

GOVERNMENT OF INDIA
DEPARTMENT OF SPACE

RAJYA SABHA
UNSTARRED QUESTION NO. 1083

TO BE ANSWERED ON THURSDAY, MARCH 09, 2017

USE OF SATELLITES TO IMPROVE AGRICULTURAL PRODUCTION

1083. DR. VIKAS MAHATME :

Will the PRIME MINISTER be pleased to state:

- (a) whether it is easy to monitor, assess and advise the progress of agriculture produce using satellites;
- (b) whether common agriculturists are not getting any benefits from the information provided by satellites;
- (c) what was the percentage of agriculturists in the country who were benefitted and improved their agriculture production because of information provided by satellites during the last five years; and
- (d) what steps Government is taking to improve this facility which could eventually help in increasing agricultural production and help the poor farmers?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG &
PENSIONS AND IN THE PRIME MINISTER'S OFFICE

(DR. JITENDRA SINGH):

- (a) Satellite data helps in inventory, monitoring and assessing the condition of major crops. Satellite derived information is primarily used for enabling decision makers in planning agricultural inputs, post-harvest management, import/ export policies, impact assessment due to droughts, floods and extreme weather events. ISRO collaborates with Ministry of Agriculture and Farmers Welfare on various applications using satellite data and geospatial technology in agriculture sector, which include – (i) multiple in-season crop production forecasts for major crops, (ii) agricultural drought assessment & monitoring, (iii) horticultural crop inventory and site suitability for expansion in under-utilised areas.

- (b) Satellite based information is an integral part of National Agro-advisory Service bulletins, which are disseminated to Agro-Met Field units (AMFUs) located in different State agricultural universities. The nodal officers in AMFUs use this information to issue advisories for the benefit of farmers and common agriculturalists. The satellite-enabled services in conjunction with ground data include weather forecasting, agro-advisory, agromet services, soil moisture and agricultural extension activities to support farming operations in the country by India Meteorology Department (IMD), Ministry of Earth Sciences.
- (c) The satellite data in conjunction with ground based information helps in mapping of culturable wastelands for reclamation measures; site suitability for crop intensification in under-utilised areas; assessing water resources. This information helps the concerned departments, field level implementation agencies and decision makers to undertake suitable measures towards improving agricultural production. However, specific data is not available on percentage of agriculturists in India who were benefited.
- (d) Various steps being taken up by ISRO include – (i) improvements in scale and frequency of mapping, (ii) enabling improved weather forecasts in terms of resolution and time, (iii) enhancing geospatial services and mobile applications towards soil health cards, crop damage assessment and agro-advisory services (iv) constellation of satellites for improved revisit.
