

## NOAKHALI SCIENCE AND TECHNOLOGY UNIVERSITY

Noakhali - 3814, Bangladesh.

# SDG PROGRESS REPORT 2024



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#### **Comprehensive Report: SDG 1 - No Poverty Noakhali Science and Technology University** December 2024

#### Introduction

Noakhali Science and Technology University (NSTU), as a public university under the Government of Bangladesh, is deeply committed to addressing Sustainable Development Goal 1: End poverty in all its forms. Recognizing that Bangladesh is a recently graduated lower-middle-income country with a significant portion of its population facing economic hardship, NSTU has implemented a holistic, multi-faceted strategy.

Our approach is built on two key pillars:

- 1. **Research and Innovation:** Dedicating our research efforts to identifying and evaluating practical, scalable solutions that empower vulnerable households, enhance food security, and build sustainable livelihoods.
- 2. Operations and Community Engagement: Applying direct action through institutional policies and community outreach. This includes ensuring accessible education for all, providing robust support systems for low-income students, and actively engaging with our local community to foster sustainable economic development.

This report details our progress across both of these critical areas.

#### Pillar 1: Research on Sustainable Livelihoods

Our 2024 research, "The contribution of homestead pond fish culture..." (Belal Hossain, M.B. et al.), provides an evidence-based model for tackling household poverty. The study highlights how small-scale aquaculture directly addresses key dimensions of poverty:



#### **Improved Food** Security

Ensures reliable and consistent access to sufficient, safe, and nutritious food, breaking the poverty cycle at its foundation.



#### **Enhanced Dietary Diversity**

Provides a steady, low-

cost source of highquality protein (fish), directly combating malnutrition and nutritional deprivation.



#### Resilient Livelihoods

**Empowers households** to leverage local resources, enhancing economic resilience and reducing vulnerability to food and economic shocks.

#### Pillar 1: Progress through Research and Innovation

Our institution is dedicated to research that advances SDG 1, recognizing that poverty is a complex, multidimensional challenge where food security, nutrition, and economic resilience are inextricably



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linked. Our 2024 research in this area focuses on identifying and evaluating practical solutions for vulnerable households.

#### Section 1.1: Enhancing Food Security and Resilience (Targets 1.2, 1.4, 1.5)

Our key 2024 research contribution to SDG 1, "The contribution of homestead pond fish culture to household food security and dietary diversity..." by Belal Hossain, M.B. et al., provides a direct, evidence-based model for tackling poverty at the household level.

This study investigates how localized, small-scale aquaculture—a common practice in many developing nations—serves as a powerful tool for poverty alleviation. By analyzing homestead pond culture, the research highlights a tangible solution that directly addresses several key dimensions of poverty:

- **Improving Food Security (Target 1.2):** The study provides clear evidence that this practice significantly boosts household food security. This ensures families have reliable and consistent access to sufficient, safe, and nutritious food, a foundational step in breaking the poverty cycle.
- Enhancing Dietary Diversity (Target 1.2): By providing a steady, low-cost source of highquality protein (fish), the intervention directly combats malnutrition and improves dietary diversity. This is a critical component of escaping multidimensional poverty, which includes nutritional deprivation.
- Building Resilient Livelihoods (Target 1.4 & 1.5): The research demonstrates how households can leverage existing, often underutilized, local resources (homestead ponds) to create a sustainable livelihood. This practice enhances economic resilience (Target 1.4) and reduces household vulnerability to food price shocks and other economic disruptions (Target 1.5).

This work provides a clear pathway for policymakers, development agencies, and local governments seeking to promote self-sufficiency and enhance the economic and nutritional well-being of the poor.

#### Pillar 2: Progress through University Operations and Community Engagement

Beyond our research, NSTU implements direct strategies to fight poverty at its roots, focusing on student support and local community empowerment.

#### **Section 2.1: University-Led Initiatives for Student Support**

#### **Section 2.1.1: Accessible Education for Low-Income Families**

NSTU serves as a primary destination for higher education for students from low- and lower-income families across Bangladesh. Our commitment to accessibility is threefold:

1. Affordability: The total tuition cost for a four-year undergraduate program at NSTU is maintained at an extremely low level, typically remaining below USD 400. This fee structure, which includes transportation and semester fees, makes a university education attainable for students from even the bottom 20% income group.



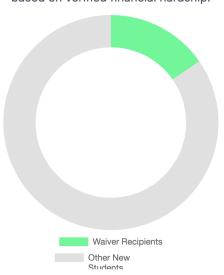
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A dedicated scheme for new students based on verified financial hardship.



224 of 1,462 new students received waivers.

### Unlocking Access: Affordability

A 4-year undergraduate program at NSTU costs less than:

## \$400 USD

This ultra-low fee structure makes higher education attainable for students from the bottom 20% income group.

- 2. **Equitable Admission:** While admission is strictly merit-based through competitive national examinations, NSTU ensures pathways for the most disadvantaged. We maintain special admission quotas for students from marginalized and underprivileged communities, including ethnic minorities, tribal groups, and the Dalit and Harijan communities, who traditionally belong to the lowest household income groups. In recent years, we have successfully admitted **12** students under this quota in 2023, **22** in 2024, and **14** in 2025.
- 3. Targeted Financial Aid: Direct financial support is a cornerstone of our anti-poverty strategy. Currently, 1,227 students out of a total of 9,897 receive financial aid specifically because of poverty or low-income status. To further this, NSTU operates a Full Semester Tuition Fee Waiver Scheme. Under this program, financially challenged students can apply for a full tuition exemption each semester based on verified family income and faculty recommendation. In 2024, this scheme supported 224 new bachelor's students out of 1,462, ensuring that financial hardship does not become a barrier to continuing their education.

#### **Section 2.1.2: Ensuring Success and Completion**

NSTU is committed to a 100% degree completion target for all enrolled students, including those from economically disadvantaged backgrounds. A strong academic monitoring system, coupled with dedicated departmental advisors and mentors, provides continuous academic and personal support. This supportive learning environment, combined with our low tuition structure and comprehensive financial aid, minimizes dropout rates.

Furthermore, we provide heavily subsidized and affordable accommodation, transportation services, and access to student welfare funds to ensure that all students, regardless of their socio-economic status, can successfully pursue and complete their studies.

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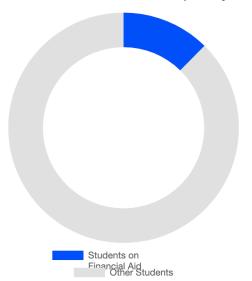
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#### **University-Wide Financial Aid**

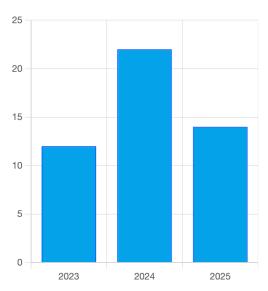
A significant portion of our student body receives financial aid due to poverty.



1,227 of 9,897 students receive aid.

#### **Special Quota Admissions Trend**

Targeted admission quotas for students from marginalized and underprivileged communities.



Ensuring pathways for the most disadvantaged.

#### Section 2.2: Community Engagement and Local Empowerment

#### **Section 2.2.1: Supporting Sustainable Livelihoods**

The university actively leverages its resources and research to create financially and socially sustainable business opportunities for the local community.

- **Knowledge Transfer:** We provide free training and mentorship. For example, the Department of Fisheries and Marine Science (FIMS) developed a new, highly effective method for crab farming in hatcheries. To share this innovation, a day-long field day was organized in Cox's Bazar, where researchers directly demonstrated the method's procedures and profitability to local farmers and entrepreneurs, translating scientific research into real-world, sustainable income.
- **Financial & Resource Support:** NSTU provides tangible assets to local entrepreneurs. We offer land leasing and cultivation opportunities at subsidized rates or nominal prices, enabling start-ups in agriculture and horticulture. Additionally, the university provides shop spaces within campus premises at minimal rent, helping local businesses sell essentials directly to the campus community. This not only promotes local entrepreneurship but also contributes to food security (SDG 2) and employment.

#### Section 2.2.2: Improving Access to Basic Services and Policy

Our commitment to community well-being includes direct action to improve basic services and contributing to poverty-reduction policies.

• **Direct Training:** NSTU organizes programs to improve access to basic services for all. A recent example is the two-day training program on fire safety and first aid that began on



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December 5, 2024, under the theme "Ensuring a safe and secure working environment for all." This initiative enhances campus safety and extends to equipping residential halls and administrative buildings with first aid boxes and essential medicines.

• **Policy Contribution:** The university participates in policy-making at local and national levels. Our faculty serve as expert contributors in government-led conservation and livelihood programmes. A key example is our involvement in the Department of Fisheries' gravid hilsa conservation activities in Noakhali. Through this, NSTU supports community awareness and sustainable resource management, directly protecting the livelihoods of vulnerable fishing communities whose incomes depend on these threatened fish stocks.

#### **Pillar 2: Operations – Community Empowerment**

Our strategy extends beyond the campus, uplifting the local community through knowledge, resources, and policy engagement.



#### Conclusion

Noakhali Science and Technology University's commitment to SDG 1 is comprehensive, integrating high-impact research with tangible, community-focused operations. Through accessible education, direct student support, and strategic empowerment of local communities, NSTU is actively working to break the cycle of poverty. Our two-pillar strategy ensures that we are not only developing the knowledge to solve poverty but are also a primary actor in its alleviation, fulfilling our public mission to foster a more equitable and sustainable future for Bangladesh.

#### **Appendix: SDG 1 Targeting Publication Referenced**

Hossain MB, Pingki FH, Sultana M, Salim NM, Islam MM, Rahman AA, Paray BA, Arai T.
The contribution of homestead pond fish culture to household food security and dietary
diversity in central coast of a developing country. Heliyon. 2024 Apr 15;10(7).