

15.2.3 - Does your university as a body work directly to maintain and extend existing ecosystems and their biodiversity, of both plants and animals, especially ecosystems under threat?

Azerbaijan State Oil and Industry University (ASOIU) works actively to maintain and extend ecosystems and their biodiversity through research, educational field activities, and practical conservation projects that align with SDG 15 – Life on Land. Drawing inspiration from global biodiversity protection models, ASOIU implements projects focusing on ecosystem monitoring, restoration, and awareness.

1. Restoration and Monitoring of Ecosystems

ASOIU supports field research programs in regions with vulnerable ecosystems, such as Astara and Lankaran, where biodiversity is under pressure from human and climatic factors. Through international geophysical and environmental field camps organized jointly with UFAZ and supported by BP and EI Group, students and researchers use geophysical, hydrogeological, and geochemical tools (e.g., GPR, resistivity probes, water-quality sensors) to assess soil and groundwater conditions. These studies help identify aquifer health, land degradation patterns, and ecological restoration opportunities — directly contributing to sustainable ecosystem management.



2. Protection of Local Flora and Fauna

Within its Green Campus Program, ASOIU carries out tree-planting and greening campaigns, enhancing biodiversity on and around the university's territory. These campaigns, often in cooperation with the Ministry of Ecology and Natural Resources, aim to increase native tree cover, reduce soil erosion, and support pollinator habitats. More than 400 trees were planted under the “Green World Solidarity Year 2024” initiative, expanding the university's green areas and strengthening the urban ecosystem.



3. Research and Education for Biodiversity Conservation

ASOIU's Department of Ecology and Environmental Engineering leads multiple research projects that focus on environmental protection, sustainable use of natural resources, and ecological awareness. Students are trained in biodiversity assessment methods, including soil microbiota sampling and vegetation analysis, ensuring long-term monitoring of environmental quality indicators. These activities promote both academic knowledge and civic responsibility for the conservation of plant and animal diversity.

ASOIU's ongoing initiatives demonstrate direct and measurable efforts to maintain, restore, and extend existing ecosystems and biodiversity. Through practical field studies, reforestation, student engagement, and sustainable research partnerships, the university contributes to protecting Azerbaijan's land, flora, and fauna — particularly in regions and habitats under environmental threat.