



## The story of how Asafoetida came to be successfully cultivated in India

**Why in news:** Heeng (*Ferula assa-foetida*) is widely used in Indian cuisines and mentioned in **Mahabharata, Ayurveda, and Charaka Samhita Sutrasthana 27/299** for its medicinal properties.

### Prelims and Mains context:

- Traditionally sourced from **Iran, Afghanistan, Central Asia**.

### Plant Characteristics

- Thrives in **cold, arid, high-altitude regions** (10-20°C, tolerates -4°C to 40°C).
- Grows in **sandy, well-drained soil** with 200-300 mm annual rainfall.
- Matures in **5 years**; resin is extracted from **taproot and rhizome** for culinary use.

### India's Dependence and Shift to Indigenous Cultivation

- India was the **world's largest consumer** but **fully dependent** on imports. Government launched indigenous cultivation led by **CSIR-Institute of Himalayan Bioresource Technology (IHBT), Palampur**.

### Seed Procurement and Research

- From 2018-2020, CSIR-IHBT sourced seeds from **Iran and Afghanistan** after coordination with **20+ international suppliers**. **ICAR-NBPGR** issued import permits and conducted quarantine inspections.

### Overcoming Biological Challenges

- IHBT developed **germination protocols**, identified **altitude-specific zones**, and adapted **agronomic practices**.
- Trials conducted at **IHBT Palampur and Ribling, Lahaul & Spiti**.

### Key Milestones in Cultivation

- **2020:** First plantation in **Kwaring village, Lahaul Valley**.
- **2020:** Expansion to **Janjheli, Mandi district** (mid-hill region).
- Demonstration plots and training set up in **Lahaul & Spiti, Mandi, Kinnaur, Kullu, Chamba**.

### Major Early Adopter Villages

- **Lahaul & Spiti:** Madgran, Salgran, Beeling, Keylong
- **Mandi:** Janjheli, Majhakhal, Kataru, Ghayan, Karsog
- **Kinnaur:** Kafnoo, Hango, Maling, Reckong Peo, Kalpa, Moorang, Graming, Katgaon
- **Kullu:** Bagsaid, Dhaugi-Sainj, Kotla-Banjar
- **Chamba:** Pangi, Deol, Bharmour, Mahala, Tooh

### Institutional Support and Research Infrastructure

- **Heeng Germplasm Resource Centre** inaugurated at IHBT Palampur in **2022** for conservation, research, training.
- Tissue culture unit established for **large-scale propagation**, funded by **Himachal Pradesh government**.
- **Ecological niche modelling** used for identifying suitable cultivation zones.



### Significance and Future Potential

- Reduces **import dependence** on heeng. Opens new **agro-ecological frontiers** for cultivation in India.
- Boosts **farmer incomes** and promotes **self-reliant supply chains**.
- Success attributed to collaboration among **CSIR-IHBT, ICAR-NBPGR, Himachal Pradesh government, State Agriculture Department, and progressive farmers**.

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[Current Affairs Course is now Live](#). Course will start in October 2025 1st week.

Modules will include class notes, monthly compilation, quarter compilation and annual compilation. This will help in regular revision r/t in the fag-end of preparation.

I will provide my annual compilation, like last year, on Telegram in May 1st week.

[Last year I had promised 20 questions in Prelims from my notes & 28+ Questions could be answered from the same](#).

30 questions is my aim for 2026 prelims. To meet that, I have analyzed why I missed 5-6 C.A. questions in 2025 and I have increased my coverage accordingly.