

AgriLORE- An Innovative Content Management System



Open and distance learning systems of education can potentially help farmers and extension staff in accessing new knowledge provided good quality learning materials are made available, argues B.S Hansra and P.K Jain.

Background

To address new challenges and to fully exploit new opportunities, farmers need access to new knowledge. Conventional models of extension and farmer education alone won't be adequate to support farmers in this regard. Traditional educational systems are under increasing pressure to experiment with new and efficient ways of reaching large number of farmers. Open and Distance Learning (ODL) system of education is one such approach that has the potential to better reach the unreached (farmers, rural youth and extension staff). Wider access to advanced digital platforms and range of digital content technologies has provided new opportunities to enhance the power and reach of distance learning.

AgriLORE

AgriLORE platform (www.agriore.org) is an innovative content management system which allows for collaborative creation and unrestricted use of learning materials in agriculture. These Learning materials are developed in the form of Re-usable Learning Objects (Box 1).



Figure 1: Snapshot of AgriLORE platform

AgriLORE platform emerged from the NAIP (National Agricultural Innovation Project) supported project entitled “Innovations in Technology Mediated Learning: An Institutional Capacity Building in using Reusable Learning Objects in Agro-horticulture”. The project was implemented by the following partners:

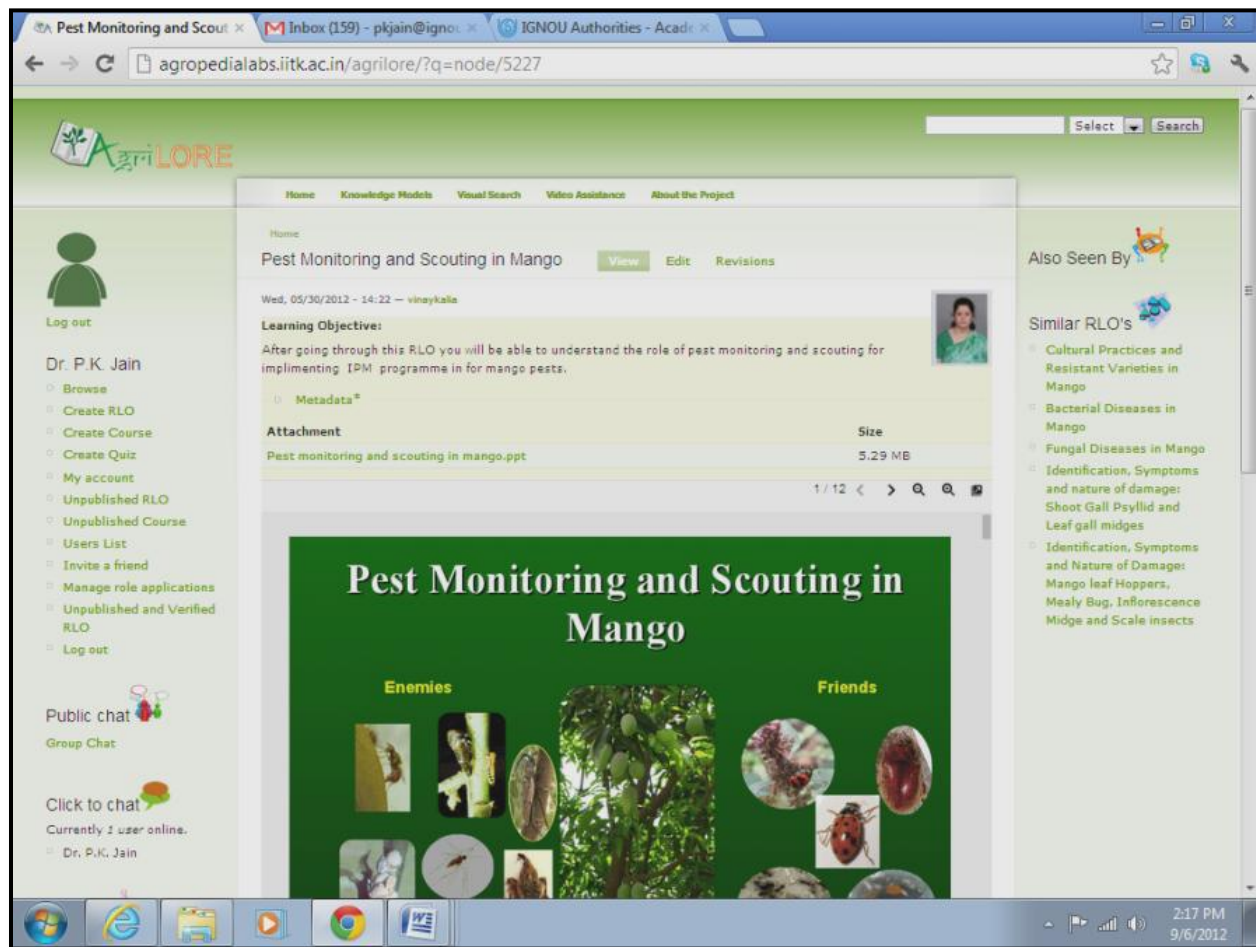
- The School of Agriculture, Indira Gandhi National Open University IGNOU, New Delhi (lead partner)
- School of Agricultural Science, Yashwantrao Chavan Maharashtra Open University (YCMOU), Nasik;
- Directorate of ODL, Tamil Nadu Agricultural University (TNAU), Coimbatore; and
- Division of Knowledge Management and Sharing, International Crops Research Institute for Semi Arid Tropics (ICRISAT), Hyderabad

Box 1: Re-usable Learning Objects (RLOs)

Re-usable Learning Object (RLO) Technology is based on the philosophy of "Open Educational Resources (OER) and is a new paradigm in Life Long Learning. The term Open Educational Resources (OER) was first adopted by UNESCO in 2002 and it refers to educational resources available freely and openly to anyone who can use, re-use, remix, recycle, redistribute under restricted or un-restricted manner. RLO is smallest stand alone and an independent unit of learning designed for re-use in multiple instructional context. RLO can include text, audio, video, photograph, animation, table and chart that can be suitably combined to form new body of knowledge in the form of learning lesson, unit, module, course, program, etc. It is a type of online instruction that provides a digital educational resource that can be scaled and shared from a central online repository in the support of instruction and learning.

RLOs in AgriLORE

RLOs are prepared using PowerPoint presentation (Fig.2) taking into consideration the level of an VIIIth pass learner. The text content of the RLO is supported with pictures, graphics and videos wherever required to facilitate clear understanding of the concept. Emphasis is given on presenting the knowledge visually using animation and graphics. The RLOs are hyperlinked using automatically generated metadata tags and are equipped with self-assessments.

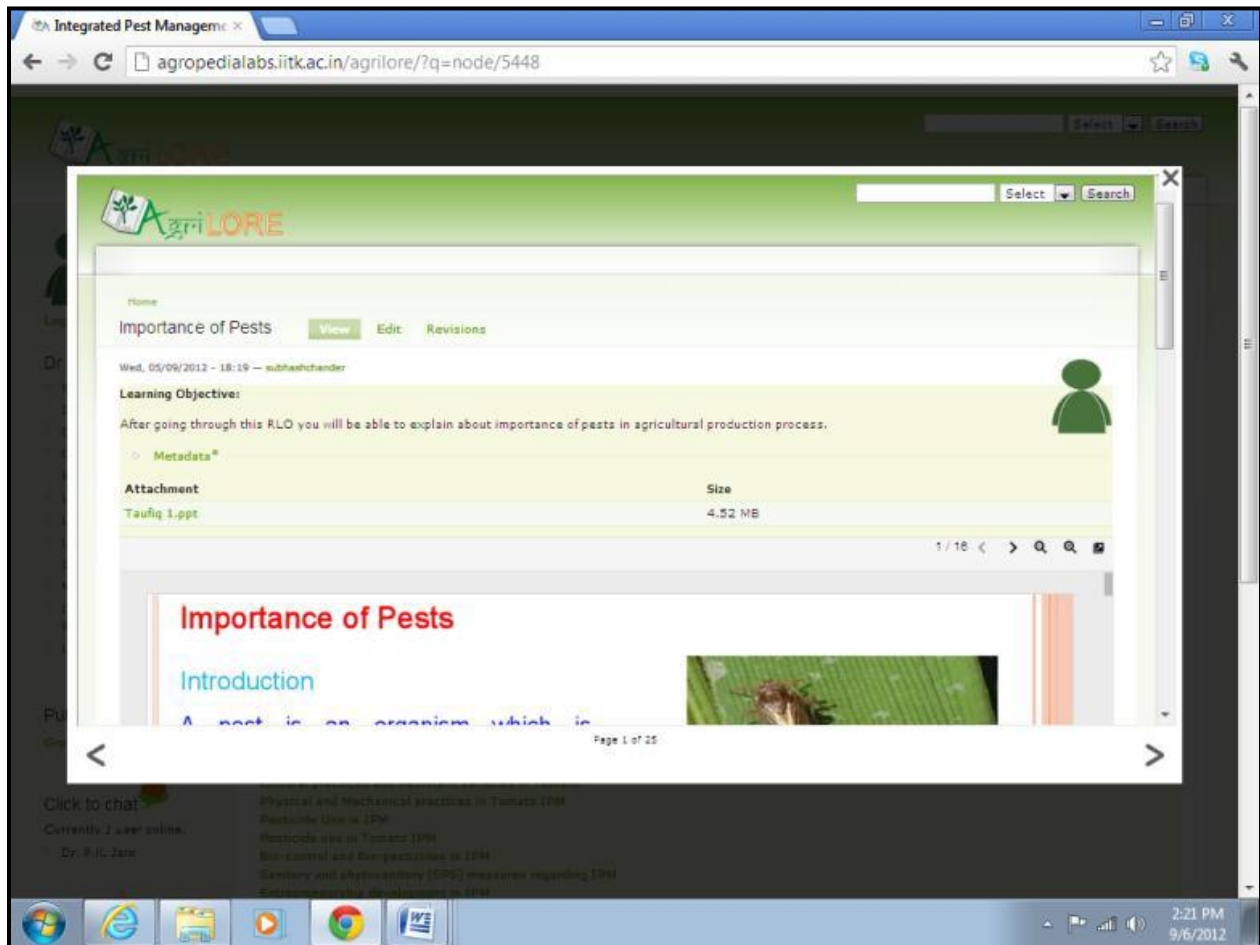
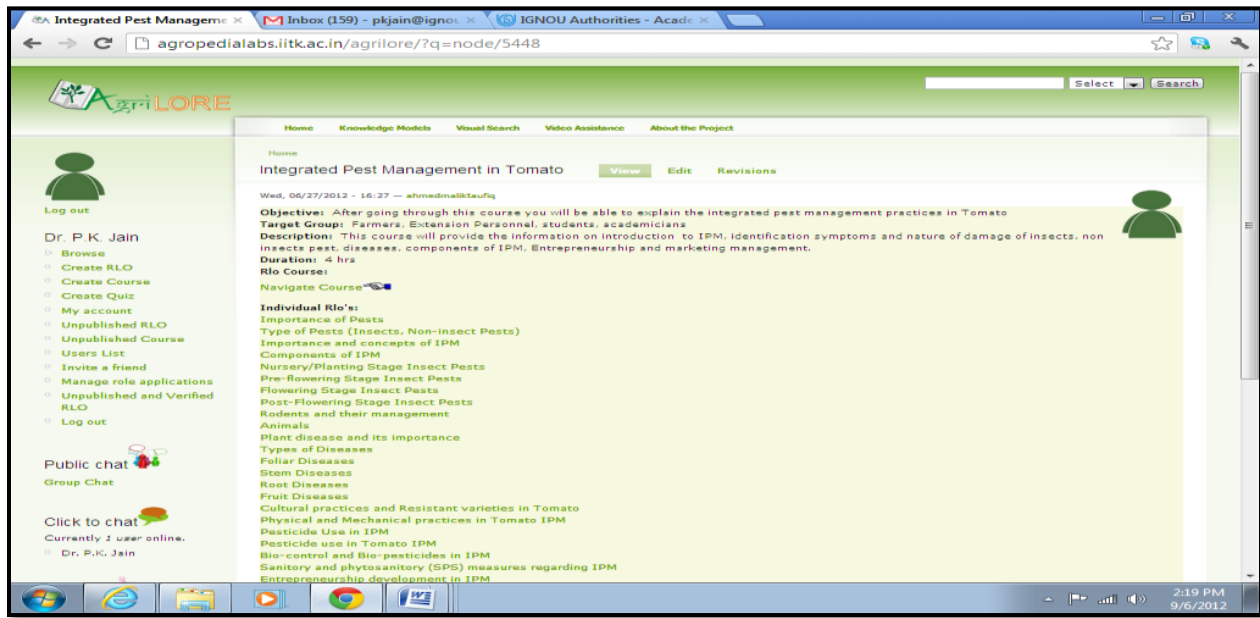


About 500 RLOs having sound pedagogic value with flexibility to be used in various learning/instruction contexts: instructor-led, learner-managed or facilitated by a community were developed on five themes covering six crops namely rice, potato, grapes, tomato, banana and mango. These themes include:

- nursery management,
- high value crop production technology,
- integrated nutrient management,
- integrated pest management and
- post harvest management and value addition

Course Development

AgriLORE enables learners to design and develop the courses based on their need by meaningful grouping of RLOs out of the available pool of RLOs. A course consists of a set of RLOs. Development of curriculum through meaningful grouping of such RLO's to provide the educational resources needed to fulfill credit requirements in a certification process, is an innovation attempted in the AgriLORE platform (Fig. 3 and 4).



Challenges

We faced several challenges in developing the course materials. Most of the experts who developed these RLOs were good in their subject knowledge but lacked skills in instructional designing for

development of open and distance learning materials. To address this constraint, extension training in instructional design had to be organized. Similarly RLOs are embedded with various types of multimedia components. Development of dynamic multimedia components in RLOs is difficult and requires special expertise. The experts involved in RLO development were facing problem in development of multimedia components.

Ways Forward

- The 500 RLOs developed so far could be translated into regional languages for its wider coverage of the clientele.
- RLOs can be organized for developing certificate course on a specific topic so that it provides complete learning on a given topic.
- In order to make RLOs more effective, multimedia components like audio, video, animations, etc can be incorporated.
- Presently, RLOs are on offer through PC based browsers and these could be delivered in multimode such as mobile phone and print.

Reference

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