

Business Standard

Govt bats for GM mustard in SC: To make India self-sufficient in edible oil

The government said the present rate of edible oil consumption in India surpasses the domestic production rate and at present, India meets nearly 55-60% of its edible oil demand through imports

IANIS | New Delhi | November 13, 2022

The Centre has told the Supreme Court that genetically modified (GM) mustard will contribute to India's self-sustenance with respect to production of edible oil and it will go a long way in realising the vision of 'Aatmanirbhar Bharat'.

Recently, the Genetic Engineering Appraisal Committee (GEAC) allowed the environmental release of GM mustard for seed production and testing.

In an affidavit filed before the top court, the Union Ministry of Environment, Forest and Climate Change (MoEFCC) said that increased domestic production of edible oil due to deployment of GM mustard hybrids will reduce the dependency on other exporting countries.

The government said the present rate of edible oil consumption in India surpasses the domestic production rate and at present, India meets nearly 55-60 per cent of its edible oil demand through imports.

The MoEFCC said the release of GM mustard parental lines would allow public and private organisations to produce productive hybrids of their own and DMH-11 is the first hybrid developed using the barnase/barstar technology, while more will follow.

It added that a good pollination control mechanism is a one-time development and developing productive hybrids is a continuous activity that will contribute to enhancing mustard productivity in India.

"This will contribute to India's self-sustenance with respect to production of edible oil and the same shall go a long way in realizing the vision of Aatmanirbhar Bharat," it added.

The affidavit said GM mustard hybrid DMH-11 has shown increased per-hectare yield by 25-30 per cent over the traditional varieties due to exploitation of hybrid vigour. Given that mustard is one of the highest oil-bearing of oilseeds in India, domestic production of edible oils will rise considerably, it added.



The MoEFCC said that at the international level, regulatory authorities of the US, Canada and Australia have allowed the cultivation of GE rapeseed containing bar, barnase and barstar genes.

Currently, Canada has the largest area under GE rapeseed; in 2021, around 8.64 million hectares of land were sown with GE rapeseeds which besides the barnase, barstar and bar genes, also contain resistance to herbicide glyphosate for low-till cultivation. There are no reports of any effect of GE rapeseed, said the government.

It added that India imports about 55,000 MT of canola oil largely from GM canola seeds and similarly nearly 2.8 lakh tons of soybean oil is being imported annually, which largely comprises GM soybean oil. The government said as India is importing and consuming oil derived from GM crops, opposition to such technology based on such unfounded fears of adverse impact is only hurting the farmers, consumers, and the industry.

The average prices of refined palm oil, refined soy oil and mustard oil have been continuously increasing and India needs to be independent in oil production to meet the domestic consumption demand.

"Increased edible oil prices will also lead to inflation in the Indian economy. An agricultural reform like growing Genetically Modified (GM) oilseed crops like mustard will be useful. Globally, it has been observed that the yields of rapeseed have increased with the introduction GM hybrids," said the affidavit.

The affidavit added that mustard is the most important edible oil and seed meal crop of India - grown in around 8-9 million hectares of land - and seed replacement (farmer buying fresh seed) rates are around 63 per cent and area under irrigation has increased to 83 per cent of the total area under mustard. Despite all these investments, yields of mustard are stagnating, it added.

The application seeking moratorium on the release of GM mustard was moved by activists led by Aruna Rodrigues through advocate Prashant Bhushan, who filed a petition in 2016 and then in 2021 opposing open field trials or commercial release of herbicide tolerant (HT) crops, including GM mustard.

On November 3, a bench comprising justices Dinesh Maheshwari and Sudhanshu Dhulia had sought Centre's response on Rodrigues application even as the Centre assured there will be no "precipitative action".

Bhushan had informed the bench that in 2012, as per directions of the Supreme Court a technical expert committee (TEC) was set up with broad terms of reference to examine in detail the matter of genetically modified crops in India, and it had recommended a total ban on all HT crops.

The affidavit said it is important to note the relevant development in the strengthening of the regulatory regime in India post the report of TEC. "In regard to the regulatory system in respect of genetic engineering, India has put in place a robust system based on science and involving technical experts throughout the process of research, confined trials (event selection trials, biosafety research level trial-I, biosafety research level trial- II) as well as environmental release of GM crops", added the affidavit.

Detailing on the decision-making on GM mustard, the affidavit said a 3,251-page dossier containing results of all bio-safety studies was submitted to the GEAC in 2015, which has been thoroughly examined by the GEAC and its sub-committees prior to release.

"It is pertinent to note that the application or the environmental release of GM mustard has been considered by GEAC only when the applicant has completed three years of BRL Trials (two years of BRL-1 trials, and one year of BRL-II trials) as required under the regulatory regime," said the MoEFCC, and provided year-wise development of the GM mustard project.

The MoEFCC added that if evidence emerges regarding harmful effects of the approved GE mustard, then the approval could be revoked on the ground of non-compliance of any condition stipulated by the GEAC.

On November 10, Attorney General of India, R. Venkataramani, and Additional Solicitor General, Aishwarya Bhati, representing the Centre, submitted before a bench headed by justice Dinesh Maheshwari that Centre has filed its reply in the matter.

The top court has scheduled the matter for further hearing on November 17.
(Sumit Saxena can be contacted at sumit.s@ians.in)

--IANS

Source: https://www.business-standard.com/article/economy-policy/govt-bats-for-gm-mustard-in-sc-to-make-india-self-sufficient-in-edible-oil-122111300125_1.html