

HARNESSING THE WIND

Clean energy, clear progress

In a coastal village in Cox's Bazar, steel towers now rise where fishermen once cast their nets. The wind that used to whip across the salt-stung plains without notice is now captured, spinning giant blades that generate electricity and promise a cleaner future. Bangladesh, long reliant on fossil fuels and foreign energy imports, is finally beginning to turn the tide.

The 60-megawatt wind farm at Khurushkul, right beside the Chaufaldandi Union in Cox's Bazar, stands as a symbol of that change. Built with a Chinese partnership and using 22 turbines towering 90 metres high, this is the country's first large-scale attempt to harness the power of the wind. For a nation often thought to lack the wind speeds needed for

utility-scale generation, the project is both a technical and psychological breakthrough.

Md Shahrar Ahmed Chowdhury, Director of the Centre for Energy Research at United International University, has followed this transition closely.

"If we consider wind power potential, from Bangladesh's perspective, it's lower than moderate. Not even moderate," he said. While the numbers may not equal those of Europe's giants, they are definitely worth considering.

The research carried out by the Asian Development Bank, with the help of some German, Italian and Dutch experts, has shown that certain coastal areas and offshore zones in Bangladesh can get pretty windy with speeds of 6

to 7 metres per second. However, when storms come through, the wind speed can shoot up to a staggering 80 metres per second, a terrifying prospect for any turbine.

"We generally design our turbines to take on winds of 60 metres per second, so at extreme wind speeds the turbines are at risk, which increases the insurance premium," Shahrar says.

This is the catch that Bangladesh finds itself in about wind power: harnessing the energy whilst withstanding the full force of the storms.

Despite this, the Cox's Bazar project is up and running, pumping out just shy of 110 million kilowatt-hours every year. At about 20 per cent of its total

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