



### **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**

## **Coral Reef Rehabilitation in Raja Ampat**

### **Summary**

The world's coral reefs and marine ecosystems face persistent declines caused by dioxide emissions, overfishing, and pollution. IPB University is committed to developing and applying science-based strategies to restore depleted coral reefs in Indonesia. In collaboration with the Coral Triangle Initiative (COREMAP – CTI), the Ministry of National Development Planning (BAPPENAS), and Indonesia Climate Change Trust Fund (ICCTF), Center for Coastal and Ocean Resources Studies (PKSPL), IPB University implements the coral reef restoration and conservation in Raja Regency Ampat. Raja Ampat is the bull's eye of the world's coral reef triangle, the area with the highest biota diversity in the coral reef triangle area. Although it covers less than 1 percent of the world's oceans, it has a very significant impact. This activity was carried out from August 2020 to February 2022. Until the end of 2021, IPB has carried out five (5) types of activities, namely: 1) ICM leader forum and workshop on sustainable fisheries management with a bioeconomic approach; 2) ICZM training for stakeholders in Manokwari; 3) ICZM Implementation Training for West Papua Province; 4) RZWP3K Monitoring and Evaluation System FGD; and 5) Implementation of coastal ecosystem rehabilitation in Yensawai village, West Papua. Ecosystem rehabilitation focuses on planting mangroves, seagrass, and coral reefs. In addition, we also formed and strengthened institutional groups for managing coastal ecosystems in these three ecosystems (mangroves, seagrass, and corals). In other locations, such as the Seribu Islands National Park, we actively monitor and rehabilitate 40 points in the core protection zone. We have even built an agro-maritime laboratory in the Seribu Islands National Park to support this coral reef rehabilitation activity. We also initiated the rehabilitation of coral reef ecosystems with the people of Mandangin Island, Madura.

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

1. Increasing the effectiveness of controlling the use of coastal and marine space through the development and implementation of a monitoring and evaluation system for the implementation of the RZWP3K and the preparation of an integrated coastal management platform;
2. Capacity building of local stakeholders in integrated coastal area management in the fields of marine spatial planning, tourism, fisheries, and/or conservation;
3. Enhancing community engagement in coral reef conservation;
4. Recovery of critical ecosystems in coastal areas and small islands through rehabilitation;
5. Developing better livelihoods for locals, such as aquaculture, capture fisheries, and tourism

### **Barriers or challenges**

1. Sustainability of observations and threats of bleaching. On the other hand, care and monitoring must continue so that the newly grown corals can survive.
2. Integrated coastal zone management and water river basin management requires engagement from various stakeholders. Increasing coordination among stakeholders is a challenging process .
3. Awareness and supervision of the importance of coral reefs are not enough from IPB as the program's initiator but also from the surrounding community and tourist visitors.

**Conclusions and recommendations – max 200 words**

Coral reef ecosystems are very important because they contribute to economic growth among coastal communities. Coral reefs can also become a center for tourism and aquaculture, not only as a gathering place for fish resources. Therefore, the commitment to maintaining the health of coral reefs must be carried out by all parties (government, academics, and the community). Rehabilitation of coral reefs in West Papua, which is carried out in collaboration with state agencies, is an important action that IPB University has carried out throughout 2021. Several other locations, such as Pulau Seribu and Pulau Mandangin, are being rehabilitated by IPB lecturers and students.



Fig 1. Aerial photo of coral reef replantation sites in the Raja Ampat Islands - West Papua conducted by PKSPL IPB University in collaboration with ICCTF



Fig 2. PKSPL IPB University researchers trained local communities in Yensawai Village – West Papua in coral reef replanting programs