

6th National Symposium on Transforming Indian Villages into Knowledge Hub

August 27-28, 2009

PROCEEDINGS AND RECOMMENDATIONS



2009

UNIVERSITY OF AGRICULTURAL SCIENCES
BANGALORE

INDIAN AGRICULTURAL UNIVERSITIES ASSOCIATION
NEW DELHI



**Proceedings of the 6th IAUA National Symposium
On Transforming Indian Villages into Knowledge Hub held at UAS,
Bangalore on August 27-28, 2009**

Inaugural Session

The University of Agricultural Sciences, Bangalore and Indian Agricultural Universities Association, New Delhi jointly organised the 6th Indian Agricultural Universities Association's National Symposium on **Transforming Indian Villages into Knowledge Hub** on August 27-28, 2009 at UAS, Bangalore. Prof. U.R. Rao, Chairman, PRL Council, ISRO-DOS, Bangalore inaugurated the Symposium on August 27, 2009. Prof. Anwar Alam, President, IAUA and Vice-Chancellor, SKUAST(K), Srinagar presided over the function. Dr. R.P. Singh, Executive Secretary, IAUA, New Delhi in his introductory address mentioned that recommendations of 33 Annual Convention have helped in shaping 47 Agricultural Universities in the country. IAUA has planned to tackle the problems in an innovative way through enhanced scholarship, collaboration with farmers, round table conferences with technical universities, inter universities collaboration to international collaboration so that the benefits are spread to all the universities.

Dr. U.R. Rao in his inaugural address lamented that Transforming Indian Villages into Knowledge Hub is an innovative idea where in the application of Space Research is extended to the benefit of farmers. In his concluding remarks, he stressed the need for committed NGOs, energy conservation. Small savings (SHGs), application of remote sensing for combating drought, flood and estimating area under crops, contract farming so that the large majority of farmers are benefited and contribute towards National Progress.

Dr. P.G. Chengappa, Vice-Chancellor, UAS, Bangalore welcomed the gathering giving an over view of the University Teaching, Research and Extension activities besides the initiative taken by the University in utilising the space technology to reach the farming community through the establishment of Expert Centre at GKVK Campus and 17 VRCs attached to KVKs. Dr. K. Narayana Gowda, Coordinator, 6th IAUA Symposium and Dean (Agri.), College of Agriculture, GKVK proposed vote of thanks.

Technical Session-I

Globalization of Agricultural Economy

The session was chaired by Dr. M.L. Madan, Vice-Chancellor, U.P. Pt. DDUPCVV, Mathura, Uttar Pradesh. Dr. M. Boopathi, Vice-Chancellor, TNAU, Coimbatore, served as Co-Chairman of the session. A keynote paper on the **Role of Higher Agricultural Education** was presented by Dr. P.G. Chengappa, Vice-Chancellor, UAS, Bengaluru and Dr. Ganesh Raj presented an invited paper on the **Village Resource Centers adopted by ISRO**. Dr. S.S.Chahal, Vice-Chancellor, MPUAT, Udaipur, Dr.R.S. Kulkarni, Director of Extension, UAS, Bengaluru and Dr. Subbian, Registrar, TNAU, served as panelists. Dr. B.V. Chinnappa Reddy, Professor, of Agricultural Economics and Mr. Ranganath Mangalvedkar, Associate Professor of Agril. Extension served as rapporteurs.

The session evoked tremendous response from the participants and several critical view points and suggestions emerged from the interactions which are presented as below.

The chairman in his introductory remarks strongly expressed that globalization demands to remove various barriers in its trade domain like geographic, climatic, social, community and to bring a common cultural system to tackle these problems in achieving efficient global economy. In the present context of National Agricultural Economy diversification of farming business with the blend of livestock and horticulture components needs to be promoted on a priority basis as small farmers' livelihoods can best be sustained with this type of farming system. Efforts need to be directed towards evolving pro-poor agricultural economy and knowledge hubs at village on a priority basis, in order to bridge knowledge, communication and participation gaps on the part of the small farmers. Besides, there is a strong need to initiate institutional reforms through IT, raise capacity, create incentives and assets, and reduce vulnerability among the poor.

Dr. P.G.Chengappa stressed the role of higher agricultural education in the globalization of agriculture and called for treating agricultural education and technology as public goods so that all farmers will have access to it. There is need for restructuring agricultural education both at UG and PG levels responding to the needs of the farming community, private sector and other agencies. Agriculture education must focus more on skill developing curriculum so that farm graduates are confident and competent to take up responsibilities at all levels including local and global levels. Globalization of education should address the issue of opening a window for Indian students to problems in International Agriculture and develop expertise in these areas.

Dr. Ganesh Raj gave a detailed account of how space technology enabled services can be used for the benefit of common man especially in remote areas. He demonstrated how Village Resource Centres (VRC) can act as knowledge hubs covering various facets of rural life including medicine, education, agriculture, livelihood opportunities and many others.

Dr. Chahal covered a wide spectrum of issues in the area of globalization and identified several ground realities in the realm of globalization. He has suggested the need to enhance quality of produce, strengthen quarantine capacity, improving efficiency both in production and costs, measures to increase profit margin, diversification of crops, reduce burden on buffer stocks, value addition, women empowerment and demand driven technology.

Dr. R.S. Kulkarni suggested that SAUs have to give emphasis on practicing IPR, GMO coverage, biosafety, seed industry, biodiversity issues, ICT inclusion and sensitizing line departments for strengthening delivery systems.

Technical Session-II

Knowledge Empowerment of Rural People; Issues and Policy Perspectives

The session was chaired by Dr. A.K. Srivastava, Director and Vice-Chancellor, NDRI, Karnal; Prof. C.S. Chakrabarthy, Vice-Chancellor, WBUAF&S, Kolkatta, West Benga Co-Chaired the session. Dr. Doddahanumaiah, Professor of Agrill. Extension and Dr. K. Venkataranga Naika,

Professor of Agril. Extension served as Rapporteurs. The Chairman emphasized the need for knowledge empowerment of rural people with emerging trends of population pressure, escalation in cost of production, distortion in the transfer of knowledge process. Dr. Murugesha Boopathi explained the programmes of ICT initiatives taken up in the Tamil Nadu Agricultural University viz., KVK, e-velanmai, market intelligence etc. and opined that Middlemen can be eliminated in Agricultural produce selling through establishing terminal markets and farmers should be given free mobile access for Agriculture information.

Dr. K. Narayana Gowda in his presentation of paper entitled **How to reach the unreached with required effectiveness**, emphasized the need for the use of SATCOM which can provide dependable information, knowledge and skill to the remote villages not only on agriculture but all aspects of health, education and rural development. He explained the activities of Expert Centre established at the University Main Campus connected to 51 VRCs of Karnataka which provided information/Knowledge on diversified needs of the farmers.

Dr. B.P. Shah spoke on the successful efforts of Dairy Co-operatives in Gujarat and concluded that the Socio-Economic condition of farmers has increased and migration to urban areas is reduced and living standard of farmers increased due to the establishment of dairy cooperatives.

The panelist Dr. Jayapaul emphasized the need for strengthening of Extension system on weather and price forecast and harvesting of solar energy.

Dr. H.V. Nanjappa emphasised the need for integration of information considering the different type of farmers such as small, marginal and big farmers taking into account their diversified need for knowledge to overcome their problems.

Technical Session-III

Rural Knowledge Management through Stakeholders Partnership and Interventions

The session's chairman Dr. N.N. Singh expressed that there is a need for different services required by the farmers. Training of school dropouts one boy and one girl in each village through Prajna Kendra may be continued. Co-chairman Prof. S.S. Chahal expressed that agriculture is knowledge intensive and information should be need based and easily adoptable. There is a need of basket of technology for complete adoption in the adopted village and strengthening of agri-clinics in every University is required. Dr. D. Nanjappa, Professor Agril. Extension and Dr. N. Narasimha, Professor of Agril. Extension served as Rapporteurs.

Dr. Bambure delivered the key note address on behalf of Dr. V.B. Mehtha, Vice Chancellor, BSKKV, Maharashtra. He detailed the challenges of agriculture development and expressed the need for reducing the gap between ITK and contemporary knowledge, Stress for small farmers organization and involvement of farm women in assessment and refinement of new knowledge. He called for the establishment of Rural Knowledge Centres through public private partnership and effective use of ICTs in Information Communication Technology knowledge empowerment of farmers, leading to increase in agriculture production and their socio-economic upliftment.

Prof. C.S.Chakrabarthy spoke about the importance of public private partnership in RKM and suggested the training to villagers on recycling of capital, protection against flood, use of various harvesting methods, animal production and storage methods apart from marketing aspects and enhance knowledge commissions through multimedia, strategies through rural Kiosks etc.

Dr. K. Vijayaraghavan explained about the Agricultural Knowledge Management Strategies adopted by IARI, New Delhi like Seed Production from farmers to meet their demand, Seed production through progressive farmers with buy back by IARI and Seed production by farmers facilitated by Seed Companies. Partnership with SAUs, IARI and Farmers Organizations. He suggested having different types of partnership for the benefit of farmers.

Dr. Hanchinal Director of Extension, UAS, Dharwad representing the Vice- Chancellor Dr. J.H. Kulkarni opined that Knowledge management is equal to Business management and suggested to enhance Quality of agricultural produce by post harvest technologies like processing and value addition besides organising various producers associations and suggested that the SAUs, Farmers Associations and Government should join hands in improving the farmers income.

Dr. Savalia, DE, JAU, Junagarh and Dr. N. Nagaraja, Dean (Seri.) participated in the discussion as panellist.

Technical Session-IV (28-8-2009)

The Significance of ICT in enhancing rural Agricultural Knowledge Competency

The session was chaired by Dr. Dillip Kumar, Director, CIEF, Mumbai and Co-chaired by Prof. A.K. Das, Vice-Chancellor, UBKV, Cooch Behar. Dr. M. Shivamurthy and Dr. K.C. Lalitha, Professors of Agricultural Extension, UAS, Bangaluru served as Rapporteurs.

Dr. Yelamanda Reddy emphasized the need for using ICT in combination with other extension methods for transfer of technology to the farmers. He explained with successful case studies on rice, groundnut and chickpea for contacting farmers through different ICTs being employed in the ANGRAU.

Dr. S.B.Dandin called for integration of ICT in every part of development which requires strengthening of all KVKs, Line Departments, Zilla Panchayats and RSKs with ICTs .

Dr. Dilip Kumar pointed out that the Village Resource Centers/Village Knowledge Centers should provide technologies on agriculture, health, environment, education and family planning and they must have the connectivity with individuals through mobile phones and other affordable means.

Dr. Govindaraj highlighted the ICT initiatives undertaken by the IFFCO and he brought to the attention about introduction of sending important messages through mobile phones to the farmers.

Dr. M.A Shankar opined that in addition to strengthening ICT in rural areas there is also need to address the ill effects of ICT application, which is affecting adversely on rural indigenous knowledge, beliefs and predictions of the farmers in forecasting the future. Proper blending / integration of ICT with the culture of village community were emphasized with examples.

Technical Session-V

Integration of ITK with Scientific Knowledge for their Adaptation

Dr. Vijay B. Mehta, Vice-Chancellor, BSKKV, Dapoli chaired the session and indicated that the technologies developed have been either partially adopted or not adopted fully by the farmers. Hence, ITKs need to be tested scientifically, refined and passed on to farmers for greater adaptation. Dr. B. V. Patil, Special Officer, UAS, Raichur Co-chaired the session viewed that ITKs are proven technologies that could be used as preventive measures. Dr. G. Gopinath, Professor (Hort.) and Mr. Chandrashekar, Personal Secretary to Director of Extension served as rapporteurs.

Dr. A. K. Srivastava in his keynote address opined that ITK is synonymous with indigenous knowledge, Ethno-science and rural knowledge emphasised on the availability and applications of ITKs in the field of Animal Sciences. He narrated the strengths of ITKs, while doing so, ITK was compared with scientific knowledge, how ITK could be better utilised in increasing the milk production was narrated.

Dr. V. M. Mayande expressed that ITKs are generated and preserved by the people of the country and stressed that new refined ITK knowledge has to be piped into the villages although the villages have already turned into Knowledge Hubs. He suggested that ITK and improved technologies should be integrated into one. Several of the ITKs were quoted to express that they are being practised by the farming community. There should be scientific understanding to adopt ITKs in an eco-friendly manner.

Prof. A. K. Das was of the view that conservative mind and competitions have led to lack of documentation of ITKs, ultimately resulting in the extinction some of them. He also brought to the notice of the house that some of our age old ITKs have already been patented by advanced countries.

Dr. H. Shivanna suggested the utilization of ITKs and natural resources in increasing the food production.

Technical Session-VI

Multi functionality of Agriculture and Knowledge Intervention: The Task Ahead

Dr. V.M. Mayande, Vice-Chancellor, DPDKV, Akola chaired the session and emphasised the need for multi functionality of Agriculture and Knowledge interventions in view of increased demand for Food, Fruit, Fodder, Fibre and fuel for the livelihood of rural masses. Dr. Subbian, Registrar, TNAU, Coimbatore Co-chaired the session. Dr. B. Krishnamurthy, Professor (Agril. Extn.) and Dr. S.V. Suresha, Coordinator, BTU, UAS(B) served as Rapporteurs.

Prof. A.K. Das in his presentation emphasised that the Knowledge is always considered as third eye of the man keeping its importance in day to day life of the man kind. The delivery of Agricultural System need to be understood in the context of three terminologies: Rural, Agriculture and Knowledge where in knowledge plays a vital role in the development process. Further, the knowledge driven economy and society. The ICT is the key enabler and vital

component of the knowledge. In turn, the ICT lead to Knowledge Vibrant e-learning environment in the society. The presentation was made with the successful illustrations in the field of e-education. The presentation was concluded with the remark that Knowledge Village connectivity through e-village, choosing right idea, and scientist must design ICT. Knowledge made available through Village Knowledge Hub, create e-learning solutions and VKH motivate and acts upon principle of think globally and act locally.

Dr. P.S. Lonkar in his presentation reiterated the role of e-learning in the development process of the country. He emphasised the success of the Maharashtra Animal and Fisheries Sciences University in using the different e-learning facilities for different stake holders of the state viz; MAFSU, Dept. of Animal Husbandry, Livestock products processing industry, feed industry, Pharmaceutical industry and farmers and different means used to reach stakeholders like Animal help line, MAFSU website, Cyberspace, continuing education courses like post-mortem techniques, diagnosis of parasitic diseases, surgical techniques in small and large animals through interactive CDs etc.,

Dr. H.B. Lingaiah emphasised on the role of NAIP projects and KVKs in enhancing the multi-functionality of Agriculture and Knowledge. Further, to make the agriculture viable, the e-learning has to be strengthened.

Technical Session-VII

Problems of Agricultural Universities

Prof. Anwar Alam, Vice-Chancellor, SKUAST(K), Srinagar and President IAUA chaired the session and invited the members of the house to indicate the problems of the State Agricultural Universities for the consideration of IAUA. After thorough deliberations, the following problems of the SAUs were found pertinent by the members for consideration of the IAUA. Dr. K. Nagabhushanam, Professor (Agril. Extension) and Mr. B. R. Chandrasekhar, Personal Secretary to Director of Extension served as Rapporteurs.

After the deliberations the following decisions were taken:

1. Implementation of revised UGC Pay scales to the teachers of SAUs
2. Separate Pay scales for the cadre of Directors are not provided
3. Draft recommendations of the CAS are not clearly indicated
4. Guidelines for appointment of Assistant Lecturer posts in the SAUs
5. Fixing of Retirement age / term of the Vice-Chancellors
6. No much difference in the pay scales of Senior Scientists and Principal Scientists
7. Providing Internship to the final year undergraduate students of SAUs
8. Revision of internship to the final year students
9. Uniform guidelines for providing internship to be evolved
10. Uniform staffing pattern for all the SAUs
11. Problems of opening new Universities in the States without budget
12. Recognition of Sericulture as a subject for extending the support to the sericulture students for consideration to sanction of JRFs & SRFs
13. Agriculture & allied employment opportunities to the National Employment Guarantee Scheme.

Plenary Session

Dr. Anwar Alam, President, IAUA, New Delhi gave an overview of the symposium. He said that there is need for vocational training centres, rural KIOSKs and village knowledge centres. There is a need for opportunity for education of farm people as 90% of jobs are land and water based. There is also dearth of teachers who have experience and confidence to teach. There is also need of portals for quick information. The training of Agriculture and Agri-Business in TNAU is a success as more than 40% of trainees are practicing private extension. Also KVKs have to be strengthened.

Chairman of the session Dr. Mayee, Chairman, ARSB, New Delhi said that there is a need for knowledge access, through net working. Based on creative research concepts have to be developed and applied in the field. There is also need for effective delivery system. All these activities should be planned and executed keeping the present and future availability of manpower and other resources at the SAU level.

Co-chairman Dr. S.A. Patil, Chairman, Karnataka Agricultural Commission expressed the need for participatory technology development to reduce the gap in research and extension. There is need for mastery of knowledge for effective teaching. Also suggested expertise among agriculture scientists where farmers feel the need for inevitability of agricultural scientists. As drought has become common phenomena, we need to develop drought proof technology. Also needed effective and speedy decision making for implementation of projects. There is a need for effective teaching in SAUs, which motivates agriculture graduates to work in rural areas. There is a need for integration of crop and livestock technology. Also needed net working of research institutions.

It was decided to form a committee under the chairmanship of Dr. P.G.Chengappa with Dr. R.P. Singh, Executive Secretary of IAUA, New Delhi and Dr. K. Narayana Gowda as Members to reform the recommendations for implementation by different State Agriculture Universities as per the suggestion of Chairman of Plenary session, Dr. C. D. Mayee.

Recommendations

Session-I

1. Evolve strategies to make Indian agriculture truly globalised, emphasizing on pro-poor techniques and technology interventions to meet challenges of small-holders and take advantage of opportunities and challenges under WTO regime.
2. To be globally competitive, cost efficiency and production efficiency in agriculture need to be enhanced. A serious thought needs to be given in identifying areas in agriculture both at micro and macro levels where reforms and modifications can be introduced. For example, by promoting use of biofertilisers on a larger scale we can reduce cost of cultivation significantly.

Session-II

1. "Integrated Rural Knowledge Centre" needs to be established at Gram Panchayat level with single window system consisting of information, consultancy, suitable technology and input providers.

2. To reach the benefits of space technology to the rural and remote places, the Village Resource Centres should be established with SATCOM connectivity in association with Government and Non-governmental organizations at hobli level in the initial stage and Gram Panchayat level later to promote single window delivery of need based services.

Session-III

1. The establishment of rural knowledge centres through public private partnership and effective use of developments in ICT (Information Technology Centre) will help in knowledge empowerment of farmers, leading to increase in agriculture production and their socio-economic upliftment.
2. SAUs, Farmers Associations and Government should join hands in sharing the knowledge .

Session IV

1. To enhance the effectiveness of ICT initiatives, it has to be complemented with other extension methods of transfer of technologies and dissemination of knowledge

Session V

1. ITKs need to be documented, grouped and validated by testing in both at laboratory and field level ultimately be transferred to the farming community in order to reap the benefits.

Session VI

1. All the SAUs to equip their KVKs to serve as a Knowledge Hub which could serve as a replicable model for others.

Session VII

1. Revised UGC pay scales have to be implemented as early as possible by pursuing with the respective State Governments
2. There is need to pursue the creation of the separate pay scales for Directors/Deans.
3. ICAR to pursue the retirement age for the Vice-Chancellors of SAUs.
4. The term of Vice-Chancellors should be five years.
5. The Internship amount provided for final year students need to be enhanced.
6. UAS, Bangalore was requested to pursue recognition of Sericulture as a subject by the ICAR for consideration to JRFs & SRFs.
7. Agriculture and allied activities to be included in the National Rural Employment Guarantee Scheme.

