



# GREEN AUDIT REPORT

## Academic Year 2021 - 2023



EARTH



WATER



AIR



LIGHT



SPACE



# PACHHUNGA UNIVERSITY COLLEGE



Prepared by :



**GREEN MENTORS**  
Powered by Law of Nature



## AUDITOR'S VIEW

Green Mentors is proud to Present Green College Audit Report & Green College Accreditation Certificate to the Pachhunga University College (PUC) affiliated with Mizoram University.

This report is prepared based on information provided by the PUC Green Auditing Team, in the view of addressing Five Elements of Nature through education and incorporating sustainability in its Teaching-Learning Practices.

1. **PRITHVI (Earth)** - Biodiversity Landscaping & Built-up Space
2. **JAL (Water)** - Water Management Practices
3. **VAYU (Air)** - Air Quality Level within the Campus
4. **AKASH (Sky)** - Application of Sustainable Technologies
5. **AGNI (Energy)** - Energy Management Practices

Green University Auditing and Accreditation is a Set of Global Sustainability Indicators containing Governance & Academic, Building Design and Landscaping, Water Management Practices, Energy Uses & Saving Practices, Air Quality Level, Health & Hygiene Practices & Sustainable Resource Utilization for the Green Learning Spaces.

Each Green College Auditing & Accreditation Indicator is in turn measured against a set of the Global Standard for sustainable learning spaces, auditing and accreditation.

Green Mentors is proud to inform you that, PUC has achieved **440** Points out of **500** Points & earned Platinum Ranking in the Global Green College Accreditation Standards for the Period of Academic Year 2021-2023.

Green Mentors is also proud to announce that PUC is the First Platinum Ranking Accredited Green College that accepted accountability to the pupil and responsibility to the planet in the North Eastern Region of India.

*Virendra*  
14-12-2021

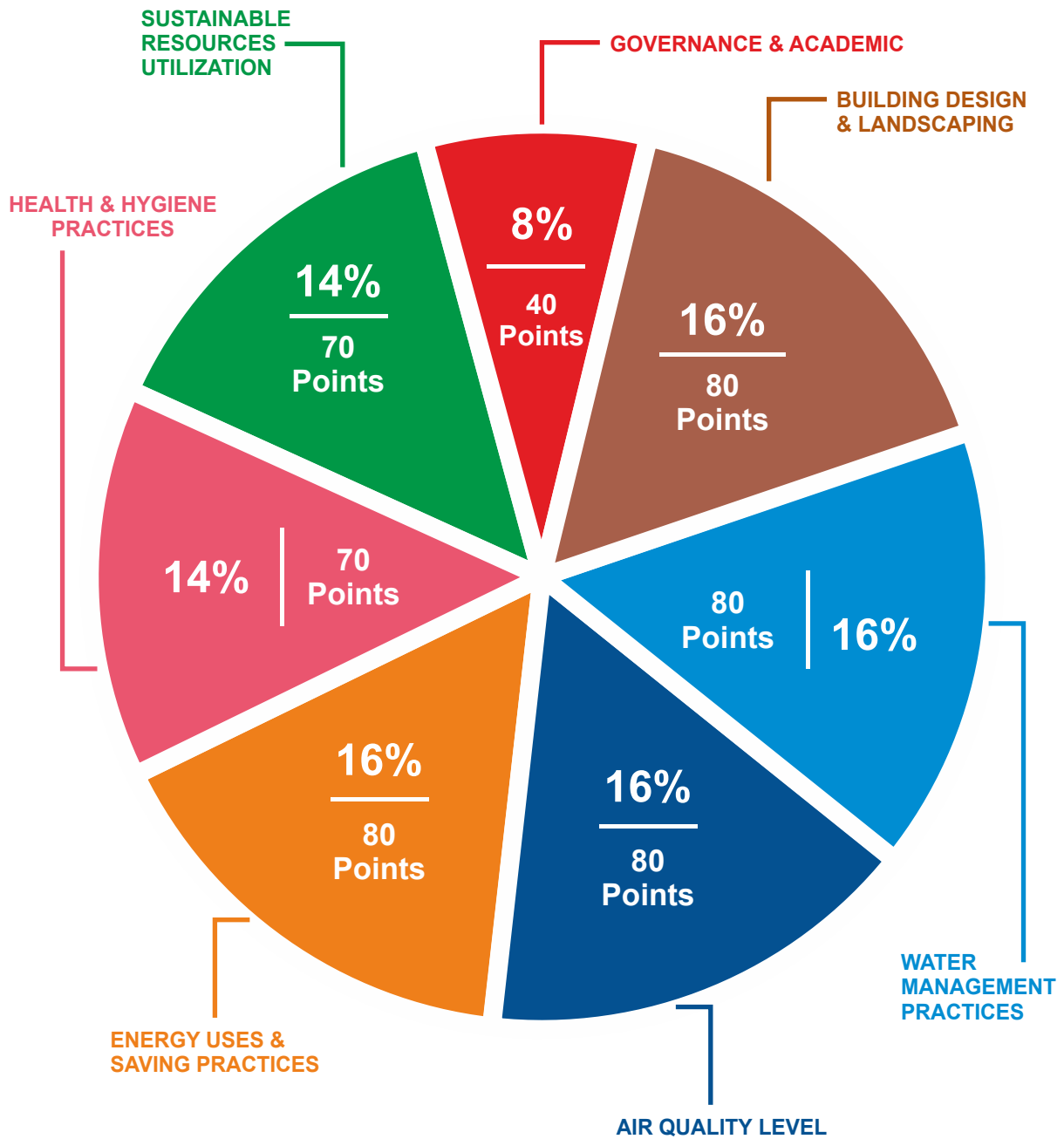
**Virendra Rawat**  
Director,  
Green Mentors



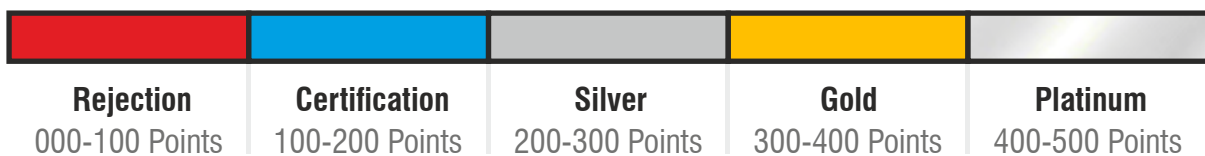
**GOOD FOR PUPIL & GOOD FOR PLANET**



## Sustainability Weightage of Assessment Areas



### Certification Level







**ACCREDITED CERTIFICATE**

ACCREDITATION

 EARTH

 WATER

 AIR

 LIGHT

 SPACE


CERTIFICATE

 TRANSPORT

 HYGIENE

 EDUCATION

 SAFETY

 INNOVATION



PLATINUM

2021-2023

PACHHUNGA UNIVERSITY COLLEGE

Aizawl, Mizoram

has successfully achieved the Green College Accreditation Standards,  
designed & defined by Green Mentors, & hereby Accredited as a

GREEN COLLEGE

in Platinum Ranking.



Virendra Rawat

Director, Green Mentors



GREEN MENTORS

Powered by Law of Nature



This Certificate is issued on 14<sup>th</sup> December, 2021 & Valid till the Academic Year 2023

## Brief Introduction of PUC

Pachhunga University College formerly known as Aijal College or Pachhunga Memorial Government College or Pachhunga College was established on 15th August 1958 as an intermediate college of arts (equivalent of higher secondary education) and later expanded to bachelor degrees in arts, commerce and science.

PUC is located in the land of Blue Mountains, surrounded by gushing rivers and high sparkling waterfalls is the oldest and largest college in Mizoram, by enrolment and campus size.

As an A+ NAAC Ranked Institution based in Mizoram has been awarded as UGC College with Potential for Excellence, Mentor Institute under UGC Paramarsh Scheme. PUC is supported by the Department of Biotechnology Government of India. PUC is also featured in the 101-150 Rank Band of the NIRF Ranking System.

### Affiliation

Pachhunga University College (PUC) is the only constituent college of Mizoram University, a central university established by an Act of Parliament of India.

### Academic Program

PUC presently offers 23 Undergraduate programs in Arts, Science, Commerce, and Management 4 Postgraduate programs i.e. Life Science, Geophysics, Mizo, and Philosophy.

The college has an extensive Research and Instrumentation Centre, Physical Sciences Research Centre, Advanced Level Biotech Hub, Internet Resource Centre, Language and Communications Development Centre, Computer Laboratories, and a state-of-the-art Library.

PUC also offers : Diploma Course in Mushroom Cultivation & Certificate course in Mizo traditional Handicraft Vermicompost Technology, Housekeeping, 'Repair & maintenance of powersupply, inverter & UPS.

### Achievements

- 1<sup>st</sup> Prize Awards for donating the most units of blood by an educational institution in the state of Mizoram for 10 years.
- 3 NSS National Award in 2016
- Mizoram University Varsity Sports Overall Champion for 5 years.
- Gold Medalists in the Mizoram University Under-Graduate Final Exams (Arts and Science stream) for 10 years.
- PUC has also taken immense steps towards serving the community through various extension programs without failing to establish an academic environment within the campus and also achieving academic excellence.

## GOVERNANCE & ACADEMIC



### 1. Governance

Governance in PUC is driven by State and Statutes. Governing body of PUC is committed to its purpose, dedicated to serve the interests of all stakeholders including environment.

Governing Body of PUC also follows well-informed decision-making, transparency in teaching learning practices & accountability in the performance and use of human potential.



**Prof. K.R.S. Sambasiva Rao**  
Vice Chancellor, PUC

Pachhunga University College is the only constituent college of Mizoram University and is therefore under the direct supervision of the University.

The Vice Chancellor is the topmost authority in terms of governance followed by the Registrar and the college Principal.

In the college, the college Principal is the main authority and the entire administrative process of the college falls within his jurisdiction.

However, there are several committees constituted by the college Principal which directly displays the effective management practice of the college. The college currently has 17 committees, 9 cells and 9 clubs.

The college Principal employs a strategic and effective system of decentralization and participative management by way of forming different committees and cells.

The functioning of these committees is directly monitored by the IQAC which is chaired by the college Principal. All committees, cells and clubs are required to submit an Annual Activity Report (AAR) to the IQAC for performance assessment.

## GOVERNANCE & ACADEMIC

The existence of different committees allows the college Principal to gather useful information and important issues to effectively manage the institution while also serving as a useful system for delegation of responsibilities.

The different committees and cells do seek permission from the college Principal (if the college Principal is not the Chairman) before performing any action within the campus or elsewhere. The different committees and cells provide opportunities for the voices and opinions of the teachers to be heard in the management system of the college.

Active participation in these committees ensures the collective participation and also the decentralization of management responsibilities.

The Vice Principal of the College is also given different responsibilities such as being Chairman of certain committees. Members of the committees and cells include not only the teachers of the college but also the non-teaching staff and students' representation. This inclusion ensures the participation of the stakeholders especially towards the management of the institution.

The college has a Proctor who is in-charge of looking after the campus with regards to security. The college's hostels are looked after on site by the Hostel wardens. The college's library is managed by the Assistant Librarian. Decentralization of leadership is also visible in the Students Union and Class Representatives elections.

The college appoints RO and ARO to conduct the Election from among the teachers and CR elections are conducted by the Students Union.



## GOVERNANCE & ACADEMIC

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### 2. Leadership

Prof. H. Lalthanzara is a renowned Zoologist Principal of Pachhunga University College plays a pivotal role in making the PUC a Responsible College in the State of Mizoram.

He is a lifelong learner and constantly makes efforts towards building the nation through responsible education.

Prof. H. Lalthanzara is passionate about his vision and plans towards taking PUC as a champion of responsible education in the State of Mizoram.

#### ■ Brief Profile of Principal



**Prof. H. Lalthanzara**

Prof. H. Lalthanzara is an alumni of PUC completed his M.Sc. (Zoology) from the North-Eastern Hill University, Shillong in 1999. He obtained his Ph.D. from Mizoram University and has research interests in the science of earthworms, Animal Ecology & Diversity and Soil faunal diversity.

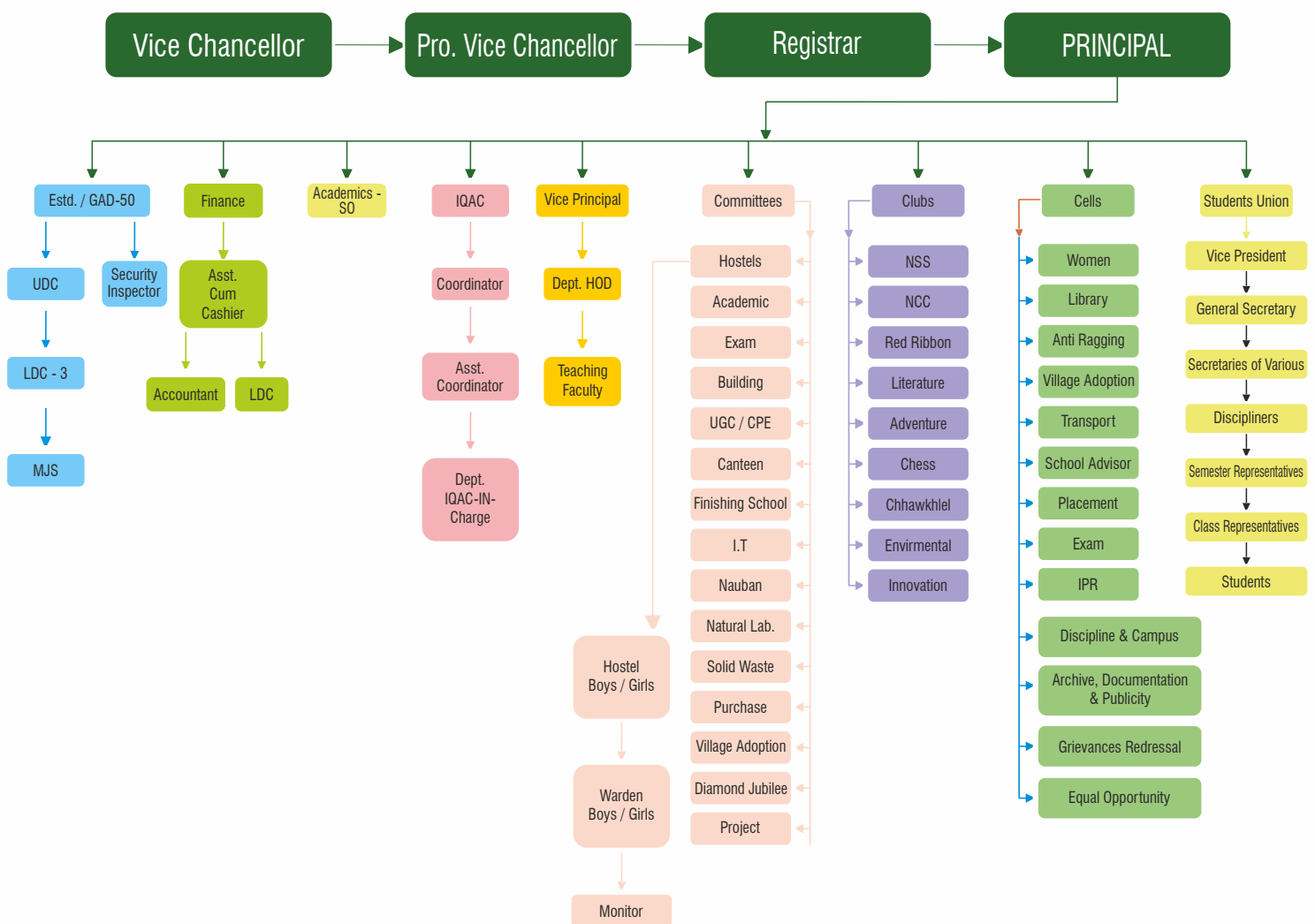
He joined PUC as an Assistant Professor in 2005 and progressed to the position of Professor till his present role as the administrative head of the College since March, 2021.

Prof. H. Lalthanzara has more than 50 research publications in reputed journals, including the journal Science and Scientific Data from his outstanding research works on earthworm, bird, fish and animal diversities, especially focused on the North Eastern region of India. He has published two books, Popular Birds of Mizoram and Current Trends of Biodiversity Research in Mizoram, and also served as a guest Editor for the Journal of Environmental Biology. He has also presented several papers and lectures in seminars and conferences at both the national and international levels. He is a member of several Boards, Councils and Committees of the Mizoram State Government and Mizoram University.



**GOVERNANCE & ACADEMIC**

Prof. H. Lalthanzara has coordinated and completed several scientific projects funded from various funding agencies, including DST-SERB, UGC, DBT, Govt. of Mizoram and NEC, and has scientific collaborations with researchers from both national and international institutions.



## GOVERNANCE & ACADEMIC

### List of Teaching Staff

Sr. No.	Position	Name	Total
1	Professors	Dr. L.H.Chhuanawma, Dr. Rinpari Ralte, Dr. K.Lalchhandama, Dr. H.Lalthanzara	04
2	Associate Professors	Dr. Lalbiaksangi Chongthu, Dr.H.S.Thapa, Shri Lallungmuana, Shri HL.Lawmzuala, Dr. Lalrammawii, Shri HS.Lalsangpuia, Dr. Rualzakhumi, Dr. Lalthankungi, Dr. Margaret Z.Khiangte, Dr. Grace Skariah, Dr. K.Laldailova, Dr. Henry Lalmawizuala, Dr. Saitluanga, Dr. R.Ramthara, Dr. L.P.Lalduhawma, Dr. Bobby Beingachhi, Dr. H.Lalruatsanga, Dr. J.Lalvohbika, Dr. Vanlalhruaii Ralte, Dr. Raghvendu Pathak, Dr. Lalramliana, Smt. Lalsangkimi Sailo, Dr. Thanhmingliana, Dr. C.Lalhriatpuia, Dr. Shiv Raj Gurung, Dr. Anupam Kumar, Dr. Lalhriatzuala, Dr. Saichampuii Sailo, Dr.David Zothansanga, Dr. Lalhunthara, Dr. HC.Lalchhuanawma, Dr. Lalthakima, Dr. Rajesh Kumar, Dr. Ghanashyam Deka, Dr.Chanambam Nalini Devi	35
3	Assistant Professors	Dr. Lalbiaksangi Chongthu, Dr.H.S.Thapa, Shri Lallungmuana, Shri H L.Lawmzuala, Dr. Lalrammawii, Shri HS.Lalsangpuia, Dr. Rualzakhumi, Dr. Lalthankungi, Dr. Margaret Z.Khiangte, Dr. Grace Skariah, Dr. K.Laldailova, Dr. Henry Lalmawizuala, Dr. Saitluanga, Dr. R.Ramthara, Dr. L.P.Lalduhawma, Dr. Bobby Beingachhi, Dr. H.Lalruatsanga, Dr. Lalthakima, Dr. Vanlalhruaii Ralte, Dr. Raghvendu Pathak, Dr. Lalhunthara, Smt. Lalsangkimi Sailo, Dr. Thanhmingliana, Dr. C.Lalhriatpuia, Dr. Shiv Raj Gurung, Dr. Anupam Kumar, Dr. Lalhriatzuala, Dr. Saichampuii Sailo, Dr. David Zothansanga, Dr. Lalramliana, Dr. HC.Lalchhuanawma, Dr. Ghanashyam Deka, Dr. J.Lalvohbika, Dr. Rajesh Kumar, Dr.Chanambam Nalini Devi	77
Total			116



**GOVERNANCE & ACADEMIC**

**List of Non Teaching Staff**

Rothangliana Zirsangliana **Vannunzira** Annie Zomuanpuii  
**P.C.Lalthianghlma**  
Malsawmtluanga Lalnunnguri Sarban Kumar Chhetri  
Lallianpuii Chhakchhuak  
**Chuauthanga** **R.Vanlalhriata** Juliana Vanrengpuii  
K.Lahlupuii P.C.Vanlalvena  
Lalsawikima **Ramdinthara** Zothanpari  
**C.Laltlanchhuaha**  
C.Thansanga C.Lallawmkima Darchhawna **Chawngthankima**  
J.Muansanga Vanhmingliani  
**P.C.Lalnunkimi** V.L.Chhanhima Hranleh  
**Samuel Thawmte** C.Malsawmkima  
Hmingthansanga H.Biakmawia **K.Lalmuansanga**  
Zaihlunchhungi H.Lalpianmawia  
Lalmuanawma Fanai J.Lalthasiama Rosie Lalnuntluangi Mualchin  
**Lalengzama** Jesper Vanlalmuanpuia  
Lalhmingliani Khiangte  
**F.Zadawla** Lalbiaka Hnamte Amos VL Vensanga Hnamte  
Laldinthara Hnamte R.Lalthangpuii **Lalsawmliana** C.Lalringgheta  
Benjamin Lalruata P.C.Lalpianmawia Lalramthara Pachuau **Laldingliana**  
Zothanzuala  
**Darrothanga Lalremruata** Lalngaihthanga Lalngihhlova  
R.Lalbiakthuama **Rothuamliani** Lallawmkima Zote  
**Dr Lalthanmawii Sailo** Zoremdeka **R.D.Lalthansanga** Laltanpuia  
Vanlaltluanga P.L.Ringliana Lalhmangaihzuala Dengvunga Barry Lalengkima  
Zosangliani **P.C.Lalhruaitluanga** Vanlalsanga R.Lalrinliana  
Jacinta Zoramchhani K.Lalnunzira **Lalremruati** Zion Lalfakmawia



## GOVERNANCE & ACADEMIC

### LIST OF PROGRAMME

Programme	No.
Certificate	04
Diploma	01
Under-Graduate	23
Post-Graduate	04
Research/Ph.D	01

### NUMBER OF STUDENTS

Course	No. of Students
Under-Graduate	3023
Post-Graduate	88
Ph.D.	10
<b>Total</b>	<b>3121</b>





**GOVERNANCE & ACADEMIC**

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### 3. Sustainability Commitment

PUC strongly accepts the "accountability to the future"—a special role and a special responsibility in confronting the challenges of climate change and sustainability.

Vision of PUC is rooted in its shared responsibility to build and operate a campus that contributes to the well-being of every member of its community—and ultimately to the health of the planet.



## GOVERNANCE & ACADEMIC



Ph – (0389) 2322257/2327095 Fax No – (0389) 2312312  
Email : pachhunganivcollege@gmail.com

principal@pucollege.edu.in

Web : www.pucollege.edu.in

**PACHHUNGA UNIVERSITY COLLEGE**  
**(A CONSTITUENT COLLEGE OF MIZORAM UNIVERSITY)**  
**NAAC Accredited A+ Institution**  
**AIZAWAL - 796001 : MIZORAM, INDIA**

No. PUC/Principal/PPB/2021

Dated Aizawl the 28<sup>th</sup> October, 2021

### SUSTAINABILITY STATEMENT

I, on behalf of Pachhunga University College, declare that we strictly follow the existing norms of sustainability involving social, environmental and economic dimensions for any initiatives undertaken in the college. We take appropriate steps for reduction of all types of waste especially plastic and paper. Moreover, we take further measures to minimise energy consumption and encourage reuse, recycling and the disposal of non-biodegradable waste.

Pachhunga University College also undertakes various actions to make litter and plastic free campus for a cleaner environment. Moreover, we have implemented the utilization of green energy by installing solar panels on our roof top, solar street lights. Rain water is also harvested during rainy season by constructing appropriate storage tanks. Furthermore, suitable steps for preservation of large area of forest cover which houses a high diversity of plant species are being undertaken continuously. Finally, the college is firmly committed to improve its performance continually with strong emphasis on the protection of our environment.



**(PROF. H. LALTHANZARA)**  
**Principal**



## GOVERNANCE & ACADEMIC

Head of the Departments of Economics, Education, English, Geography, History, Mathematics, Mizo, Philosophy, Political Science, Psychology, Public Administration, Sociology, Biotechnology, Botany, Chemistry, Environmental Science, Geology, Physics, Statistics, Zoology, Business Administration, Philosophy, Geo-Physics, and Life Science also declared is sustainability policy towards minimizing the impact on the local environment.





**GOVERNANCE & ACADEMIC**

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**4. Innovative Practices**

Innovation is an application and implementation of creativity; thus, creativity and innovation are inseparably related, which reflects their complementarity in providing what is new and adding value. Post Graduate & Research Programs of PUC are driven by the innovation

HoDs of different academic departments brings innovation into learning opportunities through collaboration with exceptional researchers, innovators & entrepreneurs.



Cumulative Score

**37/40**





## BUILDING DESIGN & LANDSCAPING



### 1. Local Building Regulations

Green building laws and codes in our country are voluntary. A green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building. Built-up learning spaces of PUC meet all local building laws.

The Aizawl Municipal Corporation Building Regulations-2012 and The Aizawl Municipal Corporation Building Regulations (Amendment) 2019 have regulated the construction of buildings in the AMC area since 2012.

The newly constructed buildings which have come up after 2012 have conformed to the AMC Building regulations and approvals granted by the AMC. Most of the academic buildings and the establishment offices were constructed before the said regulation came into being. The area falls under the seismic zone-V, the highest risk zone.

Keeping this in view, the scale and volume of the structures have been kept as low as possible and high rise structure is avoided. The structural designs have been conformed to the IS CODE. A rainwater harvesting system is incorporated into the system.

The design has also adhered to the green building concept including more shaded areas, elimination of light trespass, local species of plants are grown, solar energy will be harvested, the nursery will be placed near the building, gender sensitivity concept, disaster resilience, and green building materials are incorporated in the design.

**BUILDING DESIGN & LANDSCAPING**





## BUILDING DESIGN & LANDSCAPING

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### 2. Top-Soil Preservation

Top-soil is the uppermost layer of soil capable of growing and supporting vegetation. Soil conservation is the prevention of loss of the top most layer of the soil from erosion or prevention of reduced fertility caused by over usage, acidification, salinization or other chemical soil contamination.

PUC have taken proactive measures towards top-soil conservation in the campus, through regular aeration that allows nutrient to reach the roots of plants, filling the holes created by aeration, indigenous gardening, building wind barriers, mulching and placing stepping stones for walkers on top soil.

The college campus was once a barren land due to the jhum cultivation practiced in the region. Afforestation efforts have been undertaken since the 1970s.

The National Service Scheme (NSS) under the leadership of the principal has been spearheading the task. Now, it is a sprawling campus, a big jungle, providing good quality air to Aizawl. It is often given the pseudonym 'The Lung of Aizawl' as it supplies oxygen to the surrounding areas.

Through afforestation, soil erosion is preserved. Besides, the stone wall is used for topsoil preservation in many parts of the campus. This also helps in the preservation of soil erosion.





### 3. Eco-Friendly Commuting Practices

## BUILDING DESIGN & LANDSCAPING

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PUC encourages its students & professors to adopt environment friendly transport to minimize environmental impact from automobile use. College also offers residential facilities to its professors and non teaching staff that minimizes to impact on environment

Half of the students commute through public transport or two-wheelers, while half of the students and staff commute by walking or bicycle. Less than 5% of college community members commute by car.

	Walking	Bicycle	Motorcycle	Car	University Transport	Public Transport	Total
Students	900	–	400	50	800	861	3011
Teachers	16	–	46	40	10	5	117
Non-Teaching Staff	20	–	45	10	7	5	87







#### 4. Parking Facility

### BUILDING DESIGN & LANDSCAPING

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PUC is having sustainable shaded parking space that include sustainable paving materials, natural lighting and improved pedestrian walkways.

PUC is having sufficient and designated parking space.

Buses	Cars	Motorcycles	Bicycles
10	100	500	1000



## BUILDING DESIGN & LANDSCAPING



### 5. Greenery In Campus

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Maintaining a rich diversity of plants is vital to stable and healthy ecosystems as they provide food, shelter and other important components of habitat for wildlife.

Interaction with greenery can be beneficial for human stress reduction, emotional states and improved cognitive function.

PUC has maximized Greenery in its campus including community gardens, parks, meadows, green roofs, playing fields and wetland that supports well-being and education outcomes.

The college campus is rich in biodiversity and different varieties of flora and fauna thrive on the campus. About 90 percent of the campus is covered with greenery; it is a PUC-made jungle in the heart of the city.

PUC is probably the only Academic Institution on the planet that is known as Lungs of Aizawl, the Capital City of the State of Mizoram.





## BUILDING DESIGN & LANDSCAPING

**Total Area of the Campus-** 5,62,265 sq.m

Sr. No.	Name	Area in Square Meter
1	Building Footprint	10,054.3
2	Playground Area	9,430.21
3	Vegetated Space	5,42,780.49
	A. Turf Area	–
	B. Area with native species	–
	C. Area with drought tolerant species	–
	D. Other Species area	–
4	Non-roof impervious area	4926.08 sq.m.
5	Water body	–





**BUILDING DESIGN & LANDSCAPING**

**6. Minimize Heat Exposure To Sun: Non-roof**

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PUC Campus is housing 56226 trees and plants speared in 134 acres of land area that is restricting impervious surfaces being exposed to sun, to minimize impact on microclimate in the campus.

PUC is a global model of the Pupil for Planet

PUC has successfully inspired pupils to work for the planet and achieved 90% greenery inside the campus.

All footpaths, roads, lanes, pathways parking areas are shaded by trees.

- A. College Campus Area - 5,62,265 sq.m.
- B. No. of existing trees/saplings planted- 56226 nos.
- C. Total non-roof area, the area covered with trees foliage– 4926.08 sq.m.







## BUILDING DESIGN & LANDSCAPING

### 7. Minimize Heat Exposure To Sun: roof



PUC has planted trees in a strategically way that provide shade to the roof in summer, when the leaves fall, the trees allows the sun to shine through, creating a desired solar heat gain effect during the winter.

Most of the roof areas are covered with solar panels and remaining areas are covered with tiles & paint to reduce the concrete surface that was exposed to the Sun that minimizes impact on the microclimate in the campus.

The roofs of buildings in the college are covered with tiles and paint. This is to minimize the concrete surfaces being exposed to sun and also to protect tin roof from rusting so that it may last longer.

The total roof area along with roof area covered with tiles/paint/vegetation with photographs is as follows:

Total Roof Area	Roof Area Covered with Tiles / Paint / Vegetation
10,054.3 sq.m.	6,000 sq.m.





## 8. Universal Design

### BUILDING DESIGN & LANDSCAPING

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Universal Design for Learning (UDL) is an approach to teaching and learning that gives all students equal opportunity to succeed. The goal of UDL is to use a variety of teaching methods to remove barriers to learning. It's about building flexibility that can be adjusted for every person's strengths and needs.

Learning spaces at PUC are designed to facilitate to differently abled pupils. Rest Rooms are also designated for differently abled Students; Hindrance-free movement's facility is available in common area.

College building/campus design has facilitated differently-abled pupils. A separate non-slippery ramp is created in all the newly constructed buildings.

There is hindrance free movement in the common area for the disabled. There are enough parking spaces for the differently abled inside the campus.



Cumulative Score

74/80



## WATER MANAGEMENT PRACTICES

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### 1. Rainwater Harvesting: Roof & Non-Roof

The Earth's surface is acquired by 71% with water but only 3% of water can be used as potable water. Nowadays conservation of water is one of the basic principles of green University.

PUC has well designed rainwater harvesting system in the campus that enhance ground water table and reduces potable water usage. PUC captures maximum run off volume of rain water from Roof & Non-Roof areas.

The Average normal rainfall/day is calculated as shown in the table below:

Average normal rainfall/day in your area is **18.3 mm**.

Average Normal Rainfall (r)					
Location	Year	Peak Rainy Month	Total Rainfall (mm)	Number of rainy days	Normal Rainfall / Day (mm)
Aizawl	2017	June	706.4	30*	23.55
Aizawl	2018	June	590.4	30	19.68
Aizawl	2019	July	534.3	30*	17.81
Aizawl	2020	July	365.04	30	12.16
Aizawl	2021	June	NA	NA	NA
Average normal rainfall/day (mm)				<b>18.3 mm</b>	
Average normal rainfall/day (m)				0.0183 m	

\* Number of rainy days in whole Mizoram as the data is not available for the month of June 2017 and July 2019 for Aizawl

PUC falls within a region which receives heavy rainfall with an average of 2500 mm to 3000 mm every year. Average Annual rainy days in this region are 89-113 days. That meets fresh water needs of its campus community and biodiversity. However PUC has enough water storage capacity to meets is needs.



## WATER MANAGEMENT PRACTICES

PUC falls within a region which receives heavy rainfall with an average of 2500 mm to 3000 mm every year. Average Annual rainy days in this region are 89-113 days. That meets fresh water needs of its campus community and biodiversity. However PUC has enough water storage capacity to meets is needs.





## WATER MANAGEMENT PRACTICES

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### 2. Water Efficient Plumbing Fixtures

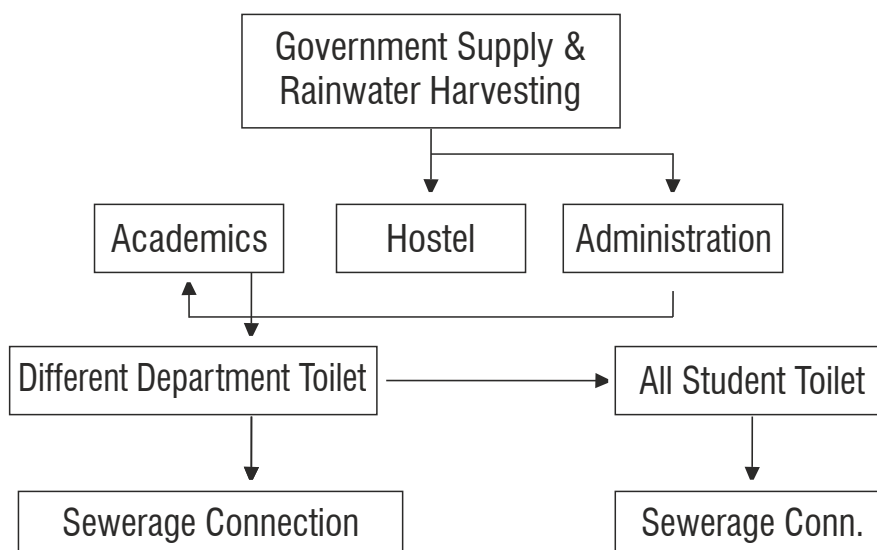
PUC have initiated responsible uses of fresh water practices in academic and hostel areas to reduce the consumption of potable water in drinking Water Points, face washing points, urinals, toilets to reduce water flow rate in the daily use.

Most of plumbing fixtures are low flow without hampering the performance. Plumbing fixtures have achieved water efficiency standards for Green College , and are working properly with no leaks or drips.

Baseline Flow Rates for Plumbing Fixtures

Fixture Type	Maximum Flow Rate	Duration	Daily uses per Person/Day
Water Closets	16 w / min. PSI Loss & Noise	5 Hour	10 - 12 L
Urinals	16 w / min. PSI Loss & Noise	8 Hour	10 - 12 L
Health Faucet	NA	NA	NA
Faucet / Taps	NA	NA	NA
Kitchen Taps	16 w / min. PSI Loss & Noise	8 Hour	15 - 20 L
Showerhead	NA	NA	NA

### Water Flow Chart





## WATER MANAGEMENT PRACTICES

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### 3. Turf Design

Turf is a major component of whole landscape in PUC, which meets functional and aesthetic expectations for teaching learning community, while at the same time minimizing the impact of natural resources and the greater environment.

Turf area of PUC is having many drought tolerant species in its total vegetated area that minimizes water consumption.





## WATER MANAGEMENT PRACTICES



### 4. Water Efficient Landscaping

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Most of the Universities in India use its maximum water for landscape and lawns irrigation, while water efficient landscape is one of that is functional, attractive, and easily maintained in its natural surroundings.

Whole Landscaping in PUC campus is water efficient that reduces the water consumption through responsible irrigation practices and mulching. Vegetated area of campus contains drought tolerant plant species including trees, shrubs, herbs, climbers and grass that required less water than other Species.

PUC is located in hilly region with nature's own landscaping with 90-113 rainy days.





## WATER MANAGEMENT PRACTICES

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### 5. Water Efficient Irrigation System

PUC uses manual irrigation is an efficient irrigation system that keeps landscape plants healthy and beautiful. Instead of wetting the whole landscape, water is applied only to the plant root zone.

The primary goal of manual irrigation is to apply water at the time when plants need it most and in rates needed for proper plant growth.

PUC is blessed by nature's own irrigation system that brings rains in 90-113 days in a year to irrigate its vegetated area round the year.







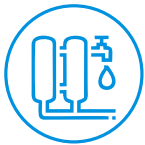
## WATER MANAGEMENT PRACTICES

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### 6. Waste Water Treatment

PUC follows minimum water discharge campus, which means minimized water is discharged outside the campus and maximum water is harvested within the campus through many recharging wells.

PUC receives 2500 mm to 3000 mm average rainfall every year that meets its need for freshwater, therefore the need of treating its waste water doesn't arise.



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### 7. Use of Treated Waste Water

PUC doesn't use Treated Water



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### 8. Water Use Monitoring

PUC has standard water monitoring system in place with 10 flow meters which indicates daily, weekly and monthly water uses in various facilities.

Water lose is prevented through real time alert of water overflow, leakages and dripping that ensures judicious use of Water Consumption.

Cumulative Score

61/80

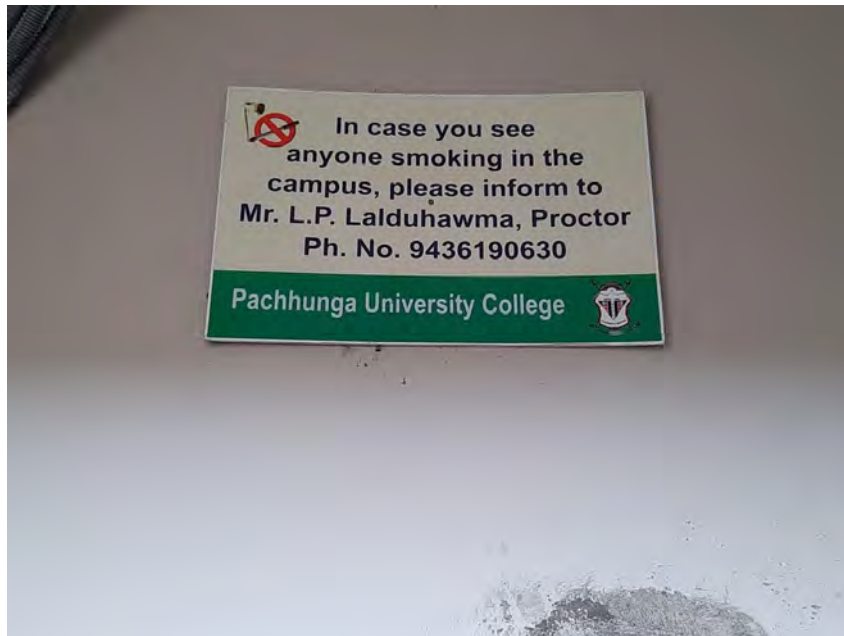


## 1. Tobacco Smoke Control

### AIR QUALITY LEVEL



PUC is totally Smoke Free Campus, Anti Smoking Policies are strictly implemented that eliminates exposure of students & teachers to tobacco smoke & reduce health impacts caused due to passive smoking.





## 2. Day Lighting

### AIR QUALITY LEVEL



Indoor environmental conditions in classrooms and namely day lighting conditions also influence student's health, well-being and performance.

The conscious use of daylight in Classrooms has a great potential for improving the comfort and the academic performance of users, contributing, simultaneously for the rational use of energy in building.

Maximum regular occupied spaces at PUC Campus are daylit, & average daylight factor is maintained.

PUC is located in hilly region, rainy days and other environmental factors influences the daylight factors in teaching learning spaces.







### 3. Fresh Air Ventilation

## AIR QUALITY LEVEL



A good ventilation system helps to expel a build-up of pollutants, bacteria, moisture and unpleasant odors, such as body odor from classroom.

Maximum regularly occupied spaces like Classrooms, Laboratories, Libraries & Indoor Game Facilities of PUC Campus are adequately ventilated, and that improves health and well-being of Students & Faculties.

PUC offers well-ventilated teaching-learning spaces to its students having adequate windows for cross-ventilation. Most learning spaces are having an average of 4% openable area.

Space	Carpet Area in M2 (a)	Openable area in m2 (b)	Prescribed Percentage of Openable Area	Prescribed Percentage of Openable Area (b/a) x 100	Achieved / Not Achieved
Classroom	5548	222	–	4.00	Achieved
Lab	908	36.3	–	4.03	Achieved
Library	1018	40.7	–	4.00	Achieved
Indoor Games	2200	88	–	4.00	Achieved





#### 4. Area of Class Room

### AIR QUALITY LEVEL



All learning spaces including classrooms of PUC are well designed according to statutory standard and norms that follows appropriate occupant density, which enhances Student's Productivity.

No.	Category	No. of Students Per Classroom	Minimum Gross Area of Class Rooms (in m2)
1	Undergraduate	50	110.9
2	Post Graduate	20	277.4





## 5. Anthropometric Dimensions in spaces

### AIR QUALITY LEVEL



Anthropometry has a considerable importance in optimizing the design of buildings. The underlying principle of Anthropometrics is that building designs should adapt to suit the human body, rather than people having to adapt to suit the buildings.

Anthropometric dimensions of learning spaces aims to create safe, comfortable and productive learning spaces by bringing human abilities and limitations into the designing of building, including the individual's body size, strength, skill, speed, sensory abilities (vision, hearing) and even attitudes.

Maximum learning spaces of PUC including Classrooms, Laboratories, Libraries & Indoor Game Facilities, Toilets, and Hostels & Canteen are designed according to standard anthropometric dimension norms that allow comfort to the students.

#### Anthropometric Dimensions for Classroom Furniture

Anthropometric Dimensions	H ( Standing height of a student, in m)		
	Diploma	Under Graduate	Post Graduate
Position with Furniture	–	1.30	1.32

#### Toilet Fixture for Students

Anthropometric Dimensions	H ( Standing height of a student, in m)		
	Diploma	Under Graduate	Post Graduate
Squatting Position	N/A	0.66	0.68
Wash Basin	N/A	0.71	0.83

#### Sill height, parapet wall, and riser of stairs

Architectural Element	Height (H) in m
Parapet Wall	1.00
Sill Height	0.91
Rise of the Stairs	0.10





## AIR QUALITY LEVEL





## 6. Toxin-free Environment

### AIR QUALITY LEVEL



Governing body of PUC has declared the policy to use material with low emissions especially Paints to reduce adverse health impacts on the students and teachers.

The college has a purchase committee headed by the Principal and office bearers from different academic departments. This committee looks after any type of purchase deals, tender processing, maintenance, etc.





## 7. Dust - Free Environment

### AIR QUALITY LEVEL



Governing body of PUC has declared the policy to use Dust Free Products including Chalks & other material to reduce adverse health impacts on the Students and Facultyies.

The campus is cleaned on a daily basis. The college administration has appointed several laborers on daily-wage basis who sweep the buildings, driveways, parking areas, etc.

The campus is dotted with several dustbins for easy segregation of different waste types viz. dry, wet, and non-biodegradable wastes. Additionally, the college arranges several community-based cleanliness drives in the college where the students also take active part in maintaining a clean campus.



## 8. Exhaust Systems



Exhaust Fans are installed in all Toilets, Urinals, Canteens & Laboratories of PUC learning and residential facilities that maximize airflow & enhance the Indoor Air Quality.

Cumulative Score

68/80





## ENERGY USES & SAVING PRACTICES

### 1. Ozone Depleting Substances

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Ozone depleting substances are chemicals that destroy the earth's protective ozone layer. PUC has procured refrigerators and air conditioners, fire extinguishers, foam, aerosol propellants that have minimum impact on Ozone Layer Depletion.

PUC has installed eco-friendly refrigerants & halons in the College in order to minimize the impact on ozone layer depletion.





**ENERGY USES & SAVING PRACTICES**



**PACHHUNGA UNIVERSITY COLLEGE**

**(A CONSTITUENT COLLEGE OF MIZORAM UNIVERSITY)**

**A+ NAAC Accredited**

**UGC College with Potential for Excellence**

**AIZAWL - 796001: MIZORAM**

Declaration Letter

Date: 29-10-2021

To

Whom It May Concern

I declared that the Pachhunga University College is installing fire suppression system (Fire Hunt, dry powder Extinguisher, ABC type) in every building premises and Laboratories for the safety of the fraternity and property for the smooth functioning of the College.

**Principal/Chairperson**

Pachhunga University College

Aizawl, Mizoram



## ENERGY USES & SAVING PRACTICES

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### 2. Energy Efficient Lighting Fixtures

It has been proven time and time again that natural light is the best solution for reading or studying. PUC has as much natural light as possible to get the best learning outcome.

Energy efficient lighting includes the use of more illumination from less power lights by replacing high power consumption lights like incandescent, high discharge lamps.

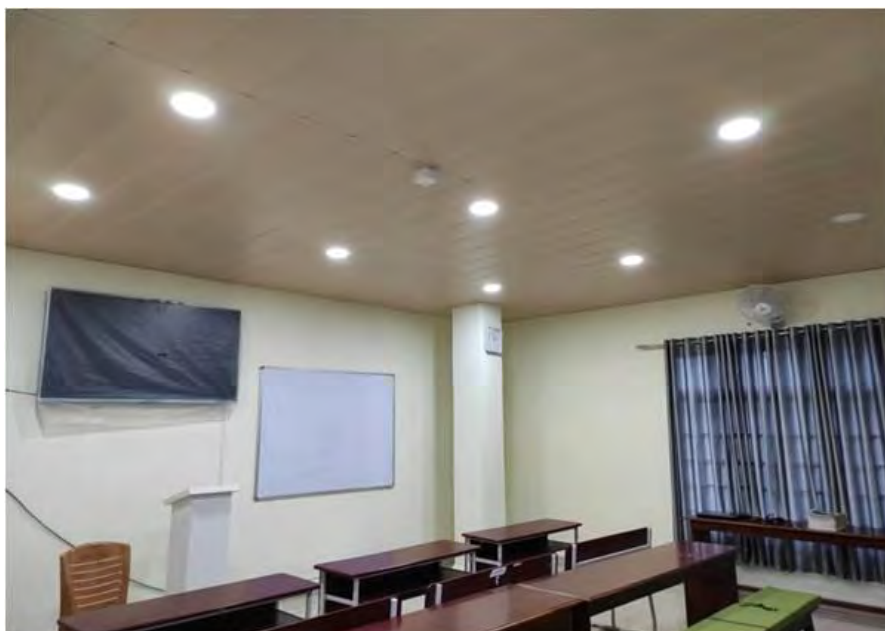
LED lighting provides a safe, secure & energy-efficient environment on campus at all times. LEDs also reduce the cost of operation while satisfying the needs of faculty members and students who can appreciate the benefits of eco-friendly solutions.

LEDs also provide outstanding durability in the environments that can place an incredible amount of stress on light bulbs and lighting fixtures, such as a university campus.

Due to the high-quality energy efficiency, LED lighting allows universities to save a significant amount of money on repairs, operating costs, and maintenance costs. When compared to a traditional light bulb, LED light bulbs consume less than half the energy that the traditional light bulb.

PUC has installed LED Lightening & Fixtures instead of old Lightning that reduces the environmental impacts associated with energy use.

PUC is about to achieve 100 % energy efficient lighting fixtures.





## ENERGY USES & SAVING PRACTICES

Table Showing the area statement of all interior spaces; number of lighting fixtures along with the wattage.

Locations	Carpet Area (Sq.m)	Number of Fixtures (f)	Luminare Capacity (kw)	Operating Hours (hr)	Energy Consumption by lighting fixtures in a day (kw x hr x f)	Total energy consumption by lighting fixtures in entire years (kw x hr x f x n) Appr. n = 220
<b>Class Room</b>						
Academic Blg-1	280.04	40	0.02	5	4	880
Academic Blg-2	491.69	100	0.02	5	10	2,200
Academic Blg-3	408.56	20	0.02	5	2	440
Academic Blg-4	206.4	35	0.02	5	3.5	770
Physical science	334.14	60	0.02	5	6	1,320
Old Science Blg.	366.01	65	0.02	5	6.5	1,430
Life Science	412.03	97	0.02	5	9.7	2,134
<b>Labs</b>						
Physical Science Lab	481.61	40	0.02	5	4	880
Science lab	246.49	15	0.02	5	1.5	330
Life science Lab	281.34	50	0.02	5	5	1,100
Total	3508.31	522			52.2	11484

## ENERGY USES & SAVING PRACTICES

**Table Showing Proposed Scenario of lighting fixtures.**

Locations	Carpet Area (Sq.m)	Number of Fixtures (f)	Luminare Capacity (kw)	Operating Hours (hr)	Energy Consumption by lighting fixtures in a day (kw x hr x f)	Total energy consumption by lighting fixtures in entire years (kw x hr x f x n) Appr. n = 220
<b>Class Room</b>						
Academic Blg-1	280.04	30	0.02	4	2.4	528
Academic Blg-2	491.69	80	0.02	4	6.4	1,408
Academic Blg-3	408.56	10	0.02	4	0.8	176
Academic Blg-4	206.4	30	0.02	4	2.4	528
Physical science	334.14	50	0.02	4	4	880
Old Science Blg.	366.01	55	0.02	4	4.4	968
Life Science	412.03	85	0.02	4	6.8	1,496
<b>Labs</b>						
Physical Science Lab	481.61	30	0.02	4	2.4	528
Science lab	246.49	10	0.02	4	0.8	176
Life science Lab	281.34	40	0.02	4	3.2	704
<b>Total</b>	<b>3508.31</b>	<b>420</b>			<b>33.6</b>	<b>7392</b>

Percentage (%) Improvement (X) = Based Scenario – Proposed Scenario/(Based Scenario) x 100 = 35.63%

The proposed scenario on lighting fixture is based on the fact that since new buildings are coming up and also old buildings are removed or renovated in such a way that natural lighting in the classroom are enhanced and hence lesser amount of light fixing will be required.



## ENERGY USES & SAVING PRACTICES

- 1 2 3 4 5 6 7 8 **9** 10

### 3. Energy Efficient Fans

PUC has installed Energy efficient Fans and Air Conditioners instead of High Energy Consuming Fans and Air conditioners that reduces the environmental impacts associated with energy use.

Locations	No. of Efficient fans	Number of wall fun
Academic Blg-1	18	-
Academic Blg-2	28	-
Academic Blg-3	06	-
Academic Blg-4	08	-
Physical Science	28	-
Old Science Blg.	-	35
Life Science	42	-
Library	18	-
Administrative Blg.	18	-
Cantene-1	05	-
Cantene-2	-	07
Total	171	42



**ENERGY USES & SAVING PRACTICES**



**Efficient Fans Installed in the College**

## ENERGY USES & SAVING PRACTICES

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### 4. Energy Efficiency in Appliances & Equipment

Modern electronic appliances, such as, freezers, ovens, stoves, dishwashers, clothes washers and dryers, use significantly less energy than older appliances. Installing STAR rated electronic appliances significantly reduces energy consumption.

PUC has replaced energy efficient Electronic Appliances & Equipments instead of High Energy Consuming Appliances that reduces the environmental impacts associated with energy use.

Locations	Name of Efficient Appliances / Equipment	Number of Efficient Appliances / Equipment
<b>Class Rooms</b>		
Academic Blg-1	LCD Projector	04
Academic Blg-2	LCD Projector	09
Academic Blg-3	LCD Projector	02
Academic Blg-4	LCD Projector	05
Physical science	LCD Projector	04
Science	LCD Projector	05
Life Science	LCD Projector	04
Seminar Hall	LCD Projector	02
	Air Conditioning	01
Administrative Blg.	LCD Projector	02
	Air Conditioning	03
<b>Labs</b>		
Physical Science Lab	Air Conditioning	01
Science lab	Air Conditioning	01
Life Science Lab	Air Conditioning	02

**ENERGY USES & SAVING PRACTICES**



**Type of unitary Air Conditioner installed in the college**



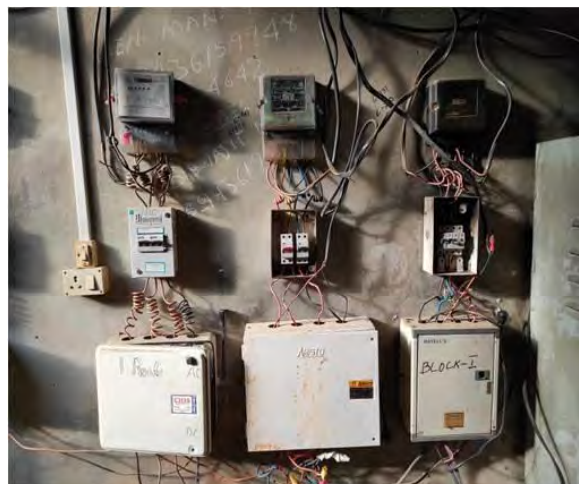
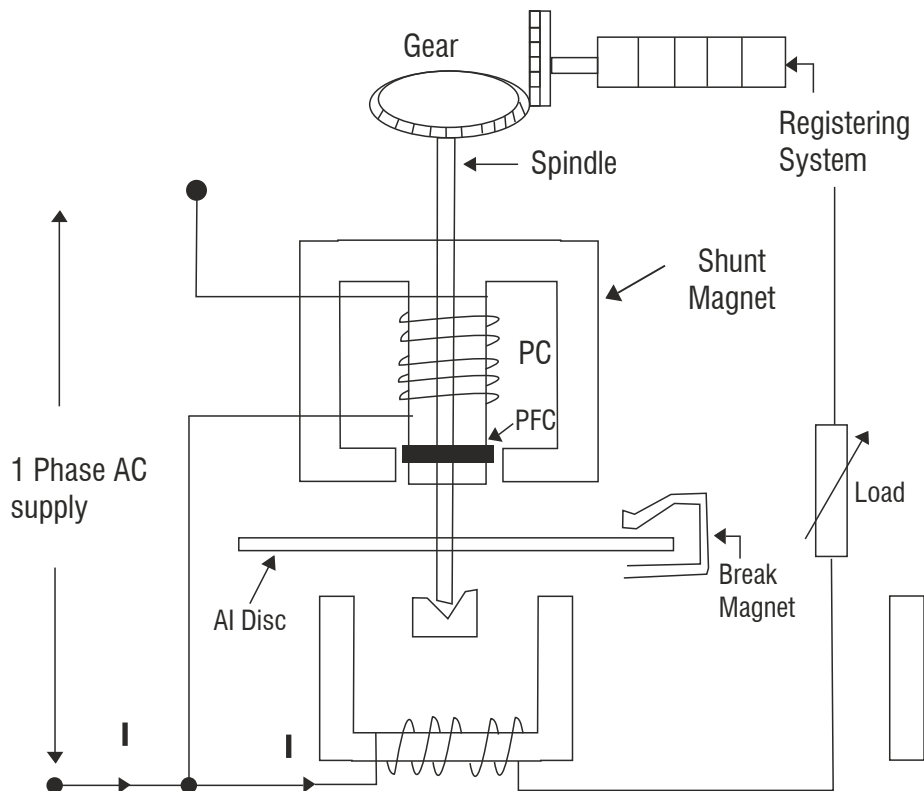


## ENERGY USES & SAVING PRACTICES

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### 5. Energy Sub-Metering

PUC practices continuous monitoring of energy uses through sub metering and aspirate metering of each learning spaces, residential and open spaces throughout the year towards achieving judicious use of energy, which inspire teaching learning community to save the energy in their day to day uses.





## ENERGY USES & SAVING PRACTICES

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### 6. On-Site Renewable Energy

PUC has installed 10 KVA Solar Power Plant and few solar lighting systems as its efforts to on-site Renewable Energy Source; however it encourages student community to save energy to minimize environmental impacts of using fossil fuels.

PUC has plans to go 100% on renewable in next 3 years.





## ENERGY USES & SAVING PRACTICES

### 7. Solar Water Heating Systems

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PUC have installed solar water heating System in its all hostel facilities that minimize the environmental impacts of using fossil fuels.







## ENERGY USES & SAVING PRACTICES

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### 8. Distributed Power Generation

PUC has well designed power distribution system in place that allows power supervisor to monitor power supply according to judicious need of the users.

PUC has one AC Power Generator (100 KVA capacity) along with Solar Power System (10 KVA) in the campus and it is to be noted that these two power backups are efficiently utilized whenever any normal power supply is interrupted inside the college campus and the power generated is sufficient enough for the smooth functioning of the college.

Name of Power generator system	No	Specification	Capacity
100 KVA, AC generator	01	Kirloskar	100KVA/80,000w
Solar Power System	01	AGNI solar power	10KVA/9500w



**100KVA AC Generator**



**Solar Power System**

**ENERGY USES & SAVING PRACTICES**

UPS Inverter Installed in the College		
Location	No. of UPS Inverters	Capacity
Academic Blg-1	01	1.5 Ah
Physical Science Blg.	06	1.5 Ah
Life Science Blg.	08	1.5 Ah
Old Science Blg.	02	1.5 Ah
Seminar Hall	01	1.5 Ah
Library	01	1.5 Ah
Internet Resource Centre	04	1.5 Ah
Administrative building	02	1.5 Ah



Cumulative Score

**73/80**



## HEALTH & HYGIENE PRACTICES

1 2 3 4 5 6 7 8 **9** 10

### 1. Toilet Facilities

PUC has well defined Hygiene & Cleanliness mechanism, which maintains Hygiene & Cleanliness standards in all toilets regularly that reduces the infections risk on Students and Teacher's Health & well-being.

Cleaning of the toilets and lavatories are performed regularly by the departmental attendants on a daily basis as well as by the students as part of the weekly co-curricular activities on Friday of every week.

#### The daily practices of cleaning the toilets and washrooms include-

- i. Visual inspection of washrooms and removal of any debris on the floor, around the sink or toilet/urinal areas.
- ii. Checking of garbage cans and recycling bins and removal of thrashes when they are full.
- iii. Regular checking and replenishment of soap and toilet paper dispensers.

#### On a weekly basis, the cleaning procedures include-

- i. Cleaning and scrubbing of all interior surfaces of toilets/urinals with a toilet brush and wiping down all exterior surfaces, including toilet seats, with a disinfectant.
- ii. Disinfection of all surfaces, including door handles, light switches, countertops, partitions and dispensers are also done.
- iii. Toilet and washroom mirrors are cleaned with a glass cleaner to remove any marks.
- iv. Sinks, faucets and handles are cleaned using a germicidal/acidic surface cleanser
- v. The toilet and washroom floors are cleaned with broom, dust mop and wet mop specifically for the toilet purpose.
- vi. After the cleaning, the used mop buckets, mops, and rags are rinsed out and cleaned.







## HEALTH & HYGIENE PRACTICES

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### 2. Drinking Water Facility

Water Quality of all Drinking Water stations & Tapes are maintained at PUC Campus. Water Quality Reports are checked by Government Authorized Laboratories in regular interval of time to ensure Clean & Safe Drinking Water at all the time to everyone.

Clean water is supplied via RO water purifier and cooler systems. The water supply to the college is provided by the Mizoram Public Health Engineering Department (PHED), Aizawl. All drinking water supplied by the Mizoram PHED are safe treated water and are free from biological contamination (guinea worm, cholera, typhoid, etc.) and within permissible limits of chemical contamination (excess fluoride, briskness, iron arsenic, nitrates etc as per IS-10500 standard of BIS).

The data on safe drinking water provision in Aizawl city (thus including the college) can be found in the Govt. of Mizoram PHED Citizen Charter 2015 report (<https://phed.mizoram.gov.in/page/citizen-charter-2015>).

Drinking water stations are installed in every division within the college campus .





## HEALTH & HYGIENE PRACTICES

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### 3. Access to Healthy Food

Healthy food plays an important role in the optimal growth, development, health and well-being of individuals in all stages of life.

Healthy and nutritious Food is accessible to all students & teaching staff at the Canteen of PUC that maintain the fitness of teaching learning community.

Junk Food is strictly prohibited in the Campus.

The College has efficiently-run canteens that provide fresh and healthy food to the college students within the campus. There are two fully operational canteens that cater to the needs of the students through both packaged and freshly cooked food, and fruits.

The college is also a shareholder of the local co-operative fresh milk franchise, MULCO, which provides fresh milk to the college daily.

The following is a selected list of packaged and fresh food currently provided in the college canteens

#### Freshly prepared foods/beverages

1. Rice (topped with egg/veggies/beef/pork/chicken, etc)
2. Chow (Vegan/beef/pork/chicken/mixed/etc.)
3. Chowmein (Vegan/egg/beef/pork/chicken/mixed/etc.)
4. Fresh Rolls (Vegan/egg/beef/pork/chicken/mixed/spring roll, etc.)
5. Noodle Soups (Vegan/egg/beef/pork/chicken/mixed/etc.)
6. Clear Soups (Vegan/egg/beef/pork/chicken/mixed/etc.)
7. Common Soups (egg/beef/pork/chicken/mixed/etc.)
8. Mushroom Soups (topped with egg/beef/pork/chicken/mixed, etc.)
9. Indigenous Delicacies/Dishes (more than 20 different varieties), etc.

## HEALTH & HYGIENE PRACTICES

### Packaged foods/beverages

1. Frooty Fresh fruit juice
2. Biscuits
3. Chocolates
4. Candies
5. Packaged drinking water, etc.

### Fresh Fruits

1. Banana
2. Oranges
3. Cucumber
4. Gooseberries/Amla
5. Watermelon, etc







**HEALTH & HYGIENE PRACTICES**



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**UGC College with Potential for Excellence**

**AIZAWL - 796001: MIZORAM**

**Declaration**

This is to confirm that, to the best of the college authority's knowledge, the food provided and available in the canteens within the college campus are healthy and meet the requirements of safe and healthy food.

**Principal/ Chairman**  
Pachhunga University College,  
Aizawl, Mizoram



## HEALTH & HYGIENE PRACTICES

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### 4. Sports Amenities

PUC offers various sporting opportunities to its undergraduate and post graduate students. All Indoor & Outdoor sports amenities at PUC are designed to achieve excellence in sports to enhance growth and health of students.

PUC has multiple sport facilities including include Basketball, Futsal, Badminton, Table tennis, and Volley ball, Football, Carom and Athletics.





**HEALTH & HYGIENE PRACTICES**

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**5. Dedicated Playground**

PUC is having dedicated Sports Amenities for Basketball, Futsal, Badminton, Table tennis, and Volley ball, Football, Carom and Athletics. , while facilities for other sports are shared to minimize impact on environment

Name of Sport Facility	Area in Sq Meters
Football	5,936
Futsal	589.56
Basketball	839.3
Volleyball	153.94







## HEALTH & HYGIENE PRACTICES

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### 6. Organic Fertilizers and Pesticides

PUC uses Organic Fertilizers and Pesticides to reduce Health impacts on Students and Faculties. Composting pits prepares enough fertilizers for entire vegetated area.

PUC uses primarily organic fertilizers within the campus wherever and whenever necessary.

The college has a vermin composting center that generates vermin composts which are used as manure for the ornamental plants within the campus.

Additionally, cow dung manures are procured from the local produce to fertilize the college vegetations in the gardens.

The college currently does not use any pesticides within the campus as the need does not arise.





## HEALTH & HYGIENE PRACTICES

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### 7. Green Housekeeping

PUC uses environment friendly cleaning products to clean its Learning & residential spaces. Eco friendly Cleaners are also used to clean the toilets and drinking water Stations to prevent chemical related Health hazards.

Declaration of use of only environment-friendly cleaning and house-keeping products



## PACHHUNGA UNIVERSITY COLLEGE

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AIZAWL - 796001: MIZORAM

### Declaration

This is to declare that Pachhunga University College uses only environment-friendly cleaning products in order to prevent any chemical related health hazards within the campus. It is also further declared that only eco-friendly house-keeping products will be used in the college.

**Principal/ Chairman**  
Pachhunga University College,  
Aizawl, Mizoram

Cumulative Score

**66/70**



## SUSTAINABLE RESOURCES UTILIZATION



### 1. Waste Segregation

Waste Segregation Mechanism is well placed at PUC Campus. Waste generated through various sources and practices is being segregated in the safe manner & sent to recycling & composting sites or authorized recyclers in the safe manner, which prevents the waste being sent to the landfills.

The Solid Waste Management Committee of PUC was constituted on 28<sup>th</sup> July, 2017 under the Chairmanship of the Principal. The committee is responsible for the proper management of the solid waste generated from the college campus.

The main objective of a comprehensive solid waste management in PUC campus is to successfully implement an effective waste management system for our college and achieve the target of making PUC a litter free campus for cleaner environment.

In order to achieve this, proper handling of solid waste generated from the campus is being undertaken. So, different coloured dustbins (**Blue, Green & Red**) are placed in all the departments and buildings located inside the college campus. Solid wastes generated are segregated into biodegradable, non-biodegradable and paper waste at the source. The segregated wastes are transported to the main segregation/sorting point located near the playground.

From the main segregation point recyclable waste are sorted out and sent for recycling. Biodegradable waste would be sent for vermin composting. Additionally, a series of awareness campaign on solid waste management was carried out for enhancing information, education and communication activities for students, faculty, staffs and dwellers of PUC campus for effective implementation of the overall waste management system.

Colour of Dustbin	Type of Waste
BLUE	Paper Waste Only
GREEN	Biodegradable Waste
RED	Non-Biodegradable Waste



## SUSTAINABLE RESOURCES UTILIZATION

### DETAILS OF DUSTBINS FOR SOLID WASTE MANAGEMENT, PUC

Sl. No.	Name of the Building / Size of the Bins	Number	Total Number	Remarks
1.	Small size bins: For 22 Departments and 2 in main administrative (office) building, one each in library, Research and Instrumentation room (Size 40 litres)	<b>3 each</b> (1 Blue + 1 Green + 1 Red) (3 X 25 = 75)	<b>75</b> (25 Blue + 25 Green + 25 Red)	Blue = Paper Waste Green = Biodegradable Waste Red = Non - Biodegradable Waste
2.	2 Small size bins: For 9 residential quarters and 1 each in Drivers, Technical and SU buildings (Size 40 litres)	<b>2 each</b> (1 Green + 1 Red) 12 x 2 = 24	<b>24</b> (12 Green + 12 Red)	Green = Biodegradable Waste Red = Non - Biodegradable Waste
3.	Big size bins: 2 each placed at 13 convenient location. (Size 120 litre)	<b>2 each</b> (1 Green + 1 Red) 2 x 13 = 26	<b>26</b> (13 Green + 13 Red)	Green = Biodegradable Waste Red = Non - Biodegradable Waste
<b>TOTAL</b>				
	1. Dustbin Blue colour (40 Litres)	-	26	
	2. Dustbin Green colour (40 Litres)	-	38	
	3. Dustbin Red colour (40 Litres)	-	38	
	4. Dustbin Green colour (120 Litres)	-	13	
	5. Dustbin Red colour (120 Litres)	-	13	



## SUSTAINABLE RESOURCES UTILIZATION





## SUSTAINABLE RESOURCES UTILIZATION



### 2. Organic Waste Management

Since PUC has adopted the philosophy of “reduce - reuse – recycle”, therefore all organic waste sent to various, composting and Vermi composting Facilities that makes waste into resource and prevents the waste being sent to landfills.

For proper dealing of organic waste generated from the college, we take the following measures. PUC has a fully operational **Vermicomposting Plant**.

All the segregated organic waste along with cardboard and loose paper waste are sent for vermicomposting. In the first phase of vermicomposting conducted in Mid-July 2019, it gave a result of 80% decomposition rate.

In the second phase of Vermi composting carried out during October 2019 using paper waste and cow dung was very successful. Four cement bags of vermin compost were harvested and it was utilized in the beautification and gardening of the college campus.

Moreover, there are 2 composting pits inside the college campus for decomposition of trees leaves and other organic waste.

Additionally, our college conducts 6 months Certificate Course in Vermitechnology under the UGC Community College Scheme







## SUSTAINABLE RESOURCES UTILIZATION

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### 3. Green Policy

PUC framed broader Green Policy that inspires its teaching learning community to take responsibility for future through their behavior with nature and natural resources.

PUC has its well defined Green Policy to maintain sustainability in its teaching learning practices. Different steps are currently undertaken to make college campus more environment friendly.



## SUSTAINABLE RESOURCES UTILIZATION

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### 4. Salvaged Materials

PUC makes new furniture & fixtures by using salvaged materials towards reducing the dependence on virgin materials.





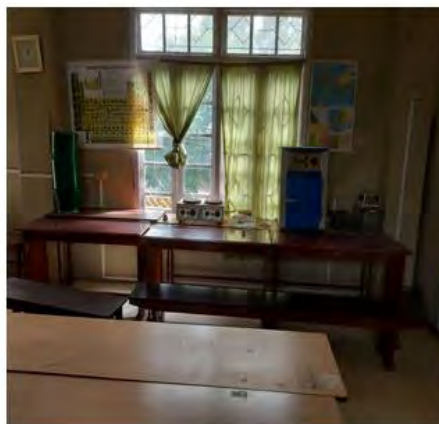
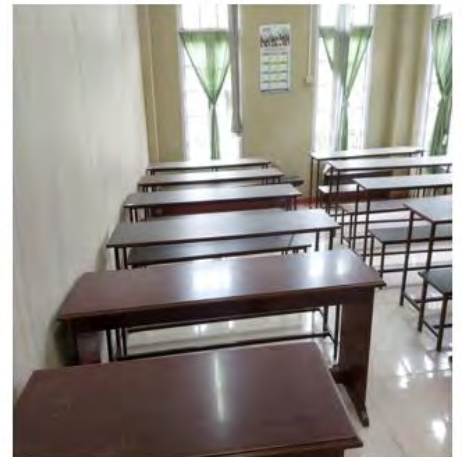
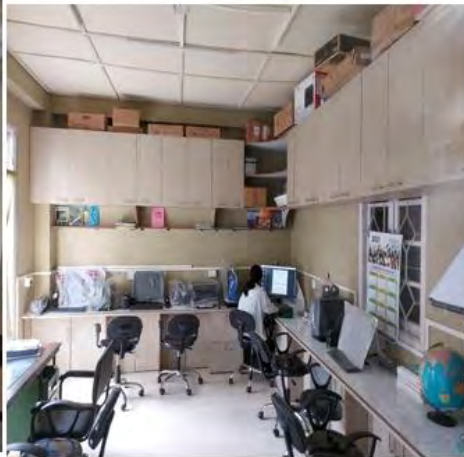
## SUSTAINABLE RESOURCES UTILIZATION

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### 5. Eco-friendly Wood Based Materials

PUC encourages using Certified Composite Wood to encourage use of Eco-friendly Wood Based Materials towards conserving Forest Resources and reducing the dependence on virgin materials.

Most of the furniture like desk, benches, and cupboards, racks and cabinets are made from Medium Density Fiberboard (MDF).







## SUSTAINABLE RESOURCES UTILIZATION

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### 6. Materials with Recycled Content

PUC uses materials in its new construction sites and repairing spaces, which have recycled content like Concrete, Bricks, Fly ash Bricks, Aluminum Windows and Glass & Tiles to reduce environmental impacts associated with the use of virgin materials.





## SUSTAINABLE RESOURCES UTILIZATION

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### 7. Local Materials

PUC uses Building Materials available locally to minimize the associated environmental impacts resulting from transportation to build its new facilities.

Materials available locally like bamboo, gravel, boulders, local sand and bricks are used in the construction of the new buildings as well as renovation of the old buildings.










Cumulative Score



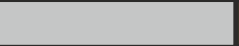

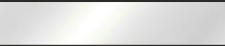
61/70



## SUSTAINABILITY EVALUATION CHART

Sr. No.	Assessment Areas	Cumulative Score
1.	GOVERNANCE & ACADEMIC	37/40 
2.	BUILDING DESIGN & LANDSCAPING	74/80 
3.	WATER MANAGEMENT PRACTICES	61/80 
4.	AIR QUALITY LEVEL	68/80 
5.	ENERGY USES & SAVING PRACTICES	73/80 
6.	HEALTH & HYGIENE PRACTICES	66/70 
7.	SUSTAINABLE RESOURCES UTILIZATION	61/70 
<b>Total</b>		<b>440/500</b>

### Certification Level

				
<b>Rejection</b> 000-100 Points	<b>Certification</b> 100-200 Points	<b>Silver</b> 200-300 Points	<b>Gold</b> 300-400 Points	<b>Platinum</b> 400-500 Points





# GREEN MENTORS

Powered by Law of Nature



## For more details:

B-802, Mondeal Heights, Near Wide Angle Cinema,  
S.G. Highway, Ahmedabad - 380 015, Gujarat, India

+91 79 49000160 | [info@greenmentors.in](mailto:info@greenmentors.in) | [www.greenmentors.in](http://www.greenmentors.in)

