

Proceedings



**The IAUA
Vice Chancellors' Convention
on**

**“Making World Class Agricultural
University in India”**

November 8 – 9, 2014



IAUA

INDIAN AGRICULTURAL UNIVERSITIES ASSOCIATION

**IG 2, C.G.I.A.R. Block, N.A.S.C. Complex
Dev Prakash Shastri Marg Pusa Campus, New Delhi 110012
www.iauaindia.org**



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Contents

Background	1
Presentation Summary of Technical Sessions	1
Technical Session I	5
Technical Session II	6
Plenary Lectures	7
Technical Session III	10
Technical Session IV	12
Technical Session V	13
Technical Session VI	14
Valedictory Session	16
Recommendations	17
List of Delegates/Participants (Annexure I)	20

Proceedings of the Vice-Chancellors' Convention on *"Making World Class Agricultural University in India"* (November 8 - 9, 2014)

1. **Background:** The IAUA Vice-Chancellors' Convention 2014 was held on November 8th - 9th, 2014 in the NASC Complex, New Delhi on the theme of **"Making World Class Agricultural University in India"**. The event was organized under the aegis of The Indian Agricultural Universities Association (IAUA). IAUA is a registered society, and Agricultural Universities in the country, including 5 Deemed Universities of the ICAR (IARI, New Delhi; IVRI, Izatnagar; NDRI, Karnal; CIFE, Mumbai and SHIATS, Allahabad) and 2 Central Universities (CAU, Imphal and BHU, Varanasi) are its members. Accordingly, the invitees to the convention represented all the Vice Chancellors, Deans and Directors of SAU'S, Directors of Deemed Universities, Directors of ICAR Institutes, DDGs & ADGs and Senior Most Scientists of ICAR head-quarter and Institute. In addition, two international experts also participated in the convention. (**Annexure I**). The main objective of the association is to promote agricultural research, education and extension in the universities and states, and thereby rural development in the country.
2. **Presentation Summary of Technical Sessions:** Recognizing the current worsening economic scenario world-wide, it has been realized and acknowledged that in coming decades, agriculture production system would be "Knowledge intensive" and not "Input Intensive". Accordingly, two days convention was conceptualized with the aim to revisit our policies and to discuss our weaknesses and strengths to set our priorities for achieving long-term goal of improving agricultural universities and agricultural education system in India in order to compete in an increasingly knowledge- and innovation-driven world's economy.

Day One : 08-11-2014

Registration and Inaugural Session

The Convention was inaugurated by Dr. S. Ayyappan (Secretary, DARE; DG, ICAR & President, NAAS) with lighting the ceremonial lamp followed by Maa Saraswati Vandana. Prof. (Dr.) A.K. Srivastava, Director & VC, NDRI and President, IAUA presided over the function and





*Glimpse of Inaugural Session: Dr. S. Ayyappan
(Secretary, DARE; DG, ICAR & President, NAAS) along with other dignitaries*

welcomed the dignitaries. Guest of honour Prof. R.B. Singh (Chancellor, CAU and Ex-President, NAAS), Dr. M. L. Chaudhary (VC, BAU, Bihar & Vice-President, IAUA), Dr. K. M. Bujarbaruah (VC, AAU and ex-DDG (AS), Dr. Ramesh Chand (Deputy Director General (Education), ICAR) and Dr. K. S. Khokhar (VC, CCSHAU) also shared the dias during inaugural function. The session was participated by hon'ble Vice-Chancellors, DDGs, Prof. John J. Kennelly (Professor, Faculty of Agricultural, Life & Environmental Sciences, University of Alberta, Edmonton, Canada), Dr. Liu Zhimin (Jimmy) (Director of University Planning Office, Head of Higher Education Institute, Nanjing Agricultural University, P. R. China), Dr. R.P. Singh (Executive Secretary, IAUA), senior officers and other distinguished participants. Dr. K.S. Khokhar and Dr. M. L. Chaudhary in their introductory remarks detailed the importance of IAUA, the VC convention and its relevance in the area of agricultural education in India.

Prof. (Dr.) A. K. Srivastava, President IAUA presided over the function and delivered the presidential address. Prof. Srivastava, in his presidential address, talked about the glorious past of Indian Education System in which Nalanda, Takshashila, Vikramshila, Kashi were centers of knowledge in ancient time. He reiterated that Nalanda and Takshashila Universities were among the top ranking universities of the world, like present day Oxford & Harvard, and the famous treatise of "Arthashastra" by Kautilya was said to be compiled in Takshashila. He opined the need to move ahead in future without being nostalgic about our glorious past. He said that today none of the Indian University figures in first top 200 universities of the world, and in "Times Higher Education Ranking Surveys of world Universities", only two universities (Panjab University and IISc, Bangalore) figured in the group rank between 275-300. He also talked about the Hon'ble President of India's recent address through "National Knowledge Network" on new initiatives for enabling the Indian Universities to find a place among first 200 universities.

He also talked about the Centre for World University Rankings (CWUR)-2014, and compared our country's best with other best universities of different regions of the world. Dr. Srivastava also reminded the audience some bitter but true facts such as the non-existence of any Indian University among top 200 universities seems a facile generalization and these facts point strengths of Indian Universities. He also questioned the methodologies for ranking of universities by ranking agencies (The Times Higher Education, Shanghai University and QS) and also about the methodology showing bias in favour of advanced countries e.g. Alumnus & staff winning "Noble Prizes" & "Field Medals", papers published in Nature & Science and the proportion of international students are given sizeable weightage (upto 30% in Shanghai ranking). He also discussed that no Indian Agricultural University is present in "QS World University Rankings by Subject" (in Agriculture & Forestry) 2014. He also deliberated about the major issues and



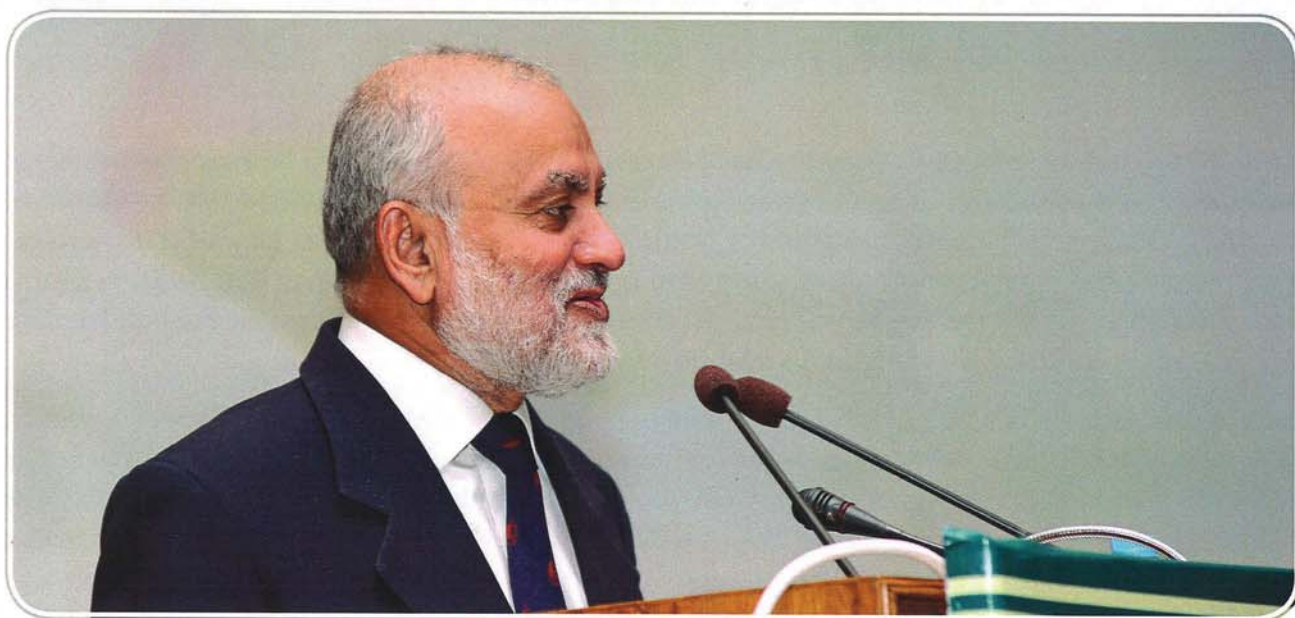
Prof. A.K. Srivastava, Director & Vice Chancellor, NDRI & President, IAUA delivering Presidential address

challenges relating to higher education in India, such as moderate quality barring few centres of excellence; low access and inequity (The access to higher education in India is 18% as compared to 100% in Korea & 95% in USA); highly inequitable distribution across gender, location and socio economical groups; weak networking among Indian Universities; over emphasis on lecture based teaching pedagogy; fragile cultural diversity and lack of trusted institutional mechanism for university-industry interface and social interface.

He also told that India now has close to 700 universities: central, state, private and deemed. Barring few private ones, most universities have similar subjects and course structures, and the extent of specialization is limited among Indian Universities. There is more growth in engineering and technology institutes; investment in the growth of humanities has been ignored in the higher education. Of the five criteria used in ranking i.e. teaching, research, citations, international outlook and industry income, it is only on the last criterion that Indian Universities face major disadvantages. Discussing about the way forward, he also told that India's continued poor performance in educational rankings comes in the background of working towards National Knowledge Network, and many countries put resources in improving the global profile and performance of their universities. Should India care for these rankings or should we have our own ranking system? Talking about the weakness, strength and line of action, he told that in most universities, teachers are driven by their professional accomplishments and they spend maximum time on academic work and they eschew from devising strategies for marketing the achievements of university. In the absence of institutional mechanism for marketing, we fail to project our achievements properly and therefore, each university should either setup its own cell for performance ranking or outsource. He also talked about the Indian Centre for Assessment and Accreditation (ICAA), a not-for-profit organization, formed with a vision 'to help for the inclusion of 5 Indian Universities in the Top 200 of the World University Rankings by 2025. Dr. A.K. Srivastava also urged the participants to motivate young Indians to Agriculture which is the need of the day. For achieving this, he focused on modernization of research and instructional farms, increasing the use of ICT tools towards enhancing quality education, research and technology development capabilities and also inculcating corporate practices in them.



The chief guest, Dr. S. Ayyappan (Secretary-DARE and DG, ICAR) in his address shared that agriculture is the mainstay of the Indian economy. The Indian agriculture is today recognized as one of the largest agrarian economies of the world. Crop husbandry, Animal Husbandry, Dairying and Fisheries sectors play an important role in the national economy and in the socio-economic development of the country. Recognizing the occasion, Dr. Ayyappan stressed upon the need for the universities across the country to join hands, share the knowledge and strive to take on programmes that are nationally relevant. Interventions to reduce labour cost in agriculture through mechanization should be encouraged. He said that, the challenges of higher education in India are much different from developed countries. Therefore, we need a ranking methodology, governed by the issues and challenges of our higher education system and to evolve India specific methodology for assessing the performance of Indian universities. For making World-Class University, alignment of the key factors such as Talent, Resources and Governance is required. He said that the cultural diversity of a university needs to be encouraged by having several indicators, and the performance should be measured by indicators such as the quality of teaching and learning outcome, curriculum, quality research, social inclusion, balanced subject / discipline growth, Inter-state & Inter-university Collaboration. At



Dr. S. Ayyappan (Secretary-DARE and DG, ICAR) delivering keynote address



the end, he expressed his satisfaction toward IAUA's efforts on the organization of conventions and workshops on very relevant topics, and congratulated Dr. Srivastava, Director, NDRI and President, IAUA and his team for organizing the convention.

On this occasion, institutional membership was conferred to several universities and Dr. K. M. Bujarbaruah expressed his views and emphasized the need for a big boost in the higher education sector in agriculture and allied subjects in terms of investment and technology. He also emphasized the need for sustainable models of public-private partnerships in this sector.



Vice-chancellors of respective universities receiving IAUA Institutional membership conferred to their universities

Technical Session I

- Theme:** Transformation in agricultural education: creativity and innovation in curriculum and course design
- Speaker:** Dr. Ramesh Chand, Deputy Director General (Education), ICAR
- Moderator:** Dr. N. C. Patel, AAU, Anand, Gujarat
- Panelists:** Prof. A. Padma Raju, ANGRAU, Hyderabad, Telangana
 Prof. Chittaranjan Kole, BCKV, Mohanpur, Nadia, West Bengal
 Prof. Baskaran Manimaran, TNFU, Tamil Nadu
 Dr. K. K. Katoch, CSKHPKV, Himachal Pradesh
 Maj. Gen. Shri Kant, SM, VSM (Retd.), LUVAS, Hisar, Haryana
 Dr. R.P. Singh, Director, Agriculture Faculty, BHU, Varanasi

The session started at 11.30 AM. Dr. Ramesh Chand, Deputy Director General (Education), ICAR talked in the theme of "Transformation in agricultural education: creativity and innovation in curriculum and course design" and stressed on the need to improve and sustain the quality of higher agricultural education for addressing the emerging challenges for livelihood security and sustainable development. He told that in current scenario, there is an urgent necessity to bring improvements, achieve excellence, enhanced relevance and high efficiency in the agricultural higher education system, and the agricultural universities to offer enhanced services to benefit farmers, rural women and other stakeholders. Institutions of agricultural education should adopt reforms in the governance of AUs and increasing System's internal efficiency. They must adopt greater collaboration with ICAR institutions, both in academics and research to introduce many innovations in teaching and research. A major exercise should be undertaken for periodical revision of course curricula and syllabi in all the subjects of agriculture and allied sciences. Newer and frontier area



research disciplines like genomics, transcriptomics, metabolomics, systems biology, bioinformatics and nanotechnology should be introduced, and the revised curricula and syllabi should be implemented in all agricultural universities. The e-Courses should be implemented for all the undergraduate courses. All these efforts will greatly help in making higher agricultural education more utilitarian and relevant in tune with the scientific and technological advancements and the demands of the country's growing economy.

Technical Session II

- Theme:** Researchable issues as a harbinger of change-Cutting edge research and ensuring commercialization
- Speaker:** Dr. R. B. Singh, Ex-President, NAAS and Ex-ADG, FAO of the United Nations
- Moderator:** Dr. K. M. Bujarbaruah, AAU, Jorhat, Assam
- Panelists:** Dr. K. E. Lawande, DBSKKV, Dapoli, Ratnagiri, Maharashtra
Dr. D. P. Biradar, UAS, Dharwad, Karnataka
Dr. George John, BAU, Ranchi, Jharkhand
Dr. C. Renukaprasad, KVAFSU, Bidar, Karnataka
Dr. Purnendu Biswas, WBUAFS, Belgachia, Kolkata, WB
Dr. Akhtar Haseeb, NDUAT, Faizabad, UP

Professor (Dr.) R. B. Singh talked about the "Researchable issues as a harbinger of change" and reminded everyone about the Green Revolution Symphony through which, with major inputs of technology, services, public policies and farmers' enthusiasm, Indian farmers achieved as much progress in wheat production in four years (1964-68), as during the preceding 4000 years. He also told that assured and remunerative market is the prime mover of farmers' enthusiasm and also warned the audience that the planet earth is under pressure as follows:

- By 2050, world population will become 9.26 billion; India's 1.6 billion, most populous and crowded
- India has over 17% world population with only 2.4% land area



- Land, water, biodiversity will shrink by 30 to 50%; Systems are at risk
- Distorted trade-offs among food security, ecological intensification and diversification
- Intensifying volatilities of climate change, market & food prices
- Entrenched high inequalities breed inequality and despair and blunt growth efforts

He also told that by 2050, productivity loss due to climate change will be about 10 to 30%, which means a loss of 1.5 to 4.5% GDP annually. 40% of below 5 years children costing 3% of GDP; IFPRI predicts additional 10% undernourished. Thus, total child undernourishment will cause GDP loss of 4%. If the two losses not controlled, economy will remain Grey (annual GDP loss of 9 to 10%) on only these two counts. Small farmers are the core of Indian Agriculture with ~85% farmers having < 2 ha cultivated land and hence focus should be on low cost, ergonomically designed, multi-purpose farm equipments. He also talked about the strategies to improve soil health viz. balanced fertilization, integrated plant nutrient supply, crop diversification with inclusion of legumes, R&D on sustained release fertilizer materials and conservation agriculture. Dr. R. B. Singh made the point that South Asia faces increasing challenges due to climatic risks and we need to mobilize all the scientific acumen, resource conservation technologies for adaptation and mitigation as well as work for developing climate smart villages. He also advocated for a new vision for agriculture, according to which by 2020, we should do a 40/20/20 i.e. task to build on Green Economy by increasing productivity by 40%, emission by 20% and rural poverty by 20%. He finally spoke that we need to have two-fold objective for agricultural scientists – enable farmers to feed India and the world; and earn a good livelihood and also work for our PM's mantras of "Kam zameen, kam samay, zyaada upaj" and "per drop, more crop" along with creation of talent pool of young, educated and progressive farmers, and agricultural research scholars. Prof. Singh concluded his presentation with famous *Albert Einstein* quote "You cannot solve the problem with the same kind of thinking that created the problem".

Plenary Lectures

Speakers: Dr. John Joseph Kennelly, University of Alberta, Canada
Dr. Liu Zhimin (Jimmy), Nanjiang Agriculture University, China



Moderator: Dr. A. K. Srivastava, President, IAUA; Director & VC, NDRI, Karnal

Panelists: Dr. Arvind Kumar, VC, Rani Laxmibai Cental Agricultural University, Jhansi
Dr. M. C. Varshney, VC, Kamdhenu University, Gujrat

Excerpts from the talks of Dr. Kennelly and Dr. Zhimin are as follows:

Prof. John J. Kennelly first gave a brief outline of the University of Alberta, which is one of Canada's largest research universities. He appreciated the opportunity to participate in the IAUA conference and found it interesting reading about the goals and aspirations of IAUA as they mirror quite closely what GCHERA would like to achieve globally. He reiterated that the focus of the conference is on how to achieve world class status for agricultural universities and mentioned that the key factor in attracting support to become world class universities is the relevance of the work that we are doing. It means that if we are to attract the best staff, students and funding, we need to be focus on important global issues. He also pointed that the world rankings of universities should be viewed with a caution as there is a lot of subjectivity associated with the rankings as demonstrated by the divergence among the rankings. Dr. Kennelly first reviewed the context for the education and research done by agricultural and life sciences universities and then provided an insight at the evolution of agricultural universities/faculties from basic production agriculture to environment and the bioeconomy. He was also of the opinion that no single model has evolved as universities respond to local conditions and hence the needs are very different in North America, where less than 2% of the population are directly engaged in agriculture compared to India, where the number of people engaged in agriculture is an order of magnitude higher - between 20 and 50% of the population depending on how it is estimated. Finally, he looked at the role of GCHERA as the only body representing agriculture and life sciences higher education at the global level. Dr. Kennelly also told the audience that the impact of agriculture on the environment is an area of growing concern, and there is a societal expectation that the environmental footprint of agriculture needs to be reduced at the same time as we increase food production. He was also of the opinion that the impact of climate change will be greatest in some of the most populous countries of the world as they struggle to cope with feeding a rapidly expanding population. Dr. Kennelly also expressed that these global challenges require education and research and outreach and hence agricultural education and research remain critically important. Our focus should be on meeting the needs for education and research-not on achieving a particular ranking internationally. He also reminded that success should be measured in terms of quality of what we do which does not always translate into





the higher levels of international rankings and therefore, other measures of impact, including impact on the quality of life of people are more important than rankings.

Dr. Liu Zhimin talked about "the scenario and benchmarks of world-class universities characterized in agriculture". Speaking on the occasion, he reminded the audience that currently, many countries joined the global race to build a world-class university in the knowledge society and the conception of world-class universities characterized in agriculture means those worldly well-known universities with world first-rate agricultural related subjects. Then, he posed a question that how about the situation of world-class universities characterized in agriculture and what's the benchmark for world agricultural universities to follow up? For reaching this, his analytical framework included exempling of world-class universities characterized in agriculture, classification of world-class universities characterized in agriculture, ESI citation rankings of world-class universities characterized in agriculture, Status of other agricultural universities, China's action, setting benchmarks followed by reaching conclusion. Talking about the exempling of world-class universities characterized in agriculture, he told that currently there are 15 international rankings in the world and 3 of them has the greatest impact that include the ARWU (the Academic Ranking of World Universities released by Shanghai Jiao Tong University in China from 2003), QS World University Rankings (by Quacquarelli Symonds Starting in 2004, cooperated with Times Higher Education Supplement, but separately launched its own from 2009) and NTU Ranking (Started from 2007 by National Taiwan University). He also told that if we define the overlapped parts of universities which have ranked in all of the three rankings in agricultural subject as worldly acknowledged universities characterized in agriculture, then the top 5 of 50 shown of them involved in agriculture include Cornell University, University of California, Davis, University of Wisconsin-Madison, University of California, Berkeley and Wageningen University. China Agricultural University has 48th rank. He also told that out of these 50 top universities in agriculture, 48% are located in USA, 12% each in Canada and Australia, 4% each in Denmark and Japan and rest 20% in countries like China, France, Finland, Germany, Netherlands, Spain, UK, Switzerland, Sweden and Taiwan. He also told that according to their development forms, we can divide these 50 universities into four types:

1. Type A: *Agricultural universities*. With "agricultural name frames" from birth no matter the changing of their names from agricultural schools, academies, colleges etc. into agricultural universities in their histories.
2. Type B: *Bestowed universities*. At the beginning, they were agricultural schools, academies, colleges etc. and subsequently they became more comprehensive, and changed their original "agricultural names frames" into comprehensive universities.
3. Type C: *Comprehensive universities*. From their birth to present, without changing their names' frames in histories.
4. Type M: *Merged universities*. Merged or being merged to comprehensive universities from agricultural ones.

Dr. Liu also talked about China's action in this area and a Composition Framework of Universities' Layer Structures in China. He finally explained that if we define the overlapped parts of Top 55 universities which were ranked in all of the three rankings of NTU, QS and ARWU in agricultural subject as worldly acknowledged universities characterized in agriculture, then 94% of these universities are comprehensive ones and only 6% of them are the traditional agricultural universities. 48% of the total universities are occupied by those from USA, among which nearly 90% are land-granted Universities and 12% shared by those from Canada. It strongly suggests that government played a crucial role in the proceeding of establishment of world-class universities



characterized in agriculture in USA. Dr. Liu also discussed that universities may be beneficial from the process of comprehending, but no evidence shows that the more comprehensive a university is the more academic unit it has or the stronger its subjects. The intrinsic mechanism for the benefit of comprehensive university in advanced subjects' formation needs to be further exploited. He also elaborated that judged from the criteria of subject numbers in ESI 1% of the world, for the world-class universities characterized in agriculture, the benchmarks

- for the type C are Cornell University, University of Wisconsin-Madison, The University of Queensland, University of Minnesota and University of British Columbia;
- for type B, Wageningen University, Michigan State University, Oregon State University, Colorado State University, Ohio State University etc.;
- for type M, Pennsylvania State University, University of Guelph, University of California, Davis, University of California, Berkeley, The University of Queensland etc. and
- for type A, only Texas A&M University, Swedish University of Agricultural Sciences and China Agricultural University perhaps can act as successors.

Dr. Liu Zhimin further went to explain that the range of these top 50 sampling universities possessing ESI 1% advantage subjects is between 7 to 20, which make it a sense that for a world class agricultural university, more than 7 ESI 1% advantage subjects are necessary and they should focus on the following order of subjects: Plant & Animal Science, Agricultural Sciences, Environmental/ Ecology, Biology & Biochemistry, Chemistry, Engineering, Social Sciences General, Molecular Biology & Genetics, Clinical Medicine, Microbiology etc. He finally explained the importance of Indicators such as global research reputation, regional research reputation, publications, normalized citation impact, total citations, number of highly cited papers, international collaboration and number of PhD degrees awarded in making a world class university.

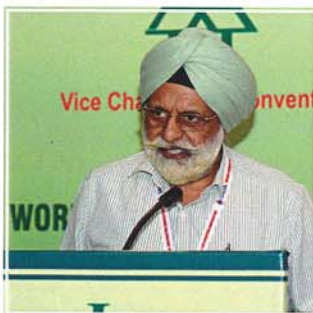
Technical Session III

- Theme:** Linkage Development-Targeted collaboration between lab, industry and farm
- Speaker:** Dr. B. Ashok, KVASU, Pookode, Kerela/ Dr. M. C. Varshney
- Moderator:** Dr. V. S. Tomar, JNKVV, Jabalpur, MP

- Panelists:**
- Prof. A. K. Misra, MAFSU, Nagpur, Maharashtra
 - Dr. Milkha Singh Aulakh, Banda University of Agriculture and Technology, Banda, Uttar Pradesh
 - Dr. A. R. Pathak, NAU, Navsari, Gujarat
 - Prof. A. K. Gahlot, RAJUVAS, Bikaner, Rajasthan
 - Prof. H. S. Gaur, SVPUAT, Meerut, UP
 - Dr. Ashok A. Patel, SDAU, Banaskantha, Gujarat



Dr. B. Ashok and Dr. M. C. Varshney discussed about the necessity and targeted collaboration between lab, industry and farm. Their industries have been collaborating for over a century, but the rise in economy has intensified the need for strategic partnerships that go beyond the traditional funding of discrete research projects. World-class research universities are at the forefront of pioneering such partnerships. That is why, we need to design them to run longer, invest more, look farther ahead and hone the competitiveness of universities and regions. We need to transform the role of the research university for the 21st century, anchoring it as a vital centre of competence to help tackle social challenges and drive economic growth.



General Body Meeting (6:00- 7:00 PM)

The general body meeting was held in the evening. Minutes of the last General Body was confirmed and approved. GB appreciated the efforts of IAUA president. Several intense discussions were done on the points suggested by participants and members.

Cultural Programme

A country and its outlook towards the world can be best understood when its culture is explored. India boasts of a rich and diverse cultural heritage that has paved the way for binding the country with other countries in the world beyond trade and politics. In this era of global inter connectedness where the world is witness to a great deal of homogenization and eclectic intermingling, a country's language and culture still provides a durable distinctiveness to a country. India is particularly blessed



by its magnificent and legendary diversity of cultures and languages. This makes India virtually unique. It is this uniqueness that was wished to present for the visiting dignitaries on this event. With an intention to showcase true Indian tradition, a cultural programme performed by NDRI students and Indian classical dance group was staged. The evening was lit by the wonderful performers. The cultural troupe enthralled the audience with their graceful dance performances depicting the rich culture of India. Different classical and folk dances of India showcased the rich cultural heritage of our country.

Day Two : 09-11-2014

Technical Session IV

Theme: State-of-the-art Infrastructure requirement

Speaker: Dr. K. S. Khokhar, CCSHAU, Hisar, Haryana

- Moderator:** Dr. M.L. Chaudhary, BAU, Sabour, Bihar
- Panelists:** Dr. R. K. Mittal, RAU, Pusa, Samastipur, Bihar
- Dr. U. K. Mishra, CKV, Durg, Chhattisgarh
- Dr. B.M.C. Reddy, DRYSRHU, West Godavari, AP
- Dr. T. A. More, MPKV, Rahuri, Maharashtra

Dr. K.S. Khokhar, Vice-Chancellor, CCS HAU, Hisar, presented his views on the requirement of State-of-the-art Infrastructure for making the world class agricultural university in India. He has given more emphasis on digitalization of agricultural universities. His talk was mainly focused on education/research, technology dissemination, management and support services. In order to improve education and research, he suggested the need of advancement in infrastructure, smart class rooms and next generation based orientation in biotechnological aspects. He also emphasized over the development of laboratories working for diagnostic, agricultural machinery development, food technological including organic food certification systems apart from bio-safety and weather forecasting facilities etc. in agricultural universities. He strongly mentioned the need of 24x7 Power supply for agricultural universities as a first step towards making of world class in terms of education and research. He told that technology dissemination cells (KVKs) have also to be developed equally like universities in terms of infrastructure. Single window access to all agro advisory services, mobile diagnostic vans at KVKs and importance of community radio stations are some key dialogues he added in his talk over technology dissemination centers. He was very specific about the development of facilities in Hazardous material and waste management for safety. He also suggested Eco-friendly Small Vehicles for Intra-campus mobility and sports mantra for keeping strong integrity united culture among students.



Technical Session V

- Theme:** Stakeholder's participation-To build and sustain a world class status
- Speaker:** Dr. B. Venkateswarlu, MAU, Prabhani, Maharashtra
- Moderator:** Dr. Arvind Kumar, RLB CAU, Jhansi, UP
- Panelists:** Prof. M. Kar, OUAT, Bhubaneswar, Orissa



Dr. Pradeep K. Sharma, SKUAST, Jammu, J&K

Dr. T.J. Harikrishnan, TNUVAS, Chennai, TN

Dr. D. P. kumar, UAS, Bengaluru, Karnataka

Dr. A. S. Nanda, NDUVS, Jabalpur, MP

Dr. B. Venkateswarlu discussed about the Stakeholder's participation to build and sustain a world class status. He told the audience that issues of "participation" have become increasingly important at any place, organization and event. We must recognize that participation is essential to the achievement of its overarching objectives of poverty reduction and sustainable development and a world class university. Participatory approaches have been shown to enhance project quality, ownership and sustainability; to empower targeted beneficiaries (in particular, students, women and poor people) and to contribute to long-term capacity-building and self-sufficiency and we must move ahead for achieving this.



Technical Session VI

Theme : Financial Sustainability-Strengths, Constraints & Opportunities

Speaker: Dr. Tej Pratap, SKUAST, Srinagar, Kashmir

Moderator: Dr. S. N. Puri, CAU, Imphal, Manipur

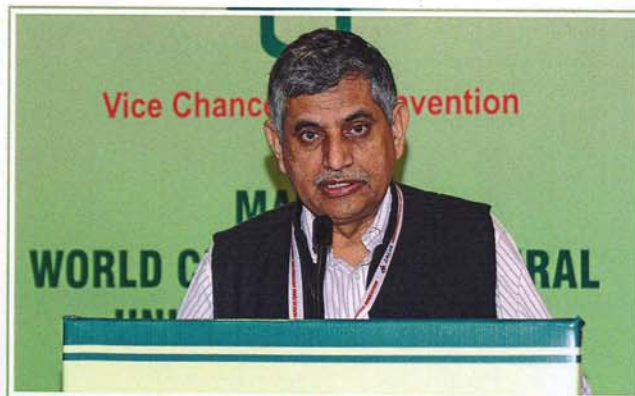
Panelists: Dr. B. S. Janagoudar, UAS, Raichur, Karnataka
Dr. A. C. Varshney, Mathura, UP
Prof. A. K. A. Lawrence, Pro UP. Pt. DDUPPCVV, SHIATS, Allahabad, U.P



Dr. Tej Pratap told the audience that for Research in our universities to be a success story, there should be increased focus on moves to enhance the financial sustainability of the research base. This can be achieved by more collaboration with local research



institutes near the universities. The volume of research being carried out by NARS should be monitored at a national level on an annual basis, and ICAR, DARE, IAUA and other governing bodies should take themselves that there is an institution-wide strategy they should develop measures to assess the extent to which this is being achieved. We should consider how a consistent set of metrics can be incorporated into its annual accountability review process of an institution; and that the funding bodies should consider how such a set of metrics can be incorporated into their equivalent processes. The funding bodies should each then produce an annual summary report for this outlining headline information on the overall financial sustainability of institutions and specific information on the sustainability of the research base. This process will require cooperation between the funding bodies and research and academic institutes. The greater intensity of utilisation of assets by NARS institutions should be encouraged particularly the sharing of research equipment and facilities. The Social, environmental and financial sustainability will be at the core of the University's future viability, and should be based on four key drivers: sustained quality, relevance, financial capacity and deliberately harnessing the University's existing and future diversity potential.

*Dr. Satyender Arya, CEO, Skill Council**Dr. Rameshwar Singh, Project Director, (DKMA), ICAR*

Valedictory Session

Chairman; Dr. S. Ayyappan, Secretary, DARE and DG-ICAR

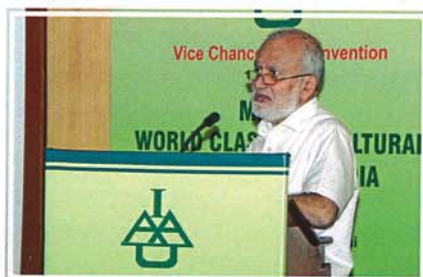
Guest of honour: Dr. R. B. Singh, Chancellor, CAU, Imphal

Co-Chairperson: Dr. A.K. Srivastava, President, IAUA

Rapporteur: Dr. K. S. Khokhar, VC, CCSHAU, Hisar

The valedictory session was chaired by Dr. S. Ayyappan, Secretary-DARE and DG-ICAR.

Prof. (Dr.) A. K. Srivastava greeted Dr. Ayyappan with floral bouquet. Prof. R. B. Singh and Dr. K. S. Khokhar and other senior VCs also shared the dias. All the dignitaries expressed their views. The Co-chairperson, Dr. A.K. Srivastava, President IAUA and VC, NDRI, Karnal welcomed the chairman, the guest of honour, distinguished delegates of the session and invited panelists for their concluding remarks. The convention ended with the presentation of salient recommendations of technical sessions followed by vote of thanks presented by Dr. K. S. Khokhar.

*Dignitaries during valedictory session*



Recommendations

- It was consensually agreed that we need to move ahead in future without being nostalgic about our glorious past as today none of the Indian university/ agricultural university figures in first top 200 universities of the world.
- For assessing the performance of Indian universities, there is an urgent need to formulate a ranking methodology, governed by the issues and challenges of our higher education system and evolve India specific methodology realizing the importance of Indicators, such as global research reputation, regional research reputation, publications, normalized citation impact, total citations, number of highly cited papers, international collaboration and number of PhD degrees awarded in making a world class university.
- Government has a crucial role to play in the establishment of world-class universities characterized in agriculture as in USA and other highly ranked countries. For making World-Class University, alignment of key factors such as Talent, Resources and Governance is required. The universities must also give due importance for the quality assurance of higher agricultural education.
- There is a need to counter major issues and challenges relating to higher education in India, such as moderate quality barring few centres of excellence; low access and inequity, highly inequitable distribution across gender, location and socio economical groups; weak networking among Indian Universities; over emphasis on lecture based teaching pedagogy; fragile cultural diversity and lack of trusted institutional mechanism for university-industry interface and social interface.
- The cultural diversity of the university needs to be encouraged by having several indicators, and the performance should be measured by indicators such as quality of teaching and learning outcome, curriculum, quality research, social inclusion, balanced subject/discipline growth, Inter-state & Inter-university Collaboration. There should be an emphasis on the digitalization of agricultural universities. In order to improve education and research, there is a need of advancement in infrastructure, smart class rooms and next generation based orientation in biotechnological aspects.
- There is an urgent need to motivate young Indians to Agriculture which is the need of the day. Agricultural education and research should be made more attractive to attract young talent. To attract the best staff, students and funding, we need to be focused on important global issues. For achieving this, there is also a need of modernization of research, increased use of ICT tools towards enhancing quality education, research and technology development capabilities and also to inculcate corporate practices in them.
- There is a need for a new vision for agriculture, according to which by 2020, we should do a 40/20/20 i.e. task to build on Green Economy by increasing productivity by 40%, emission by 20% and rural poverty by 20%. The impact of climate change will be greatest in some of the most populous countries of the world as they struggle to cope with feeding a rapidly expanding population. Therefore, we need to mobilize all the scientific acumen, resource conservation technologies for adaptation and mitigation as well as work for developing climate smart centers.
- Success should be measured in terms of quality of what we do, which does not always translate into the higher levels of international rankings, and therefore, other measures of impact, including the impact on the quality of life of people, are more important than rankings.



- There should be an emphasis on the development of laboratories working for diagnostic, agricultural machinery development, food technological including organic food certification systems apart from bio-safety and weather forecasting facilities etc. in agricultural universities. There is an urgent need of 24x7 Power supply for agricultural universities as a first step towards making of world class in terms of education and research. There should be the development of facilities in Hazardous material and waste management for safety.
- "Sports, culture and social service" mantra should be promoted in universities for providing strong sense of national integrity, unity, ethics and pragmatism among students.



IAUA Vice Chancellors' Convention



Annexure I

List of delegates/Participants
Chief Guest/Guest of Honor

Dr. S. Ayyappan
 DG, ICAR & Secretary, DARE

Dr. R. B. Singh
 Chancellor, CAU, Imphal

Vice Chancellors

Dr. A.K. Srivastava
 Director & VC, NDRI & President, IAUA

Dr. Chitranjan kole
 BCKVV, Mohanpur

Dr. S. N. Puri
 CAU, Imphal

Maj. Gen Shrikant, SM, VSM
 LLRUVAS, Hissar

Dr. Tej Partap
 SKUAS &T (K), Srinagar

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 ANGRAU, Hyderabad

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Dr. M. L. Chaudhary
 BAU, Sabour, Bihar

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 CCS HAU, Hisar

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 SVBPUANT, Meerut

Dr. N. C. Patel
 AAU, Anand

Dr. A. C. Varshney
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Dr. V. S. Tomar
 JNKV, Jabalpur

Dr. Manoranjan kar
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 JAU, Junagadh

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 DRYSRHU, Tadepalligudem

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 MPKV, Rahuri

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Principal and Dean, BA College, AAU, Anand

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