



**IPB University**  
— Bogor Indonesia —

### **Integration of SDGs in**

- Institutional governance/strategic level
- SDGs in research
- SDGs in campus operations**
- SDGs in curriculum development
- SDGs in student engagement activities
- SDGs into community activities
- SDGs at a whole-institution level

### **Focus on**

- Goal 1 - No poverty
- Goal 2 - Zero hunger
- Goal 3 - Good health and wellbeing
- Goal 4 - Quality education
- Goal 5 - Gender equality
- Goal 6 - Clean water and sanitation**
- Goal 7 - Affordable and clean energy
- Goal 8 - Decent work and economic growth
- Goal 9 - Industry, innovation and infrastructure
- Goal 10 - Reduced inequalities
- Goal 11 - Sustainable cities and communities
- Goal 12 - Responsible consumption and production
- Goal 13 - Climate action
- Goal 14 - Life below water
- Goal 15 - Life on land
- Goal 16 - Peace, justice and strong institutions
- Goal 17 - Partnerships for the goals**

## **Water Conservation "Inspiration Lakes"**

### **Summary**

Biodiversity Park and Inspiration Lake is a water conservation program implemented by IPB within the campus area. This program aims to sustainably manage freshwater resources and prevent water pollution in nearby lakes, rivers, and local watersheds in the IPB environment. IPB has a clean water treatment unit with natural water sources from rivers around campus with very high turbidity levels. In 2021, three artificial lakes (DAM) were built within the IPB University. These programs were supported by IPB partners from private sectors, such as PT Nutricia Indonesia Sejahtera by Danone Indonesia. It is hoped that with the construction of this DAM, it can become a source of clean water to supply water needs, such as in field laboratories that require untreated water. In addition, it is hoped that these lakes will become one of IPB's programs in the development of micro-hydro renewable energy sources. The total water consumed at IPB during 2021 was 1,488,297 m<sup>3</sup> (69% decrease compared to 2019 due to the pandemic), with sources originating from the water treatment process (74.2%), lakes (17.6%), and local water companies (8.2%). We develop 3 new lakes during the 2020-2021 period, namely the Inspiration Lake, the Lake at the Faculty of Veterinary Medicine (FKH), and the Small DAM at the Faculty of Fisheries and Marine Affairs. Inspiration Lake (Telaga Inspirasi) is not only a place for water conservation but also channelled as raw water for clean water. The Inspiration Lake was built in 2020 and has become an open space for the public. FKH Lake is a new lake built-in 2021, with an approximately 1000 m<sup>2</sup> of water discharge that can be used as a micro-hydro generator. The FPIK dam, which was built in 2021, is located at the end of the lake water discharge from the library building, the resulting water discharge is more than 2 meters, so it has the potential as an alternative raw material for clean water and micro hydropower plants.

### **Benefits of integrating this theme:**

1. This program can save money and diverts less water from our rivers and estuaries, which helps keep the environment healthy;
2. It can also reduce water and wastewater treatment costs and the amount of energy used to treat, pump, and heat water;
3. Prevent flooding because the lake has a sluice gate that functions as the entry and exit of the water flow gradually to regulate the volume of water in the river;
4. Prevent landslides because the artificial lake has a dam that functions to reduce damage to cliffs along the river in the IPB area;
5. It can be used to provide energy for hydroelectric power plants (PLTA), such as micro-hydro, to be turned into electrical energy via transmission.

**Barriers or challenges:**

1. The high rainfall in Bogor causes the need to conserve and utilise rainwater to become a challenging issue in IPB. The presence of an artificial lake needs to be added to its capacity so that it can accommodate more water;
2. The potential for micro-hydro development is very open in the future, and we are gradually testing the application of micro-hydro in our artificial lake. It requires more investment to install sufficient capacity of micro-hydro to fulfil campus needs.

**Conclusions and recommendations – max 200 words**

IPB University recognizes that water is essential and inherently understands that its campus-wide community depends on water. So, water conservation through various sustainability actions is needed. To avoid waste and ensure that everyone in our community has access to clean water, IPB is dedicated to making water conservation a campus-wide priority.



Fig 1. Lake of Inspiration in IPB University, a partnership with DANONE to preserve water conservation that was built in 2021

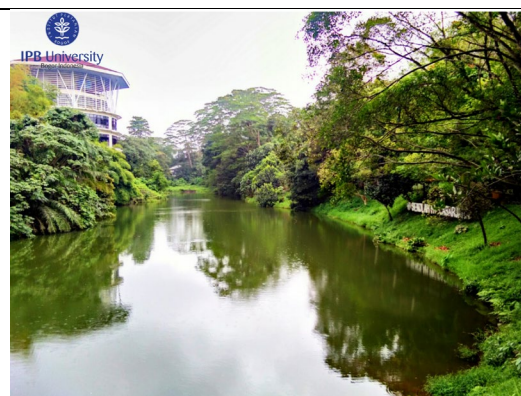


Fig 2. Lake of LSI in IPB University, a place for water conservation and recreational activities