

To beat drought, ICAR eyes GM sugarcane

Will Join Hands With Pawar-Led Sugar Institute

Vishwa.Mohan@timesgroup.com

New Delhi: As water-guzzling sugarcane is blamed for worsening the water crisis in parched areas of Maharashtra, the central government's premier research institution — Indian Council of Agricultural Research (ICAR) — has decided to join hands with former agriculture minister Sharad Pawar-led Vasantda Sugar Institute (VSI) to develop drought-tolerant genetically modified (GM) sugarcane that will not need huge quantities of water.

The move is significant considering the government is treading cautiously on the path of genetically engineered crop amid strong opposition from anti-GM crop environmentalists and the RSS-linked Swadeshi Jagran Manch (SJM).

"It will, however, be a long-term project. Developing drought-tolerant (less water-consuming) GM sugarcane is not an end in itself. We know how difficult it is in India to go for commercial release of any transgenic crop," said an ICAR scientist.

Citing the recent example of GM mustard, sources claimed that even positive reports based on field trials and bio-safety examinations of the crop could not get this transgenic variety — developed by a Delhi University institution — green signal.

But the effects of back-to-back droughts, mounting rural distress and the sheer economic and ecological costs of water-intensive crops might make planners keen to develop GM sugarcane. Authorities hope that once the benefits of the new crop become evident, its acceptance will grow.

The final call will be that of



MAKING CANE SWEETER: Sugarcane, a water-guzzler, has been blamed for worsening the water crisis in Maharashtra

Cane crop acreage up 1 lakh ha in Maha

Maharashtra may have been reeling under the fourth consecutive and the worst drought, but water-guzzling sugarcane has seen 1 lakh hectare rise in area under cultivation, while there has been a steep fall in acreage of major crops like wheat, pulses, oilseeds, jowar, bajra and coarse grains. The final data released by the agriculture department shows that area under sugarcane cultivation in 2015-16 was 9.87 lakh hectare as against an average estimate of 8.86 lakh hectare. Farmers in Marathwada, one of the worst-hit areas in the state, cultivated close to 2.4 lakh hectare of sugarcane. This area also boasts of 61 sugar mills. The trend has been similar for the past three years when the actual area under sugarcane has been higher than what was estimated. In 2014-15, the estimated area was to be 8.93 lakh hectare, while 9.87 lakh hectare was actually cultivated.

Bhavika Jain | TNN

the central regulator — Genetic Engineering Appraisal Committee — of the environment ministry. So far, GM brinjal hasn't been allowed commercial release even after the regulator's nod whereas a similar transgenic variety is being cultivated by Bangladesh.

But GM sugarcane in water-stressed areas can offer hope in Maharashtra and other parts of India. Already, extreme water shortages have turned the focus on how to use water judiciously with PM Narendra Modi calling for all out efforts to implement drip irrigation on a massive scale.

Referring to the urgency, an ICAR scientist said the GM route could be a long-

term approach, keeping in mind the global demand scenario and India's role in it, whereas drip irrigation was the need of the hour.

The research body, nevertheless, appears to be preparing for the future. ICAR director general Trilochan Mohapatra had last month written to Pawar while apprising him of the work done by ICAR-Sugarcane Breeding Institute in Coimbatore in the field of GM sugarcane and how it could join hands with VSI, Pune. Pawar is chairman of the board of trustees that manages VSI.

Responding to Pawar's letter on the issue, Mohapatra said an MoU was ready to be signed between ICAR and VSI.