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AGRO- SPACE

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Introduction

As the heading speaks out itself it contains two small words but I would say this word is itself an advance world i.e**., "AGRO SPACE**". We all know that our country's economy is basically based on agricultural. According to agriculture prospect, it has been reported in 2018 that 60.43 percent (1573.35) of total land of India is under agriculture. But the farmers or the beneficiaries from agriculture are facing various distress in the field of agriculture due to different type of issues whether it is soil related or climate or yield related.

Thus, here I am focusing on how our country is using space technologies to mitigate agriculture program policies and help the farmers.

So, why it is in news?

The ministry of agriculture and farmers welfare has been proactive using space technology in agricultural sector. So here, we will talk about various initiatives in the aid of farmers.

Some of institutional measures

The first is THE DEPARTMENT OF AGRICULTURE COOPERTAION AND FARMER WELFARE had established the center known as ***"MAHALANOBIS NATIONAL CROP FORECAST CENTRE".*** It is opened by Indian government in collaboration with ISRO in 2012.Here they are using remote sensing technologies for agriculture forecasting. It works for operationalization of space technology development in the ISRO for crop production forecasting.They use the satellite technology for draught assessment, multiple forecasts are done of around 11 major crops which include Rabi and kharif crop they also use GIS- Geographical Information System.

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Some of the various projects initiated by Government of India by using space technology-:

1.FASAL PROJECT- It provides agro-meteorological and land-based observations. It started in 1988.The main aim is to collect monsoon data through remote sensing.

2.CHAMAN PROJECT-Its main objective is for development of horticulture sector. It is the pioneer project where we use the waste land for cultivation of horticulture crops.

3.NADMAS – National agriculture draught assessment and monitoring system. It prepares fortnightly reports by using advanced field sensors. The satellites which are used in this project are IRS-1C, IRS -1D

Therefore, agriculture is an integrated system which is also depend on space technology. However, it is a major step but manual work is also required.So,analysis report will be made for farmer and crop insurance like activity will take place. However talking about crop insurance, space technology helps getting fast and unbiased information about crop condition in our country and it is providing us digital data which is amendable for analysis because of its synopsis view it send image of whole country in short duration. These data are used in various programs like crop type, crop area, crop condition, damage and growth.

The latest project where we are using space programme is-KISANproject-Crop Insurance Space and geo-informatics in October 2015.Here we are using high resolution remote sensing data for optimum crop cutting, planning and improving yield. It is done in 4 districts of 4 major states-HARYANA,KARNATKA,MAHARASTHRA,and MADHYA PRADESH to define SOP (standard operating procedure) to use of satellite data in revised guidelines of Pradhan Mantri Fasal BimaYojna.

So, here I am concluding that YES space technologies are helping a lot to simultaneously enhance production and profitability by using remote sensing that provide us key data for monitoring soil, draught,snow cover,rainfall, so accurate that it helps in overcoming the distress of food shortage and famine.