

Agroforestry

Newsletter

National Research Centre For Agroforestry, Jhansi-284 003

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NATIONAL SYMPOSIUM ON AGROFORESTRY FOR LIVELIHOOD SECURITY, ENVIRONMENT PROTECTION AND BIOFUEL PRODUCTION

In a scenario of decreasing availability of arable lands for agriculture, degradation of soil and water resources, increasing pollution hazards, threats to environment and ecosystem and meeting the demands of National Forest Policy for putting 33 per cent area under forest, new approaches in farming systems are needed. Integration of trees, crops and livestock in an already existing land use system is one option to achieve sustainability while optimizing productivity and meeting food, fodder, fibre, firewood and timber demands of the increasing population. Agroforestry has today become an established approach of integrated land management system not only for renewable resource production but also for ecological considerations. The perennial woody plants like shrubs, trees and grasses provide direct and indirect benefits and assure livelihood security to the farming community. Planning and execution of agroforestry intervention in farmland has a far reaching environmental and ecological effect.

Keeping in view the manifold importance of the agroforestry, NRCAF and Indian Society of Agroforestry jointly organized National Symposium on “Agroforestry for Livelihood Security, Environment Protection and Biofuel Production” from 16 to 18 December, 2006. Dr. K.G. Tejwani, Director, Land Use Consultant (Int'l), New Delhi was the Chief Guest. Dr. A. K. Gogoi, ADG (Agronomy), ICAR, New Delhi was the special guest of the function.

There were 8 technical sessions under three broad themes *viz.* Agroforestry for Livelihood Security, Environment Protection and Biofuel Production in addition to plenary and valedictory session during the symposium, which were very efficiently handled by the respective Chairman and Co- Chairman. There were 2 Plenary Lectures addressed by Dr. V. Sardana from SPWD and Dr. Tejwani, 11 key note address, 47 oral presentations and 71 poster presentations. The poster evaluation panel selected three best posters for award.

Following recommendations have emerged from National Symposium on Agroforestry for Livelihood Security, Environment Protection and Biofuel Production:

- While food production for humans is addressed, we have ignored the problem of fodder for the livestock and other herbivores. Total grazing land is decreasing while cattle units per ha of grazing land are increasing. Fodder produced under agroforestry systems needs to be quantified.
- The contribution of agroforestry towards fuel wood, small timber, leaf fodder, fruit production as well as meeting day to day needs of the house hold are to be quantified.
- Contribution of agroforestry for soil and water conservation, ground water recharge, watershed development, carbon sequestration and environment needs to be quantified.

- To prevent, arrest and reverse the degradation of life support system pertaining to land and water through partnership should be emphasized.
- Contribution of livestock and nutrient trade through livestock movement in productivity of agroforestry systems needs to be assessed.
- Before initiation of new research project on agroforestry, the diagnosis should address the issue of natural assets *viz.* decline in water table, land degradation, per capita land availability, changing land use pattern, rising soil pollution and global warming. It is essential to direct it towards the National Plan Objectives and design new initiative on farmer's field.
- There is need to involve industry and NGO's in the quality planting material production and quality planting material should be site and requirement specific.
- To make agroforestry sustainable and more credit worthy inclusions of medicinal, aromatic and high value crop varieties should be emphasized.
- An agroforestry policy on the lines of forest and agriculture policies should be developed.
- The agroforestry produce should be treated as farm produce for all the matters.
- Hazards of Tsunami and other natural disasters can be minimized by making bio-shield of tree species.
- Different agroforestry system needed to offset the effect of CO₂ elevation should be identified.
- Role of agroforestry in employment generation and poverty alleviation needs to be emphasized.
- There is a need for detailed study on Reproductive biology, insect pest diseases and pruning of *Jatropha* and other biofuels species..

About 170 delegates representing 21 states and 2 Union Territories were registered. The delegates represented 22 SAU's, 11 ICAR Institutes, 4 ICFRE Institutes, 4 KVK's, 2 NGO's, 3 Industries, 18 students and farmers.

PROMOTION

- Dr. Rajeev Tiwari, Technical Officer (T –6) promoted to the post of Sr. Technical Officer (T –7/8) w. e. f. 3rd February, 2005.
- Sh. C. K. Bajpai, Technical Officer (T –6) promoted to the post of Sr. Technical Officer (T –7/8) w. e. f. 3rd February, 2005.

HUMAN RESOURCE DEVELOPMENT

- Dr. P. Rai, Pr. Scientist participated in the Golden Jubilee Symposium on “Conservation of Agriculture and Environment held at BHU, Varanasi from 26th -28th October, 2006.
- Dr. P. Rai, Pr. Scientist participated in the National Symposium on “Tree Improvement for Sustainable Forestry” held at JNKVV, Jabalpur from 4th to 6th November, 2006.
- Dr. Ajit, Sr. Scientist and Sh. R. H. Rizvi, Scientist (Computer Application) participated in the International Conference on “Statistics and Informatics in Agricultural Research” organized by Indian Society of Agricultural Statistics, IASRI, New Delhi from 27th to 30th December, 2006 at NASC Complex, New Delhi.

- All the Pr. Scientists, Sr. Scientists, Scientists and Technical Officers participated in National Symposium on “Agroforestry for Livelihood Security, Environment Protection and Biofuel Production” from 16th to 18th December, 2006 organised by the NRCAF and Indian Society of Agroforestry, Jhansi.

TRAINING ON BIOFUEL- RENEWABLE AND SUSTAINABLE SOURCE OF ENERGY

PC Unit of AICRPAF organized Training on “Biofuel- Renewable and Sustainable Source of Energy” from 21 to 23 November, 2006 at NRCAF. Twenty five farmers, Forest Officers, NGOs and others participated in this training programme.

TRAINING PROGRAMME FOR JFM COMMITTEES OF M. P. FOREST DEPARTMENT

Centre organized Training Programme for the office bearers and members/ farmers of JFM committees and officials of M.P. Forest Department from 11 to 13 December, 2006. In this programme, 31 participants from Ratlam and Shivpuri districts were trained in Joint Forest Management through agroforestry interventions.

VISITORS

- Dr. K.G. Tejwani, Director, Land Use Consultant (Intl.), New Delhi
- Dr. A. K. Gogoi, ADG (Agronomy), ICAR, KAB-II, New Delhi.
- Dr. S. N. Shukla, ADG (Food & Forage Crops), ICAR, New Delhi.
- Dr. K.R. Solanki, Ex ADG (Agroforestry), ICAR, New Delhi
- Dr. R. Deb Roy, Ex. Director, NRCAF, New Delhi.
- Dr. R.C. Dhiman, Sr. Manager, WIMCO Seedlings Limited, R & D Centre, Rudrapur (Uttanchal).
- Dr. J.P. Chandra, Retd. IFS, RAC Member, Rudrapur, U.S. Nagar (Uttanchal).
- Dr. K.A. Singh, Director, IGFRI, Jhansi (U.P.).
- Dr. P.S. Pathak, Ex ADG (Agroforestry), ICAR, New Delhi.
- Dr. S.D. Singh, IFS, Regional Manager, UAFDC, Dehradun Uttanchal).
- Dr. V. K. Sardana, Executive Director, SPWD, New Delhi.
- Dr. P. Kumar, Acting Director, NRC Pomegranate, Sholapur (Maharashtra).
- 170 delegates of National Symposium.

SEMINARS DELIVERED

At the Centre Scientist and Ph.D. student delivered Seminars on their research topics as given below:

S. No.	Seminar Topics	Name of the Speaker
1	Planning and Management of land and water resources in Nagani watershed of Uttanchal using GIS & Remote sensing	Er. Ramesh Singh Scientist (SWE)
2	Effect of different pruning regimes on production of understorey crop in <i>Albizia procera</i> based agroforestry system	Sh. Triloki Singh

NAAS FELLOWSHIP

Dr. O.P. Chaturvedi, Pr. Scientist (Forestry & Agroforestry) of the Centre was elected as a Fellow of National Academy of Agricultural Sciences (NAAS), New Delhi. His contribution includes establishing the concept on replacement of oak by pine forests in mid-Himalayas due to its higher nutrient conserving ability which results in reducing shortage of nitrogen in the soil. He has worked on structure, functional, nutrient cycling of poplar based agroforestry systems in the lower Gangtic plains. He has also designed *Acacia lenticularis* and Litchi based agroforestry systems for river –bed areas of Bihar for higher economic returns. He has more than 100 research publications in national and international journals of report. **NRCAF and ISAF Congratulate him.**

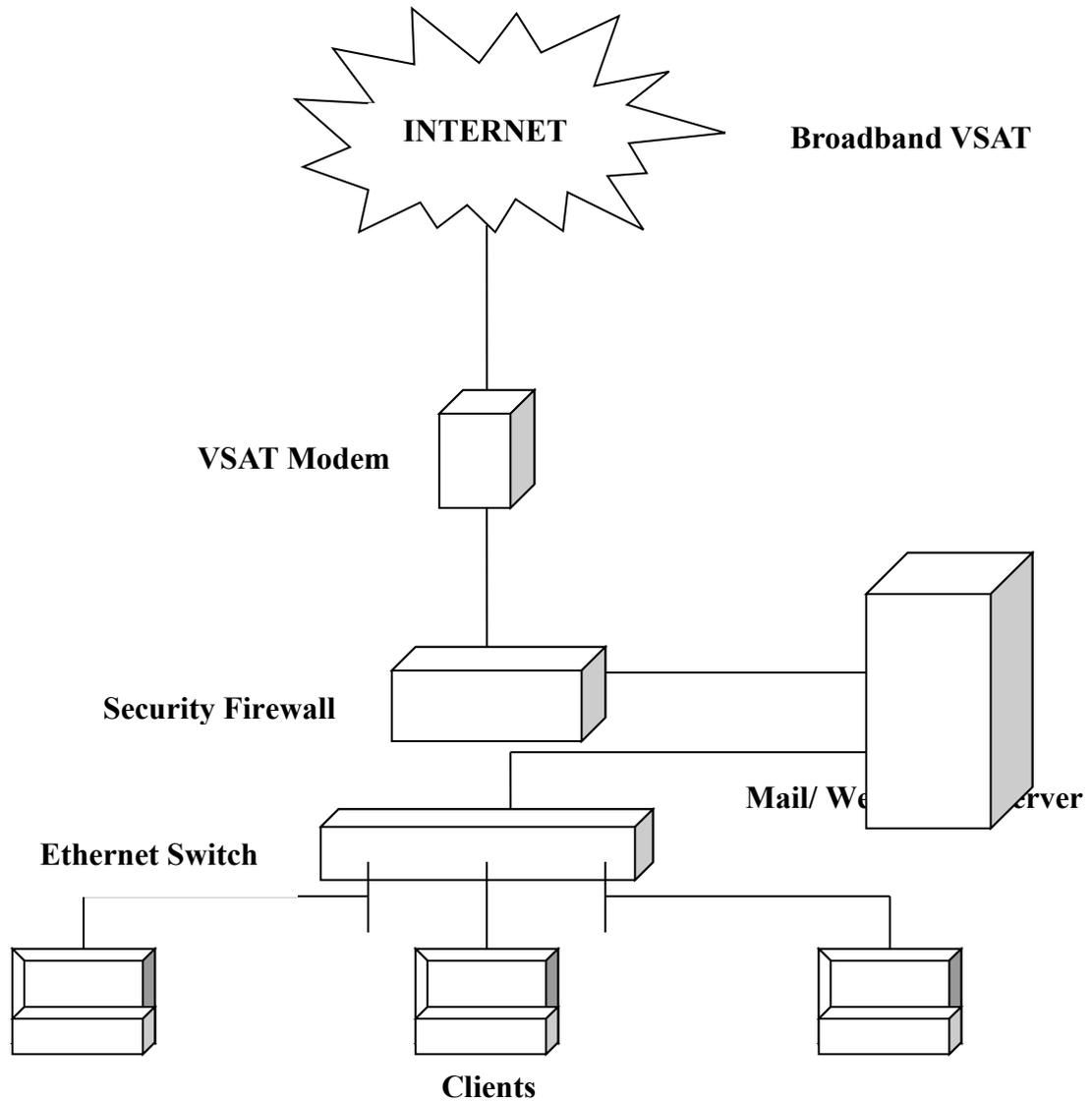
Agricultural Research Information System at NRCAF

A well designed Local Area Network (LAN) has been established at the Centre. More than 30 clients are connected through Fast Ethernet Switches and enhanced CAT-5 cable. Hardware (printer, scanner, etc.), software and file resources can be shared over the network. For Internet connectivity, a broadband VSAT of 128 kbps provided by ICAR has been installed. The Internet connectivity to the Centre has been provided by ERNET India and domain '*nrcaf.ernet.in*' is registered with the Internet Service Provider. An E.mail/ Web server using LINUX Enterprise Server software has been installed and configured on dual processing capable Server. Internet connection has been given to the clients through proxy server by assigning private IP addresses to them. A Cisco ASA 5510 network security firewall has also been installed for protecting the Server and Network from external threats such as hackers, worms, viruses and other malicious codes. The power backup to Server, IDU and network switch has been given by an online UPS of 3 KVA of upto 3 hours backup.

The Centre's Web Site has also been developed and is hosted on the Web server, the URL of web site is <http://www.nrcaf.ernet.in>. The web site provides upto date information about the Centre such as research achievements, ongoing projects, research publications, AICRP on Agroforestry, etc. Right to information and tender notices are also made available on the web site regularly. Future events such as symposium, workshop, training, etc. can also be seen on the web site. More than 20 email accounts have been created on email server, which can be accessed using MS Outlook or directly from www.nrcaf.ernet.in/webmail for Intranet users. These accounts provide a space of 250 MB to each user and an attachment of 50 MB can be sent with the email. The official email address is krishivaniki@mail.nrcaf.ernet.in, which is also given on home page as an icon. Internet and email facilities are widely used for the research and other official purposes in the Centre.

Besides this, a mirror server is also connected to the network for accessing CD-Databases on Forestry and Agroforestry references. Centre is equipped with P-IV systems, color laser and inkjet printers and is having software such as MS Office 2003, SYSTAT 11 and Norton Antivirus. GIS software i.e. Arc GIS 8.3 is also available at the Centre, which can be used for geospatial analysis. Introduction of modern technologies like wireless LAN, IP based telephony and Video Conferencing have been planned for future.

Structure of INTRANET



R.H. Rizvi, Scientist(Computer Application)& OIC(ARIS)
National Research Centre for Agroforestry, Jhansi

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QUINQUENNIAL REVIEW TEAM CONSTITUTED

Director General, ICAR vide letter No. 16-6/06-IA.II dated 26 September, 2006 constituted the Quinquennial Review Team (QRT) to review the work done by National Research Centre for Agroforestry, Jhansi & All India Coordinated Research Project on Agroforestry for the period of 2002 to 2006. Dr. R. P. Awasthi, Former Vice Chancellor, Dr. Y. S. Parmar University of Horticulture & Forestry, Solan is the Chairman and Dr. J. P. Tewari, Dean, GBPUA&T, Pantnagar, Dr. V. K. Mishra, Ex. Dean, Solan, Dr. U. C. Sharma, Ex-National Coordinator, N.A.T.P. (ICAR), New Delhi and Dr. A. K. Mandal, Director, TFRI, Jabalpur (MP) are the members of the team. Dr. P. Rai, Pr. Scientist, NRCAF, Jhansi is the secretary. The first meeting with Dr. J. S. Samra, DDG (NRM), Dr. A. K. Gogoi, ADG(Agronomy), Dr.R.P.Awasthi,Chairman and Dr. S. K. Dhayni, Director, NRCAF & Project Coordinator (AICRPAF) was held at ICAR, New Delhi on 29th November,2006.

FROM DIRECTOR'S DESK

The present quarter was the very hectic and fruitful for the Centre. About 170 delegates representing research institutions, universities, industries, NGOs, students and farmers deliberated agroforestry interventions for livelihood security, environment protection and biofuel production in the country in a 3 days National Symposium from 16th to 18th December,2006. The symposium was great success with the staff of the NRCAF, member of ISAF and sponsors viz. ICAR, New Delhi, SPWD and DST truly deserves congratulation and thanks. The Centre also organized a three days training programme on “Biofuel- Renewable and Sustainable Source of Energy (21 to 23 November, 2006)”and “JFM through agroforestry interventions (11-13 December, 2006)” successfully. The quarter is also significant as Director General, ICAR has constituted the third QRT to review the work done by the NRCAF and AICRPAF centres for the period of 2002 to 2006. Wish you a Merry Charismas and Happy New Year.