

## CSSRI Karnal Developed Sulphur Based Soil Improvement Technology

## Why In News?

On October 30, 2023, Dr. Arvind Kumar Roy, Chairman, Department of Crop and Soil Improvement, Central Institute of Soil and Salinity Research (CSSRI), Karnal, informed that after six years of research, CSSRI has developed Sulphur-based soil improvement technology.

## **Key Points:**

- Dr. Arvind Kumar Roy said that at present, gypsum from the mines of Rajasthan is used for soil
  improvement, but it is continuously decreasing, due to which scientists have been looking for an
  alternative for many years.
- The study was conducted at several locations in Haryana, Punjab, Uttar Pradesh, Madhya Pradesh, Rajasthan along with CSSRI for the results of Sulphur based soil improvement technique. Also, it was used on various crops such as paddy, wheat, cotton, berseem etc.
- Using this technique, a large area of the country can be made fertile again, in which crops will be produced and the country's food grains will increase.
- At present, 3.78 lakh hectares of land in the country is affected by alkalinity. The land whose PH value exceeds 8.3 is considered alkaline land. Apart from this, the production of crops gradually falls due to the use of alkaline water. In 10 to 15 years, the situation becomes such that the yield of crops in that land stops and the land starts becoming barren.
- Scientists at CSSRI started research work on preparing an alternative. This research work was started by CSSRI in collaboration with Reliance Industries. After six years of hard work and research, the institute has now developed a Sulphur-based soil improvement technique.
- It is noteworthy that the Sulphur used in this technique is obtained from the petroleum refinery, which is unusable. The gases that come out of it will be removed by going through a process and Sulphur. Its biggest advantage is not only the improvement of alkaline land, but the second biggest benefit will also be that pollution from these gases will also be reduced.





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