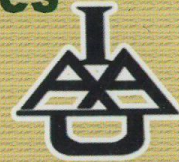




**University of Agricultural Sciences
Dharwad (Karnataka)**



Proceedings of

6th Regional Committee Meeting of the IAUA

on

**Agricultural Policies for Food Security
February 20-21, 2016**

**Organized
by**

**University of Agricultural Sciences
Dharwad (Karnataka)**

**Sponsored
by**

**Indian Agricultural Universities Association
New Delhi**

Venue

**University of Agricultural Sciences
Krishinagar, Dharwad**

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RECOMMENDATIONS

1. The Market reforms initiated by Government of Karnataka (GoK) need to be extended to other states of the country. GoK model is ideal at the national level because of e-trading with ICT, PPP market mode.
2. Implementation of reforms through model APMC act: Which mainly deal with setting up of special commodity markets, PPP in management & extension activities/ promotion of e-trading, provisions for contract farming and establishment of private markets / farmer – consumer markets / direct marketing etc.
3. There is a need to develop market policies for fodder, milk, wool, livestock, fish and horticultural crops and preventing distress sale.
4. Success stories in respect of food security of each university should be documented.
5. Milk and eggs are to be introduced in public distribution system (PDS) for nutritional security and to create awareness about the nutritional importance of millets and coarse cereals when introduced in PDS. Per capita availability of pulse needs to be increased as it is half the quantity suggested by WHO.
6. Establishment of processing industries at village level is to be encouraged.
7. Greater emphasis on growing of minor pulses which are equally nutritive and highly drought tolerant.
8. Popularisation of cropping system/farming system approach which facilitates inclusion of different crop and animal components.
9. In PDS system millets, likes sorghum, pearl millet, finger millet, fox tail millet and others as well as pulses are to be included in addition to rice and wheat to address the issues related to nutritional security.
10. PDS needs to be strengthened by allotting shops to each village particularly in the border areas under the leadership of retired military and BSF personnel. In tribal areas, all the commodities including medicines should be made available in the PDS shops.

Proceedings of 6th Regional Committee Meeting of the IAUA on Agricultural Policies for Food Security

(February 20-21, 2016)

PRELUDE

The IAUA 6th Regional Committee meeting on Agricultural Policies for Food Security was held at University of Agricultural Sciences, Dharwad on 20th and 21st February, 2016. This event was organized by University of Agricultural Sciences, Dharwad under the aegis of Indian Agricultural Universities Association (IAUA). IAUA is a registered society and 66 Agricultural Universities in the country including five Deemed Universities (IARI, New Delhi; IVRI, Izat nagar; NDRI, Karnal; CIFE, Mumbai and SHIAT, Allahabad) and two Central Universities (CAU, Imphal and BHU, Varanasi) are its members. Faculty wise, the members include 42 Agricultural Universities, six Horticultural Universities, 15 Veterinary and Animal Science Universities and three Fisheries Sciences Universities. Accordingly, the invitees to the Regional Committee meeting represented the Vice Chancellors, Deans and Directors of SAUs. The main objective of the Regional Committee meeting was to promote agricultural research, education and extension in the universities in respective states and thereby giving more emphasis on agricultural policies for food security, which also included nutritional and economic security. Hence, Agricultural Universities have a greater role to play in attaining food security at local, regional, state and national level.

DAY 1 (20-2-2016)

INAUGURAL SESSION OF THE 6th REGIONAL COMMITTEE MEETING OF IAUA HELD AT UAS, DHARWAD ON 20th FEBRUARY, 2016

THEME: AGRICULTURAL POLICIES FOR FOOD SECURITY

Dr. Varshneya, President, IAUA chaired the Inaugural Session.

Dr. D.P. Biradar, Vice Chancellor, UAS, Dharwad, Dr. J.V. Goud, the Former Vice-Chancellor of UAS, Dharwad, Dr. K.S. Khokar, Vice-President, IAUA, Dr. R.P. Singh, Executive Secretary, IAUA and Dr. B.M. Khadi, Organising Secretary, UAS, Dharwad were present on the dias.

Dr. D.P. Biradar, Vice Chancellor, University of Agricultural Sciences, Dharwad welcomed all the dignitaries on the dias, VCs, Officers, HODs and faculty of UAS, Dharwad. He said the next two days would be more meaningful because the theme of the meeting was Agriculture Policies for Food Security. He also said that major focus was on food security, which also included nutritional and economic security, and therefore Agricultural Universities have a greater role to play in attaining food security. This meeting shall crystallize the thoughts, which will be in the form of the policy recommendations through IAUA to the Central government or to other agencies for recommendations.

The meeting was inaugurated by lighting the lamp by the dignitaries on the dias and a video on KrishiMela, a mega event at UAS, Dharwad was released by Dr. Varshneya, President, IAUA and a booklet on Research Highlights 2014-15 of UAS, Dharwad was released by Dr. J.V. Goud, the Former Vice-Chancellor of UAS, Dharwad.

Dr. R.P. Singh, Executive Secretary, IAUA in his introductory remarks said that policies for food security is a burning issue because in Agriculture not many genuine policies have been categorized by the Central Government. These policies should start from bottom to top approach starting from the farmers. The policies should be in the first instance in the regional level where we are not focusing and then only we can think of food security. He also reiterated that food security also includes nutritional

and economic security as indicated by Dr. D.P. Biradar. He insisted the food security should be starting from the farmers with the cropping system approach highlighting what type of crops in policies should be taken-up at various stages and in various seasons. Another aspect of food security is that it should be taken-up with the farming system approach. Farmers need to focus more on horticulture and vegetable crops, floriculture, medicinal plants and species apart from regular food crops. Another major issue is that we should include livestock species and other components along with the crops. Many of the landless farmers working with agriculture should focus on the peri-urban agricultural systems like value addition, etc. Marketing system has to be improved because farmers are not getting a better price and we must give more emphasis on agriculture policies as to how the marketing would help the farmers to get at least 60-70% of their production and this has been one of the issues related to marketing system. Another issue is the rural financing system, which has been very poor till date and that is how farmers have landed up in disastrous situations. The farmers are not accessible to banks and is a cumbersome process in obtaining loans from banks and as such are forced to take loans from the rural money lenders on a very high rate of interest. Some policies of the Government have to be such that the farmers do not get into unprecedented situations. According to the system and environment, the policies should be much more flexible in dry land areas than rainfed and irrigated areas. Therefore, to address this topic, we really need some inputs, some guidelines and some recommendations so that these can be passed on to the ICAR, Ministry of Agriculture and State Ministries of Agriculture, so that our system should become more viable and visible.

Special remarks on the theme was made by Dr. K.S. Khokar, Vice-President, IAUA and Vice Chancellor, CCSHAU, Hisar.

Particularly this Regional Committee choose this theme rightly since the views of the body like IAUA would matter either by the planners in Ministry or ICAR. Of late, ICAR has been decentralising some of the themes to be given to IAUA, so that they have to deliberate and come out with certain recommendations.

In the colonial system, the focus was only on avoidance of famines and particularly putting the fertile land to commercial crops so that raw materials for the industries were available to Britishers. Other than that nothing major was done.

In 1950s, we had only 50 million tonnes of food grains. At that time Sri. C. Subramaniam was the Union Minister of Agriculture. In 1965-66, 1966-67 we imported about 10 million tonnes of food grains in one year followed by 11 million tonnes next year. At that time, Mr. Lendon Johnson was the President of USA and he declared that India should be taught a lesson and stopped the supply of food grains.

Dr. Khokar narrated how the Indian government promoted establishment of Agricultural Universities all over the country under land grant system resulting in increased food production to 145 million tonnes and then emphasis was shifted from production to quality. He also said that any policy to be implemented should happen at grass root level.

Address by the Guest of Honour Dr. J. V. Goud

Indian agriculture has come a long way. India is a traditionally agriculture country and most of the production comes from agriculture. But due to various reasons, the production in agriculture was not commensurate with the area and efforts of the people. In the 1960s the situation in this country was very bad.

If late Prime Minister Indira Gandhi would not have made that strong decision of not importing food from any other country, we would not have produced enough food for our own country by ourselves. She had a meeting with the then most dynamic leader Agriculture Minister C. Subramaniam and his officers and told that we have to produce sufficient food. This was a big challenge to our Agriculture Ministry, officers and scientists of our country.

Fortunately, at that time Norman Borlaug had identified Mexican dwarf wheat Sonara-63, Sonara-64, Lerma Roja having high response to chemical fertilizers and produced at least 3 to 4 times rotationally at that time.

Dr. M.S. Swaminathan was the Head of the Department at IARI who carried out to produce large quantity of seeds of Lerma Roja and Sonara-64. The entire scenario in the country changed within 3-4 years. Other landmark developments were development of Hybrid maize, hybrid sorghum, hybrid bajra and sunflower.

Thus, the food production, which was 51 million tonnes in 1947-48 grew to 150 million tonnes, three times, in a matter of just few years (1963-64 to 1968-69).

Late Prime Minister Indira Gandhi was really very happy and she challenged the conscious of people of the country who rose to the occasion. From that time onwards, the scientists concerned have produced 265 million tonnes of food grains bringing in self-sufficiency and also exported food grains to other countries. But now there has been a mismatch in production with that of population growth for which every one of us is responsible.

Along with the green revolution there has been the White revolution with the milk production increasing to 137 million tonnes, the vegetables and fruits have also increased to 250-260 million tonnes and also the fish production.

Food security, it is the policy of our Government to see that every individual is fed properly. But then comes the purchasing ability of people. Even if it is available, they are not in a position to purchase. To help this, many governments have launched many welfare programmes and subsidies to distribute.

The food is not just cereals alone but includes pulses, vegetables, fruits, milk, fish, etc. That also has to be commensurately developed to meet the needs of our population. And above all, our economic growth of the people should be such that everybody should be able to purchase the food.

The percentage of the hungry people of China has come down to 5%. Whereas, in India we still have 35% or more. Is this situation a failure of our policies or is it wrong policies? All of us need to examine the situation. It is the motivation that is required to bridge this gap. And also lack of inputs, finance, marketing facilities and also food spoilage in the storage to the extent of 25-30%.

President Dr. M.C. Varshneya, President, IAUA wished to give a message to the Government of Karnataka or Government of India that if a policy is to be developed on food security, there cannot be a better seat than Dharwad Agriculture University.

He applauded UAS, Dharwad for its achievements in various fields especially for securing maximum JRF awards.

He also complimented regarding seed village concept model of UAS, Dharwad which has spread all over the country. He said that he has also introduced the same concept in Anand Agricultural University.

While complimenting the Vice Chancellor Dr. D.P. Biradar said that seed village concept has been accepted by whole nation and the National Agricultural Research System. Seed replacement rate in different crops is now improving but in crops like groundnut, gram the seed replacement rate is still low. Farmer is still using his own stored seed and it is not a bad habit rather, it is a good habit that he was always storing some of his produce as seed and then remaining he was marketing and utilising for the domestic purpose.

The productivity of farmer seed can also be increased by seed priming, seed pelleting and seed invigorating techniques. He referred to seed quality, seed integration by which the stored seed of the farmer can also be rejuvenated and its productivity can be increased. He requested all for taking up some research on this aspect so that stored seed of the farmer can be improved.

He said food security of India meant to provide food and nutritional security to whole population of the country, especially children, women, aged persons and weaker sections of the society by ensuring availability in adequate quantity and quality food at affordable prices to people and live a life with dignity and self-respect. Also it should encompass exigencies such as war, security threat, drought, flood etc. If we see the today's background all of you must be aware that our GDP of the country has reached to US \$2000 billion.

Our population has reached to 124 crores and projected population for 2020 is around 135 crores. Agriculture production reached to 264.04 million tonne. But last year rainfall was not well distributed and therefore our food production declined. It has fallen from 264 million to 255 million tonne and again this year bad rainfall in Maharashtra and in many parts of the country and has led to a decline in food production by 0.6% again. And our today's food production is around 255 million tonne.

He said that India is having 37 million tonne storage capacity in Government Sector, it takes on rent 23 million tonne capacity thus making it 60 million tonne, while 30 million tonne remain with the private sector. Government of India procures around 30% of production or around 72 million tonne. Thus, sometime food grain is staked in open and is getting spoilt by rodent and other exigencies. It is because of

this that Supreme Court, in 2012, commented why this food grain should not be distributed amongst poor people free of cost.

He said that more storage capacity should be developed on scientific basis. Now, Government of India has also made a scheme to finance construction of more warehouses. Similarly, warehousing storage receipt is also treated as a negotiable instrument.

He further stated that in 2012, GOI presented a scheme to distribute rice at Rs. 3/- per kg, wheat at Rs. 2/- per kg and coarse grains at Rs. 1/- per kg. Thus, giving 35 kg food grains per family per month through PDS. However, some States gave 25 kg and others 20 kg food grains per family per month. In case 50% of the rural population and 25% of the urban population is considered as poor, then we will need around 51 million tonne food grain for distribution through PDS.

He also talked about the cold chain storage system by PPP mode to store perishables in the country. The Govt. is giving loan to the farmers for construction of godowns, cold storages and cold chains.

Therefore, he requested the august body to discuss the issues threadbare and come out with major policy recommendations to the government of India.

Dr. B. M. Khadi, Director of Education, UAS, Dharwad and Organising Secretary, extended vote of thanks.

GLIMPSES OF 6TH REGIONAL COMMITTEE MEETING OF IAUA

INAUGURAL SESSION (20-2-2016)



TECHNICAL SESSION - I

- TOPIC** : **Public distribution system and supply of diversified food items**
- CHAIRMAN** : Dr. K.S. Khokar
Vice-Chancellor, CCSHAU, Hisar
- SPEAKER** : Dr. H. Shivanna
Vice-Chancellor, UAS, Bengaluru
- RAPPORTEURS** : Dr. B.S. Janagoudar
Director of Research, UAS, Dharwad
Dr. K.V. Natikar
Associate Director of Extension
Directorate of Extension UAS, Dharwad
- PANELISTS** : 1. Dr. B.M.C. Reddy
Vice-Chancellor, Dr.YSRHU,
Venkataramannagudem (AP)
2. Dr. R.C. Srivastava
Vice-Chancellor, RAU, Pusa, Samastipur
3. Dr. P. M. Salimath
Vice-Chancellor, UAS, Raichur

As per the World Bank definition (1986) Food security means "Access by all people at all times enough food for an active, healthy life. Its essential elements are the availability of food and the ability to acquire it".

Today, India is facing two types of food insecurity viz., Temporary and Cyclical/seasonal food insecurity. The causes for food insecurity in India are Chronic poverty, Low agricultural productivity, Change in climatic conditions, High rates of population growth, Civil conflicts, Poor infrastructure, Ecological constraints, Inappropriate

economic policies, Limited arable land, Rising share of high value agricultural commodities. To overcome the food insecurity, the GOI has initiated Public Distribution System (PDS), Targetted Public Distribution System (TPDS), Annapurna and Anna Bhagya, Ksheera Bhagya Scheme etc., implemented through National Food Security Mission (NFSM).

Following points are to be taken care to attain food security

- ❖ Loss of food items in the city areas in functions are to be avoided.
- ❖ Avoid mis-use of ration cards
- ❖ Supply of quality food grains by way of constructing the good storage facilities
- ❖ Higher transportation cost be avoided
- ❖ Malpractice in distribution be stopped
- ❖ Providing of loans to farmers for having their own storage structures
- ❖ Area under food grains, pulses and millets to be increased
- ❖ Production of good quality seeds by adopting Seed Village Concept
- ❖ Village cold chain system to be adopted for smart village development

Finally, the speaker concluded that

- 1) The PDS should be fine tuned in a stabilized manner for proper distribution of food items.
- 2) In PDS system millets, likes sorghum, pearl millet, finger millet, fox tail millet and others as well as pulses are to be included in addition to rice and wheat to meet the nutritional security.

PANELISTS OPINION

1. Dr. B. M. C. Reddy, VC, Dr. YSRHU, Venkataramannagudem (AP)

- ❖ Govt. should also concentrate on addressing nutritional security issues besides food security as is being addressed now.
- ❖ Introduce fruits, vegetables and milk in the mid-day-meals program
- ❖ Need to promote kitchen garden concept in the village
- ❖ Need to bring awareness about health benefits of locally grown horticultural crops.

2. Dr. R. C. Srivastava, VC, RAU, Pusa, Samastipur

- ❖ Identify the high productive area – produce – procure – process it – store at Panchayat level and distribute to the villagers. This saves energy as well as ensures good quality seeds of high nutritional value to take care of poor quality supply of food items by PDS.
- ❖ Importance to be given for growing millets with value addition and made palatable.
- ❖ Universities should start producing good quality seeds at village level and then procure, process and distribute to people at panchayat level.
- ❖ Distribution of millets, cereals, pulses through PDS, may be initiated

3. Dr. P. M. Salimath, VC, UAS, Raichur

- ❖ The distribution of food grains after procurement started since colonial times in India. By critically looking into the limitations of the existing systems like PDS, TPDS and undertaking research on the issue may improve the existing system.
- ❖ Strict monitoring of the loopholes in the existing PDS would help to improve the efficiency.

- ❖ Programmes to create awareness about the nutritional importance of millets have to be thought of to ensure the preference of masses for these coarse cereals when they are to be introduced in the PDS.
- ❖ A thorough exercise has to be made to fix the prices of commodities being distributed through PDS vis-à-vis the remunerative prices that need to be given to the farmers and the consumers who buy the commodities in the open market.

Dr. C. Vasudevappa, Vice-Chancellor, University of Agricultural and Horticultural Sciences, Shivamogga opined that milk and eggs are to be introduced in PDS distribution for nutritional security.

The session ended with vote of thanks by the Chairman.



Technical Session I

TECHNICAL SESSION - II

TOPIC-1 : **Status of malnutrition among weaker section and measures to mitigate them**

TOPIC-2 : **Food access and food security issues**

CHAIRMAN : Dr. C. Vasudevappa
Vice-Chancellor, UAHS, Shivamogga

SPEAKER-1 : Dr. B. M. C. Reddy
Vice Chancellor
Dr.YSRHU, Tadepallgudem (A.P.)

SPEAKER-2 : Dr. P. M. Salimath
Vice Chancellor, UAS, Raichur

RAPPORTEURS : 1. Dr. R. S. Giraddi
Dean (Agri), AC, Dharwad
2. Dr. S. L. Madiwalar
ADR (HQ), UAS, Dharwad

PANELISTS : 1. Dr. D. L. Maheshwar
Vice-Chancellor, UHS, Bagalkot
2. Dr. N.V. Naidu
Director of Research, ANGRAU, Guntur

The Chairman in his opening remarks stressed the need for addressing malnutrition and measures to mitigate it. He quoted the example of China wherein population suffering from malnutrition has come down to 5% as against 30% in India. He stressed that nutritional security is more important than food security. There were two speakers. One of them Dr. B.M.C.Reddy, Vice-Chancellor, YSRHU, Tadepallgudem spoke on the “**Status of malnutrition among weaker sections and measures to mitigate them**”. He gave an overview of malnutrition in the world and in India. Exhaustive information on various issues like precise meaning of malnutrition, constituents of malnutrition, high-risk groups, causes of malnutrition, etc., was given. At this juncture, he mentioned that current surplus in food grain production is unreal istic and illusory considering the per capita availability of food grains (209 kg per annum) as against actual need (300 kg per annum). Detailed account of measures to mitigate hunger and malnutrition was also narrated. Based

on presentation and discussions, following points with policy relevance emerged.

- Food based approach to mitigate malnutrition leading to diseases needs to be promoted by showcasing examples of success stories (millets, leafy vegetable consumption, etc.) instead of drug based approach, where more than 125 million rupees is being spent on purchase of drugs.
- Female emancipation and economic empowerment through horticultural, animal husbandry and fisheries activities should receive greater attention.
- Measures taken by Government to mitigate malnutrition specially multisectoral approach, direct and specific interventions need to be continued and mechanism of effective dissemination of these programmes to end users be strengthened.
- Integration of nutrition specific interventions in other programmes are to be encouraged.



Technical Session II

- Research support from International Agricultural Research Institutes in the fight against malnutrition and hunger to be increased.
- Under utilized fruits and vegetables which are rich in nutrients and minerals, need to be promoted.
- Kitchen garden concept is to be promoted in developing countries.

Second speaker Dr. P. M. Salimath, Vice-Chancellor, UAS, Raichur delivered speech on **“Food access and security issues”**. He gave detailed account of components of food security, availability of food grains at national level, annual growth rate in food grain production and food management. Some interesting points were highlighted through critical analysis of quantitative data. For example, over the years, quantum jump in the yields was noticed only in case of wheat and rice but not in other crops. Another important point he made was decline in the food grain yield acceleration despite increase in the total food grain production. From the presentation and discussions, following points with policy relevance emerged.

- Per capita availability of pulses needs to be increased as it is half the quantity suggested by WHO.
- Impact of ongoing schemes of Government addressing food security needs to be reassessed.
- Establishment of processing industries at village level is to be encouraged.
- Minor pulses which are equally nutritive and highly drought tolerant needs greater emphasis.
- Need to address adequately the declining annual growth rate in food grain production.
- Growing of under utilized minor crops with high nutritional value with useful traits should be made aware to the farmers.
- Cropping system/Farming system approach which facilitate inclusion of different crop and animal components needs to be promoted.

TECHNICAL SESSION III

- TOPIC-1** : Market reforms and food security policies
- TOPIC-2** : Policies for demand driven agriculture: Need for prioritizing the research agenda
- CHAIRMAN** : Dr. K. K. Katoch
Vice Chancellor, CSKHPKV, Palampur
- SPEAKER-1** : Dr. D. L. Maheshwar
Vice Chancellor, UHS, Baglkot
- SPEAKER-2** : Dr. Ashok A. Patil
Vice Chancellor, SDAU, Sardar Krishinagar
- RAPORTEURS** : 1) Dr. C. S. Hunshal
Dean (PG Studies), UAS, Dharwad
2) Dr. Shailaja D. Naik
Dean (HSc.), RHSC, Dharwad
- PANELISTS** : 1) Dr. K. P. Vishwanatha
Vice-Chancellor, MPKV, Rahuri.
2) Dr. V. M. Ramani
Principal & Dean, Dairy Science College, Amreli, Gujarat

At the outset, Dr. K. K. Katoch welcomed all the delegates and briefed about the market reforms and food security policies. He highlighted on the importance of agriculture, characterization and degree of trade dependency. Market reforms can be implemented at three segments viz., Globalization Impact- establishment of WTO and agreement on agriculture, liberalization of economy and impact on agriculture and food security; Technical Issues – like climate change and its impact on food production and prices; and Social Issues – prevalence of hunger and poverty, co-existence with high levels of food stocks, public distribution system (PDS), 'right to food' campaign and natural food security bill. Infact, there are three important components of food security i.e., availability, access and absorption of food.

Under the banner of need for prioritizing research agenda, it was highlighted on new solutions to reduce food and nutritional insecurity by stagnating food productivity and production, unconnected or fragmented chains and under investment

in agricultural research and development. Focus need to be given on long term structural measures that promote availability, accessibility and utility of nutritious safe food, specially for vulnerable groups (infants, children, pregnant and lactating women, senior citizens and differently abled children). He stressed on policy dialogues which need to be conducted with the wide range of stake holders for privatization of demand driven agricultural research, since agriculture is a key to economic development. Since there is no agricultural research policy, this is the time to formulate and implement a policy at national level to increase the food productivity with special focus on addressing the rural poverty, climate change, nutrition, export, maintenance and storage of food and food shortage.

Dr. D. L. Maheshwar, Vice Chancellor, UHS, Bagalkot deliberated on **Market Reforms and Food Security Policies**. India is leading in food crops, milk and horticultural crops but is yet to adopt the food policies and reforms. Therefore it is necessary to work from food shortages and import to self-sufficiency and exports; from subsistence farming to intensive and technology led cultivation; today, India is the front ranking producer of many crops in the world; was possible through the green, white, blue and yellow revolutions. It was highlighted on area, production and yield of food grains in 2013-14, India's rank in world in relation to productivity of different crops; food grain production over the years; rise-fall in agriculture growth; demand driven by population growth and land scarcity. Further deliberated on challenges of agricultural marketing; phases of reforms – pre - liberalization, post - liberalization and 2003 onwards.

A greater stress was given on vital areas of reforms as per model APMC act 2003: Establishment of different market, encourage e-trading, and point levy of market fee. Various reforms initiated- alternative marketing channels for farm produce, Negotiable Warehouse Receipts System passed by the Parliament, Enactment of an Integrated Food Law to promote quality and single window regulatory system, and futures trading/ electronic spot trading in agricultural commodities.

Implementation of reforms through model APMC act: Setting up of special commodity markets, PPP in management and extension activities/ Promotion of e-trading, Provisions for Contract Farming and Establishment of Private markets / Farmer – consumer markets / Direct marketing etc. Market liberalization for horticulture crops, fodder, milk, etc.

President IAUA Dr. Varshneya shared the success story of an Engineering student who developed 'Farmers Producer Company' and succeeded in expanding such units up to 1000 that generated employment for a large cluster.

Dr. R. P. Singh, Executive Secretary, IAUA expressed that some of the Departmental stores initiated their business with the concept to purchase fruits and vegetables directly from the farmers. But later, it failed because of interference of middlemen.

Recommendations

- The Market reforms initiated by Government of Karnataka (GoK) need to be extended to other states of the country. GoK model is ideal at national level because of e-trading with ICT, PPP market mode
- Implementation of reforms through model APMC act: Setting up of special commodity markets, PPP in management and extension activities/ Promotion of e-trading, Provisions for Contract Farming and Establishment of Private markets / Farmer – consumer markets / Direct marketing etc.
- Develop Market policies for fodder, milk, wool, livestock, fish and horticultural crops and preventing distress sale
- Re-look at the research opportunities in marketing aspects of commodities produce.
- Develop reforms to train the NGOs on post-harvest marketing.
- Strengthening of cold storage systems and establishment at village level.
- MSP to be reviewed regularly for food and nutritional security.
- Newer form of PDS including nutritional products success stories of each University should be documented.



Technical Session III

Day 2 (21-2-2016)

TECHNICAL SESSION – IV

TOPIC : **Convergence of food security policies**

CHAIRMAN : Dr. R. R. Hanchinal
Chairperson, PPV & FRA, New Delhi

SPEAKER : Dr. Vasudevappa
Vice-Chancellor, UAHS, Shivamogga

RAPPORTEURS : 1. Dr V.I. Benagi
Director of Extension, UAS, Dharwad
2. Dr. M. Motebennur
Librarian, UAS, Dharwad

PANELISTS : 1. Dr. K.K. Katoch
Vice-Chancellor, CSKHPKV, Palampur
2. Prof. Baskaran Manimaran
Vice-Chancellor, TNFU, Nagapattinam

Ancestors protected ITK and medicinal plants, since 100 years where as we could not protect many varieties and because of this we are lacking nutritional, food and health security.

Many policies are bits and pieces and hence there is a need for convergence. Worst affected groups are landless labour, traditional artisans and petty self employed people. Further, 800 million people go hungry, among them 170 million children, 70% of them belong to Asian continent. 30 lakh people died in Bengal in the year 1943 because of food and water scarcity. Food security concept should include food produced and distribution which should be environmentally friendly and sustainable. 251.12 million tons were produced during 2014-15, it is expected to produce 291 million tonne during 2020 and 342 million tonne during 2030. Restoring soil fertility is a major issue in National Food Security Mission. Pulse, milk, and milk products, fruits and vegetables production need to be increased.

Micro credit and Micro finance in agriculture are basic in attaining food security. In our country 6488 cold storage units have capacity of 30.75 MMT and all these are not functioning due to inefficient power supply. So there is a need for utilization of solar power. Two billion people suffer from micro nutrient deficiency and children up to 10 years need immediate attention. There is a need for convergence in traditional concept, socio demographic concept and politico developmental concept.

Poverty is the worst form of violence – Mahatama Gandhi

Panelists opinion

1. Dr. K.K. Katoch, Vice-Chancellor, CSKHPKV, Palampur

There is a need for achieving food security at all levels :

- ❖ IFS module for nutritional security
- ❖ Resource conservation
- ❖ Soil Health Care, Soil Health Card and its use
- ❖ Climate change, Input cost
- ❖ Zero budget farming
- ❖ Protected cultivation

2. Prof. Baskaran Manimaran, Vice-Chancellor, TNFU, Nagapattinam

- ❖ Sixty percent of the population depends on Agriculture, for attaining food security Agricultural Research, Education and Transfer of Technology is important.
- ❖ Ten million tonne of fish production of India stands second in the world after China. Chinese production is 5 times higher than India. Hence, adoption of technology is important for our country. In India Andhra Pradesh is first to adopt technology in aquaculture. Establishment of demonstration unit in every research station is required. Plant based proteins is required for nutritional security of poor people. Inclusion of locally available material and its inclusion in feed component for fish meals. Consumption of sea weed which has huge nutritional

value is very popular in Japan. Omega 3 which is rich in fish should be used for mental development of child.

- ❖ Balanced Nutritional meal scheme should be introduced.
- ❖ Universities can work out marketing studies and frame research and technology.

3. Dr. R. R. Hanchinal – Remarks

- Micro Nutrients should reach to the unreached.
- Soil Health care is important for all revaluation
- Value addition without losing of nutrients
- Market linkage aspects



Technical Session IV

TECHNICAL SESSION –V (PLENARY SESSION)

TOPIC : **Development of policy perspective on food security**

CHAIRMAN : Dr. M. C. Varshneya
President, IAUA, New Delhi

CO-CHAIRMAN : Dr. D.P. Biradar
Vice Chancellor, UAS, Dharwad

RAPPORTEURS : 1. Dr. R.A. Balikai
Dean (Agri), A.C., Hanumanamatti
2. Dr. N.K. Biradarpatil
Dean (Agri), A.C., Vijayapur

PANELISTS : Dr. R.C. Srivastava
Vice Chancellor, RAU, Pusa, Samastipur

Dr. R. R. Hanchinal, Chairperson, PPV & FRA, New Delhi presented about the role of NARS in registration of farmers and public sector varieties. He explained about the programmes (Training, Awareness, Capacity Building) conducted year wise wherein maximum of 361 programmes were arranged during 2014-15. He narrated details of farmers variety applications received and IPR certificates issued. While explaining the crop wise status of the notified varieties from 1992 to 2015, he told that, in agricultural crops only 17.5% and in horticultural crops about 9.3% registration had been done. He also highlighted about the crop varieties notified and applications received for PVP-entitlement (IPR), share of public and private sector institutions and farmers in filing agricultural and horticultural crop varieties for IPR and IPR issued, Notification of ICAR institute/SAUs as centres under Section 41, Statutory function of the authority & co-ordination with SAUs, awards, rewards and recognitions and linkages with institutions for promotion of farmers rights. He requested all the Vice Chancellors to go for registration of varieties released / already notified ones at PPV & FRA.

The panelist, Dr. R.C. Srivastava, Vice Chancellor, RAU, Pusa narrated the agricultural scenario, wherein he said that, 60% farmers are above 50 years of age and 84% holdings are small and marginal in which 38% holdings are below 0.5 ha. Thus, giving any technology becomes difficult. Further, 52% people dependent upon agriculture are generating just 18% of GDP and growing @ 1-4% depending upon monsoon. While explaining the way ahead and targets, he informed that, there is a

reduction in population dependent upon agriculture. Our goal should be to bring it to 30% in next 20 years and 20% in next 10 years thereafter. Presently the cultivated area is 140 million ha, out of which area under food grains is 105 million ha. By target productivity for different eco-regions/districts, our food requirements could be met from a smaller area provided we make sufficient investment. From 90 million ha we can get food grains of 395 million tonne. For this, advanced modelling using distributed computing and system integration technologies is required.

Dr. K. P. Vishwanath, Vice Chancellor, MPKV, Rahuri said that, corporate farming or co-operative farming is possible in only small pockets and not on large scale. Dr. S. P. Singh opined that corporate farming is not possible under Indian conditions. Dr. D. P. Biradar, Vice Chancellor, U.A.S., Dharwad said that there is lot of variation in the productivity levels between the states.

Dr. M. C. Varshneya, President, IAUA, New Delhi remarked that, co-operative farming has been successful with respect to Gujarat Milk Federation. In Maharashtra, only partial success has been noticed for co-operative farming in case of sugarcane. He also opined that, PDS needs to be strengthened by allotting shops to each village particularly in the border areas under the leadership of retired military and BSF personnel. In tribal areas, all the commodities including medicines should be made available in the PDS shops. He was more concerned about the thin attendance of Vice Chancellors. IAUA will facilitate two days programme supported by PPV & FR at New Delhi during April-May this year.

All the session proceedings were read by the rapporteurs of respective sessions. The meeting ended with vote of thanks by Dr. B. M. Khadi, Director of Education, U.A.S., Dharwad.



Technical Session V

APPROVED TECHNICAL PROGRAMME

6th Regional Meeting of IAUA scheduled at UAS Dharwad

Date: 20-21st Feb., 2016

THEME: “Agricultural policies for food security”

Session-wise Programme:

Day-1

9.00 am to 10.00 am Registration

Inaugural Session

Time	Details
10.00 am to 10.05 am	Invocation
10.05 am to 10.20 am	Welcome address: Vice-Chancellor, UAS, Dharwad
10.20 am to 10.30 am	Introductory remarks: Secretary General, IAUA
10.30 am to 10.40 am	Address by Guest of Honour: DDG (Edn)
10.40 am to 11.00 am	Presidential address : President, IAUA
11.00 am to 11.15 am	Lighting the lamp and Inaugural address by Chief Guest Hon'ble Minister for Agriculture, Government of Karnataka/H.E. the Governor of Karnataka
11.15 am to 11.30 am	Vote of thanks: Organizing Secretary
11.30 am to 11.45 am	Tea Break

Technical Session – I

11.45 am to 01.15 pm

Chairman	Dr Rajendra B. Lal Vice-Chancellor, SHIATS, Allahabad
Co-Chairman	1. Dr S.K. Patil Vice-Chancellor, IGKV, Raipur 2. Dr R.G. Dani Vice-Chancellor, DPKV, Akola

Speaker	Dr. P. Rajendran Vice-Chancellor, KAU, Thrissur Food security-convergence of views and government policies
Speaker	Dr. H. Shivanna Vice-Chancellor UAS, Bangalore Public distribution system and supply of diversified food items
Rapporteurs	1. Dr. S. L. Madiwalar ADR (HQ), UAS, Dharwad 2. Dr.K.V.Natkar ADE, UAS, Dharwad
Panelists	1. Dr. A. K. P. Singh Vice-Chancellor, RAU, Pusa 2. Maj. Gen. Shrikant LLRUVAS, SM, VSM, Hisar 3. Dr. S. Thilagar TNV & ASU, Chennai 4. Dr. B.R. Chippa SKRAU, Bikaner 5. Dr.Moirangthem Premjit Singh CAU, Imphal 6. Dr. S. L. Goswami BUAT, Banda 7. Dr. S. L. Goswami Vice-Chancellor, CSAUA&T, Kanpur 8. Dr. Manmohan Singh, IAS SVVU, Tirupati 9. Dr. Umesh K. Mishra CKV, Raipur 10. Dr. S.N.S. Parmar Vice-Chancellor, NDVSU, Jabalpur 11. Shri C. Partha Sarathi, IAS Vice-Chancellor, SKLTSHU Rajendranagar

01.15 pm to 02.00 pm **LUNCH**

Technical Session – II

02.00 pm to 03.30 pm

Chairman	Dr. K. M. Bujarbaruah Vice-Chancellor, AAU, Jorhat
Co-Chairman	1. Dr. A.R. Pathak Vice-Chancellor, JAU, Junagadh 2. Dr. Trilochan Mahapatra Director, IARI, New Delhi
Speaker	Dr. B.M.C. Reddy Vice-Chancellor, Dr. YSRHU, Tadepalligudem Status of malnutrition among weaker section and measures to mitigate them
Speaker	Dr. P. M. Salimath Vice-Chancellor, UAS, Raichur Food Access and Food Security Issues
Rapporteurs	1. Dr. B.S. Janagoudar, Director of Research, UAS, Dharwad 2. Dr. R.S. Giraddi Dean (Agri), AC, Dharwad
Panelists	1. Dr. Mangla Rai GBPUA&T, Pantnagar 2. Dr. Gopal Krishna CIFE, Mumbai 3. Dr. Subarato Biswas, IAS KVASU, Wayanad, Kerala 4. Dr. H.S. Gaur SVBPUAT, Meerut 5. Dr. Manoranjan Kar OUA&T, Bhubaneshwar 6. Prof. A.K. Misra MAFSU, Nagpur 7. Dr. C. Renukaprasad KVAFSU, Bidar

8. Dr. B.Venkateswarlu
VNMKV, Parbhani
9. Prof. R.K.Singh
IVRI, Izatnagar
10. Dr. T. Bhattacharyya,
Vice-Chancellor, Dr.BSKKV, Dapoli
11. Prof B. Madhusoodhana Kurup
Vice-Chancellor, KUFOS, Kochi

03.30 pm to 03.45 pm Tea Break

Technical Session - III

03.45 pm to 05.15 pm

Chairman	Dr. A.K. Srivastava Vice-Chancellor, NDRI, Karnal
Co-Chairman	<ol style="list-style-type: none"> 1. Dr. N.C. Patel Vice-Chancellor, AAU, Anand 2. Prof A.K. Gahlot Vice-Chancellor, RUVAS, Bikaner
Speaker	Dr. D. L. Maheshwar Vice-Chancellor, UHS, Bagalkot

Market reforms and food security policies

Speaker	Dr. Ashok A. Patel Vice-Chancellor, SDAU, Sardarkrushinagar
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Policies for demand driven agriculture : Need for prioritising the research agenda

Rapporteurs	<ol style="list-style-type: none"> 1. Dr. C.S.Hunshal Dean (PGS), UAS, Dharwad 2. Dr.Shailaja D.Naik Dean (H.Sc.), RHSC, Dharwad
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Panelists

1. Dr. K.P. Vishwanatha
Vice-Chancellor, MPKV, Rahuri
 2. Dr. George John, BAU, Ranchi
 3. Prof. Asit Kumar Chakravarti
BCKVV, Mohanpur
 4. Dr. K. Ramasamy
Vice-Chancellor, TNAU, Coimbatore
 5. Dr. C.J.Dangaria
NAU, Navsari
 6. Dr. A.K.Singh
RVSKVV, Gwalior
 7. Dr. Nazeer Ahmed
SKUAS&T, Srinagar
 8. Dr. A. Padmaraju
ANGRAU, Hyderabad
 9. Prof. P.K.Sharma
SKUAST(J), Jammu
 10. Dr. A.S.Nanda
GADVASU, Ludhiana
 11. Dr. Arun Kumar
BAU, Sabour
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Day-2

Technical Session - IV

10.00 am to 11.00 am

Chairman Dr. K.S. Khokhar
Vice-Chancellor, CCSHAU, Hisar

Co-Chairman 1. Dr B.S. Dhillon
Vice-Chancellor, PAU, Ludhiana
2. Dr Mathew Prasad
Vice-Chancellor, UHF, Garhwal

Speaker Dr. S.L.Mehta
Former Vice-Chancellor, MPUAT, Udaipur

Role of farm universities in enhancing food and nutritional securities

Speaker Dr. C.Vasudevappa
Vice-Chancellor, UAHS, Shimoga

Convergence of food security policies

Rapporteurs 1. Dr V. I. Benagi, Director of Extension,
UAS,Dharwad

2. Dr. M. Motebennur
Librarian, UAS, Dharwad

Panelists 1. Prof. Purnendu Biswas
WBUAF & S, Kolkata
2. Dr. V. Praveen Rao
PJ TSAU, Hyderabad
3. Prof. P.K. Dashora
Vice-Chancellor, MPUA&T, Udaipur
4. Dr. A.C.Varshney
UP Pt. DDUPCVV, Mathura
5. Shri Hanuman Singh Bhati, IAS,
SKNAU, Jobner

6. Dr. V.S. Thakur
Dr. YSPUH&F, Nauni
7. Dr. K.K.Katoch
CSKHPKV, Palampur
8. Prof. Baskaran Manimaran
TNFU, Nagapattinam
9. Prof. Akhtar Haseeb
NDUAT, Faizabad
10. Dr. Girish Chandra Tripathi
BHU, Varanasi
11. Prof. Debasis Mazumda
UBKV, Coochbehar

11.00 am to 11.15 am **Tea Break**

Session – V (Plenary Session)

11.15 am to 12.00 pm

Chairman	Prof. M.C. Varshneya, President , IAUA
Co-Chairman	<ol style="list-style-type: none"> 1. Dr. V.S. Tomar Vice-Chancellor, JNKV, Jabalpur 2. Dr. D.P. Biradar Vice-Chancellor, UAS, Dharwad
Speaker	Dr. S.N. Puri Former Vice-Chancellor, CAU, Imphal Development of policy perspective on food security
Rapporteurs	<ol style="list-style-type: none"> 1. Dr. R.A. Balikai Dean (Agri.), A.C., H'matti 2. Dr. N.K. Biradar Patil Dean (Agri.), A.C., Vijayapura

12.00 pm to 01.15 pm

Presentation of recommendations of each session

Participation All Vice-Chancellors

01.15 pm to 02.00 pm **LUNCH**

02.00 pm **Departure of Dignitaries**

LIST OF DELEGATES / PARTICIPANTS

Sl.No.	Name & Address
1.	Dr. N. S. Rathore, DDG (Edn), ICAR, New Delhi
2.	Dr. M. C. Varshneya, President, IAUA, New Delhi
3.	Dr. K. S. Khokhar, Vice-Chancellor, CCSHAU, Hisar
4.	Dr. S. K. Patil, Vice-Chancellor, IGKV, Raipur
5.	Dr. K. Ramasamy, Vice-Chancellor, TNAU, Coimbatore
6.	Dr. K. K. Katoch, Vice-Chancellor, CSKHPKV, Palampur
7.	Dr. B. M. C. Reddy, Vice-Chancellor, Dr.YSRHU, Tadepallgudem
8.	Dr. D. P. Biradar, Vice-Chancellor, UAS, Dharwad
9.	Dr. C. Vasudevappa, Vice-Chancellor, UAHS, Shimoga
10.	Dr. D. L. Maheshwar, Vice-Chancellor, UHS, Bagalkot
11.	Prof. Baskaran Manimaran, Vice-Chancellor, TNFU, Nagapattinam
12.	Dr. P. M. Salimath, Vice-Chancellor, UAS, Raichur
13.	Dr. H. Shivanna, Vice-Chancellor UAS, Bangalore
14.	Dr. K. P. Vishwanatha, Vice-Chancellor, MPKV, Rahuri
15.	Dr. R. C. Srivastava, Vice-Chancellor, RAU, Pusa (Samastipur)
16.	Dr. R. P. Singh, Secretary General. IAUA, New Delhi
17.	Dr. N. V. Naidu, Director of Research, ANGRAU on behalf of VC, ANGRAU
18.	Dr. V. M. Ramani, Dean, Faculty of Dairy Science, Amreli, Gujarat

LIST OF COMMITTEES

Sl.No.	Committee	Name
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|----|---------------|---|
| 1. | Organizing | Dr. B. M. Khadi, Director of Education (Organising Secretary)
Sri. B. B. Hosamani, Registrar, UAS, Dharwad |
| 2. | Reception | Dr. V. I. Benagi, Director of Extension, UAS, Dharwad |
| 3. | Programme | Dr. C. S. Hunshal, Dean (PG Studies), UAS, Dharwad |
| 4. | Accommodation | Dr. R. S. Giraddi, Dean (Agri), AC, Dharwad & Transportation |
| 5. | Food | Dr. B. S. Janagoudar, Director of Research, UAS, Dharwad |
| 6. | Finance | Sri. R. B. Hanji, Comptroller & Admn. Officer, UAS, Dharwad |
| 7. | Cultural | Dr. S. K. Gali, Dean (Student Welfare)
Dr. Maltesh Motebennur, Univ. Librarian, UAS, Dharwad |
| 8. | Excursion | Dr. Shailaja D. Naik, Dean (HSc), RHSC, Dharwad |
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Acknowledgement

The University of Agricultural Sciences, Dharwad highly acknowledges the financial support given by IAUA, for conduct of 6th Regional Committee Meeting of the IAUA at the University of Agricultural Sciences, Dharwad-580 005, Karnataka.

Visit of Dignitaries to Hi-Tech Horticulture, Exhibition & Other Departments of UAS, Dharwad

