

2023

ACHIEVING SUSTAINABILITY

IPB UNIVERSITY SUSTAINABILITY REPORT

www.bpkb.ipb.ac.id
bpkb@apps.ipb.ac.id
@bpkbipb

CONTRIBUTOR

Ibnul Qayim
Anuraga Jayanegara
Eva Anggraini
Heriansyah Putra
Rina Mardiana
Alfian Helmi
Mokhamad F Ulum
Dordia A Rotinsulu
Anisa D Utami
Fifi G Dwiyanti
Hana Khoirunisa
Windi M Sari
Zayyaan N Khairunnisa
Jessica M Veronica
Zahra W Amigunani
Muh Firmansyah
Bunga Anggraeny
Nabilah Z Ramadhani
Permata Mei Kartika



Head of Sustainable Campus Development Office
Directorate of Strategic Studies and Academic Reputation
Directorate of Global Connectivity

Published by IPB University, Bogor - Indonesia
2024

TABLE OF CONTENTS

Rector Message 04

Head of Sustainable Campus Development Office Message 05

IPB Sustainable Value (IPB SuV) 06

Achievement on Sustainability 08

Operational Campus 12



Programs 30



Action Plan 41



RECTOR MESSAGE

IPB University has a strong history of supporting sustainability in all facets of the university, including operations, research, education, and community engagement. We think that higher education institutions have a fundamental duty to address the issues of social injustice, environmental degradation, and climate change in addition to having a moral obligation to do so. Today, by releasing this sustainability report, we make a major advancement in reiterating our commitment to sustainability. It is evidence of the collective efforts of our faculty, staff, and students who have devoted countless hours to incorporating sustainable practices into our university's core operations.

This study captures the spirit of invention, teamwork, and resilience that characterizes IPB University, going beyond just figures and statistics. It outlines our goals for the future, recognizes our flaws, and emphasizes our successes and advancements. Its pages contain uplifting accounts of groundbreaking scientific discoveries, revolutionary educational endeavors, and significant community outreach projects. You will also see the concrete results of our sustainability efforts, such as decreased carbon emissions, the use of renewable energy, and the integration of sustainable practices into our systems for managing natural resources and agriculture. We understand that sustainability is a never-ending process and that much work remains.

I would like to sincerely thank everyone who helped with the preparation of this report, including our committed sustainability teams, the academics and researchers who shared their knowledge, and the countless individuals who poured their time, effort, and passion into realizing our common goal.

I also would like to express my gratitude to all the students who have supported environmental causes and your unshakable dedication to making the world a better place. We are all inspired by your words and deeds, which serve as a constant reminder that the future is in your capable hands.



Let's welcome the release of IPB University's Sustainability Report 2024 as a testament to our dedication, progress, and determination to build a sustainable future. May it start dialogues, encourage teamwork, and foster transformative change both inside and outside of our organization.

Thank you, and let us continue our collective journey towards sustainability.

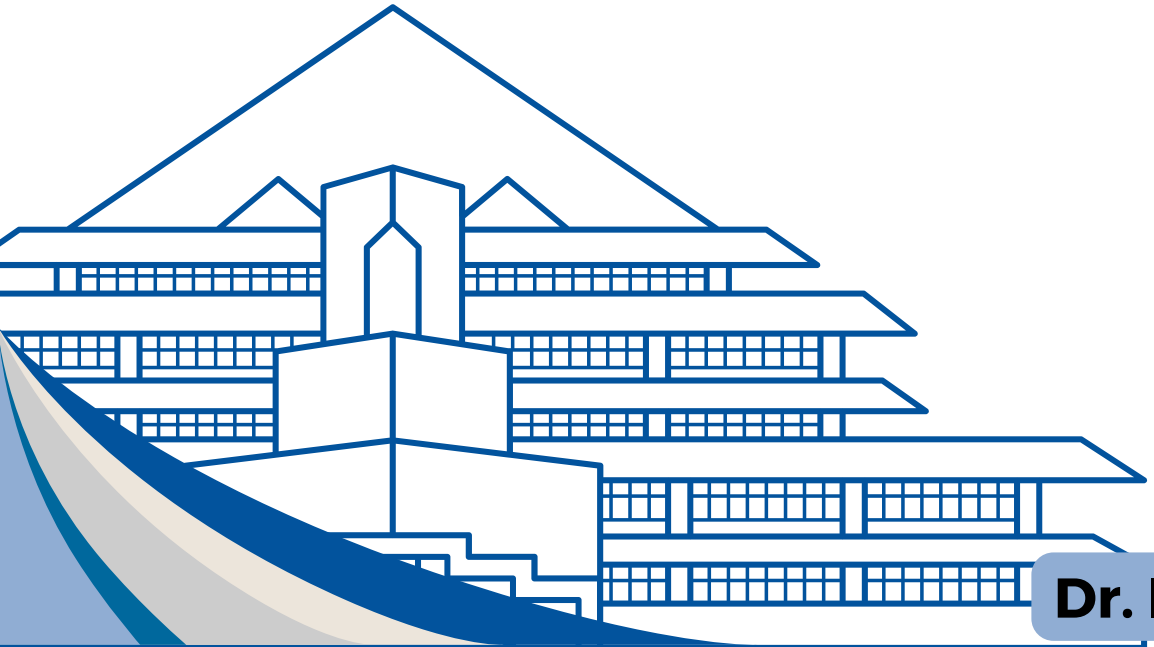
Prof. Dr. Arif Satria, S.P., M.Si.

HEAD OF SUSTAINABLE CAMPUS DEVELOPMENT OFFICE (BPKB) MESSAGE

It is with great pride that I deliver this address on behalf of the Sustainable Campus Development Office (BPKB) of IPB University for the publication of the 2023 Sustainability Report. BPKB IPB was established to enhance IPB's reputation in achieving sustainable development goals and to realize the vision of a socio-technopreneur university as outlined in the IPB Long-Term Plan (RJP). We provide strategic guidances and developing sustainability programs across academics, research, community service, and campus operations.

This report reflects the collective efforts of our faculty, staff, and students in integrating sustainable practices into the university's core operations. Within its pages, you will find inspiring stories of scientific discoveries, educational initiatives, and community empowerment projects that showcase tangible results, from reducing carbon emissions to utilizing renewable energy. We understand that sustainability is an ongoing journey, and there is still much work to be done.

I extend my sincere gratitude to everyone who contributed to this report, including our dedicated sustainability teams, academics, researchers, and students who have supported environmental efforts. Let us welcome the launch of the 2023 Sustainability Report as a testament to our dedication and progress in building a sustainable future.





Dr. Ir. Ibnul Qayim

IPB SUSTAINABILITY VALUE



The IPB vision 2024-2028 is "Being an innovative and resilient university for sustainable national progress in building a techno-socio entrepreneurial university that is excellent globally in agriculture, marine, and tropical bioscience". Toward this vision, IPB commit to be the Globalized Sustainable University in 2028. Creating a sustainable university entails incorporating social, cultural, and economic factors into the curriculum, research, infrastructure, and community involvement, among other areas of the institution's operations. Sustainability in higher education relates to how the campus operation does not harm the environment and thus requires facilities and infrastructure to be set up in a way that becomes environmentally friendly. By adopting various dimensions of sustainability, the IPB developed the IPB sustainability values consisting of five aspects, namely: 1) Manageable infrastructure, 2) Controlled energy and pollution, 3) Friendly and Safe Environment, 4) harmonious and comfortable environment, and 5) Continuous education, research, and community services.



Manageable infrastructure promotes resource efficiency, cost savings, resilience, educational opportunities, and reputation building. Sustainable infrastructure refers to systems and facilities designed, built, and operated in an environmentally responsible, economically viable, and socially beneficial way for the entire life cycle. It also protects biodiversity by minimizing its impact on ecosystems.



IPB integrates controlled energy and pollution to minimize negative environmental impact, reduce carbon footprint, and promote long-term resilience and efficiency. It covers energy efficiency, which utilizes renewable energy resources and reduces energy consumption. At the same time, it is accompanied by implementing resource efficiency by minimizing the use of non-renewable resources, promoting recycling and reuse, and controlling pollutants.

IPB SUSTAINABILITY VALUE

FRIENDLY AND SAFE ENVIRONMENT



The sense of belonging contributes to a frendly and safe campus environment. Sustainable universities prioritize security measures to ensure the safety of everyone on campus. It embraces inclusive design principles to ensure that all community members, including those with disabilities, feel welcome and have equal access to campus facilities and services.

HARMONY AND COMFORTABLE ENVIRONMENT



A harmonious and comfortable campus environment enhances the well-being and productivity of students, faculty, and staff. Sustainable campuses feature ample green spaces, parks, and gardens, providing relaxation, recreation, and social interaction opportunities. Furthermore, a sustainable campus can foster a sense of community through engagement opportunities such as sustainability initiatives, volunteer programs, and community events.

CONTINOUS EDUCATION, RESEARCH, AND COMMUNITY SERVICES



Continuous education, research, and community services form the cornerstone of IPB's mission to contribute significantly to societal development. IPB, as a higher education institution, aims to provide opportunities for lifelong learning through professional development courses, certifications, workshops, and extension programs to keep professionals updated with the latest knowledge and skills in their fields. Meanwhile, research is designed as a function of knowledge advancement, fostering innovation and development, as well as academic collaboration and student involvement at national and global levels. Subsequently, along with education and research, community services are designed to foster public engagement, service learning, community partnerships, and economic development. The integration of continuous education, research, and community services creates a dynamic environment in IPB where knowledge is generated, applied, and disseminated widely. This holistic approach ensures that IPB remains relevant and responsive to societal needs, contributing to overall development and well-being.

ACHIEVEMENTS ON SUSTAINABILITY

Indonesia's SDGs Action Award

IPB University succeeded in proving its commitment and maintaining its position as the 1st Best university of Indonesia's SDGs Action Award 2023.

1st Indonesian's SDGs Action Awards 2023 University Categories

The case study used in the selection of Indonesia's SDGs Action Award is the One Village One CEO (OVOC) program that has been running for the last 5 years. Through a fairly rigorous interview process, IPB was able to convince the reviewer of the excellence of these programs and their contribution to the achievement of SDGs.

Indonesia's SDGs Action Awards 2023

THEME OF INDONESIA'S SDGS ACTION AWARDS 2023
Water, Energy and Agriculture towards Sustainable Food Security

This award is given by Badan Perencanaan dan Pembangunan Nasional (Bappenas), as the national coordinator of SDGs Indonesia, as a form of appreciation to institutions that have carried out SDGs actions and have an impact on society.

The awards were given to eleven (11) categories, including: ministries/institutions, provincial governments, city governments, universities, research institutions, large businesses, small and medium businesses, civil society organizations, philanthropic organizations, youth organizations and the media.

The awarding of Indonesia's SDGs Action 2023 is the second time given by Bappenas, and was announced at the opening of the 5th Indonesian SDGs Annual Conference on November 5, 2023 in Yogyakarta. The award was handed over directly by the Minister of National Development Planning (PPN)/Head of the National Development Planning Agency (Bappenas) to the Rector of IPB.



ACHIEVEMENTS ON SUSTAINABILITY

THE Impact Ranking

The Times Higher Education Impact Rankings is the sole global performance table that assesses universities against the United Nations' Sustainable Development Goals (SDGs).

They employ carefully calibrated indicators to offer a comprehensive and balanced comparison across four broad areas: research, stewardship, outreach, and teaching.

OVERALL SCORE
88.1
out of 100

OVERALL RANK
101-200
out of 1,591 institutions

IPB obtained a score of 88.1 out of a maximum score of 100. This score increased by 4.4 points from the 2022 score of 83.7 out of 100. The overall score is obtained from the assessment of the score of SDG 17 (22%) and the other three SDGs that have the highest score (each given a weight of 26%). Each university can submit data for all 17 SDGs or only some SDGs (SDG 17 mandatory).

In 2023, IPB was ranked 101-200 globally out of 1,591 participating higher education institutions. Surviving from last year's position which also ranked 101-200 out of 1,406 participating institutions in 2022.



From the ranking of 17 SDGs that were followed, 3 SDGs succeeded in reaching the world's Top 10 positions: SDG8 in 1st, SDG 1 in 9th, and SDG 2 in 10th.

ACHIEVEMENTS ON SUSTAINABILITY

QS WUR Sustainability



QS World University Rankings Sustainability shows institutions' commitment to a more sustainable existence in science and technology to address climate issues, as well as the impact of research conducted across the 17 UN sustainable development goals.

QS WUR Sustainability Rankings are designed to measure higher education institutions ability to tackle the world's greatest environmental, social and governance (ESG) challenges. The ranking evaluates the social and environmental impact of universities as centers of education and research, as well as large corporations that face the operational sustainability challenges of large, complex organizations.

#405
QS WUR Sustainability 2024

#2
at Indonesia

#35
at Environmental Education

IPB University achieved **405th** place globally in the QS Sustainability Rankings 2024 and secured the **2nd** position nationally announced on December 5th, 2023. For performance lens at Environmental Education, IPB University achieved **35th** place globally.

Overall Score
62.2 /100

#252
score : 63.4
Environmental Impact

#823
score : 54.7
Social Impact

#184
score : 86.5
Governance

ACHIEVEMENTS ON SUSTAINABILITY

UI GreenMetric World University Ranking

UI GreenMetric World University Ranking assesses various aspects such as setting and infrastructure; energy and climate change; waste management; water usage; transportation; and also education and research related to sustainability.



4th

Most Sustainable University in Indonesia



34th

Most Sustainable University in The World



1st

Setting Infrastrcture in Indonesia



18th

Setting Infrastructure in the World

The ranking aims to promote awareness and encourage universities to adopt more sustainable policies and practices. In 2023, IPB University obtained the most sustainable university **4th** out of 145 Universities in Indonesia and the most sustainable university **34th** out of 1,183 Universities in the World.

World Ranking History



IPB Reached 8,825/10,000 points in 2023



1,375/1,500 (91.67%)

SI Setting & Infrastructure



1,475/2,100 (70.24%)

EC Energy & Climate Change



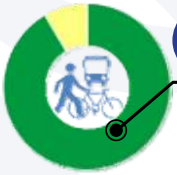
1,575/1,800 (87.50%)

WS Waste



950/1,000 (95.00%)

WR Water



1,650/1,800 (91.67%)

TR Transportation



1,800/1,800 (100.00%)

ED Education & Research

OPERATIONAL CAMPUS

18 sites

Distribution of SDGs

5,450 courses

Campus Area **1,669** ha

Campus Buildings Area **195,900** m²

52% Covered in Forest

41% Covered in Planted

12 Amphibians
22 Mammals
38 Reptiles
99 Birds
128 Butterflies



40 Bamboos
127 Medicinal plants
173 Woody plants

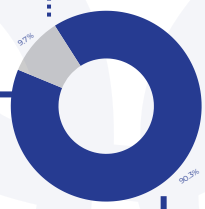
Open Space

96% of Total Area

Related to Sustainability

451 m² Open Space for **1** person

47 Student Activities
28 Start Ups
17 Community Services
193 Events



10% (3,377) Academic & Staffs

90% (31,365) Students

5 International Research Institute

23 Research Centers

9 Faculties
3 Schools
168 Study Programmes

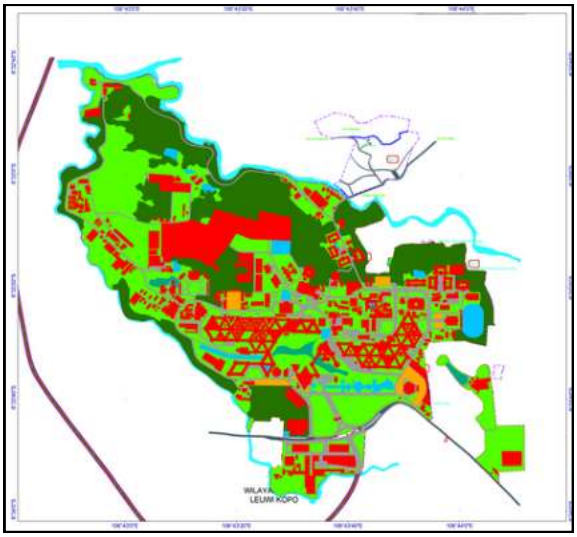
MANAGABLE INFRASTRUCTURE

Manageable infrastructure is a concept that focuses on managing and operating systems and facilities in an optimised and sustainable approach. Sustainable infrastructure refers to systems and facilities that are designed, constructed and operated in an environmentally responsible, economically viable and socially beneficial manner for their entire life cycle. IPB's building developments strive to fulfil green building requirements, and developments are planned to maintain green open spaces on campus.



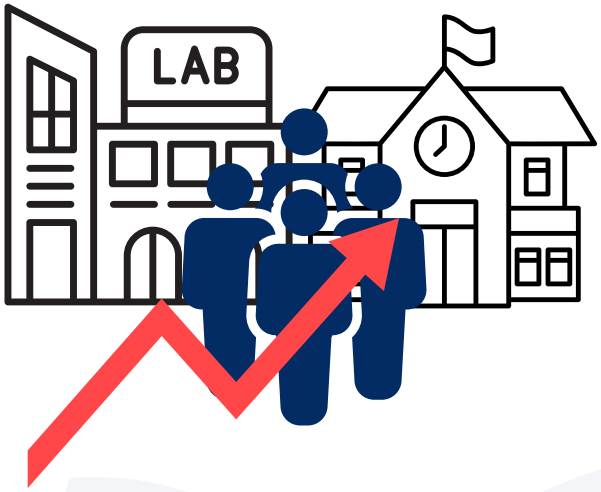
GREEN SPACE

MASTERPLAN OF IPB DRAMAGA CAMPUS MAP



IPB University managed the upcoming building constructions aligning with a **masterplan.** Therefore, the open space and green space of IPB remain preserved. For instance, IPB Dramaga Campus managed the area of open space until 2045 as stated in the masterplan. By 2023, the IPB University area has 96% open space, consisting of 52% forest and 41% vegetation. IPB Dramaga as the center of the IPB University campus has the largest open space area. IPB Dramaga Campus has 84.39% open space and 76.97% green space.

Based on the strategic plan of IPB University for 2028, there should be an increase in the number of students, lecturers, and staff in IPB Dramaga Campus to reach 33,129, it needs to be followed by control of the open space of the IPB Dramaga campus. The ideal open space requirement based on the projection of the IPB Dramaga campus community is 62.04%.





To support the ideal green space requirement of **50 m² or a minimum of 9 m² per person** (recommendation of WHO), referring to Regional Regulation Number 11 of 2016, each new building construction at IPB has a green base coefficient **(KDH) of 20%,** so that the green space of IPB Dramaga meets the ideal needs of **62.04%**.

GREEN BUILDINGS IN IPB UNIVERSITY

The Intergovermental Panel on Climate Change (IPCC) stated in their report that global emissions must reach net-zero around the middle of this century to reach the global warming target below 1.5˚C. Following the target of IPCC, IPB has tried to adopt green infrastructure, particularly green building initiatives since 2019.



Al-Hurriyyah Mosque

In Indonesia, green building certification refers to the Greenship by Green Building Council Indonesia (GBCI). Greenship rating is conducted by evaluating the buildings in some categories such as Appropriate Site Development, Energy Efficiency and Conservation Water Conservation, Indoor Health and Comfort, and Building Environment Management.



Vocational School



IPB University Rectorate

Green building practices play a vital role in tackling climate change, fulfilling Environmental, Social, and Governance objectives, maintaining resilience, and promoting equity within communities. Reflecting on IPB's vision to be a Green Campus, IPB has pursued green building certifications to ensure new and existing buildings are designed and operated with sustainability.



A.M. Satari Building

The implemetation of green building principles in IPB University campus has been reflected in IPB University buildings, such in IPB University rectorate, Al-Hurriyyah Mosque, A.M. Satari Building, and Vocational School building. Those buildings will soon be certified with Green Building by GBCI.

CONTROLLED ENERGY AND POLLUTION





IPB seeks to manage energy and reduce the amount of pollution generated from activities carried out in the campus area. These include; Waste Management, Water Conservation, Green Transportation, Air Quality, Electricity and Renewable Energy.



WASTE MANAGEMENT

The university employs innovative waste management strategies, transforming organic waste into high-quality compost through its Composting House, and using a biodigester to convert animal waste into gas, electricity, and bio-slurry. Additionally, inorganic waste is processed into paving conblocks using a melter. Furthering its environmental efforts, IPB introduced the eco-initiator machine to convert plastic, paper, and dry styrofoam into ash and partnered with Mountrash to streamline waste disposal via strategically placed dropboxes, making it easier for staff and students to manage waste sustainably.



Inorganic waste was processed into paving blocks using a melter.

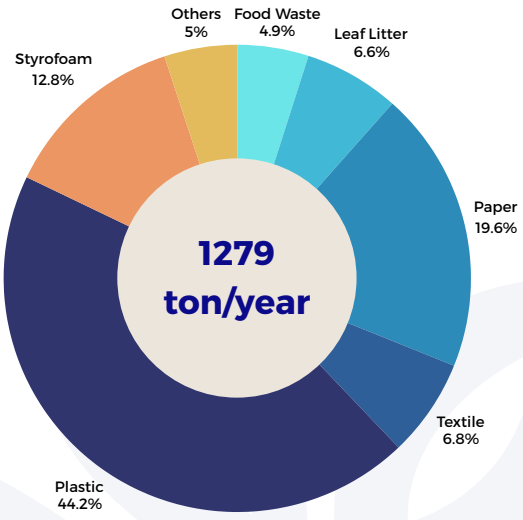


Organic waste was processed into compost

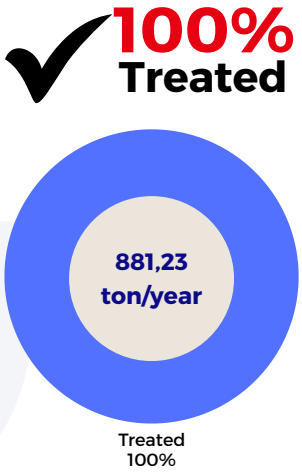


Mountrash Garbage ATM

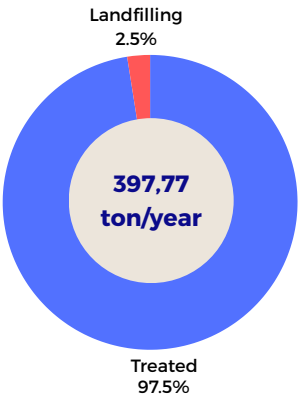
Press Tool



Percentage of Waste Composition in 2023



Percentage of Anorganic Waste Processing in 2023



Percentage of Organic Waste Processing in 2023

In 2023, IPB University generated **1,279 tons of waste**, processing 1269 tons and sending 9,94 tons to landfills.

WATER CONSERVATION



The SDGs Lake serves as a potential water source to meet the water needs of IPB University.



Rainwater utilization for the fishpond at Al-Huriyah's mosque IPB



Water Treatment Plant

IPB's water sources come from lakes, rivers, rainwater harvesting and groundwater springs. Currently, there are two WTPs at IPB that utilize river water around the campus of IPB Dramaga as the main water source, that is Ciapus WTP and Cihideung WTP.

> 50%
of water conservation already practiced

1,366,560 m^3
Total water consumption



Water Conservation Program and Implementation

- SDGs Lake, Inspiration Lake, Sukabumi Campus Lake, Pascasarjana Lake
- Creating a lake to conserve water program
- Water Conservation - Lake
- Infiltration wells
- Rainwater utilization for building sinks

1,208,880 m^3
of treated water consumed

> 50%
of water-efficient appliances installed

- 216 toilets
- 576 wash basins
- 60 faucets
- 36 buoys

GREEN TRANSPORTATION

In 2023, the number of vehicles into the campus area are skyrocketed to 16,270 vehicles, consisting of 12,755 motorcycles, 3,504 cars, and the same 11 shuttle buses. The Number of vehicles more than tripled from the previous year.

Motorcycle

12,114
Daily
Average

Car

2,930
Daily
Average

With the increasing volume of vehicles entering the campus, IPB took proactive steps to address this issue. Using green transportation—a sustainable solution aimed at reducing the reliance on private vehicles. IPB provides green transportation such as shuttle buses, bicycles, and electric golf cars. The shuttle bus used at IPB University is a Zero Emission Vehicle because it uses Gas fuel instead of Solar. From shuttle buses to bicycles and electric golf cars, IPB's commitment to environmental conservation is not only evident but also a beacon of inspiration for campuses everywhere.

Green Transportation Facilities



IPB University has 11 shuttle buses, and 5 of them use LNG fuel.



IPB University has 13 electric golf cars.



IPB University has 643 bicycles that can be rented by all IPB residents.





IPB University has automatic gates for cars and motorcycles

AIR QUALITY

IPB University is on a mission towards achieving carbon neutrality by 2030, a commitment solidified in the Rector's Decree Number 298/IT3/LK/2020. Presently, the IPB Dramaga Campus boasts an impressive 84.39% open space, with 76.39% green space. Within this green space, 43.71% comprises various plantations, while 33.26% stands tall as pristine forest cover. The open space area contributes to the air quality of IPB University campus. The quality of air can be determined by existing concentration of pollutant in the air, such as particulate matter For instance, IPB Dramaga Campus has measured PM2.5, PM10 to determine the campus' air quality.



The distribution pattern of PM2.5 shows that the IPB Dramaga Campus area is categorized as Moderate because it is within the interval 16 - 60 µg/m³.

MODERATE PM2.5

Threshold value of PM2.5 = 65 µgram/m³.

The distribution pattern of PM10 shows that the IPB Dramaga Campus area is categorized as Good because it is within the interval 31 - 40 µg/m³.

GOOD PM10

Threshold value of PM10 = 150 µgram/m³.





In addition, CO_2 also measured to know it impacts to global warming. The tolerance limit of CO_2 is 0.0035% to prevent the formation of greenhouse gases. CO_2 concentrated in the parking area which indicates that CO_2 produced by the car and motorcycle.

CONTROLLED ENERGY AND POLLUTION

11 SUSTAINABLE CITIES AND COMMUNITIES

ELECTRICITY AND RENEWABLE ENERGY

IPB's electrical energy use during 2023 is 19,807,007 kWh. To fulfill the electrical energy needs, IPB also seeks to fulfill its energy needs with renewable energy.

19,807,007 kWh

IPB's average electricity consumption per capita is 521.24 kWh, which is lower than Indonesia's average electricity consumption per capita in 2023 by the Ministry of Energy and Mineral Resources of The Republic of Indonesia, which was 1,285 kWh.

IPB University implemented the renewable energy of solar panel and biodigister. Solar panels were provided to support electricity source of several classrooms and street lights. Apart from solar panels, IPB University also use biodigister for energy sources. Annualy, IPB University produced renewable energy of 145,630 kWh.

Renewable Energy

145,630 kWh









FRIENDLY AND SAFE ENVIRONMENT





IPB University prioritize security to ensure the safety of everyone on campus. It embraces inclusive design principles to ensure that all community members, including those with disabilities, feel welcome and have equal access to campus facilities and services.



CAMPUS SECURITY

Campus security at IPB University is maintained by security guards and surveillance cameras installed at 124 points across the Dramaga Campus. To mitigate fire risks, the university has a fire truck and conducts regular training for staff and students. For the safety and convenience of cyclists, IPB provides dedicated bike lanes. Additionally, convex mirrors are installed on several roads to aid road users.





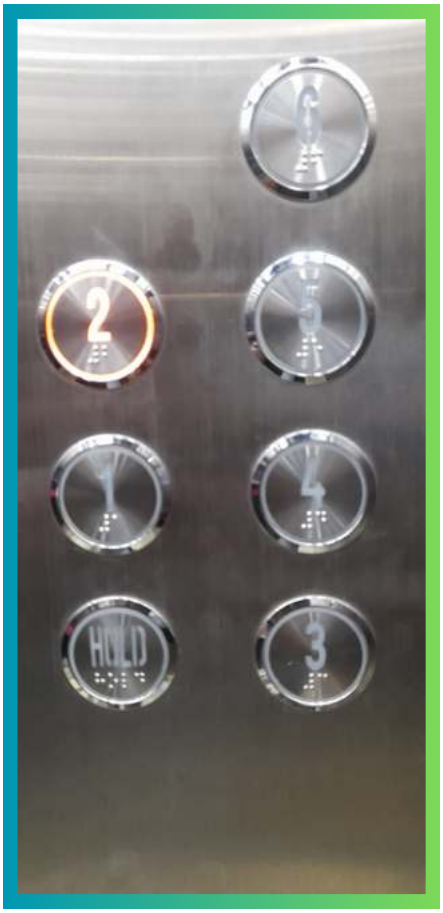








DISABILITY SUPPORT SERVICES

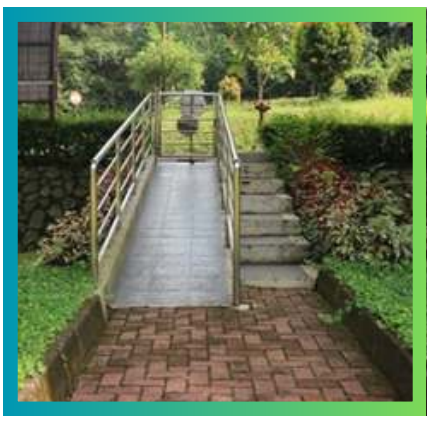


IPB University provides several special facilities for individuals with disabilities to ensure their comfort and safety in daily activities. These facilities include disabled ramp, disabled parking spaces, pedestrian pathways with guide paths (yellow ramp), and elevators equipped with Braille buttons and handrails. Additionally, IPB offers disability-friendly restrooms with handrails.













HARMONY AND COMFORTABLE ENVIRONMENT

Creating a harmonious and comfortable atmosphere boosts the happiness and secureness of students, faculty, and staff. IPB University as a sustainable campus include extensive green areas like parks and gardens, offering places for relaxation, leisure activities, and socializing.



HARMONY GARDEN AND INCLUSIVITY

Harmonious and comfortable environment is the learning environment that IPB wants to create. A comfortable and green environment can be a conducive learning place and provide freshness to its community.





We embrace the principles of inclusive design to ensure that all members of the community, including those with disabilities, feel welcome and haveequal access to campus facilities and services. Additionally, policies promoting gender equality and nondiscrimination against women contribute to a more inclusive and supportive environment. Furthermore, providing public access to green spaces and ensuring transparency through public financial reporting enhances community engagement and trust. Measures such as monitoring the proportion of students with disabilities and implementing anti-bribery and corruption policies further reinforce the commitment to creating a harmonious and equitable environment.

The Task Force for the Prevention and Handling of Sexual Violence (Task Force PPKS) which changed its name to HopeHelps IPB is part of IPB University which functions as a center for the Prevention and Handling of Sexual Violence on campus.

Policies for The Inclusivity

Policy of Non-Discrimination Against Women
Circular Letter no. 24799/ITS/KP/2021

Policies of Gender-responsive Universities
Rector Regulation No. 133 of 2020



CHILDCARE FASILITIES

In its continuous effort to create an inclusive and supportive environment, IPB University has developed several child-friendly facilities that cater to the needs of young children and their families. Two examples of these facilities are the Agriananda Childcare and Kindergarten and the IPB Character Education Lab School.



MATERNITY CARE

IPB University provides maternity facilities for breastfeeding mothers, ensuring a supportive environment for parents. Additionally, under Rector Regulation No. 7 of 2021 concerning the Management of IPB Employees, every female staff member is entitled to two months of maternity leave.



SPORT CLUB AND FACILITIES

IPB University has a variety of sports facilities, including running tracks, swimming pools, nutrition clubs, gyms, sports arenas, and sports halls. These facilities support the physical well-being and recreational needs of students, staff, and the community.

CONTINUOUS EDUCATION, RESEARCH, AND COMMUNITY SERVICES

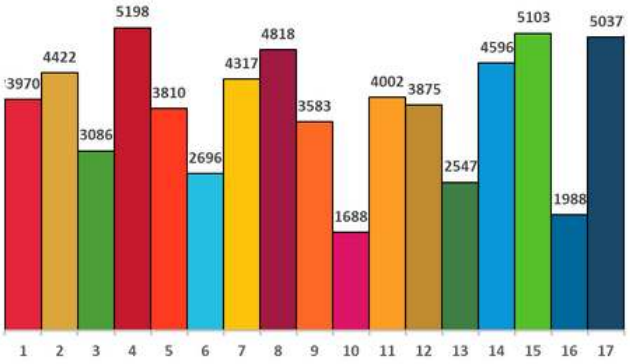


IPB's mission is towards sustainable education, research, and community service, aiming to contribute significantly to the development of society. IPB integrates every aspect of sustainability in the three pillars of higher education.



CONTINUOUS EDUCATION, RESEARCH, AND COMMUNITY SERVICES

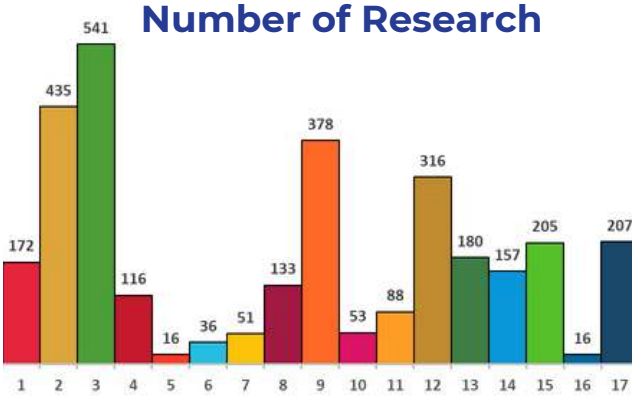
Following the growing concern about sustainability, IPB University has integrated the sustainability issue in all aspects including teaching, research, and community engagement. To do so, the university has regularly evaluated all activities in relation to the sustainable development goals (SGDs) in particular.

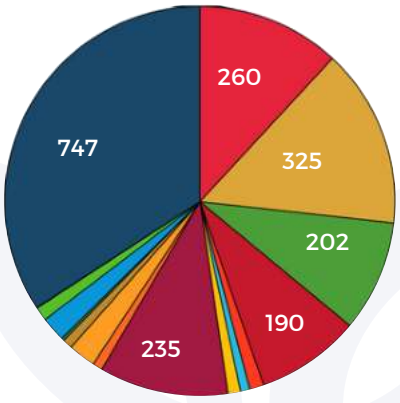


Based on the course analysis conducted on 7,122 courses, IPB courses are most closely related to SDGs with SDG 4 (Quality Education). A total of 5,158 courses or equivalent to 95.4% are related to SDGs 4 (Figure 4). IPB courses have more than 90% relevance to the three SDGs.

The total research by SDGs from 2019 - 2023 shows significant variations in the focus of research on SDGs to contribute to sustainable development. SDG 3 (Good Health and Well-Being) is the most researched research with a total of 541 studies. This reflects the high attention of IPB University's work units to health and welfare issues.

Number of Research



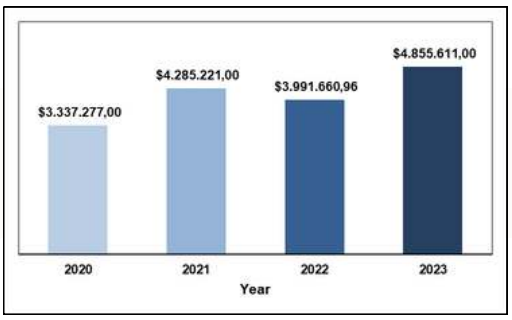


Number of Community Services

In community service conducted by IPB community members, the sustainability aspect has been implemented through the SDGs principle. Based on the results of the analysis of community service data on the 17 SDGs issues, It is obtained that the distribution of SDGs tends to SDG 17 by 34% (747), SDG 2 by 15% (325), and SDG 1 by 12% (260) that are closest to the community service conducted by IPB.



University Budget For Sustainability Research



PROGRAMS



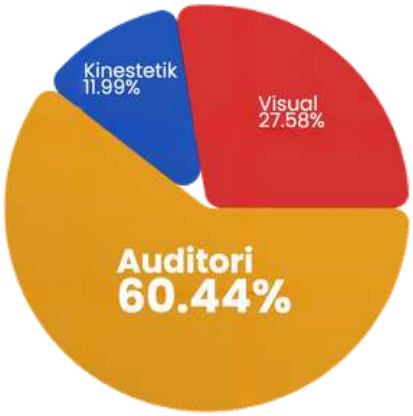
The implementations of Sustainablity Development Goals and IPB Sustainable Value were conducted in some programs created by IPB Univesity



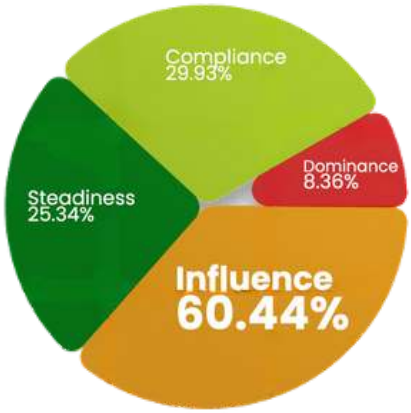
TALENT MAPPING

The Talent Mapping for New Students (TMNB) is an integral part of the New Student Orientation at IPB University. This initiative aims to identify the talents and interests of new students, covering aspects such as mindset, competencies, behavior, and career aspirations. Through TMNB, IPB University ensures that each student's unique potential is recognized and nurtured from the very beginning of their academic journey.

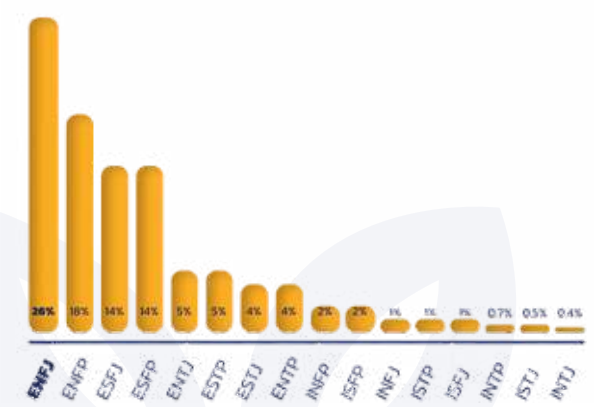
Learning Styles



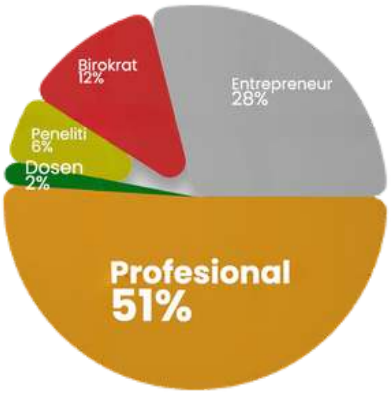
DISC Personality



MBTI Test



Career Interest and Potential Suitability



Total 7000+ students

The majority of student of IPB Universty Batch 60 (2023), in the management of learning information is **auditory,** in the management of the faced situation is **influence,** in Interaction with the learning environment is an **ENFJ** personality, and in career interests and potential suitability have **professiona**l interests.

INNOVATIVE STUDENT SUPPORT

IPB University is committed to supporting students, especially those from low-income families, to ensure they can complete their education. Our core belief is that financial barriers should not prevent any qualified individual from attending university.

To achieve this, we collaborate with the government, donors, and the students themselves. Our innovative financial aid programs are designed to provide accessible high quality education for all. Through scholarships, grants, and other forms of assistance, we strive to create an inclusive academic environment where every student has the opportunity to succeed.

Scholarship & Tuition Assistance

	2022	2023
Beneficiaries	8783	10279
Donors	63	95





Food Support

Go Maksi	Free Lunch Coupon	350 coupons/week
Agrianita's Kitchen	Free Lunch	200 servings/day
Milk & Fruits	Free milk & fruit	30 to 50 packages/day

CLIMATE-ADAPTIVE RICE VARIETIES

As the leading agriculture-based university in Indonesia, IPB University places a strong emphasis on innovation in the food sector. This focus has led to significant advancements, particularly in the development of climate-adaptive rice varieties. To date, we has successfully introduced several high-quality rice strains, including:

IPB 3S



Productivity : 11 ton/hectare

Growth duration : 112 days

Nutritional content : 17,78 ppm (Fe); 24,10 ppm (Zn)

Resistant to tungro disease, blast (*Pyricularia oryzae*.), and leaf blight

Have been implemented in 26 provinces in Indonesia

IPB 9G



Productivity : 11 ton/hectare

Growth duration : 115-125 days

Nutritional content : 17,54 ppm (Fe); 23,33 ppm (Zn)

Climate Smart

Amphibian

Use fertilizer and water more efficiently

IPB 15S



Productivity : 10,16 ton/hectare

Growth duration : 104 days

Nutritional content : 21,09 ppm (Fe); 24,04 ppm (Zn)

Resistant to *Nilaparvata lugense*. and blast (*Pyricularia oryzae*.)

SCHOOL FOR HIGH QUALITY FAMILY

To support a harmonious and comfortable environment through community service, IPB University has established the "Sekolah Keluarga Berkualitas (School For High Quality Family)" This program aims to enhance the knowledge and skills of families in fostering a high-quality family environment, with a particular focus on developing Indonesia's future generations. The program comprises seven sessions conducted in Balumbangjaya Village, Loji Village, and Benteng Village.

The program's strategy involves close collaboration with local stakeholders, regular health monitoring for children, and continuous guidance and training for the parents (especially mothers) until they complete the program. Additionally, the initiative actively engages villages surrounding our campus to promote family welfare and develop a healthy, high-quality human resource base. Through these efforts, the program seeks to create sustainable improvements in family well-being and contribute to developing a robust and healthy society.

School For High Quality Family's Curriculum

- The Importance of Family Resilience and the First 1,000 Days of Life in Preventing Stunting
- Implementing "Asah, Asih, and Asuh" in the Family: Promoting the Healthy Development of Toddlers
- Characteristics of Toddlers and the Environment Needed for Optimal Growth and Development
- Smart Financial Management
- The Value of "Investing" in Children to Improve Their Quality
- Strengthening Family Functions to Prevent Stunting
- Cooking Demonstration of Nutritious Meals



School For High Quality Family at Babakan Village



School For High Quality Family at Cibanteng Village



School For High Quality Family at Situ Gede

GOATHAI ORGANIC FERTILIZER



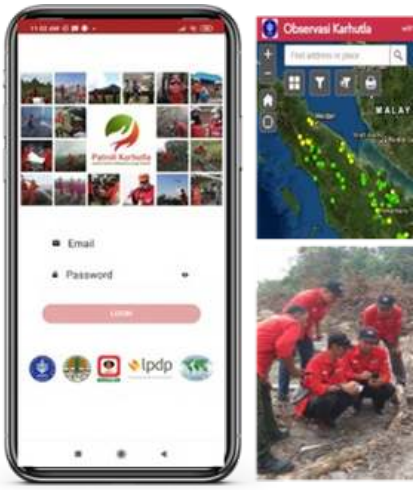
Supporting Sustainable Food System

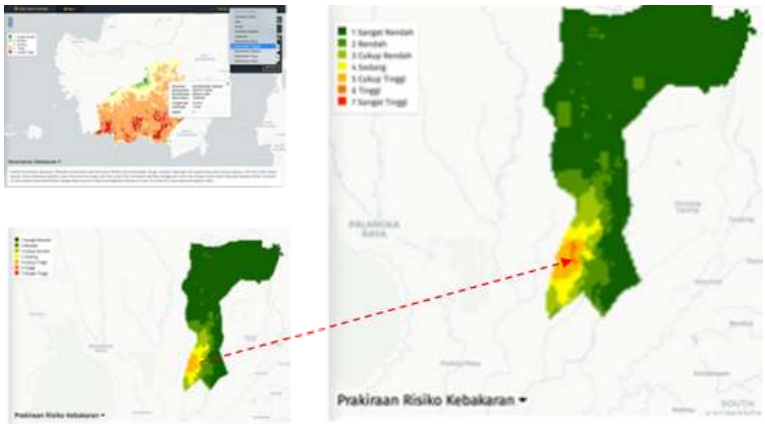
GoatHai organic fertilizer is a premier innovation from the IPB University. successfully penetrating international markets through the One Village One CEO (OVOC) mentoring program. GoatHai is made from selected goat manure processed with modern technology.

The OVOC program involving GoatHai not only benefits farmers who use this fertilizer but also positively impacts the local economy. By increasing production and improving the quality of agricultural yields, farmers can enjoy higher incomes. Additionally, the program provides training and support for farmers and local entrepreneurs, creating jobs and empowering rural communities.

GoatHai organic fertilizer is a perfect example of innovation that combines science, technology, and local wisdom to create a widely beneficial product. Through superior quality and sustainable production processes, GoatHai is not just a fertilizer but a holistic agricultural solution. Its success in the OVOC IPB program demonstrates that with proper guidance, local products can reach international standards and provide significant benefits to the economy and the environment. With GoatHai, a better future for agriculture is not just a dream but a reality being realized.

SMART PATROL INFORMATION SYSTEM FOR FOREST & LAND FIRE PREVENTION





In collaboration with the Ministry of Environment and Forestry, IPB University have launched the Forest and Land Fire Prevention Patrol Information System (SIPP Karhutla). This cutting-edge system, available as a mobile application and website, is designed to improve patrol data management for forest and land fire prevention. The implementation of SIPP Karhutla has significantly enhanced the efficiency of field patrols and data management. It has resulted:

36.02% increase in efficiency for recording field data

40.32% improvement in field data reporting

69.86% costs related to report duplication and binding per village have decreased

56.48% boost in generating patrol reports

4.9% reducing paper usage in reporting

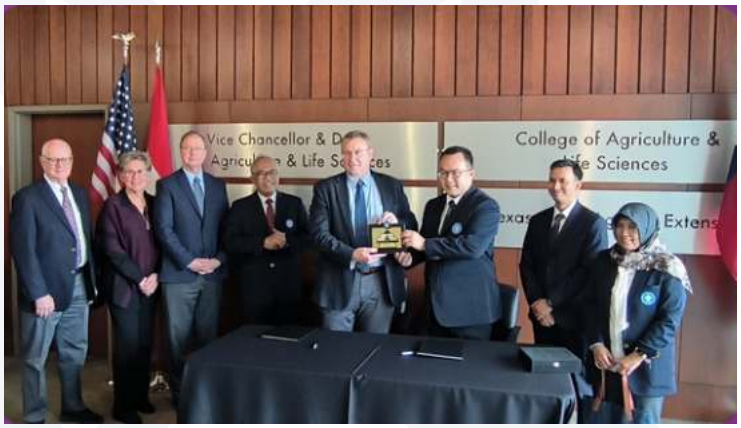
SUMATRAN RHINO CONSERVATION

In 2023, IPB University embarked on groundbreaking research and development of genetic technology for Sumatran Rhinos and Orangutans. For this initiative, we also collaborate with Texas A&M University, Colossal Biosciences, and Re:Wild USA. The primary goal is to boost the population of Sumatran Rhinos in conservation areas using gene-editing techniques.

Historically, captive breeding without technological advancements has resulted in only five rhinos being born worldwide over the past 40 years. Recognizing the urgency, the Indonesian Ministry of Environment and Forestry fully supports our innovative approach. This collaboration also underscores our commitment to sustainable value, striving to create a friendly and safe environment through continuous education, research, and community service.







IPB University

re:wild

TEXAS A&M UNIVERSITY

colossal

15 LIFE ON LAND

17 PARTNERSHIPS FOR THE GOALS

CONTINOUS EDUCATION, RESEARCH, AND COMMUNITY SERVICES

A COLLABORATION FOR SUSTAINABLE CORAL REEFS



Through the Center for Coastal and Marine Resources Studies (CCMRS), IPB University is partnering with PT Pupuk Kaltim on a Center of Excellence (COE) initiative focused on coral reef sustainability.

These efforts aim to advance research, education, and community involvement in coral reef conservation. This initiative includes four integrated Scopes of Work (SOW):

- SOW 1: Assessing and mapping the health and biodiversity of coral reef ecosystems.
- SOW 2: Developing the Sea Garden, a field laboratory and learning center for coral ecosystems and marine education, serving various stakeholders, including domestic and international universities.
- SOW 3: Establishing a coral reef education center dedicated to ex situ conservation.
- SOW 4: Strengthening and engaging the community around coral reef conservation.

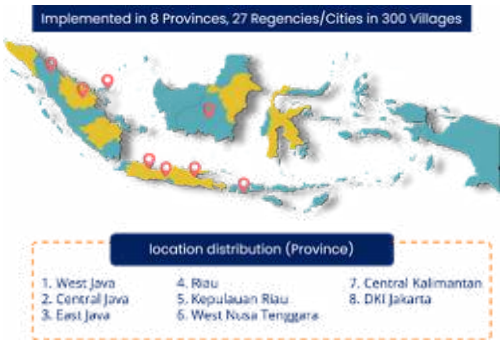


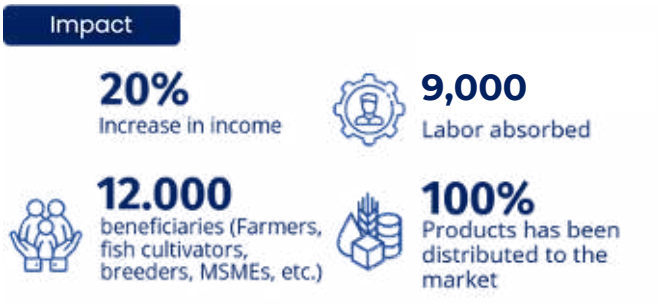
Coral Reef Restoration to Developing the Sea Garden



Monitoring Health and Biodiversity of Coral Reef Restoration

ONE VILLAGE ONE CEO (OVOC)





The IPB University has launched an innovative program entitled "One Village One CEO," which aims to create young entrepreneurs in every village in Indonesia. Since its launch in 2018, this program has demonstrated a number of significant achievements in empowering the rural economy. Currently, OVOC program has involved more than 5,000 youth from 100 villages throughout Indonesia. This program provides more than 200 training sessions and workshops covering various topics, from financial management, digital marketing, to product innovation and agricultural technology. As a result, more than 75% of participants reported significant improvements in their business skills and knowledge.





Approximately 65% of program participants succeeded in establishing new businesses or developing existing businesses. In addition, more than 150 MSMEs in these villages showed an increase in turnover of up to 40% in their first year participating in the program. After the success in the pilot villages, this program began to be expanded to other areas. In 2023, this program has been replicated in more than 50 new villages in Central Java, East Java and South Sulawesi. The target is that by 2025, this program can reach 500 villages throughout Indonesia.





ALUMNI AFFAIRS

Himpunan Alumni IPB (HA-IPB) / IPB Alumni Affairs established on 5th September 1970 in Bogor. HA-IPB has a vision to be a role model of alumni association as a platform and strategic partner that makes a real contribution toward alumni, almamater, and Indonesia nation . In 2023, HA-IPB have a total member of 190,000 alumni.



Dr. Ir. Walneg S. Jas

Dr, Ir. Walneg S. Jas is the current head of HA-IPB for 2021-2025. He completes his study in IPB on 2023 as a Doctor in Management and Business, Stretegic Management. Before taking role as the head of HA-IPB, Dr. Walneg S. Jas is a secretary of HA-IPB in 2017-2021. He is a professional with extensive 30 years of experiences in various managerial fields, sales & distribution, leadership as well as change management

To build a sustain affairs, HA-IPB created the infrastructure of its organization that consist of :

- Central Excutive Board HA-IPB
- 12 Commissariat Executive Board (Faculty HA)
- 34 Regional Executive Board (Province HA)
- 6 Autonomous Bodies HA-IPB
- 200 Branch Executive Board (City HA)
- 5 International Branch Executive Board (USA, Netherland, Malaysia, Singapore, dan Japan)
- 36 Diaspora Network Coordinator

The infrastructure of HA-IPB is expected to be able to **maintain relationships between alumni. encourage alumni contribution, and facillitate campus and students**

HA-IPB's SUSTAINABILITY RELATED PROGRAMS

MENTORING LEADER

A program to create and prepare leaders from IPB Alumni regularly. This program has been held for 5 batch in 2023.

YAPI SCHOLARSHIP

A scholarship program to help student with financial constraints. This scholarship targeted 1,000 awardee for 2024.

WIRATANI BANGUN DESA (WIBASA)

A fund program for alumni to build an agricultural business in their hometown. This program targeted 100 IPB's alumni that distributed in 34 provinces of Indonesia.



ACTION PLANS

IPB University has set a milestone to become a Globalized Sustainable University by 2028. To achieve this, IPB is implementing action plans such as green building initiatives, the use of eco-friendly transportation, effective water management on campus, and actively promoting sustainability issues both on campus and in the surrounding community, with all sustainability information recorded on a dedicated sustainability dashboard.

2024
Resilient Ecosystem for Advanced Science and Technology

2025
Innopreneurship and Value Creation for Community and Industry

2026
Global Engagement

2027
Global Leadership in Innopreneurship

2028
Globalized Sustainable University



GREEN BUILDING

SOP

The construction of new buildings at IPB will be in accordance with the Standard Operating Procedures (SOP) and must conform to the IPB Masterplan. The building constructed is initiated to be a Green Building.

The first building to be registered as a green building is the AM Satari Building. This building from the beginning of the construction has been initiated and planned to be built into a Green Building.



To become a green building, this building produces renewable energy from solar panels installed on the rooftop. In addition, this building also uses rainwater as another water resource. The use of electrical energy for electronic devices such as air conditioners, lights, and others is also recorded regularly.

Platinum Categorized

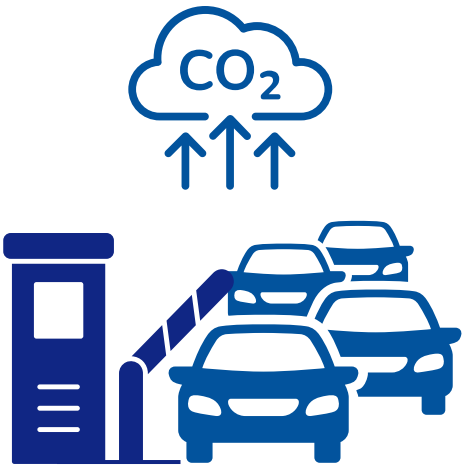
In an assessment simulation conducted in accordance with GBCI's Green Building criteria, the building received a score of Platinum as a Green Building. Registration for Green Building Certification is planned to begin in early 2024.

Later, buildings in IPB will also be included in the Green Building certification organized by Green Building Council Indonesia.

GREENSHIP

GREEN BUILDING COUNCIL INDONESIA

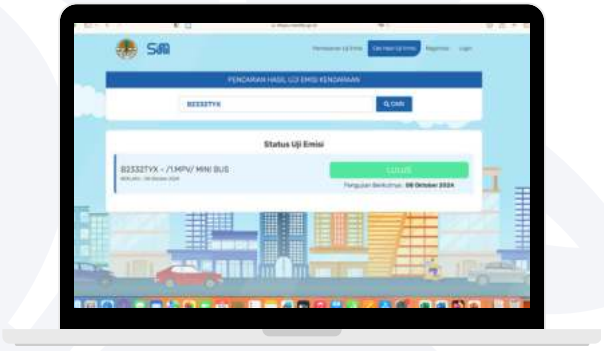
TRANSPORTATION



To control the number of vehicles entering the campus, a free emission test is conducted to formulate a policy that can be issued by the campus. In the future, vehicles entering the campus must be registered to pass the emission test. Every vehicle that enters is recorded when entering the automatic gate.

The first vehicle emission test in IPB University campus held on 2024 with a collaboration between IPB University, Auto2000, and Environmental Services of Kabupaten Bogor. The first emission test were targeted for 2000 IPB community's vehicle. In the upcoming event, IPB will hold the emission test regularly and initiates a special day called "IPB Emission Reduction Day" every 4 days per month.





The result of emission test will be connected with the national website called SIUMI (Emission Test Infromation System) by Indonesian Ministry of Environment and Forestry.

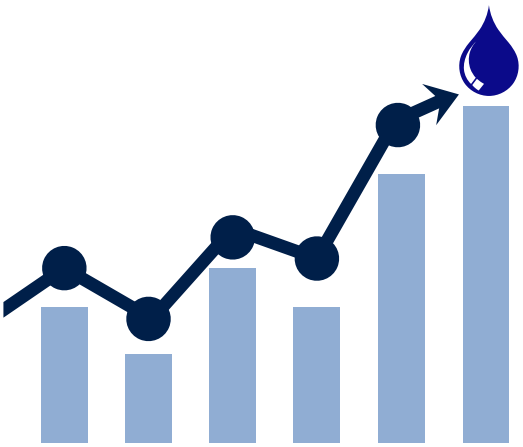
WATER MANAGEMENT



IPB started the management of water governance by conducting water quantity and quality studies. This assessment was carried out to meet IPB's future water needs with high quality.

Water management is transforming from conventional to IT-based. In the future, monitoring of water quality and quantity will be carried out in real time and can be seen in the IPB Sustainability Dashboard.

A study is currently being designed to measure the quantity of water sourced from (1) springs, rain, and groundwater, (2) reservoirs and lakes, and (3) rivers. In addition, the water use at IPB will also be projected until 2045 using data on the number of clean water users per building at IPB. This study will begin in 2024.



Improvement of water quality and its purification system will be carried out in four water sources at IPB namely Cihideung Water Treatment Plant (WTP), Ciapus WTP, SDGs Lake, and LSI Lake. A water quality assessment will also be conducted in 2024 along with a water quantity assessment.









SUSTAINABLE LIFESTYLE MOVEMENT

A sustainable university encompasses more than just its campus infrastructure and facilities; it hinges crucially on the sustaineble lifestyle of its campus community. Sustainable lifestyle is adopting practices that conserve natural resources, reduce waste, and support ecological balance for future generations. This lifestyle will support the establishment of sustainable university from the roots. Reflecting on IPB philosopy: Growth Mindset, the sustainable lifestyle needs to be echoed to all of the IPB's community.

Sustainable lifestyle in small community of IPB has been practiced by Department of Science Communication and Community Development in a program named Gerakan Ekologi Mandiri (Gerakoman). Gerakoman encourages students to adopt new habits that are sustainable for 21 days.
Inspired by Gerakoman, IPB aims to elevate this movement at the campus, regional and national levels. As a curtain raiser, IPB university collaborate with Dinas Pendidikan Sukabumi and Self Learning Institute to launch this movement.



Gerakoman Activity 2024

IPB's Sustainability Ambassador

IPB's sustainability ambassador is chosen to make a movement and encourage the implementation of sustainable lifestyle,
There will be three role of IPB's sustainability ambassador:

- Biodiversity Ambassador
- Waste Governance Ambassador
- Lifestyle Ambassador

The IPB's sustainability ambassador will regularly chosen every semester to promote sustainable lifestyle in every generation of IPB University.



IPB'S CONTRIBUTIONS TO THE LOCAL VICINITY

IPB as a State University for 60 years has implemented the Tridarma of higher education, both from within the campus and outside the campus. For forward development of IPB University, the Tridarma need to be evaluated as a basis for campus decision-making. Therefore, research on the satisfication on IPB's tri dharma.

The main objective of the Satisfaction Index Study of Residents and Communities around Campus on Tridharma Activities of IPB is to provide data and information on the level of satisfaction of residents and communities around the campus of IPB towards education, research, and community service activities. Other objectives expected from this study are:

- Knowing the perception of the community around the campus regarding the impact of the presence of IPB and the development of the Dramaga-Ciampea area.
- Provide recommendations to increase the resilience of the community around the campus to changes that occur as mitigation of the impact of the growing IPB (IPB Darmaga Town).

Progams for IPB's Tridarma



Education

- IPB Mengajar
- Communal waste management training

Research



- Desa presisi Data
- One Village One CEO
- Dosen Mengabdi



Community Services

- UMKM Camp
- Field Study and Community Service
- Sinarsari Mandiri Program
- Eco-based village Program

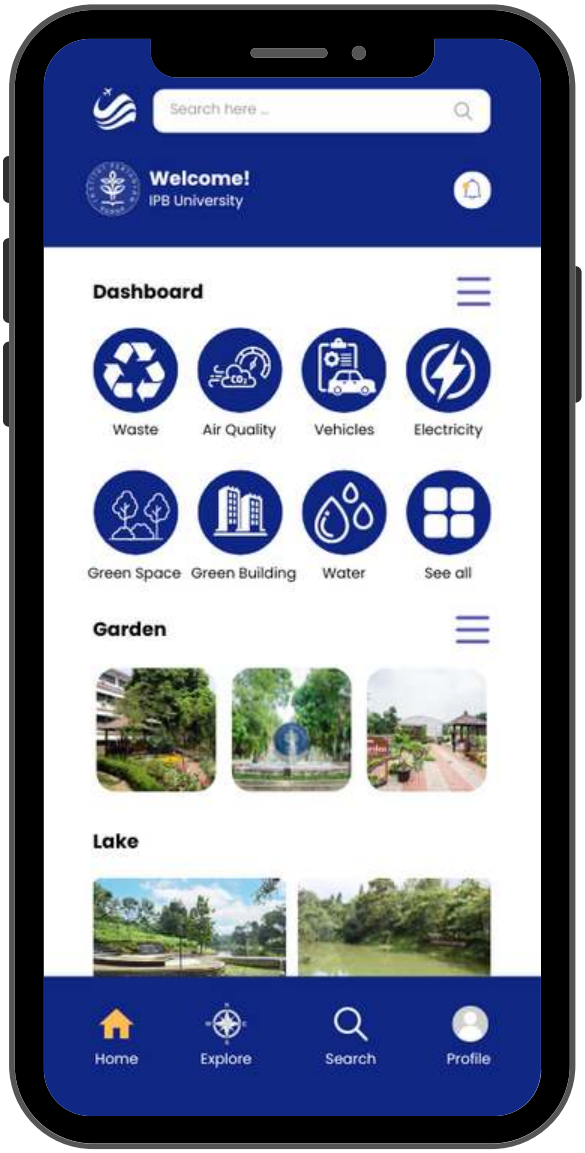
IPB SUSTAINABILITY DASHBOARD

IPB has many applications to support daily life on campus such as IPB mobile. Currently, IPB is developing an application to measure sustainability parameters.

Sustainability parameters that will be displayed on the dashboard are:

- Waste
- Air quality
- Vehicle
- Electricity
- Water
- Green Space
- Green Building

All of the information related to sustainability at IPB will be gathered through a dashboard with **realtime** data so IPB community can monitor the condition of the IPB environment and can also increase awareness to preserve the IPB campus environment.





IPB Sustainability Dashboard is also set to provide notifications / alerts for any critical changes in sustainability parameters.

IPB UNIVERSITY SUSTAINABILITY REPORT

2023

www.bpkb.ipb.ac.id bpkb@apps.ipb.ac.id @bpkbipb