



UNIVERSITY OF AGRICULTURAL SCIENCES DHARWAD

NATIONAL SEMINAR on **SUSTAINABLE FOOD PRODUCTION SYSTEMS FOR SELF RELIANT & CLIMATE RESILIENT AGRICULTURE**

16th to 18th June, 2022

Organised By

Dr. S. V. Patil Chair for Research and Training for Farmers Welfare
University of Agricultural Sciences, Dharwad
Karnataka, India

In Collaboration with

- Indian Council of Agricultural Research, New Delhi
- University of Agricultural Sciences, Bengaluru
- University of Agricultural Sciences, Raichur
- University of Horticultural Sciences, Bagalkote
- University of Agriculture & Horticultural Sciences, Shivamogga
- Karnataka Veterinary Animal Husbandry & Fisheries Sciences University, Bidar
- National Bank of Agriculture and Rural Development, Mumbai
- National Rainfed Area Authority, MA & FW, GOI, New Delhi

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Dr. B. N. Aravind Kumar	Professor of Agronomy	: Co-organising Secretary
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ABOUT THE SEMINAR

The agro-ecosystems have been modified for the production of food and fiber, in the process they retain many of the characteristics of natural ecosystems, but from a toxicological viewpoint they are characterized by the frequent presence of agrochemicals, including pesticides, fertilizers, and plant growth regulators. The nature and extent of the agrochemical contamination will vary considerably, depending upon the nature of the crops and /or livestock. Degradation of agro-ecosystem and soil productivity in terms of soil physical condition, nutritional disorders, micronutrient deficiencies, salinity and alkalinity, poor soil biological activity and the outbreak of pest and diseases which are posing serious threat to our food security and livelihood supporting systems. Almost 300 million people are prone to undernourishment in South Asia, of which, about 200 million live in India. Widespread problem of soil degradation and desertification, is considered to be an important cause of the problem of human malnutrition. Human food produced through plants and animals grown on nutrient poor soils is deficient in these essential nutrients and adversely affect human health and well being.

The vast majority of rainfed farmers still practice low external input or no external input farming. These agro-ecosystems are more heterogeneous with diverse farming systems dominated by coarse cereals, pulses, oilseeds, cotton, fruit crops, trees, pastures & livestock based systems. The rainfed agriculture in these agro-ecologies needs to be made more productive, stable and resilient, while minimizing the pressure on natural resources and reducing environmental foot-prints, for which, long-term sustainable land and /or water strategies need to be implemented.

Most of innovative sustainable agricultural strategies (especially those against water scarcity) are encompassed by the concept of using principal natural resources (i.e., notably arable land, fresh surface and groundwater) more efficiently that is, avoiding/reducing losses and quality deterioration with maximal increases of crop yield. Production systems that managed by innovative sustainable agronomic practices, which could restore soil health, recycle nutrients, conserve and purify water, strengthen biodiversity, and produce nutrient-rich quality food are need of the hour. Under the prevailing environmental and economic constraints, further increase in productivity and production can only be possible through increased resource-use efficiency, multiple uses of limited resources and adoption of smart agricultural innovations. There is need to develop integrated soil-crop- animal-environment management system through advanced agronomic research and technology development.

India's digital ecosystem is witnessing healthy tailwinds such as affordability and availability of high speed internet and maturing content ecosystem. The confluence of these factors presents an exciting opportunity for innovations in agriculture. Wherein next generation technologies such as data digitization, data platforms, data analytics, artificial intelligence and machine learning have a greater role to play in Indian agriculture. Agricultural practices empowered by digital technologies are also being referred as smart farming. Smart farming, which holds a promise to build an agriculture and food system that is efficient, environmentally sustainable and equitable.

In spite of technological development, the adoption of improved technologies is only 20 to 24 per cent at national level. The farm productivity has marginally increased over a period of time; however the average income of the farmer is as low as Rs.10280 per month (Situation assessment Survey of Agriculture Households, 2018). The problem is more serious among small and marginal farmers who constitute 85 % of land holders. Organizing them in to groups and empowering increases their access to technology and bargaining power. The only way out to boost farmers income is switching over to secondary agriculture that includes value addition and integration.

Based on the deliberations of the seminar, future research strategies and recommendations based on available knowledge will be developed to address the emerging matrix of the agricultural problems in a holistic manner, which will be potential to promote eco-friendly sustainable agriculture under a changing climate scenario. The proposed National Seminar is being organised to commemorate birth centenary year of legendary agricultural scientist Dr. S. V. Patil.

THEMES

- 1. RESOURCE CONSERVATION TECHNOLOGIES FOR SUSTAINABLE PRODUCTION :**
Soil and Water Conservation, Residue Management, Conservation Agriculture, Watershed Management, Water Resources, Farm Mechanization.
- 2. ORGANIC, NATURAL AND ECOLOGICAL AGRICULTURAL PRODUCTION SYSTEMS :**
Production Systems, Nutrient cycling, Traditional Knowledge, Soil health management, Soil organic matter, Carbon sequestration, Ecology and Environment Crop Pest Diseases Interactions, Pest Disease Management / Soil Biology and Bio-Life, Soil-Microbe-Plant Interactions. Processing, Value addition, Certification, Marketing.
- 3. AGRICULTURAL INNOVATIONS AND SMART FARMING :**
Precision Farming, Precision Nutrient, Water, Weed and Pest Management, Input use efficiency, Remote sensing and GIS, Sensor based technologies, Big data analytics, Unmanned Aerial Vehicles (Drones) for crop management, Robotics and Automations.
- 4. CROP INTENSIFICATION AND DIVERSIFICATION :**
Bio-diversity conservation, Cropping Systems, Integrated farming systems, Agro Forestry, Alternate Land use systems, Nutri Cereals, Under exploited crops, Forest Economic Plants / Trees.
- 5. CLIMATE RESILIENT AGRICULTURE :**
Adaptation and mitigation strategies for climate change, Crop planning for aberrant weather conditions, Biotic & abiotic stress management, Crop weather models, Weather forecasting.
- 6. SECONDARY AGRICULTURE :**
Technology transfer, Technology interventions in processing, Value addition and marketing, Postharvest Technology, Rural Bio Entrepreneurship, Farmers Producers Organizations (FPO's), Doubling farmers income, Livelihood opportunities for small and marginal farmers.

ABOUT UNIVERSITY OF AGRICULTURAL SCIENCES, DHARWAD

The University of Agricultural Sciences, Dharwad established on 1st October, 1986 has earned reputation of being the farmers' University has been striving to keep pace with frontiers science to overcome the contemporary challenges of social, economic and technical relevance. The University has 5 Colleges, 27 Research Stations, 6 Agriculture Extension Education Centers, 6 Krishi Vigyan Kendras and ATIC. The University has its jurisdiction over 7 districts in Northern Karnataka. Greater diversity exists in soil types, climate, topography, cropping and farming situations. The jurisdiction includes dry-farming areas to high rainfall coastal and hilly regions and irrigated command areas of Upper Krishna, Ghataprabha and Malaprabha. Important crops of the region include rice, wheat, pulses, chilli, cotton, sugarcane, groundnut, soybean, sunflower, safflower, millets etc. The region is also known for many horticultural crops. Considerable progress has been registered in the field of education, research and extension from the University. University hosts several firsts; Institute of Organic Farming, Dharwad seed model, Institute of Biotechnology, Agribusiness Knowledge Centre, RKVY, RAFTAR (ABI), world bank funded NAHEP, IDP and Centre of Excellence in smart farming.

About Dharwad : The University head quarter is located in Northern Transition Zone of Karnataka, known for its cool and pleasant climate and is highly rich in vegetation with different flora and fauna which creates an ideal atmosphere for academic and agricultural research activities. It is situated on the Pune-Bengaluru National Highway 48 having very good road connectivity. Hubballi-Dharwad, a Head Quarter of South Western Railway Zone, is having very good train connectivity to major cities of the country. The nearest airport is Hubballi which is 20 kms away from University Head Quarters and other airports are Belagavi (80 kms) and Goa (165 kms). The Weather during June will be a very pleasant and comfortable for stay 25 to 30^o C during day and 18 to 21^o C at night. Hubli-Dharwad twin cities are known as education hub of Karnataka. The twin cities hosts four Universities, IIT and IIIT. The city is well known for Dharwad Pedha which has attained GI tag.

Venue : Farmers Knowledge Centre, University of Agricultural Sciences, Krishinagar, Dharwad - 580 005, Karnataka, India.

Registration Fees (In Rs.)			Account Name : Dr. S. V. Patil Centenary Celebrations
Personnel	Within Due date	After Due date	
Scientists / Teachers	4000/-	5000/-	
RA/SRF/ Young Professionals	2000/-	2500/-	
Doctoral Students	1,500/-	-	
Corporate/Industry/Private	7500/-	8500/-	
Accompanying members	1500/-	2000/-	

Account No. : 40706283580
IFSC Code : SBIN0003151
Bank Name : State Bank of India
Branch Name : UAS Campus, Dharwad

IMPORTANT DATES	
Extended Summaries, Research papers, Lead papers, case studies and success stories	21 - 05 - 2022
Registration	



QR Scan & Pay

Technical Information

Invited Lead Lectures : These would offer an insight into the various Themes of the National Seminar. Technical committees constituted for each Theme will identify two speakers. A lecture of each speaker will be of 20 minutes followed by discussion. Lead speakers will be requested to provide 3-4 pages extended summaries of their talk and brief bio-data for inclusion in the pre-seminar proceedings. Selected Full length papers will be published in Journal of Farm Sciences Special Issue.

Extended Summaries : The delegates will submit extended summary of their research paper before 21-05-2022. These extended summaries will be scrutinized and published in the pre-seminar proceedings and distributed to delegates at the time of registration. The extended summary (up to two pages) should include : Title, Authors and Affiliation details, Abstract (<100 words), Introduction, Materials and Methods and Results and Discussion along with 3-4 most relevant references. If necessary, one figure/table may be included in the results section. The reference should follow the Journal of Farm Sciences format. All extended summaries must be 1.5 lines spaced, 12 font sizes in Times New Roman text with margin of 1.2 inches. Extended summary prepared without following the style and format and guidelines will not be accepted for publication. A soft copy of the extended summary prepared in Microsoft word doc may be emailed to organizing secretary.

Extended Summaries should be sent to :
Organising Secretary, on or before 21st May, 2022 by
E-mail : svp.natsem@uasd.in

Oral Presentation : This would provide an opportunity for oral presentation of research papers submitted as Extended summaries. Limited number of papers will be selected by the committee for presentation based on importance of subject matter, its relevance to the sub theme of the seminar. The speaker will be informed well in advance for making the presentation and presentation will be for 10 minutes with a maximum of 20-25 slides for presentation.

Poster presentations : All the delegates will get an opportunity to present their contributory research papers through poster presentation. Poster presentation will be arranged theme wise. This would provide an opportunity to the participants to present their work in a more informal manner with personalized interaction with other participants. Material for fixing the posters will be provided by the organizers.

Guidelines for poster preparation : The area allotted for each poster would be approximately 90 cm x 75 cm. Single sheet depicting information for the poster be prepared for presentation.

Lettering : The font for the title should be Arial Bold in 34 size (capital with contrast to the background and clearly visible from a distance of 1m. All additional lettering should be Arial font (no bold) in 16 size. Headings for table and figures should be in Arial bold font in 16 size. Numerical and letters included in figures and tables should be in a befitting manner, preferably same size as in script, but should be clearly visible from a distance of 1 m. The title of the poster should follow the name(s) of the author (s) and their affiliation in Arial Font 20 size. The text part should include the following befitting with the size of the poster.

- **Abstract**
- **Objectives in two or three sentences**
- **Material and Methods briefly**
- **Results and discussion (Including Table, Charts / Graphs)**
- **Conclusion**

Note : The poster must be concise, legible and readable, stress on two or three important points. It is possible that lot of people read your poster while you are away. In such case, make sure that the message is clear and simple. It is better than you make provision for a sign up pad to record the names and address of individuals seeking more information. Best oral and poster presentation will be suitably rewarded.



Dr. S. V. Patil Chair for Research and Training for Farmers Welfare

Late Dr. S. V. Patil a genius agricultural scientist, a teacher, academician, visionary and most important a great institution builder contributed immensely for the development of College of Agriculture, Dharwad, which became precursor for formation of second Agricultural University during 1986, to cater

to the needs of agricultural education and research of Northern Karnataka and is aptly called as Krishi Rushi or Bhisma pita maha of Agriculture in the state. Because of his high intellectual visionary gleam and institution builder he is responsible for establishment of College of Veterinary at Bidar & College of Agriculture, Raichur which became independent universities which shows the vision of Dr. S. V. Patil. He is also responsible for establishment of Forestry College at Sirsi and Ponnampet, up gradation of Diploma in Agricultural Engineering to degree programme and agro-forestry research at Dharwad. In his 45 years of illustrious service as teacher and academician as Director of Instructions (Agri and Post Graduate) and Vice Chancellor of prestigious UAS, Bengaluru he set a very high morale of conduct among the teachers, scientists and students. In agricultural education, research and farmers welfare activities. To pay tribute to legendary Dr. S. V. Patil it arouses interest among his students, disciples, university faculty and farmers to establish a chair in his memory on the occasion of centenary celebrations at UAS, Dharwad, for the development of agriculture and farmers welfare in the State.



REGISTRATION FORM

Name (in block letters) :

Sex (Male/Female) :

Designation :

Mailing address with Pin code :

.....

.....

Phone with STD Code :

Mobile No. :

Office / Residence :

Email :

Life members of foundation : YES / NO

Thematic area :

Registration fee paid : YES / NO

Mode of payment with date : DD/Cheque/Bank Transfer.

If DD : Demand Draft No. :

Transaction ID of Scan & Pay :

If Bank transfer :

NFTS / RTGS Code :

Name of Bank / Branch :

Accompanying persons (if any) :

.....

Signature of the Participant

Organizing Secretary

Dr. H. B. Babalad

University Librarian and Professor of Agronomy
and Organizing Secretary. University of Agricultural
Sciences, Krishinagar, Dharwad – 580 005

Mob : 91-9449809436, Ph : 0836-2440311

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