

डॉ० शकील अहमद  
उप सचिव

**Dr. Shakeel Ahmad**  
**Deputy Secretary**



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग,  
नई दिल्ली – 110 002  
**UNIVERSITY GRANTS COMMISSION**  
**BAHADUR SHAH ZAFAR MARG**  
**NEW DELHI – 110 002**

**Phone : 011-23219719**  
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**By Speed Post**

D.O. No. 14-12/2013 (CPP-II)

August, 2013

***Subject: Recommendations made by National Forest Commission (NFC).***

Dear Sir,

The National Forest Commission (NFC), headed by Mr. Justice B.N. Kripal, Former Chief Justice of India with six other Members was constituted vide resolution dated 7<sup>th</sup> February, 2003 of the Ministry of Environment and Forests. The Commission submitted its report to Hon'ble Prime Minister which has 360 recommendations. One of the recommendations of this chapter is reproduced below:

***(244) Forest Departments and the Government of India should encourage universities and organizations to take up research proactively particularly applied research; the topics/areas for required baseline data collection and research should be identified, researchers be supported, and the findings of applied research in the working/management plans be incorporated.***

You are requested to take necessary steps for compliance of the recommendations of National Forest Commission.

Yours faithfully,

**(Shakeel Ahmad)**

To  
All Vice-Chancellors

2015/CPR-7  
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27 JUN 2013  
RECEIVED  
NEW DELHI

S.No.1(R)

F.No.18-28/2013-U.1(A)  
Government of India  
Ministry of Human Resource Development  
(Department of Higher Education)

New Delhi, the 25 June, 2013

To

The Secretary  
University Grants Commission  
Bahadur Shah Zafar Marg,  
New Delhi

Sey. Secy.

Subject:- Recommendations made by National Forest Commission(NFC).

Sir,

I am directed to forward herewith a copy of O.M No. 6-20/2013-FP dated 8<sup>th</sup> April, 2013 alongwith extracts of Chapter 13 of the recommendation of NFC received from Ministry of Environment & Forests on the above mention subject.

2. It is requested to disseminate the contents of the Chapter 13 of the recommendation of NFC among the Universities for necessary follow-up.

Encl: As above

Yours faithfully

Sanjh

(Sandeep Jain)

Under Secretary to the Govt of India

Tel: 23385293

Copy to :- Shri Amit Kumar, AIG(FP/FIC) for information. MHRD supports the recommendation of NFC for GOI to encourage Universities to take up applied Forestry Research, proactively.

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Mrs. Manjiv

and in homesteads. Bamboo propagation thus needs to be made a national priority, for State Forest Departments, State Agricultural Departments, and local bodies including panchayats and Gram Sabhas.

- [227] Assistance and cooperation of concerned panchayats, Gram Sabhas and appropriate non-government organizations need to be taken in agroforestry extension.
- [228] The State Forest Departments must establish appropriate extension services to provide necessary technological support to tree growers. In order to provide single-window-services to farmers, agroforestry extension should be handled by the extension services of the agricultural universities and agriculture departments. Subject matter specialists in forestry species should be posted at Krishi Vigyan Kendras and in other appropriate extension units undertaking forestry extension.
- [229] Wood-based industries should also be encouraged to supply certified quality planting stock to farmers and to enter into buyback arrangements with them for the raw material produced by them. The farmers should be free to sell to the market if they get higher prices.
- [230] Liberal credit facilities at lower interest rates may be channelized through banks and other financial institutions to farmers to raise tree and bamboo plantations.
- [231] Suitable lands outside village forests, falling in the category of permanent agricultural fallows or wastelands fit for agriculture (e.g. canal side lands), or problem lands (e.g. usar, ravines, etc.), should be assigned to individuals or groups for tree cultivation in any form (including agroforestry, farm forestry, silvi-pasture, horti-silviculture), and suitable incentives should be designed and put in place to promote tree planting on lands distributed to the landless persons.

### Chapter 13

- [232] Ecological relations of species with their environments should be documented.
  - a) Ecological keystone species in major forest types should be identified.
  - b) Optional and truly obligate physiological or behavioral relationship among species should be identified and studied.
  - c) Key agents in biogeochemical cycles and energy flow chains, and quantify the rates of nutrient and energy transfers should be identified.
- [233] Genetic markers for identification of plus strains of important tree species for forestry and utilitarian purposes should be developed.
- [234] Soil processes in forest ecosystems, particularly aboveground –belowground interactions including role of mycorrhizae in forest regeneration and rehabilitation should be studied, and indicators of soil quality be identified.
- [235] Carbon sequestration of degraded forests using forestry practices should be improved, and carbon sequestration by major forest types be evaluated.
- [236] The role of coarse woody debris in forest regeneration/restoration should be determined.

- [237] *Pollutant sensitivity of major tree species and the response of forest to carbon dioxide and nitrogen enrichment should be determined; the impacts of toxins and pollutants in perturbing biogeochemical cycles be considered.*
- [238] *Tree species for urban forest in different agro-climates should be designed and identified.*
- [239] *Biodiversity database for major forest types should be developed and the uses of this biodiversity be examined.*
- [240] *The effect of changes in ecosystem structure and functioning in response to global biophysical and sociological impacts on the delivery of ecosystem services, both tangible and non-tangible, should be documented.*
- [241] *The linkage of ecosystem services to human well-being should be determined, and the level of well-being dependency on ecosystem services for different forest systems under different socio-economic conditions be evaluated.*
- [242] *Robust analytical framework and methodological foundations for valuation of ecosystem services and their delivery across social groups should be developed.*
- [243] *Indian Council of Forestry Research and Education should assess the local research needs of States and prioritize.*
- [244] *Forest Departments and the Government of India should encourage universities and organizations to take up research proactively, particularly applied research; the topics/areas for required baseline data collection and research should be identified, researchers be supported, and the findings of applied research in the working / management plans be incorporated.* ] X
- [245] *Research permits, getting of which is a difficult task, should be given without arbitrariness and quickly, provided certain conditions are met. Each management plan should list: i) research required, ii) research carried out in the area, and iii) publications and summary of findings that are relevant to the management plan.*
- [246] *Long-term research on grassland ecology, fire, flood, invasive species, forest regeneration, wildlife diseases, inter-relationships and inter-dependence of species, groups and habitats, multidisciplinary integrated research encompassing scientific and socioeconomic aspects related to protected area management, reintroduction, rehabilitation of species, etc. should be undertaken in different eco-regions with proper funding by the government and provision of facilities by the Forest Department. Research for making use of ethnic knowledge in wildlife conservation and management, and applied research to obtain intellectual property rights capable of benefiting the local communities and the country, should receive special attention.*
- [247] *ICFRI (Indian Council of Forest Research and Education) institutes should focus on basic research, and on research relating to national or regional problems which cannot be handled by State Forest Research Institutions (SFRIs), such as genetics and tree breeding, wood science and technology, forest hydrology, chemistry of forest products and their utilization, bio-pesticides, global warming, biodiversity conservation and management, forest sociology including participatory management, and forest economics. Strong linkage should be ensured between SFRIs, ICFRE institutes and agricultural universities*