GIS Type & Available GIS Soft Wares
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So what we try to do in the previous lecture is like what are all the different applications, how those applications are little different than the present-day usages and how best we can go ahead. That is what we have seen. Now, in the next lecture what we try to do is; what are all the different management and the analysis activity which you get it over here.

Now, you have a web application programming interface which you'll be able to do that then you have got a distributed GIS. This GIS as we have said is web based, mobile based and corporate GIS as well as the GRID in computer. Nowadays that even the mobile GIS has come up and which will be easier for us. So, what are the agriculture extension activities or extension information; they can go either in the form of adversary; the text mode or in the form of a map mode or in the form of a graphic mode that can reach people and things like that.

So, and in addition to that but what happened nowadays everything is that we are talking about the open source, open source. So open source is which you can download and use it and then you can; you don't have to buy it out. So, that is the type of things are available in the GIS also. There are GIS, GRASS, Quantum and MapServer. They are all available in the OpenGIS Soft Wares are available for a download purposes and you can use it and then you don't have to buy.

The web that there are Google Maps and live maps that is what we are all much familiar than anything else. These are all the product of the GIS which has come into picture. Now what are the Open Geospatial Consortium are OGC standard. See when you have an open downloadable thing, the issue comes the previously if you buy a car, if you buy a material from me and you cannot use it with the other vendor. So, vendors they were trying to protect their own interest but not allowing to merge with others. See this portion, the Open GIS, Geospatial Consortium is the group of universities and government agencies and companies; they joined together. So they have developed their own GIS. So, the input to is one and the data format may change from one to another and the individual other software. The software we will be able to convert from one to another and they use it in their own analysis purposes.

So, now what we have is; what I'm trying to give you a list of proprietary software that means you may have to buy it from the regular vendor and some of them are very may be expensive may not be expensive depending upon who is funding over there. So, these are all the different type of IDRISI, Autodesk, Cadcorp, EDAS and all these things. These are all the software's which are available. This you may have to buy it on a desktop activity then another thing is these are all the open source software that means you can download it and use it. The same purposes can be done, there may be some here and there inadequacies which we may have to look around. So, other GIS software are also listed over here. So, that you can decide. So, which software you want to do that if you have money and you can buy a proprietary item. If you want to do it on a web Desktop fine, if you want a laptop type activity, it’s fine, in the mobile; whatever you want to do, however you want to do you will be able to do that.

And if you don't want to do that, if you do not have money. So what happen is you can download some of the open software, use it out and your purpose will be done. So, this is how, what we have got is now, to get an effective agriculture practices for the future is that you have to try to collate information, collate information means information from the elders like you orally you can just collect it and then record it and then use it in your activity and you can take maps prepared from any time at any scale with any projections, they will be able; to you can use it either in the form of maps, in the form of a point, in the form of other activities which you will be able to do that.

So, GIS will be able to store. Take or; if you take a satellite picture or aerial picture or UI picture any picture you take it out; they can be brought in and it can be updated. So, this updated information as well as the historical information they can be combined together and you'll be able to take a database that is a baseline information you will be able to correct it and that information you will be able to use it for your own agriculture practices. Agriculture practices what I mean to say is village level form level, farm level, farm land Management as well as the water resources management as well as salinity management. Any type of management which you come across is possible. So, only here is; there is a solution.

If it is for a finer resolution, if you want a finer resolution is like you may have to get a more picture if you want to have a coarser picture then you pixel size then you may have to wave off it, trade-off is possible with all these things. So all these things is not only for today, it is further tomorrow also. Tomorrow another 20 years; what will happen is the baseline information whatever you have created that can be updated, that can be analyzed for a better change over to meet the climate based smart agriculture which people are advocating now.