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Aquaponic farming in the country

1285. SHRI VIJAY PAL SINGH TOMAR: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- whether it is a fact that Government is providing different techniques and plans for agricultural production to double the income of farmers;
 - if so, the details thereof;
- whether it is also a fact that Government is also promoting aquaponic farming in the dry places of the country; and
 - (d) if so, the details thereof?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) and (b) The Government has taken various steps to promote the use of modern techniques and plans to the agricultural production for doubling farmers income. Some of the interventions in this direction are:

- (i) Sub-Mission on Seed and Planting Material (SMSP)
- Per Drop More Crop (PDMC) (ii)
- (iii) Soil Health Card (SHC) Scheme
- (iv) Creation of a network of Krishi Vigyan Kendras (KVKs) by Indian Council of Agricultural Research (ICAR) to facilitate farmer's access to knowledge and information generated by Agricultural Universities and ICAR Institutes of the country.
- (v) Initiatives under Agriculture Technology Management Agency (ATMA) Scheme like Extension Reforms, Mass Media Support to Agricultural Extension, Kisan Call Centres, Agri-Clinics and Agri-Business Centres, Exhibitions/Fairs etc.
- (vi) Sub Mission on Agricultural Mechanization (SMAM)
- (vii) National Agriculture Market (e-NAM) Scheme
- (c) and (d) Fisheries Research Institutes under Indian Council of Agricultural Research (ICAR) are involved in research and development of technologies and are

in process of standardizing the techniques for aquaponics. ICAR-Central Institute of Freshwater Aquaculture, Bhubaneswar has taken up aquaponics project entitled 'Development of a low cost aquaponics system using plastics for urban aquaculture' under ICAR-All India Co-ordinated Research Project on Plasticulture Engineering and Technology.

Stubble burning menace

1286. DR. K.V.P. RAMACHANDRA RAO: DR. SANTANU SEN:

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) whether Government has noticed that stubble burning is the major cause of air pollution in NCT of Delhi and is an incorrect practice followed by farmers;
 - (b) if so, the details thereof and the reasons therefor;
 - (c) whether Government has taken any steps to tackle this issue; and
- (d) whether Government has taken up steps for creating awareness among the farming communities about adverse effect of stubble burning?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) and (b) Among other various local sources of pollution in NCT of Delhi, smoke from the burning of paddy crop residue in Indo-Gangetic plains of the States of Punjab, Haryana and Uttar Pradesh also contribute to environmental pollution in NCT of Delhi during the early winter season. The farmers are resorting to paddy straw burning because of very short time window between the harvesting of paddy crop and the sowing of next crop.

(c) and (d) To address air pollution and to subsidize machinery required for *insitu* management of crop residue, a Central Sector Scheme on Promotion of Agricultural Mechanization for *In-Situ* Management of Crop Residue in the States of Punjab, Haryana, Uttar Pradesh and NCT of Delhi' for the period from 2018-19 to 2019-20 is being implemented with the total outgo from the Central funds of ₹ 1151.80 crores.

During the year 2018-19 and 2019-20, the funds as under have been released under the aforementioned scheme.:-