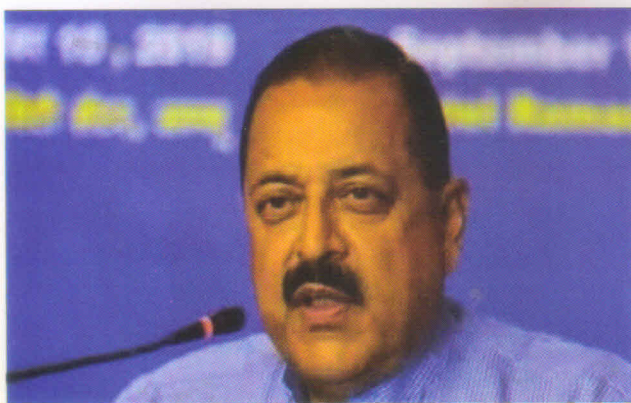


Asafoetida from Indian farms to our kitchens



ASAFOETIDA or Heeng, as it is commonly known in India, is a staple in many Indian kitchens. Its pungent aroma and unique flavour add depth to countless dishes. However, despite its widespread use, India has always been reliant on imports for this essential spice. Traditionally sourced from countries like Iran, Afghanistan, and Uzbekistan, the idea of cultivating Heeng domestically seemed like a distant dream until recently.

Palampur-based CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT), has started the initiative of cultivating asafoetida plants in India. Now, the day is not far when the people of India will use asafoetida grown in the fields of the country in their kitchen, that is, India will become self-reliant in terms of asafoetida production. The Government of India is constantly working towards realising the dream of Viksit Bharat 2047 and Self-reliant India with the development of indigenous research and technologies in scientific fields. Recently, in February 2025, Union Minister of State for Science and Technology (Independent Charge) Dr Jitendra Singh inaugurated the Asafoetida Seed Production Centre as a state-of-the-art facility. Asafoetida production in the country will get a new momentum and direction with the initiation of this centre.

Heeng, a very significant spice of our kitchen is extracted from the fleshy roots of the *Ferula Asafoetida* plant, a species native to the cold, dry regions of Central Asia. This plant is notoriously difficult to cultivate. It takes nearly five years to

mature and produce the oleo-gum resin that is harvested as a unique spice called heeng. Moreover, the plant's seeds are prone to dormancy, making germination rates incredibly low.

Heeng Cultivation by CSIR-IHBT: A Scientific Breakthrough

Despite various cultivation related challenges of this spice, Indian scientists at the CSIR-IHBT embarked on a mission to cultivate Heeng domestically. CSIR-IHBT established a Heeng Germplasm Resource Centre and seed production centres to conserve germplasm resources and produce indigenous Heeng seeds. This constituent laboratory of CSIR conducted training programmes for farmers and agriculture officers, covering aspects of asafoetida cultivation. Over 1,100 farmers have been trained so far through 61 on-farm training programmes.

India marks a significant milestone in spice production as CSIR-IHBT achieves a breakthrough in Heeng cultivation, successfully inducing flowering for the first time in India. To ensure the successful cultivation of Heeng, the IHBT team conducted Ecological Niche Modelling (ENM) to identify regions in India with suitable climatic conditions. Their research revealed that the cold desert regions of Himachal Pradesh, Ladakh, Jammu & Kashmir, and Uttarakhand were ideal for Heeng cultivation.

Farmers in Himachal Pradesh, particularly in the Lahaul valley, were eager to adopt this new crop. The potential for high returns and the ability to utilise vast tracts of wasteland made Heeng cultivation an attractive proposition. With the support of IHBT, farmers received training on its cultivation

