

| 1     | 2   |
|-------|---|
| 11.7  | Paramparagat Krishi Vikas Yojana                        |
| 11.8  | National Project on Agro-Forestry                       |
| 11.9  | National Bamboo Mission                                 |
| 11.10 | Sub-Mission on Agriculture Extension                    |
| 11.11 | Information Technology                                  |
| 11.12 | Sub-Mission Seeds and Planting Material                 |
| 11.13 | Sub-Mission on Agricultural Mechanization               |
| 11.14 | Sub-Mission on Plant Protection and Plant Quarantine    |
| 11.15 | Integrated Scheme on Agriculture Cooperation            |
| 11.16 | Integrated Scheme on Agricultural Marketing             |
| 12    | <b>National Food Security Mission</b>                   |
| 12.1  | National Food Security Mission-Oilseeds and Oil Palm    |
| 12.2  | National Food Security Mission- Other Crops             |
| 12.3  | Integrated Schemes on Agriculture Census and Statistics |

#### **Technological intervention in agriculture**

1291. DR. VIKAS MAHATME: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) the steps taken by Government to modernize farming techniques;
- (b) whether technologies like artificial intelligence, machine learning, cloud computing, block chain, etc. have become an intrinsic part of Governance, especially with Digital India scheme, if so, the technologies being deployed in the Ministry;
- (c) the details of extent of public-private participation in this regard; and
- (d) the challenges identified and the reasons therefor?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) For promotion of technology in agriculture sector, following initiatives have been taken:

- (i) The Indian Council of Agricultural Research (ICAR) has established a network of Krishi Vigyan Kendras (KVKs) in the country mandated with Technology Assessment and Demonstration for its Application and Capacity Development (TADA-CD). KVKs organize demonstrations, training programs and skill development programs for the benefit of farmers and farm women, rural youth and in-service extension personnel.
- (ii) On farm trials (OFTs) for assessing technologies and front line demonstrations (FLD) showcasing potentials on improved varieties, modern technologies and practices are conducted on farmers' fields to create awareness among farmers. To update the knowledge and skills on modern agricultural technologies, training courses on various technologies are organized.

(b) to (d) Several Schemes such as, e-NAM, Soil Health Card, m-Kisan, etc., are making use of mobile and data analytics. Weather forecast is also being sent to the farmers through SMS.

#### **Decline in production of wheat and rice**

1292. SHRI DEREK O'BRIEN: Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

- (a) the data for the yield of rice and wheat in the country for the current year and the past five years;
- (b) whether the yield of rice and wheat has decreased over the years; and
- (c) if so, the reasons therefor?

THE MINISTER OF AGRICULTURE AND FARMERS WELFARE (SHRI NARENDRA SINGH TOMAR): (a) to (c) The yield of rice and wheat during last five years *i.e.* 2014-15 to 2018-19 has been increasing in the country. The All - India yield of rice and wheat for the past five years and current year are given as under:-

|         | (Kgs/Hectare) |       |
|---------|---------------|-------|
| Year    | Rice          | Wheat |
| 1       | 2             | 3     |
| 2014-15 | 2391          | 2750  |
| 2015-16 | 2400          | 3034  |