agMOOCs

Mod-01 Lec-01 Introduction

GIS in Ag-Essentials and Applications

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and

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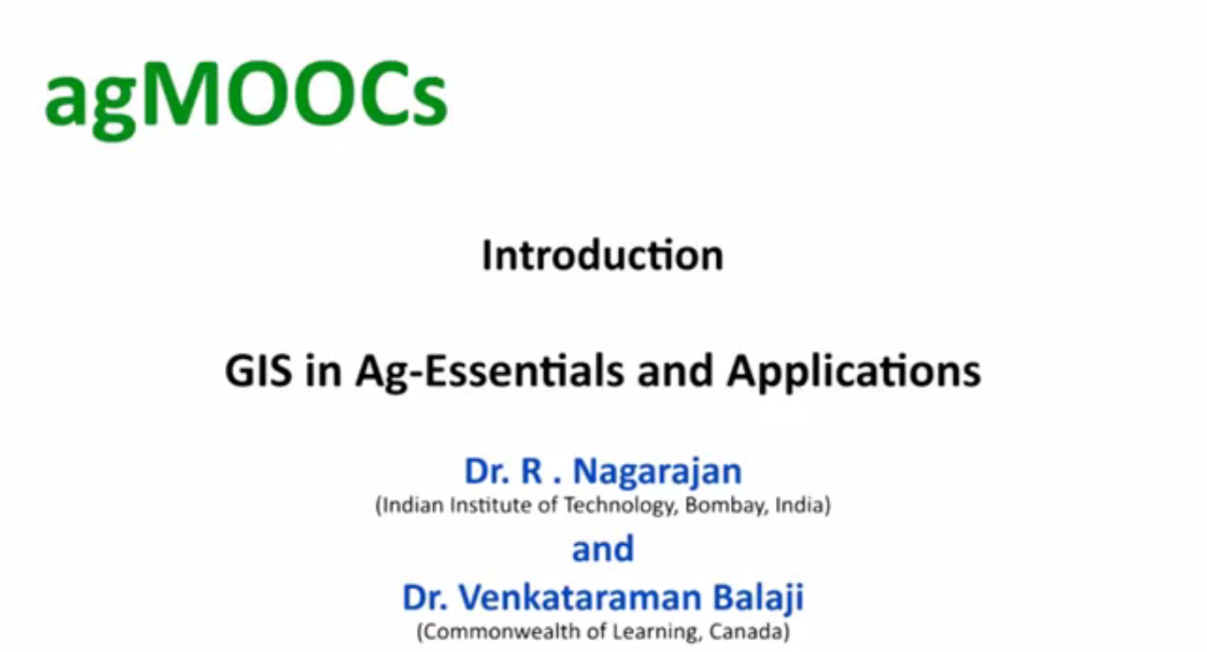

Welcome to agMOOCs course on GIS in Agriculture-Essentials and Applications. This course is offered by R. Nagarajan from IIT Bombay that's self and Venkataraman Balaji who is from Commonwealth of Learning in Canada.

So this course has been designed or formulated based on the following requirements: Land, water, soil and natural environment has been impacted while maintaining our crop production.

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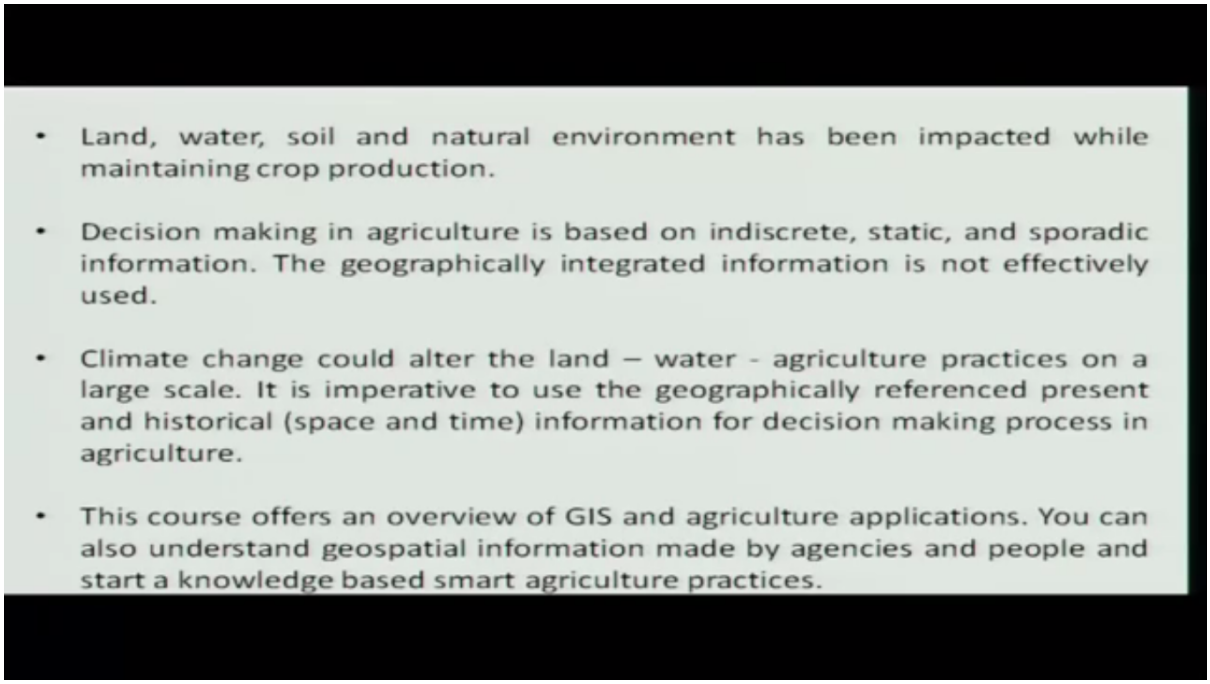

Decision making in agriculture is based on the static and sporadic information. The geographical integration is not effectively used in our agriculture practices. Hence, we have lost our valuable land to some extent.

Now anticipated climate change could alter land, water, agriculture practices on a large scale. Hence, it is imperative to use geographically referenced present as well as the past historical information for decision making processes in agriculture. The past traditional knowledge will always help us in improving ourselves in the forthcoming future.

So this course, which is the overview of GIS in agriculture applications, you can understand how a geographical information is made, and agencies and other people, you can start knowledge-based smart agriculture practices in the future.

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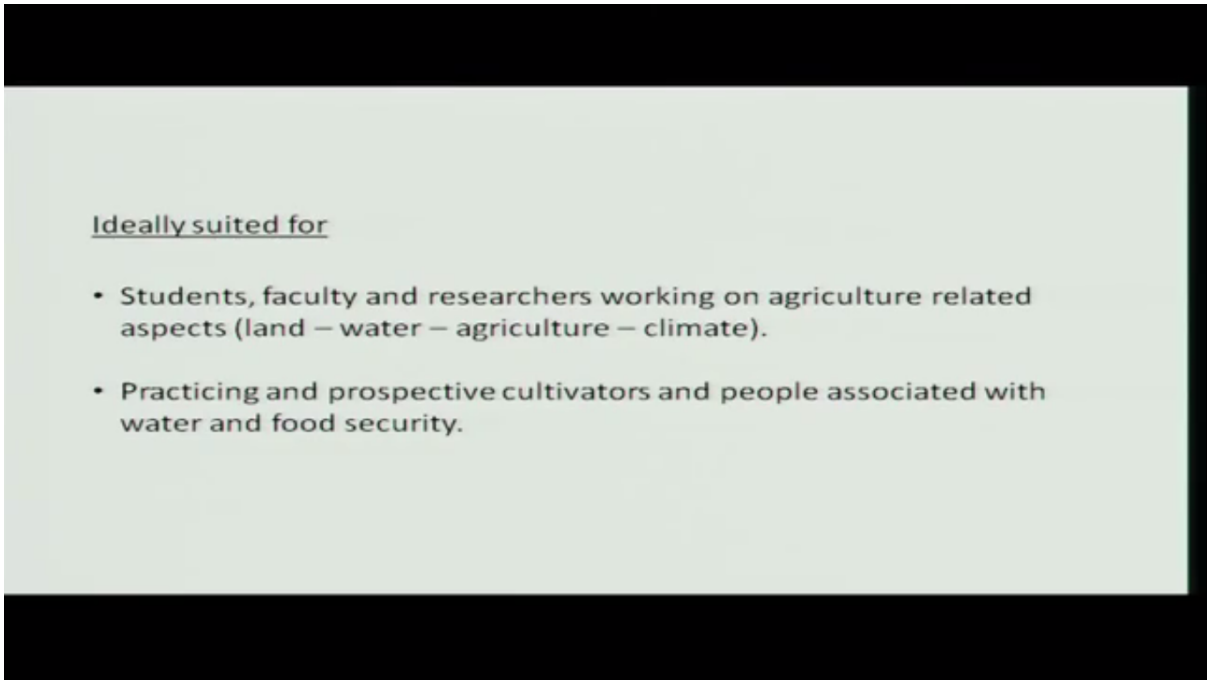

It is ideally suited for the students, faculty members, academic faculty members and researchers working on agriculture related aspect like water, land, agriculture and climate.

It is not only for them. It is -- it is teacher to teacher activities. It is for the practicing that means farmers who are doing it and the prospective farmers or the cultivators and people who are associated with the water and food security, for them also it is most useful.

Now how did we -- how are we planning to have the lectures?

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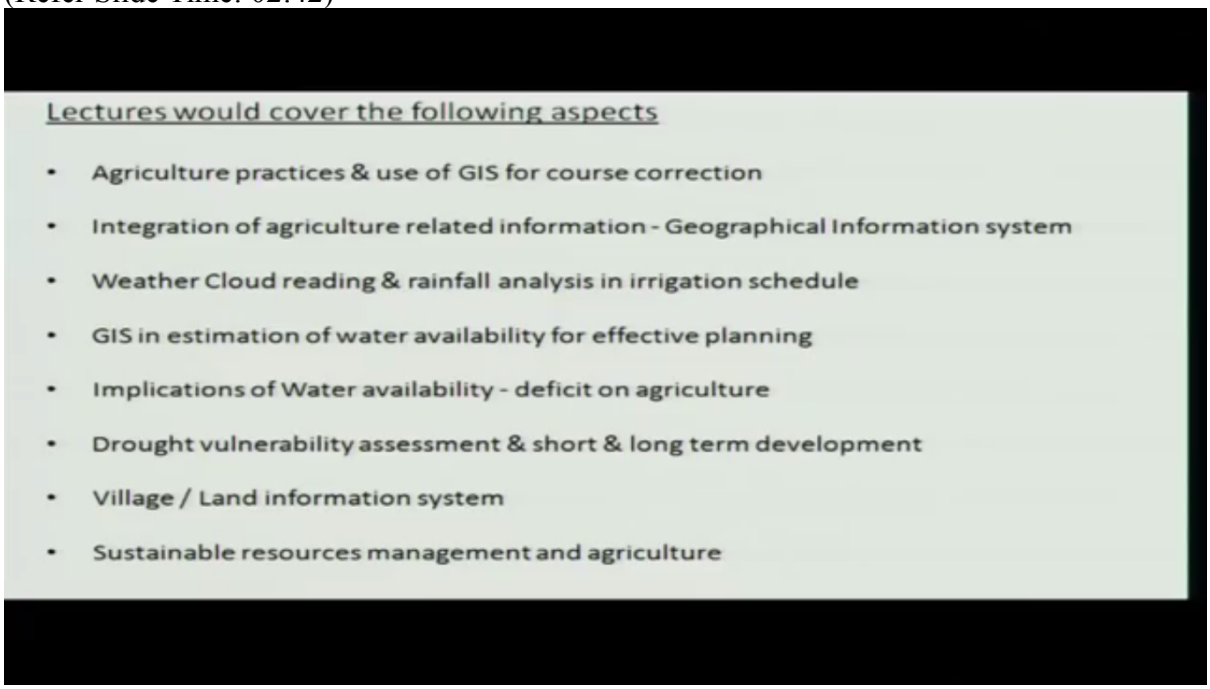

The following lectures we want to do that. The first lecture we have covered what all the different practices which we have used it. The second lecture is integration of agriculture related information, like, using GIS.

The important thing which always we fail to do is about reading of that weather clouds and rainfall analysis in our water irrigation.

Then another thing is whether -- whether we have water or not. So we were going ahead with our activities. So we have included GIS application in water availability as well as water demand, and implications of water deficit on agriculture or in deficit leads to drought vulnerability, and that assessment need to be done and long -- short and long term development project have to come up instead of a crisis management.
We should not forget the village and the land information system. That is the backbone of this entire agriculture practices. We should not worry about the past. We should have a sustainable resources management in agriculture.
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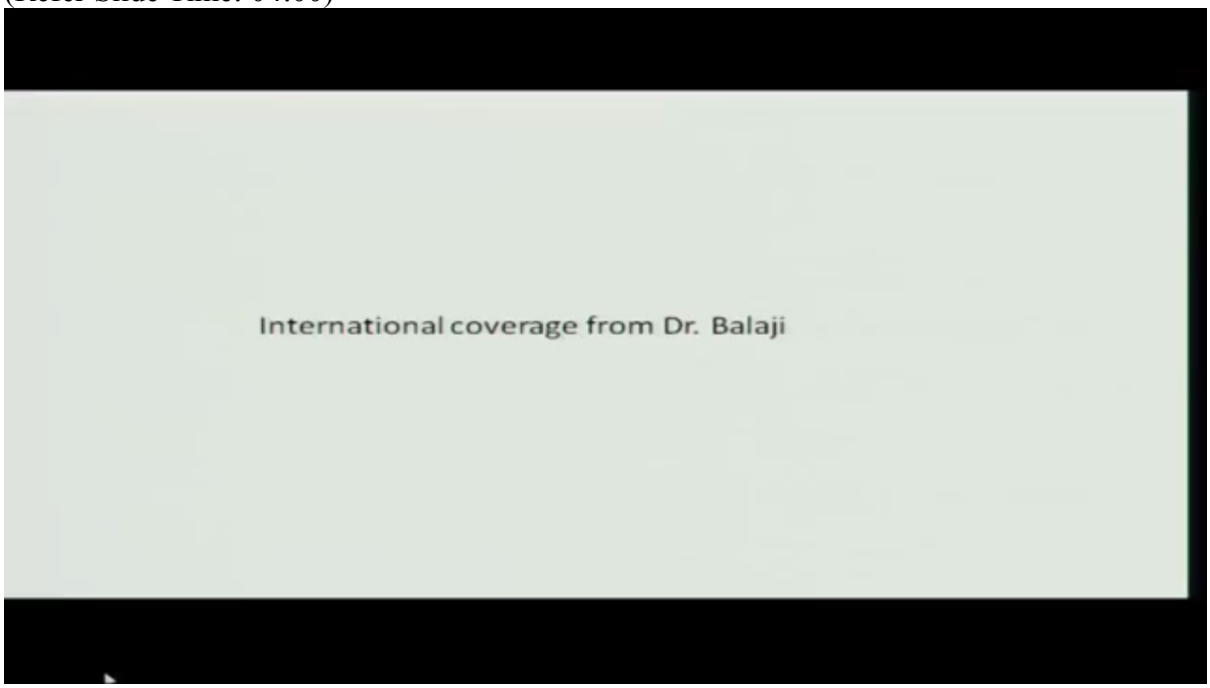

So this is how we have planned it out. Hope you will be able to get enough knowledge to start your own activities in a more extensive manner. Thank you very much.

Balaji Venkataraman
Commonwealth of Learning

Balaji Venkataraman: I am happy to welcome you to this course on geographic information systems in agriculture. My name is Balaji. I work for the Commonwealth of Learning based in Canada. I'll tell you why it is important that you sign up for this course.
Most farmers in the developing world today are subsistence farmers. If the nations want to become more prosperous and happier, subsistence farmers must become smart farmers and GIS is an essential tool in aiding that transformation. That's one reason why you should attend this course and learn much about GIS.
The second reason is climate change is already a reality. Its effects are being felt increasingly and throughout the world. Global leaders are considering new agreements to help all of us mitigate the impacts of climate change. GIS, which is an important tool in spatial data management, can be of great help in devising new decision-making tools in support of smart farming, smart agriculture by combining spatial data with weather information. That's another reason why you should attend this course and take advantage of much that Professor Nagarajan, the chief faculty in this course has to offer. He is one of the few experts in the

developing world who combines deep knowledge of GIS with disaster management, which is very integral to management of risks in relation to climate change.
You will find this course rewarding and I would encourage you to consider joining this course, bring your friends along, form a good community, engage with the instructor.