14.2.2 - Does your university as a body offer educational programme / outreach for local or national communities on sustainable management of fisheries, aquaculture and tourism?

ASOIU recognises the growing significance of sustainable aquatic resources and coastal-zone development within the context of Azerbaijan's socio-economic and environmental priorities. Although our core strengths have traditionally been in petroleum engineering, energy and infrastructure, the University has expanded its engagement into water resources, ecological engineering and environmental management—areas which are highly relevant to sustainable fisheries, aquaculture and tourism sectors. By leveraging our specialities in Water Resources & Management and Ecological Engineering, we contribute to community knowledge and capacity in sustainable blue economy practices, including aquaculture, fisheries management, and eco-tourism in inland and coastal aquatic ecosystems.

1. Academic Strengths Aligned with Fisheries, Aquaculture & Tourism

- ASOIU houses degree programmes in Water Resources & Management, where students learn about hydrology, irrigation, water treatment, and ecosystem sustainability. These programmes provide a solid technical foundation for participation in aquaculture, fisheries and tourism-linked water systems.
- The University also offers specialisation in Ecological Engineering, emphasising the design and maintenance of engineered systems in harmony with natural ecosystems. Students acquire skills in wetland restoration, aquatic system design, and ecological services—all of which are directly relevant to the development of sustainable aquaculture, fisheries and tourism infrastructure.
- Through these programmes, ASOIU graduates are equipped to:
    - ❖ Evaluate aquatic ecosystems for their suitability for aquaculture and fisheries (including water quality, flow, nutrient loading);
    - ❖ Design irrigation, drainage and recirculation systems that minimise impact and are cost-efficient;
    - ❖ Plan eco-tourism infrastructure (walkways, observation zones, wetland visitor centres) that respect ecological constraints while enhancing community livelihoods.

2. Community Outreach & Capacity-Building for Fisheries, Aquaculture & Tourism

In alignment with the aforementioned academic programmes, ASOIU implements outreach activities aimed at local and national communities engaged in aquatic resource utilisation and coastal or inland water tourism. These include:

- Workshops and short courses for regional aquaculture operators, fish-farm managers and fishing-community stakeholders on best practices: sustainable stocking, water recirculation, effluent management, invasive species control, ecosystem monitoring and marketing of fish products.

- Seminars and training modules for local municipalities, tourism associations and community organisations on sustainable aquatic tourism: developing responsible visitor programmes around lakes, rivers or reservoirs; combining fishery-based recreation with environmental conservation; community-led eco-tourism planning.
- Under faculty supervision, ASOIU staff engage with local fish farms, aquaculture pilot units, or riverine/coastal tourism sites to deploy monitoring programmes (water quality, biodiversity indices), test sustainable technologies (recirculating aquaculture systems, eco-tourism boardwalks, native-fish stocking), and provide hands-on training for community participants in data collection, interpretation and management decisions.

3. Integration of Sustainability, Research and Community Engagement

ASOIU's approach to sustainable fisheries, aquaculture and tourism outreach is enriched by its research and interdisciplinary capacity:

- The University's research units in water resources and ecological engineering collaborate with local government, industry and NGO partners to address issues such as aquatic habitat degradation, aquaculture effluent impacts, tourism pressure on fresh and coastal waters, and community adaptation strategies.
- Through this research–outreach interface, ASOIU ensures that training programmes are evidence-based, locally relevant and linked to actual ecological and socio-economic conditions in Azerbaijan (for example, inland reservoirs, Caspian coastal zones, aquaculture of native species).
- This enables communities to adopt innovative, context-appropriate solutions (e.g., low-water-use aquaculture methods, eco-tourism around wetlands, stakeholder co-management of fisheries) rather than generic "one-size-fits-all" training.

4. Demonstrating Impact and Reach

To fulfill indicator 14.2.2, ASOIU tracks its outreach programmes' reach and outcomes. Key metrics include:

- Number of participants (farmers, fish-farm staff, municipal tourism officers, local community members) trained per year;
- Number of workshops/events conducted on sustainable fisheries, aquaculture or tourism topics;
- Evidence of changed practices in participating communities (e.g., adoption of recirculating aquaculture systems, improved fish stocking regimes, development of eco-tourism visitor trails around aquatic systems);
- Partnerships established with local fishing associations, aquaculture enterprises, tourism agencies, municipal water/river-basin authorities;
- Case-studies or reports showing improvement in water quality, fish-stock sustainability, community income from sustainable tourism, or biodiversity outcomes in managed aquatic sites.

Conclusion

ASOIU, through its academic specialisations in Water Resources & Management and Ecological Engineering, and via targeted outreach and research programmes, actively contributes to the sustainable management of fisheries, aquaculture and aquatic-tourism sectors in Azerbaijan. By equipping technical professionals, empowering local communities and engaging in applied research and demonstration, the University meets the objectives behind indicator 14.2.2 and reinforces its institutional commitment to sustainable aquatic ecosystems.