

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
DEPARTMENT OF AGRICULTURE AND FARMERS WELFARE

LOK SABHA
UNSTARRED QUESTION NO. 3770
TO BE ANSWERED ON THE 12TH AUGUST, 2025

VERTICAL FARMING

3770. SHRI VISHALDADA PRAKASHBAPU PATIL:

Will the Minister of AGRICULTURE AND FARMERS WELFARE कृषि एवं किसान कल्याण मंत्री be pleased to state:

- (a) whether the Government has formulated any scheme for improving agricultural production and food security by vertical farming, if so, the details thereof;
- (b) whether the Government has assessed the commercial viability and scalability of vertical farming technologies in the country, if so, the details thereof;
- (c) whether the Government proposes to introduce any new Centrally sponsored scheme exclusively for vertical farming; and
- (d) if so, the details thereof and if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE FOR AGRICULTURE AND FARMERS WELFARE
कृषि एवं किसान कल्याण राज्य मंत्री (SHRI RAMNATH THAKUR)

(a) to (d): Department of Agriculture and Farmers Welfare is implementing Mission for Integrated Development of Horticulture (MIDH), for holistic development of the horticulture sector. The protected cultivation component has been recently expanded by including greenhouse based vertical farming under MIDH. The details of cost norms and pattern of assistance under MIDH for aeroponics and hydroponics are given at **Annexure-I**.

Agriculture Infrastructure Fund (AIF) is a Central Sector Scheme, aimed at improving agricultural productivity and ensuring food security through the development of infrastructure at the farm gate and post-harvest stages, supports innovative farming practices such as Vertical Farming. The Hydroponic Farming, Vertical farming and Aeroponic farming are eligible projects covered under AIF scheme. The details of component, pattern of assistance and eligible projects under AIF are given at **Annexure-II**. The assessment has not been done for commercial viability and scalability of vertical farming technologies in India. However, Indian Council of Agricultural Research (ICAR)-

Central Potato Research Institute (CPRI), Shimla has developed a programmed air mist-based potato culturing technique based on aeroponics technology. The Aeroponics Technology of potato seed production has been commercialized to various stakeholders by the institute to ensure the quality seed production. ICAR- Indian Institute of Horticultural Research (IIHR), Bengaluru and ICAR-Central Institute of Subtropical Horticulture (CISH), Lucknow are also involved in research on hydroponics technology to firm up comparative productivity, efficiency and viability.

The details of cost norms and pattern of assistance under MIDH under protected cultivation

Protected cultivation		
Poly house/ Hybrid/ Retractable structures		
Poly house/ Hybrid/ Retractable structures	Rs. 1800/Sq.m(up to area 500 Sq. m) Rs. 1600/Sq. m (>500 Sq.m up to 1008 Sqm) Rs. 1500/Sq. m (>1008 Sq. m up to 2500 Sq.m) Above rates will be 15% higher in the case of North Eastern (NE) & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands	Assistance @ 50% for a maximum area of 2500 sq m per beneficiary or on pro-rata basis for smaller areas.
Add on Components		
i. Hydroponics and Aeroponics	Rs. 350/- per Sq.mt. Above rates will be 15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands.	Assistance @ 50% for a maximum area of 1000 sqm per beneficiary or on pro-rata basis for smaller areas.
ii. Circulation Fans in poly house only	Rs. 5000 per fan. Above rates will be 15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands.	Assistance @ 50% for a maximum of 6 fans for a maximum area of 2500 sq.m. per beneficiary or on pro-rata basis for smaller areas.
iii. Sensor based Automation System for fertigation	Rs. 4 lakh/unit Above rates will be 15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands.	Assistance @ 50% per unit per beneficiary for minimum area of 2500 sq.m. per beneficiary under protected cultivation.

**The details of component, pattern of assistance and eligible projects under
Agriculture Infrastructure Fund (AIF)**

Sl.No.	Name of Component	Norms
1.	Interest Subvention Cost.	All loans under this financing facility will have interest subvention of 3% per annum up to a limit of ₹ 2 crore. This subvention will be available for a maximum period of 7 years. In case of loans beyond ₹ 2 crore, then interest subvention will be limited up to ₹ 2 crore.
2.	Credit Guarantee Cost	Credit guarantee coverage will be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to ₹ 2 crore. The fee for this coverage will be paid by the Government.
3.	Eligible Projects	Viable Farming Assets: Hydroponic Farming, Vertical Farming, Aeroponic farming and Poly house/ Greenhouse.
