



Agroforestry

Newsletter



National Research Centre for Agroforestry, Jhansi

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CONGRATULATIONS

Dr. Jagir Singh Samra

Deputy Director General (NRM), ICAR, New Delhi



Dr. Jagir Singh Samra, a renowned agricultural scientist joined as Deputy Director General (Natural Resource Management), ICAR, Krishi Bhawan, New Delhi on 4th August, 2000.

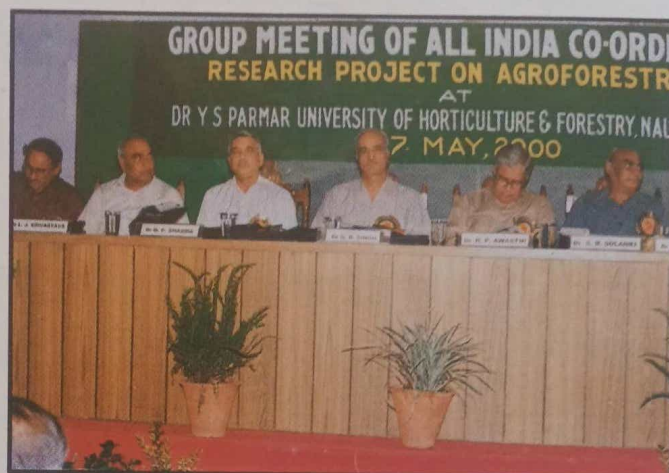
Dr. Jagir Singh Samra was born in a farming family in 1947. He graduated in 1968, completed his M.Sc. and Ph.D. from IARI, New Delhi. He had an excellent academic career throughout. He joined the ICAR in 1974 as Junior Soil Chemist in the Central Mango Research Station, Lucknow a regional research station of IIHR, Bangalore. He was selected as Senior Research Officer at Forest Research Institute and College, Dehradun in 1978. After doing excellent research in the field of forestry, he joined CSSRI, Karnal in 1982. He became Alexander Von Humboldt Fellow in Federal Republic of Germany by undergoing stringent competitive process. Dr. Samra joined as Officer Incharge at, regional station Chandigarh, of Central Soil and Water Conservation Research and Training Institute (CSWCR&TI), Dehradun.

He pioneered participatory process in watershed management. As a result of his significant contributions in the area of research and management, he was selected as Director, CSWCR&TI, Dehradun in 1994. He is also a recipient of Hari Om Ashram Award, the ICAR Team Research Award (1994-96) in Natural Resource (Watershed Management), the Hem-Prabha S.N. Gupta Medal from the Institution of Engineers, Calcutta in Watershed Management and the ICAR Award for Team Research for the biennium 1997-98 for outstanding research contribution in the field of Natural Resource Economics. He has widely traveled in many countries like Germany, Yugoslavia, Netherland, France, UK, Nairobi, Japan, China and Nepal and has rendered 13 consultancies in the area of Watershed Management. Dr. Samra is member of many technical and policy making bodies for watershed conservation in India.

He has more than 150 publications including research papers, book chapters, bulletins and books to his credit.

Director and staff of NRCAF, Jhansi wish him all success in his present endeavour.

Annual Group Meeting of All India Coordinated Research Project on Agroforestry (AICRPAF)



The Annual Group Meeting of AICRP on Agroforestry was organized by Dr. K.R. Solanki, Director, NRCAF and Project Coordinator of AICRP on Agroforestry at Dr. Yashwant Singh Parmar University of Horticulture and Forestry (YSPUH&F), Nauni, Solan (HP) during 5- 7 May, 2000. Dr. G.B. Singh, DDG (NRM), ICAR, Krishi Bhawan, New Delhi was the Chief Guest and Dr. R.P. Awasthi, Vice Chancellor, YSPUH&F presided over the workshop. Dr. P. S. Pathak, ADG (AF), ICAR, Krishi Bhawan, New Delhi, Dr. K.K. Jindal, Director of Research, YSPUH&F, Dr. L.J. Srivastava, Dean, College of Forestry, YSPUH&F, Dr. Ram Newaj, Senior Scientist, NRCAF, Dr. K. Kareemulla, Senior Scientist, NRCAF, Dr. A.K. Handa, Scientist, NRCAF and about 150 delegates from various coordinating centres and principal investigators of adhoc research projects under AP Cess fund scheme (agroforestry) attended the group meeting.

Proceedings of all the technical sessions along with some broad recommendations were presented by the rapporteur of the respective sessions. The house unanimously accepted the proceedings/recommendations. The major recommendations are :

□ Agroforestry models and package for farmers

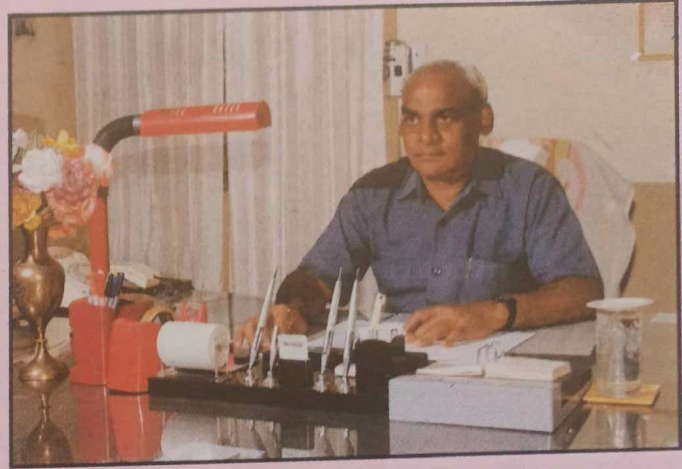
of different land holdings (economical level) needs to be developed by different centres.

- Production of quality seed and planting material of promising and already identified tree species needs to be attempted on priority. Techniques need to be standardized for asexual propagation of trees suitable for agroforestry. Controlled mist chamber facilities needs to be created at selected centres for production of true to type planting material for distribution to user agencies. As in case of agricultural crops, a mechanism needs to be evolved for the release of varieties of agroforestry species.
- Experiments which have yielded sufficient data and does not appear to be in tune with the present research should be phased out.
- The transfer of technology by different centres should be sent to the coordinating centre for compilation.
- Centres in Indo-Gangetic plains should bring uniformity in their work on Poplar based agroforestry systems.
- Agroforestry technology package is available for selected situations including wastelands such as salt-affected soils, rainfed areas, minespoils, etc. to popularize these practices, more emphasis on adaptive research will be required.

From the Director's Desk.....



The Annual Group Meeting of All India Coordinated Research Project on Agroforestry was held during 5-7 May, 2000 at Y.S.P. University of Horticulture and Forestry, Solan in which most of the coordinating centres actively participated. "Agroforestry models and packages for farmers of different land holdings (economical level) needs to be developed by different centres" was the major recommendation of the meeting.

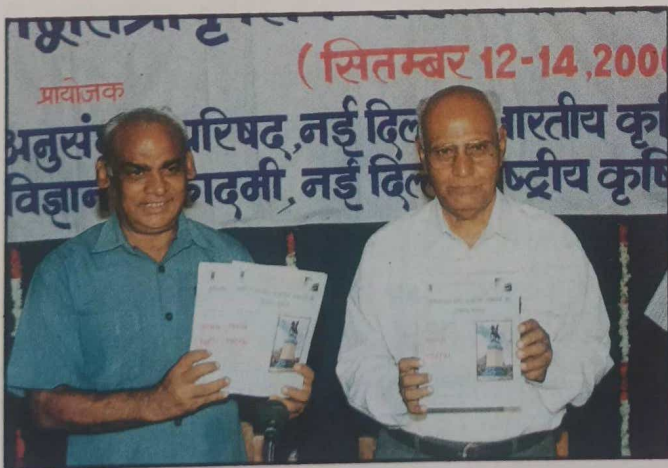


The agroforestry is gaining momentum which is evident from the participation of scientists and their presentation. Dr. G. B. Singh, Deputy Director General (Natural Resource Management), Indian Council of Agricultural Research, New Delhi emphasized that the centres should study the allotted MPTS comprehensively as well as extensively. Recently, Planning Commission has constituted a Special Task Force for the over all development of agroforestry in India. Agroforestry has been nicely focused in the current National Agriculture Policy.

K.R. Solanki

(K.R. SOLANKI)

राष्ट्रीय संगोष्ठी



राजभाषा स्वर्ण जयंती वर्ष के उपलक्ष्य में राष्ट्रीय कृषिवानिकी अनुसंधान केन्द्र, झाँसी ने भारतीय कृषिवानिकी सोसायटी के सहयोग से कृषिवानिकी द्वारा प्राकृतिक संसाधनों

का टिकाऊ प्रबंधन पर त्रिदिवसीय राष्ट्रीय संगोष्ठी का आयोजन 12-14 सितम्बर, 2000 को केन्द्र पर किया गया। इस संगोष्ठी का उद्घाटन डा. आर.पी. सिंह, पूर्व निदेशक,



केन्द्रीय बारानी अनुसंधान संस्थान, हैदराबाद ने किया। इस संगोष्ठी की अध्यक्षता डा. आर. देवराय, पूर्व निदेशक, राष्ट्रीय कृषिवानिकी अनुसंधान केन्द्र, झाँसी ने की। संगोष्ठी के मुख्य अतिथि, अन्य अतिथियों एवं प्रतिनिधियों का स्वागत केन्द्र के निदेशक डा. के. आर. सोलंकी ने किया। इस संगोष्ठी को पाँच तकनीकी सत्रों में आयोजित किया गया। संगोष्ठी में 120 वैज्ञानिकों, अधिकारियों एवं कृषकों ने भाग लिया। संगोष्ठी के उद्घाटन सत्र में निम्नलिखित पुस्तकों का विमोचन क्रमशः डा. आर. पी. सिंह एवं डा. आर. देवराय द्वारा किया गया।

- कृषिवानिकी द्वारा प्राकृतिक संसाधनों का टिकाऊ प्रबन्धन (सारांश एवं स्मारिका)
- कृषिवानिकी द्वारा प्राकृतिक संसाधनों का प्रबन्धन एवं पर्यावरण संरक्षण.
- Agorforestry Innovation for dergraded lands
- Transferable Agroforestry Techonologies

संगोष्ठी के दौरान निम्नलिखित अनुसंशायें पारित की गयी :

सत्र - I : उपजाऊ तथा अनुत्पादक भूमि में कृषिवानिकी

- मृदा अभिलक्षणन के अनुसार हर प्रकार की भूमि के लिये कृषिवानिकी पद्धति उपलब्ध है, उनका उपयोग होना चाहिये।
- आन फार्म रिसर्च को बढ़ावा देना चाहिये जिससे शीघ्र परिणाम मिलते है।

- उप-आर्द्र परिस्थिति में बबूल आधारित कृषिवानिकी को प्रोत्साहित करना है क्योंकि इससे मृदा में मृत्तिका की मात्रा बढ़ेगी और रेत की मात्रा न्यून होगी।
- बीथी सस्योत्पादन (एले क्रापिंग) से अर्द्ध शुष्क क्षेत्रों में भूमि कटाव से कमी और भूमि की उर्वराशक्ति को बढ़ाने हेतु इस पद्धति को इन प्रदेशों में प्रचारित करना होगा।
- शुष्क क्षेत्र में स्थायित्व के लिये बेर, अनार, आँवला पर आधारित कृषि उद्यानिकी करने में सक्षम है।
- नीम, विलायती बबूल पर आधारित सस्य वानिकी से एक सीमा तक मरुस्थलीकरण रोका जा सकता है।

सत्र - II : क्षीण भूमि की समस्या, प्रकार एवं विकास

- अर्द्ध शुष्क क्षेत्रों की क्षीण भूमियों पर उद्यान-कृषि पद्धति की अच्छी संभावनायें पायी गयी है जिसमें लागत व जोखिम कम है।
- समस्याग्रस्त भूमि जैसे लवणीय, क्षारीय, जल मग्न, जल एवं वायु अपरदन से प्रभावित भूमियों के विकास कृषिवानिकी द्वारा सुनिश्चित किया जाय। भूजल संरक्षण तथा प्रजातियों के चुनाव पर विशेष जोर दिये जाने की आवश्यकता है।
- लवण प्रभावित, कंकरीली-पथरीली नदियों के किनारे की भूमियों व वीहड़ क्षेत्रों के विकास के लिये वानस्पतिक विधियों को अपरिहार्य बनाया जाना चाहिये। अति क्षीण भूमियों के विकास के प्रारंभिक दौर में लाभप्रदता को

गौण माना जाना चाहिये और हरियाली को प्रमुख लक्ष्य मानकर विकास कार्य करना चाहिये।

- बंजर भूमि के सुधार हेतु वन चरागाह पद्धति को अपनाना चाहिये। इसके द्वारा चारा एवं जलाऊ लकड़ी प्राप्त होती है तथा भूमि में सुधार होता है।
- पत्थर खदानों व सीमेंट फैक्टरियों के आस-पास मलबे के ढेर व धूल प्रदूषण रोकने के लिये उपयुक्त वृक्ष प्रजातियों व बनीकरण तकनीकियों पर गहन शोध की आवश्यकता है।
- क्षरण प्रभावित भूमियों पर भूजल संरक्षण हेतु यांत्रिक विधियों के साथ वानस्पतिक विधियों का उपयोग अनिवार्य करने की आवश्यकता है। कृषिवानिकी पद्धतियों का भूजल संरक्षण में योगदान सर्वसिद्ध है।

सत्र - III : प्रदूषित पर्यावरण सुधार में कृषिवानिकी की भूमिका

- विभिन्न शोधों से स्पष्ट है कि कृषिवानिकी विधियाँ कम खर्चीली हैं और इसके लिये अलग से विशेष व्यवस्था की आवश्यकता नहीं है। अतः इनके व्यापक प्रयोग की आवश्यकता है।
- सामुदायिक भूमियों का प्रबन्धन प्रदूषण नियंत्रण ब्लाक के रूप में करने की आवश्यकता है। उक्त जिम्मेदारी ग्राम समाज को दी जानी चाहिये और इसके लिये अलग से कोष की व्यवस्था होनी चाहिये जिसकी निगरानी प्रदूषण नियंत्रण बोर्ड द्वारा होनी चाहिये।
- कीट नियंत्रण, धूल प्रदूषण नियंत्रण, भू-जल प्रदूषण नियंत्रण आदि में कृषिवानिकी की निर्णायक भूमिका है। अतः खनन व क्षीण भूमियों की पुनर्स्थापना करने के लिये कृषिवानिकी को अनिवार्य बनाने की आवश्यकता है।
- कृषि उत्पादों के लाभप्रद प्रबन्धन पर विशेष जोर देने की आवश्यकता है जिससे प्रदूषण नियंत्रण के साथ-साथ कार्बनिक पदार्थ का अधिक से अधिक उपयोग हो सकें।

सत्र - IV : सामाजिक एवं आर्थिक परिवेश में कृषिवानिकी

- विभिन्न क्षेत्रों में चल रहे कृषिवानिकी शोधों से स्पष्ट है कि कृषिवानिकी की सामाजिक ग्राह्यता सर्वत्र है और यह लाभकारी भी पायी गयी है परन्तु लाभ की दर धीमी होने के कारण इसका प्रसार तेजी से नहीं हो पा रही है। अतः कृषिवानिकी पद्धतियों की लाभदेयता बढ़ाने की आवश्यकता है। लघु आर्वातन वानिकी पर विशेष जोर देने की आवश्यकता है।
- ग्रामीण महिलाओं में कृषिवानिकी के प्रति पर्याप्त जागरूकता है परन्तु उनकी निर्णायक भूमिका न होने के कारण उनकी जागरूकता का लाभ कृषिवानिकी प्रसार में नहीं मिल पा रहा है। अतः आवश्यकता इस बात की है कि महिलाओं को निर्णयात्मक भूमिका अदा करने के लिये प्रोत्साहित किया जाय तथा कृषिवानिकी के माध्यम से उनकी आर्थिक स्थिति मजबूत करने के प्रयास किये जायें।
- संक्रांतिकाल में उपयोग किये जाने वाले ईंधन, चारा प्रजातियों की गुणवत्ता का गहन अध्ययन किया जाना चाहिये। घरेलू उद्योग-धन्धों के लिये कच्चा माल उपलब्ध कराने वाली कृषिवानिकी पद्धतियों व प्रजातियों का अध्ययन कर उन पर गहन शोध की आवश्यकता है।
- कृषिवानिकी से छोटी-छोटी आवश्यकताओं के साथ-साथ बाजार व्यवस्था पर भी ध्यान देना पड़ेगा।
- विश्व भर में स्वास्थ्य के प्रति बदलती परिस्थिति में वन औषधियों के प्रति झुकाव दिन-प्रतिदिन बढ़ता जा रहा है। जिस भूमि में कृषि योग्य फसलों का उगाना सम्भव नहीं है उस भूमि में औषधीय पौधों की खेती करना उचित रहता है। इस अवस्था में औषधीय पौधों की खेती खाली स्थान में अन्तः फसल के रूप में इन वृक्षों के नीचे करने से अधिक शुद्ध आय प्राप्त की जा सकती है और साथ ही साथ पेड़ों की वृद्धि में कोई प्रतिकूल प्रभाव भी नहीं पड़ता है। लेकिन औषधीय फसलों को बाजार में विक्रय की बहुत बड़ी समस्या है।

कृषिवानिकी से ग्रामीण युवकों के लिये रोजगार बढ़ाने की पूरी संभावना है।

सत्र - V : योजना व नीतिगत समस्याएँ एवं उनका विकल्प

- कृषिवानिकी के अन्तर्गत जल उपयोग तथा पोषक तत्वों के लिये प्रतिद्वन्द्विता, विभिन्न सूक्ष्म जलवायु कारकों में परिवर्तन तथा इनका एक दूसरे पर सम्मिलित प्रभाव आदि विषय का गहन अध्ययन करने की आवश्यकता है जिससे अधिकतम लाभ लिया जा सके और प्राकृतिक संसाधनों का सदुपयोग हो सके।
- विभिन्न कृषिवानिकी पद्धतियों की सामाजिक-आर्थिक विवेचना करने की महती आवश्यकता है। इसके लिये मानदंडों का निर्धारण करने की जरूरत है जिससे विभिन्न अध्ययनों में त्रुटि कम से कम हो और एक दूसरे से तुलनीय हों।
- कृषिवानिकी का प्रभाव मापने के लिये (इम्पैक्ट एनालिसिस) अवयवों को निर्धारण की आवश्यक है।
- उच्च गुणवत्ता के वृक्षों की नर्सरी बनाने की आवश्यकता है जिससे किसानों को वृक्षों की पौध उपलब्ध कराये जा सकें।
- कृषिवानिकी के अन्तर्गत कार्बनिक खेती को बढ़ावा देने के लिये इस पद्धति द्वारा हो रहे पोषक तत्वों के चक्रण, उनकी मात्रा व उपयोग पर गहन अध्ययन की आवश्यकता हो।
- किसानों के खेत, खलियान, बाग-बगीचे तथा खेतों के मेड़ों पर उगने वाले का वन नियम के दायरे से बाहर रखा जाय, आवश्यकतानुसार वृक्ष काटने के निर्णय का अधिकार कृषकों के पास निहित होना चाहिये। इसके व्यापक प्रचार-प्रसार की आवश्यकता है।
- विधि उपाय सरल एवं सहज होना चाहिये तथा नियम लागू करने वाली संस्थाओं में किसानों की भागीदारी होनी चाहिये।

AWARD

Dr. Ram Newaj, Sr. Scientist (Agronomy) and Dr. K.R. Solanki, Director, NRCAF, Jhansi jointly received Dr. Rajendra Prasad Award for their book entitled "Krishivaniki Ke Sidhant, Mahatwa avam Upyogita" for original writing in Hindi. The ICAR award consists of a citation and a cash of Rupees fifty thousand .

IJSC Meeting

Meeting was held on 22nd April, 2000 under the Chairmanship of Dr. K.R. Solanki, Director, NRCAF, Jhansi.

Sports Meet

Mrs. Chitra Shankar participated in ICAR Interzonal Sports Meet held during 8-12 May, 2000 at Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram (Kerala) and got Bronze Medal in discus throw.

SRC Meeting

Meeting was held during 19-20 May, 2000 under the chairmanship of Dr. K.R. Solanki, Director, NRCAF, Jhansi. All the PI of the projects presented the research highlights of their projects in the meeting and the technical programmes for the next year were finalized.



NRCAF

NATIONAL RESEARCH CENTRE FOR AGROFORESTRY



The National Research Centre for Agroforestry (NRCAF), a unit of **ICAR** was established in 1988. The Centre is located at Jhansi in Uttar Pradesh, about 10 Kms from Jhansi Railway Station on Jhansi-Gwalior Road and is popularly known as "**KRISHIVANIKI**". The Centre is in process of developing phase and modernising its infrastructure including construction of office building and residential quarters.

- MANDATE**
- RESEARCH ACTIVITIES**
- INFRASTRUCTURE**
- AICRP ON AGROFORESTRY**
- PROJECTS**
- PUBLICATIONS**
- SCIENTIFIC STAFF**
- SOCIETY OF AGROFORESTRY**



UPDATED Aonla Week, 20-26 Nov., 2000

National Research Centre for Agroforestry
Gwalior Road, Jhansi - 284 003 (U.P.)
INDIA



Web Site of NRCAF on World Wide Web

World Wide Web

The World Wide Web or simply Web is one of the popular service provided by Internet. It is seamlessly an interconnected set of several thousand sites that all share a format called Hypertext Markup Language (HTML). Using this service one can access the information available on the Internet. The information on web is accessed through what is called 'Web Browser'. The web browser is a software necessary to navigate the world wide web. The most popularly used Web Browsers are Netscape Navigator and Internet Explorer.

The World Wide Web is based on the Hypertext Transfer Protocol (HTTP) and works on Client'/Server model. The provider of information is called Server and user who request for information is called Client. Hypertext Transfer Protocol is a set of communication protocols that lets any client using browser to communicate with the Web Server. The Web Server is a computer that makes the web content available to the web browser.

Information on Web is put in the form of web pages. A collection of web pages is known as 'Web Site' and the starting point for a web site is called 'Home Page'. The contents of web page can be static or dynamic. For creating, editing and maintaining a web site, web development tools such as HTML, Dreamweaver and Microsoft Front Page are required.

Hypertext Markup Language is a simple text formatting language used to create hypertext documents also known as web pages. This language uses the tags to control the appearance of the document. These tags can also define a word or phrase as link. By selecting a link one can go to other document or to other section of the same

document. HTML documents can also include colour graphics, images and animations. Special text effects like Blink and Marquee can be used in HTML document.

Web Site of NRCAF

As world wide web is a good means of retrieving information put on the web pages. In order to provide information about Centre on the world wide web, the web site of NRCAF has been designed and developed. This web site can be seen through both web browsers viz. Internet Explorer and Netscape Navigator. The home page contains brief history of the Centre and links to other pages. A picture showing an agrisilviculture experiment is also there on the home page.

Other useful informations such as Mandate, Infrastructure, Research Activities, AICRP on Agroforestry, Ongoing Projects, Publications, Scientific Staff and Society of Agroforestry are given in the form of links. By selecting any of these links, one can see the information of that particular web page. From every web page, one can navigate to the home page by selecting HOME link. One can directly send e-mail to the Centre by clicking an e-mail icon given on the home page. Link to the ICAR's Web Site (<http://www.nic.in/icar>) has also been given on the home page.

Information of the future programmes such as Seminar, Symposium etc. can also be made available on the web site from time to time. The web site will be updated after every four months for including new information.

Web Site address :

<http://www.nic.in/icar/nrcaf/index.htm>

R.H.Rizvi, K.R.Solanki and A.K.Bisaria
National Research Centre for Agroforestry, Jhansi

VISITORS

- Hon'ble Agriculture Minister of U.P. Government, Shri Divakar Vikram Singh visited National Research Centre for Agroforestry,



Jhansi on 19th August, 2000. First of all, he planted a sapling of Shisham and then Dr. K.R. Solanki, Director, NRCAF took him to exhibit the on-going research experiments at the Centre and appraised him the significant findings. The Agriculture Minister appreciated the experiments being conducted at the Centre. He was glad to see the experiments and in particular he appreciated a lot the aonla based agrihorticulture system. The field visit was followed by a function which was held in Centre's auditorium.

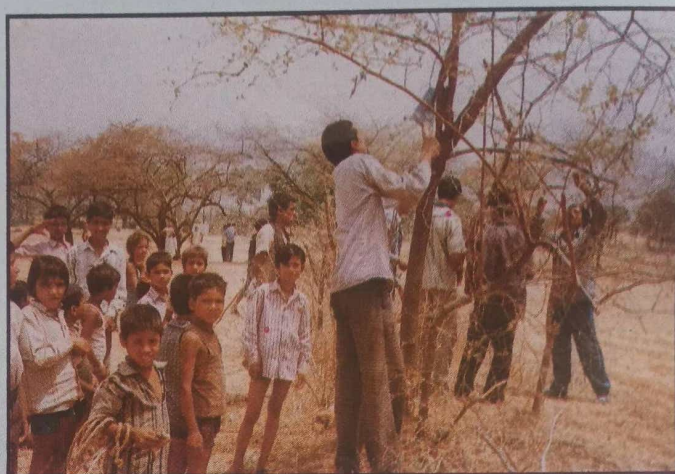
- Dr. R.P. Singh, Ex. Director, CRIDA, Hyderabad.
- Dr. R. Deb Roy, Ex. Director, NRCAF, Jhansi.
- Sh. S.S. Chitwadgi, Retd. IFS (CF), Bhopal.
- Dr. P.S. Pathak, Director, IGFRI, Jhansi.
- Dr. N.P. Melkania, Project Coordinator Forage Crops, IGFRI, Jhansi.
- Sh. B.D. Sankhwar, Chief Conservator of Forest, Social Forestry, Gwalior.
- Sh. A.P. Shrivastva, Joint Director Agriculture (Extension), Jhansi Division, Jhansi.

- Dr. Nasim Jaidi, Secretary, Deptt. of Agriculture, U.P. along with District Agriculture Officers.
- Dr. B. Srimannarayana, ANGRAU, Hyderabad.
- Dr. S.K. Nalatwadmath, CSWCR & TI, Regional Research Station, Bellary.
- Dr. S.J. Patil, UAS, Dharwad.
- Dr. S.M. Mutanal, UAS, Dharwad.
- Dr. P.R. Chaudhary, CSWCR&TI, Regional Research Station, Koraput.
- Mr. Anchal Das, CSWCR&TI, Regional Research Station, Koraput.
- Er. N.A. Jadhav, MPKV, Rahuri.
- Er. M.S. Pandke, MPKV, Parbhani.
- Sh. S.G. Daware, MPKV, Parbhani.
- Dr. V.K. Mishra, JNKVV, Indore.
- Dr. N.H. Ranade, JNKVV, Indore.
- Dr. Shila P.K. Unni, JNKVV, Indore.
- Smt. Sobhana Chaterjee, Architect, CPWD, New Delhi.
- Dr. B. Ekambaram, Scientist, LRS, ANGRAU, Hyderabad.
- Dr. I.A. Khan, Director, AEEC, Punjabrao Krishi Vidyapeeth, Akola.
- Dr. K.S. Datta, Assistant Research Scientist, GAU, Junagarh.
- Dr. Prabhat Tripathi, CIRG, Makhdoom.
- Dr. Vinod Shankar, Head of the Division (GSM), IGFRI, Jhansi.
- Dr. A.K. Sharma, Officer Incharge, CSWCR & TI, Regional Research Centre, Datia.
- Dr. K.C. Kanodia, Ex. Pr. Scientist, IGFRI, Jhansi.
- Dr. O.P. Sharma, Sr. Scientist, ICAR, Krishi Bhawan, New Delhi.
- Sh. H.M. Pateria, Technical Officer, ICAR, Krishi Bhawan, New Delhi.

Training of Farmers and Rural Youth on Ber Pruning

A three days training programme during 3-5 May, 2000 on pruning of Ber (*Zizyphus mauritiana*) was conducted at village Katili in Datia district (M.P.) with the following objectives :

- i) To impart skills of pruning in Ber
- ii) To create desire amongst the rural youths for self employment
- iii) To encourage exchange of knowledge among farmers and farm youths.



The various methods of training *viz.* lectures, group discussion and demonstration were followed. The training was attended by 19 farmers including village youths. Each and every trainer was provided with pruning tools to have practical exposure. Director of the Centre emphasised the importance of pruning as well as the role of improved variety of Ber in socio-economic upliftment of farmers, particularly small and marginal farmers. This will provide employment opportunities to the farmers and unemployed rural youths, he added. Once the farmers and farm youths are convinced, they will take part in pruning them selves which will result in providing self employment to them.

R.P. Dwivedi, R.K. Tiwari and K.R. Solanki
National Research Centre for Agroforestry, Jhansi

Workshop on NATP Programme

The workshop of RNPS-3 "Developing Live Fencing System For Soil and Water Conservation Crop Diversification and Sustaining Productivity in Rainfed Regions" Project under NATP programme was held during 13-14 June, 2000 at the Centre. Seventeen delegates participated from the seven co-operating Centres and the lead Centre.



Human Resource Development

- ❑ Dr. K. Kareemulla, Sr. Scientist (Agril. Economics) participated in the training programme on "Impact Assessment of Agricultural Technology" at the Centre of Advance Studies, Division of Agricultural Economics, IARI, New Delhi from 13th March to 2nd April, 2000.
- ❑ Dr. D.B. V. Ramana, Scientist (LPM) participated in the training programme on "Nutrition and Production of Animals under Various Stress Conditions" at Centre of Advance Studies, Animal Nutrition Division, IVRI, Izatnagar, Bareilly from 9th March to 7th April, 2000.
- ❑ Dr. R.P. Dwivedi, Scientist (Agril. Extention) participated in a training programme on "Rapid Relaxed and Participatory Learning and Action" from 20th June to 1st July, 2000 at NAARM, Hyderabad.
- ❑ Dr. K.R. Solanki, Director attended Coordinator's Meeting chaired by D.G., ICAR, New Delhi on 19th June, 2000.
- ❑ Dr. K.R. Solanki, Director attended Seminar on "Biotechnology of Modified Plants" held at IIT, New Delhi on 14th July, 2000.
- ❑ Dr. K.R. Solanki, Director attended Seminar on "Nutritional and Food Security" held at Udaipur University, Udaipur during 29-30 July, 2000.
- ❑ Dr. K.R. Solanki, Director and Dr. K. Kareemulla, Sr. Scientist participated in the "International Convection on Agricultural Marketting Management - Challenges in the Millenium" held at Hyderabad during 24-25 August, 2000 organised by MANAGE.
- ❑ A ten days (1-10 May, 2000) Training Programme on Computer Operation & Word Processing (Coral Word Perfect) was conducted by Sh. R.H. Rizvi, Scientist (Computer Application) for ministerial staff of the Centre.

Obituary

Sh. Babu Lal, Driver passed away on 12th June, 2000. The NRCAF staff conveyed their sympathy and condolence for the family. We pray the almighty for peace to the departed soul.

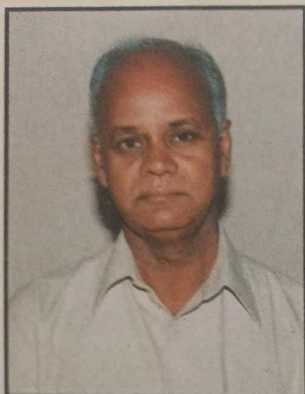
Hindi Diwas

Hindi Diwas was celebrated on 14th September, 2000.

Anti Terrorist Day

Anti Terrorist Day was observed at the Centre on 19th May, 2000.

CONGRATULATIONS



Dr. P.S. Pathak, Assistant Director General (Agroforestry), Indian Council of Agricultural Research, Krishi Bhawan, New Delhi has joined as Director, Indian Grassland and Fodder Research Institute, Jhansi on 4th August, 2000.

Dr. Prem Shankar Pathak received education at Banaras Hindu University, Varanasi. Dr. P. S. Pathak obtained Ph. D. degree in 1967 under renowned Ecologist, Dr. R. Mishra, FNA, BHU, Varanasi. He entered into profession as Lecturer at Agra Collegé, Agra. Thereafter, Dr. Pathak joined Indian Grassland and Fodder Research Institute, Jhansi in 1969. He served in various professional capacities.

Dr. Pathak is associated with various professional societies and is on the Editorial Board of many journals. He has visited many countries viz. Singapore, China, Japan, Thailand, Nepal, Pakistan, Taiwan and Indonesia as Fellow, Delegate or Trainee. Dr. Pathak has published more than 200 research papers and many books to his credit.

We congratulate him on occupying this elevated position.

पुस्तकालय, राष्ट्रीय कृषिवानिकी अनुसंधान केन्द्र, झाँसी के सौजन्य से

AGROSTOLOGY	घास विज्ञान/घासपात विज्ञान
AFFORESTATION	वनीकरण/वन रोपणी
ALKALI	क्षारीय/क्षारक
ALLEY CROPPING	वीथीक फसलें/वीथीकीय फसलें
ALTERNATE LAND USE	एकान्तरी उपयोग/ एकान्तर भू प्रयोग
AMELIORATION	सुधार
AMELIORATIVE	सुधारक

APICULTURE	मधुमक्खी पालन
ARID	शुष्क
BROWS SPECIES	चारा प्रजाति
BUSHLANDS	क्षुपी वन/झाड़ियों वाले मैदान
CONSERVATION	संरक्षण
CONTROL	नियंत्रण/रोगथाम
COPPACING	गुल्म बनाना/गुल्मीकरण
CROWN DIAMETER	शिखर व्यास/किरीट व्यास
FOREST PRODUCT	वनोत्पाद
FORESTRY	वानिकी
FUEL	ईंधन

Supervision and Guidance : Dr. K.R. Solanki, Director, NRCAF, Jhansi

Compiled & Edited by :

A. K. Bisaria

Ajit

A.K. Handa

Rajeev Tiwari

Published by :

Director

N.R.C.A.F., Jhansi

Ph. : +91 - (0517) - 448213

Fax : +91 - (0517) - 442364

E.mail : nrcaf@hub1.nic.in

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