Integrated Farming System - For Better Livelihood and Economic Sustainability

A Guest lecture on “Integrated Farming System- For Better Livelihood and Economic Sustainability” by Dr. D.C. Ghosh, Retired Professor (Agronomy) Institute of Agriculture, Visva-Bharati, Sriniketan, West Bengal and presently working as member of executive committee Visva-Bharati, nominated by Prime Minister of India. The lecture conducted for PG and Ph.D students and faculty members of Birsa Agricultural University to enhance their knowledge on Integrated farming system. Scientists of different faculty including Dean College of Agriculture Dr. M. S. Yadava, Dean College of Veterinary Science and Co. PI Dr. Sushil Prasad, Chairman Department of Agronomy Dr. R. Thakur, Chairman of the Department Genetics and Plant Breeding Dr. Z. A. Haider, Chairman Department of Soil Science and Agricultural Chemistry Dr. D. K. Shahi attended the lecture. Dr. M. S. Malik, Principal Investigator NAHEP-CAAST (National Agricultural Higher Education Project – Centre for Advanced Agricultural Science and Technology), Integrated Farming System, Birsa Agriculture University, Ranchi, has explained about the objective of NAHEP-CAAST programme and also encouraged to PG and Ph.D students to for higher education, advanced technical training, exposure visits at National and International institutes for up-gradation of their knowledge and skill in various integrated farming system model. Scaling up the capacity building of the faculty for enhancing their research and teaching capabilities to impart advanced knowledge to post graduate students in area of integrated farming system and enabling them for agriculture entrepreneurship.

The guest speaker Dr. D. C. Ghosh started the lecture with major problem of today's farming, why production is declining and discussed few major points which are responsible for the declination of the production due to, soil erosion and degradation, How soil degradation causes, agricultural chemical, contamination of pesticides, green house effect, effect of global warming on agriculture, loss of biodiversity etc. During the lecture, attendees shared opinions, thoughts and suggestions for consideration of the sustainable agriculture. Agriculture scientist has said that the land of Jharkhand is suffering from the problem of soil erosion. So, its diagnostics can be traced to sustainable agricultural system. Through soil erosion, soil fertility status has decreased, changes in water balance and water quality has also declined. Soil degradation causes decline in soil structure-compaction, crusting, poor aeration & water retention and impeded root growth, Reduction in the quality and quantity of soil organic matter, disruption in cycles of carbon, nitrogen, phosphorus, and sulphur leading to nutrient depletion and toxicity and decline in soil biomass carbon and soil biodiversity. Also described the meaning "Sustainable agriculture should involve successful management of natural resources for agriculture to satisfy changing human needs while maintaining or enhancing the environment and conserving natural resources. Further described the component of sustainable agriculture nutrient management, erosion management, residue management, crop management, water management and integrated pest management. The speaker discussed the potentiality of organic farming as environmental aspects, soil aspects, farm productivity and economic aspects, germplasm and breeding aspects, erosion and runoff control aspects.

The main objective of integrated farming system is to integrate natural resources and regulation mechanisms into farming activities for maximum replacement of off farm inputs in reducing

pollution and production costs and improving farm economics, to secure sustainable production of high quality food and other products through ecologically preferred and safe technologies, to eliminate or reduce environmental pollution and to sustain the multiple functions of agriculture (diversified landscape, wildlife conservation, remote area cultivation and decentralization of colonies maintaining cultural traditions) for generating sustainable farm income. Dr. Ghosh focused on the need of integrated farming system as well as the components which should be used in the farming system i.e., meet the demands of the society, maintain human health and animal welfare, maintain a viable farming system, care for the environment and sustain natural resources. Further emphasis was on selection of the components for the Farming System and suggested that component should be selected according to the area where the farming system is to established which gave the higher profit, selection of the farmers is also important. Keeping in mind while selecting the farmers for adoption of IFS like, the selection of farm families for adopting integrated farming system must be according to their need, habits and facilities available, in each village three to four families should be selected for the same components of integrated farming system having similar facilities and at the University Farm an ideal integrated farming system model must be maintained for demonstration and training.

Sessions lasted for around ninety minutes. After the completion of the lecture the session was opened for the discussion, in which all the students and scientists took part and cleared their query regarding integrated farming system. In this session some useful suggestion comes out like, about cultivation of mushroom through weeds, weeds, and also to adopt integrated farming system for land less farmers besides adoption of different mix culture in pond etc.

The lecture was concluded by Dr. Arvind Kumar and gave the vote of thanks to the Guest Dr. D. C. Ghosh and presented a shawl and momento by the PI of the project Dr. M. S. Malik, and also thanked to him for organizing such an educational lecture for students and scientists to enhance their knowledge also thanked to the students who attended the lecture with patiently as well as sincerely.

बिरसा कृषि विवि | एकीकृत खेती प्रणाली पर व्याख्यान शृंखला, वैज्ञानिक डॉ डीसी घोष बोले

स्वास्थ्य के लिए एकीकृत खेती प्रणाली बेहतर विकल्प

लाइफ रिपोर्टर @ रांची
life.ranchi@prabhatkhabar.in

विश्व भारती श्री निकेतन के कृषि वैज्ञानिक प्रो डॉ डीसी घोष ने कहा है कि झारखंड की भूमि मिट्टी क्षरण की समस्या से ग्रसित है. इसलिए इसके निदान सतत टिकाऊ कृषि प्रणाली में खोजा जा सकता है. मिट्टी के क्षरण से मिट्टी की उर्वरता में कमी आयी है. इसके अलावा जल संतुलन में बदलाव तथा पानी की गुणवत्ता में गिरावट भी आयी है. डॉ घोष मंगलवार को बिरसा कृषि विवि में बेहतर आजीविका और आर्थिक स्थिरता के लिए एकीकृत खेती प्रणाली विषय पर अतिथि व्याख्यान दे रहे थे. डॉ घोष ने सतत टिकाऊ कृषि में पर्यावरण को बनाये रखने और प्राकृतिक संसाधनों का संरक्षण करते हुए मानव की जरूरतों को पूरा करने तथा प्राकृतिक संसाधनों का सफल प्रबंधन के बारे में जानकारी दी.

घोष ने बताया कि एकीकृत कृषि प्रणाली से समाज की मांगों को पूरा, मानव स्वास्थ्य और पशु कल्याण को बनाये रखना, एक व्यवहार्य कृषि व्यवसाय बनाये रखने, पर्यावरण की देखभाल एवं प्राकृतिक संसाधनों को बनाये रखने में मदद मिलती है. प्रत्येक गांव में तीन से चार परिवारों को समान सुविधाओं वाले एकीकृत कृषि प्रणाली के समान घटकों के लिए चुना जाना चाहिए. उन्होंने कहा कि विवि के फार्म में एक आदर्श एकीकृत कृषि प्रणाली मॉडल को प्रदर्शन और प्रशिक्षण के लिए बनाना जरूरी है. एग्रीकल्चर डीन डॉ एमएस यादव एवं शस्य विभाग के अध्यक्ष डॉ राघव ठाकुर ने झारखंड में कृषि के लिए अनुकूल एक हेक्टेयर भूमि में एकीकृत कृषि प्रणाली के तकनीकों पर प्रकाश डाला. मौके पर डॉ एमएस मल्लिक, डॉ बीके अग्रवाल ने भी विचार रखे. स्वागत डॉ डीके शाही एवं धन्यवाद ज्ञापन डॉ अरविंद कुमार ने किया. इस अवसर पर डॉ सुशील प्रसाद, डॉ जे उरांव, डॉ जेडए हैदर, डॉ आरआर उपासनी, डॉ राकेश कुमार, डॉ आलोक कुमार पांडे सहित शोधकर्मी, पीजी एवं पीएचडी के विद्यार्थी उपस्थित थे.

बिरसा कृषि विवि में आयोजित व्याख्यान शृंखला में अपनी बात रखते कृषि वैज्ञानिक और उन्हें सुनते लोग.

प्रभात खबर
Wed, 26 February 2020
https://epaper.prabhatkhabar.com/c/49561425