

Oil flowers on the coastlines

Sunflower fields in coastal districts meet farmers' edible oil needs, with scope to boost national supply beyond tourism appeal

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For some tourists visiting Kuakata, acres of sunflower fields are simply a scenic backdrop for photos. But for farmers in Patuakhali and neighbouring Barguna, the crop has become an increasingly important part of their livelihoods.

Despite certain limitations, sunflowers' tolerance to soil salinity makes them well-suited to coastal areas, where fields often remain unused after the Aman paddy is harvested in November and December.

Farmers say they are not driven by export ambitions or the national goal of replacing imports; instead, sunflowers serve as a practical crop that meets household cooking oil needs while offering some additional income.

Bangladesh still produces only a small portion of its oilseed demand and relies heavily on imports. To address this, the government has taken steps to expand oilseed cultivation, leading to steady growth in the sector.

While mustard and soybean production have increased more significantly, sunflower farming has also expanded.

However, challenges such as limited seed availability, lack of diverse varieties, and high seed costs continue to restrict wider adoption.

FARMERS SEE STEADY RETURNS

Bimal Kabiraj, a farmer from Monoharpur village in Patuakhali, has been growing sunflowers and mustard for a decade. He says interest in the crop has been rising among both farmers and consumers.

Last year, he cultivated sunflowers on 25 bighas of land, harvesting about eight maunds of seeds per bigha. He sold part of the produce at Tk 3,000 per maund (one maund—around 40 kilogrammes) and reduced his cultivation to 15 bighas this year.

After meeting his family's annual cooking oil needs, Kabiraj sells the surplus, often to buyers from Dhaka and Khulna who collect oil directly from his home.

"It's an additional crop that needs low cost and labour but gives high returns," said fellow farmer Dinesh Chandra.

Kabiraj added that sunflower fields in full bloom often attract tourists travelling to Kuakata. "We enjoy their attention," he said, "but we ask them not to damage the crop."

PROCESSING FACILITIES BOOST INTEREST

A major turning point for farmers in Barguna came with the installation of a modern oil processing and refining machine in Talatoli upazila through a public-private partnership.

Set up at farmer Matin Mridha's residence in Zakirtabak village last April, the machine cost Tk 28 lakh,



with Tk 10 lakh provided as a subsidy by the Department of Agricultural Marketing (DAM). It can crush 200 kilogrammes (kg) of seeds per hour and refine up to 500 litres of oil daily.

Md Bashir Uddin, a sub-assistant agriculture officer and Mridha's son, said farmers previously struggled due to a lack of local processing facilities.

"Now they can produce and market oil themselves, increasing their income," he said.

Following the installation, sunflower cultivation in the village expanded by at least 140 bighas this year.

Last year, Mridha purchased 300 maunds of seeds and produced oil, which was sold at Tk 250 per litre without refining. Plans are underway to begin refined oil production with technical support from China and market it through major companies.

Mridha noted that many farmers value sunflower oil for its health benefits and primarily use it for household consumption. The oil is typically extracted from seeds left after setting aside stock for the next planting season.

Alkam Hossain, a DAM marketing facilitator, said processing costs are about Tk 15 per kg of seeds, making it affordable. He added that higher domestic production could reduce reliance on imports and save foreign currency.

PROFITS AND BY-PRODUCTS

Mridha himself has been growing sunflowers on eight bighas for five years. Last year, he spent Tk 36,000 and harvested 60 maunds of seeds, producing about 780 litres of oil.

He sold the oil at Tk 230 per litre,



earning roughly Tk 180,000 and making a profit of around Tk 144,000. By-products such as oilcake are sold as cattle feed at Tk 30 to Tk 40 per kg.

He said the crop requires little irrigation and also improves soil fertility.

Farmers had previously reduced sunflower cultivation due to limited processing facilities and low prices. However, improved machinery has revived interest, encouraging more farmers to take up the crop.

EXPANSION AND FLUCTUATIONS

According to agriculture officials, sunflower cultivation in Talatoli has fluctuated sharply — from 2,000 hectares in 2022-23 to just 99 hectares in 2024-25 — before rebounding to 1,050 hectares in the current fiscal year.

In Patuakhali, cultivation has increased dramatically, rising nearly 64 times over five years — from 55 hectares in 2021-22 to more than 35,000 hectares this year, with a production target of about 63,000 tonnes of oilseeds.

As per the BBS Yearbook of Agricultural Statistics 2024, between FY22 and FY24, Barishal division remains in the lead in terms of both acreage and production of sunflower, followed by Chattogram, Sylhet and Khulna.

It may be noted that the total national acreage of sunflower in FY24 was 6908.31 acres, while total national production was 3895.16 tonnes.

but remains concentrated in coastal districts such as Patuakhali, Barishal, Bhola, Pirojpur, Barguna, Satkhira, Bagerhat, and parts of Noakhali.

He noted that 90 to 95 percent of production comes from these areas.

He said the crop is well-suited to saline-prone regions where land often remains unused, offering better yields and higher oil content than traditional oilseeds like mustard.

The project has introduced 12 cropping patterns, allowing farmers to grow two to three crops annually — for example, inserting mustard between Boro and Aman cycles — helping utilise previously idle land.

However, Alam acknowledged that sunflower production declined in FY25 due to unfavourable weather during the seeding stage, along with issues related to seed quality and availability. High prices of imported hybrid seeds also discourage wider adoption.

He added that although private sector interest is increasing, large-scale investment remains limited due to the inconsistent supply of sunflower seeds throughout the year.

RESEARCH, CHALLENGES, FUTURE PROSPECTS

The Bangladesh Agricultural Research Institute (BARI) continues to support the sector through research, seed multiplication, and farmer training.

Sunflower research in Bangladesh began in 1974, with varieties released in 2004, 2006, and 2018. After a period of slow progress, research has regained momentum, leading to the development of new promising lines.

"In terms of quality, sunflower oil is one of the best edible oils in the world," said Rabiul Islam, senior scientific officer at the Oilseed Research Centre (ORC) in Gazipur under BARI.

He said scientists are working to integrate sunflowers into the country's rice-based cropping system. However, current varieties take more than 100 days to mature — longer than crops like wheat, mustard, and potatoes — limiting where they can be grown.

Research is now focused on developing faster-maturing, shorter, and more resilient plants, as existing tall varieties are vulnerable to damage.

Shekh Hasna Habib, another senior scientific officer at ORC, said sunflower farming has strong potential but requires a complete value chain.

"While crops like mustard are widely grown, processed and consumed, sunflowers lack an established marketing system. This leaves farmers uncertain about where to sell their produce," she said.

She added that increasing awareness and profitability are attracting both traditional farmers and new investors. Climate change is also playing a role, as shorter winters are reducing the production window for mustard.

"A key advantage of sunflowers is their tolerance to salinity. This allows it to grow in saline areas where other Rabi crops cannot be cultivated after Aman rice," she said.

With continued government support, improved seed supply, and stronger market linkages, experts believe sunflowers could play a larger role in reducing Bangladesh's dependence on imported edible oil while supporting coastal livelihoods.

PHOTO: SOHRAB HOSSAIN



Mohammad Zahangir Alam, director of the Oil Crop Production Enhancement Project at DAE, said sunflower cultivation is spreading but remains concentrated in coastal districts. Around 90 to 95 percent of production comes from these areas.