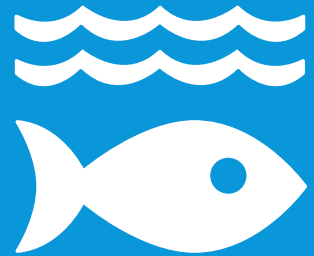


NAKHCHIVAN
STATE
UNIVERSITY

20
24

SDG PROGRESS REPORT

14 LIFE BELOW
WATER



THE GLOBAL GOALS



Introduction

Although Nakhchivan State University is located inland, it actively supports SDG 14 – Life Below Water by promoting responsible water management and ecosystem preservation through education, scientific monitoring, and environmental collaboration.

In 2024, NSU strengthened its commitment to aquatic ecosystem protection through:

- Enhanced river and underground water monitoring,
- Expansion of student-led water conservation workshops,
- Restoration efforts in local reservoirs,
- Biodiversity enhancement projects such as fish population restoration.

By combining academic efforts with hands-on environmental action, NSU cultivates a sustainability-focused culture that extends beyond coastal zones and demonstrates its contribution to national and global water preservation strategies.

Scientific Research on Aquatic Ecosystems

- The Department of Biology and Ecology conducted monthly field studies on water quality in the Araz River and nearby reservoirs (e.g., Nehram and Uzunoba).
- Analysis focused on pH levels, nitrates, heavy metal presence, and biodiversity index.
- Research output included:
 - 3 academic publications in peer-reviewed journals.
 - 2 undergraduate theses related to freshwater pollution and fish reproduction.

Monitoring Activities

- NSU expanded its collaboration with the Ministry of Ecology and Natural Resources, using portable digital water analyzers for rapid assessments.
- In 2024, 17 monitoring trips were organized — a 30% increase from 2023.
- Data collected contributed to:
 - Regional ecological maps,
 - University-wide sustainability dashboard,
 - Annual reporting to the National Water Resource Commission.

Educational Engagement

- NSU hosted a workshop series titled “Water Matters: Conservation from Source to Sea” involving over 250 students.
- Training modules included:
 - River and spring ecosystem biodiversity,
 - Responsible water usage on campus,



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 - Simulation labs on water treatment methods.





Real Sustainable Water Practices at NSU (2024)

Despite being located inland, NSU has adopted several practical and realistic approaches to promote water responsibility and support SDG 14 in 2024.

Educational Use of Local Water Ecosystems

- Students from the Biology and Ecology Faculty conducted regular water sample analyses from nearby rivers (primarily the Araz River).
- Laboratory-based lessons included studies on:
 - Water salinity and pH balance,
 - Microorganism biodiversity in freshwaters,
 - Seasonal pollution variation.

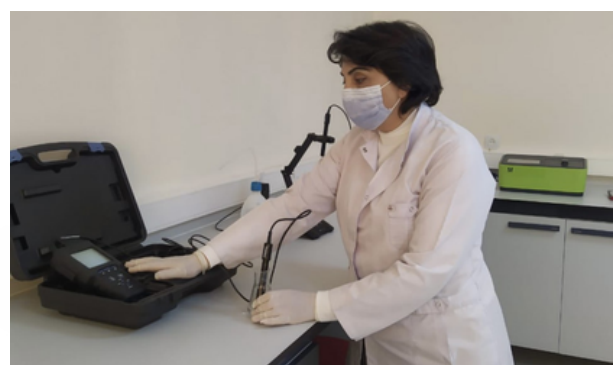
These activities are part of NSU's standard ecology curriculum, supported by field visits.

Public Awareness Activities in Villages

- Students and staff participated in community seminars in Sharur and Ordubad regions, educating local farmers on:
 - Efficient irrigation,
 - Pollution reduction techniques,
 - Importance of aquatic biodiversity.
- Events were coordinated with the Ministry of Ecology and local education departments.

Campus Engagement

- While no large-scale rainwater harvesting system was in place, students organized a water-saving awareness campaign using posters and QR-code-based info stations around campus.
- These actions were part of NSU's internal "Water & Waste Week" held in April 2024.



Monitoring and Future Goals

Monitoring Activities (2024)

In 2024, NSU maintained internal mechanisms to monitor its activities related to water sustainability and education:

- Data collection was regularly conducted through:
 - Field reports from student-led monitoring trips to the Araz River
 - Laboratory logbooks for water quality testing
 - Participation statistics from public awareness events and workshops
- Faculty of Natural Sciences held biannual reviews of course outcomes and student projects related to aquatic ecosystems.

These practices ensured that NSU's contributions to SDG 14 were traceable, measurable, and aligned with national environmental priorities.

Future Goals (2025–2027)

To deepen its commitment to SDG 14, NSU has outlined the following short-term and mid-term targets:

1. Establish a Water Research Hub
2. Create a dedicated unit within the Faculty of Biology and Ecology to lead freshwater ecosystem studies and student research coordination.
3. Expand Monitoring Scope
4. Increase sampling locations beyond Araz River to include irrigation canals and village reservoirs.
5. Partner with local environmental NGOs for shared data use.
6. Publish an Annual Water Report
7. Begin publishing an annual "NSU Water Impact Report" summarizing education, research, and outreach outcomes related to water sustainability.
8. Strengthen Youth Engagement
9. Launch a "Blue Ambassadors" student initiative to organize educational visits to schools, aiming to raise awareness about protecting inland water resources.

