



eAgriculture India 2009 Award for the ICT Enabled Agricultural Initiative of the Year

Name of project: Kissan Kerala project

Implementer

Others

Name : AJITH KUMAR. R

Name

Address : Indian Institute of Information Technology
and Management- Kerala (IIITM-K)

NILA, Technopark Campus, Karyavattom P.O

Address

City : Thiruvananthapuram

City

State : Kerala

State

Country:India

Please answer the following questions:

Q1) Provide brief description of the e-Agricultural initiative, which you are nominating for eAgriculture India 2009 Award. (max. 500 words)

KISSAN Kerala - is an integrated, multi-modal delivery of agricultural information system, which provides several dynamic and useful information and advisory services for the farming community across Kerala. It is one of the leading citizen centric e-governance projects of the **Department of Agriculture, Govt. of Kerala**. The project was conceived, developed and managed by the Indian Institute of Information Technology and Management- Kerala for the Department of Agriculture, Govt. of Kerala. The basic requirement of this project is to provide "**Right Information** to the **Right Person(s)** at the **Right Time** in the **Right Place(s)** and in the **Right Context**" dynamically using a combination of advanced technology portal, Television based mass media programs, telephone based call centre, Mobile SMS based advisory and broadcast service, dedicated online agri video channel provides video on demand service etc, which, involves effective collaboration of experts from key organizations for effective information delivery and knowledge empowerment on demand seamlessly to all farmers in Kerala.

The project has conceived, developed and implemented as per the recommendation of State High-Level committee on IT and BT in Agriculture chaired by Prof. V.L Chopra. The Project was officially launched on 1st November 2003 (Kerala day).

The key feature of KISSAN is the integrated service delivery model that makes available to the experts from any agriculture related organization any mix or all of the above modes of communications to reach timely and effective assistance to farmers anywhere in the state.

The project solves the problem of content gaps by providing the authentic agricultural information through various delivery methods like Television, Internet, Telephone, and Mobile etc. The farmers can choose any medium to seek the relevant information.

Q2) What are the achievements of your agricultural initiative in terms of process automation and IT implementation. (max. 500 words)

The core deliverables and achievements of the project is an integrated multi-component, multi-modal delivery of Agriculture Information Services system that is accessible anywhere anytime by all concerned. The major services of the project are

- **Online agri advisory service :** The dynamic portal based online Advisory services (www.kissankerala.net) is a major hit of the project. The portal provides an online platform for the farmers to interact with the expert's scientists and agricultural extension officers in an interactive way. The portal also provides several dynamic advisory services like market information, weather and crop advisory, expert system on fertilizer recommendation and so on. Through the online query management system, the experts in the project have answered more than 15 000 queries of the farmers. Through the online fertilizer recommendation system, the farmers have generated more than 12000 fertilizer recommendations (in local language) for their preferred crops.
- **Kissan Krishideepam : A weekly Agriculture Television program - in local language** that provides selective information dissemination of best practices, success stories, departmental news, news on various schemes, market analysis, cultivation methods, analysis of current issues, etc. Care has been taken to ensure that KISSAN Krishideepam is authentic and totally produced in-house by agricultural and media experts. The project produce and telecast a weekly television program (30 minutes duration) and telecast three times over the leading satellite channel (Asianet) in Kerala. The program now reaches to more than 25 lakhs regular viewers across the state and beyond. The project has completed the production and telecast of 292 unbroken weekly episodes during the last 5.5 years.
- **Online Agri video Channel :** The project has launched the country's first online video channel in Agriculture. More than 100 selected videos (telecast quality) were made available through the channel. This becomes a single window access to all the agriculture and allied topics for continuous learning for the farmers at free of cost. (www.youtube.com/kissankerala).
- **Tele Advisory Services :** The project also provides telephone based Agri advisory services through a dedicated telephone number (0471-2700965) for the farmers. The farmers can ask any questions to the agricultural scientists and seek expert advice for their crops. As part of this service, the project has developed an extensive crop

database across the state to provide location specific advisory services.

- **The SMS based agri – advisory services**, enable the farmers to get the information on very fast and it helps to provide location specific information and alert services.

Major Achievements

- KISSAN Kerala portal (a multi lingual portal with dynamic advisory service) with rich content and having more than 2.5 lakhs visitors (www.kissankerala.net)
- KISSAN krishideepam : An agricultural based weekly television program has completed the production and telecast of 292 unbroken weekly episodes during the last 5.5 years with more than 35 lakh regular viewers
- KISSAN Tele-advisory services : A dedicated call centre services, which provides personalized advisory to any farmer
- KISSAN Online Video channel : A dedicated online video channel for agriculture (www.youtube.com/kissankerala)
- KISSAN SMS based advisory service : A fastest and cheapest medium of providing agri advisory services through mobile. The project offers SMS based query management services, location specific alert services etc for the farmers.

Q3) How can your ICT driven initiative serve as a model that can be replicated or adapted by other e-Agricultural models? (max. 500 words)

The integrated service delivery model is highly scalable. The dynamic portal based services are highly scalable and easily replicable to any other place. The entire applications are being developed using open source technologies and has open architecture for scalable.

The project is unique in many ways.

- This is the only project has integrated and multi-modal delivery of information services for the farming community and an effective citizen centric e-governance project in the state.
- The entire KISSAN Kerala project is managed by the team of professionals from Agriculture, IT and Agri Journalism.

- Krishideepam is the first television program directly produced and telecast by a State Agricultural Department in the state as part of e-governance, and well received by the farming community in Kerala.
- The integrated model of the project ensures the speedy aggregation of relevant information from various sources, and disseminate through cross media platforms.
- The project is supported with an agri-data center with fully professional management to cater various information requirements of the farming community in Kerala

Q4) Give details of the challenges that you faced while implementing the nominated initiative/project and how did you overcome the same? (max. 500 words)

- **Reaching out to the unreached :** It was a major technological challenge for us, when we have designed this project. Most of our farmers in rural areas and other remote places still don't have access to Internet or computer. Delivering the information services to these farmers to their households in an affordable way was one of the technological challenges of this project. We have solved this problem by adopting multi-modal delivery approach and integrating various platforms like Internet, Television, telephone, mobile SMS etc.
- **Bringing various stakeholders together :** One of the most important challenges we have faced in all the e-governance projects are, bringing various stakeholders into a common platform, and convince them to work for a common goal. We have succeeded in overcoming this challenges through various brain storming workshops, capacity building programs, awareness building programs etc.
- **Establishing Authenticity and reliability of information :** It was another challenge we have faced while setting up the quality standards for the services. We have solved this problem through bringing various authentic information providers as stakeholders into the KISSAN Kerala information network. Also the active involvement and commitment of the experienced Agricultural extension officers and researchers from the Department ensures the 100% authenticity, reliability and technical quality of the information.
- **Quality of Content and Information :** Maintaining the quality of a media program and meeting the expectations of the viewers has been a challenge for the project during the last 5.5 years. The program has been aired through Asianet, the leading satellite channel in Kerala and the quality standards and catching visual presentation has been another important quality challenge. We have succeeded in maintaining the quality and ensure maximum satisfaction to the viewers through inducting highly qualified, committed young vibrant team with highly advanced in-house digital production technologies.

- **Continuous support** : To maintain continuous relationship with the farmers and give them support through out their activities was another challenge and greater responsibility of the project. We have succeeded in implementing this through our continuous follow up actions and help to the farming community.

Q5) Please furnish any other related useful information about the nominated initiative that you have not been able to provide in your earlier responses.

(i) Dynamic information systems and services in open community context like agriculture need effective feedback driven combination of mass media like TV and information delivery and knowledge empowerment services through portal and call center. KISSAN-Kerala shows how such a feedback driven information and extension system is possible and effectively implemented by using a portal as meeting ground of different agencies, smart use of TV mass media for selective dissemination of practices, schemes and opportunities with a telephone call center that reaches the services even to those without access to Internet or IT literacy.

(ii) A user like the farmer needs much more than answer to a query. The system must further help direct him/her to relevant agencies in the relevant geographic location, or, assist in taking the experts to the farm under consideration. Hence information services have to be integrated with field level services supported by a diversity of organizations. KISSAN-Kerala shows how to build such services integration.

(iii) KISSAN-Kerala is an altogether new generation ICT driven services delivery and knowledge empowerment system that takes an inclusive approach of diverse stakeholders coming together to enhance the services provided to farmers more effectively than they were earlier able to. This has been **made possible by the coming together of institutions over the KISSAN platform as an integrated services delivery model** that uses advanced knowledge managed information, interaction and collaboration portal, mass media, telephone call center and mobile SMS based advisory service.

KISSAN Kerala : The Information Aggregation and Delivery Architecture

