

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

LOK SABHA
UNSTARRED QUESTION NO.540
TO BE ANSWERED ON THE 06TH FEBRUARY, 2024

BENEFITS OF HYDROPONIC INNOVATIONS

540. Dr. KALANIDHI VEERASWAMY:

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

- (a) whether the Government acknowledges the improved sustainability of plants grown through hydroponic innovations compared to traditional methods;
- (b) if so, the details of initiatives and programmes proposed by the Government to encourage their use and if not, the reasons therefor;
- (c) whether the Government has looked into the minimal water and space requirements of hydroponics as compared to other traditional techniques of agriculture and if so, the details thereof; and
- (d) if not, whether the Government is looking to undertake such a study to ascertain the scalability of hydroponics in the country?

ANSWER

MINISTER OF AGRICULTURE AND FARMERS WELFARE

कृषि एवं किसान कल्याण मंत्री (SHRI ARJUN MUNDA)

(a) to (d) : Hydroponics is a viable alternative to traditional farming methods for soil less cultivation for enhancing productivity and water use efficiency in places of water scarcity and soil born diseases. Hydroponics is a new concept in India and is gaining popularity among entrepreneurs and innovative farmers for sustainable and commercial cultivation of crops, at places with limited natural resources. At present, this technology is mostly confined to urban farming, rooftop gardening and commercial farming.

Under National Horticulture Board (NHB) i.e., a sub-scheme of Mission for Integrated Development of Horticulture (MIDH), assistance is provided to farmers using hydroponic methods of farming as per the cost norms of protected cultivation.

Further, Indian Council of Agricultural Research (ICAR)- Indian Institute of Horticulture Research (IIHR), Bengaluru has developed a variant of hydroponics, “Cocaponics” or the Soilless production of vegetables using cocopeat as a substrate, which has been found to be comparatively successful in vegetable crops. The Institute has developed the complete production technology including a liquid nutrient formulation (ArkaSasyaPoshakRas) for soilless cultivation of various vegetables. The Institute is providing hands on training to interested farmers and entrepreneurs on this technology. More than 3000 urban dwellers, cocopeat producers, hydroponics start up etc., have been trained at ICAR-IIHR during last 3 years through various capacity building programmes.

ICAR-Central Institute of Subtropical Horticulture (CISH), Lucknow is also engaged in indigenous structural design of hydroponics and development of package of practices for sustainable and cost effective hydroponic crop production in sub tropical region. The Institute has evaluated four hydroponic systems (nutrient film techniques, Ebb and flow technique, drip hydroponic techniques and geaponics techniques) for high value vegetable production.
