

Role of agro-met information services in farmer decision making

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Abstract:

Agro-met Information Services, the name itself sustains a gathering of lots of data with regards to various climatic conditions. This ensures the predictability of various climatic parameters which proved to be very helpful in decision making powers of farmers regarding their crop selection, sowing period and timing, pest management and harvesting. Agro-met information helps farmers to produce their crops under appropriate conditions to reduce crop failures and ensures food safety.

Keyword: Agro-met, food safety, decision making.

Introduction:

In 21st century everyone is getting more informative and advance with the use of most advance science and technological gadgets. This is the need of today's world to become more advance from technical aspects. The same thing is being applied to farmers as well. The need of agro-met (agricultural metrological information) is very extremely helpful for the 21st century farmers. This will change their way of agriculture to become more advance and more efficient for sowing and harvesting their crops. The agro-met covers all the aspects of agro climatic changes that effects the crops on a great deal from their sowing to harvesting. The need of agro-met is very much crucial to get more advancement in traditional agriculture practices.

In India, agro-met services were started with the establishment of Indian Meteorological Department (IMD) during 1945. They used to broadcast agro-met information regarding temperature, rain, fog, wind factors via radio. After that during 1980

the National Centre For Medium Range Weather Forecasting (NCMRWF) started start forecasting on 5 days basis. This system become very effective and efficient in dispersing the agro-met information services to local farmers in 127 agro climatic zones of India. The agro-met information is the key for farmers to produce their crops on proper time and harvest them before any natural mishappenings. Farmers need to access various types of information before sowing their crops viz. upcoming temperatures, humidity, fog, rain, dew point, wind factor etc. After accessing all such information the farmers can then decide what to sow and when to sow?

Literally these are the two basic queries of farmers that what to sow? And when to sow? The very first query is related to the basic decision making of farmers. This is effected by various parameters viz. What is the marketing status of that area? What is the demand of that market? And the most basic that what the climatic parameters of that particular area? Or simply we can say what kind of climatic zone it is? On that note than farmers can decide that which crop they must select that will tolerate or withstand with their climatic zone as per given by the IMD. So because every crop has their basic elements to grow and mature (most importantly the climatic factors).

So the next query comes up with when to grow? This decision making requires more precise information about various agro-met services provided by various local and centre bodies. As discuss earlier various crops requires different temperature and humidity conditions to germinate. The various factors viz. seed rate, seed depth, sowing date, multiple and mixed cropping etc. requires agro-met information to carry out such functions. With the provision of agro-met services it comes in very handy to farmers to decide the type of crop and harvesting time as well. Not only these the agro-met information services also very helpful for post harvest management of crops. The harvesting of crop under proper conditions will increase their shelf lives and ensure the food safety.

Status of agro-met services in India:

The India's Integrated agro-meteorological advisory services (AAS) is the most advance meteorological forecasting program in the world. IMD took the leadership of agrometeorological advisory services during 2007. After this they launched a District level agrometeorological advisory services (DAAS) in 2008.

The main services provided by this facility is agrometeorological information, extension services and information dissemination. With the facilities of AAS and DAAS the farmers now can have a bunch of informative data that they can compile by themselves or by local agricultural research facilities to guide the farmers throughout their cropping seasons. The farmers decisions now become more accurate and technologically more advance than traditional farmers. Now they can deal with problems of crop failure due to adverse climatic conditions or due to mismatch between their crops and agro climatic zones. This gives the power of decision making in the solely hands of farmers not any other private concerns to tell them what to grow? And when to grow? They have complete independence of choosing any appropriate crop depending upon their climatic zones.

Due to such conditions the farmers now can contributes more to national food safety measures and helps to ensure the tremendous production of crops. Also agro-met information services become very handy in introducing the various new cropping system in India. This increases the bio diversity in crops and maintain soil productivity. Various cropping systems can be decided by farmers themselves depending upon their need and agro climatic conditions.

Conclusion:

After all the discussions it has been very clear that to ensure the food safety and farmer well being the agro-met information services plays a significant role. The decision making power of farmers regarding their crop selection, crop sowing, intercultural practices and harvesting us solemnly depends upon meteorological information provided by local and central authorities. The farmers then can ensure their crops to produce quality and quantity of production to fulfil the present food demands.

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