Cloud Types & Rain Bearing Clouds
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Hello, welcome to this class or this lecture which is going to described about the cloud types and cloud rain-bearing clouds. This is in continuation of our previous lecture how the rainfall is important and how the forecast is given over there. What are the clouds? Clouds are nothing but large collection of trainee droplets of water that are small and like these billions of droplets come together to form a visible clouds that is what you are able to see it on the horizon.

Now when you say rainfall, rainfall maybe a showers begin as well as ends suddenly. It is a short-lived from the cumulus clouds. What is the rain? Rain is nothing but a steady steadier one and falls from the stratiform clouds. Then what is a drizzle? Drizzle is nothing but a uniformly uniform precipitation having very small water droplets then then other activities are convection clouds, orographic clouds, frontal rainfall as well as monsoon rainfall these are all the things which happens depending upon the cloud formations.

Now let us see what are the different type of clouds which will be able to see it on the horizon. The clouds, the entire clouds as you could see from this picture is clouds are there the atmosphere is; it is about 11 kilometers from the Earth's surface from the earth means sea level surface. The clouds are classified depending upon the height from the surface. They are called high level clouds which occurs between five kilometers to ten kilometers above the earth surface medium level clouds it is two to seven kilometres height; low-level clouds this is 0 to 2kilometer in height and there are clouds which can extend 0 to 13 kilometers in a vertical mode.

These are all the possible classifications which are being used. Now they are called some of them the lowermost clouds they are called as stratus clouds, the stratus clouds are nothing but a flat bottom clouds whereas the cumulus clouds are those clouds which you have the buff up on the surface. Then whereas the cirrus clouds are some of the fragmented portion of the clouds that is what we call it as cirrus clouds, cumulus clouds and the stratus clouds depending upon the appearance on the horizon.

In between nimbostratus then alto is about the height related and these clouds when you see this is one full formation of a cloud whereas these clouds are part and parcel of this particular weather system. So these clouds they also indicate what is the major weather system which is happening or shaping up in this area. Now let us see one by one different clouds. This cloud what you try you are able to see is cirrocumulus clouds. It shows large characteristics of ice crystals present in them but the probability of a rainfall is no precipitation from these type of clouds if you see it on your horizon for your experience you can see it and then record it. Another type of cloud is the cirrus clouds these cirrus clouds what do you see here; you do not give any precipitation now the next one; this is the cumulonimbus clouds if you observe a cloud like this then there is a probability of a shower or a snow is assured right second thing is whether it happens throughout it may happen throughout the cloud spread or it may happen

in one or two places in this area that is the next process which need to understand in detail but not from this lecture whereas the another cloud is the cumulus cloud this is a low altitude crowd that means it will be there up to three kilometers from the earth surface.

The probability of a rain or a shower is possible from these clouds if it is; if you see it on your area then there is a probability of a rain or a shower is possible. Now Altostratus, here also there is a rain or snow is possible depending upon the geographical location then the Altocumulus clouds may produce light showers which you see the appearances like this. So, this slide shows about the different clouds which you can observe it on the horizon and you can infer whether there is a probability of a rainfall or low probability of a rainfall could be assessed by yourself; what we have seen in the previous slides are how the clouds look like and where they are whether they are in the lowermost portion on middle portion or in the upper portion of the Troposphere and what is the probability if I see a cloud like cumulonimbus cloud a cloudlike this over my place, what is the probability of precipitation? So, here the precipitation is very high. So, this is how you can assess yourself whether there is going to be rain tomorrow or today in some part of the areas and whether and start a pump or not; this type of decisions can be made by yourself by observing the clouds every day before you initiate your agriculture activities that is the one.

That is why this type of information was briefed before you; now thank you and how you use it in the forthcoming water assessment will be seen in the next lecture. Thank you.