MANIPUR POLLUTION CONTROL BOARD
IMPHAL WEST DC OFFICE COMPLEX
LAMPHELPAT-795004

GREEN AUDIT CERTIFICATE
Imphal, the 19th June, 2024

No. PCB/56/2022-23/: This is to certify that the Manipur Pollution Control Board, Imphal West DC Office Complex carried out Environmental Green Audit of the campus of the Regional College, Lilong Chajing, Imphal West, Manipur and the related information and data furnished by the College Authority has been verified through physical and field verifications.

The information furnished is found satisfactory. The efforts of the college authority, teachers and the students are appreciated and commendable.

19/6/24

(Dr Usham Deben Singh)
For Member Secretary
Manipur Polllution Control Board

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REGIONAL COLLEGE, LILONG CHAJING

IMPHAL WEST, MANIPUR-795130

GREEN AUDIT REPORT 2022-2023

Prepared by

MANIPUR POLLUTION CONTROL BOARD

ACKNOWLEDGEMENT

Manipur Pollution Control Board (MPCB) would like to thank the Audit team of Regional College for giving us this task of Green Audit. We appreciate the co-operation of the team members for successful completion of the assessment.

We would like to thank the following Team Members of MPCB:

1. Mr. M. Bangajit Singh, AEE, MPCB
2. Mr. N Honeyrani Devi, Environment Scientist, MPCB
3. Mr. R.K. Santosh Singh, Senior Scientific Assistant, MPCB
4. Mr. T Umananda Sharma, Sample Collector, MPCB

We would also like to thank ***Dr. Leimapokpam Shivadutta Singh*** – Coordinator, *IQAC*, and his team for their tremendous support and active involvement in data collection and field surveys.

Further, we would like to thank the following Audit Members of Regional College:

1. Dr. O. Avijeet Singh - Member IQAC
2. Dr. Aheibam Jeeran Singh - Member IQAC
3. E. Bishorjit Singh - Member IQAC
4. Ningthoujam Teresarani Devi - Member IQAC
5. Gyaneshori Yumnam - Member IQAC
6. Khundrakpam Aditya Devi - Member IQAC

Lastly, we would like to thank **Dr. M. Memtombi Devi**, Principal and **Yumnam Sunil Singh**, Secretary of the Governing Body, Regional College for giving us the opportunity to assess the environmental performance of the college.

Bangajit
AEE, MPCB

DISCLAIMER

The report of Green Audit for Regional College is prepared by the Manipur Pollution Control Board (MPCB) using input data that was provided by college representatives and the expert team's best judgement. This information acquired has been used in good faith to create the facts in this report with reasonable precaution in its compilation.

It further states that the conclusions are based on the best estimates available and the Audit team disclaims all responsibility for any implied or express representations, warranties or undertakings made in this report. Additionally, the Audit team accepts no responsibility for any direct or indirect losses resulting from the use of the data, forecasts or statements in the report.

All information about the Institution that is not already in the public domain, required by law or any third party shall not be disclose by MPCB and its employees. Individual confidentiality commitments have been completed by MPCB employees and accreditation bodies, who will only obtain sensitive information when necessary.

Signature

Sangajit
AEE, MPCB

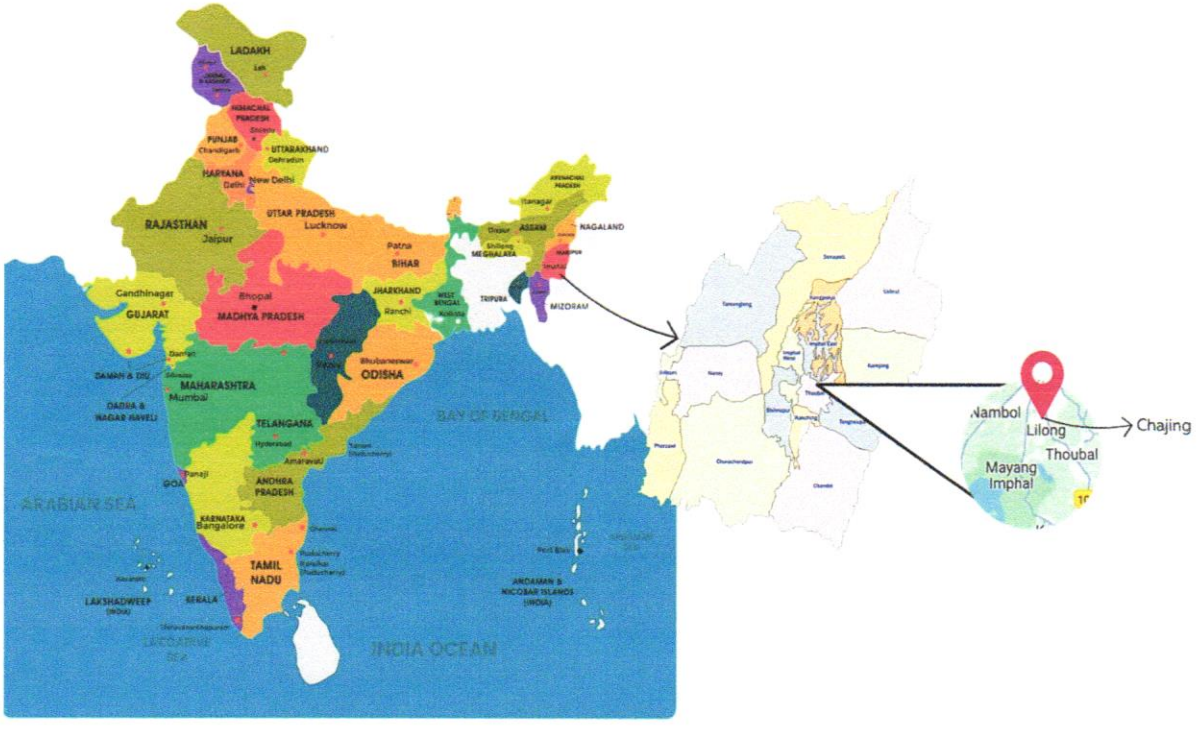
GREEN AUDIT REPORT:

About the college

Regional college, an aided college affiliated to Manipur University is situated at Lilong Chajing, Imphal West district, Manipur. The college is about 13.0 km away from the State Capital-Imphal city and takes around 25 minutes to reach the campus via NH-102. With the beautiful scenic view of Heibok Hill in North-west and a football field having an open gallery at the main entrance, the college campus has an eco-friendly environment. The College was established in the year 1986 under Societies Registration Act XXI of 1860, as a co-educational institution with great enthusiasm by the local people, educationalists and social workers with an aim to improve the educational quality of the surrounding people.

With free Wifi campus, it offers multidisciplinary courses providing undergraduate programmes in Arts and Science. The Campus has well equipped laboratories, library, classrooms and an indoor stadium. The college also has a separate girls' hostel, girls' common room, administrative blocks and separate washrooms for boys, girls and the staffs. The college too provides canteen facilities and vehicle shed.

Location of Regional College:



Geo Coordinates from Google maps: 24.7243° N, 93.9329°

1. **Land use:**

Regional college campus has 7.5 acres of land consisting of administrative block, classrooms, laboratory rooms, indoor stadium, canteen, botanical gardens, ponds, girls' hostel, vehicle shed, girls' common room, staff room and fallow land. The details of land use pattern are listed below:

Category	Area in Sq. Metres	Area in Acres
Girls' Hostel	477.99	0.12
Library	133.78	0.03
Canteen	104.52	0.03
Washrooms	45.99	0.01
Administrative Block and Staff room	202.90	0.05
Indoor Stadium	917.88	0.23
Laboratories	433.94	0.11
Classrooms	889.12	0.22
New building	390.19	0.10
Botanical Garden 1	362.32	0.09
Botanical Garden 2	170.94	0.04
Vehicle Shed	123.56	0.03
Waterbodies	2214.81	0.55
Pucca Dustbin	20.88	0.01
Football field & Fallow/Open land	23863.26	5.88
Total	30,352.08	7.5

2. Biodiversity:

A rich variety of flora and fauna is found on the college campus. It accommodates more than 20 species of plants and animals. These different species of plants and animals form a part of the college ecosystem. The lists of the diverse flora and fauna are reflected below.

List of fauna-

Sl no.	Scientific name	Family	Common name	Local name
1	*Phyllanthus emblica*	Phyllanthaceae	Indiangooseberry	Heikru
2	*Psidium guajava L.*	Myrtaceae	Guava	Pungdon
3	*Magnolia champaca*	Magnoliaceae	Champak	Leihao
4	*Callistemon linearis DC.*	Myrtaceae	Bottle brush	Likli lei
5	*Citrus maxima*	Rutaceae	Pomelo	Nobab
6	*Ficus elastica*	Euphorbiaceae	Rubber tree	Rubber pambi
7	*Prunus sp.*	Rosaceae	Plum	Heikha
8	*Cedrela toona*	Meliaceae	Red cedar	Tairen
9	*Saraka indica*	Fabaceae	Ashoka tree	Ashoka
10	*Spondiasmangifera*	Anacardiaceae	Wild mango	Heining
11	*Ixora coccineae*	Rubiaceae	Jungle flame ixora	Hameibon
12	*Elaeocarpus floribundus*	Elaeocarpaceae	Indian Olive	Chorphon
13	*Spathodeacampanulata*	Bignoniaceae	Fountain tree	
14	*Platycladusorientalis*	Cupressaceae	Oriental arborvitae	Lairikheibi mana
15	*Mangifira indica*	Ancardiaceae	Mango	Heinous
16	*Plumeriaacutifolia*	Apocynacaeae	Pagoda tree	Khageleihao
17	*Citrus sp.*	Rutaceae	Lemon	Champra

Herbs and Shrubs:

Sl no.	Scientific name	Family	Common name	Local name
1.	*Clerodendrum serratum*	Lamiaceae	Wild jasmine	Moirangkhanam
2.	*Manihot esculenta*	Euphorbiaceae	Bitter cassava	U-mangra
3.	*Alsinia allughas*	Zingiberaceae	Tara	Poollei
4.	*Alsinia galanga*	Zingiberaceae	Shell ginger	Kanghu
5.	*Dendrobeummoschatum*	Orchidaceae	Orchid	Ingellei
6.	*Curcuma angustifolia*	Zingiberaceae	East Indian arrow-root	Yaipan
7.	*Hedychium flarum*	Zingiberaceae	Yellow ginger lily	Takhelei
8.	*Litsea polyantha*	Lauraceae	Soft bollygum	Tumitta
9.	*Uetextrifolia*	Lamiaceae	Simple leaf chasetree	Urikshibi
10.	*Nerium indicum*	Apocynaceae	Indian oleander	Kabirei
11.	*Dendobrium orchid*	Orchidaceae	Yellow orchid	Khonggunmelei
12.	*Hibiscus rera sinensis*	Malvaceae	China rose	Jubakusoom
13.	*Caesalpinia pulcherrima*	Fabaceae	Peacock flower	Krishna chura
14.	*Gardenia florida*	Rubiaceae	Cape jasmine	Koboklei
15.	*Bougainvillea spectabilis*	Nyctaginaceae	Bougainvillea	Cherei
16.	*Codonacanthus pauciflorus*	Acanthaceae		Nongpoklangthrei
17.	*Artemisia maritima*	Asteraceae	Sea wormwood	Laibakngou
18.	*Phlogacanthus thyrsiflormis curriflorus*	Acanthaceae		Nongmangkha

19.	*Zanthoxylum acanthopodium*	Rutaceae	Winged leaf prickly ash	Mukthrubi
20.	*Phlogacanthus curviflorus*	Acanthaceae	Curved flower flaming	Nongmangkhaasinbi
21.	*Phlogacanthus jenkinsii*	Acanthaceae	Nongmangkha	Nongmangkha

List of Fauna:

Fishes:

Sl no.	**Scientific Name**	**Common Name**	**Local Name**
1.	*Labeorohita*	Rohu	Rou
2.	*Catlacatla*	Catla	Bao
3.	*Cirrhinusmrigala*	Mrigala	Mrigal
4.	*Ctenopharyngodonidella*	Grass carp	Napi Chabi
5.	*Hypophthalmichthys molitrix*	Silver carp	Silver
6.	*Cyprinus carpio*	Common carp	Puklaobi
7.	*Tilapia mossambicus*	Tilapia	Tunghanbi
8.	*Osteobramabelangeri*	Pengba	Pengba
9.	*Banganadero*	Kalabans	Ngaton/ khabak
10.	*Anabas testudineus*	Climbing Perch	Ukabi
11.	*Channa punctatus*	Snakehead	NgamuBogra
12.	*Channa gachua*	Snakehead	Meitei Ngamu
13.	*Esomusdanricus*	Darkina	Ngasang
14.	*Puntius sophore*	Pool barb	Phabounga
15.	*Puntius chola*	Swamp barb	Phabounga
16.	*Amblypharyngodon mola*	Mola	Mukkanga
17.	*Trichogasterfasciata*	Gourami (Banded)	Ngapemma
18.	*Trichogasterlabiosa*	Thicklippedgourami	Ngapemma

Insects and Reptiles:

Sl no.	Scientific name	Common name	Local name
1.	*Order Anisoptera*	Dragonfly	Charang
2.	*Order lepidoptera*	Butterfly	Kurak
3.	*Pila globose*	Apple snail	Tharoi
4.	*Pheretimaposyhuma*	Earthworm	Tinthrok
5.	*Hirudinaria granulosa*	Leech	Tinfa
6.	*Caelifera sp.*	Grasshopper	Koujeng
7.	*Order coleoptera*	Beetles	Kangchet
8.	*Phasmids*	Stick insect	Cheitektin
9.	*Order hymenoptero*	Bees and wasps	Khoi
10.	*Rana tigrine*	Frog	Moreh hangoi
11.	*Bufo melanostictus*	Toad	Hangoiborabi
12.	*Hyla*	Tree frog	Hangoitangsang
13.	*Bungarus*	Kraits	Tanglei
14.	*Naja naja*	Cobra	Kharou
15.	*Ampheismastolatum*	Buff striped keelback	Lilha
16.	*Hemidactylus*	Wall lizard	Chum
17.	*Calotes versicolor*	Calotes	Numityungbi chum
18.	*Rattus rattus*	Rat	Uchi
19.	*Mus musculus*	Mice	Bora uchi

Birds:

Sl no.	Scientific name	Common name	Local name
1.	*Corvus sps*	Crow	Kwak
2.	*Sturnus tristis*	Mynah	Chonga
3.	*Amaurornisphoenicurus*	White breasted waterhen	Urengkonthou
4.	*Hirundo rustica*	Swallow	Sembrang
5.	*Columba livia*	Pigeon	Sendrang
6.	*Pyenonotussp*	Bulbus	Khoining
7.	Passerdomesticus	House sparrow	Sendrang

3. **Pollution:**

Regional College has taken up several measures to combat the ongoing environmental issue of global warming and carbon emissions. For instance, this institution from its establishment has planted several trees and continues till date with plantation drives in the college premises as well as the surrounding areas. The campus is home to various species of plants and trees thereby creating a clean and green environment and maintaining a moderate temperature of the surrounding. As an initiative to create a plastic free environment, plastic bottle banks are kept around the college campus. A proper mechanism for disposal of waste is developed in the college. In order to maintain the waste generation from various sources, a dumping site is also constructed by the authorities inside the campus. Wastes from this site is regularly collected by the Municipal council. With its strategic location along with an open gallery football field at the entrance, the college campus experiences minimum noise pollution from surrounding areas.

4. **Water resources and management:**

A total of four rooftop water tanks are present in the college. Two tanks are placed above the administrative block of the college. Another one is placed above the girls' hostel. An underground tank is also constructed for storing water in the new building. A tank is constructed in the science block for the harvesting of rainwater. Water from these sources is used in the washrooms, canteen, laboratories and for gardening. Two ponds are dug on eastern side of the college. These ponds are used to collect rainwater

diverted from the rooftops of the college buildings. Water from these ponds is used for pisciculture and various other activities.

Sl no.	Water tank	Water capacity	Quantity
1	Rooftop north block	500L	2
2	Underground	16,560L	1
3	Rooftop south block	1000L	2
4	Water harvesting tank (science block)	500L	1
5.	Water harvesting barrel	500L	1

5. Energy Consumption and Management:

LED blubs are used throughout the campus to conserve energy and solar plates are installed as an alternate form of energy.

The electrical equipment's used in the college campus are listed below:

Sl no.	Equipment Name	Quantity
1	Generator	2
2	Fan	30 approx
3	Solar plate	10
4	Water pump	3
5	LED lights	110
7	Computers	2
8	Smart board	2
10	Wifi router	2

6. **Waste Disposal and Management:**
   i. Paint containers used to paint the college are repurposed to make dustbins for the college.
   ii. Colour coded dustbins are placed in the college campus for segregation of bio degradable and non-biodegradable waste. The green bins are meant for biodegradable and the blue bins are meant for non-biodegradable waste.
   iii. A pucca dumping site with three compartments is constructed for separate disposal of biodegradable, non-biodegradable and e-waste.
   iv. Wastes generated in the campus are regularly collected by the Municipal Council.
   v. Plastic bottle banks are placed inside the campus for ease of collection and to achieve a plastic free environment.
   vi. A proper drainage system is constructed in the campus and outlets from different laboratories are let through this drainage.

7. **Environmental Awareness:**
   i. Regular tree plantations are conducted so as to an create eco-friendly campus.
   ii. Workshops and seminars are organized to create environmental awareness.
   iii. A paper titled "Environmental Science" is compulsory for all 2nd semester undergraduate students according to New Education Policy (NEP) 2022.
   iv. Cleanliness drives are conducted in and around the Campus.

8. **Mitigation and Management Practices:**
   - Tree plantation drives:
     Plantation drives are regularly carried out inside and outside the college campus on important days and occasions. The college has two botanical gardens housing varieties of trees and plants. The first garden is well laid out with seating areas under the tree shades. The second garden has numerous medicinal herbs and shrubs.

   - Workshops and seminars:
     i. A one-day national seminar on the topic "Catch the Rain- Rainwater Harvesting" 2023 was organized on 18th February 2023.
     ii. National Science Day was observed on 28thFebruary 2023 with the theme "Global science& Global Wellbeing."

   - Water conservation:
     i. A large underground tank is constructed for storing for various purposes in the college premises.

ii. A rain water harvesting tank is constructed in the Science Block. Water from this tank is used for gardening purposes in the campus.
iii. Rooftops rainwater is diverted towards the ponds for harvesting rainwater for future use.

- Cleanliness drive:
  Regular social services are conducted in the college campus by the students, teaching and non-teaching staff.

- Energy conversation:
  i. Solar plates of capacity 12V are installed on the roof of the Administrative Block of the college.
  ii. LED blubs are used throughout the college campus to reduce energy consumption.

- Waste management:
  i. A three-compartment pucca dumping site is constructed for deposition of biodegradable, non-degradable and e-waste.
  ii. A ban on single use plastic is imposed in the entire campus.

9. Recommendations:

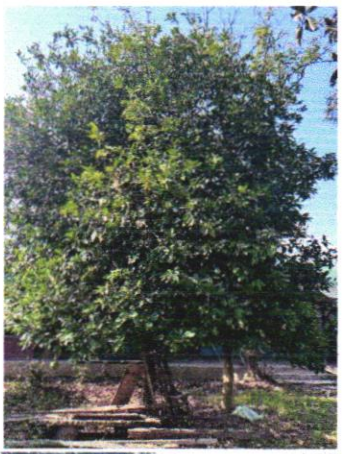
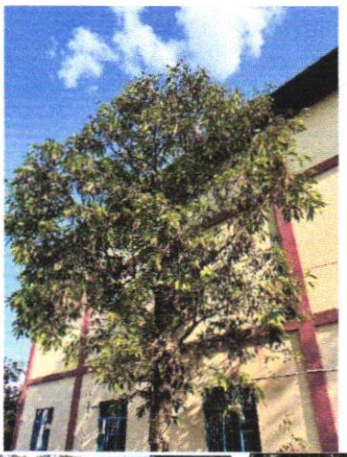
i. Disabled-friendly washrooms should be constructed.
ii. More fruit bearing trees and medicinal plants should be planted in and around the campus.
iii. There is a need for a bio-compost unit in the campus.
iv. There should be a more proper disposal of chemical waste.
v. Environmental Club should be form.
vi. Green paints should be applied on the tin roofs.
vii. More solar plates should be installed in the campus.
viii. The water harvesting areas should be increased as to conserve more rainwater.
ix. More tree plantation should be encouraged in and around the campus.
x. Solid waste should be recycled at the maximum level.

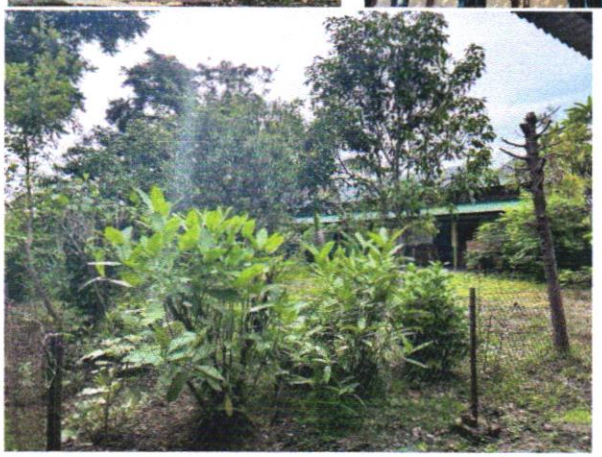
Photos:

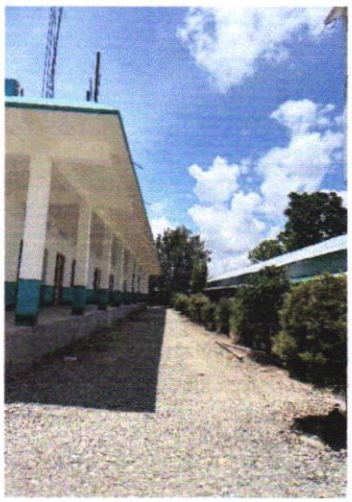

REGULAR PROGRAMME
REGIONAL COLLEGE, LILONG, IMPHAL WEST
GPS Map Camera
Lilong Chajing, Manipur, India
PWFM+P5F, Awang Leikai, Lilong Chajing, Manipur 795130, India
Lat 24.724216°
Long 93.932797°
26/02/23 10:29 AM GMT +05:30
Google


NATIONAL SCIENCE DAY CELEBRATION
DEPARTMENT OF PHYSICS


Regional College NSS Unit II
Celebrates
Van Mahotsav
Tree Plantation Programme



REGULAR PROGRAMME
REGIONAL COLLEGE NSS UNIT II
Azadi Ka Amrit Mahotsav
National Cleanliness Campaign


BIODEGRADABLE
NON BIODEGRADABLE


PLASTIC BOTTLE BANK


PLEASE
SWITCH OFF
LIGHT & FAN
WHEN
NOT IN USE
SAVE ENERGY