



IPB University
— Bogor Indonesia —



SUSTAINABLE
DEVELOPMENT
GOALS



IPB UNIVERSITY
SUSTAINABILITY DEVELOPMENT GOALS

SDGs Report 2023

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SDGs Report 2023

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GLOSSARY



A

ARM HA-IPB : Aksi Relawan Mandiri Himpunan Alumni IPB (Independent Volunteer Action of the IPB Alumni Association)

B

BDP : Teknologi dan Manajemen Perikanan Budidaya (Aquaculture Technology and Management)

BPKIL : Balai Pengujian Kesehatan Ikan dan Lingkungan (Fish and Environmental Health Testing Center)

BRIN : Badan Riset dan Inovasi Nasional (The Indonesian National Research and Innovation Agency)

C

CCR : Common Class Room Building

CCMRS : Center for Coastal and Marine Resources Studies

D

Dospulkam : Dosen Pulang Kampung (Lecturer Homecoming Program)

POS LIGA : Sekolah Menengah Atas Negeri Posyandu Peduli dan Siaga (Caring and Alert Integrated Health Post)

F

FAD : Fish Aggregating Device

FPIK : Fakultas Perikanan dan Ilmu Kelautan (Faculty of Fisheries and Marine Sciences)

H

HIMASPER :



GLOSSARY



K

- KKN-T : Kuliah Kerja Nyata-Tematik (Thematic Community Service Program)
KPC : Komunitas Peduli Ciliwung (Ciliwung Care Community)

M

- MSP : Manajemen Sumberdaya Perairan (Aquatic Resource Management)

O

- OVOC : One Village One CEO

P

- PPLH : Pusat Penelitian Lingkungan Hidup (IPB's Environmental Research Center)

S

- SIL : Teknik Sipil dan Lingkungan (Civil and Environmental Engineering)
SMP PGRI : Sekolah Menengah Pertama Persatuan Guru Republik Indonesia (The Indonesian Teachers' Association Junior High School)

W

- WWTP : Wastewater Treatment Plants

6 CLEAN WATER AND SANITATION



Ensure availability and sustainable management of water and sanitation for all

1 Learning Program

The Faculty of Fisheries and Marine Sciences (FPIK) offers programs focused on sustainable water resource management. In the Department of **Aquaculture Technology and Management**, students study courses such as **Aquaculture Water Quality**, **Aquaculture Quality Management Systems**, and **Water Quality Management**. Meanwhile, the Department of **Aquatic Resource Management** offers courses like Water Pollution and Treatment, Aquatic Productivity, and Aquatic Environmental Risks and Impacts, all aimed at teaching the importance of maintaining clean and sustainable aquatic environments. In addition to courses, the university also offers various enrichment opportunities through webinars, such as those organized by the Department of Aquatic Resource Management (MSP) and the Department of Civil and Environmental Engineering (SIL). These webinars emphasize the importance of water resource conservation and aquatic sustainability, such as **The Use of Fishways to Maintain Biodiversity** and **The Readiness of Water Infrastructure to Face Climate Change Impacts on Food Security**. Collaborations with academic and research institutions, like Charles Sturt University and BRIN, further strengthen efforts to find innovative

solutions to the challenges of water resource conservation and sustainability in Indonesia.

2 Research and Innovation

IPB University continues to demonstrate its commitment to supporting access to clean water and sanitation through various research and innovations. In collaboration with the DKI Jakarta Environmental Service, IPB's Environmental Research Center (PPLH) conducted a study on **Reservoir Water Quality** in Jakarta to identify issues and efforts to improve water resources. Additionally, university lecturers initiated the development of **Water Treatment Technology** in Nganti Village, Bojonegoro, to address clean water shortages caused by the El-Nino phenomenon. Meanwhile, the university's KKN-T students designed an automatic water quality monitoring tool called **aquasense**, equipped with sensors to monitor temperature, turbidity, and pH in real-time, helping farmers maintain water quality in aquaculture. These innovations contribute significantly to improving access to clean water in various regions of Indonesia.



20
Water station across 11 locations



Research in number

 **360** scholarly output in 2019–2023

 **309** FWCi in 2019–2023

 **1724** citation count in 2019–2023

3.46% of all Indonesian citation count

4.95% of all Indonesian scholarly output

3 Campus Operation

IPB University is committed to supporting various campus operations that focus on access to clean water and proper sanitation. As a concrete step, the Faculty of Fisheries and Marine Sciences (FPIK) recently implemented **clean student toilets**, which serve as an essential facility to support the continuity of education on campus. With clean and comfortable toilets available, it is hoped that students can focus on their studies and achieve satisfactory accomplishments.

In addition, since 2021 the university provides free drinking water stations in nearly all faculties, including the Common Classroom Building and Al-Hurriyyah Mosque. There are 20 water stations distributed across 11 locations. These stations not only supply healthy drinking water for lecturers, students, and visitors but also contribute to reducing plastic waste from single-use water bottles. With the presence of these water stations, students' consumption of drinking water is expected to increase. The water stations can save students an average of IDR 73,333 per person per month on purchasing bottled water.

Water Consumption Levels (MI)	Water Station	
	Before (%)	After (%)
500-100	51.06	6.38
1001-2000	34.04	68.09
2001-2500	12.77	19.15
>2500	2.13	6.38
Total	100	100

wastewater sources into several areas leading to the WWTP locations facilitates effective waste management across the campus. Furthermore, studies on water quantity and quality are continuously conducted to meet future needs, with a shift in water management to IT-based systems that enable real-time monitoring of water quality and quantity. Improvements in water treatment systems and water quality at four sources, such as the Cihideung Water Treatment Plant and SDGs Lake, are also part of the university's efforts to ensure the availability of clean water for the entire campus community until 2045.

4 Community Engagement

Programs that emphasize the importance of access to clean water and sanitation also involve the communities. One of the initiatives includes the handover of two **clean water installation** units by the IPB Alumni Association (ARM HA-IPB) to residents in Jamaras Village, Sarampad Village, and Padaruum Village in Cianjur. This installation provides vital access to safe drinking water for communities affected by the earthquake, helping them meet their basic daily needs. Additionally, to enhance understanding of water management, the Department of

Aquatic Resource Management (MSP) organized **Water Management Training** in collaboration with the Fish and Environmental Health Testing Center (BPKIL) in Serang Regency. The event, themed "Limnology and Aquatic Productivity: First Steps in Enhancing Basic Understanding of Aquatic Science for Water Management," aims to equip participants with the necessary knowledge to sustainably manage water resources.

In another effort, the university lecturers are also involved in **the revitalization of an ex-sand quarry** for freshwater fish cultivation in Suradita Village, Tangerang. Through the Dospulkam program, they conduct training and pilot activities in collaboration with the Bratasena Pandu Nusantara Foundation, which has managed the area for ecotourism activities. This initiative not only helps improve local food security but also supports sustainable water resource management.



participation among students in safeguarding clean water. Additionally, the One Village One CEO (OVOC) team is also working to **improve water quality** at the Miftahul Ulum Islamic Boarding School (Ponpes) in Tabalong through a collaborative filtration program with the Adaro Foundation. In this activity, students mentor working groups to understand how to enhance water quality, particularly in terms of pH, oxygen, and ammonia levels, thereby meeting the **The river cleanup** during Ciliwung Care Day is also part of the students' efforts to preserve the environment and enhance water resource quality. In collaboration with the Aquatic Resources Management Student Association (Himasper), the Ciliwung Care Community (KPC), and other groups, this activity involves focus group discussions, tree planting, waste management, and education on proper sanitation.



5 Student Activities

Students actively contribute to various activities focused on water conservation. One of these initiatives is the **"Gevatirtha" Water Conservation Movement**, which was implemented at SMP PGRI 5 Bogor. In this program, students provide material on the importance of conserving water resources to maintain the hydrological cycle, engage in planting activities, and create an automatic watering system from recycled bottles to raise awareness and encourage

