



ILLUSTRATION: ABIR HOSSAIN

COVER STORY

The obstacles and opportunities Career prospects for environmental science graduates

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Sharnali Akhter is currently spending the better part of her sixth year at Dhaka University (DU) building a bacteria-powered desalination cell, exploring the potential for salt removal from brackish waters. Her undergrad in soil and environmental studies led her to a graduate programme in renewable energy technology. The research would focus on implementation in coastal ruralities — communities that spend their years on borrowed land, and where the land is slowly disappearing with climate change. The pilot was good. Her supervisor at the Bangladesh Council of Scientific and Industrial Research (BCSIR) said so. However, what nobody mentioned, at any point across her undergraduate degree, was what she was supposed to do with it after convocation.

"I finished my toils with my undergrad, not knowing a single recruiter in the field," she says. "We are trained to understand what is breaking, how it's breaking, but not how to insert

ourselves into fixing it. That gap is just how the degree is designed."

She describes herself, with dry self-awareness, as "a standard issue of hopefuls".

It is an apt phrase for an entire cohort. Every year, Bangladesh's public and private universities produce hundreds of graduates who have studied, on paper, precisely what the country most urgently needs: flood modelling, arsenic remediation, soil diagnostics, coastal resilience, and climate policy. The syllabi across universities in Bangladesh read like catalogues of national emergency. And yet, graduate unemployment among tertiary-educated youth has climbed to 27.8 percent — nearly triple the figure from a decade ago, according to the World Bank.

Environmental science graduates occupy no privileged corner of that statistic.

Nafisa Tasnim, a former student of Bangladesh University of Engineering and Technology (BUET), now completing a PhD in environmental engineering at the University of

Texas, Austin, has a precise diagnosis. "There is an incongruence between the professorial discipline set, the industry-required portfolio, and the syllabus," she says.

The syllabus, the industry requirements, and the faculty expertise are engulfed in what can only be termed a three-body problem. "With its inception in the British colonial era, the structure is no longer apt for the modern workforce. Retool the degree or accept that you are training people for a job market that existed 15 years ago, when there was no looming threat of the great dismantling by AI," she adds.

Her supervisor at Dhaka University (DU), Prof. Dr Muhammad Ashraf Ali, traces the failure further upstream. "The public sector has too few positions, academic or otherwise, too much politics, and the universities have too little money to retain their best people," he says. "We are not losing graduates because Bangladesh has nothing to offer them. We are losing them because the institutions that should be fighting to keep them are not organised enough to make the case."

The students absorbing this reality are doing so in real time. Sifat Yamin, an undergraduate in the Department of Soil, Water, and Environment at DU, has been doing the arithmetic on his prospects since his second year. He is not dismissive of Bangladesh as a destination. "I want to work here. The problems are here. But if the choice is between a position that does not exist and a scholarship abroad, the scholarship wins — not because I want to leave, but because the system has not made a persuasive case for me to stay," he explains.

Their uncertainty is rational. The entry-level positions that do exist frequently demand two to five years of prior experience. "If they want two to five years of experience for a position they are calling 'entry-level', it is a tremendously unfair offering — to which most of us opt for

opportunities overseas,"

Sharnali says.

For fresh graduates without industry experience, the public sector is the most accessible entry point and, in several respects, the most consequential one. The Bangladesh Civil Service (BCS) technical cadres —

BCS

Agriculture and BCS Forest — require only a qualifying undergraduate degree and a cleared tumultuous examination.

The Department of Environment (DoE ECC) recently opened internship tracks for the first time, a development that assistant professor Md Bayazid Hossain of DU considers significant. A former scientific officer at the Soil Resource Development Institute himself, he points beyond BCS jobs to a constellation of adjacent institutions: the Bangladesh Agricultural Research Institute for irrigation and crop science, and the Bangladesh Atomic Energy Commission for the more specialised intersection of pollution monitoring and radiation sciences. Availing them may mean the graduates of today will grossly change the outcome for environmentalists yet to come.

"Stop treating the BCS as a fallback and start treating it as infrastructure," he advises. "The graduates who succeed in the public sector are the ones who started preparing three years before they think they should have — who read gazettes, who applied wherever even a minutia of opportunity arose."

The academic route remains the most demanding entry and the most politically complicated to hold. Lecturer positions at private institutions require a master's and a publication record; a dean's award suffices for public ones. North South University's Department of Environmental Science & Management programme, developed with the University of Manitoba under World Bank funding, and the UN University's Joint PhD in Integrated Water, Soil and Waste Management, remain the two most underutilised pathways for graduates who prefer depth over displacement.

For those requiring a more nine-to-five-centric gradient, the private sector provides ample capacity. The private sector offers the steepest salary curve, albeit through the narrowest doors.

The Institute for Water Modelling rewards fluency in river simulation software with technically demanding, well-remunerated work. SGS Bangladesh, the Swiss inspection giant's local arm, recruits environmental auditors requiring ISO 14001 (an international standard for environmental management systems).

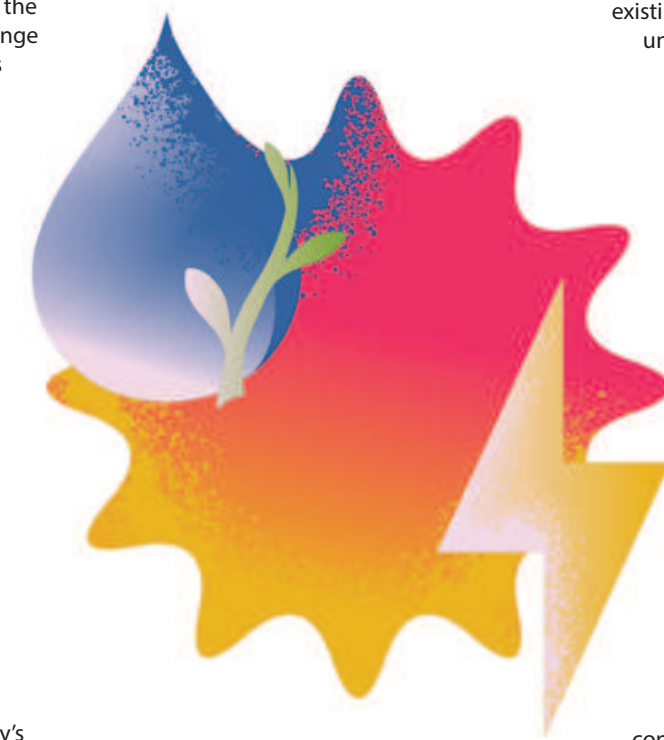
Most of these roles are incredibly demanding, but a year of service returns you with considerably greased pockets.

The honest caveat here is that the corporate sector is riddled with internal and opaque hiring. Credentials alone carry limited weight. Mashiyat Semonti, a social compliance auditor at SGS, knows

within the first 10 minutes of an interview whether a candidate has spent time in the field or only read about it.

"The strongest candidates come in having already done something unglamorous," she says. "A soil survey for a union parishad. An effluent audit for a factory nobody has heard of. Something that required them to show up somewhere inconvenient and produce a document at the end of it."

What eliminates most applicants, she adds, is a CV that is academically immaculate and professionally empty.



"A good CGPA tells me you can follow instructions. It does not tell me you can manage a non-compliant factory floor at seven in the morning." Her advice to anyone approaching graduation is blunt: stop waiting for a formal opportunity to accumulate experience. "Volunteer for the fieldwork your seniors are avoiding. Learn to write in plain language. A degree with no artefacts attached is only a badge of an institution. It is not the horses you should bet on solely."

Multinational NGOs and intergovernmental organisations constitute a third pathway — often misrepresented, frequently underestimated. Entry-level work begins with unglamorous, geographically demanding field assignments, but the institutional mobility is genuine. WaterAid Bangladesh runs a Young Professional programme targeting fresh graduates willing to travel extensively. Club experience and community engagement, programme officers say, go further than most applicants expect.

"Their work involves travelling to low-income communities to help with hygiene training and water access," says Fazla Zawadul Arabi, a seasoned project officer at WaterAid. He states that if applicants seek to help the disenfranchised, there is no better avenue, advising them to have substantial references and basic field experience under their belt.

The most technically demanding opening in this corridor is the Regional Integrated Multi-Hazard Early Warning System (RIMES), headquartered in Bangkok, of which Bangladesh is a key signatory. RIMES recruits climate professionals for disaster monitoring across cyclone, flood, and landslide forecasting — work requiring demonstrable fluency in remote sensing and AI.

Ibrahim Risat did not arrive at RIMES through a straight line. He arrived through Jahangirnagar University (JU), through professional restlessness and the determination of someone who kept enrolling in new degrees because the existing ones kept leaving questions unanswered. After completing his master's in data science at JU, he joined as an AI and machine learning intern, and later as an engineer, building predictive numerical flood models for one of the most disaster-prone regions on earth. He is now simultaneously pursuing a second master's in disaster science and resilience at DU.

"Nobody at MNCs cares about which university you attend. They care whether you have built something substantial, broken it, fixed it, and understood why it broke. I have seen first-class graduates from many reputable universities fail our screening because they were only considered booksmart," says Ibrahim. "Build something that fails, and fail until you find the crux of what it means to have succeeded. Be on an active lookout for opportunities that reward that way of systems thinking."

The window for building domestic environmental capacity is narrowing on one side and widening on the other, and the graduates standing in that aperture are better trained than the system deserves credit for producing. The opportunities simply require a map that nobody has thought to hand out at convocation.

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