

PHOTO: COLLECTED, STAR

## **KARUPANYA RANGPUR**

# Is it a forest? Is it a garden? NO, IT'S A FACTORY!

As air flows over the water and the plants cling to the huilding

### KONGKON KARMAKER

From a distance, it appears as a forest. But as one gets closer, it becomes evident that it's in fact a seventory factory building covered with vines and leaves. After entering the premises, one will see a 30-foot-tall white sculpture of a woman. There stands the factory of Limited, Karupannya Rangpur flanked by greenery from all sides. Designed by architect Bayezid Mahbub Khondker and his team from Nakshabid Architects, this eco-marvel is located at Robertsonganj, Rangpur. Upon entering through the gate of the building, you will be greeted with a symphony of leaves inside. Plants crawl lovingly over the brick-andmortar structure, taking the shape of a vertical garden.

than the scorching summer heat, all without a single air conditioner or electric fan.

While the rest of the country grapples with the unbearable heatwave, the nearly 5,000 workers



countries.

been fueled

"Our

and hard work," reflected Selim.

environmental sustainability

our success," he added.

welfare of its employees.

working environment."

quality has been the cornerstone of

He also said Karupanya not

Siddharth Lahiri, general manager

(Finance and IT), adds, "The workers

are the backbone of our operations.

We strive to provide them with the best facilities and a secure, pleasant

commitment

starting with a small Shataranji shop.

Over the years, his relentless efforts

transformed it into a significant player

in the handicraft industry globally,

exporting his products to over 50

"From a small shop to a global

journey

has

by innovation

to

and



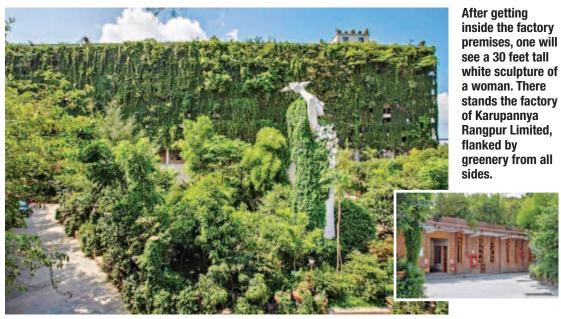
it cools significantly. This cool air then rises through four massive 37-footdiameter hollow pillars effectively acting as natural air conditioners for the entire structure.

Four large, 15,000-square-foot reservoirs resembling ponds grace the ground floor, holding 5,00,000 litres of water.

After being used in the dyeing process of Shataranji (a traditional rug), the iron-free water is collected in these reservoirs.

As air flows over the water and the plants cling to the building, it cools significantly. This cool air then rises through four massive 37-footdiameter hollow pillars effectively acting as natural air conditioners for the entire structure.

The result? A comfortable working environment several degrees cooler to minimising its environmental



at Karupannya Rangpur Limited toil away in a serene haven. The special architectural technique also results in 80 percent energy saving.

"The design draws inspiration from traditional Bangalee earthen homes in rural areas, which often have an open southern side and a nearby pond. This setup allows cool air to flow over the water and into the building, while warm air rises and exits through roof chimneys," said Bayezid.

The project site covers 14,170 square metres, with a total built-up area of 24,850 square metres. The main factory building occupies 3,820 square metres. Its construction began in 2013, and the factory became operational in early 2017.

Bayezid received two gold medals at the ARCASIA Awards for Architecture-2023, winning in the categories of Socially Responsible Architecture and Industrial Building for the factory.

#### WASTE MANAGEMENT

But Karupannya Rangpur Limited's commitment to sustainability goes beyond its innovative building design. While any factory produces waste, Karupannya Rangpur is dedicated

#### Water reservoir helps keep the structure cool amid heat.

impact through meticulous waste renting a tiny space in Rangpur, management practices.

The factory cleverly utilises renewable and natural raw materials such as cotton waste from spinning mills, jute fabric, and various plant materials like hogla leaves and banana bark.

This approach not only prevents exporter, our pollution but also promotes sustainability by repurposing waste materials that would otherwise end up in landfills. The absence of harmful chemical waste and black smoke underscores the factory's dedication to environmental protection.

The company's practices align with the broader goals of reducing carbon footprints and promoting ecological balance.

"By using natural materials and focusing on renewable resources, we ensure that our production processes are environmentally friendly," said Safiqul Salim, the founder of Karupannya Rangpur Limited.

"This approach not only preserves the environment but also showcases the rich cultural heritage of Bangladesh," he said.

#### THE JOURNEY

The story of Karupannya Rangpur Limited is as inspiring as its architectural marvel.

Safiqul Selim, the founder, was only prioritises environmental raised at Guptapara in Rangpur city. sustainability but also focuses on the His journey began back in 1986 when he displayed straw portraits at the Dhaka Shilpa Mela.

Despite initial setbacks, Selim's creativity and perseverance led him to explore the potential of handicrafts of rural Bangladesh, he said.

In 1991, he established Karupanya



#### A walkway surrounded by greenery.

This correspondent also spoke to some of the female staffers at the factory. They seemed to share similar sentiments.

tRashidus Sultan Bablu, secretary of the Bangladesh Poribesh Andolon (Bapa) in Rangpur, highlighted the factory's ability to absorb excess heat and maintain environmental purity.

"This is a creative solution that significantly reduces energy consumption. This innovative approach serves as a model for other factories in Bangladesh and beyond, demonstrating that industrial progress does not have to come at the expense of the environment," he said.

"The factory's green design helps maintain the ecological balance and provides a healthier environment for the workers," said Bablu. "It proves that sustainable industrial practices are not only possible but also beneficial for everyone involved."

Asclimatechangecontinuestopose challenges worldwide and Bangladesh is not out of risk, Karupanya offers a blueprint for balancing industrial activity with ecological responsibility. By integrating traditional wisdom with modern architecture, this factory not only enhances worker comfort but also sets a new standard for sustainable industrial practices, said Rezaul Islam Milon, president of Rangpur Metropolitan Chamber of Commerce and Industry.

He said Karupanya exemplifies how industries can harmonise with nature while achieving economic success and giving comfort to a large number of employees.