DIRECTORATE OF RESEARCH Agriculture University, Kota

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Dated: 22/7/16

Proceedings of the first Research Council Meeting of Agriculture University, Kota held on 18th July, 2016 at 02.00 PM at Agricultural Research Station, Ummedganj, Kota

The first Research Council meeting of Agriculture University, Kota was held on 18th July, 2016 in the conference hall of Agricultural Research Station, Ummedganj, Kota under the chairmanship of Prof.G.L. Keshwa, Hon'ble Vice-Chancellor, AU, Kota.

The following members were present:

S. No.	Name	Designation	
1.	Prof. G. L. Keshwa	Hon'ble Vice-Chancellor, AU, Kota and Chairman	Ex-Officio
			Chairman
2.	Dr. I. J. Gulati	Eminent Scientist; Dean, COA, SKRAU, Bikaner Member	
3.	Dr. R. K. Singh	Eminent Scientist, Head, ICAR-IISWC, Research Center, Kota Member	
4.	Dr. I.N.Gupta	Director Extension Education, AU, Kota	Member
5.	Dr. R. K. Singh	Director, PME, AU, Kota	Member
6.	Dr. S. K. Trivedi	Director Education, AU, Kota	Member
7.	Dr. K. N. Ojha	Director HRD, AU, Kota	Member
8.	Dr. M. C. Jain	Director Student's Welfare, AU, Kota	Member
9.	Dr. H. R. Chaudhary	Zonal Director Research, AU, Kota	Member
10.	Dr. (Mrs.) Mamta Tiwari	Assoc. Dir. Ext. & Prof. (Home Science), AU, Kota	Member
11.	Dr, J, M. Dhakar	Assoc. Dir. Seed & Prof. (PBG), AU, Kota	Member
12.	Dr. K. M. Gautam	Prof.(SWC), AU, Kota	Member
13.	Dr. A. K. Jain	Assoc. Prof. (Plant Pathology), AU, Kota	Member
14.	Dr. Mahendra Garg	Assoc. Prof. (Animal Husbandry), KVK, Kota	Member
15.	Dr. V. C. Prahlad	Asstt. Prof. (Forestry), CH&F, Jhalawar	Member
16.	Mrs. Bhawanti jethawani	Registrar, AU, Kota	Special invitee
17.	Dr.(Mrs.) Purva Agarwal	Comptroller, AU, Kota	Special invitee
18.	Dr. Baldev Ram	Asstt. Prof. (Agronomy) & I/c Technical Cell, ARS, Kota	Special invitee
19.	Dr. J. P. Tetarwal	Asstt. Prof. (Agronomy) & Member Technical Cell, ARS, Kota	Special invitee
20.	Dr. R. K. Shivran	O/I MAF ,MAF, Kota	Special invitee
21.	Sh. S. N. Meena	O/I ,ARSS ,Khanpur	Special invitee
22.	Dr. Abhay Dashora	Asstt. Prof. (PBG), ARS, Kota	Special invitee
23.	Dr.Pratap Singh	Director Research, AU, Kota	Secretary

The following officers of Govt. of Rajsthan did not attend the meeting.

- 1. The Director Agriculture, Pant Krishi Bhawan, Jaipur.
- 2. The Director Horticulture, Pant Krishi Bhawan, Jaipur.
- 3. The Chief Conservator of forest, Van Bhawan, Jaipur

However the following members were out of station with prior permission, due to pre-occupied University works:

- 1. Dr. L.K. Dashora, Dean, CH&F, Jhalawar
- 2. Dr. I.B. Maurya, Prof. & head, Dept. of vegetable Science, CH&F Jhalawar
- 3. Dr.S.K. Jain, Professor & Head, Dept. of Post harvest Technology, CH&f Jhalawar
- 4. Dr.Aushutosh Mishra, Professor & Head, Dept. of Floriculture & Landscaping, CH&F Jhalawar

Dr. Pratap Singh, Director Research and Member Secretary, welcomed all the members of Research Council and eminent experts and also introduced the eminent experts Dr. I. J. Gulati, Dean, COA, SKRAU, Bikaner and Dr. R. K. Singh, Head, ICAR-IISWC, Research Center, Kota.

Dr. Pratap Singh, Director Research, presented the salient achievements of Research (2013-16). after creation of Agriculture University, Kota. He informed that during last three years, efforts were made to bring new research projects from different funding agencies. During previous year, university has got sanction of AICRP projects namely Honeybees & Pollinators. During the reporting years (2013-16) five project of RKVY, one project of ATMA and 42 private funded projects were also sanctioned to the university. During this year one volunteer centre on AICRP on Dryland Agriculture from ICAR-CRIDA and forteen RKVY projects also sanctioned to the University. The detailed presentation of varieties developed and released under DOR viz., Pratap Soya 45 (RKS 45) of soybean, Pratap Sugandh 1 (RSK 1091-10-1-1) of Rice, Pratap Urd 1 (KPU 07-08) & Mukundra Urd 2 (KPU 405) of Urdbean, Pratap Alsi 2 (RL 26016), Kota Barani Alsi 3 (RL 29202) & Kota Barani Alsi 4 (RL 10193) of Linseed, Pratap Raj Dhania 1 (RKD 18) of Coriander and Pratap Ganna 1 (CoPK 05191) of Sugarcane. Dr. Singh informed the house that two varieties viz. RKS 113 of Soybean and Kota Rajmash 1 (RKR 1033) of Rajmash, have also, been identified for national release. Last three years (2013-14 to 2015-16) 12857 q seed was produced of which 10720 q was breeder seed and 5130 q was of certified/TL seed. Out of these, university fulfilled the DAC indents and quality seeds were made available to the NGOs & farmers. Dr. Singh also reported the effect of increasing temperature on growth and yield of soybean and wheat. Agro-advisories were provided to the farmers. 52 production and 6 protection technologies were developed by the scientists. Among horticulture, 16 technologies mainly low tunnel in bitter guard and insect-pests & diseases management in vegetables as well as fruit plants, etc. were recommended by ATC Nanata, Kota scientists in collaboration with the ASR scientists. The future research priorities were also presented by the Director research.

Dr. H. R. Chaudhary, Zonal Director Research, Agricultural Research Station, Kota presented the salient achievements of agro-climatic Zone-V. In his presentation, Dr. Chaudhary informed about on-going AICRP & volunteer research projects, research facilities available at the station (Phytosanitary, Honeybee laboratory & Soil and Water testing Laboratory), technologies generated, technologies incorporated in the package of practices, technologies transferred to ATC for field testing, seed production, extension activities and research problems. He also informed about the awards received by the scientists and research publications as well as capacity building programme (workshops/seminar/symposia/conference) attended by the scientists during last 3 years.

Dr. R. K. Shivran, 1/c MAF, Kota presented the land utilization pattern of MAF, breeder seed produced viz., wheat (7725 q), chickpea (949 q), mustard (46 q), pea (27.5 q), coriander (10.8 q), fenugreek (8 q) & soybean (281.7 q) and trainings and field days organized (08). He also informed the house about 800 q additional seed may be produced through creation of 20 ha additional area, fencing and other developmental activities.

Dr. J. M. Dhakar, Assoc. Dir. (Seeds) presented the over view of seed production scenario of university. He also acquainted the house that total nucleus seed production was 646 q. Total 2778 q during kharif and 26668 q seed in rabi were produced by the university. HVC asked to submit the future perspective plan of the university seed sector and also make the plan to take seed production programme at KVK farms by proper monitoring under the direct supervision of Assoc Dir. (seed) and concerned crop breeder and ascertain the seed grading, tagging and testing properly before seed selling to maintain the quality.)

Action to be taken by: Assoc.Dir. (seed)

The Following agenda items were proposed before the house for discussion and approval:

AGENDA ITEM NO. AUK/RC-1/2016/1 AGENDA ITEM NO. AUK/RC-2/2016/2	To restructure the testing fee for soil and water analysis for the agencies: Proposed by ZDR, ARS, Kota Proposal for need based research for the zone IIIB by KVK, Swai Madhopur:Proposed by Director Research	The matter was discussed in detai and finally it was resolved that the testing fee as proposal by ZDR, ARS, Kota for soil and water analysis may be revised and approved. The matter was discussed and it was resolved that KVK, Sawaimadhpur will conduct need based experiments for zone IIIB and scientific technical support will be provided by the scientists of other units especially ARS, Kota as and when required.
AGENDA ITEM NO. AUK/RC-1/2016/3	Proposal for MoU with Regional Station of ICAR-Indian Institute of Soil & Water Conservation, Research Center, Kota. :Proposed by Director Research	The matter was discussed and it was resolved that scientific technical support will be provided by the scientists of ICAR-IISWC, research center,Kota and agriculture university Kota, jointly and a MOU will be signed.

The eminent expert Dr. I. J. Gulati stressed that Rajasthan state have five agriculture universities in different regions, hence to show the worth of university we have to prioritized the research mandate accordingly for the betterment of farming communities in the respective regions. Soil and water conservation will be the major focuse areas in the university jurisdiction dominated by various river flows. He also suggested that university have a MoU with ICAR-IISWC regional station Dadwada, Kota for getting the expertise guidance for the development of problematic and reclamation of ravines. The technologies developed at the university must be feasible and input efficient. Sustainability of soil health is a major issue because we have churned out our soil (physical, chemical as well as biological) properties and need to add organic matters in the soil to build up organic carbon for enhancing higher input efficiency. Resource based agriculture is the need of hour. we have to categorized our research priorities according to the resource availability of the farmers (marginal, small & large) because farmers do not have extra money for more inputs. Hence, pertinent technologies for better adoption and sustainable production. Systems of Rice intensification (SRI) in rice is a better viable technology for soil microbes versus puddling in Rice may disturb soil microbial biomass. Soil microbes directly or indirectly helps in maintaining flavor, anti-oxidant and food quality of the field crops. The soybean crop is a also nitrogen fixer but also harnessing more nutrients from the soil and makes soil sickness due to monocropping. Similar cases have been observed in taramira and sorghum also. Phytosanitary laboratory is an important viable laboratory in the university. Every soil, crop and plant parts must be analyzed for quality parameters for improving food quality and human health. Deterioration in soil health is the major cause of decreasing crop productivity and sustainability. Research prioritizations have to include in these aspects. Quality seed of the field crops will be the best asset and mirror of the university. Production of good quality seed with university brand name make goodwill among the farmers and shows the worth of the university existence. He also gave very good suggestion for micronutrient deficiency curing in standing crop namely zinc, iron, copper and manganese but Kota zone soils are more calcareous in nature. Application of these micronutrients are not available to the plant due to certain reasons . Hence, for improving the efficiency of zinc applied as 0.5 % zinc sulphate with slacked lime and add 1.5-2.0 per cent urea for foliar application and iron applied as ferrous sulphate, add 0.1 per cent citric acid in 0.5 per cent ferrous sulphate for

curing of zinc and iron deficiency in standing crop. He urged upon the scientists also to ponder into microclimate for improved input efficiencies.

Action to be taken: DR/Assoc.Dir.Seed/ZDR

The eminent scientists Dr. R. K. Singh opinioned that for getting funds, recognition, visibility and respect, university must have to initiate new innovations in the research and realistic approach more visible require hard and smart work. Yield gap analysis should be done. The tools for potential production of field crops against abiotic and biotic stresses should be developed. Dr.Singh suggested to formulate research projects as per the research gaps. This university service area has very good runoff harvest potential which was untapped and can be more efficiently utilized through soil conservation and water harvesting technologies for harnessing input use efficiency. The research gaps requires for creative work approach in some different ways so farmers may be more attractive towards eco-friendly technologies which are market orientated and easily feasible. The solutions for field crop problems like stagnation or decline in soybean as well as coriander productivity. He also stressed upon the point of soybean crop failure due to excess or deficit of soil moisture conditions or other reasons. Hence, moisture conservation practices i.e. broad bed furrow (BBF) planting, dead furrow opener and mid season correction measures for soybean may be the next best alternative options for sustaining productivity.

Action to be taken: DR/Assoc.Dir.Seed/ZDR

Dr. V. C. Prahlad, Asstt.prof.. (Agro forestry) stressed out the research the creation of new AICRP on Agro-forestry regular centre at CH&F, Jhalawar and also requested to permit for need based research on agro-forestry at CH&F, Jhalawar. HVC asked him to take initiatives in this regard and submit project proposals under RKVY and other funding agencies. Therefore, technologies must be generated, keeping in view the uncertainty of rainfall and small land holdings in the area. Hence, crop diversification with high value crops must be popularized. He advised to promote alternate crops of soybean in kharif season for ensuring certain returns under adversities of climate. He also suggested to keep in view the research priorities under changing climate and underlined the need to further strengthening of the research extension linkages.

In concluding remarks, Hon'ble Vice Chancellor Prof. G. L. Keshwa focused on organic farming and dry land agriculture research and should be the priority of the university. HVC said that research council meeting is the most important meeting of the university and all the presentation should be made in the line of research prioritization, achievements, other developmental activities and future perspective plan also. There must be participation of Govt. officers in research council meeting but no member of Government department attend the prestigious meeting of university. He suggested to work out the major issues of crop diversification, integrated farming system models for small and marginal farmers to augment the round year income security. The Hon'ble Vice-Chancellor Prof. G. L. Keshwa remarks that efforts done by Director Research and his team for strengthening research in the university and giving useful recommendations to the farmers of the area are in right direction. He emphasized on the need for development of resource efficient technologies specially in water sector to conserve rain water & it's efficient use. He asked the scientists to accommodate the suggestions given by the eminent experts in their future research programmes. He also suggested Director Research to initiate MoU with ICAR-IISWC, Kota centre. Soil conditions of the Kota zone are different, thus research priorities on soil health especially on soil organic carbon and micro nutrients have to plan, prioritized and execute accordingly. He also optioned that in coming research council meeting all the unit incharges will present their achievements, constraints and future thrusts and advised that respective unit incharges will present their progress activities etc.

Action to be taken: DR/ZDR/Unit I/c

HVC asked ZDR, to re-orient the research programmes to sustain soybean productivity in the zone and urged to ZDR to linked with department of agriculture for the concerned issues and also release advisory timely before the things come in epidemic situations.

Action to be taken: ZDR

HVC suggested to initiate need based research work on agro-forestry at CH&F, Jhalawar and ask Dr. Prahlad to submit research proposals under RKVY and other funding agencies.

Action to be taken: Dean/ DR/ Dr. Prahlad

Dr.Keshwa urges the need of the preparation of university documentation at Director level including respective units also and asked to get ready in next one month before commencement of convocation probably in the month of mid September.

Action to be taken: DR / Assoc.Dir.Seed / ZDR / O/Is / P.I.s

Lastly, HVC thanked eminent scientists, Dr. I. J. Gulati and Dr. R. K. Singh for sparing their valuable time and giving useful suggestions to improve research in the University.

The meeting ended with vote of thanks proposed by Dr.H.R.Choudhary, ZDR, ARS, Kota to the chair.

(Dr. Pratap Singh)
Director Research and Member Secretary

Copy for information and n/a to:

- 1. The PS to Hon'ble Vice-Chancellor, AU, Kota
- 2. All the members
- 3. Guard file

Director Research and Member Secretary