

## Village Information System Dr. R. Nagarajan

Now we after doing all the cadastral land information systems now we thought why not we have a village information system for a one village in Maharashtra. So as a village youth what I wanted to do is I wanted to know one thing is about the land records what are the land records then I want to know what are the water sources then agriculture, weather information settlement information, cultural information like that you have so many information which everybody wants to know at a village level. So, this is one thing is to know what is happening in the village as well as how you get connected with the rest of the area what else we can do it at the same time the people from the faraway places for them what is happening in the villages.

So this the purpose of this is to create awareness from the villagers. Village youths, so that they will be able to get a better knowledge including this GIS program is meant for them and also for others to know what is happening in that type of system. So, this has been developed as a pilot study for the village in Loha in the Nandi district of Maharashtra. Now what I wanted to show is how the caddis trees and land information is attached to this is the purpose of this so what is done here is the village map has been converted Auto-CAD type. So, what we try to have it. This is the parcel land parcel these are all some of the boundaries, this is one boundary, this is another boundary, this is the third boundary and somewhere here it is a fourth boundary so this village is surrounded by so many places now what I wanted to do is one thing is I said about what is who is there the neighbour.

So, here the parcel of this, this is the settlement area let us go to the settlement area first. So, this is the way the entire village houses are located now I want to know who are all living in these houses. So, this house 98 which I have named it or which I have numbered it this many people are living in these houses so now I have got a list so that I will be able to plan further betterment of these places people. Now I want to know who is there in the house number 102 that means one thing is the individual house information is needed second thing is spatially where other houses are there because I do not know because i have not seen it so that house is somewhere here.

Okay, so this type of the another one if I have to do it so we can give any a village number. So, this will tell you about who is the people which are who are there and a third thing is now let us go back to some other spatial query that this type of spatial queries about the 60 village ok I can by this way what I can able to do is in a village and how many houses are there who is living in the house and which are the house; which are in close proximity to each other so this is one thing which is often needed and this can be updated by the local youths. So, that they will be able to get some better benefits and they are the people who are going to give them information correctly instead of some other service.

Now, it is regarding the land parcels. Land parcels this parcel is owned by this group's total area which is the parcel is 1.4 acres and 20 is grown maize, and 12 1.2 is grown by some other crops. So, this is the what the 7/12 it normally contains it. So, what I did was I have

taken the 7/12 of an individual plots and then I have converted into a attribute table that attribute table is connected to the parcel.

Now when I want to go back 78, so this is where the 80. So, when I want to know who are all my neighbour okay? My neighbour is 80, so 80 is here then when I go back to 82, these are all the people. So now why I want this type of information is; if I if this is this is the road, this is the main road which goes on. If I have to buy a plot adjacent to the road my query is how close I am at the same time who are all my neighbours so that I will be able to get on their plot also. I will be able to get a bigger unit. So, this type of spatial queries as well as the individual owner's query they are all possible in these type of GIS mode of operations.

So, that is what we wanted to show it to you. So, same thing multiple village boundaries are adjusted in a river basin that river basin. What are all the villages which are there; if it is village basin wise also you will be able to query it up. My villages Pardih; so either I go to this village website or you can go to this Pardih which is located here. So, I can go to the same area that means as a river basin-wise also I will be able to access this information and also as a revenue village information system also I will be able to do it up now what we were talking about is how to create a village level information. So, that individual micro level information and for a village and so that the spatial information of that is special information related to the this agriculture plot, spatial information related to the individual houses or the query can be still furthermore that means who are all the people with a particular surname who owns that house or owns that particular village parcels.

So, these are all the queries which you can do that, that depends on what is the your interest. Now, another interest is who are all the people who are doing a particular crop in that village during that particular period that is also possible by this type of methods. Now the second one which we I thought I will try to show it to you is about nowadays watershed river basin management those are all the things which are coming up in a big way. Now this is one small water and this is the Godavari River which goes and joins this entire village thing.

Now if we want to if you just superimpose all your village boundaries and attached to this river basin boundary. So, the water which is used surface water which is used, surface water which is stored that could be planned. So, here I have my interest is Pardih village. So, it go back to the website showing the village or it can come back or other information also which we have not finalized it. So, even though that 7/12 are there we have not filled up all those details. So, this type of entire village can be mosaicked or entire village can be separated out and you can have a spatial information analysis is possible on a river basin mode also.

So, to control our to summarize the village or the land information systems helps in dealing with the practices or water and other natural resources which is required for the food security as well as for the crop production. So, this type of GIS based village information, cadastral information and settlement information; if it is synergized integrated using the geo-referenced conditions then it can be up-scaled. Up-scaled in the sense from the village level up to the top regional level up to the bottom.

So, this type of movement is possible. So, that accurate evaluation of a water availability or water demands can be managed on a regional scale during the drought and other natural disaster conditions. Why adjacent areas information is inter studies suppose if I don't have anything it will be possible for me to go to the others and then get that water or movement or whatever it is you will be able to do that. For this purpose we need to create a local information as well as a shining information which is possible only by this geographic information systems. So, we close for the day and then we look for the next lecture. Thank you.