Proceedings of the XIV Research Policy Committee (RPC) Meeting

 $30^{th} - 31^{st}$ May 2013



Thrust Areas of ICFRE Research:

- Managing Forests and Forest Products for Livelihood Support & Economic Growth
- ➤ Biodiversity Conservation & Ecological Security
- > Forests and Climate Change
- ➤ Forest Genetic Resource Management & Tree Improvement

Thrust Areas of ICFRE Forestry Education

► Forestry Education and Policy Research to meet Emerging Challenges

Thrust Areas of ICFRE Extension

> Forestry Extension for taking research to people



Indian Council of Forestry Research & Education
(An Autonomous Body of the Ministry of Environment & Forests, Govt. of India)
P. O. New Forest Dehra Dun – 248 006

<u>Index</u>

Sl. No.	Contents	Page No
1.	Minutes of the XIV meeting of RPC	1-4
2.	Programme of RPC	5
3.	Annexure I: List of participants of XIV RPC	6-7
4.	Annexure II: Ongoing projects of Institutes	8-29
5.	Budget Summary of ongoing projects	30
6.	New Projects of XIV RPC	31-45
7.	Annexure III Thrust Area-I: Managing Forests and Forest Products for livelihood Support and Economic Growth.	31-36
8.	Annexure IV: Thrust Area-II: Biodiversity Conservation and Ecological Security.	37-39
9.	Annexure V: Thrust Area-III: Forest and Climate Change.	40
10.	Annexure VI: Thrust Area-IV: Forest Genetic Resource Management and Tree Improvement.	41-43
11.	Annexure VII: New Research Proposals of Centre for Forest based Livelihood and Extension (CFLE), Agartala.	44
12.	Budget summary of New projects	45

Minutes of the XIV meeting of the Research Policy Committee (RPC) of Indian Council of Forestry Research and Education (ICFRE),

30th -31st May, 2013

XIV meeting of Research Policy Committee (RPC) was convened in the Board Room of ICFRE under the Chairmanship of Dr. V. K. Bahuguna, Director General, ICFRE from 30th -31st May, 2013. List of participants of RPC meeting is at **Annexure I.**

At the outset, Dr P.P Bhojvaid, Deputy Director General (Research) and Member Secretary RPC welcomed all the RPC members and invited participants. He briefed the house about the mandate of the Council and role of the RPC.

Dr. V. K. Bahuguna, DG, ICFRE & Chairman, RPC in his opening remarks stated that the ICFRE: Vision 2040 and document on "Changing Frontiers of Research Programs in ICFRE based on XIII Research Policy Committee (RPC) 2012 Meeting" is in place now and new project proposals have to be considered as per Vision Document in the already identified following four research thrust areas in programme mode as All India Coordinated Project/Interinstitutional project/Networking project:

- Managing Forests and Forest Products for Livelihood Support and Economic Growth
- Biodiversity Conservation and Ecological Security
- Forests and Climate Change
- Forest Genetic Resource Management and Tree Improvement

DG, ICFRE informed the house that ICFRE is planning to add two more All India Coordinated projects namely "Conservation of Biodiversity and enhancing Livelihood Opportunities to the Tribal's and forest fringe communities" and Agroforestry models for the country. The adaptability of agroforestry research needs extra efforts to popularize it among farmers by demonstrating robust models/ technologies.

He stressed that ICFRE research programs must have forward and backward linkages to maintain the continuity of research in a manner that the output of one scientist becomes input of other scientist with interdisciplinary/multidisciplinary approach as team work. Leads in the research projects needs to be followed for future gains. The research should focus on the needs of the society though few research projects with region specific scientific pursuits may be started by a special justification by associated director.

Further ICFRE needs to work on emerging global issues such as biodiversity conservation, climate change etc. Linkages between ICFRE research works with the industries should be established. The DG, ICFRE again reminded that the culture should be developed that scientists work by themselves and number of JRF/SRF in the projects should be curtailed. One JRF/SRF should be involved at least in 4-5 projects. In place of JRF/SRF appointment of post doctoral fellows may be considered for appointment as consultants or otherwise. It was further discussed and decided that JRFs engaged in the projects may be encouraged and enrolled for perusing the research work for the Ph.D degree out of the project work. It was decided that a Committee under the chairmanship of Prof. S.P. Singh, Chair of Excellence, FRI (DU), Dr P.P. Bhojvaid, Director, FRI and two other members would be formed to formulate guidelines for the enrollment of the JRF/SRF for the Ph.D degree from FRI, DU out of the project work / part off shoot of the project work. DG, ICFRE stressed that while research has importance the maintenance of premises, assets and infrastructure has also significance and therefore their maintenance should be given priority over over all issues.

RFRI, Jorhat has sufficient funds available with them from North East funding and it was decided by the house that the equipments whatever possible in collaborative projects may be purchased under North-East funds by RFRI, Jorhat and may be transferred to the other institutes of ICFRE on loan basis. The institutes would give the requirement of the equipment to the Director, RFRI with copy to DDG (Admin).

As the current year budget position with ICFRE is not very sound, the house was of the view that PI's/Institutes should keep on exploring the possibility of funds from the national and international funding agencies. The projects may be submitted to the Planning Commission/Ministry of Tribal Affairs/MoEF/NMPB/DST/DBT/NMBA/ITTO/UNDP/EU etc. State Forest Departments (SFDs) may be contacted for CAMPA funds available with them to cater the research needs related State Forest Departments.

A book "Atlas of Wood Decaying Fungi of Central India" authored by Dr C.K. Tiwari, TFRI, Jabalpur was released in the inaugural session of RPC meeting by Director General, ICFRE.

After this, Thrust area wise presentations were made by the respective National Project Directors (NPDs) on the new proposals to be included in these thrust areas. Directors of the

institutes presented the ongoing projects of the institutes along with rolling plan projects for extension/change in budget/change in objectives etc., and the details of approvals are given at **Annexure II**. Subsequently pending projects of the institutes, which could not be initiated in 2012-13 due to budget constraint, were presented by the Directors of the institutes and decision of RPC is also at **Annexure II**. Thrust area wise details of new projects along with decision taken are given in **Annexure III**, **IV**, **V** and **VI**. Newly created Centre for Forest Based Livelihood and Extension (CFLE), Agartala has submitted five new projects with total budget of Rs. 12.10 lakhs. The incharge of CFLE, Agartala was requested to submit the detail projects for the approval by the competent authority. The list of these projects at **Annexure VII**. The house authorized Chairman of the RPC for taking decisions on case to case basis if need so arises.

A. Projects for Extension:

During 2012-13, due to budget constraint, sufficient budget for ongoing projects could not be released, which affected the progress of ongoing projects. It was unanimously decided by the house that those ongoing projects which were due for completion on 31st March 2013, without any additional budget requirement would be given extension. All ongoing projects requiring enhancement of budget less than 15% of the total approved budget outlay were approved for cost and time duration.

B. Pending Projects:

These are projects which were non starter of XIII RPC. Institutes have submitted the list of pending projects to be undertaken by them (**listed in Annexure III**) for their execution in 2013-14, approval was given with the condition that they will manage it within the allocated budget.

Following points also emerged after detailed discussions by RPC members:

- The ongoing projects will be completed on priority basis by the directors of the institutes. However based on availability of funds, the directors of the institutes will take their conscious decision with respect to new and pending projects. New projects that have been technically approved by the RPC during the meeting will be started as and when funds are available. In principle, approval is given to the new projects as indicated in **Annexures IV-VII** as detailed above.
- ➤ DDG (R) and DDG (Admin) will rationalize the distribution of allotted budget after the discussions with respective directors.

- ➤ ICFRE research on conservation of forest resources and their sustainable use will be actively perused.
- ➤ Data of 'Revisit of Forest type' may be used as base line data by the institutes for further biodiversity related research as discussed in the RPC meeting. Forest Based Biodiversity in AICP mode may be initiated at state level by the respective institutes. Director, IFGTB was requested to initially work on biodiversity aspects of Andaman and Nicobar Islands.
- > CSFER, Allahabad will focus extension work on poplars for farmers with the help of IFP, Ranchi and extension of agro forestry species in Eastern UP.
- Research on invasive species like *Lantana* may be taken on localized area. Dr Subash Nautiyal, Scientist-G, FRI will take necessary initiation in this regard.
- > TFRI, Jabalpur with the help of State Forest Department will make efforts to open a new centre in its jurisdiction states. TFRI, Jabalpur will work towards increased activities at Chhindwara centre.
- Research on micropropogation in Bamboo in AICP mode would be taken, Dr T.S. Rathore, Director, AFRI will be the Chief Technical Advisor for this activity.

The meeting concluded with vote of thanks by DDG (Research), ICFRE.

PROGRAMME

XIV RESEARCH POLICY COMMITTEE (RPC) MEETING OF ICFRE

Date: 30 - 31 May 2013

Venue: Board Room ,ICFRE,Dehradun

30/5/2013 Inaugural Session

9.30 AM - 10.30 AM | Welcome by DDG(R)

Opening of XIV RPC by Chairman, RPC

Thrust area-1: Managing forests and forest products for livelihood support 10.30 AM to 1.00 PM

Overview Presentations of the Thrust Area I by NPD

Institute wise Presentation and discussions on New and Ongoing Projects

New Projects / Approved pending projects of XIII RPC / Ongoing projects

FRI Dehradun, IWST Bangalore, IFGTB Coimbatore, IFP Ranchi, TFRI Jabalpur, AFRI Jodhpur, RFRI Jorhat, HFRI Shimla, IFB Hyderabad, CSFER Allahabad

Lunch (1.00-2.00)

Thrust area- 2: Biodiversity Conservation & Ecological Security 02.00 PM to 05.30 PM

Overview Presentations of the Thrust Area II by NPD

Institute wise Presentation and discussions on New and Ongoing Projects

New Projects / Approved pending projects of XIII RPC / Ongoing projects

FRI Dehradun, IWST Bangalore, IFGTB Coimbatore, IFP Ranchi, TFRI Jabalpur, AFRI Jodhpur, RFRI Jorhat, HFRI Shimla, IFB Hyderabad, CSFER Allahabad

31/5/2013

Thrust area-3: Forestry interventions for climate change mitigation and adaptation

09.30 AM to 1.00 PM

Overview Presentations of the Thrust Area III by NPD

Institute wise Presentation and discussions on New and Ongoing Projects

New Projects / Approved pending projects of XIII RPC / Ongoing projects

FRI Dehradun, IWST Bangalore, IFGTB Coimbatore, IFP Ranchi, TFRI Jabalpur, AFRI Jodhpur, RFRI Jorhat, HFRI Shimla, IFB Hyderabad, CSFER Allahabad

Lunch (1.00-2.00)

Thrust area-4: Management and Improvement of Forest genetic resources 02.00 PM to 04.30 PM

Overview Presentations of the Thrust Area III by NPD

Institute wise Presentation and discussions on New and Ongoing Projects

New Projects / Approved pending projects of XIII RPC / Ongoing projects

FRI Dehradun, IWST Bangalore, IFGTB Coimbatore, IFP Ranchi, TFRI Jabalpur, AFRI Jodhpur, RFRI Jorhat, HFRI Shimla, IFB Hyderabad, CSFER Allahabad

4.30 PM Any other discussion with the permission of the chair

Wrap up and Concluding Session

PARTICIPANTS OF XIV RESEARCH POLICY COMMITTEE (RPC) MEETING HELD AT ICFRE H.Q. DEHRADUN 30th and 31st May, 2013

_	30 ^m and 31 ^m May, 2013				
	T	RPC MEMBERS			
1.	Dr. V.K. Bahuguna, D	G, ICFRE & Chairman, RPC			
2.	Dr. P.P. Bhojvaid, Dy Member Secretary, RP	. Director General (Research) & Director, FRI, Dehradun & C			
3.	Dr. S.P. Singh, DDG (Admin.), ICFRE			
4.	Sh. Saibal Dasgupta, D	DDG (Extension) ICFRE			
5.		r, International Cooperation, ICFRE & Director, RFRI,			
	Jorhat	•			
6.	Sh. S.C Joshi, Director	, IWST, Bangalore.			
7.	Dr. N. Krishna Kumar,	Director, IFGTB, Coimbatore.			
8.	Dr. T.S. Rathore, Direc	ctor, AFRI Jodhpur			
9.	Dr. U.Prakasham, Dire				
10.	Dr. V.R.R. Singh, Dire	ector, HFRI, Shimla.			
11.	Shri Rameshwar Das, l	Director, IFP, Ranchi.			
12.	Sh. M.R.G. Reddy, Dir	rector, IFB, Hyderabad			
13.		hief Conservator of Forests (Research), Haldwani			
14.	Prof (Dr.) S. P. Singh,	Chair of Excellence, FRI, Dehradun (Formerly Vice-			
	Chancellor, HNB Garh	iwal University), 41/1 Vasant Vihar, Dehradun – 248006			
15.	Dr. O.P. Chaturvedi, H	lead, Plant Sciences, CSWCRTI, Dehradun			
16.		ofessor, High Altitude Plant Physiology Research Center			
	(HAPPRC),HNB Garhwal University, Srinagar (Garhwal), UK 246 174				
17.	Sh. Anil P. Joshi, HESCO, Dehradun				
18.	Dr. T.P. Singh, ADG (FCC), ICFRE, Dehradun				
19.	Dr. V.R.S. Rawat, Scientist E / Addl. Director, ICFRE, Dehradun				
20.	Dr.Vimal Kothiyal, AI	OG (RP), ICFRE Dehradun			
		OTHER PARTICIPANTS			
21.	Ms. Neelu Gera,	ADG (Panchayat & Human Reasearch), ICFRE, & NPD,			
		Managing forests and forest products for livelihood			
		support & economic growth.			
22.	Dr. Veena Chandra	Scientist F, FRI Dehradun and & NPD, Biodiversity			
		Conservation and Ecological Security			
23.	Shri M.P. Singh	Head, Climate Change, FRI, Dehradun & NPD Forests			
		and Climate Change			
24.	Dr. H.S. Ginwal,	Scientist-F, FRI & NPD, Forest Genetic Resource			
		Management and Tree Improvement			
25.	Ms Kamal Preet	ADG (Education and Policy Research), ICFRE Dehradun			
		& NPD, Forestry Education and Policy Research to Meet			
		Emerging Challenges			
26.	Sh. Kunal Satyarthi ADG (Media & Extn.), ICFRE Dehradun & NPD, Forestry				
		Extension for Taking Research to People			
27.	Sh. A.S. Rawat	Group Coordinator (R), FRI Dehradun			
28.	Sh. T.P. Raghunath	Group Coordinator (R), IFGTB, Coimbatore			
29.	Dr. S.A. Ansari	Group Coordinator (R), TFRI Jabalpur			
30.	Dr. K.S. Kapoor	Group Coordinator (R) & Scientist HFRI Shimla			
31.	Sh. Pankaj Agrawal	ADG (EM) ICFRE			

32.	Sh. S.D. Sharma	ADG Stats, ICFRE		
33.	Dr. V. Mohan	Scientist F/Special Director, IFGTB, Coimbatore		
34.	Dr. Sushma Mahajan	Scientist F / Special Director, ICFRE		
35.	Dr. G.R.S. Reddy	Scienitst F, IFB, Hyderabad		
36.	Sh. N.K. Upreti	Scientist F, RCS, FRI Dehradun		
37.	Dr. R. Yasodha	Scientist F, IFGTB Coimbatore		
38.	Sh. S. Banerjee	TFRI Jabalpur		
39.	Dr. Anita Tomar	Scientist D, CSFER, Allahabad		
40.	40. Dr. B.M Dimri Scientist C, ICFRE			
		RAPPORTEURS		
41.	Dr. R.S. Rawat	Scientist C/ Asstt. Director, FCC, ICFRE		
42.	Dr. Anil Negi	Scientist C/ Asstt. Director, ICFRE		
45	Dr. Vishwajit Kumar	Scientist, C / Asstt. Director, ICFRE		
46	Dr. Shilpa Gautam	Scientist, C / Asstt. Director, ICFRE		
		SUPPORT TEAM		
47.	Smt. Manjeet Sharma	PS to ADG (RP), ICFRE		
48.	Sh. Kailash Chand	Assistant, RP Division, ICFRE		
49.	Sh. Danish Shahab	RA, RP Division		
50.	Sh. Sanjeev Sharma	Highly Skilled worker, RP Division		
51.	Sh. Vipin Verma	Unskilled worker, RP Division		

Annexure II

Ongoing projects of the Institutes

(Institutes would distribute the budget according to the Total Budget allocated vide DDG (Admin) letter dated 15th May 2013)

(i) Institute: Forest Research Institute, Dehradun

	Ongoing Projects Without Change Request		
Sl. No	Title of the project/PI/ Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thrust .	Area 1. Managing Forests and Forest Products for livelihood Support a		
1.	Vegetative propagation, nodulation and nitrogen fixation studies in <i>Myrica esculenta</i> Ham a non legume nitrogen fixing species. Dr. S. P. Chaukiyal/ 4 Years, April 2010 – March 2014	10.96	2.59
2.	Evaluation of wood properties and growth performance of <i>Eucalyptus</i> hybrids raised in multilocation trials./ Dr. P.K. Pandey/ 3 years (April 2011– March 2014)	11.70	4.40
3.	Evaluation of <i>Sesbania Grandiflora</i> and <i>Lannea coromandilica</i> for paper making./ Dr. S.P. Singh/ 3 years (April 2011- March 2014)	5.59	1.94
4.	Enzyme aided alternative process for the extraction of oil from Cymbopogon citratus (lemon grass)./ Dr. Rashmi/3 years (April 2011– March 2014)	5.97	2.13
5.	Evaluation of <i>Santalum album</i> grown in plateau area of Uttar Pradesh adjoining Madhya Pradesh and Uttarakhand for yield, quality and composition of essential oil. /Rakesh Kumar/3 years (April 2011 – March 2014)	3.90	1.05
6.	Screening of some forest tree species for their antioxident properties./ Dr. V.K. Varshney/3 years (April 2011– March 2014)	6.35	1.99
7.	Utilization of <i>Pinus roxburghii</i> needles for value added products./ Dr. Vineet Kumar/3 Years (April 2012 - March 2015)	4.50	2.22
8.	Structural studies and utilization of <i>Acacia tortilis</i> gum exudates./ Dr. Vineet Kumar/3 Years (April 2012 - March 2015)	4.50	1.57
9.	Processing fungal resources for development of natural dye./ Dr. Rakesh Kumar/3 Years (April 2012 - March 2015)	6.18	1.50
10.	Process refinement for extraction of quality fiber and optimal isolation of bioactive constituents from Agave sisalana./ Dr. Y.C. Tripathi/3 years (April 2011– March 2014)	8.40	2.59
11.	Phytochemical screening of selected wild edible plants for exploration of new sources of Luteolin./Dr. Y.C. Tripathi/3 Years (April 2011- March,2014)	8.65	2.64
12.	Biology of hispine Bamboo borer- <i>Estigmena chinensis</i> Hope (Coleoptera :Chrysomelidae) damaging green standing bamboo and its management./ Dr. K.P. Singh/4 Years (April 2012 - March 2016)	10.01	2.70
13.	Studies on diversity of egg parasitoid wasps <i>Trichogramma</i> spp. From Punjab and Haryana and their application in biological control of important forest insect pests./ Dr. Mohammed Yousuf/4 Years (April 2012 - March 2016)	11.94	5.32
14.	Development of models of some important medicinal plants with <i>Melia Composita</i> and <i>Emblica officinalis</i> in degraded land of Punjab and Uttrakhand. Sh. Ram Bir Singh/5 Years (April 2011 - March 2016)	9.83	0.80
15.	Study on status of agroforestry system existing in Punjab, Haryana, Uttrakhand & North-West Region of Uttar Pradesh./ Smt. Jayshree Ardey Chauhan/3 Years (Oct. 2011– Sept. 2014)	17.10	2.60
16.	Enhancing fodder productivity through silvi - pasture system on degraded land of India./ Dr. Charan Singh/5 Years (April 2012 - March 2017)	8.00	0.75
17.	Studies on performance of ZiBOC treated imported wood in different agro climatic conditions./ Dr. Sadhna Tripathi/5 years, April 2009 – March 2014	6.00	0.40
18.	Application of defects detection technique on standing trees./ Dr. Y.M. Dubey/3 years (April 2011- March 2014)	1.88	0.68
19.	Chemical modification of wood for durability improvements./ Sh. Ajmal Samani/3 years (April 2011– March 2014)	6.66	1.77
20.	Studies on the suitability of paper mulberry for plywood. D.P. Khali/3 years (April 2011–March 2014)	4.77	2.35
21.	Studies on working quality and finishing aspects of <i>Melia Composita</i> . /Dr Kishan Kumar/2013-2016 (4 Years)	18.48	2.92

22.	Vacuum press drying studies of <i>Melia composite</i>	3.35	1.30
22	Sh. Shailendra Kumar/3 Years (April 2012 - March 2015)	0.00	2 - 1
23.	Studies on natural durability of plantation grown species with conventional /eco-	8.08	2.61
	friendly preservatives (ZIBOC)./		
	Dr. Sadhna Tripathi/5 Years (April 2012 - March 2017)		
24.	Study on Nanoclayas filler on physical and mechanical properties of plywood./	4.30	1.55
2.5	Ms. Ismita Nautiyal/3 Years (April 2012 - March 2015)	0.10	2.05
25.	Development of composites of lops and tops of <i>Melia composita</i> .	8.10	2.85
	Sh. D.P. Khali/3 Years (April 2012 - March 2015)		
26.	To develop medium density fiber board (MDF) from lops and tops of popular./	7.35	1.10
	Ms. Ismita Nautiyal/3 Years (April 2012 - March 2015)		
27.	Working Plan of FRI		
	Sub Total	202.55	54.32
Thrust	Area 2. Biodiversity conservation and ecological security		
28.	Ecological studies of watershed in Mussorie hills of Dehradun/Sh. Nirmal	4.86	1.41
	Ram/		
29.	Studies on Taxonomy of the family Eulophidae (Hymenptera: Chalcidoidea)	6.00	0.40
	present in National Forest Insect Collection (NFIC) except Doon Valley		
	Dr. Sudhir Kumar/5 years, April, 2010 - March, 2015		
30.	Studies on Taxonomy of the family Encyrtidae (Hymenptera: Chalcidoidea)	6.00	0.60
	present in National Forest Insect Collection (NFIC) except Doon Valley		
	Dr. Sudhir Kumar/5 years, April, 2010 - March, 2015		
31.	Sudies on thrips of forest and medicinal plants, problems caused by them and	9.00	1.52
	their management in Uttarakhand/ Dr. Neena Chauhan/4 Years (April, 2011		
	– March, 2015)		
32.	Soil organic carbon store under different land uses in Haryana.	8.43	2.02
	Dr. M.K. Gupta/4 Years, April 2010- March 2014		
33.	Assessment of Soil Quality Indicators for growing different Plantations in	6.66	1.97
	Uttarkashi District. /Dr. A. K. Raina/3 years (April, 2011– March, 2014)		
34.	Assessment of soil microbial community and soil quality under poplar and	9.06	2.09
	eucalyptus plantations in Haryana./		
	Dr. Parul Bhatt Kotiyal/3 years (April, 2011– March, 2014)		
35.	Development of suitable model for enrichment of selected Medicinal Plant	7.35	0.95
	Conservation Areas (MPCAs) of Uttarakhand Himalayas./		
	Dr Anoop Chandra/2012-2015 (3 Years)		
36.	Development of molecular diagnostic kits for identification and early detection	12.53	4.08
	of nursery and plantation pathogens of Eucalyptus./		
	Sh. Amit Pandey/3 years (April, 2011- March, 2014)		
37.	Impact of Human Induced Disturbance on Regeneration and Population	16.25	2.75
	Structure of Rhododendron arboretum and Myrica nagi in Mid Hills of Gharwal		
	Himalaya./ Dr. H.B. Vasistha/4 years, April, 2009 – March, 2013		
38.	Invasive Species - Impact of invasive species on plant diversity in selected forest	8.67	3.03
	sites of Uttarakhand, Haryana, Punjab./ Dr. Anoop Chandra/3 Years (April		
	2012 - March 2015)		
39.	Rare and endangered species - AICP on inventorization, characterization and	120.46	5.23
	conservation strategies of selected rare and endangered speices of India/		
	Dr. Anoop Chandra/3 Years (April 2012 - March 2015)		
	Sub Total	215.27	26.05
Thrust	Area 3: Forests and Climate Change		
40.	Adaptation Component - Assessment of ecosystem services imparted by forests	69.74	40.02
10.	of Uttarakand./ Sh. M.P. Singh/3 Years (April 2012 - March 2015)	07.74	10.02
41.	Program: Elevated CO2 Studies	40.00	40.00
	Forest ecosystem studies in change environment conditions of elevated CO2 and		
	temperature by free air CO2 enrichment (FACE) and open top chamber (OTC)		
	conditions./ Sh. M.P. Singh / 2012-2014 (2years)		
	Sub Total	109.74	80.02
Thrust			-
	Area 4: Forest Genetic Resource Management and Tree Improve		0.24
42.	Evaluation of different genotypes and recombinants of eucalypts for adaptability	13.02	9.34
12	and productivity/Ms. Parveen Population Constitution of Himphysia Only (Quantum	24.45	6.62
43.	Population Genetic Analysis of Himalayan Banj Oak (Quercus	24.45	6.63
	leucotrichophora) forests and its pertinence to Genetic Conservation./		

	Dr. H.C. Ginwal/3 years (June, 2011 – May, 2014)		
44.	AICP for genetic improvement of Melia composita./Dr Ashok Kumar	103.00	50.00
45.	Screening of Poplar genotypes for resistance against <i>Alternaria alternata</i> Toxin (s)./ Dr. Y.P. Singh/3 years (April 2011 - March 2014)	8.56	2.87
46.	Allelopathic Influences in regeneration of silver fir (Abies pindrow) and spruce (<i>Picea smithiana</i>) forests - Effect of natural leachates on seedling growth in nursery./ Sh. Ombir Singh	8.15	3.24
47.	Evaluation of <i>Bombax ceiba</i> for seeds sources in Northern India Dr. Dinesh Kumar/4 years (April 2011- March 2015)	13.39	4.16
48.	Allelopathic potential in regeneration of Sal (<i>Shorea robusta</i>) forests Dr. Ombir Singh/5 years (April, 2011– March, 2016)	13.43	3.42
	Sub Total	184.00	79.66
	Grand Total	711.56	240.05

Ongoing Projects With Change Request

	Ongoing Projects with Change Request					
Sl. No.	Title of the project/PI/Duration	Total cost of the project (in lakhs)	Change request with justification	Recommendations of RPC		
1	Validation of chemical markers conferring <i>Cylindrocladium</i> leaf and seedling blight resistance in Eucalyptus germplasm./ Dr. V.K. Varshney/3 Years, April 2010–March 2013	4.71	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period.	Approved for one year extension without additional budget		
2	Development of Category Shades of Natural Dyes of <i>Pinus roxburghii</i> and <i>Mallotus philippensis</i> ./Sh. Rakesh Kumar/2years (April 2011–March 2013)	4.00	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period.	Approved for one year extension without additional budget		
3	Refining of process for detoxification studies of Jatropha seed oil Dr. Vineet Kumar/3 Years, April, 2010 – March, 2013	7.56	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period.	Approved for one year extension without additional budget		
4	Phytochemical examination of Acacia albida./Dr. Pradeep Sharma/3 Years, April, 2010 – March, 2013	8.27	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period.	Approved for one year extension without additional budget		
5	Survey of insect pests and their control in plantations./ Dr. Shamila Kalia/3 Years, April, 2010 – March, 2013	3.70	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period. Permission for appointment of one FA is also requested within project budget outlay.	Extension of one year is approved. Existing manpower approved for continuation.		
6	Shisham mortality – Finding solutions for future plantations Dr. N.S.K. Harsh/3 Years, April, 2010 – March, 2013	22.99	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period. Permission for appointment of one FA is also requested within project budget outlay.	Extension of one year is approved. Existing manpower approved for continuation.		
7	Screening of Eucalyptus germplasm for diease resistance against Cylindrocladium leaf and seedling blight./Dr. Amit Pandey/3 Years, April, 2010 – March, 2013	18.12	1 Year's extension in project period. No additional budget is required. Balance amount will be utilized in the extension period.	Approved for one year extension without additional budget		
8	Interaction between <i>Pseudomonas</i> fluorescens and AM Fungus on Dendrocalamus strictus Dr. Y. P. Singh/5 years, April, 2010 – March, 2015	12.56	The project period is 2010 to 2015. The JRF was sanctioned for three years only. Due to acute shortage of regular staff in the Division, services of one JRF/SRF	Approved within the allotted budget.		

	1			
			are required for 4th to 5th years	
			also. For this extra budget of Rs. 2.88 lakh is required.	
9	Studies on the suitability of different	4.97	1 Year's extension in project	Extension may be
	combinations of plantation grown species	7.77	period. No additional budget is	applied in the last
	for laminated veneer lumber (LVL)		required. Balance amount will be	year of completion
	Sh. D.P. Khali/3 years (April 2011 -		utilized in the extension period.	of the project.
	March 2014)		Permission for appointment of one	· · · · · · · · · · · · · · · · · · ·
	·		FA is also requested within project	
			budget outlay.	
10	Refinement in vacuum timber dryer	2.00	The Project period is 2012-2014.	Extension may be
	designed by FRI and its performance		Due to very late release of budget	applied in the last
	studies		for Equipment (on 18th Feb 2013),	year of completion
	Sh. N.K. Upreti/2 Years (April 2012 -		no activity could be performed	of the project.
	March 2014)		during 2012-13 except initiation of	
			procurement of equipment in March 2013. Hence project period	
			may kindly be revised to 2012-	
			2015.	
11	Study on performance of treated timbers	9.63	Extension of Project Assistant	Approved
	(ZiBOC, CCB & CCA) and their natural		(@Rs. 8500/- per month) may be	extension of PA
	durability in cooling towers./ Dr. Sadhna		given for two years for which Rs.	within allotted
	Tripathi/5 years, (2010-2015)		2.04 lakhs are required. As Rs.	budget.
			1.59 lakhs are already balance	
			after the first three years,	
			additional 0.45 lakhs may be	
10		24.07	sanctioned.	
12	Characterization of <i>Pinus roxburghii</i> for	24.87	Due to non availability of	Approved
	resin yield and spiral grain formation in		specialized scientific worker, work under the 4th objective	
	wood using NIR spectroscopic methods and association studies using molecular		under the 4th objective (Development of NIR based	
	markers./ Dr. Santan Barthwal/3 Years		application methods in relation in	
	(April 2011 - March 2014)		spiral grain formation and resin	
	(- F		yield in <i>P. roxburghii</i>) could not	
			be initiated. Hence this objective	
			may be dropped and title of this	
			project may be modified	
			accordingly as	
			"Characterization of Pinus	
			roxburghii for resin yield through	
			association studies using	
13	Development of DNA-marker based	23.08	molecular markers". Two years extension in project	One year extension
1.0	technique for <i>Pinus roxburghii</i> and	23.00	period. Additional budget of Rs.	is approved with
	Cedrus deodara for wood/timber		9.36 lakh (over project, outlay) is	additional budget
	forensics./Dr. Santan Barthwal/3		also required.	of Rs. 3.00 lakhs
	Years, April, 2010 – March, 2013			
14	Development of macro and	7.35	1 Year's extension in project	Approved for one
	micropropagation protocol of		period. No additional budget is	year extension
	Rhododendron arboreum Smith: state		required. Balance amount will be	without additional
	tree of Uttarakhand/Dr. Ajay Thakur/3		utilized in the extension period.	budget
1.5	Years, April, 2010 – March, 2013	7.00	1 Voorlo systemation in the state of	Annuovad f
15	Interspecies hybridization between	7.00	1 Year's extension in project	Approved for one
	Eucalyptus pellita and E. urophylla and development of F1 hybrids/Ms. Parveen/		period. No additional budget is required. Balance amount will be	year extension without additional
	3 Years, April, 2010 – March, 2013		utilized in the extension period.	budget
16	Digitization of FRI (Dehradun	43.23	5 years extension in the project	Send the Project
10	Herbarium) Herbarium	.5.25	period with additional budget of	proposal to all the
	Dr. Veena Chandra/5 years, April,		Rs. 25.00 lakhs.	Directors for
	2008 - March, 2013			exploring more
				funds from outside.
				Create a search
				engine facility for

				identification of	
				plants with more	
17	Phytochemical studies on medicinally important <i>Diploknema butyracea</i> (Indian Butter tree) seeds./ Dr. Rashmi/3 Years ,	6.12	1 Year's extension in proj period. No additional budget required. Balance amount will	is	
18	April, 2010 – March, 2013 Establishment of multilocation clonal trial and study of wood anatomical properties and cellulose content of promising clones of <i>Populus deltoids.</i> / Dr. Dinesh Kumar /3 Years, April, 2010 – March, 2013	14.41	utilized in the extension period. Six months extension (upolitical September 2013) with addition budget requirement of Rs. 1 lakhs.		
19	Impact component - To undertake the dendrochronological analysis of different trees growing in different meterological settings. Sh. M.P. Singh/3 Years (April 2012 - March 2015)	39.59	The project was approved in X RPC-2012 for Rs 18.00 la However the NPD has requested budget outlay of Rs 39.59 lakhs XIV RPC 2013. The budget of 20.79 lakh is requested for current year	kh. 20.79 lakh is for approved for current in year subject to Rs availability of funds.	
20	Mitigation Component - Process based carbon sequestration study (Open Top Chamber)./ Sh. M.P. Singh/3 Years (April 2012 - March 2015)	40.41	The project was approved in XIII RPC-2012 for Rs 20.00 lakh. However the NPD has requested for budget outlay of Rs 40.41 lakhs in XIV RPC 2013. The budget of Rs 32.93 lakh is requested for the current year	year subject to	
	Total	304.57	11 501 0 1 1		
	Ongoing Projects Dro		equested by FRI, Dehradur	<i>1)</i>	
Sl No.	Name of the Project/PI/Duration	Total Cost of the Project (in lakhs)	Required Budget for 2013-14 (in lakhs)	Recommendations of RPC	
1	Study on silvi - medicinal system in arid an semi - arid Himalaya and tropical zones of India./ Dr Charan Singh /April 2012-March 2016	1.87	1.25	Project Dropped	
2	Development of NIR spectroscopy based application methods for evaluation of physical and mechanical properties of <i>Melia composita</i> (Syn Melia dubia) Dr Vimal Kothiyal/April 2012-March 2015	6.00	0.65	Project Dropped	
3	Screening of Higher Basidiomycetes fungal resources for bioactive cholesterol and triglycerides lowering agents (Statins)./ Dr V. K. Varshney/April 2012-March 2015	1.50	1.50	Kept in abeyance	
4	Genetic evaluation and establishment of germplasm banks of <i>Bauhinia variegate</i> Dr Shilpa Gautam/April 2011-March 2015	15.24	-	Rs. 1,38,307/- has been incurred. Need justification from the institute.	
5	Evaluation of Joint Forest Management in Northern India./ Sh. Ved Pal/Oct. 2011-Sep. 2015	36.81	9.67	Rs. 4,71,300/- has been incurred. Need justification from the institute.	
6	Bioecology and management of the gall insect in Eucaylyptus./ Dr. Shamila Kaliya/3 years (April, 2011– March, 2014)	12.66	The project is proposed to be dropped as the Entomology Division has already taken up work on same field on larger scale in collaboration with Punjab Government. PI Needs time till 31st March	Budget incurred may be intimated along with project report	

	Total	74.00	2013 to compile the data and submit the report of the work done so far.			
	Total P	ending Pro	iects			
Sl. No.	Name of the Project			Total Cost of t Project (in lakhs)	he	Required Budget for 2013-14 (in lakhs)
Thru	st Area 1. Managing Forests and Forest Proc	lucts for livel	ihood Support	and Economic G	Frow	th
1.	Evaluation of some bio-pestisides for the rurseries and plantations./ Dr. Shamila Kalia	•	of termites in	13	3.90	3.60
2.	Management of fungal discolouration of Bamb and other utility items to help artisans. Dr. N.S	oo for handic	rafts, furniture	14	.99	3.50
3.	Studied s on finishing aspects of <i>Dendacala</i> Kumar /	imus strectus	./ Dr. Kishan	5	5.20	2.60
4.	Chemical Interventions for utilization of Eye wood conversion industry./ Dr. V.K. Varshne		k residues for	12	2.02	3.84
5.	Studies on chemoenzymatic treatement of B reducing sugars./ Dr. P.K. Gupta /	lack liquor fo	or recovery of	9	0.10	4.22
			Total	55.	.21	17.76

(ii) Center for Social Forestry and Eco-Rehabilitation, Allahabad

	Ongoing Projects Without Change Request						
Sl. No	Title of the project/PI/ Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)				
Thrust A	rea 1. Managing Forests and Forest Products for	or livelihood Support	and Economic Gr	owth.			
1.	Conservation and cultivation of Economically va		6.85	2.82			
	less utilized fruits tree species and to determin						
	components presents in fruit based Agro-forestry in	n Eastern U.P.					
	Total		6.85	2.82			
Thrust A	area 2. Biodiversity conservation and ecological	security					
2.	Phyto-remediation of water logged waste land thro	ough biodrainage and	9.90	2.79			
	soil amendments						
3.	Restoration of Sand Stone Mining Area of Vind	hyan region through	30.66	5.38			
	Microbial Technology						
	Total		40.56	8.17			
	Grand Total		47.41	10.99			
	Ongoing Projects	With Change Red	quest				
Sl. No.	Title of the preject/DI/Duretien	Total cost of the	Change reque	est Recommendati			
SI. NO.	Title of the project/PI/Duration	project (in lakhs)	with justificati	on ons of RPC			
1.	Development of site specific medicinal plant	-	-	Details not			
	based agro-forestry models for existing			provided by the			
	plantations in Eastern Uttar Pradesh and			Institute.			
	establishment of demonstration model./ Dr. B.K.						
	Pandey, Sci-D /						

(iii) Institute: Institute of Wood Science and Technology, Bangalore

	Ongoing Projects Without Change Request						
Sl. No.	Title of the project/ PI/ Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)				
Thrust	Area I Managing Forests and Forest Products for livelihood Support and Eco		_				
1	Effect of treatment with micronized copper preservative on the strength, treatability and durability of selected wood species./PI: Dr. S.R. Shukla / (2010-2014)	21.34	3.98				
2	Furfurylation of wood to improve properties for various applications./ PI: Dr. Anil Kumar Sethy/ (2011 –2014)	6.2	0.55				
3	Effect of flowering on culm quality of Dendrocalamus brandisii and to explore its potential for making bamboo composite products./ PI: Amita Pant/ (2012-2015)	10.23	2.05				
4	Evaluation of wood properties of <i>Melia dubia</i> of different ages from southern India for finding suitability for various end products and development of value added products./ PI: Dr. S.K. Sharma / (2012-2015)	7.7	3.27				
5	Nanoparticles based wood coatings for outdoor applications./ PI: K.K.Pandey/ (2011 –2014)	7.54	0.70				
6	Natural fiber-PVC composites for light structural applications./ PI: Dr.Pankaj Aggarwal/ (2011 –2014)	23.61	2.73				
7	Wood quality variability in sawn timber from three plantation grown species./ PI: Dr.Shakthi singh chuhan / (2011 –2014)	2.5	0.65				
8	Study the effect of microwave irradiation and seed storage conditions on quality of Pongamia pinnata (L.) seed oil for cost effective production of biodiesel./ PI: Ritesh Kumar D.Ram / (2011-2014)	15.98	2.62				
9	Variation of growth stresses in <i>Melia composita</i> ./ PI: Dr. Pankaj Aggarwal.	8.95	6.54				
10	Wood modification of <i>Melia composita</i> for improving its dimensional stability and durability. Dr. K.K. Pandey	9.4	2.15				
11	Evaluation of the performance of Steam Volatile Creosote as a wood preservative./ PI: S.Mohan/ (2010-2015)	7.9	1.65				
12	Chemical derivatization of a cellulose into value added products./ PI: Dr. S.S. Bisht / (2012- 2015)	14.36	3.20				
13	Production of Synthetic Biodiesel from the Wood Waste./ PI: R.Ezhumalai / (2011-2014)	15.5	2.00				
14	Development of coccinellids based biocontrol programmes for the management of sandal scales and mealy bugs./ Dr.R.Sundarraj / (2011-2015)	4.89	2.86				
15	Development of botanical pesticidal formulations and demonstration of application in forest nureries and plantations. / PI: Dr.R.Sundararaj / (2011-2014)	11.5	3.58				
16	Determination of the treatability and durability of imported timbers as per Bureau of Indian Standards./Dr. R. Sundararaj /(2012-2018)	8.8	1.43				
17	Population dynamics of pests and suitable control measures in selected silvihorticultural models in Karnataka./ PI: Raja.Muthukrishnan / (2011-2014)	1.00	0.26				
18	Microbial biosynthesis of polyhydroxyalkanoates (PHA) from wood waste. / PI: Dr.Muthukumar / (2011-2014)	3.95	0.80				
19	Screening of oils of Pongamia pinnata, Linn., Jatropha curcus Linn., and Simarouba glauca. D.C for developing eco-friendly wood preservatives./ PI: D.Venmalar / (2010-2015)	20.2	2.62				
20	Screening of certain plant extractives for developing eco-friendly wood preservatives. / PI: D.Venmalar / (2010-2015)	5.69	1.73				
21	Durability and treatability of <i>Melia composita</i> . / Mrs. D. Venmalar./	2.00	1.00				
22	Studies on macro wood deteriogens at Kakinada port and Narsapur Green filed port, Andhra Pradesh. / PI: M.Balaji / (2011 –2014)	4.73	1.32				
23	Growth and yield studies on forest plantations of teak in Karnataka for their sustainable management. / PI: Dr.V.P.Tiwari / (2010-2015)	17.51	2.49				
	Total	231.48	50.18				
THRUS	T AREA -II : Biodiversity conservation and ecological security		•				
24	Structure, Diversity and Regeneration Studies in Permanent Preservation Plots in	14.31	5.262				

	Moist Deciduous and Evergreen Forests of Western Ghats in Karna	ataka / DI·Dr	1	1
	Syam Viswanath/ (2011 –2014)	ataka./ 11.D1.		
25	All India Coordinated Project on genetic improvement of P. Dr.Geeta Joshi / (2012-2022)	Melia dubia./	107.00	11.25
26	Growth variability in melia dubia plantations and seed germination Arun Kumar / (2011-2016)	n studies./ Dr.	3.5	1.27
27	Refinement and standardization of protocols for in vitro propagation	on and genetic	15.48	2.07
-	fidelity studies of micro propagated plants of two bamboo spec		13.10	2.07
	balcooa and Thyrsostachys oliver./Dr. Ashuthosh Srivastava/ (20			
	Total	-	140.29	19.852
	Grand Total		371.77	70.032
	Ongoing Projects With Chang	e Request		
Sl. No.	Title of the project	Total cost	Change request	Recommend
		of the	with	ations of
		project	justification	RPC
1	Careaning and avaluation of calcutad mambage of Dutaceae from	(in lakhs) 12.75	Dequest to drap	Anneyed
1.	Screening and evaluation of selected members of Rutaceae from Southern India for anti-malarial activity. Sh. B.S.	12.73	Request to drop the objective of	Approved for one year
	Chandrashekar / 2010-2013		evaluating the	extension
	Chandrashekar / 2010-2013		plant extracts on	with Rs. 2.00
			RBC and liver	lakhs
			cell lines. One	
			year extension	
			with budget of	
			2.872 lakhs.	
2.	Vegetative propagation and silvicultural practices for selected	17.04	The second	Approved as
	tropical timber species for plywood and panelwood		objective,	proposed.
	industries./Dr. Geeta / 2011-2016		"Evaluation of	
			growth	
			performance of	
			macro	
			propagated plants at nursery	
			and field",	
			needs to be	
			modified to:	
			"Evaluation of	
			growth	
			performance	
			plants	
			(Seedlings /	
			cuttings) at	
			nursery and field".	
3.	Development of Sandal (Santalum album Linn.) Information	4.5	One year	Approved
	System. / PI: Sh. V. Soundarajan / (2011 – 2013)		extension is	for one year
			needed.	extension.
	Total	34.29		
g	Pending Projects		I	
Sl.No.	Title of the project/PI/Duration		Total Cost of	Requirement
			the project	for 2013-14
	Thrust Area: Managing Forests & Forest Products for Liveli	hood Sunnaut	(in lakhs)	wth
1	Biomass, net primary productivity and site productivity of seve		16.88	Not provided
1	important bamboo species in semi arid and humid tropics of Pen Dr. Syam Viswanath/ 2013-2016	10.00	by Institute	
	Thrust area: Forestry Extension for taking			
2	Documentation of traditional knowledge of protecting marine through indigenous methods./ Sh. M.V. Rao/ 2013-2015	wooden craft	2.945	Not provided by Institute
	Total		19.825	by monute
<u> </u>			13.023	

(v) Institute: Institute of Forest Genetics and Tree Breeding, Coimbatore

	Ongoing Projects Without Change Request		
Sl. No.	Title of the project	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thru	st Area 1. Managing Forests and Forest Products for livelihood Support and Econon	nic Growth	
1.	Introduction and evaluation of fast growing species in different agro-climatic zones of Tamil nadu. / Shri. S. Saravanan, Scientist – D/ 5 Years (April 2010- March 2015)	17.55	1.71
2.	An improved holistic approach for development of database on fast growing tree species targeting stakeholders in Tamilnadu and Kerala. / Sh. R. Vivekanandan / (April, 2011- March, 2013)	5.00	0.28
	Total	22.55	1.99
THR	UST AREA -II : Biodiversity conservation and ecological security		
3.	Incorporating resistance in Eucalyptus to <i>Leptocybe invasa</i> fisher & La Salle (Hymenoptera: Eulophidae) through expression of insect specific dsRNA./ Dr. N.V.Mathish, Scientist – E / (April, 2012)	29.75	4.065
4.	Influence of <i>Eucalyptus</i> species on the natural enemies incidence on the gall wasp <i>Leptocybe invasa.</i> / Dr. John Prasanth Jacob, Scientist – E / (April, 2010- March, 2013)	13.33	3.39
5.	Screening for blister bark disease resistance in <i>Casuarina equisetifolia</i> clones./ Dr. A. Karthikeyan, Scientist – D / (April 2009, March 2014)	16.61	2.24
6.	Response of mycorrhizae and microbial symbionts to elevated CO ₂ in commercially important tree species. / Dr. A. Karthikeyan, Scientist – D / (April 2011- March 2015)	9.73	0.76
7.	Anti-insect secondary metabolites from fungal endophytes of selected tree species./ Dr. N. Senthilkumar, Scientist –D / (April, 2011- March, 2014)	12.14	1.74
8.	Tree rich biobooster: A Novel approach to synergise growth and pest management in fast growing industrially important tree species./ Dr. S. Murugesan, Scientist – F / (April, 2012)	25.09	9.73
9.	Restoration Ecology and species recovery studies in Tsunami impacted Mangroves of Andaman Islands./ Dr. K. Ravichandran, IFS, D.C.F / (April, 2011-March 2016)	23.89	2.91
10.	Development of models for conversion of plantations into secondary forests in Andaman./ Dr. K. Ravichandran, IFS, D.C.F / (April, 2011-March 2016)	24.09	3.05
11.	Development of site specific regeneration augmentation plan for potential degraded areas in Western Ghats./s	15.12	0.38
12.	Impact of forest plantations on ground flora diversity and soil characteristics including the prescription of management practices./ Dr.C.Kunhikannan, Sci-E / (April 2010–March, 2013)	12.05	2.00
13.	Population structure, regeneration status and pollination ecology of <i>Dalbergia latifolia</i> and <i>D. sissoides.</i> / Dr. K.R. Sasidharan, Sci – E / (April, 2011- March, 2016)	22.26	1.87
14.	The study of Biology and Conservation of Endemic Plants of Kalakad Mundanhurai Tiger Reserve, Tamil Nadu./ Sh. S.K. Shanmugha Sundaram/ (April 2011- March 2014)	7.30	1.64
	Total	211.36	33.775
Thru 15.	Progeny testing of selected clones for establishment of clonal and seedling seed orchards in	34.14	3.80
16.	Genetic Improvement of <i>Casuarina</i> species through Second Generation Orchards./ Dr. A Nicodomy Scientist E / (April 2008 Moreh 2014)	43.28	4.04
17.	A. Nicodemus, Scientist – E / (April, 2008- March, 2014) Development of advanced generation seed orchard of A. mangium based on biomass and wood density. / Dr. Maheshwar Hegde, Scientist-D / (Aug, 2009- March, 2014)	15.31	2.40
18.	Study of variation in <i>Pierocarpus santalinus</i> in Tamilnadu for growth and heartwood content./ Dr. Maheshwar Hegde, Scientist – D / (August 2010- March 2015)	11.00	2.94
19.	Selection of clones of <i>Acacia auriculiformis</i> with desirable stem form and wood properties for short rotation timber production. / Dr. Maheshwar Hegde, Scientist – D / (Aug, 2010- March, 2015)	19.225	3.82
20.	Clonal Tech Developing: Clonal Technoloogy for raising clonal Plantation of Endogenous Species Ailanthus 17ineat and Ailanthus triphysa in Tamilnadu & Kerala./ D. Rajasugunasekar, Scientist – C / 4 Years (May, 2010- May, 2014)	18.68	2.75
21.	Evaluation and identification of optimal parameters for flowering and fruit set in	5.77	0.41

	tamarind (tamarindus indicia.) Orchards./ Shri A. Mayavel, Scientist – D/ (April, 2010		
	- March, 2013)		
22.	Genetic Improvement of Gmelina arborea Roxb. Through selection and clonal evaluation./ Mr. A. Mayavel, Scientist –D /(April, 2011- March, 2016)	22.71	3.62
23.	Selection and screening of germplasm of Thespesia populnea for improving productivity./ Dr. Kannan C.S. Warrier, Scientist –D/ (April, 2011-March, 2016)	19.82	2.68
24.	Establishment of second generation seed orchards and selection of clones for high productivity in eucalyptus./ Dr. V. Sivakumar, Scientist – D / (April, 2012)	39.98	6.69
25.	Developing breeding populations of teak with broad genetic base for long term genetic improvement./ Dr. B. Gurudev Singh, Sci – F./ (April, 2012)	11.97	3.56
26.	Molecular Analysis for population differentiation and mating system studies in <i>Acacia auriculiformis</i> using dominant and codominant markers./ Dr. A. Shanthi, Scientist – B / (April 2010- March 2013)	8.00	3.33
27.	Genetic diversity assessment for management of Eucalyptus seed orchards./ Dr. Rekha R. Warrier,Scientist – C / (April, 2012)	47.60	6.41
28.	Evaluation of genetic resources of Melia dubia in Tamil nadu and Kerala for productivity enhancement in tree farming./ Dr. Rekha R. Warrier, Scientist – C / (April, 2012)	41.90	3.26
29.	Evaluation of <i>Gmelina arborea</i> Roxb. Selections from North Eastern and Southern Regions./ Shri V.K.W. Bachpai, Scientist – B / (April 2010- March 2013)	11.38	2.20
30.	Development of methods for functional analysis of genes involved in salt tolerance in Eucalyptus./ Dr. N. V. Mathish, Scientist –E / (April, 2009 – March, 2014)	30.93	1.547
31.	Determination of the target genes in Leptocybe invasa for engineering resistance in Eucalyptus through gene-silencing approaches. / Dr. N. V. Mathish, Scientist – E / $(April\ 2010-\ March\ 2014)$	23.50	4.215
32.	Evaluation of <i>Calophyllum inophyllum</i> populations for high oil yield./ Smt. R. Anandalakshmi, Scientist – D / (April-2010, March-2014)	19.00	3.87
33.	Chemotyping of <i>Sapindus emarginatus</i> - a potential NTFP of Tamil nadu for saponins./ Smt R. Anandalakshmi, Scientist – D / (April 2010- March 2015)	23.15	2.89
34.	Studies on the suitability of Eucalyptus clones for various agro climatic zones of southern India	16.10	1.43
35.	Selection and Vegetative Propagation of <i>Neolamarkia cadamba</i> (Roxb.)Miq – An alternative species for Pencil, Match Wood and Ply Wood Industries./ Dr. A. Vijayaraghavan, Scientist – C / (April 2010- March 2014)	18.50	2.48
36.	Selection and Evaluation of High yielding clones of <i>Pongamiapinnata.</i> / Dr. K. Palanisamy , Sci – F / (April , 2011 - March , 2015)	18.38	3.45
37.	Exploration, Collection and Evaluation of Forest Genetic Resources and Development of National Gene bank./ Dr. K. Palanisamy, Scientist- F / (April, 2012)	48.82	5.54
38.	Productivity studies on commonly cultivated bamboo species in different agro climatic zones of Tamil Nadu./ M. Mario Dominic Savio, Scientist – D / (April, 2012)	19.11	2.73
	Total Grand Total	568.255 802.165	80.062 115.83
	Pending Projects	002.103	113.03
Sl.	Title of the project/PI/Duration	Total Cost	Required
No.	• •	of the project (in lakhs)	budget for 2013-14 (in lakhs)
1.	Thrust Area –I Establishment of model plantations of teak as subsequent rotation crop for enhanced productivity./ Dr A.C. Surya Prabha/2012-2017 (5 Years)	25.52	5.38
2.	Thrust Area –II Assessment of soil organic carbon under different land uses in Tamil Nadu./ Dr A.C. Surya Prabha /2012-2015 (3 Years)	33.90	4.67
3.	Thrust Area –IV Germplasm assemblage and Improvement of Leucaena leucocephala (Lam) De Wit for	22.51	
4.	industrial biomass productivity./ Durai / 2012-2017 (5 Years) Selection and screening of germplasm of <i>Acacia nilotica</i> L. to improve productivity in Tarrii Nadu / K. Paragar Salvara / 2017 (5 Years)	23.31	6.06
5.	Tamil Nadu./ K. Paneer Selvam /2012-2017 (5 Years) Mapping and monitoring of Casuarinas and Eucalyptus plantations in Tamilnadu using RS and GIS techniques. / Sh. Vivekanandan / 2012-2015 (3 Years)	38.97 17.00	5.52 3.93
6.	Cytogenetic analysis of selected native tree species. Dr. R. Yasodha / 2012-2015 (3 Years)	11.72	3.93
	Total	150.42	28.80

(vi) Institute: Institute of Forest Productivity, Ranchi

	Ongoing Projects Without Change Request		
Sl. No.	Title of the project/PI/Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thrus	st Area 1. Managing Forests and Forest Products for livelihood Support and Eco	onomic Growth	
1.	Introduction of selected genotypes of Karanj, Kusum and Bamboo as tree components in Agroforestry models in lateritic belt of eastern India./ Dr. Animesh Sinha, Scientist – D/4 years (April, 2011- March, 2015)	14.995	4.06
2	Studies on nutrient management practices in <i>Flemingia</i> species for lac cultivation and promotion of rural livelihood./ Dr. Arvind Kumar, Scientist-C/ 3 years (April, 2011- March, 2014)	14.04	2.99
3	Survey and identification of insect pest associated with <i>Dalbergia sissoo</i> , <i>Gmelina arborea and Shorea robusta</i> of eastern states of India. / Dr. Arvind Kumar , Scientist – C / 3 years (April, 2011-March, 2014)	13.028	4.68
	Total	42.063	11.73
Thrus	st Area-IV:- Forest genetic resource management and tree improvement		
4	Assessment of variability and genetic fingerprinting in <i>Pongamia pinnata</i> (L.) Pierre using microsatellite markers./ Dr. Sanjay Singh, Scientist – E/ 4 year (April 2010 – March 2014)	26.09	4.46
5	Evaluation of <i>Dalbergia sissoo</i> Roxb. Clones for suitability in large scale clonal forestry in Gangetic plains and Chotanagpur Plateau./ Dr. Sanjay Singh, Scientist – E / 5 years (July, 2011- March, 2016)	29.40	6.20
6	Studies on pollarding and propagation in Kusum (<i>S.oleosa</i>) for lac cultivation./ Dr. Animesh Sinha, Scientist – D / 4 years (April, 2011-March, 2015)	10.00	2.23
7	Standardization of propagation method and germplasm conservation of <i>Machilus villosa</i> (Roxb.) & <i>Quercus 19ineate</i> : promising timber & fuel wood of North West Bengal./ Sh. Sanjeev Kumar, Scientist – C / 3 years (April, 2011- March, 2014)	6.77	2.75
8	Tree Borne Oil seeds (TBOs) in community lands for Improved Livelihoods of Vulnerable Groups of Jharkhand./ Dr. Animesh Sinha, Scientist – D/ 5 years (2012 – 2017)	23.34	3.70
	Total	95.6	19.34
	Grand Total	137.663	31.07

(viii) Institute: Tropical Forest of Research Institute, Jabalpur.

	Ongoing Projects Without Change Request		
Sl. No.	Title of the project	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thrust	Area 1. Managing Forests and Forest Products for livelihood Support and Econo		1
1	Development of lac based agroforestry (Silvi-Agri-Lac) system. / Dr. N. Berry , Scientist – D / (June , 2010 - May , 2015)	8.2	2.06
2	Evaluation of Madhuca indica based silvi-agri system in arid and semi-arid zones of india. / Dr. Nanita Berry, Scientist – E / (April 2012- March 2017)	32.75	2.06
3	Status of sal heartwood borer, <i>Hoplocerambyx spinicornis</i> Newman and its management. / Dr. N. Roychoudhury Scientist – F / (June, 2011- March, 2016)	14.02	1.1
4	Biological control of insect pests of medicinal plants-Abelmoschus moschatus, Gloriosa superb and withania somnifera./ Dr. P. B. Meshram, Scientist-F / (April, 2010- March 2014)	7.37	1.59
5	Eco-friendly management of bark eating caterpillar, Indarbela quadrinotata on aonla (Emblica officinalis) in plantations. / Dr. P.B. Meshram, Scientist – F / (April 2012- March 2015)	6.57	2.09
6	Biocontrol potential of native isolates of entomopathogenic nematodes for the management of insect pests of teak./ Dr. N. Kulkarni, Scientist – F/(April, 2011 – March, 2014)	9.41	3.38
7	Development of rearing technique for production of insect predator, Canthecona furcellata, as biocontrol agent for larval defoliators. / Shri Subhash Chandra / (April 2012- March 2015)	7.52	2.04
8	Development of certification criteria and production of microbial inoculants for application in forest nurseries and plantations. / Dr. R. K. Verma, Scientist-E / (April, 2010- March 2014)	4.75	2.49
9	Potential pathogens and insects responsible for the low seed production in teak seed orchards and their management. / Dr. V.S. Dadwal, Scientist – C / (April, 2011 – March, 2014)	7.05	1.89
10	Evaluation of Schleichera oleosa (Kusum) fruits for their nutritional value and development of value added products for economic development of local people. / Dr. S.C. Biswas, Scientist – B / (April 2012- March 2015)	5.26	1.13
11	Chemo-profiling of some Dasmoola species (<i>Uraria picta, Solanum indicum</i> and <i>Solanum xanthocarpum</i>) in Madhya Pradesh. / Sh. Hari Om Saxena, Scientist-B / (April 2011 – March, 2014)	5.00	1.74
12	Evaluation of non edible oil seeds for development of surfactants and their utilization in pest management. / Smt. Neelu Singh, Scientist – E / (April, 2011- March, 2014)	14.7	3.38
13	"Evaluation of phyto-polymers as eco-frindly bioadhesives". / Smt. Neelu Singh, Scientist – E / (April 2012- March 2015)	9.91	3.17
14	To study the variations in major phytochemical constituents of Andrographis paniculata, Cyperus rotundus, Hemidesmus indicus, Phyllanthus amarus and Plumbago zeylanica for quality produce from different agroclimatic regions of Chhattisgarh	6.51	2.38
_	Total - I	139.02	30.5
	Area -II - Biodiversity Conservation & Ecological security		
15	Standardization of the technique for germination, collection and maintaince of maximum viability of four important tropical species: Bridelia Retusa, Sterculia urens, Bosvella serrata and Serrata indica./ Dr. Maitreyee Kundu / (April 2012–March 2016)	8.46	2.14
	Total - II	8.46	2.14
	Area –III- Forests and Climate Change		
16.	Monitoring the impact of climate variables on plant diversity in Bhimashankar permanent preservation plot of Sub tropical hill forest of Maharashtra. / Dr. P.K. Khatri, Scientist-D / (April, 2011 – March, 2014)	7.81	2.85
	Total - III	7.81	2.85
	=		

Thrus	t Area-IV- Forest Genetic Resource Management and Tree Improvement		
17.	"All India Coordinated programme for genetic improvement of Teak". as four sub projects:. / Dr. S.A. Ansari, Scientist – F / 10 years (April 2012-March 2022)	711.31	74.22
	Sub project: - (i) Selection of plus trees, raising their progeny trials and establishing germplasm bank. (TFRI, Jabalpur)./ Dr. S.A. Ansari, Scientist - F		
	Sub project: - (ii) Development of management practices of teak seed production areas, seedling seed orchards and clonal seed orchards. (TFRI & SFRI, Jabalpur)./ Dr. S.A. Ansari, Scientist - F		
	Sub project: - (iii) Production of transgenic teak tolerant to defoliating pests. (TFRI, Jabalpur)./ Ms. Trisa Dominic, Scientist – B		
	Sub project: - (iv) Studies on population structure, linkage disequilibrium and marker-trait association mapping of teak. (FRI & TFRI, Jabalpur)./ Dr. S.A. Ansari, Sci - F		
18.	Studies on assessment of genetic diversity and structure of <i>Boswellia serrata</i> Roxb. populations through RAPD and ISSR molecular markers. Dr. S.A. Ansari, Scientist – F / (June, 2011 – March, 2014)	13.41	3.99
19.	Collection of germplasm of madhuca indica J. F. Gmel for identification of best sources in Chhattisgarh through phytochemical Evaluation. / Dr. Fatima Shirin, Scientist – E / (April 2012- March 2015)	11.04	3.82
	Total - IV	735.76	82.03
	Grand Total	891.05	117.52

(ix) Institute: Centre for Forestry Research & Human Resource Development, Chhindwara (M.P.)

	Ongoing Projects Without Change Request		
Sl. No.	Title of the project	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thrus	st Area 1. Managing Forests and Forest Products for livelihood Support and Ec	onomic Growth	
1	Integrated Nutrient Management for Improved Growth of Trees on overburden dumps	7.75	1.72
	Total	7.75	1.72

(x) Institute: Arid Forest Research Institute, Jodhpur

C.	Ongoing Projects Without Change Request	m ·	T. 1
Sl. No.	Title of the project/ PI/ Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
	Area 1. Managing Forests and Forest Products for livelihood Support and Ed		
1.	Coordinated project on Integrated management of khejri mortality for socio-economic upliftment in Rajasthan./ Dr. S. I. Ahmed, Scientist –F/ 5 years (April, 2010- March, 2015)	102.93	8.65
2.	Innovative approaches for augmentation of composting and biofertilizer production in hot arid regions" / Dr.K.K. Srivastava, Scientist-F / 3 years (April, 2011 - March, 2014)	4.0	1.0
3.	Enhancing fodder productivity through silvipastoral systems on degraded land of India.	20.50	1.69
4.	Tapping the potential of some selected indigenous lesser known wild edible plants for food and nutrition in arid and semi arid region. / Dr. Mala Rathore, Scientist-D/ 5 Years (April, 2011 – March, 2016)	18.2	1.54
5.	Quantification value addition of NTFP and improved agricultural productivity to enhance livelihood opportunity in tribal belt of Sirohi District of Rajasthan.	14.8	1.89
6.	Managing Resources to enhance productivity of agro-forestry system in Dry Areas of Rajasthan./ Dr. Bilas Singh, Research Officer / 5 years (May, 2012 - April, 2017	20.21	0.70
7.	Market survey on selected species in selected markets./Dr. Sunil Kumar, Scientist –E / 1994 to continue	2.00	0.10
8.	Evaluation of antifungal potential and identification of broad spectrum antifungal compound from selected tree/shrubs/weeds of Indian arid region/Bhawana Sharma Scientist- C / 5 years (July, 2009- June, 2014)	9.00	1.08
	Total	191.64	16.65
Thrust	Area-II Biodiversity Conservation & Ecological security		
9.	Screening, identification and preparation of a comprehensive check- list of the Lepidopteron fauna of Sasan Gir National Park of Gujarat state. / Dr. Meeta Sharma, Research Officer / 3 Years (August 2011 – March 2014)	14.64	0.28
	Total	14.64	0.28
Thrust	Area-III Forests and Climate Change		
10	Carbon stock and soil classification mapping for Rajasthan Forest. / N. Bala Scientist-E / 4 years (April 2012 - March, 2016)	22.05	0.60
11	Identification of soil-vegetation relations and indicator species for assessment and rehabilitation in lower Aravalli./ Dr. G. Singh, Scientist – F / 4 year (April, 2010- March, 2014)	11.70	2.26
	Total	33.75	2.86
Thrust	Area-IV Forest Genetic Resource Management and Tree Improvement		
12.	Investigations on genetic variation and inheritance of Western Indian teak (<i>Tectona grandis</i> L.f.) / Dr. P. H. Chauhan, Scientist – F, / 5 years (July, 2009-March, 2014)	20.70	2.71
13.	Demonstration trial of male and female <i>Ailanthus Excelsa</i> plants raised through grafting and tissue culture	6.40	1.65
14.	Regional project-Assessment of variability, improvement and refinement of cloning techniques of <i>Tecomella undulate</i> (sm.) Seem ./ Ms. Desha Meena, Research Officer /5 years (June, 2012- March, 2017)	52.42	0.83
15.	Study of salt tolerance through gene expression pattern analysis. / Dr. Tarun Kant, Scientist – E / 5 Years (April, 2010 – March, 2015)	22.0	2.32
16.	Development of tissue culture technology for multiplication of economically important desert plant- <i>Salvadora persica</i> . / Dr. I. D. Arya, Scientist-F / 5 years (June, 2009- March, 2014)	14.9	0.33
17.	Development of technologies for multiplication of economically important desert plant – <i>Capparis deciduas.</i> / Dr. Sarita Arya, Scientist –E / 5 years (April, 2010- March, 2015)	14.72	2.00
18.	Refinement of modern nursery practices for raising quality seedlings of selected important forest tree species and arid and semi arid areas./ Dr. N.K.Bohra, Research Officer / 5 years (April, 2011 - March, 2016)	28.06	1.38

19.		cational evaluation trials for testing ro-climatic conditions for stability,	86.00		2.20	
	1 1 7 1	•	g for disease, insects, salinity and			
	Total			245.		13.42
	Grand Total			485.	.23	33.21
	C	Ingoing Pro	jects with Change Request			
S.No.	Name of the Project	Total Cost of the	Change request with justification	on	Reco	ommendations of RPC
		Project (in lakhs)				
	Induction of systemic acquired resistance in rohida (<i>Tecomella 23xcels23e</i> (Sm.) Seem.) against stem canker./ Dr. Sangeeta Singh, Sci –D / 3 years (April, 2010-March, 2013)	16.4	Since last three years work has concentrated on the study of the disea what are the bio chemicals, physiolanatomical changes occurring in the once the pathogen attacks. The study of effect of systematic chemical again pathogen is being conducted in the last. The study of how long the dimechanism is occurred after the inject the chemical in plantation is continued and for which one year is short period because repeated bioch study will be done at different intervals. Moreover, in technical prime have give the quantitative study defense enzymes but since the result promising we want to some qual studies also. For logical conclusion project, one year extension (2013-14 budget of Rs. 3.016 lakhs is required.	ase i.e., ogical, ee host, ady of ast the st year. defense tion of being s very emical time rogram dies of lts are litative of the	exten: additi	oved 1 year sion with onal budget of .00 lakhs.
2	Evaluation and selection of efficient strains of AM fungi & Rhizobium for Acacia nilotica and Ailanthus 23 excelsa in western Rajasthan / Dr. Neelam Verma, Research Officer / 3 years (April, 2010–March, 2013)	7.80	budget of Rs. 3.016 lakhs is required. As per recommendation of RAG in addition to Acacia nilotica sp., few more species like Acacia nilotica var. Indica, Acacia nilotica var. cupressiformis and Ailanthus excelsa were included therefore, suvey work was exceeded and other activities like isolation, quantification/ population of AM scores, soil nutrient analysis etc., were increased. Other activities like lying out of nursery and field trials were delayed. Due to non availability of seeds of Acacia nilotica var. cupressiformis, experiments could not start. Therefore project required one year extension with Rs. 1.50 lakhs budget to complete all the remaining work of the project for logical conclusion. Out of regional sanction of Rs. 7.8 lakhs about Rs. 4.50 lakhs expenditure incurred and still			oved 1 year sion with et of Rs. 1.00
3	Impact of Prosopis juliflora on biodiversity, rehabilitation of degraded community lands and as a source of livelihood for people in Rajasthan State./ Mrs. Seema Kumar, Sci –D/ 3 Years (April 2010- March 2013)	Rs.3.3 lakhs is balance. 8.00 In order to carryout remaining work of the project viz: inventorization of exotic species remaining 4 agro climatic zones, studies on the dependent associated faunal diversity, development of strategies for the utilization of Prosopis juliflora and development of awareness material for logical conclusion of the work. One year extension with budget				sion with et of Rs. 1.00

	1		T	Τ
			the one year extension of the project. RAG	
			also recommended for one year extension	
4	Studies on carbon	122.41	with budget of Rs. 2 lakhs. Extension is required to complete tree	Approved 1 year
4	sequestration in different	122.41	felling for biomass estimation, estimation of	extension with
	forest types of Rajasthan./		carbon stock (above ground and root),	budget of Rs. 10.00
	Dr. G. Singh, Scientist –		carbon analysis of the vegetations, data	lakhs
	F/ 4 year (April, 2008-		compilation of 33 districts, statistical	iakiis
	March, 2012, Extn. upto		analysis and preparation of report for	
	March, 2013)		Rajasthan. In addition as per the	
	Waten, 2013)		recommendations of stake holder meeting,	
			Jaipur and RAG-2010, carbon stock	
			assessment of tree outside forest (TOF) i.e.,	
			in 26 districts is also required to be	
			completed during the extended period	
			(2013-14).	
			ADG (M&E) Head suggested including	
			land use to evolve carbon sequestration	
			status of Rajasthan. RAG recommended for	
			the extension of one year with a budget of	
			Rs. 15 lakhs (5.00 lakhs for 2012-13 and 10	
			lakhs for 2013-14).	
5	Screening of high oil and	9.80	As this project has long term objectives and	Approved 2 years
	Azadirachtin in Neem./		due poor fruiting as well as less number of	extension with
	Dr. U.K.Tomar		trees producing fruits at this stage project	budget of Rs. 1.00
	Scientist- E/ 9 years		cannot be concluded. Hence the activities	lakh.
	(2002-11) extended upto		may be executed in non-project mode just	
	2013		for maintenance of trials for two years and	
			two times recordings of observations on	
			flowering and fruiting. Once 50% of trees	
			produce sufficient seeds a fresh proposal	
			may be taken in a project mode for	
			estimation of oil and Azadirachtin for	
			continuously three years for strong	
			scientific conclusive recommendation of	
			this selective germplasm and thinning	
			operations can be recommended	
			accordingly	
6	Multilocational trials of	40.5	Due to work load of other projects and other	Approved 6 months
	E. camaldulensis and		financial peak activities six months period	extension.
	D.sissoo clones in Gujarat		is required for operation of consolidated	
	state		report.	
7	Development of web	4.06	Extension of the project for one more year	Approved 1 year
	portal for forestry		is required to finally test, host of the web	extension with
	research extension./		application on web server and to complete	budget of Rs. 0.60
	A.K.Sinha, Scientist-D/		the data entry. Collection of the data and	lakh.
	6 years (April, 2007-		photographs of some more important	
	March, 2013)		species will be done as suggested by the	
			RAG. Rs. 1.00 lakh additional requirement	
			is proposed.	
8.	Carbon stock and soil	22.05	It was submitted that the said project on	Approved to continue
	classification of mapping		mapping was conceived on the results of	as standalone as per
	for Rajasthan Forests.		two projects (studies on carbon	request of Director,
			sequestration in different forest types of	AFRI.
			Rajasthan, Duration 2008-2013 and	Letter No.: Ref:
			characterization and classification of forest	Director, AFRI letter
			soil of Rajasthan, Duration 2007-2013)	No. 500/FED-
			through which, the primary data have been	5.16/AFR/JU-2011,
			generated at AFRI, jodhpur. It is quite clear	dt:. 15 th May, 2013
			that the data base generated through these	
			projects would be presented in the form of	
			digital maps of various kinds, which is	
			hitherto unavailable. It is not possible as	

		AICP, may be Project	approved as stan	ndalone	
	Total 23	1.02			
		Pending Project	ets		
Sl No.	Name of the Project			tal cost of ne project in lakhs)	Required budget for 2013-14 (in lakhs)
	Thrust Area-I				
1.	Selection of efficient AM fungi, enhancement of <i>Dendrocalamus s</i> Shrivastava / 2011-2014 (3 years		15.35	0.60	
2.	Survey evaluation and management Anogeissus pendula. / Shivani Bh	and disease of	18.81	0.50	
	Thrust Area-II				
3.	Phytochemical evaluation, development of nursery practices and conservation of germplasm of <i>Withania coagulens</i> (stocks) Dunal and endemic and endangered species of Thar desert/ Dr. Mala Rathore / 2011-2015 (4 years)			19.834	0.83
	Total			53.994	1.93
	Important P	ending Project Req	uired separate f	und	
Sl No.	Name	of the Project	To th	tal cost of ne project in lakhs)	Required budget for 2013-14 (in lakhs)
	Thrust Area-IV				
1	Screening tree species for their produce nanoparticles under in viv 2016 (4 years)			60.70	16.18 (To be managed within allotted budget)
	Total			60.70	16.18
	Grand Total			114.694	18.11

(xi) Institute: Rain Forest Research Institute, Jorhat.

	Ongoing Projects With	out Change	e Requ	iest		
Sl. No.	Title of the project			Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)	
Thru	st Area 1. Managing Forests and Forest Products for					
1.	Studies on the ecological and ethno mycological aspec of Nagaland. /P.I: Shri Rajesh Kumar/3 Years (April,			11.97	4.33	
2.	Molecular characterization of <i>Mimosa diplotrich</i> Polysaccharide. /P.I: Dr. Vikas Rana./ 3 Years (April, 2011 - March 2014)	a C. wright	seed	14.94	3.00	
3.	Study on post flowering regeneration status of <i>Me</i> Tripura. /P.I: Dr. D.J. Das/4 Years (April, 2012 - Mar	Study on post flowering regeneration status of Melocanna baccifera is				
4.	Ecology, utilization and conservation of <i>Garcini</i> Brahmaputra Valley, Assam. /P.I: Dr. D. Dutta/3 March 2015)	a species in		17.85	3.51	
5.	Preliminary phytochemical analysis of <i>Abroma Augu</i> Rana/	Vikas	3.68	3.68		
	Total:			74.01	19.41	
	sst Area-II Biodiversity Conservation & Ecological sec					
6.	Studies on the incidence and management of pine morta Dr. R.K. Borah/3 Years (April, 2011 - March 2014)			9.67	3.29 0.72	
7.		Standardization of Inoculation Technique for Agarwood formation in <i>Aquilaria malaccensis</i> Lamk. /P.I.: Dr. R.K. Borah/5 years (April, 2009 – March. 2014)				
8.	butterflies along altitudinal gradients in different forest	Ecological studies on the distribution patterns and food plant resources of butterflies along altitudinal gradients in different forest eco systems of the Eastern Himalayas (Arunachal Pradesh). P.I: Dr. A.P. Singh/3 Years (April,				
9.	Screening of endomycorrhizae and bio agents in rh augusta L.and their role in its propagation and conse P.I: Dr. V. Parkash/3 Years (April, 2011 - March 201	rvation (Sub p		15.52	3.89	
	Total			51.29	13.88	
Thru	st Area-III Forests and Climate Change					
10.	Rehabilitation of degraded Jhum land through potential reference to carbon sequestration and livelihood de (Mrs.) I.P. Borah/5 Years (April, 2009- March, 2014)	velopment. /P.		16.12	3.55	
	Total	•		16.12	3.55	
Thru	st Area-IV Forest Genetic Resource Management and		ement			
11.	All India Coordinated project on Melia Dubia. P.I: Dr.	. Tara Chand/		16.99	12.00	
	Total:			16.99	12.00	
	Grand Total	41.02		158.41	48.84	
a. I	Ongoing Project Wit					
Sl. No.	Title of the Project/ PI/ Duration	Total Cost of the Project (in lakhs)	Ch	ange request with justification	Recomme ndations of RPC	
1.	Conservation, management and utilization of selected rattans of Assam. P.I: Dr. T.N. Manohara./ 3 Years (April, 2010-March, 2013	20.00	one y	ion of the project f ear as field surv not be complicat disturbances in sor	ey extension ed is	
	Total	20.00		f Assam.	аррголец.	
	Total	40.00				

	Pending Projects			
Sl. No.	Name of the project	Total cost of the project (in lakhs)	Required budget for 2013-14 (in lakhs)	
	Thrust Area –I			
1.	Studies on the traditional knowledge of medicinal plants used by Nepali Community in Assam and identification of important species for chemical analysis. P.I.: Shri H.N. Dhungana / 2012-2015 (3years)	4.99	1.49	
2.	Capacity building, skill upgradation of artisans and promotion of traditional bamboo handicraft and art with improve technology, suitable design and value addition. P.I.: Dr. T.C. Bhuyan/ 2012-2015 (3years)	25.28	11.38	
	Thrust Area –II			
3.	Genetic diversity of <i>Trichoderma</i> strains prevalent in forest types of North East India. P.I.: Dr. S. Pandey/ 2012-2015 (3years)	27.21	21.53	
	Thrust Area –III			
4.	Assessment of diversity and carbon sequestration potential of above ground woody biomass of semi evergreen forest of Assam. P.I.: Dr. Ranjeet Kumar/ 2012-2015 (3years)	14.68	4.92	
	Thrust Area –IV			
5.	Screening of <i>Gmelina arborea</i> clone for productivity and stability. P.I. :Dr. Tara Chand./ 2012-2017 (5years)	31.98	7.92	
6.	Stability analysis of candidate plus clumps (CPCs) of Bamboos and Identification of CPCs specific SSR Marker. / P.I.: Md. Ibrahim/ 2012-2015 (3years)	24.74	13.59	
	Total	128.88	60.83	

(xii) Institute: Himalayan Forest Research Institute, Shimla

	Ongoing Projects Without Change Req	uest	
Sl. No.	Title of the project	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thru	st Area 1. Managing Forests and Forest Products for livelihood Support		
1.	Identification of superior chemotypes and ex-situ conservation of Podophyllum hexandrum Royle form Himachal Pradesh and Jammu & Kashmir (Nubra Valley)/ Mr. Jagdish Singh / /5 years (April, 2009-March, 2014)	29.23	05.94
2.	Assessment of Optimum harvest limits of <i>Picrorhiza kurrooa & Valeriana jatamansi</i> in Himachal Pradesh/ Dr A. Rajasekaran/5 Years (April 2009-March 2014)	26.62	04.65
3.	Studies on Seed Germination and Longevity of <i>Abies spectabilis</i> (D. Don) Spach- an ecologically important conifer species of high temperate Himalayas / Sh. P. S. Negi/5 years (April, 2011- March, 2016)	15.75	02.80
4.	Status, Survey and Mapping of Ashtavarga Group of Medicinal and Aromatic Plants (MAPs) in Himachal Pradesh./ Dr. Vaneet Jishtu/5 Years (April, 2012 - March 2017)	19.75	4.06
5.	Determination of nursery requirements and initial planting performance of <i>Diploknema butyracea</i> (Roxb.) H. J. Lam and <i>Myrica esculenta</i> Buch. Ham. under mid-hill conditions of Himachal./ Dr. Sandeep Sharma/2012-2017 (5 years)	15.50	3.51
	Total	106.85	20.96
Thru	st Area-II: Biodiversity Conservation and Ecological Security		
6.	Biology and Management of Insect pests of seeds of <i>Juniperus polycarpos</i> C. Koch and evaluating the insect-pests resistance performance in the nursery./ Dr. Pawan Kumar/3 Years (April, 2012 - March 2015)	7.50	2.52
	Total	7.50	2.52
Thru	st Area-III: Forest and Climate Change		
7.	Study on the Influence of Climate on Bionomics of <i>Pityogenes scitus</i> Blanford (Coleoptera: Scolytidae) in Himachal Pradesh./ Dr. Ranjeet Singh/5 years (April, 2010- March, 2015)	19.00	03.73
8.	Assessment of Carbon Stock in Forest Types of Shimla Forest Circle, Himachal Pradesh/ Dr. R. K. Verma,/ 5 years, (April, 2011- March, 2016)	24.95	03.17
	Total	43.95	6.9
	st Area-IV: Forest Genetic Resource Management and Tree Improvement		
9.	Isozyme Variation in Natural Populations of <i>Pinus gerardiana</i> (NEOZA PINE)/ Dr. Rajesh Sharma/3 years (April, 2011- March, 2014)	13.70	04.31
10.	Population Genetic Analysis of Himalayan Banj Oak (<i>Quercus leucotrichophora</i>) forests and its pertinence to Genetic Conservation/ Dr. H.S. Ginwal/3 years (April, 2011- March, 2014)	05.00	01.49
	Total	18.7	5.8
	Grand Total	177.00	36.18
	Pending Projects		•
Sl. No.	Name of the Project	Total Cost of the Project (in lakhs)	Required Budget for 2013-14 (in lakhs)
	Thrust Area-III : Forest & Climate Change		
1.	All India coordinated project (AICP) Climate change forestry research programme (AICFP) HFRI one of the implementing institute.	-	40.00
2.	Carbon sequestration potential of existing land use system in Lahaul Valley, Himachal Pradesh. / Dr. K.S. Kapoor / 2012-2017 (5years)	27.40	06.37
	Total		46.37

(xiii) Institute: Institute of Forest Biodiversity, Hyderabad.

	Ongoin		Without Change Req		
Sl. No.	Title of the project			Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)
Thru	st Area 1. Managing Forests and	l Forest Prod	ucts for livelihood Suppor		
1.	Development of Agroforestry n Gmelina arborea Roxb. as tree : Pradesh (2009-14)	10.32	2.84		
	Total	10.32	2.84		
Thru	st Area – IV Forest Genetic Reso	urce Manage	ement and Tree Improven	nent	
2.	Establishment and evaluation azedarach L. and Melia dubia (2015)			18.00	4.68
3.	Molecular assessment of breedin Teak in Andhra Pradesh (2011-14		n clonal seed orchards of	26.00	4.72
	Total			44	9.4
	Grand Total			54.32	12.24
			t With Change Reque		
Sl. No.	Title of the Project/ PI/ Duration	Total Cost of the Project	Change request with j	ustification	Recommendation s of RPC
		(in lakhs)			
1.	Population genetics and phylogeography of <i>Pterocarpus santalinus</i> L.f. and its <i>Ex-situ</i> conservation through boitecnological intervensions (FRC/XI/17)./ Dr. S. Pattanaik/2010-2013 (3 years)	25.00	Hence, three months exter	Approved three months extension.	
2	Development of the micro propagation protocols for production of superior germplasm Dalbergia latifolia Roxb. and Pterocarpus santalinus L. FRC XI-14./ Dr. G.R.S. Reddy/ 2009-2013(4 years)	10.00	action plan. The stated of achieved in rosewood shoot initiation in Red S for the root induction a which needs to be refine satisfactory level. The restudies were relegated be because of erratic interrupted power sup Telangana education related factors. It needs to protocol of red sanders multiplied the plant lets and propagation which nextension. Simultane induction of callus in R Red Sanders are propattempted in the extension accomplish the task and	oted power supply due to the education and various factors. It needs to be refine the 1 of red sanders further and tied the plant lets for hardening pagation which needs one year	

Table I : Number of Ongoing Projects of the Institutes (including Ongoing Projects With Change Request) and Pending Projects for 2013-2014

SI No.	Institute	No. of ongoing projects (without change request)	No. of ongoing projects (with change request)	Total no. of Ongoing Projects (C=A+B)	Pending projects to be taken up in 2013-14	Total no. of Projects (E=C+D)
1	FRI, Dehra Dun	48	20	68	5	73
2	CSFER, Allahabad	3	1	4	0	4
3	IWST, Bangalore	27	3	30	2	32
4	IFGTB, Coimbatore	38	0	38	6	44
5	IFP, Ranchi	8	0	8	0	8
6	TFRI, Jabalpur	19	0	19	0	19
7	CFRHRD,					
	Chhindwara	1	0	1	0	1
8	AFRI, Jodhpur	19	8	27	4	31
9	HFRI, Shimla	10	0	10	2	12
10	IFB, Hyderabad	3	2	5	0	5
11	RFRI, Jorhat	11	1	12	6	18
	Total	187	35	222	25	247

Table II: Budget Requirement for Ongoing Projects of the Institutes (including Ongoing Projects With Change Request) and Pending Projects for 2013-2014

Sl No.	Institute	Budget requirement for ongoing projects for 2013-2014 (in lakhs)	Budget requirement for pending projects for 2013-2014 (in lakhs) (B)	Total Budget Required for 2013-14 (in lakhs)		
1	FRI, Dehra Dun	298.14	17.76	(C=A+B) 315.90		
2	CSFER, Allahabad	10.99	0.00	10.99		
3	IWST, Bangalore	72.03	0.00	72.03		
4	IFGTB, Coimbatore	115.83	28.80	144.63		
5	IFP, Ranchi	31.07	0.00	31.07		
6	TFRI, Jabalpur	117.52	0.00	117.52		
7	CFRHRD, Chhindwara	1.72	0.00	1.72		
8	AFRI, Jodhpur	48.81	18.11	66.92		
9	HFRI, Shimla	36.18	46.37	82.55		
10	IFB, Hyderabad	13.54	0.00	13.54		
	Total	745.83	111.04	856.87		
	North East					
11	RFRI, Jorhat	48.84	60.83	109.67		
	Total	48.84	60.83	109.67		
	Grand Total	794.67	171.87	966.54		

Thrust Area Wise and Institute wise XIV RPC Recommendations and Observations on the New Research Proposals Presented

Annexure III

New Research Proposals

Sl. No.	Title of Project/PI/Duration	Proposed Budget (Rs. in lakhs)	Current year 2013-14 requirement (Rs. in lakhs)	RPC Recommendations/ Decisions Taken
	ITUTE: Forest Research Institute		1	
1	Enthomychological studies in Garhwal Himalaya for edible and medicinally important mushrooms./ P.I.: Dr Ashwani Tapwal, Scientist-C /2013-2017 (3 years)	13.93	5.44	To be developed as AICF with FRI as nodal Institute with the comments/observations of the National Project Director.
2	Production of reducing sugars through pre-treatment lignocellulosic biomass for bioethonol./ P.I.: Dr. P.K. Gupta, Scientist-F /2013-2016 (3 years)	8.84	2.48	Standalone Project Approved subject to the availability of funds.
3	Strength evaluation of structural	4.91	2.28	Approved.
	bamboo./ P.I.: Shri. Rajesh			Institute may justify
	Bhandari, Scientist-E /2013- 2016 (3 years)			By verifying with earlier works.
4	Physical, mechanical properties and fiber morphology of some bamboo species. / P.I.: Dr. Y.M. Dubey, Scientist-C /2013-2016 (3 years)	4.00	1.92	Approved, Institute may justify the project utility
5	Improvement and innovation in Solar timber dryer design and trial with Thermal Energy Storage System (TESS)./ P.I.: Shri. Shailendera Kumar, RO / 2013-2016 (3 years)	3.36	1.56	Approved however, Institute may justify 2 nd modification.
6	Micro-propagation of plus clumps of <i>Bambusa nutans</i> and <i>Dendrocalamus hamiltonii</i> and establishment of multilocational trials./ Shri. J.M.S Chauhan , Sci-C/2013-2017 (3 years)	10.88	2.62	Institute may justify
INST	TTUTE: Centre for Social Forestry	y and Eco-Re	habilitation, All	ahabad
1	Extension of Poplar Based Agroforestry in Eastern Uttar Pradesh./ P.I.: Shri M.K. Shukla, IFS, Director / 2013-	52.84	16.06	Approved subject to the availability of funds.

	2018 (5 years)			
2	Development of site specific medicinal plant based agroforestry models for existing plantations of Guava and Anola in Eastern Uttar Pradesh and establishment of demonstration model. / P.I.: Dr. B. K. Pandey, Scientist-D / 2013-2018 (5 years)	21.86	3.15	Project should be developed in AICP mode.
3	Promotion of Eucalyptus based Agroforestry in Eastern U P. /P.I.: Dr. Anubha Srivastava, Research Officer / 2013-2018 (5 years)	17.48	4.36	Project should be developed in AICP mode.
4	Promotion of Shisham based Agroforestry in Eastern U P./ P.I.: Dr. Anubha Srivastava, Research Officer / 2013-2018 (5 years)	15.98	3.36	Project should be developed in AICP mode.
5	Capacity building for Rehabilitation of lac cultivation and processing mechanism in Eastern Uttar Pradesh for rural development./P.I.: Dr. B. K. Pandey, Scientist-D / 2013-2018 (5 years)	23.50	4.59	May be developed as networking project with IFP, Ranchi as nodal Institute by assigning task to scientist working Lac. 3 similar projects from 3 Institutes can be combined as interinstitutional
				Three similar projects from three institutes can be combined as inter- institutional
6	Promotion of Lesser Known beneficial species in Social Forestry Programmes./Dr. Anita Tomar, Sci- C/ 2013-2016 (3 years)	9.72	3.43	Institute may justify
INS	ΓΙΤ UTE: Institute of Wood Science	& Technology	, Bangalore	
1	Nanocellulose filled starch based composites./ P.I.: Ajay Karmarkar, Scientist-F / 2013-2015 (2 Years)	5.18	2.58	Approved subject to the availability of funds.
2	Liquefaction of Wood and value added products from the liquefied wood./ P.I.: Dr. S.S. Chauhan / 2013-2016 (3 years)	3.35	2.35	Approved subject to the availability of funds.

3	Chemical modification of Eucalyptus hybrid oil and development of fragrant Products./ P.I.: Mr. S.H. Jain / 2013-2016 (3 years)	9.50	5.50	Approved subject to the availability of funds.
4	Bioassay of plant extractives for antibacterial activity of marine biofilm isolates./ P.I.: Mr. M.V. Rao / 2013-2017 (4 years)	9.28	2.06	Approved subject to the availability of funds.
5	Characterization of selected botanicals exhibiting anti wood borer activity in marine environment./ P.I.: Mr. M.V. Rao / 2013-2017 (4 years)	8.73	3.00	Can be combined. Already dropped by the institute.
6	Development of database on selected Non-Timber Forest Produce in Southern India./ P.I.: V. Soundararajan / 2013-2016 (3 years)	8.00	3.52	DRI may discuss with the DDG (Education) and ADG (Education and Policy Research) regarding the inclusion of this project in networking project on NTFPs in collaborating some agricultural universities from Karnataka.
INST	TTUTE: Institute of Forest Genetic	s and Tree Bi	reeding, Coim	batore
1	Development of livelihood strategies and capacity building for tribes through NTFPs and Medicinal plants in Coimbatore Districts of Tamil Nadu./ P.I.: Dr. K. Panneer Selvam, Scientist C / 3 Years (2013 - 2016)	27.57	4.22	This project could be incorporated under livelihoods project. Director (IC), ICFRE may be contacted for this.
2	Insect pests of out planted saplings of TCPL (Tree Cultivation in Private Lands) species and their management./ P.I.: Dr. John Prasanth Jacob, Scientist-E / 3 Years (2013 - 2016)	21.99	6.63	Institute may justify. This project could be incorporated under agroforestry project. Institute may contact NPD and nodal officer of the project.
3	Molecular Characterization of PGPRs and Actinomycetes and their efficacy as Biological Control Agents against Forest Tree Pathogens./Dr. V. Mohan, Sci- F/ 2013-2016 (3 years)	14.55	4.16	To be submitted for external funding.
INST	TTUTE: Institute of Forest Product	tivity, Ranchi		
1	Livelihood support through lac cultivation on non traditional host <i>Flemingia</i> species for the rural tribal farmers of Jharkhand./ P.I.: Dr. Sharad Tewari, Sci-E /	65.31	26.20	 To be developed as inter institutional project on lac. IFP, Ranchi as Nodal Institute.

	2013-2016 (3 Years)			
INST	TTUTE: Tropical Forest Research	 Institute, Jaba	alpur	
1	Standardization of processing and storage techniques of Malkangni (Celastrus panuculatis), Baheda (Terminalia belerica) & Baividang (Embelia tsjeriam – cottam) fruits/seeds./ P.I. Dr. S.C. Biswas, Sci-B / 2013-2016 (3 Years)	6.37	2.58	Approved subject to the availability of funds.
2	Studies on the causes of <i>Gmelina</i> mortality in plantation of Madhya Pradesh, Chhattisgarh and its integrated management./ P.I.: Dr. V.S. Dadwal, Sci-C / 2013-2016 (3 Years)	2.80	1.20	Approved subject to the availability of funds.
3	Studies on insect biocontrol agent, <i>Chrysoperla carnea</i> and its potentiality as insect predator./ P.I. Subhash Chandra, Sci-C/ 2013-2016 (3 Years)	6.37	2.04	Institute may do complete literature review.
INST	TTUTE: Arid Forest Research Ins	titute, Jodhpu	ır	
1	Integrated lac and medicinal plants cultivation and demonstration or livelihood support in Gujarat & Rajasthan. (MERGED)./ PI: Dr. Shiwani Bhatnagar, Sci-B / 2013-2016 (3 Years)	37.47	5.65	 To be developed as inter institutional project on lac. IFP, Ranchi as Nodal Institute.
2	Integrated pest and disease management (IPDM) of important tree species in nurseries of Rajasthan./Mrs. Seema Kumar, Sci-D/ 2013-2017 (4 years)	20.16	5.65	Can be taken up in AICP mode.
3	Effect of shallow water table on physiological behavior of different tree species growing along Jojari river./ Sh. Manish K. Singh, Sci-B/ 2013-2016 (3 years)	22.52	14.53	Approved subject to funding from Jodhpur Development authority and SFD. Recast the title.
INST	TTUTE: Rain forest Research Insti	tute, Jorhat		-1
1	Raising planting materials of selected cane species and establish plantation in fringe villages of Karbi-anglong, Assam to sustain rural livelihood./ Shri H.R. Borah, Research Officer / 2013-2016 (3 Years)	22.79	4.78	This project could be incorporated under livelihoods project. Action Dr. N.S. Bisht, Director (IC).
2	Studies on soil profile attributes and its relation with forest	16.286	6.61	Approved Stand alone.

_		1		
	vegetation of some selected sites of Nagaland State./ Dr. P.K. Das, SciC/2013-2016 (3 years).			
3	Studies on the diversity of soil borne entomopathogenic fungi in different land use system of North East India and their utility for the management of major defoliators of <i>Gmelina arborea</i> Roxb. and <i>Aquilaria malaccensis</i> Lamk./ Shri. R. Raja Rishi, Sci-C/2013-2016 (3 years)	8.27	2.43	Approved.
INST	TTUTE: Himalayan Forest Research	ch Institute, S	himla	-
1	Ecological assessment and selection of superior genotypes of Salix and Poplars for developing appropriate models for benefit of communities in the Cold Deserts of Himachal Pradesh./ P.I.: Dr. KS Kapoor, Scientist-F / 2013-	60.00	8.38	Institute may justify Budget requirements > Funding could be explored from the States. > J&K may be included in later stage. > Linkages can be
	2018 (5 years)			developed with Kashmir University.
2	To determine optimum age of harvest of Khair trees./Dr. Rajesh Sharma, Sci-F/ 2013-2015 (2 years)	7.95	4.29	Institute may justify. Funds for the project may be explored from SFD being as a demand driven project.
3	Standardization of nursery and planting technique of <i>Juniperus polycarpus</i> C. Koch./ P.I.: Sh. P.S. Negi, RO/ 2013-2018 (5 Years)	20.40	3.13	Likely duplication. Institute may justify.
4	Biological Control of Insect-Pests of Aconitum heterophyllum, Picrorhiza Kurooa, Saussurea costus in Nursery and Extension of Protection Technology./ Dr. Ranjeet Singh, Sci-F / 2013-2015 (3 years)	15.05	4.70	Institute may justify. Possibility of funding may be explored from NMPB.
5	Soil organic carbon inventory of different agroforestry systems in Himachal Pradesh./ Dr.V.P. Panwar, Sci-C / 2013-2018 (5 Years)	20.50	4.53	Dropped
6	Establishment of <i>Lymantria</i> obfuscata cell lines for propagation of LONPV Baculovirus./ Dr. S. Chakarabarti, Sci-F / 2013-2016 (3 years)	12.85	7.55	Approved subject to the availability of the funds.
7	Role of agroforestry on community livelihood and carbon	23.70	4.36	Dropped

MANAGING FORESTS & FOREST PRODUCTS FOR LIVELIHOOD SUPPORT AND ECONOMIC GROWTH

	mitigation in lower hills of HP./ Dr. Vijender Pal Singh Panwar, Sci-C / 2013-2018 (5 years)			
8	Valuation of Ecosystem's Goods and Services of Satluj River to Assess its Contribution Towards Green Economy./ Dr. K.S. Kapoor, Sci-F/ 2013-2015 (2 years)	15.20	6.77	Approved subject to the availability of funds from SFD/NHPC/BBMB. Reframe the title as "Contribution of forest ecosystems in sustaining hydro-electric projects".
INST	TITUTE: Institute of Forest Biodive	ersity, Hydera	ıbad	
1	Development of Agro-forestry models based on RET and Medicinal species in Andhra Pradesh./ Dr. G. Ravi Shankar Reddy, Sci-F/ 2013-2018 (5 years)	40.55	Nil	Possibility may be explored for funding from National Institute of Rural Development. For External funding from NIRD or any other funding agency.
2	The successional trends and productivity studies of Sriharikota (SHAR) and Pulicat Lake Ecosystems for conservation of biodiversity. / Dr. G.R.S. Reddy / 2013-2016 (3 years)	29.00	3.67	Approved subject to availability of funds

Annexure IV

THR	THRUST AREA - II: BIODIVERSITY CONSERVATION AND ECOLOGICAL SECURITY					
Sl. No.	Title of Project TTUTE: Forest Research Institute	Budget (Rs. in lakhs)	Current year 2013-14 requirement (Rs. in lakhs)	RPC Recommendations/ Decisions Taken		
1		ĺ	2.74	1 11 1		
•	Qualification and conservation of Indopiptadenia oudhensis, IIex pseudo-odorata, trachycarpus takil, Cochlospermum religiosum, Turpenia cochinchinenisi Rare/Endangered trees of Uttarakhand. / Dr. Ranjana Negi, Sci-B/ 2013-2016 (3 years)	6.97	2.74	Approved subject to the availability of the funds.		
2	Propagation and conservation of vulnerable/threatened species of Uttarakhand./ Dr. Nav Bahar, Sci-B/ 2013-2017 (4 years)	9.31	2.20	This project could be prepared as a collaborative project with Uttarakhand Forest Department.		
3	Study of weeds and their management in FRI campus./ Shri. A.K. Acharya, DCF, ASE	10.82	Nil	Dropped		
4	Effect of heavy metals on morpho-biochemical traits and metal accumulation in some forest trees species./ Dr. Meena Bakshi / 2013-2016 (3 years)	10.82	3.94	Approved subject to justification from Institute.		
INST	ITUTE: Centre For Social Forestry	And Eco-Reha	abilitation, Allal	nabad		
1	Evaluation of bamboo species for Bioremediation of Usar land in Uttar Pradesh./Dr. B. K. Pandey, Sci-D/2013-2018 (5 years)	19.51	3.65	Dropped. It was suggested that CSFER, Allahabad should work on agro-forestry species including poplar in Uttar Pradesh with the help of IFP, Ranchi.		
2	Evaluation of Medicinal and Aromatic plant Species for Bioremediation of Usar land in Uttar Pradesh. / Dr. B. K. Pandey, Sci-D/ 2013-2018 (5 years)	18.11	2.25	Dropped		
INST	TTUTE: Institute of Wood Science	& Technolog	y, Bangalore			
1	Rehabilitation of Bellary-Chitradurga iron ore belt by ecosystem approach./ Dr. B.N. Diwakara/ 2013-2016 (3 years)	9.99	2.98	Dropped		
2	Diversity and species assemblage of scarabs (Coleoptera:	8.96	1.96	Approved subject to the		

		BIODIV	ERSITY CONSER	VATION AND ECOLOGICAL SECURITY
	Scarabaeidae) in forest ecosystems of central Western Ghats./ Y.B. Srinivasa/ 2013-2016 (3 years)			availability of funds.
	ITUTE: Institute of Forest Genetic		reeding, Coim	batore
1	Invasion impacts of Acacia mearnsii on changes in soil fertility status of shola forests in the Western Ghats./ Dr. A.C. Surya Prabha, Sci-C/ 2013-2018 (5 Years)	25.47	4.43	Reframe it as preservation of Shola forest ecosystem and possibility for funding can be explored from SFD.
2	Biocolourant: Bioprospecting of selected accessions of Red tamarind as natural dye in textile industry./ Dr. S. Murugesan, Sci-F/ 2013-2016 (3 years)	29.544	3.36	Approved but funding can be explored from outside agencies such as CSIR and DBT etc.
3	Development of seed pelleting techniques for commercially important tree species./ R. Anandalakshmi, Sci-D / 2013-2016 (3 years)	15.00	4.88	Approved subject to the availability of funds.
INST	ITUTE: Institute of Forest product	tivity, Ranchi		
1	Standardization of nursery techniques for organic cultivation of <i>T. Terrestris</i> L. & <i>C. quadrangularis</i> L. medicinal plants extensively used in traditional system of medicine./ Dr. Malabika Ray, Sci-D/2013-2016 (3 Years)	11.78	2.00	Reframe the project with main emphasis on cultivation techniques instead of nursery techniques. Reduced the funds/budget. Species selection can be made on the basis of agro-climatic zones.
INST	ITUTE: Tropical Forest Research	Institute, Jab	alpur	
1	Impact of coal and iron mining on forest health and crop productivity in Chhattisgarh./ Dr. A.K. Bhowmik, Sci-C / 2013-2016 (3 Years)	13.28	3.69	Dropped
INST	ITUTE: Arid Forest Research Inst	titute, Jodhpu	ır	
1	Diversity of pollinators and their role in fruit/pod production of Acacia senegal, Capparis decidua and Prosopis cineraria in Rajasthan./ Dr. Shiwani Bhatnagar, Sci-B/ 2013-2016 (3 years)	19.53	8.38	Approved subject to availability of funds.
2	Rehabilitation of limestone mine over-burden in arid region of Western Rajasthan./ Sh. S. R. Baloch, Sci-B/ 2013-2018 (5 Years)	45.38	15.84	Approved. Hold a one day workshop on the subject and explore the possibility of funding from Hindustan Zinc Ltd./CAMPA funds of SFD.

BIODIVERSITY CONSERVATION AND ECOLOGICAL SECURITY

TNICT	TITITE: Dain fanast Dagaawah Insti		ERSITY CONSERV	VATION AND ECOLOGICAL SECURITY
	Studies on the geometrically		2.50	Ammayad
1	Studies on the economically important diseases of medicinal and aromatic plants of Assam to develop management practices through organic approach./ Dr. Shailesh Pandey, Sci-B/ 2013-2016 (3 Years)	8.00	3.58	Approved.
INST	TITUTE: Himalayan Forest Resear	ch Institute, S	Shimla	
1	Biodiversity of Spiders (Arachnida: Araneae) in Himachal Pradesh./ Dr. S. Chakarabarti, Sci-F / 2013 to 2016 (3 years)	7.47	4.49	Approved subject to the availability of funds.
2	Assessment of plant diversity in Tundah Wildlife Sanctuary of District Chamba, Himachal Pradesh for long term ecological monitoring./ Dr. R.K. Verma, Sci-F/2013 to 2017 (4 years)	7.27	1.68	Dropped. AICP on Access and Benefit Sharing to be prepared by Prof. S.P. Singh, Chair of Excellence, FRI (DU) in consultation with Dr. Anil Joshi, HESCO. A Committee to be constituted under the Chairmanship of Prof. S.P. Singh, Chair of Excellence, FRI (DU) on Access and Benefit Sharing and capacity building of villagers.
INST	TITUTE: Institute of Forest Biodive	ersity. Hyders	hads	ounding of vinagers.
1	Screening of certain forest flora based on ethno-botanical records for their bio-efficacy against insect pests./ Dr. N. Rama Rao, Sci-G/2013-2016 (3 Years)	23.09	Nil	Approved. Deferred for next year.
2	Natural Regeneration Studies of important tree species of Nallamalla Seshachalam Hills and Koundinya wildlife sanctuary of Eastern Ghats of Andhra Pradesh./ Dr. G.R.S. Reddy, Sci-F/2013-2018 (5 Years)		4.40	Approved. RPC suggested to include population dynamic studies.
3	Ecological diversity of Kawal Tiger Reserve in Andhra Pradesh- A Bench Mark Study./ Dr. G. Ravi Shankar Reddy, Sci-F/ 2013-2018 (5 Years)	24.71	2.97	Approved subject to availability of funds.

THR	THRUST AREA - III: FORESTS AND CLIMATE CHANGE				
Sl. No.	Title of Project	Budget (Rs. in lakhs)	Current year 2013-14 requirement (Rs. in lakhs)	RPC Recommendations/ Decisions Taken	
INST	TTUTE: Forest Research Instit	ute, Dehra	adun		
1	Seasonal characteristics and climate effect to black carbon aerosols over the urban areas of Uttarakhand./ Dr. A.K. Tripathi, Registrar and Sci-F./ 2013-2016 (3 Years)	20.64	2.49	To be a part of AICP (Impact Component) Methodology and funding. Issue may be discussed with concerned NPD.	
INST	ITUTE: Centre For Social Forestr	v And Fco	_ _Rahahilitation	Allahahad∙ Nil	
	ITUTE: Institute of Wood Science				
	ITUTE: Institute of Forest Genetic		<u> </u>		
1	Screening tree species for intraspecific variation in carbon sequestration potential under elevated CO ₂ ./Dr. C. Buvaneswaran, Sci-E / 2013-2016 (3Years)	9.57	2.69	Approved subject to availability of funds.	
INST	TTUTE: Institute of Forest prod	luctivity.	Ranchi:	Nil	
	TTUTE: Tropical Forest Resear			Nil	
	TTUTE: Arid Forest Research			Nil	
	TTUTE: Rain forest Research In			Nil	
	TTUTE: Himalayan Forest Res				
	TTUTE: Institute of Forest Biod			Nil	

THR	THRUST AREA IV: FOREST GENETIC RESOURCE MANAGEMENT AND TREE IMPROVEMENT					
Sl. No.	Title of Project	Budget (Rs. in lakhs)	Current year 2013-14 requirement (Rs. in lakhs)	RPC Recommendations/ Decisions Taken		
INST	ITUTE: Forest Research Institute	, Dehradur				
1	Genetic diversity and adaptability though morphological and molecular markers in <i>Dalbergia sissoo</i> Roxb./ Dr. Ashok Kumar, Sci-E/2013-2016 (3 Years)	24.86	11.54	Approved subject to availability of funds		
2	Clonal propagation of newly developed superior hybrids/genotypes of Eucalypts and their development in the field./Ms. Praveen, Sci-C./ 2013-2016 (3 Years)	18.78	5.26	New component added in AICP on Eucalyptus. Approved subject to availability of funds.		
3	Field evaluation of recombinants emanating from F1 and F2 generations of Corymbia (Syn. Eucalyptus) hybrid C. citrodora Hook. x C. torelliana F.v. Muell for high productivity (follow up for high project)./ Dr. Ajay Thakur, Sci-C/ 2013-2015(2 years)	19.91	4.54	New component added in AICP on Eucalyptus. Approved subject to availability of funds.		
4	Cytogenetic investigations of selected forest tree species./ Dr. Rama Kant, Sci-B./ 2013-2016 (3 Years)	22.71	7.57	New component added in AICP on Forest Genetics Resource Evaluation and Conservation. Approved subject to availability of funds.		
INST	ITUTE: Centre for Social Forestry a	and Eco-Re	habilitation, All	ahabad:		
1	All India Coordinated Project for Genetic Improvement of <i>Melia Composita</i> Wild Nodal Institute FRI: CSFER, Allahabad will be the part of this AICP./ Dr. Kumud Dubey / 2012-2022	-	4.00	Technically approved subject to availability of funds.		
	(10 years)					
	ITUTE: Institute of Wood Science					
	ITUTE: Institute of Forest Genetic	s and Tree	Breeding, Coir	mbatore		
1	Documentation of existing forest genetic resources in India and preparation of a national register of FGR./ M. Maria Dominic Savio, Sci-D/ 2013 - 2016 (3 Years)	101.74	38.91	New component added in AICP on Forest Genetics Resource Evaluation and Conservation. Approved subject to availability of funds.		

	FC	DREST GENE	FIC RESOURCE M	IANAGEMENT AND TREE IMPROVEMENT
2	Production of multi-parent intercross populations of eucalypts and transcript profiling for salinity tolerance./ Dr. R. Yasodha, Sci-F/ 2013-2016 (3 years)	32.36	6.24	New component added in AICP on Eucalyptus. Approved subject to availability of funds.
3	Isolation and characterization of Cinnomoyl CoA Reductase gene in <i>Casuarina equisetifolia.</i> / Dr. A. Shanthi, Sci-B/ 2013-2016 (3 years)	18.71	4.74	New component added in AICP on Casuarina equisitifolia. To be started with AICP as and when funds are available.
4	Studies on heart-rot and root rot diseases of Phyllodinous Acacias./ Dr. V. Mohan, Sci – F/2013-2017 (4 years)	26.33	3.26	AICP on Phyllodinoes Acacias. Approved subject to availability of funds.
INST	ITUTE: Institute of Forest Product	tivity, Ran	chi:	
1	Collection, conservation and evaluation of <i>Melia dubia</i> germplasm from North Bengal, Odisha Hills and other parts of India for identification and release of superior clones./ Sh. Aditya Kumar, Sci–B/ 2013-2018 (5 Years)	67.50	23.43	New component added in AICP on <i>Melia</i> . Approved subject to availability of funds.
INST	ITUTE: Tropical Forest Research	Institute, J	abalpur :	
1	Studies on effect of introduction of honey bee on seed production in teak seed orchards./ P.I. Dr.Deepa M., Sci-B./ 2013-2016 (3 Years)	7.52	2.69	New component added in AICP on Teak. Check the pollination deficiency/ flowering problem in teak from available literature and take up preliminary study.
2	Genetic improvement of Dalbergia latifolia Roxb. through selection and evaluation of germplasm in central India./ Dr. Fatima Shirin/ 2013-2016 (3 Years)	99.04	7.43	New component added in Inter Institutional AICP on <i>Dalbergia latifolia</i> . To be taken with complete project subject to availability of funds.
3	Collection and morpho-molecular characterization of critically endangered <i>Litsea glutinosa</i> germplasm from Madhya Pradesh and Chhattisgarh./ Dr.Naseer Mohammad, Sci-B/2013-2016 (3 years)	11.12	3.99	New component added in AICP on Forest Genetic Resource Evaluation and Conservation. Revise the proposal including <i>ex-situ</i> conservation aspect of the proposed species.
INST	ITUTE: Arid Forest Research Inst	titute, Jodh	pur	
1	Assessment of guggul plant's population density phenology and	24.19	4.88	New component added in AICP on "Forest Genetic Resource

FOREST GENETIC RESOURCE MANAGEMENT AND TREE IMPROVEMENT

INST	progenies in Gujarat./ Dr. Shivesh Kumar Rajput/ 2013-2016 (3 Years) ITUTE: Rain forest Research Insti			Evaluation and Conservation". Subject to availability of funds.
1	In vitro propagation of Vanda coerulea./ Shri Satyam Bordoloi, Sci–B./ 2013-2016 (3 years)	6.65	2.85	Approved
2	Study on seed source variation for germination and seedling growth and establishment of seedling seed orchard of <i>Michelia champaca.</i> / Md. Ibrahim, Sci-B/2013 to 2016 (3 years)	10.47	3.20	Approved
	ITUTE: Himalayan Forest Resear			Nil
INST	ITUTE: Institute of Forest Biodive			
1	Productivity improvement in <i>Pterocarpus santalinus</i> L.f. through mass selection and selective breeding./ Dr. S. Pattanaik, Sci-E/ 2013-2018 (5 years)	37.77	Nil	For external funding from DBT, SFD.

Annexure VII

Institute: Centre for Forest based Livelihood and Extension (CFLE), Agartala								
Sl. No	Title of the project/PI/ Duration	Total cost of the project (in lakhs)	Budget approved for 2013-14 (in lakhs)					
Thrust Area 1. Managing Forests and Forest Products for livelihood Support and Economic Growth.								
49.	Documentation of Forest based livelihood supports. (1 year)	0.75	0.75					
50.	Livelihood Research and Development Program on bamboo	4.00	4.00					
	handicrafts and their value addition (in collaboration with BCDI,							
	Agartala)./ (1 year)							
	Total	4.75	4.75					
Thrust Area 2 .Biodiversity Conservation & Ecological Security								
51.	Biodiversity assessment of various sites in Tripura./ (1 year)	1.40	1.40					
	Total	1.40	1.40					
Thrust Area 3. Forestry intervention for Climate Change mitigation and adaptation								
52.	Studies on Check dams/ water-bodies. / (1 year)	2.40	2.40					
53.	Studies on lowering of water table with special reference to Haora	3.55	3.55					
	River./ (1 year)							
	Total	5.95	5.95					
	Grand Total	12.00	12.00					

Table III: Status of New Projects of the Institutes with Budget

	Institute	New Research Projects Submitted		New Research Projects Approved		
Sl. No		Number of Projects	Budget Outlay (in lakhs)	Number of Projects	Budget Outlay (in lakhs)	Budget requirement (2013-14) (in lakhs)
1	FRI, Dehra Dun	15	190.74	13	170.61	170.61
2	CSFER, Allahabad	9	179	7	141.38	141.38
3	IWST, Bangalore	8	62.99	7	53	20.97
4	IFGTB, Coimbatore	11	322.83	10	297.364	79.09
5	IFP, Ranchi	3	144.59	2	132.81	49.63
6	TFRI, Jabalpur	7	146.5	6	133.22	19.93
7	AFRI, Jodhpur	6	169.25	6	169.25	54.93
8	RFRI, Jorhat	6	72.47	6	72.466	23.45
9	CFLE, Agartala*	5	12.00	5	12.00	12.00
10	HFRI, Shimla	10	190.39	9	183.12	48.2
11	IFB, Hyderabad	6	173.12	5	135.35	11.04
Total		86	1663.88	76	1500.57	631.23

^{*5} projects of CFLE, Agartala costing Rs. 12.00 lakhs are yet to be approved.