

1 NO
POVERTY



SDG 1: NO POVERTY

ANNUAL REPORT 2024-25



Brainware University

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About Brainware University and SDG Integration

Brainware University, located in Barasat, West Bengal, embraces the United Nations Sustainable Development Goals (SDGs) as a core element of its institutional mission. As a multidisciplinary private university, Brainware aligns academic, research, and social outreach functions with SDG indicators to ensure education translates into measurable community progress.

SDG 1: No Poverty aims to eradicate poverty in all forms by ensuring access to basic education, livelihood, and social protection. In the regional context of North 24 Parganas, where rural income disparity and educational exclusion remain key issues, Brainware University's strategy combines **education, innovation, and field outreach** to drive economic inclusion.

Objective of the Report

This report documents the initiatives, achievements, and impact of Brainware University related to SDG 1 for the academic year **2024-25**.

It consolidates authentic institutional data across four domains:

1. Education and Scholarships
2. Community Outreach and Unnat Bharat Abhiyan
3. Research, Innovation, and Patents
4. Institutional Partnerships and Impact Metrics

Key Highlights (Academic Year 2024-25)

Indicator	Data (2024-25)	Source
Students benefiting from scholarships	4000+	Scholarship Portal
Villages covered under UBA	5	UBA Records
Faculty-led funded projects	15+	R&D Cell
Total external + internal funding	₹120-150 lakhs	Govt + Seed Grant
Patents filed or granted	70+	IPR Cell

Brainware University's 2024-25 agenda under SDG 1 focused on equitable access to education, technology-based livelihood support, and sustainable community empowerment. Through **five adopted villages under the Unnat Bharat Abhiyan**, Brainware organized health, sanitation, and skill-building drives that directly affected marginalized communities. Research and innovation units filed **dozens of patents** on affordable agricultural, medical, and environmental technologies.

More than **₹50 lakh in scholarships** were distributed to ensure that no student discontinued education for financial reasons.

Collectively, these initiatives represent a university-wide movement towards inclusion, skill development, and sustainable poverty alleviation.

SCHOLARSHIPS AND FINANCIAL INCLUSION

Scholarships, Fee Waivers, and Support for Underprivileged Students

Brainware University's scholarship structure ensures that education remains accessible for all deserving students, regardless of socio-economic status.

Major Schemes Supported (2024-25):

- *Swami Vivekananda Merit-cum-Means Scholarship*
- *Kanyashree Prakalpa (K1, K2)*
- *SC/ST/OBC Scholarships (Govt. of WB)*
- *West Bengal Chief Minister's Relief Fund (Nabanna Scholarship)*
- *National Scholarship Portal Schemes*

Institutional Scholarships:

- Merit-based and need-based scholarships
- Tuition waivers for top academic performers
- Internship stipends for social or community-linked projects

COMMUNITY OUTREACH AND UNNAT BHARAT ABHIYAN

Outreach Programmes 2024-25

The University's **NSS Cell** and **UBA Team** played a leading role in translating research into direct community impact.

Major Outreach Events:

Date	Location	Activity	Impact
15 Aug 2024	Kotra Gram Panchayat	Awareness Drive	Increased local scheme enrollment
27 Sep 2024	Faldi High School	Women's Health Camp	Early screening for anemia
21 Nov 2024	Hyderbelia	Free Health Check-up Camp	15 referrals to subsidized clinics
Feb 2025	Dugaria Village	Nutrition Education for Children	Hygiene and diet awareness

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Mar 2025	Faldi-Dubgaria Belt	Vector-Borne Disease Awareness	Dengue and malaria prevention
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These field activities integrate **education, healthcare, and self-reliance**, reinforcing the University's SDG 1 mandate.

RESEARCH AND INNOVATION

Seed-Granted and Government-Funded Projects

Project Title	Department	Funding (₹)	Agency
Renewable Energy Integration: 150.15 KWp Solar Plant	ECE	47,84,000	Seed Grant
Grid-Connected PV System	EE	36,45,000	Seed Grant
Solid Waste Management Practices in Academic Institutes	Biotech	3,50,000	Seed Grant
Valorizable Bacterial Bio-Pigment from Lignocellulosic Waste	Biotech	2,50,000	Seed Grant
Sustainable Food Packaging using PLA/Chitosan	Biotech	75,000	Seed Grant
Water Quality & Microbial Diversity Study	Biotech	24.75 lakh	DSTBT, WB
Groundwater Filter for Faldi Village	CMRI-Psychology	11.59 lakh	WBPCB
Nanofiltration Bottles for Rural Water Purification	Allied Health	1 lakh	MoE, UBA

Table 1: *Highlighted Projects Supporting SDG 1 (2024-25)*

These projects focus on **affordable sustainability, renewable energy, and clean water access**—essential for economic upliftment and rural quality of life.

PATENTS AND TECHNOLOGICAL IMPACT

Affordable Innovations with Social Impact

Brainware University's IPR cell led an impressive wave of innovation during 2024-25, contributing over **70+ patents filed or granted** in India and abroad.

Selected Patents Linked to SDG 1 Outcomes:

1. *Low-Cost Agricultural Supply Chain Device* (UK Patent #6375454)
2. *AI-Based Farm Environment Monitoring Device*
3. *Automated Compact Robot for Urban Gardening*
4. *IoT-Enabled Smart Waste Management Bin*

5. *AI-Based Food Safety Prediction Tool*
6. *Soil Moisture Monitoring Probe*
7. *AI-Driven Fraud Detection System*
8. *Head-Movement Wheelchair for Differently Abled Individuals*

Each of these inventions strengthens resource efficiency, food security, and inclusion—empowering rural and low-income communities through technology.

PUBLICATIONS AND KNOWLEDGE CONTRIBUTIONS

Representative Research Publications 2024-25

Title	Author(s)	Theme
<i>A Review on Applications of Machine Learning in IoT: Challenges and Future Prospects</i>	Subrata Paul & Anirban Mitra	Smart agriculture, rural innovation
<i>Impact of COVID-19 on Migratory Behaviour of Workers of Rural India</i>	Adhikari S. et al.	Labour economics, social protection
<i>Crop Sustainability and Intellectual Property Rights</i>	Mukherjee P. et al.	Legal protection for farmers
<i>Formulation of Potent Killing Agent of Mycobacterium Smegmatis</i>	Dr. Sayantan Ghosh	Affordable healthcare
<i>Bioabsorbable Polymeric Composites in Biomedical Applications</i>	A. Prasad et al.	Sustainable biomaterials
<i>Eco-Friendly Fuzzy Logic for Greenhouse Risk Management</i>	Adhikary & Banerjee	Climate-resilient agriculture

Table 2 – Academic Publications with SDG 1 Relevance (2024-25)

These works expand scientific insight into sustainable livelihoods and low-cost healthcare.

PARTNERSHIPS AND INTERNATIONAL COLLABORATIONS

Strategic Collaborations for Inclusive Growth

Partner	Country	Focus Area
Fraunhofer IIS	Germany	Joint R&D in Computational Sciences
University of South Carolina	USA	Research & Training in Biotechnology
INTA	Argentina	Agricultural Sustainability
Hanyang University	South Korea	Biotechnology Collaboration
Kasama University College	Zambia	Health & Curriculum Development

Table 3: Major MoUs Supporting SDG 1 Themes (Active in 2024-25)

These partnerships enhance Brainware's capacity for cross-border innovation addressing poverty, agriculture, and inclusive education.

The academic year 2024-25 reaffirmed Brainware University's position as a socially committed institution that treats education as a public good, not a privilege.

Its multidimensional work—combining research, innovation, community engagement, and social equity—illustrates how a university can meaningfully advance **SDG 1: No Poverty** in the Indian context.

Through:

- **Funded projects**
- **Scholarship beneficiaries**
- **Patents and designs**
- **Multiple outreach and NSS initiatives** the University directly improved lives, enhanced employability, and strengthened rural ecosystems.

Looking ahead, Brainware University plans to **institutionalize the SDG 1 framework** through an AI-enabled monitoring system, annual impact audits, and greater involvement of students and local governments.

Brainware University stands for a model of inclusive education and responsible innovation. By transforming scientific knowledge into social capital, it continues to shape a Bengal where learning ends poverty, and opportunity replaces deprivation.