Agricultural knowledge management tools and processes: A case of rice knowledge management portal

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Knowledge Management is about facilitating the maximum sharing and leveraging of the knowledge and insights of people in terms of a program strategy or result. It means sharing the tacit/implicit knowledge in the minds of individuals from diverse backgrounds and experiences. In India, a country now famous for its dynamic computer software industry, many KM tools and services are available. A considerable number of vendors provide standard or customized solutions for both small and large corporations. Knowledge Management in agriculture is relatively a new concept. The mammoth task of driving the knowledge sharing process in agriculture requires capacity building exercises. The concept of KM in extension is emerging as a viable factor of production in the developing countries. Training on Knowledge Management strategies, exposure to knowledge management initiatives in agriculture worldwide, acquiring the first hand information and managerial skills holds key to KM strategies in agriculture (Shaik N.Meera, 2010). In this backdrop, the present paper aims at providing the insights to those interested in applying KM tools, processes and strategies in agriculture in general and agricultural extension in particular.

The new agricultural paradigm in India will have to be recast to take advantage of the wealth of knowledge available to achieve multiple goals of sustaining the food security, income, jobs, etc. The ICTs along with Knowledge Management strategies have significant role to play in evolving such a vibrant agricultural system. The present paper deals with the experiences of Rice Knowledge Management Portal where most of these strategies were applied. Today, a rice farmer from Uttar Pradesh is able to get all the rice related reliable information specific to their region in Hindi language. This dream of any Indian extension professional to provide the right information at the right time and context in the local languages to the ever ‘Information-Hungry’ farmers is realised through Rice Knowledge Management Portal (www.rkmp.co.in)- the one stop shop for rice related information.

The portal is the product developed by Indian Council of Agricultural Research (ICAR) under the National Agricultural Innovation Project (NAIP) project and is built by the Directorate of Rice Research, Hyderabad in association with 8 consortium partners along with two convergent and 20 AICRIP partners. The all-rice portal serves as an information highway for rice sector in sharing general rice knowledge along with specific content for 15 states in English, Hindi, Telugu, Tamil, Kannada and Marathi. RKMP hopes to serve the wide range of stakeholders like farmers, extension professionals, researchers, traders, NGOs, policy makers, etc. and help in better planning and realizing higher productivity & production of rice by the farmers through improved knowledge and skill. Through one of its domain exclusive for rice farmers namely ‘Farmers’ Domain’, the portal provides range of critical information like package of practices and production know how in English and local languages as well provided with the help of the credible information sources like state agricultural universities and various organisations of that particular state. If the farmers have more queries, the portal provides the answer through its online/SMS based question answer platform "Expert Answers on Rice" with 152 Rice Experts by using the three tier structure namely Web-based Question and Answer Forum, SMS based alerts and Web based Questions answered through SMS.

Completely Image Driven Diagnostic tool is developed exclusively for the extension professionals and farmers to diagnose the field problems based on the stage of the crop. The largest rice database of location specific content also helps the farmers to know about the soil health and fertilizer recommendation system through online Fertimeter application. Also, the exclusive and exhaustive information on weeds aims to make wise decisions in weed management. As Indian Agriculture is highly dependent on vagaries of weather and the portal provides the short term weather forecast to render timely information to the farmers and extension agents for real time decision making. The day to day mandi price of rice prevailing in the various national markets are channelled into this portal for better decisions for better remuneration of the rice farmers. For having the first hand information, any farmer is given assistance in spotting the nearest research station, extension office, KVK, dealer. The information on various government schemes at both the national and state level will take the outreach of the government activities to various unreached farmers.

A gallery of 52 video clips and 4000 minutes of audio clips and the details of various front line demonstrations are sure to benefit the rice farmers in need of reliable and convincing information. Portal aims to kindle the innovativeness in the farmers through its well documented database of various rice innovations and at the same time has put enormous efforts in preserving the indigenous rice knowledge to the future generations. To enhance the export opportunities for rice from India, Trade Information System of delivers the trade information at different markets all over the World and Exports & Imports information of Rice. Other than farmers’ domain, the portal caters the needs of the other stakeholders through research domain, extension domain, service domain, general domain and E-learning. The portal developed through the latest ICT tools envisions supporting mobile telephony and will also help agricultural departments’ ongoing activities in reaching out to the farmers through extension advisory services, in most effective way.

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