

CONCEPT PROJECT PROPOSAL

FOR ESTABLISHING

LOCALISED AGRISNET FACILITATED SERVICES

WITH

INTEGRATED MASS MEDIA

AND EDUCATION SUPPORT FOR

KNOWLEDGE DRIVEN EXTENSION SERVICES

Submitted by the

**KARSHAKA INFORMATION SYSTEMS, SERVICES AND
NETWORKING (KISSAN – KERALA) PROJECT, IIITM-K**

TO THE

DEPARTMENT OF AGRICULTURE, KERALA



Draft authored by K.R. Srivathsan

© INDIAN INSTITUTE OF INFORMATION TECHNOLOGY AND
MANAGEMENT - KERALA

July 2005

1. BACKGROUND TO THE KERALA'S AGRISNET PROPOSAL

The Department of Agriculture and Cooperation (DAC) under the Ministry of Agriculture, Government of India has come up with the mission mode project for the implementation of Agriculture Informatics and Communication Network (AGRISNET). The project is in its early formative phase. DAC has already commenced successfully the 1551 toll-free Kisan Call Centers in different regions with services provided in 21 different languages. Broadly, the objectives of the AGRISNET are given as follows.

- i) Strengthening of ICT at the State and District Agriculture Departments for faster information exchange/dissemination.
- ii) Establishments of Data Centers / Portals.
- iii) Develop uniform reporting system.
- iv) IT Empowerment.
- v) Establish Indian Agriculture Online in the country.

Besides the Center's Ministry of Agriculture, the intended beneficiaries are stated as (a) the State/District level Agriculture and Allied Departments, (b) Agri-Clinics and Business Centers, (c) Call Centers and (d) Farming Community at large. The overall goal of AGRISNET is ambitious. However such a large data generation, maintenance and applications venture will be difficult to achieve unless we also have clear collaboration models across the numerous stakeholders and intermediate milestones with clearly agreed and identified deliverables of knowledge empowerment, entitlement and enrichment that lead to sustainable livelihood and agrarian prosperity.

The improvement of services to the farming community through the use of ICT, and not the services per se, are to be considered for funding under AGRISNET. Such services are to be facilitated by the integrated information exchanges along the lines of G2G, G2B and G2C across all the relevant stakeholders in the agriculture and allied activities. The objective of the AGRISNET is to act as the information, collaboration and educational base for enhancing the livelihood security, trade security and rural prosperity in general.

The networking part of strengthening of ICT under the AGRISNET at the State and Districts up to the blocks level is largely covered under the State Wide Area Network (SWAN) initiative launched by the Central Government through the Department of Information Technology (DoIT) under the Ministry of Communications and IT. SWAN is implemented in each state in collaboration with the state level IT departments. This SWAN initiative is already underway in Kerala and its first phase expected to be completed by March 2006. Besides the SWAN, Kerala has already launched the **Karshaka Information Systems, Services and Networking (KISSAN-Kerala: visit www.kissankerala.net)** project. The project is jointly conducted and managed by the Department of Agriculture (DoA), Indian Institute of Information Technology and Management – Kerala (IIITM-K) and the Kerala Agricultural University (KAU). The successful piloting of the KISSAN initiative has resulted in the soon-to-be-commissioned Virtual University for Agriculture Trade (VUAT) KAU, IIITM-K and DoA.

Kissan-Kerala provides both G2G Portal and G2C services delivery model. It has been a successful pilot validating and proving several concepts of value that will be incorporated in the proposed AGRISNET. In this proposal we provide the details of the proposed Kerala's AGRISNET implementation. Our approach leverages upon both the KISSAN initiative and the SWAN related developments. The outline of the KISSAN, together with the Krishideepam TV serial initiative, secondary Agriculture Call Centre and VUAT provide the best services delivery and services model for AGRISNET.

2. AGRISNET AND KISSAN KERALA

AGRISNET intends to fund the setting up of Agriculture related Data Centres up to one per each district. This funding includes the cost of hardware, systems software and applications software needed to establish the data centres. KISSAN-Kerala having already developed many competencies, systems, processes and core software of relevance to AGRISNET. We briefly summarize the pilot KISSAN initiative here.

The KISSAN initiative was proposed by the Indian Institute of Information Technology and Management – Kerala and submitted to the State high-level IT & BT Committee on Agriculture chaired by Prof. V.L. Chhokra. Based on this proposal, IITM-K with the Department of Agriculture (DoA), Kerala and the Kerala Agricultural University (KAU) are now running the KISSAN-Kerala Project at a pilot scale as the next generation concept in ICT facilitated extension services to the farmers and Agriculture related organizations in Kerala. In many ways, the KISSAN project's information collection and knowledge delivery model complements the objectives of AGRISNET as the effective delivery model of knowledge based services to the framers and agriculture related community. Together the KISSAN and AGRISNET form a total system model for the entire country. KISSAN is the first initiative of its kind and has much to offer as the dynamic data and content aggregator, delivery system and programs manager for AGRISNET. As such the KISSAN model has several features that put to effective use the potential and power of ICT to Agriculture and make it the first of its kind in India. These are briefly summarized in the next section.

The objective of this proposal is **to come up with an actionable and detailed implementation project document with specific deliverables, timelines and cost estimates for a statewide rollout** of AGRISNET implementation integrated with KISSAN based delivery services. This proposal includes the needed ICT Infrastructure taking into account those being implemented under the SWAN initiative. Further, the project scope covers facilities for localized knowledge generation, designing methodologies for strategy focused agriculture advisory groups for targeted programs and consultative workshops/meetings to build in the necessary collaboration and interoperability among different agriculture institutions.

3. OVERVIEW OF KISSAN PROJECT AND VIRTUAL UNIVERSITY FOR AGRICULTURE TRADE

The aim of the KISSAN-Kerala project is to provide the ***'Right Information to the Right Persons at the Right Time, in the Right Places and in the Right Context'***. These 'Rights' are to be seen in the context of the farmer and agriculture related stakeholders gaining much value in farming and agriculture related activities on continuing basis. Delivering such 'Rights' to the farmer ideally needs the following ***five principles*** of information sciences management adopted to the farmer's needs.

- i) Aggregate the right information of use to the farmer and agriculture related community.
- ii) Efficient delivery system for the right information on demand to the farmer.
- iii) Alert the farmer to such information of value in his farming context.
- iv) Save the time of the farmer.
- v) Treat the farmer and his farm as a growing integral part of knowledge and farm inputs supply chain on the one side and value creation for the farm output on the other side.

KISSAN-Kerala Project attempts to meet the above ideal support system through a mix of the following four component areas of operations.

a) A central **KISSAN-Kerala Agriculture Portal (www.kissankerala.net)** acts as the information aggregation, collaboration and information access portal over the Internet. It helps the first two of the above principles. Today the KISSAN Portal has become the default Kerala's Agriculture Portal. Under the keyword Kissan the portal scores no. 1 hit in Google Internet search engine. The portal gets about 200 regular visitors per day, many of them being repeat visitors seeking live information on regular basis. Over 3000 queries received through the portal in the last 24 months and the answers provided are available openly with classification and integrated search facility. The portal is capable of supporting strategy focussed groups to receive queries and posting or conducting education programs and advisory support for targeted groups.

b) The third principle is supported by the popular mass media program **KISSAN - Krishideepam TV Serial broadcast over regular Asianet commercial channel**. The TV serial has completed 90 weekly episodes without break. As of today the serial is informative, educative but informal. We need to make researched TV programs to address competitiveness, sustainability and opportunity issues arising out of WTO, Free Trade Agreement zones, new technologies and changing nature of agriculture activities. We need to target human and livelihood security for the rural people in general.

c) The fourth principle is supported by integrating the Agriculture Call Centre operations with the portal's web-based interactive query management systems on the one side and linking them with the Agriculture Extension Services provided by the Krishi Bhavans, Krishi Vigyan Kendras and the extensions wing of the Kerala Agricultural University.

d) To the above services we are adding the Virtual University for Agriculture Trade (VUAT) for strategy focussed education and training to all stakeholders in the state's agriculture.

e) The fifth principle is supported by managing all the above four holistically and ensuring effective coordination with identified activities and target groups for the intended objectives.

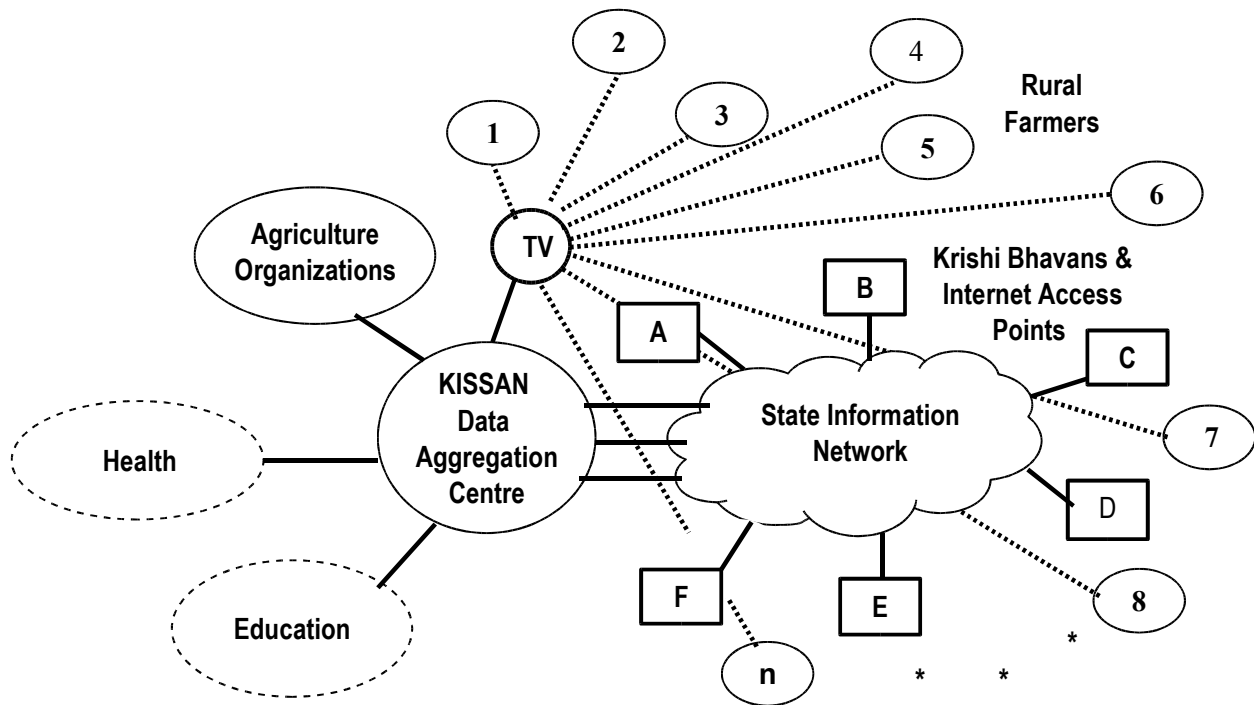


Fig.1: KISSAN Information and Media Network

Fig. 1 illustrates the overall architecture and relationship between the Portal, related TV serial and the SWAN infrastructure through which the information is aggregated and disseminated across the state. Programs like the smart extension services and those under the Virtual University are supported by this WAN, Call Centre and Portal Infrastructure. The KISSAN-Kerala pilot experience has been established at the pilot level in the Thiruvananthapuram District. Much of the location specific (up to block and panchayat levels) information, establishment of strategy focussed groups and knowledge empowerment oriented farm/farmer specific services are being evolved. This early KISSAN experience has validated the importance of managing the information and agriculture extension services as per the five principles of Information Sciences stated at the beginning of this section.

The challenge that the KISSAN-Kerala project addresses is how to manage dynamically the content, programs, information and directions to extension services. Hence it is complementary and adds much value to AGRISNET. Through this proposal, we plan to expand its scope and reach out to all the extension services areas across the state. Fig.1 also shows that it is possible to integrate other important services for rural prosperity like Health and Education as and when we are ready to mobilize resources and manage such services.

3.1. KISSAN Portal

Under the KISSAN-Kerala project, IIITM-K has developed and commissioned the advanced interactive data aggregation and information dissemination portal – www.kissankerala.net. It is continuing to build more features and capabilities in to the portal. The portal has a knowledge management system as the backend and an interactive front-end that supports diverse services. It is a state-of-the-art open-architecture web-services compliant, allowing to expand and link its functionalities with similar other portals. It hosts a query-answering system for anyone to post questions with media attachment (like a digital photo). These questions are directed, or, vectored to the appropriate Agriculture Officer or Scientist for answers. All previously answered queries are openly archived with search facilities for anyone visiting the portal to study and gain from. In summary, the following variety of Information Services are planned to be offered through the KISSAN Portal. Many of the features are already operational. The portal is used regularly in the state. The portal currently comes as No. 1. hit in the Google search engine under the general term Kissan. It attracts 200 visitors per day from the local community. 3000 queries have been received and answered through the portal in the last 18 months.

- i. Daily Market Information
- ii. Virtual market
- iii. Post Question and seek Expert Answer
- iv. Searchable Repository of Answered Queries.
- v. Weather Information
- vi. Crop Directory with more than 55 crops full details
- vii. Soil Information
- viii. GIS type Agri-Advisory Services (Locale Specific)
- ix. Farming Practices
- x. Fertilizers and Pesticides
- xi. E-publications
- xii. Krishideepam TV Serial schedule and archives.

Many improvements are being planned to the above portal including support for Virtual University related Education Programs.

3.2. Krishideepam TV Serial

KISSAN-Kerala broadcasts the weekly TV serial Krishideepam for a variety of selective dissemination of information (SDI) of value to the farmers and general citizens. These communicate best practices, farm and agriculture events, useful tips, small educational clips introducing concepts, opportunities and announcing various schemes. Those farmers or citizens who do not have time for TV or access to Internet may ask queries over phone to the Agriculture Call Centre.

- i. Enriched with high quality multimedia program
- ii. Success Stories, Best practices, Market prices analysis, weather information.
- iii. Agri-Advisory services
- iv. Seasonal advisory services
- v. Completed 90 unbroken weekly episodes as of June 2005.
- vi. Telecast 3 times per week over popular Asianet TV channel in Kerala and outside.
- vii. More than 2.5 million viewers with Asianet going for repeat telecast twice each week to reach viewers in both rural and urban areas.

3.3. Linking of Agriculture Call Center with KISSAN

The telephone based Agriculture Call Center supported by the Center's Department of Agriculture in the State is linked at secondary level to the Agriculture officials running the KISSAN services at IITM-K. We propose to integrate the two more efficiently with advanced technology and networking for providing accurate and effective advice and for recording the actions taken and data analysis following the calls.

3.4. KISSAN and Virtual University for Agriculture Trade

The Kerala Government has initiated the **Virtual University for Agriculture Trade (VUAT)** to for education and awareness programs related to promote the agriculture related trade security for the predominantly plantation and homestead type of agriculture practiced in Kerala. This has to be seen in the context of making Kerala competitive against the emerging times of WTO, Free Trade Zones, dynamic management of technology and opportunities, value additions and products mix that are needed to ensure rural prosperity. Kerala is richly endowed with renewable resources to drive its economy, but also faces the paradox of poor competitiveness in the emerging global order. We need new pooling and cooperative systems, efficient small and medium enterprises in agriculture related products, brand building, quality management, building relations globally and several other measures to make Kerala Agriculture globally competitive.

The VUAT programs will address such education programs and time-to-time need based learning imparting strategy focussed action at the farm and farm produce based value additions that ensure trade and livelihood security. The VUAT will be complimented by appropriate postgraduate level Agri-Informatics education in KAU and IITM-K that will produce experts to build and manage future AGRISNET, knowledge driven agri-business and promotion of quality employment to educated youths in the state.

3. CONVERGENCE OF AGRISNET AND KISSAN

AGRISNET is best commenced as a powerful G2C E-governance service with knowledge management for the farmers. Later, its G2G and G2B interfaces may be developed. Through a collaboration of Central and State Governments, it aims to deploy ICT facilities and Knowledge Management system for agriculture. Some of its stated objectives are to build and manage the ICT facilitated systems for the following.

- i. Monitoring of Schemes
 - ii. Crop Production, Productivity, Yield data
 - iii. Weather Watch (early warning) System
 - iv. Inputs (Fertilizer, Seed, Pesticides) availability
 - v. Agriculture Credit related Information
 - vi. Horticulture details
 - vii. Extension services
 - viii. Watershed management
- i) The implementation approach and methodologies being proposed in the AGRISNET will have to be adapted to Kerala's very different nature of agriculture and related areas. KISSAN has already designed, developed and demonstrated at pilot level a number of systems and methodologies that are well suited in the Kerala context. Some of these, including much of the technologies and processes being developed are readily deployable at the national level in all the states. In this proposal, we shall develop a project proposal (i) to further develop and deploy KISSAN facilities to cover the entire Kerala; (ii) ensure the design, development and deployment of many key inter-institutional protocols, relevant content management and advisory processes needed for effective management of the complex knowledge empowerment programs for farmers, agriculture, animal husbandry and marine related enterprises; and (iii) develop the backend information, data aggregation and interpretation facilities.
- ii) Software for Data Centre: Much of the core software necessary for the District Data Centre are being developed, integrated with readily available software and deployed under the KISSAN activity. Two additional works are needed. The first is a backend database system that is customized to local needs. The second is the localization of the interfaces in Malayalam script. Additional work is also needed in making search engines function over contents in the local script. The project also intends to take up conversion of the existing KISSAN Portal into other languages for countrywide use.

4.2.NETWORKING

The backbone networking of the District Data Centres has already been factored into the SWAN initiative. The access level networking of the District Data Centres to the Krishi Bhavans, Krishi Vigyan Kendras and field level Agriculture Research Institutions, or, the Common Services Centres and Village Knowledge Centres will be taken up under Mission-2007 and other Agriculture related networking schemes. The back haul networking of the major sources of information and places with knowledgeable manpower like the Agriculture Research Institutions, the Commodity Exchanges, Rubber Board, Coir Board and Export Development Authorities will be partly covered under this AGRISNET proposal.

5. MANAGEMENT OF DATA-INFORMATION-KNOWLEDGE LIFECYCLE

Under the AGRISNET – KISSAN combination, we propose a profoundly different approach to managing the data and information posted and made available to farmers and agriculture related stakeholders. The real value of the information services to be provided depends on the timeliness, relevance and expert inputs and empowering the farmer both through contextual knowledge based advice and the capacity to follow it with the kind of inputs needed to maximize the returns from the farm related activities. Such knowledge based service will have to be based on the five principles stated earlier in Section 3. This requires a deeper understanding of the following several processes involved in providing information of value to the farmers and agriculture related stakeholders.

- (i) The roles of different agencies in collecting validated data, information and passing it to a central aggregation area.
- (ii) Establishing recognized strategy focused groups (SFGs) with members from different agencies as necessary to supervise and monitor the different schemes. The SFGs will study and interpret the information and follow up with necessary recommendations of value to specific farmers and agriculture stakeholders.
- (iii) Establish systems to ensure that the concerned farmer or stakeholder gets continued knowledge support from concerned SFGs and is equipped with the capacity and finance to implement the recommended solutions.

We refer to the above approach as the strategy focused knowledge empowerment model. To drive the above we have to use the combination of (i) The KISSAN-AGRISNET Portal equipped with knowledge management and e-learning capabilities; (ii) building timely awareness of information, issues and opportunities through the Krishideepam TV serial program with expanded scope; (iii) Integrating the 1551 KISSAN Call Centre with the Portal support system; and (iv) appropriate Virtual University programs to educate the concerned farmers and stakeholders on the issues involved, technology transfer and details of how to implement the recommended solutions. It is only through such a multi-institutional collaborative knowledge empowerment approach that we can sustain the global competitiveness of Indian agriculture and ensure agrarian and rural prosperity.

With the above four combination backed by the AGRISNET system of information and with some new systems and processes in place, we are in a position to run several knowledge driven value added services for the farmers and the agrarian economy in general.

6. MISSION – 2007, AGRISNET AND KISSAN CONVERGENCE IN THE KERALA CONTEXT

Under the National Farmers Commission, and the M.S. Swaminathan Research Foundation the Mission – 2007 has been initiated. The Mission – 2007 with the vision of 'Ever Village a Knowledge Centre' is now supported by funds from the Government of India. The goal is to reach connectivity and knowledge services to all the 600,000+ villages of India by August 15, 2007 – the 60th anniversary of India's Independence. Among several initiatives, two key objectives are as follows.

- (i) To train at least one man and one woman in every village under a Fellowship Program of Virtual Academy. This implies we need to train over 1.2 million persons in the use of Internet and networked access knowledge services so that they can help the all the villagers to benefit from the services.
- (ii) Form a National Alliance of all key stakeholders in the rural knowledge services – Institutions, Agriculture related universities and organizations, network and Internet services providers, industry, government organizations, NGOs, R&D organizations, Finance, Banking and Insurance and such others who together have contributions to make and gain from the rural knowledge facilitated economy. Currently the national alliance has over 150 member organizations.

The SWAN initiative is being adapted to suite the Mission – 2007 as well. Besides, strategy groups are being formed to address content and knowledge based services. It is clear that AGRISNET initiative will have to be dovetailed into the Mission – 2007 related activities for the benefit of both. Under this project, we propose that a state level **Kerala Agrarian Prosperity Alliance (KAPA)** involving all organizations that are stakeholders in both Mission – 2007 and the promotion of trade and livelihood security across the state.

The alliance will enable the coherence between the IT enabled services to be offered by the different organizations and the strategy focus towards the services needed for the framers and agriculture related stakeholders for better sustainability and livelihood security.

7. AGRISNET Services and Services Goals

The primary aim of the AGRISNET initiative is to provide the Knowledge Empowerment services for farmers and agriculture related small and medium enterprises. Through such services, we intend to promote the livelihood security and agrarian prosperity in the rural areas. The Kerala AGRISNET initiative will be specifically targeted at the following services.

- i) Develop and services farm specific ***farm health records*** [FHR] as a decision support system for each farmer. It will be built upon available land use records by adding details of the farm, the crop practices and mix, land use history for previous three years and links to applicable farmer's clubs or societies in which he may be a member. Such records will be maintained live with necessary updates, decision support, information, links to connect with extension and experts services and alerts to opportunities. Each farmer will access his record through a personalized web-interface.
- ii) Each farmer to have a personal customized farm page linking the over the web with access and his FHR, alerts to farm-specific advisories, feeding information on farm outputs to concerned buyers or societies, links to information from commodity exchanges, credit agencies and relevant strategy focused expert advisory groups.
- iii) A knowledge empowerment scheme through a system of different ***Strategy Focused Groups*** [SFG] with appropriate mix of experts from multiple agencies will be set up and supported through the AGRISNET / KISSAN portals to provide business/market intelligence, specific BPO services for farmers' societies, small and medium agri-enterprises. Wherever such groups and societies already exist, they will be strengthened using the proposed information services facilities under the AGRISNET.
- iv) Development and broadcasting of researched KISSAN Krishideepam TV serial to build awareness on impact of globalization, WTO and related issues and inform the farmers and related enterprises on how different global developments affect local agriculture sustainability and profitability, and specific schemes being designed and made available to the farming community.
- v) Postgraduate education and training programs to be set up under the IIITM-K and KAU like certification courses and M.Tech. In Agri-Informatics through the VUAT. The graduates from these courses will be employable as expert agricultural consultants and constitute as members of future SFGs and research groups. They will also be trained in entrepreneurship areas related to farmers' societies.
- vi) All lab-to-land technology transfer initiatives for the farms and advised and supervised by the SFGs will be supported by KISSAN Portal based knowledge services.

7.1. Outputs and deliverables

The following are the broad parameters of the outputs and deliverables under this project. These are chosen in conformance with the services and service goals given earlier.

- i) A network of five district level AGRISNET Information Systems across the length of Kerala linked to the root KISSAN-Kerala Agriculture Portal. They will be co-located with SWAN NOCs or in well equipped institutions such as the Kerala Agriculture University, or a good agricultural institution with capacity to service the facility.

- ii) Each of the five district level systems will be equipped with systems software already developed and proven in the KISSAN- Kerala Portal. In addition, a small web-studio facility will be added to train and post local contents on dynamic basis.
- iii) Additional software by way of Malayalam based localization of content creation and management, web-services compliant and web-accessible database software to host market prices for Kerala-relevant Agricultural products, crop production statistics, farm health records and their maintenance, digital library and e-publications facilities for community level online farm and agriculture news magazines, and online education support systems.
- iv) Two master agriculture education related EDUSAT head-end classroom studio with 6 remote classroom facilities for live interactive education will be set up. Master classrooms will be located (i) at IITM-K in Thiruvananthapuram and (ii) KAU in Thrissur.
- v) Existing statewide panchayat level Krishi Bhavans will be upgrade as Agrarian Prosperity Information kiosks to aggregate and disseminate timely and relevant agricultural information on demand. The different services proposed to be offered through these AGRISNET facilitated kiosks are stated below.
 - Integration of Agri-Clinics of the department of agriculture to provide timely advisory services of the farmers. The kiosk will also function online extension counters for agri-clinics to attract the farmers to resolve their farming related issues.
 - Agri- Advisory services on various aspects related to distress management, sustainability, productivity and marketing, credit monitoring and management.
 - Supply chain supported on demand availability of various Agricultural inputs like planting materials, fertilizers, pesticides, agricultural equipment.
 - On line content availability and instructional support for relevant training programs.
 - To support the agricultural extension officer for Agri advisory services on daily basis
 - Development of strategy focussed micro level databases for better analysis and recommendation.
 - Develop advanced micro level database on farmers based on several aspect of farming (Farm Health record) which will lead to farm assets and crop planning management in the future.
 - Multimedia based training on various agricultural technologies and best practices
 - Online Fertilizer recommendation system
 - Weather information, backed by research groups to provide location specific weather forecasts.
 - Market information (local, national and international) supported by strategy groups on business and market intelligence.

- Location specific advisory services by integrating Geographical Information Systems (GIS) associated farm health records.
- Online access to all agricultural related publications on relevant topics.
- Training of agricultural extension officers and other officials to supervise and manage the agri-information kiosks and service farmers societies and clubs.

To drive the above services coherently, multiple agencies have to work coherently over the net generating, sharing, interpreting and publishing information. This calls for an information architecture to be overlaid on the SWAN and Internet connections of the different institutions. This information aggregation across different organizations and presentation as different strategy focused and interactive portlets has the architecture as illustrated in Fig. 2. We call such distributed data aggregation, information, collaboration and interaction architecture as '**scientific portal**'. IITM-K has already developed the kind of systems that are needed to put together such 'scientific portal' needed for the AGRISNET and KISSAN services delivery systems. The KISSAN Portal that is already running is an early and basic version of the scientific portal.

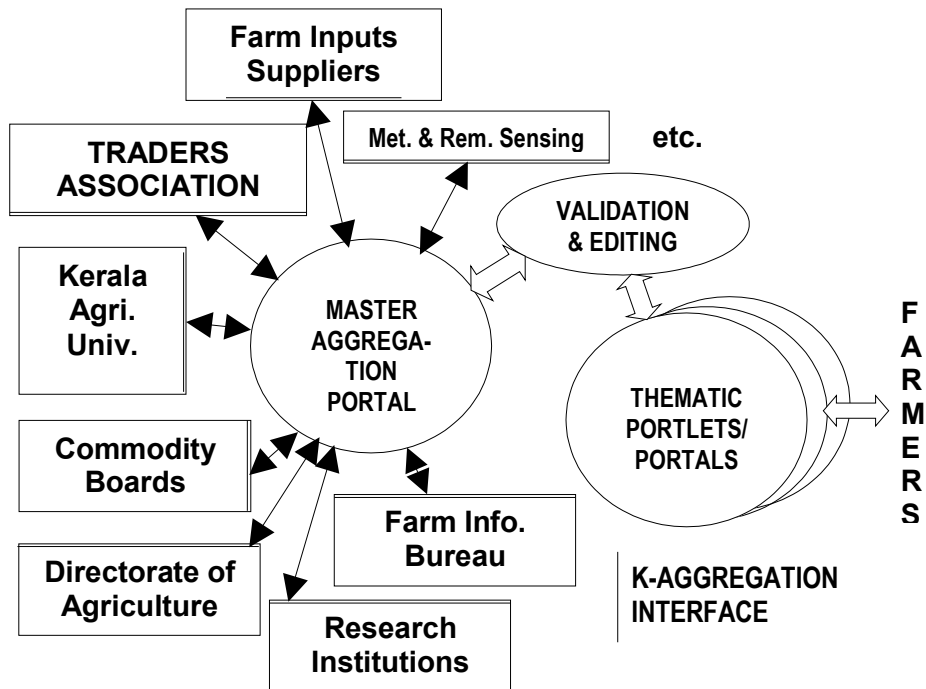


Fig. 2.: Information Aggregation & Flow Management In Scientific Portal For Agriculture

To effectively take advantage of such advanced portals as we have illustrated above, we need to equip and orient the different organizations indicated in Fig. 2. As part of the AGRISNET initiative, with the KAPA consultative forum, we shall arrive at the effective methodology and implementation of the above collaborative information systems framework.

8. ON KERALA AGRISNET PROJECT SCHEDULE AND MANAGEMENT

In addition to the services goals, output and deliverables outlined above, the AGRISNET proposal involves stipulating the following details with associated commitments indicated below.

i) Road map and Timelines, including intermediate milestones

The roadmap is as follows.

- ii) Submitting detailed proposal – within 4 months of the release of seed funds to develop the detailed proposals as given in the next section. We assume that the seed fund of Rs. 2 Lakh will be released by end of August 2005. The other dates are related Sept. 2005 as the first month of study and requirements phase of AGRISNET and related state level initiatives.
- iii) Establishing KAPA and getting commitments for participation from key stakeholders – by October 2006.
- iv) Submission of the detailed AGRISNET proposal with specific commitments from key organizations – Nov. 2006.
- v) Approval of the detailed proposal and receiving initial funds under AGRISNET – Jan. 2006.
- vi) Establishing EDUSAT head end and remote classrooms – March 2006.
- vii) Positioning of Empowered Committees:
 - a) Positioning of Mission leader – The KISSAN – VUAT team of IITM-K and KAU will be in charge of the Mission leadership. The Director IITM-K and the Executive Director of VUAT will be the Mission Leaders. The details regarding the following will be spelt out in the detailed project proposal.
 - b) Implementation arrangements and Positioning of Implementation team
 - c) Arrangements for monitoring and evaluation, including independent evaluation, of the project.
- viii) Success criteria for assessing project impact: The broad parameters for the success criteria are to be judged on the actual impact we make in the trade and livelihood security to the many small and marginal farmers and the economic prosperity brought to the rural areas by the systems we establish to provide the 'Right Information at the Right time to the Right persons in the Right places and in the Right context' with the dynamic information management support provided through AGRISNET
- ix) Total funds required for the project: Estimated Rs. 700 Lakh in the first phase (Details to be given in the final proposal).
- x) Funds to be provided by the State government, if any: Rs. 200 Lakh
- xi) Funds requested from the DAC: Rs. 500 Lakh
- xii) In-kind contribution to be made by the State government: Rs. 200 Lakh.
- xiii) Elaborate mechanism for regular data updation on real time basis: To be spelt out in the detailed proposal.
- xiv) Full details, and fully incorporate the ICT infrastructure available in the State: The details will be enclosed in the annexure to the detailed proposal. The state enjoys the best connectivity in most of the rural areas. It has the highest rural telephone density in the country.

The Kerala Government will determine the output and deliverables for each project in terms of G2C services. Provision of G2G services will be treated in relation to its contribution to the G2C services.

9. PRE-PROJECT ACTIVITIES

The detailed project proposal requires several preparatory and mobilization work. Some of these are specifically given below.

- i) Field work related to preparatory work.
- ii) Identification of strategy focussed work areas to be addressed for implementation as the initial set of activities under the AGRISNET, statewide KISSAN, VUAT and modernize extension services.
- iii) KAPA formation through consultative meetings of stakeholders and getting the requirements and commitments from key stakeholders in the state.
- iv) Two brain storming workshops – one at mid course and one for final presentation of the proposal to all stakeholders.

The detailed project proposal will be submitted within **three** months from the date of receiving the seed funds for the preparatory work. It requires 9 man-months of technical and secretarial support for this preparatory. The preparatory work will be done by the KISSAN-Kerala and the VUAT team of scientists and technologists under the joint supervision of the Director – IITM-K and the Executive Director - VUAT. The final project report will be tabled to the Government within three months of the receiving the funds for the project.

Submitted by

[Director – IITM-K and Coordinator, KISSAN-Kerala]

Dated: July 07, 2005