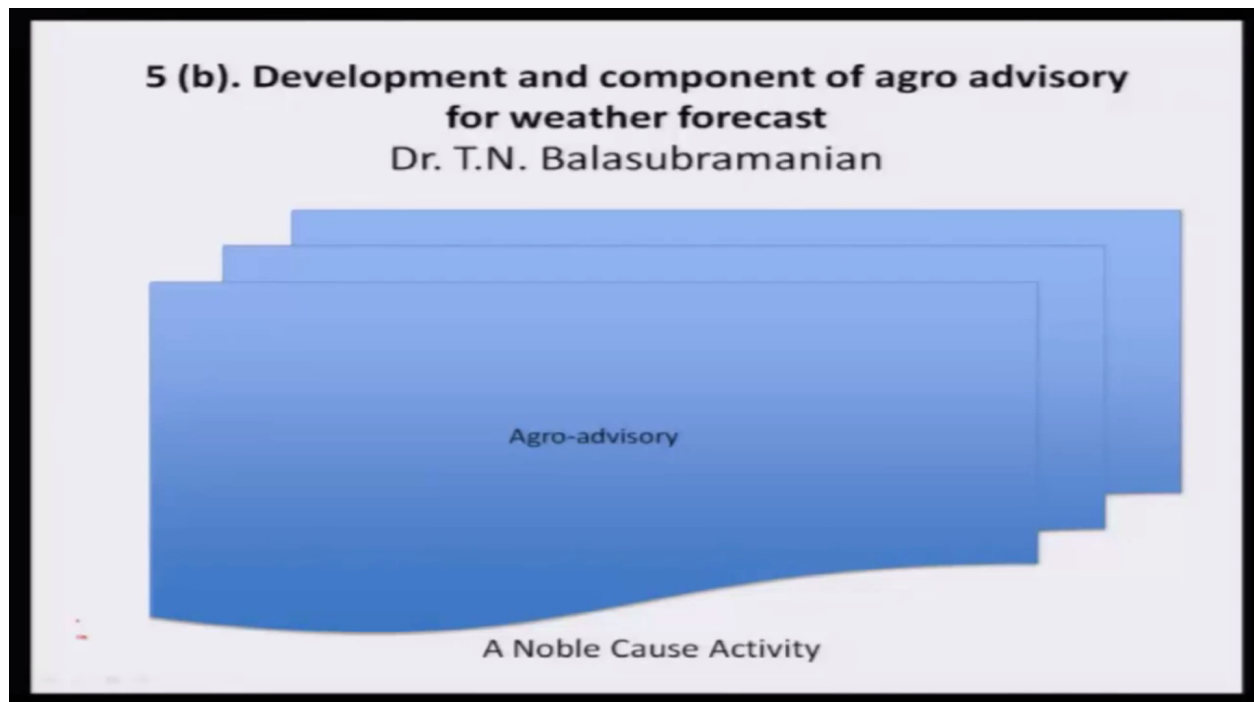


agMOOCs

Development and Component of a agro advisory for weather forecast

Dr. T.N. Balasubramanian
(Tamil Nadu Agricultural University, Coimbatore)

I feel very happy to meet you all again to discuss or to continue our subject.



Now in this class, we like to discuss the important component of our topic that is agro advisory. On along earlier, we were discussing on the basic aspects of metrology followed by in-depth discussion on weather forecasts, how it was developed, and what are the metrology adapted, whether they

are actually useful for the profession of agro advisory and thereupon. Now we come to the important topic, preparation of agro advisory.

Coming to the subject in proper you can raise question, what is agro advisory. Agro means agricultural; advisory means you are recommending something. Based on what? Based on our weather forecast underneath that we have on our hand. The form decision options are making form decision option in response to changing weather or weather forecast that we receive for the subsequent five days. So this is the definition. What are the areas that envelop our form decisions? This is very, very important maybe agronomical from management aspects must be, because agronomical management is very, very important or you can say crop husbandry is very, very important. So that area is taken care of in in the preparation of your agro advisory, and the pest and disease management, then input management. These are the three things mainly be addressed when we prepare agro advisory.

When you prepare your agro advisory, you see first week weather, present day weather forecast and put your knowledge also, then only the agro advisory would be very precise and highly useful to our farming community.

Here I have given based on our earlier discussion what are the things to be considered. So we have learned a lot on crop weather interaction, indigenous knowledge, thumb rules. So those things ought to be considered meticulously for the preparation of the agro advisory, and those are given in the text form here.

Why, When and Where

Why agro-met advisory is required?

- 1.To reduce crop losses
- 2.To sustain the crop productivity
- 3.To increase input efficiency

When it is mostly useful ?

During flood and drought weather
codes(malevolent weather situation)

Where it is required?

Monsoon dominant regions and also where the
weather system is unstable always

Next normally, I critically analyze any topic by putting many questions. Why agro advisory is necessary, when it is required, and where it is required? These are all some questions that will be raised on our topic of discussion.

So if you ask a question why agro advisory is required, in the absence of agro advisory what will happen. So the agro advisory is required to reduce the crop losses. This is very, very important. We cannot control the crop losses but we can reduce the losses. Suppose the loss, estimated loss would be 30%, by having the anticipated weather forecast, if you do agro advisory, if you follow agro advisory, the loss could be reduced to 20% and the minimum loss would be 10% only, so 20% will be saving aspect, so to reduce the crop losses.

To sustain the crop productivity, when you reduce your losses, you can be able to sustain the crops productivity. Finally, there must be also an economical benefit. So in this case, to increase the input efficiency. When you reduce the input and increase the efficiency means automatically there is economical benefit or the economical gain.

Then when it is mostly useful? You have already land, the three weather codes, normal weather code, flood water code and drought weather code. Normal weather code does not require any agro advisory. When any deviation occurs from the normal situation, whether on the positive side like a flood or on the negative side like a drought, we need agro advisory to reduce your crop production risk and also to sustain your crop productivity.

Where it is required? So monsoon dominant regions like India, like Australia, like Indonesia, so monsoon dominant regions. There are different monsoons, Japan monsoon, Burma monsoon, Indian monsoon, so wherever the monsoon is dominant, the variability normally occurs. Under this situation, this weather forecast and agro advisory are very, very important. In other way, in terms of physics physical signs, I can say that whenever stable atmosphere is there, like in the European countries, the agro advisory may not provide best advantage, but it gives ample chance for higher profitability reduction of the crop production risk when unstable atmosphere or unstable weather that prevails over a country. This is very, very important, unstable weather, very, very important.

Then moving to the next one for whom it is required, why do you waste your time, why do you waste your resources. So you may pose a question on this. So highly it is for the benefit of the farming community, because they are working under field conditions, under open conditions, weather is dominating over their activity. So in this case, the weather forecast and agro advisory are very important to farmers. Then farm based industries. Suppose, I say yeah iron rod is fabricated in a factory, they kept at the open space, because of

the increasing 07:05, the iron rod gets rusted over time, maybe month, maybe a year or maybe chronologically we can say decade or two decades or three decades. So all processing agriculture produce processing industries, this will be useful, and one among them is livestock feed.

See in the case of a livestock if the feeds contain more moisture than the threshold level, there is every possibility of occurrence of aflatoxin to the animals or poultry, diarrhea, dysentery may happen at any time. So the moisture must be kept under control. How? This is the strategy to be adopted by the livestock feed makers. They have to produce within the threshold level of the moisture. If it is more, there is the attack from the fungi. So what we say is here we have studied a lot about the relative humidity, when 08:11 is more in the year, automatically when the feed is prepared or fabricated or made, kept under open condition, the moisture content of the feed may get increased, for that yen of caution must be taken by the industries fellows.

Then government for taking decision, this is very, very important, especially for a long-range forecast or seasonal climate forecast. When a long-range forecast is given or when a seasonal climate forecast is given, the government must take necessary action. For example, when a forecast on drought is given to the forthcoming season the government should decide what are the crops to be sold during the forthcoming season, what are the technology to be adapted, how many crop variety seeds must be procured, what are the pesticides required. The government tailors some technology, some crop planning, then the state may get benefitted very well. For taking decision by the government, they must have enough policy. This policy is the outcome of discussion from the elected members and also discussion with the higher official members of the department of concerned state.

Then agricultural marketing, this is very, very important, because you can't sell cotton when rainy weather is there. So you have to avoid all those things, so marketing is a tricky or a good strategy to get the benefit from our agricultural produce. So this agro advisory would be highly useful to all fellows that we have mentioned, but agro advisory means what we think, it is highly benefit to farmers, yes, of course, but also it is needed by some other industries also.

So with this I'd like to close today's class. Thank you very much.