

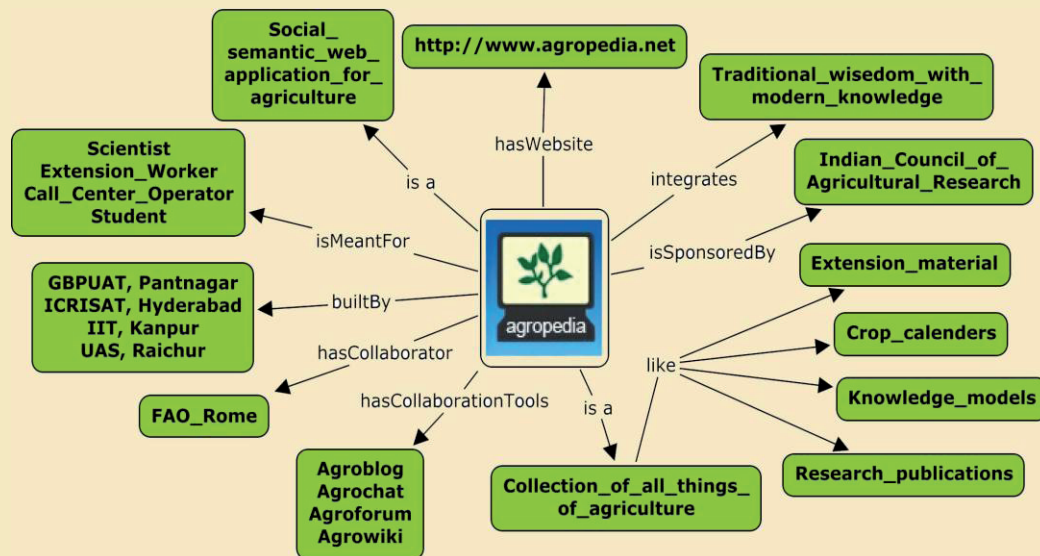


# agropedia: The Knowledge and Interaction Hub for Indian Agriculture

agropedia platform (<http://agropedia.iitk.ac.in/>) consists of a Knowledge repository, a social networking platform and content distribution services. Knowledge repository consists of universal meta-models and localized content developed for open learning and sharing of information related to agriculture. It is the first Indian agricultural knowledge repository developed with knowledge-models for localized content for a variety of users with appropriate interfaces built in collaborative mode to support information access in multiple languages.

agropedia is one stop shop for all information, pedagogic or practical knowledge related to extension service in Indian agriculture. agropedia is sponsored by National Agricultural Innovation Project (NAIP), Indian Council of Agricultural Research (ICAR) with the following objectives:

- To develop an agricultural repository and to build a Digital Ecosystem in agricultural domain for proper knowledge circulation.
- To prepare a bridge between explicit knowledge holders (like agricultural researchers, scientists, experts and tacit knowledge holders like farmers and other field workers).
- To deploy extension services for agricultural development.

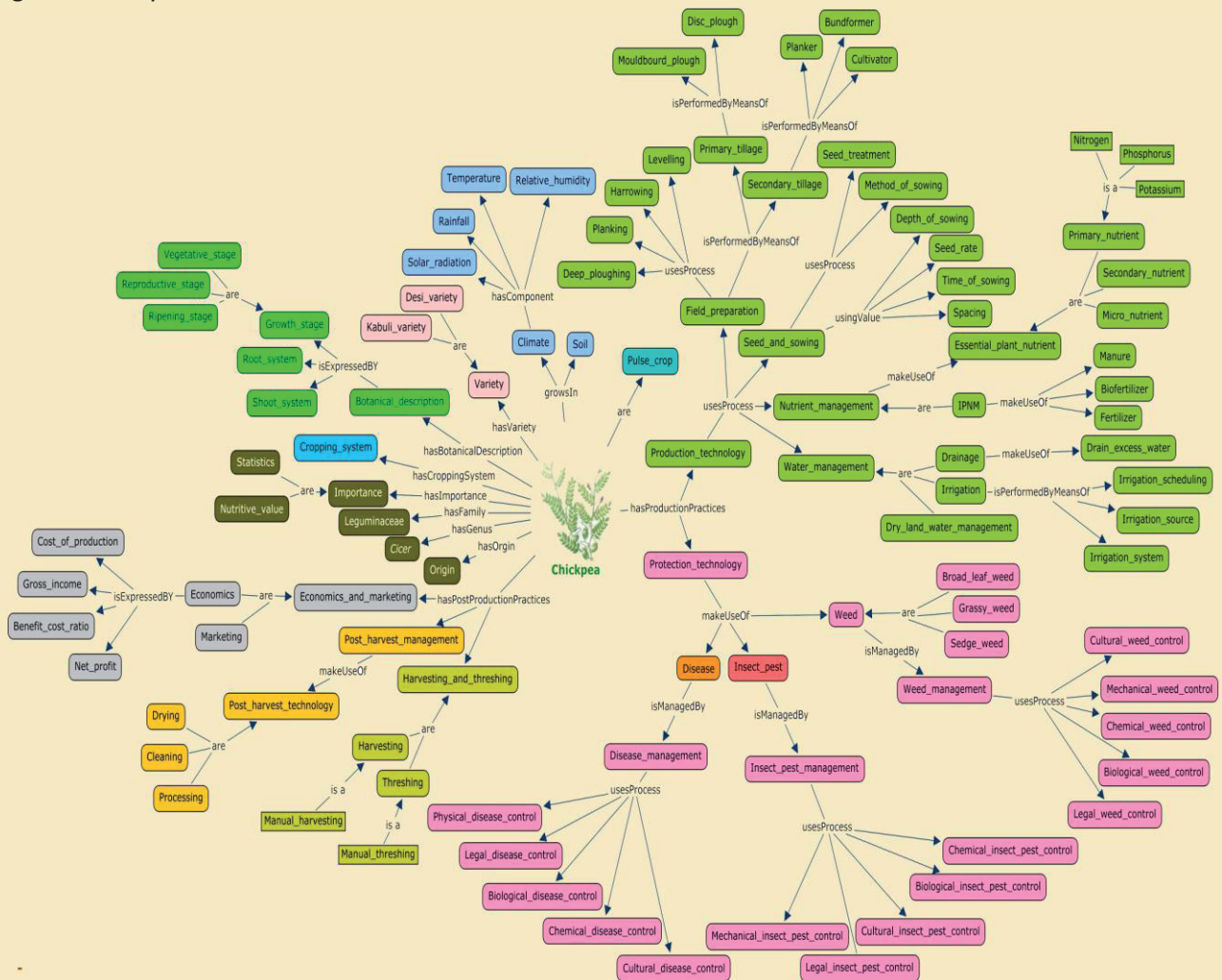


By employing state-of-the-art practices and techniques of the semantic web, agropedia enables specialists in the agriculture research, education domain and others, interested in agriculture can make contributions to the knowledge base. The users have a choice to contribute towards the gyan dhara (certified content) or participate in the interaction space to contribute to Jangyan (emergent knowledge). Thus, the users of agropedia are the architects of the knowledge, which is the lifeblood of agropedia and they do so through an easy to use and attractive web interface.

## Crop Knowledge Models

The content in agropedia is aggregated and organised by the use of Knowledge models. Knowledge models are visual representations of important concepts in agriculture with appropriate relationships between them. This is an attractive, interactive and efficient way of information dissemination to the users. The semantic technology used in agropedia is implemented by developing knowledge models which forms the basis for cataloging of agricultural information. Knowledge models, developed by domain experts or professionals who are acknowledged experts in their specific agricultural domain, linked different concepts in agriculture through robust relationships.

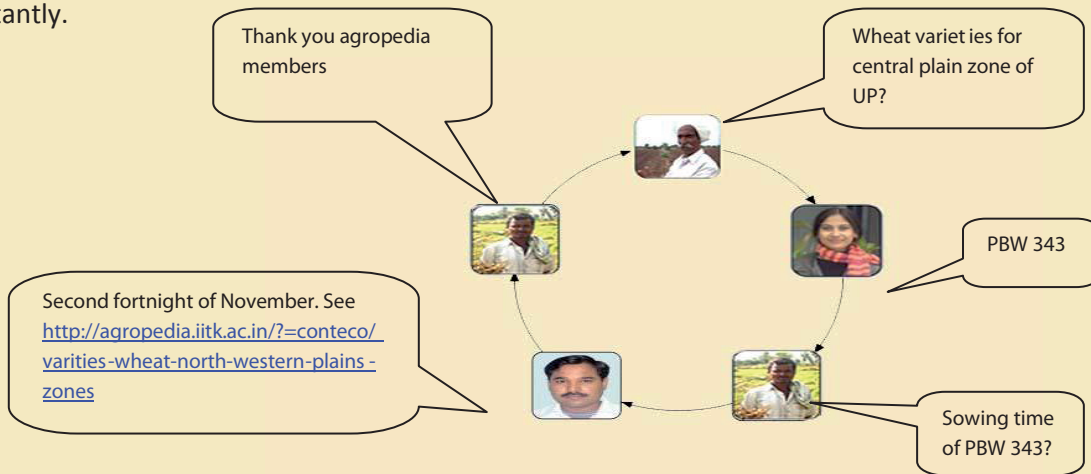
These models enable agropedia to produce a better multi-lingual agricultural information search and display results. agropedia content is organized in a systematic format using semantic web technologies and using crop knowledge models. 15 Crop knowledge models viz. rice, wheat, chickpea, pigeon pea, vegetable pea, sorghum, groundnut, sugarcane, litchi, safflower, banana, chilli, mango, grapes, potato and tomato have been developed using C-map software and made available on agropedia. These Knowledge Models enabled agropedia to produce a robust multi-lingual (Hindi, Kannada and English) search facility for retrieving agricultural information reposted in different digital formats like word documents, FAQs, images and videos which come with appropriate live tags attached, making them easily visible and searchable.



Crop Knowledge Model – Chickpea

## Social Networking

The agropedia platform aims to foster social networking and provides space for interaction to motivate and enable a healthy exchange of ideas amongst interested group of people. The objectives of social networking platform are to capture tacit knowledge as well as to vet existing encyclopedic content, and to provide a mechanism to link agricultural professionals within India and at global level and provide a mean for sharing problems and solutions instantly.



## Krishi Vigyan Knowledge – Network (<http://agropedialabs.iitk.ac.in/extension/>)

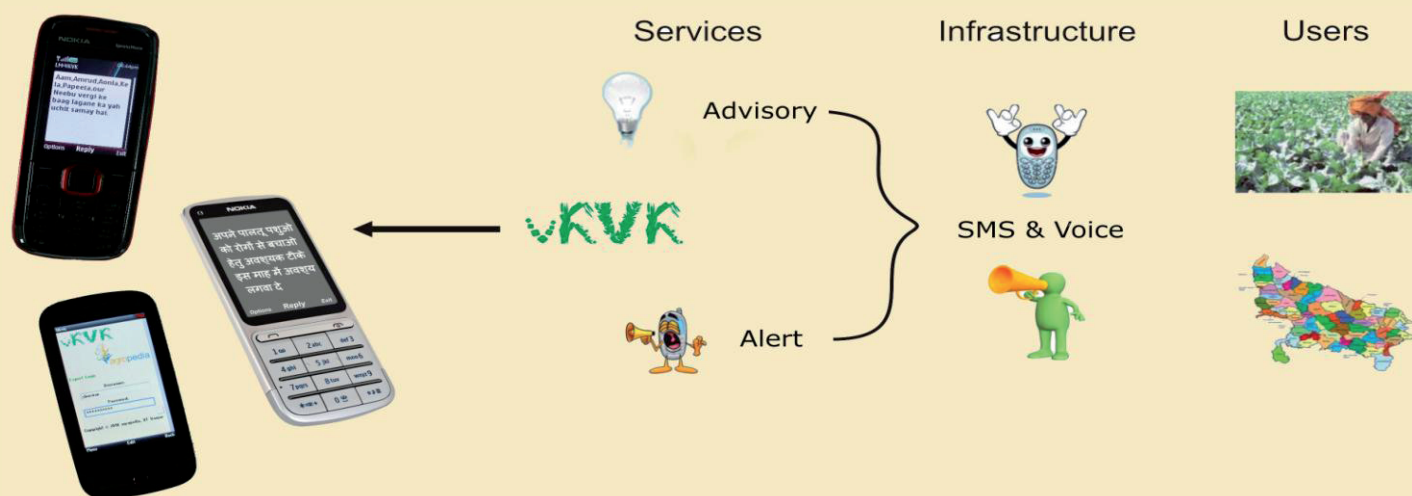
KVK-Net is an agricultural knowledge sharing platform meant for experts at KVKs for sharing information and experiences. It consists of interaction tools like Blog, Discussion Board, Event, Community, Chat and Private Message systems. It has seven agriculture and allied communities to facilitate and share knowledge among the agricultural experts and extension functionaries. The KVKs of Zone IV are currently using this platform for pilot testing. It is proposed to include all KVKs of the country in near future.



Openagri allows for uploading research publications such as Journal Articles, Conference Papers, Books, Book Chapter, Proceedings, Preprints, and Multimedia Content etc. For each document being uploaded into this repository, a set of appropriate keywords are assigned automatically from Agrotags.

## Agro-advisory delivery networks: vKVK (<http://agropedia labs.iitk.ac.in/kvk>)

agropedia has several mechanisms for delivering the content to various stakeholders. vKVK (Virtual Krishi Vigyan Kendra), a Simple Messaging System based platform allows Agro-advisories to be sent to the farmers' cell phone using SMSs. vKVK is a platform that connects KVKs with farmers through internet and mobile technology. Finally a phone based delivery system allows an agricultural expert to transmit a voice based alert/advisory to be transmitted to farmers using a phone call. A recorded message can be transmitted via vKVK platform to all farmers under the guidance of KVK experts. This platform is currently being tested in selected districts of Uttar Pradesh, Uttarakhand and Karnataka.



Within a short period of two years of its inception, agropedia has the distinction of being visited by people from over 140 countries and got 2,99,000 page views till date. Today it boasts of over 5400 registered users, with over a thousand documents like information objects among certified content, and almost the same number (wiki pages, blogs etc.) of documents from voluntary users. Openagri, which was launched recently, has over 500 documents.



## About ICRISAT

The International Crops Research Institute for Semi-Arid Tropics (ICRISAT) is a non-profit, non-political organization that does Innovative agriculture research and capacity building for sustainable development with a wide array of partners across the globe. ICRISAT's mission is to help empower 600 million poor people to overcome hunger, poverty and a degraded environment in the dry tropics through better agriculture. ICRISAT belongs to Alliance of Centers of the Consultative Group on International Agriculture Research.

**For further information, contact:**

**Dr. T V Prabhakar, IIT, Kanpur**  
Email: [tvp@iitk.ac.in](mailto:tvp@iitk.ac.in)

**Dr N T Yaduraju, ICRISAT, Hyderabad**  
Email: [n.yaduraju@cgiar.org](mailto:n.yaduraju@cgiar.org)