpara Range	30 ha. 2020-21	<i>Homalomena aromatica</i> , <i>Emblica officinalis</i> , <i>Bischofia javanica</i>	85%	1 ft	23°20'23"N 92°25'42"E	Good natural vegetation, fire prevention is necessary. Signboard is erected and Plantation journal is properly maintained.

2. NET PRESENT VALUE (NPV) NURSERY:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Balhla kawn, Tuahzawl Rawpuichhip Range	30000	<i>Parkia speciosa</i> , <i>Toona ciliata</i> , <i>Tectona grandis</i> , <i>Delonix regia</i> , <i>Artocarpus heterophyllus</i> , <i>Emblica officinalis</i> , <i>Syzygium cumini</i> , <i>Butter fruit</i> , etc.	This CAMPA Nursery under Mamit Forest Division is well maintained. Nursery have good water tank, water distribution point and nursery hut. Nursery are covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.

THENZAWL FOREST DIVISION

1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
CA - Improvement & Widening of Serchhip - Buarpui Road (2 ha.)							
1.	Tuihnial chhuah Thenzawl Thenzawl	2 Ha. 2014-15	<i>Tectona grandis</i>	80%	8m	23°29'73"N 92°69'15"E	Last maintenance in 2019-20 and become a successful plantation

2. NET PRESENT VALUE (NPV) ANR PLANTATIONS (40 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Chhipphir tlang Chhipphir Thenzawl Range	40 ha. 2020-21	<i>Prunus cerasoides</i> , <i>Ligustrum robustum</i> , <i>Michalia champaca</i> , <i>Ficus bengalensis</i> , etc.	82%	1.5 ft	22°94'9.52"N 92°47'4.42"E	Good natural vegetation, site selected is perfect. Signboard is erected and plantation journal is properly maintained. Rest hut was built inside the plantation. Overall condition is found satisfactory.

3. NET PRESENT VALUE (NPV) NURSERY:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Chalkhan kawn Thenzawl Range	2787	<i>Lagerstroemia speciosa</i> , <i>Prunus cerasoides</i> , <i>Mangifera indica</i> , <i>Mesua ferrea</i> , <i>Artocarpus heterophyllus</i> , <i>Psidium guajava</i>	Nursery under Thenzawl Division is well maintained. Nursery have good water tank, water distribution point and nursery hut. Nursery beds are covered with shade nets and made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.

LUNGLEI FOREST DIVISION

1. COMPENSATORY AFFORESTATION (CA) PLANTATIONS:

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
CA - Bridge over Kawrawng lui (0.2424)							
1.	Thingfal ram Thingfal Tawipui Range	0.2424 2018-19	<i>Michelia champaca</i>	85%	2m	23°29'73"N 92°69'15"E	Plantation is well maintained. Sing-board is erected and maintained plantation journal properly.

2. NET PRESENT VALUE (NPV) ANR PLANTATIONS (60 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Arthladawn ram Zobawk Lunglei Range	20 ha. 2020-21	<i>Michelia champaca</i> , <i>Prunus cerasoides</i>	80%	1.5 ft	22°57'14"N 92°49'15.38"E	Maintenance work was taken by YMA. The efforts of RO's and staffs are found satisfactory. Sign-board was not found during the time of visit.
2.	Tuiphir ram S. Vanlaiphai S. Vanlaiphai Range	10 ha. 2020-21	<i>Michelia champaca</i> , <i>Toona ciliata</i> , <i>Chukrasia velutina</i>	82%	1.5 ft	22°47'45.71"N 93°01'38.05"E	Plantation site is suitable for the selected species. Signboard is erected and maintained plantation journal properly.
3.	Khawhlui tlang hnuai Mausen Haulawng Range	10 ha. 2020-21	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i> , <i>Emblica officinalis</i> , <i>Oroxylum indicum</i>	75%	1 ft	23°00'41.88"N 92°45'55.40"E	Good natural vegetation. The growth of plant may slow due to trees covered the whole area. Contour trench was created in some places. Sign-board is displayed and maintained journal properly.

4.	Tuitai tlangliam Denlung Hnahthial Range	10 ha. 2020-21	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i> , <i>Emblica officinalis</i> , <i>Toona ciliata</i> .	90%	2 ft	22°57'51"N 92°54'51"E	Good natural vegetation, prevention of fire is necessary. Signboard is erected and Plantation journal is properly maintained.
5.	Kanghreng ram Tawipui N-I Tawipui Range	10 ha. 2020-21	<i>Michelia champaca</i> , <i>Emblica officinalis</i> ,	88%	1.5 ft	22°42'25.48"N 92°50'50.27"E	Good natural vegetation. Signboard is erected and Plantation journal is properly maintained.

3. NET PRESENT VALUE (NPV) NURSERIES:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Pukpui Hightech Nursery Lunglei Range	5400	<i>Michelia champaca</i> , <i>Prunus cerasoides</i> , <i>Parkia timoriana</i> , <i>Artocarpus chaplasha</i> , <i>Cassia javanica</i> , <i>Duabanga grandiflora</i> , <i>Lagerstroemia speciosa</i>	All these Nurseries under Lunglei Division are well maintained. All nurseries have good water tank, water distribution point and nursery hut. Nurseries are covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.
2.	Range Complex Hnahthial Range	2200		
3.	Thualthu Tawipui Range	1700		

TLABUNG FOREST DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (45 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Tipreghat hmar lam Tipreghat Tlabung Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Mesua ferrea</i> , <i>Lagerstroemia speciosa</i>	85%	1.5 ft	22°49'43.73"N 92°29'24.17"E	Plantation site is perfect for planting. Overall condition is found satisfactory. Signboard is erected and plantation journal is properly maintained.
2.	Tuichawng kam Tuichawng Lungsen Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Artocarpus chaplasha</i>	88%	1.5 ft	22°55'35.39"N 92°31'39.15"E	Plantation site is suitable for the selected species. Signboard is erected and maintained plantation journal properly.
3.	Ngiau tlang kawng chhak Chawngte 'L' Chawngte 'L' Range	15 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i>	92%	1.5 ft	22°38'4.02"N 92°40'26.21"E	Good natural vegetation. Signboard is displayed and maintained journal properly.

2. NET PRESENT VALUE (NPV) NURSERIES:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Artah Tlabung Range	3733	<i>Michelia champaca</i> , <i>Prunus cerasoides</i> , <i>Parkia timoriana</i> , <i>Bischofia javanica</i> , <i>Bacca-rea ramiflora</i> , <i>Karipata</i> , <i>Artocarpus chaplasha</i> , <i>Terminalia myriocarpa</i> , <i>Mangifera indica</i> , <i>Syzygium cumini</i> , <i>Embllica officinalis</i> , etc.	All these Nurseries under Tlabung Division are well maintained. All nurseries have good water tank, water distribution point and nursery hut. Nurseries are covered with shade nets.
2.	Laldawla luikam, Tuichawng Lungsen Range	3500		Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings.
3.	Range Complex Chawngte 'L' Range	3400		Ample care is taken to improve the quality and health of the seedlings.

NORTH VANLAIPHAI FOREST DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (45 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Ramrikawn N. Vanlaiphai N. Vanlaiphai Range	20 ha. 2020-21	<i>Michelia champaca</i> , <i>Prunus cerasoides</i> , <i>Bischofia javanica</i> , <i>Bauhinia variegata</i>	80%	1.5 ft	23°63'7.76"N 93°43'0.17"E	The area was covered by grass and it is hard to survive the seedlings. Signboard is erected and maintained plantation journal properly.
2.	Thaitui ram Thingsai Thingsai Range	5 ha. 2020-21	<i>Michelia champaca</i> , <i>Terminalia myriocarpa</i>	81%	1.5 ft	22°57'44.88"N 93°42'7.22"E	Plantation site is suitable for the selected species. Signboard is erected and maintained plantation journal properly.
3.	Lenhmui tlang Sialhawk East Lungdar Range	5 ha. 2020-21	<i>Prunus cerasoides</i> , <i>Bischofia javanica</i>	85%	1 ft	23°17'21.23"N 93°05'25.27"E	Good natural vegetation. Signboard is displayed and maintained journal properly
4.	Vanghmun S. Chawngtui Range	5 ha. 2020-21	<i>Toona ciliata</i> , <i>Prunus undulata</i>	84%	1.5 ft	23°3'15.581"N 93°0'54.83"E	The area was covered by trees, shrubs, reeds and weeds. It is suitable for ANR plantation.
5.	Cherhlun Cherhlun Range	5 ha. 2020-21	<i>Michelia champaca</i> , <i>Emblica officinalis</i> ,	88%	1.5 ft	22°42'25.48"N 92°50'50.27"E	Good natural vegetation. Signboard is erected and Plantation journal is properly maintained.

2. NET PRESENT VALUE (NPV) NURSERY:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Forest complex N. Vanlaiphai Range	10990	<i>Prunus cerasoides</i> , <i>Emblia officinalis</i> , <i>Ligustrum robustum</i> , <i>Syzygium cumini</i> , <i>Bauhinia variegata</i> , <i>Jacaranda mimosaeifolia</i>	Nursery under North Vanlaiphai Division is well maintained. Nursery have good water tank, water distribution point and nursery hut. Nursery beds are covered with shade nets and made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.

AIZAWL WILDLIFE DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (15 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Chal hmun phei Thenhlum Thorang WLS Range	15 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Lagerstroemia speciosa</i> , <i>Syzygium cumini</i> , <i>etc.</i>	90%	1 ft	23°18'42.94"N 92°33'2.48"E	The area was good natural vegetation. Protection and prevention of fire is necessary. Signboard is erected and maintained plantation journal properly.

LAWNGTLAI WILDLIFE DIVISION

2. NET PRESENT VALUE (NPV) ANR PLANTATIONS (10 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Dillui pahnihna Khawmawi Ngengpui WLS Range	10 ha. 2020-21	<i>Lagerstroemia speciosa</i> , <i>Syzygium cumini</i> , <i>etc.</i>	90%	1 ft	22°30'4.63"N 92°46'0.36"E	The area was degraded and abandoned jhum land and covered by bamboos, grasses and few trees. Signboard is erected and maintained plantation journal properly.

KHAWZAWL WILDLIFE DIVISION

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (15 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Khawlhing mual Rabung Murlen National Park Range	8 ha. 2020-21	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Toona ciliata</i>	86%	2 ft	23°39'53.65"N 93°12'15.23"E	Good natural vegetation, prevention of fire is necessary. Sign-board is erected and Plantation journal is properly maintained.
2.	Dawhzau ram Lamzawl Lengteng Wildlife Sanctuary Range	7 ha. 2020-21	<i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Ligustrum robustum</i>	85%	1.5 ft	23°49'53.65"N 92°12'25.00"E	Good natural vegetation, fire prevention is necessary. Signboard is erected and Plantation journal is properly maintained.

2. NET PRESENT VALUE (NPV) NURSERIES:

Sl. No.	Location & Range	Total stocks	Species raised	Comments/Remarks
1.	Khawlhing mual Murlen NP, Rabung	7200	<i>Michelia champaca</i> , <i>Bischofia javanica</i> , <i>Toona ciliata</i> , <i>Ligustrum robustum</i> , <i>Parkia timoriana</i> , etc.	All these Nurseries under Khawzawl Forest Division are well maintained. All nurseries have good water tank, water distribution point and nursery hut. Nurseries are covered with shade nets. Nursery beds are made with cemented beds with brick-wall side support and polypots are used so as to increase and improve the quality, germination and health of the seedlings. Ample care is taken to improve the quality and health of the seedlings.
2.	Range Complex Lengteng WLS, Lamzawl	5000		

LAI AUTONOMOUS DISTRICT COUNCIL

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (20 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Paithar Paithar Lawngtlai Range	20 ha. 2020-21	<i>Michelia champaca</i> , <i>Terminalia</i> , <i>Bischofia javanica</i> , <i>Lagerstroemia</i> sp., <i>Syzygium cumini</i> , etc.	86%	1 ft	22°26'20.27"N 92°54'03.55"E	Some parts of the area was degraded and some are good natural vegetation. Some of the area was covered by bamboos and grasses. Signboard is erected and maintained plantation journal properly. Prevention of fire is much necessary for the success of the plantation.

MARA AUTONOMOUS DISTRICT COUNCIL

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (20 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Tlangpui Tlangpui Siaha Range	20 ha. 2020-21	<i>Michelia champaca</i> , <i>Lagerstroemia speciosa</i> , <i>Jacaranda</i> , etc.	70-80%	1 ft	22°30'17.48"N 93°1'2.41"E	Plantation site is not suitable for some species. It is difficult to observe survival percentage during the time of visit. Signboard is erected and maintained plantation journal properly. Prevention of fire is much necessary for the success of the plantation.

CHAKMA AUTONOMOUS DISTRICT COUNCIL

1. NET PRESENT VALUE (NPV) ANR PLANTATIONS (20 ha.):

Sl. No.	Location, Village & Range	Area & Year	Species planted	Survival %	Avg. height	Geo-co-ordinates	Comments/Remarks
1.	Palenasora Palenasora Kamalanagar Range	10 ha. 2020-21	<i>Xylia xylocarpa, Mangifera indica and bamboo species.</i>	85%	1.5 ft	22°36'412"N 92°35'575"E	Plantation site is good for the species. Signboard is erected and maintained plantation journal properly. Prevention of fire is much necessary for the success of the plantation.
2.	Mondirasora Mondirasora Kamalanagar Range	10 ha. 2020-21	<i>Xylia xylocarpa, Mangifera indica and bamboo species.</i>	86%	1.5 ft	22°45'5.817"N 92°35'8.71"E	Plantation site is good for the species. Signboard is erected and maintained plantation journal properly. Prevention of fire is much necessary for the success of the plantation.

VII. SUGGESTIONS AND OBSERVATIONS:

- (1) The project could be improved when the funding amount was received in time; since this project is based on a seasonal work. The main problem is slow and insufficient funding.
- (2) More awareness to the Public is needed; awareness fund may be made available.
- (3) The present daily wage rate of the scheme is very less than the actual labour rate in the village. The minimum prevailing labour rate even in remote village is Rs. 500/- per day.
- (4) More technical training is needed for the field staffs for better success of the plantation.
- (5) Through interaction with the Forests staffs, partner organizations and Village council members, it was found that measures adopted for the conservation and protection of plantation is effective and satisfactory. The following measures are adopted for the protection of plantation as and when necessary:-
 - (a) Fire control.
 - (b) Strict vigilante against destruction of plantation.
 - (c) Control of grazing animals.
 - (d) Strict surveillance from encroachment.

(6) **Another observations:**

- (i) All the divisions successfully achieves the aims and objectives of the Project.
- (ii) Local peoples, specially women and lower class are engaged in all sorts of works within their respective project areas.
- (iii) CAMPA projects and programme can be an important measure to recover the fast decreasing forest area and for providing us a better and healthier environment.
- (iv) It is believed that the plantations taken up by the various Divisions and related activities under CAMPA would help us to develop the rural livelihood and to solve the unemployment problems of the State in future.
- (v) This programme creates more awareness in environment protection among the villagers.

VIII. OVERALL GRADING OF THE PROJECT ON A SCALE OF 1 TO 10

QUANTITATIVE ASPECT	Physical	8
	Financial	8.5
QUALITATIVE ASPECT	Survival percentage of the plantation	7
	Health & Growth of the seedlings planted	7.5
	Maintenance of the plantation	7
	Sustainability of the plantation	8
OVERALL GRADING OF THE PROJECT	Outstanding (8-10)	-
	Very Good (5-<8)	7.74 (Very good)
	Good (3-<5)	-
	Poor (<3)	-

Name of Evaluator : K. LALMUANSANGA
Signature :
Designation : President, ASEP
Date : 30th March 2022
Contact Number : 9862017018
Seal :