

Proceedings of the XVII Research Policy Committee (RPC) Meeting 16-18 January, 2017



Thrust Areas of ICFRE Research:

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

Directorate of Research

Indian Council of Forestry Research & Education (ICFRE)

(An Autonomous body of the Ministry of Environment, Forests & Climate Change, Govt. of India)

P. O. New Forest, Dehradun – 248 006

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Abbreviations

Sl. No.	Abbreviation	Description
1.	OG	Ongoing projects
2.	CR	Ongoing projects with change request
3.	NW	New projects approved for ICFRE funding
4.	NA	New Projects not approved
5.	Mod	Projects approved for modifications
6.	EF	Projects approved for external funding
7.	CP	Projects completing on March 2017

Indian Council of Forestry Research and Education (ICFRE)

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Research Seminar:

XVII meeting of ICFRE's Research Policy Committee (RPC), held on 16 January 2017 to 18 January 2017, initiated with a half-day Research Seminar on '*ICFRE's Initiative towards Enhancing Country's Green Cover and Wood Production through Development of High-yielding Germplasm of Tree Species*'. The seminar was organized in the ICFRE's Conference Hall. The research seminar highlighted great success achieved by ICFRE Institutes in developing high yielding germplasm of five commercially important species/ species groups viz., *Casuarina* spp., *Dalbergia sissoo*, *Melia dubia*, *Eucalyptus* spp., and Bamboos under various long-term tree improvement programs being implemented by the ICFRE Institutes. Dr. STS Lepcha, PCCF-cum MD, Uttarakhand Forest Development Corporation inaugurated the seminar. Mr. A K Wahal and Dr. Shashi Kumar were the guests of honour and presided over the technical sessions.

The seminar was given by the teams of the scientists working on the improvement program of these species. Dr A Nicodemus, Scientist, IFGTB Coimbatore gave the presentation in respect of *Casuarina equisetifolia* & *C. junghuniana*. Dr. NSK Harsh and Dr. Ashok Kumar, Scientists, FRI Dehradun presented the achievements in respect of *Dalbergia sissoo* and *Melia dubia* respectively. Dr. HS Ginwal, Scientist, FRI Dehradun and Dr. Shiva Kumar, Scientist, IFGTB, Coimbatore presented the achievements made in respect of *Eucalyptus* species. The performance gain in respect of 10 species of bamboo was shared by the team of Dr. HS Ginwal, Scientist, FRI, Dehradun, Dr. Shyam Vishwanath, Scientist, IWST, Bangalore and Dr. A S Thakur, Scientist, FRI, Dehradun. All these presentations covered the process and rigour employed in development of high-yielding germplasm. The presentations also highlighted the potential of the high-yielding germplasm of these species in enhancing green cover and wood production in the country.

The research seminar was attended by representatives from various stakeholder groups and was highly appreciated and generated a lot of discussion and interest. It was suggested that ICFRE should organize similar subject-specific research seminars on various subject groups for effective dissemination of its research outputs. Dr. Shashi Kumar, DG, ICFRE congratulated the ICFRE Institutes and the presenters for this very important work on tree improvement undertaken by them. He expressed the hope that the high-yielding germplasm will be adopted by the SFDs and used on a large scale to improve green cover and wood production in the country.

XVII Research Policy Committee (RPC):

The 2½ day meeting of the XVII Research Policy Committee (RPC) commenced from the afternoon of 16 January 2017 at the Board Room of ICFRE, Dehradun under the Chairmanship of Dr. Shashi Kumar, Director General, ICFRE. List of participants of RPC meeting is at Appendix-I. Summary record of the RPC meeting is given as below:

1. The meeting opened with welcome of the Chairman RPC, the RPC members and special invitees by Dr. G. S. Goraya, Deputy Director General (Research) and Member Secretary, RPC. Dr. Goraya while welcoming the members briefed about the functions of the RPC

and presented an overview of the research program of ICFRE along with comprehensive analysis of the progress over the last year i.e. 2016-2017. He informed the house that RPC is the apex body to guide the Council in finalizing its annual research program by reviewing the ongoing projects and scrutinizes the new projects that are presented to it after provisional prioritization by the Research Advisory Groups (RAGs) of the nine ICFRE Institutes. He informed that the RPC has the mandate to extend, modify or even recommend closer of the ongoing projects, if deemed fit in the best interest of the overall research program. The RPC, he informed, was also mandated to approve the proposals brought to it directly having national significance, suggest new areas of research and give direction for over all improvement of the research program.

2. The Committee was informed that the past few years ie, 2013-14, 2014-15 and 2015-16 witnessed severe budgetary constraints causing only partial implementation of the research program recommended by the previous RPCs. However, improvement in the budget availability during 2016-17 paved the way for starting all such approved projects that were lying on shelf over the past couple of years. Dr. Goraya informed that all ICFRE Institutes organized Research Advisory Group (RAG) meetings between 28 September 2016 and 26 October 2016, wherein many new research projects, especially under the 15 research priority areas suggested by the MoEF&CC were presented and recommended to this RPC for consideration. The XVII RPC will evaluate these new projects and recommend approval of all such new projects that meet the scientific scrutiny for implementation.
3. Dr. Goraya informed the house that budgetary constraints had not deterred the scientific personnel of the Council to carry on with research and extension activities. Good efforts were made to raise project funding from various sources outside ICFRE. During 2014-2015, 143 such projects (including consultancies) with a total budget outlay of Rs 75.39 crores were under implementation in the Council. The Council had also successfully completed 28 such projects worth Rs 19.73 crores during 2014-15. He further informed the house that scientific personnels of Council have also made significant progress in seeking funding from other agencies during 2015-16, 144 such projects (including consultancies) with a total budget outlay of Rs 58.65 crores were under implementation in the Council. The Council also completed 31 such projects during 2015-16. During 2016-17 mid-term review it was indicated that ICFRE and its Institutes implemented 152 projects of total budget outlay Rs 61.52 crore and completed 20 EAPs.
4. Dr Goraya informed the members that the scientific manpower of the ICFRE and its Institutes during 2014-15 published 284 research papers (170 in National Journals and 114 in Foreign Journals), and 302 research papers (173 in National Journals and 129 in Foreign Journals) in 2015-2016. The RPC members expressed their appreciation for this and called upon the ICFRE scientific manpower to further increase their publications in high impact factor journals, and aim for publishing at least one research paper per year in journals like 'Nature'.
5. Dr. Goraya also presented the status of submission of Projects Completion Reports (PCRs) by the Institutes from 2010-11 to 2015-16. A total of 53 PCRs pertaining to this period were pending submission at various stages. Chairman RPC, Dr. Shashi Kumar, called upon all the Directors of ICFRE Institutes to ensure that all the pending PCRs were submitted at the earliest, but not later than March 2017.

6. The Committee was informed that during 2016-17, the total number of Plan-funded ongoing projects in the Council was 155 projects (73 projects continued from previous years, and 82 new projects taken up for implementation during 2016-17). Of these projects, funding from other sources was received in respect of four projects (2 of FRI, 1 of HFRI and 1 of AFRI). These four projects have, therefore, not been listed under the projects being funded under ICFRE plan funding. Two projects could not be started due to transfer/ impending superannuation of the PIs. One project was closed one year in advance, and one project transferred under extension programs. A total of 38 projects were culminated/ will be culminated during the financial year. Thus, out of the 153 projects under implementation during the year 2016-17, only 109 projects will be carried forward for implementation during 2017-18. RPC, therefore, will review the 109 ongoing projects for their continuation in 2017-18. In addition, RPC will also evaluate 128 new projects that have been recommended by the Institute's RAGs for implementation from 2017-18 onwards.

7. Chairman of the RPC, Dr Shashi Kumar, DG ICFRE, set the tone for the meeting of XVII RPC 2017 with his opening remarks. He extended warm welcome to all the RPC members to the meeting in cold winters of Dehradun. He made sincere appeal to all the RPC members to evaluate the projects dispassionately and contribute wholeheartedly in the technical discussion and help in refining and finalization of the Council research program for the next year. He also requested the Directors of ICFRE Institutes to be focused in their presentation. He appreciated Dr. Goraya for presenting detailed analysis of the ongoing research program and the matters related to it.

8. The Chairman, RPC informed the members that the MOEF&CC, GoI had suggested 15 research priority themes to ICFRE for initiating research projects on each of these on priority basis. He called upon the Directors of ICFRE Institutes to gear up and keep in readiness for putting to implementation from January 2017 itself those new projects that fall in any of these 15 priority themes and that pass the scrutiny of the RPC.

9. The Committee was also informed that the research program of the Council was organised into the following 4 research thrust areas:
 - ★ **Thrust area I** : Managing Forest and Forest Products for Livelihood Support and Economic Growth
 - ★ **Thrust area II** : Biodiversity Conservation and Ecological Security
 - ★ **Thrust area III**: Forests and Climate Change
 - ★ **Thrust area IV** : Forest Genetic Resource Management and Tree Improvement

The meeting was accordingly structured into 4 sessions to have an overview of each of these 4 Research Thrust Areas in a focused way. Each Institute would, therefore, make four presentations, one presentation in each of the 4 thrust areas. Broad presentation structure would be as below:

- Overview of all the ongoing projects thrust area wise (both ICFRE funded and non-ICFRE funded)
- Ongoing projects with change request, and
- New proposals (including those approved by XV RPC)

Detailed briefing book, organized section-wise, and containing detail of all the ongoing and new projects to be put up to the RPC for review and evaluation was provided to the members as reference material. Soft copy of this Briefing Book was circulated through email 3 weeks before the RPC meeting.

10. As an endeavour to continuously improve upon the research prioritization process and to intimately involve the PI in the process, all the ICFRE Institutes were brought on video-conference during the entire proceedings of the RPC meeting.
11. The 4 thematic sessions witnessed presentation on and review of the status of ongoing projects under implementation across ICFRE Institutes during 2016-17. 38 of these projects were reported to be successfully culminated during 2016-17. Four projects received funding from sources other than ICFRE and therefore were dropped for funding from ICFRE plan funds. Other two projects could not be started due to transfer/impending superannuation of PIs. One project was recommended for closer one year in advance as the objectives that were envisaged from the project were achieved. Details of such projects is given in table below along with the decision taken by the RPC:

Table: Ongoing Projects that Received External Funding and those Recommended for Dropping/ Closer

S. No.	Project title/PI / duration/ Institute	Budget outlay (Rs in lakhs)	Expenditure incurred from ICFRE (Rs. In lakh)	Remarks/ Recommendations
1	Preparation and applications of cationized nano-cellulosic strength agents for paper making. Dr. Vikas Rana, 3 Years, 2016-2019. FRI Dehradun.	12.47	Nil	Funding of Rs 19.26 lakh received from DST. RPC took note and approved transfer of project from plan to externally-funded.
2	Selection of superior quality germplasm of <i>Oroxylum indicum</i> -an endangered species. Dr.B.P Tamta, 3 Years, 2016-2019. FRI Dehradun.	11.46	Nil	Funding of Rs 10.80 lakh received from DST. RPC took note and approved transfer of project from plan to externally-funded.
3	Ex-situ conservation and standardization of nursery and propagation methods of <i>Trillium govanianum</i> (Nag Chhatri) Wall.ex. D. Don. Sh. Jagdish Singh, 3 years, 2016-2019. HFRI Shimla.	17.30	Nil	Funding received from NMPB. RPC took note and approved transfer of project from plan to externally-funded.
4	Survey, evaluation and management of important insect-pests and diseases of <i>Anogeissus pendula</i> . 3 Years, 2016-19. Ms Swati Bhatnagar, 3 years, 2016-19.	18.81	Nil	Project approved for funding by SFD Rajasthan. RPC took note and approved transfer of project from plan to externally-

	AFRI Jodhpur.			funded.
5	Green Synthesis of Nano particles and their Utilization. Dr. D.K. Mishra, 3 Years; 2016-19. AFRI Jodhpur.	10.87	Nil	Project approved in XVI RPC (2015) could not be taken up for implementing due to fund constraints in that year. Now PI was due for superannuation and it won't be possible for him to complete it before retirement. No other subject specialist available in the Institute. RPC took note and approved the project for dropping.
6	Development of <i>Fleminga</i> based agroforestry model for poverty alleviation in Jharkhand. Dr. A. K. Pandey, 3 years, 2016-2019. IFP Ranchi.	13.64	Nil	Project approved in XVI RPC (2015) could not be taken up for implementing due to fund constraints in that year. Now PI stood transferred to FRI Dehradun. With no other scientist available for taking up the project, it was proposed for dropping. RPC took note and approved the project for dropping.
7	Ecological diversity of Kawal tiger reserve in Andhra Pradesh - A bench mark study. Mr M B Honnuri, 4 years, 2013-2018 IFB Hyderabad	13.32	3.97	Project was reported to have successfully achieved the planned targets and was thus proposed for early closer. RPC took note and approved the project for closer.
8	New Forest Handicraft Extension Counter Project at FRI. Dr KP Singh, 2 years, 2016-18 FRI Dehradun	Nil	Nil	The project was related to extension and hence was transferred under extension as per the recommendations of the previous RPC

12. The RPC reviewed all ongoing projects and considered requests for change in project period, objectives, budget line, or the PI in respect of 23 ongoing projects. After detailed deliberations, the RPC approved changes as requested in respect of the 23 ongoing projects. The RPC took note of the 38 projects that were successfully culminated/

scheduled for culmination during 2016-17; approved six projects for dropping (four on account of receipt of funding from external sources and two on account of transfer/impending superannuation of PIs); approved early closer of one project; and approved transfer of one project from under research to extension; and approved 109 of the 155 ongoing projects for continuation during 2017-2018.

13. A total of 128 new projects were presented to the RPC by Directors of ICFRE Institutes under the four research thrust areas of the Council. Of these, 64 projects were in Thrust Area-I, 25 were in Thrust Area-II, 6 in Thrust Area-III, and 33 in Thrust Area-IV. The RPC subjected these projects to detailed scrutiny, often calling upon the concerned PIs, who were available through video-conferencing, for seeking clarifications on objectives, methodology and outputs. After rigorous evaluation, the RPC recommended 86 Projects for approval (Thrust Area-I = 49; Thrust Area-II = 14; Thrust Area-III = 05; and Thrust Area-IV = 18).
14. Deputy Director General (Research) presented concept and broad framework of two inter-institutional projects titled “*Assessment of Invasive Alien Plant Species of Forest Landscapes in India and Development of Strategies for Long Term Monitoring and Management of Key Invasive Alien Plant Species in Different Regions of the Country (2017-2027)*” for a 5 year project at a total cost of Rs. 600 lakh; and titled “*Quality Improvement of Selected Tree Fodder Species for different Regions of the Country; and Development of Standardized Protocols for their Plantation and Management with special focus on Forest Fringe Villages (2017-2027)*” at a 5-year project cost of Rs. 900 lakh. The RPC highly appreciated these project proposals and recommended these for approval.
15. Summary of the ongoing projects, new approved projects and budget requirement for 2017-18 is given in table nos. 1 to 3. Institute-wise detail of the projects - both ongoing and new - approved for implementation during 2017-18 is given in Annexures-I to IX. List of projects that have been culminated during 2016-17 is given as Annexure-X.
16. The RPC, during the deliberations to evaluate the new projects, suggested modifications in some project proposals. While according ‘*in principle*’ approval to such project proposals, the RPC authorized the DG, ICFRE to approve these projects after the PIs duly incorporate suggestions of the RPC in the project proposals. RPC also authorized the DG, ICFRE to accord approval for any mid-term modifications in the approved projects that may be required during the implementation of the project and till the holding of the next RPC.
17. The RPC members took note of the low fellowship rates still being employed by the ICFRE for SRFs/ JRFs/ FAs/ Pas, etc. They called upon the DG, ICFRE to review the rates and bring these at par with the prevailing norms of other government bodies to attract and retain competent personnel for these positions.
18. All the RPC members expressed satisfaction over the wide canvas including the contemporary issues that the ICFRE’s research program was covering. They made excellent contribution while evaluating the ICFRE’s research program and made suggestions for further improving the research program. Some of the key comments by the RPC members are-

- Spend more time in making literature review a more comprehensive exercise and cause challenge to the experts by bringing innovative projects after thorough literature review. Ensure in-house peer review of the projects before putting up to RAG (Dr. M N Jha, Dr. Y S Negi, Dr. Kuldip Singh, Dr. Gurumurthy, Dr. Lal Singh, Dr. C N Pandey).
- Base genetics related projects on latest scientific equipment and newer techniques to keep at par with the global research community on the subject (Dr. Kuldip Singh).
- All tree improvement and breeding programs should be long-term programs with continuous and assured fund flow (Dr. Kuldip Singh, Dr. Gurumurthy, Mr. R. Raina).
- It is highly desirable to pool all projects on one species under implementation in different ICFRE Institutes under one comprehensive program to get tangible outputs. Networking within ICFRE Institutes would benefit all with more opportunities for peer interaction and better outputs (Dr. C N Pandey, Dr. Y S Negi, Dr. Kuldip Singh).
- Involve specialist Institutes from outside ICFRE system in the projects towards pooling of resources and better outputs (Dr. Kuldip Singh, Dr. Y S Negi, Dr. C N Pandey, Prof. S Tiwari).
- Be wary of plagiarism through comprehensive literature review and make sincere efforts to bring in novelty/ uniqueness during project preparation and writing of research papers (Dr. Y S Negi)
- Patent the technology at the right time to remain leader in the field (Dr. Y S Negi, Dr. Gurumurthy).
- Make extension and technology transfer to farmers and other stakeholders an integral part of the research program. Allocate higher resources to this aspect and hold more research seminars at regional level (Mr. R. Raina).
- More emphasis should be placed on research on native/ indigenous species with a focus to improve rural livelihoods (Dr. Lal Singh, Dr. S S Samant).
- Make efforts to publish at least one paper per year in journals of repute like 'Nature' (Dr. Y S Negi).
- Given the budgetary constraints, it was necessary to explore funding options from outside ICFRE plan sources (Dr. Kuldip Singh, Mr. A K Wahal)

Dr. Shashi Kumar, DG, ICFRE-cum-Chairman of RPC in his closing remarks, thanked the RPC members for taking time out of their busy schedules and providing invaluable inputs towards finalization of ICFRE's research program for 2017-18. He also thanked the Directors of ICFRE Institutes and their teams in making presentations of the Institutes research proposals. He also thanked DDGs and ADGs for their valuable contributions. Efforts of Dr. G.S. Goraya, DDG (Research) and Dr. Vimal Kothiyal, ADG (RP) along with support team and staff were appreciated for effectively organizing the meeting.

The RPC meeting ended with vote of thanks to the Chair, members and special invitees by Dr. G S Goraya.

Approved

Approved by Director General, ICFRE (Chairman, RPC) at N/15 of the file No. 72(XVII)/2016/ICFRE(R)/RP on 08 February 2017

Total Budgetary Outlay for the Approved ICFRE Funded Projects

Table 1a: Ongoing projects for the year 2017-18.

Institutes	Total No. of projects presented		No of new Projects received external funding/sanction	No of new projects proposed for closer/dropping	No. of projects completed in 2016-17	Total no. of projects approved for continuation	
	No. of Projects	Total Budget Outlay (Rs. In lakhs)				No. of Projects	Total Budget Outlay (Rs. In lakhs)
AFRI, Jodhpur	16	438.50	01	01	03	11	160.35
FRI, Dehradun	28	1155.36	02	01*	08	17	449.01
HFRI, Shimla	10	169.04	01	00	02	07	116.49
IFB, Hyderabad	07**	120.75	00	01	02	05	88.27
IFGTB, Coimbatore	31***	561.37	00	00	04	27	590.01
IFP, Ranchi	08	131.76	00	01	01	06	114.26
IWST, Bengaluru	18**	310.75	00	00	04	14	260.80
TFRI, Jabalpur	12	521.55	00	00	04	08	482.88
Sub Total	130	3409.08	04	04	28	95	2262.07
RFRI, Jorhat	25#	651.48	00	00	11	14	496.35
Total (Rs lakhs)	155	4060.56	04	04	38	109	2758.42

*One project of FRI shifted to extension

**One project of IWST Bangalore of Hyderabad centre transferred to IFB Hyderabad

*** One project of IFTB Coimbatore given extension subsequently

#To projects of RFRI was given extension subsequently

Table 1b: New approved projects of XVII RPC 2017 to be started in 2017-18 with ICFRE funding.

ICFRE Institutes	Total no. of projects presented in XVII RPC 2017		Total No. of projects approved				
			Funding from ICFRE			Funding from other sources	
	No. of projects	Total budget outlay (Rs. In lakhs)	No. of Projects	Total Budget Outlay (Rs. In lakhs)	No of projects recommended for modification	No of Projects	Total Budget Outlay (Rs in lakhs)
AFRI, Jodhpur	14	560.45	08	159.65	03	02	159.56
FRI, Dehradun	43	1041.72	30	593.16	02	01	80.76
HFRI, Shimla	04	212.53	03	124.01	01	00	00
IFB, Hyderabad	04	158.84	03	85.66	00	00	00
IFGTB, Coimbatore	19	497.74	09	167.80	00	00	00
IFP, Ranchi	04	76.05	02	28.82	00	00	00
IWST, Bengaluru	18	353.43	12	241.20	00	01	18.45
TFRI, Jabalpur	14	192.53	13	170.75	01	00	0.00
Sub Total	120	3093.23	80	1649.73	07	04	258.77
RFRI, Jorhat*	08	159.66	06	83.34	00	01	64.97
Total (Rs lakhs)	128	3252.89	86	1733.07	07	05	323.74

Table 1c: Total budgetary requirement of ICFRE funded projects for 2017-18.

S. No.	Project type	Total no. of projects approved	Total budget required for 2017-2018 (Rs in lakhs)		
			NE component	General budget	Total
1	Ongoing Projects for the year 2017-18	109	87.14	559.85	646.99
2	New Projects Approved by XVII RPC 2016 to be started in 2017-18	86	35.48	558.84	594.32
3	Inter institutional projects on invasive and fodder species	02*	-	250.00*	250*
4	Budget requirement of miscellaneous research activities (other than research projects)	-	40.40	652.09	692.49
G. Total:			163.02	2020.78	2183.80

*Rs 2.50 crores is added for two interinstitutional projects on invasive and fodder species

Budgetary requirement for the approved ICFRE funded projects for the year 2017-18:

Table 2a: Budgetary requirements for ongoing research projects for 2017-18.

Institute	Sub head wise budgetary requirement (Rs in lakhs) for 2017-18 for ongoing projects					
	Consumables (M&S)	Research expenditure (FRE)	Travel And conveyance (Res)-TE	Capital (Scientific Equipments)	Fellowship	Total
AFRI, Jodhpur	6.20	10.75	4.95	8.14	15.00	45.04
FRI, Dehradun	20.31	54.17	9.60	61.70	19.49	165.27
HFRI, Shimla	2.35	6.73	5.55	2.20	8.57	25.40
IFB, Hyderabad	3.88	4.10	3.64	2.50	11.34	25.46
IFGTB, Coimbatore	30.47	50.29	17.41	4.30	40.22	142.69
IFP, Ranchi	10.02	7.57	3.80	0.00	8.87	30.26
IWST, Bengaluru	14.18	9.50	5.30	26.80	18.56	74.34
TFRI, Jabalpur	8.80	18.94	9.85	0.00	13.80	51.39
Total:	96.21	162.05	60.1	105.64	135.85	559.85
RFRI, Jorhat*	9.05	30.55	21.98	0.10	25.46	87.14
Grand Total:	105.26	192.6	82.08	105.74	161.31	646.99

* including its centres

Table 2b: Budgetary requirements New Approved research projects by XVII RPC 2017 to be started in 2017-18.

Institutes	Sub head wise budgetry requirement (Rs. in lakhs) for 2017-18 for new projects					
	Consumables (M&S)	Research expenditure (FRE)	Travel And conveyance (Res)-TE	Capital (Scientific Equipments)	Fellowship	Total
AFRI, Jodhpur	8.50	11.29	5.40	6.45	12.49	44.13
FRI, Dehradun	34.55	64.55	12.85	75.65	43.93	231.53
HFRI, Shimla	2.60	4.80	5.90	3.50	10.03	26.83
IFB, Hyderabad	6.60	4.30	2.50	7.20	4.08	24.68
IFGTB, Coimbatore	6.31	12.85	8.00	1.20	13.98	42.34
IFP, Ranchi	3.55	2.25	2.90	0.00	2.14	10.84
IWST, Bengaluru	16.85	14.75	6.90	43.90	21.61	104.01
TFRI, Jabalpur	10.85	16.85	13.05	22.35	11.38	74.48
Sub Total:	89.81	131.64	57.50	160.25	119.64	558.84
RFRI, Jorhat*	13.25	1.41	7.10	4.50	9.22	35.48
Grand Total:	103.06	133.05	64.60	164.75	128.86	594.32

Note: In addition Rs 250 lakhs is required for two inter-institutional projects on invasive and fodder species. The total requirement will therefore be Rs 844.32 lakhs.

Table 2c: Total budgetary requirement for ICFRE funded projects for 2017-18.

Institutes	Sub Head wise total budgetary requirement (Rs in lakhs) for 2017-18					
	Consumables (M&S)	Research expenditure (FRE)	Travel And conveyance (Res)-TE	Capital (Scientific Equipments)	Fellowship	Total
Ongoing project	96.21	162.05	60.1	105.64	135.85	559.85
New Projects	89.81	131.64	57.50	160.25	119.64	558.84
Sub Total 1	186.02	293.69	117.60	265.89	255.49	1118.69
North East (RFRI, Jorhat)						
Ongoing projects	9.05	30.55	21.98	0.1	25.46	87.14
New Projects	13.25	1.41	7.10	4.50	9.22	35.48
Sub Total 2	22.3	31.96	29.08	4.6	34.68	122.62
Grand Total (1+2)	208.32	325.65	146.68	270.49	290.17	1241.31

Note: Note: In addition Rs 250 lakhs is required for two inter-institutional projects on invasive and fodder species. The total requirement will therefore be Rs 2183.80 lakhs.

Table 3: Budget requirement for miscellaneous research activities (for other than research projects) for 2017-18.

Sl. No	Proposed Activities	Consumables (M & S)	Research expenditure (FRE)		Travel and conveyance (Res) - TE	Capital (Scientific Equipments)		Maintenance of equipments used in research	RAG / RPC Meetings	Total
			General FRE	Engagement of unskilled / skilled worker (other than research projects)		Part of research projects*	Not part of research projects			
1	AFRI, Jodhpur	10.50	3.00	12.00	2.00	32.82	41.75	11.50	1.00	114.57
2	FRI, Dehradun	20.30	70.45	101.84	8.20	73.40	32.00	27.50	1.75	335.44
3	HFRI, Shimla	03.00	08.50	06.00	02.50	7.20	0.00	04.00	01.50	32.7
4	IFB, Hyderabad	1.00	3.00	1.20	1.50	30.70	0.00	1.50	0.50	16.7
5	IFP, Ranchi	7.40	15.25	0.00	1.30	2.85	3.00	8.65	1.75	40.2
6	IFGTB, Coimbatore	4.2	22.80	20.00	5.00	10.45	20.5	22.5	2.5	107.95
7	IWST, Bangalore	6.00	3.85	7.50	1.00	103.70	63.15	19.00	2.25	206.45
8	TFRI, Jabalpur	5.00	4.00	4.00	2.00	22.35	2.00	2.00	2.50	43.85
9	ICFRE (Hqrs)	0.75	6.00		4.50	0.00	0.00	0.75	3.00	15.00
	Sub Total A	58.15	136.85	152.54	28	283.47	162.4	97.4	16.75	935.56
	RFRI, Jorhat	0.00	2.50	21.30	12.60	9.60	0.50	1.50	2.00	50.00
	Sub Total B	0.00	2.50	21.30	12.60	9.60	0.50	1.50	2.00	50.00
	Total (A+B)	58.15	139.35	173.84	40.6	293.07	162.9	98.9	18.75	985.56
	Total (A+B) after removal project equipment*	58.15	139.35	173.84	40.6		162.9	98.9	18.75	692.49

Note 1: Miscellaneous Research Activities include activities such as (a) maintenance of nurseries, old field trials, plantations, research plots, seed banks, field stations, etc. (b) maintenance of scientific equipment and laboratories, (c) patent fees, (d) implementation of estate working plans, (e) addressing research needs of emergent nature (insect attacks, diseases, fires), etc.

*Part of research project – may be subtracted while calculating the total requirement. This is also included in the requirements of the projects.

Arid Forest Research Institute, Jodhpur

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust Area I: Managing Forests and Forests Products for Livelihood Support & Economic Growth												
OG-1	Studies on Seed Germination and Nursery Technology of <i>Anogeissus pendula</i> . Dr NK Bohra, 3 Years, 2016-19.	11.66	0.00	1.14	4.34	0.40	1.50	0.90	0.70	0.84	1 FA	Approved for continuation. Designation of Dr NK Bohra as PI in place of Sh. SL Meena approved.
OG-2	Selection of efficient AM fungi, PSBs and <i>Azospirillum</i> for productivity enhancement of <i>Dendrocalamus strictus</i> & <i>Bambusa bambos</i> . Dr. Neelam Verma, 4 years, 2016-2020.	15.35	0.00	2.25	5.35	0.50	0.60	0.50	2.05	1.70	1 JRF	Approved for continuation. Designation of Dr. Neelam Meena as new PI on retirement of original PI approved. Project was initially approved by RPC-XVI for four years, thus, corrected.
OG-3	Rehabilitation of salt affected soil with amendments of biofertilizer (AM Fungi). Bhawana Sharma, 3 Year, 2016-2019.	9.92	0.00	2.04	2.64	0.40	1.20	0.20	0	0.84	1 FA	Approved for continuation
OG-4	Integrated pest and disease management (IPDM) of important	20.16	0.00	2.38	6.24	0.40	0.85	0.65	1.94	2.4	1JRF 1FA	Approved for continuation

Annexure-I (AFRI)

	tree species in nurseries of Rajasthan. Seema Kumar, 5 years, 2016-2021.											
	TOTAL	57.09	0.00	7.81	18.57	1.70	4.15	2.25	4.69	5.78	2 JRF, 3 FA	
Thrust Area II: Biodiversity Conservation and Ecological Security: Nil												
Thrust Area III: Forests and Climate Change: NIL												
Thrust Area IV: Forest Genetic Resources Management and Tree Improvement:												
OG-5	Identification of Juvenility Markers to Improve Rooting Potential of some Important Tree Species. Dr Shivesh Rajput, 4 years, 2016-2020.	31.91	0.00	4.68	6.19	1.00	1.95	0.10	0.50	2.64	1 JRF 1 FA	Approved for continuation
OG-6	Screening of DNA markers to distinguish male and female <i>Ailanthus excelsa</i> trees for higher biomass production. Dr. U.K. Tomar, 3 years, 2016-2019.	16.00	0.00	2.54	4.08	1.00	0.85	0.50	0.00	1.73	1 JRF	Approved for continuation
OG-7	Development of tissue culture protocol for economically important Bamboo- <i>Schizostachym dullooa</i> . Dr Sarita Arya, 3 years, 2016-2019.	9.32	0.00	3.64	2.84	0.6	0.30	0.50	0.00	1.44	1 JRF	Approved for continuation
OG-8	In silico identification of abiotic stress-tolerance candidate genes using co-expression network analysis and comparative genomic. Dr. Tarun Kant, 2 years, 2016-2018.	1.50	0.00	1.00	0.50	0.50	0.00	0.00	0.00	0.00	-	Approved for continuation
	TOTAL	58.73	0.00	11.86	13.61	3.10	3.10	1.10	0.50	5.81	3 JRF, 1 FA	
	GRAND TOTAL	115.82	0.00	19.67	32.18	4.8	7.25	3.35	5.19	11.59	5 JRF, 4FA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Sub Head wise breakup for 2017-18							
					Budget Requirement for 2017--18	Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-9 CR-1	Enhancing fodder productivity through silvipastoral systems on degraded land of India. PI: Dr. Ranjana Arya, 5 years, 2012-2017	20.50 16.50	5.90	7.70	2.49	0.20	1.25	0.20	0.00	0.84	1 FA	Approved for one year extension upto March 2018. Total budget outlay revised to Rs 16.50 lakhs
OG-10 CR-2	Quantification value addition of NTFP and improved agricultural productivity to enhance livelihood opportunity in tribal belt of Sirohi District of Rajasthan. Smt. Sangeeta Tripathi, 5 years, 2012-2017	14.83 8.50	4.03	2.44	1.84	0.20	0.40	0.40	0.00	0.84	1FA	Approved for one year extension upto March 2018. Total budget outlay revised to Rs 8.50 lakhs
	Total	25.00	9.93	10.14	4.33	0.40	1.65	0.60	0.00	1.68	2 FA	
Thrust Area II: Biodiversity Conservation and Ecological Security												
OG-11 CR-3	Diversity of pollinators and their role in fruit/ pod production of <i>Acacia senegal</i> , <i>Capparis decidua</i> and <i>Prosopis cineraria</i> (Tricuta) in Rajasthan, Shiwani Bhatnagar, Duration: 3years, 2016-19.	19.53	0.00	3.73	8.53	1.00	1.85	1.00	2.95	1.73	1 JRF	RPC approved request for change of title to 'Diversity of insect pollinators and in Rajasthan'
	Total	19.53	0.00	3.73	8.53	1.00	1.85	1.00	2.95	1.73	1 JRF	

Thrust Area III: Forests and climate change: NIL											
Thrust Area IV: Forest Genetic Resources Management and Tree Improvement: NIL											
Grand Total	44.53	9.93	13.87	12.86	1.40	3.50	1.60	2.95	3.41	2 FA, 1 JRF	

C. NEW APPROVED PROJECTS OF XVII RPC 2017 TO BE STARTED IN 2017-2018:

S. No.	Project title/PI/Duration (Start and end year)	Total approved budget Outlay (Rs. in lakh)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017	
			Sub Head wise breakup for 2017-18								
			Budget Requirement for 2017-18	Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship			
1	2	3	4	5	6	7	8	9	10	11	
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:											
NW-1	Evaluation of existing Sandal wood (<i>Santalum album</i>) plantations and development of agro forestry trials with capacity building to promote cultivation in Gujarat and Rajasthan. Dr Naveen Bohra, 3 Years, 2017-2020	20.19	4.78	1.00	0.80	1.00	0.25	1.73	1PA	Approved.	
NW-2	Study on crop yield, soil fertility and gum production in <i>Acacia senegal</i> based traditional agroforestry system in arid region of Rajasthan. Dr. Bilas Singh, 5 Years, 2017-22.	19.38	3.20	0.50	0.90	0.50	0.00	1.30	1 JRF	Approved	

Annexure-I (AFRI)

NW-3	Development of Integrated management strategy against flower gall inducers of <i>Prosopis cineraria</i> (L.) Druce. Dr. Shiwani Bhatnagar, 5 years, 2017-2022.	23.85 17.85	9.53 3.53	0.50	0.80	0.50	6.00 0.00	1.73	1 JRF	Approved. Equipment not approved. Budget outlay accordingly reduced to Rs. 17.85 lakhs.
NA-1	Survey and documentation of potential diseases and insect pests of <i>Commiphora wightii</i> (Arn.) Bhandari in Rajasthan and their management. Dr. Neelam Verma, 5 Years, 2017- 22.	34.61	-	-	-	-	-	-	-	Not approved. Analysis of problem very weak.
NW-4	Impact of harvesting on soil nutrients and carbon stock in canal side plantations of Indira Gandhi Nahar Pariyojana (IGNP). N. Bala, 5 years, 2017-2022.	24.15	4.05	1.00	1.19	1.00	0.00	0.86	1 JRF	Approved. Collaborate with and explore part funding from SFD. Incorporate hydrological aspects in the project.
NW-5	Capacity building of VFPCs/ SHGs through value addition of selected underutilized NTFPs for enhanced livelihood opportunities in arid and semiarid Rajasthan. Smt. Sangeeta Tripathi, 3 Years, 2017-2020.	10.84	2.98	0.00	0.60	0.50	0.20	1.68	2 FA	Approved. Scope of commercializing value added products may be explored.
EF-1	Quantification of NTFPs in different agro-climatic zones of Rajasthan with their current regeneration status and future interventions for their sustainable harvesting through VFPCs/SHGs. Sangeeta Tripathi, 5 Years, 2017-2022.	34.60	-	-	-	-	-	-	-	Not presented & withdrawn. Director AFRI informed that funding for this project from SFD was being negotiated.
	TOTAL	92.41	18.54	3.00	4.29	3.50	0.45	7.30	3 JRF, 1PA, 2 FA	

Thrust Area II: Biodiversity conservation and ecological security:

Annexure-I (AFRI)

NW-6	Evaluation of Plant Growth Promoting (PGP) activity of rhizobium from native legumes and development of consortia with other PGP Rhizo-bacteria. Dr. Sangeeta Singh, 5 years, 2017-2022	20.94	11.48	1.50	1.50	0.75	6.00	1.73	1 JRF	Approved. Incorporate a component of training communities for adopting this technology at household level.
EF-2	All India coordinated project on 'Enhancing survival and growth of forest plantations in India. Dr. G. Singh, 5 Years, 2017-2022	124.96	-	-	-	-	-	-	-	Approved ' <i>in principle</i> ' for external funding. Collaborate with SFDs. Get this project included under SFDs plantation programs/ explore funding from under CAMPA. Include site ameliorants in the project.
TOTAL		20.94	11.48	1.50	1.50	0.75	6.00	1.73	1 JRF	
Thrust Area III: Forests and climate change:										
Mod-1	Study of climate driven effects on forests of Rajasthan through long term ecological monitoring. N. Bala, Duration: Long term project. Initially proposed for ten years (2017-2027)	167.00	-	-	-	-	-	-	-	To be re-submitted with the following modifications - AFRI and HFRI to work out and employ common methodology based on FSI grids used during Forest Types of India survey in 2012-13. Measure CO ₂ sequestration with other standard methods also. Resubmit modified project for final approval by DG, ICFRE.
Total		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
Thrust Area IV: Forest Genetic Resources Management and Tree Improvement:										

Annexure-I (AFRI)

Mod-2	Multilocational clonal trials of <i>Casuarina</i> species for multiple end uses in Gujarat State. A. Durai, 5 Years, 2017-2022.	27.92	-	-	-	-	-	-	-	To be re-submitted with the following modifications - Club this activity with <i>Casuarina</i> project of IFGTB as an activity to be implemented at AFRI. Revise budget accordingly. Resubmit modified project.
Mod-3	Genetic Diversity Analyses of AFRI Neem Germplasm using SCoT Markers. Dr Tarun Kant, 3 Years, 2017 – 2020.	30.69	-	-	-	-	-	-	-	To be re-submitted with the following modifications - Upscale the project as an inter-institutional National Neem Project. Increase number of SCoT markers to study genetic diversity as 50 markers may not be adequate for the purpose. Include association mapping in the project and involve IFGTB that has such facility for the purpose. Simultaneously explore external funding. Resubmit upscaled project.
NW-7	Genetic Improvement of <i>Azadirachta indica</i> (Neem) through Transgene Pyramiding for Enhancement of Cold Endurance. Dr Traun Kant, 5 Years, 2017-2022.	38.95 30.30	10.81 9.08	2.00	5.10	0.25	0.00	3.46 1.73	2 JRFs 1 JRF	Approved. Only one JRF allowed. Budget outlay accordingly reduced to Rs. 30.30 lakhs.
NW-8	Studies on phenology, molecular analysis and wood properties of <i>Tecomella undulata</i> with respect to three flower colour morphotypes. Mrs. Desha Meena, 3 Years, 2017-2020.	16.98 16.00	5.73 5.03	2.00	0.40	0.90	0.70 0.00	1.73	1 JRF	Approved. Purchase of GPS and camera not approved. Budget outlay accordingly reduced to Rs. 16.00 lakhs.
	TOTAL	46.30	14.11	4.00	5.50	1.15	0.00	3.46	2 JRF	
	GRAND TOTAL	159.65	44.13	8.50	11.29	5.40	6.45	12.49	6 JRF, 1 PA, 2 FA	

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2017-18						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	160.35	6.20	10.75	4.95	8.14	15.00	45.04	6 JRF, 6FA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects. Equipments approved in ongoing projects to be given priority
2	New Projects	159.65	8.50	11.29	5.40	6.45	12.49	44.13	6 JRF, 1 PA, 2 FA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	TOTAL	320.00	14.70	22.04	10.35	14.59	27.49	89.17	12 JRF, 1 PA, 8 FA	

Forest Research Institute, Dehradun

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:												
OG-12	Value addition and Utilization of <i>Cassia tora</i> seeds. Dr. Pradeep Sharma, 3 Years, 2015-2018 2016-2019.	12.21s	0.00	0.33	4.99	1.00	1.00	0.05	1.50	1.44	1 JRF	Approved for continuation for three years from 2016-2019. The original PI, as he has come back, will continue as PI.
OG-13	Production of reducing sugars through pre-treatment of lignocellulosic biomass for bioethanol. Dr. P. K. Gupta, 3 years, 2016-2019.	8.84	0.00	1.70	3.18	0.60	0.70	0.15	0.00	1.73	1 JRF	Approved for continuation.
OG-14	Chemical examination and value addition of edible mushroom <i>Astraeus hygrometricus</i> . Dr. V K Varshney, 3 years, 2016-2019.	6.66	0.00	2.05	2.29	1.00	0.25	0.20	0.00	0.84	1 FA	Approved for continuation.
OG-15	Use of near infrared spectroscopy for rapid evaluation of physical and strength properties of <i>Melia composita</i> . Dr. Y. M. Dubey, 2 years, 2016-2018.	5.70	0.00	0.00	4.45	0.35	3.65	0.45	0.00	0.00	-	Approved for continuation.

Annexure-II (FRI)

OG-16	Effect of different adhesives on the bending strength of finger jointed Eucalyptus sections. Dr. Kishan Kumar, 3 years, 2016-2019.	9.98 14.08	0.00	2.31	3.15	0.71	1.00	0.00	0.00	1.44	1 JRF	Approved for continuation. Budget corrected.
OG-17	Development and extension of <i>Trichoderma</i> spp. based formulation for disease biocontrol and plant growth promotion of eucalypts seedlings. Dr. Amit Pandey, 3 years, 2016-2019.	11.56	0.00	1.11	3.14	0.50	0.90	0.30	0.00	1.44	1 JRF	Approved for continuation.
OG-18	Assessment of suitable clones of Eucalyptus for promotion of agro forestry in Eastern UP. Dr Anubha Srivastav, 5 years, 2016-2021.	8.43	0.00	1.30	1.49	0.00	0.35	0.30	0.00	0.84	1 FA	Approved for continuation.
	Total	67.48	0.00	8.80	22.69	4.16	7.85	1.45	1.50	7.73	4 JRF, 1 FA	
Thrust Area II: Biodiversity conservation and ecological security: NIL												
Thrust Area III: Forests and climate change:												
OG-19	Assessment of hydrological services imparted by forest of Kempty watershed (Mussoorie). Dr Parmanand Kumar, 7 years, 2012-2019.	69.74	5.26	2.80	28.18	0.50	1.50	0.30	24.20	1.68	1 SRF	Approved for continuation.
OG-20	Analysis of climatic data of New Forest for working out changing trends of various climatic variables over recent past. Dr. Laxmi Rawat, 2 yrs, 2016-2018.	2.88	0.00	0.75	1.64	0.20	0.30	0.30	0.00	0.84	1 FA	Approved for continuation
OG-21	Compilation of biomass studies from various sources and development of BEF and R:S from the available data. Dr. Laxmi Rawat, 2 yrs, 2016-2018.	2.88	0.00	0.75	1.50	0.25	0.50	0.75	0.00	0.00	--	Approved for continuation
OG-22	Study on adaptive response of plants to elevated CO ₂ conditions. Dr. Hukum Singh, 3 Years, 2016-2019.	20.32	0.00	3.11	7.69	1.5	3.75	1.00	0.00	1.44	1 JRF	Approved for continuation

Annexure-II (FRI)

	Total	95.82	5.26	7.41	39.01	2.45	6.05	2.35	24.20	3.96	1SRF, 1JRF, 1 FA	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:												
OG-23	AICP on genetic improvement of <i>Melia composita</i> Wild. (2012-22) FRI Component All India Project Coordinator: Dr. Ashok Kumar, 2012-2022 Total Initial Budget Outlay of AICP: Rs. 793 lakhs	-	67.40	37.40	68.10	8.00	25.42	2.00	31.00	1.68	1 SRF	Program approved for continuation with the following condition - All India Project Coordinator to submit status report of the Phase-I (2012-17) of the program. He should also submit action plan with budget estimates for Phase-II (2017-22) of the program, with component-wise details and budget requirement for each participating Institute. Submit the action plan for approval by 31 March 2017.
OG-24	Genetic diversity and adaptability through morphological and molecular markers in <i>Dalbergia sissoo</i> Roxb. Dr. Ashok Kumar, 3 years, 2016-2019.	24.86	0.00	4.44	13.50	3.00	3.56	0.50	5.00	1.44	1 JRF	Approved for continuation
OG-25	Selection and genetic evaluation of <i>Ailanthus excelsa</i> germplasm in Northern India. Dr. Rama Kant, 4 years, 2016-2020.	40.24	0.00	4.44	10.88	2.00	2.24 5.24	2.20	0.00	1.44	1 JRF	Approved for continuation Budget corrected. PI may note.

Annexure-II (FRI)

OG-26	Field evaluation of recombinants emanating from F ₁ and F ₂ generations of <i>Corymbia citriodora</i> (Syn. <i>Eucalyptus citriodora</i>) Hook. × <i>C. torelliana</i> (Syn. <i>Eucalyptus torelliana</i>) F.v. Muell for high productivity. Dr. Ajay Thakur, 6 years, 2016-2022.	18.75	0.00	1.76	2.93	0.20	1.45	0.20	0.00	1.08	1 FA 1 PA	Approved for continuation. Engagement of PA instead of FA approved within the available budget.
OG-27	Clonal propagation of newly developed superior hybrids/ genotypes of Eucalypts and their deployment in the field (Phase-III), Dr. Parveen, 5 Year, 2016-2021.	18.78	0.00	0.00	6.26	0.00	3.50	0.60	0.00	2.16	-	Director FRI informed that the project could not be taken up for implementation due to PI proceeding on long leave. The RPC agreed to the request of FRI for change of PI. The project approved for implementation with changed PI. FRI to provide name of new PI and recheck budget requirement for 2017-2018 by 31 March 2017.
	Total	277.63	67.4	48.04	101.67	13.20	39.17	5.50	36.00	7.80	1 SRF, 2 JRF, 1PA	
	Grand Total	449.01	77.77	65.25	165.34	38.81	53.07	10.40	62.00	19.49	2 SRF, 6 JRF, 1PA, 3 FA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:												
OG-28 CR-4	Studies on natural durability of plantation grown species with non-conventional eco-friendly preservatives.(<i>Melia compoaita</i>), Dr Sadhna Tripathi, (2016-2017)	8.08	5.11	1.00	1.97	1.90	0.50	1.10	0.30	0.00	-	Approved for extension upto March 2018 without change in budget outlay.
	Total	8.08	5.11	1.00	1.97	1.90	0.50	1.10	0.30	0.00	-	
Thrust Area II: Biodiversity conservation and ecological security: Nil												
Thrust Area III: Forests and climate change: Nil												
Thrust Area IV: Forest Genetic Resources Management and Tree Improvement : Nil												
	GRAND TOTAL	8.08	5.11	1.00	1.97	1.90	0.50	1.10	0.30	0.00	-	

C. NEW APPROVED PROJECTS OF XVII RPC 2016 TO BE STARTED IN 2017-2018:

S. No.	Project title/PI/Duration (Start and end year)	Total approved budget Outlay (Rs. in lakh)	Details of budget required for 2017-2018 (Rs. in lakhs)					Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017	
			Budget Requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)			Fellowship
1	2	3	4	5	6	7	8	9	10	11
Thrust area I: Managing Forests and Forests Products for livelihood support and economic growth:										
NW-9	Development of a solar heated vacuum dryer with a thermal energy storage system. Shailendra Kumar, 3 years, 2017-2020.	25.11	12.45	1.25	0.50	0.00	9.50	1.20	1 CDL for 1 st year, 1 JRF 2nd year onwards	Approved
NW-10	Post fires impact on soil properties and microorganisms in Chirpine and Oak forests of Uttarakhand. Dr BM Dimri, 3 Years, 2017-2020.	19.87	6.69	0.40	2.54	0.15	0.00	3.60	1 JRF	Approved
NW-11	Seasoning studies on important species of bamboos for handicrafts using Dehumidifier kiln and Vacuum kiln. Dr NK Upreti, 3 years, 2017-2020.	7.25	4.05	0.30	1.60	0.15	2.00	0.00	-	Approved
Mod-4	Redefining the strength classification of selected bamboo species, Rajesh Bhandari, 3 years, 2017-2020	13.39	-	-	-	-	-	-	-	To be re-submitted with the following modifications - - prepare status report on the status of knowledge on the subject. - check with latest National Building Code. - review the work of IIT

Annexure-II (FRI)

										Delhi. - incorporate suitable modification in the project. - submit the status report on the subject. - RPC authorized DG ICFRE to take a decision on re-submitted project.
NW-12	Epidemiology and management of <i>Chlorophorus annularis</i> Fab. (Coleoptera: Cerambycidae)– A major borer of cut and dry bamboo. Dr KP Singh, 3 years, 2017-2020	16.70	5.40	1.40	3.80	0.20	0.00	0.00	-	Approved
NW-13	Insect pests of Western Himalayan Oaks and their control, Dr. Arun P. Singh, 4 years, 2017-2021.	42.40 30.88	12.00 11.28	0.30	1.10	1.00	3.00	5.88	3 JRF(1 FRI+ 2 HFRI), +1FA FRI budget = Rs 21.62 HFRI budget = Rs 9.26 Total budget = 30.88 lakhs	Approved with the following conditions: One JRF for FRI. Budget of FRI accordingly reduced to Rs 21.62. Proposed equipment to be procured on furnishing certificate of non-availability. Resubmit modified project.
NW-14	Exploratory Studies of Friction Induced Welding on Indian Wood Species for making Joints. Shailendra Kumar, 4 years, 2017-21.	6.80	4.10	3.40 0.20	0.30	0.20	3.40	0.00	-	Approved Budget corrected.
NA-2	Develop harvesting regimes of selected temperate medicinal Plants in Uttarakhand. Dr BPTamta, 3 years, 2017-2020.	18.24	-	-	-	-	-	-	-	Not Approved. The premise of developing harvesting regimes for <i>in situ</i> conservation areas i.e. MPCAs not tenable.
NW-15	Studies on role of nano-fillers in wood composites and finger-jointed solid wood. Mrs. Ismita Nautiyal, 3 years, 2017-2020.	24.5	15.20	2.50	4.00	0.20	8.50	0.00	-	Approved with the suggestion to incorporate appropriate safeguards in the project.
NW-16	Utilization of forest biomass	10.51	3.73	0.50	0.50	0.40	1.25	1.08	1 JRF	Approved.

Annexure-II (FRI)

	through value added application as source of natural dyes. Dr Rakesh Kumar. 3 years, 2017-2020.									
NA-3	Assessment of preservation and permanent plots of Uttarakhand and Himachal Pradesh. Jawaid Ashraf, 3 years, 2017-2020.	70.78	-	-	-	-	-	-	-	Not presented and withdrawn by FRI.
Mod-5	Impact assessment of mycorrhizal inoculation on the growth and health of important medicinal plants. Ranjana Juwantha, 3 years, 2017-2020.	9.81	-	-	-	-	-	-	-	To be re-submitted with the following modifications - Elaborate the problem statement Explain the availability of local consortium of mycorrhiza in the project document. Review list of medicinal plant species, cultivated, to be taken up under the project. Resubmit for approval after modification.
NW-17	Studies on the Radio Frequency Curing of adhesives in manufacturing of Plywood. DP Khali, 3 years, 2017-2020.	15.9	6.40	3.00	3.20	0.20	0.0	0.00	-	Approved
NW-18	Development of <i>Gmelina arborea</i> and <i>Emblica officinalis</i> based agroforestry models on degraded lands in Uttarakhand and Uttar Pradesh. Rambir Singh, 5 years, 2017-2022.	30.82	3.86	0.40	1.50	0.60	00.00	1.36	2 FA	Approved. The project title revised from 'degraded land' to 'fallow land'. Source planting material of <i>Gmelina arborea</i> also from the collections already available at RFRI, Jorhat.
NW-19	Development of Kachnar (<i>Bauhinia variegata</i>), Bhimal (<i>Grewia optiva</i>) and Kadam (<i>Anthocephalus cadamba</i>) based agroforestry	23.00	3.00	0.20	1.40	0.50	00.00	0.90	1JRF	Approved

Annexure-II (FRI)

	models on farmers land under rainfed conditions in Uttarakhand. Charan Singh, 5 years, 2017-2022									
NW-20	Studies on phytochemical composition of <i>Osyris quadripartita</i> Salzm. ex Decne. Dr AK Pandey, 3 years, 2017- 20	17.06	9.04	2.50	1.50	0.60	3.00	1.44	1 JRF	Approved
NW-21	Bioprospecting of <i>Pinus roxburghii</i> needles wax and other extractive. Dr Vineet Kumar, 3 years, 2017-20.	12.06	3.94	1.20	0.70	0.10	0.50	1.44	1 JRF	Approved
NW-22	Conservation of <i>Litsea glutinosa</i> -an endangered and threatened medicinal tree of north west Himalayas. Navabhar, 4 years, 2017-2021.	25.02 15.00	5.80 4.44	0.30	2.50	0.20	0.00	2.88 1.44	2 JRF 1 JRF	Approved with the following modifications – One JRF approved. Budget under FRE to be reduced by half. Budget outlay modified to Rs 15.00 lakh. Resubmit with suggested modifications.
NW-23	Modification of difficult to treat timbers by Microwave technique for improving impregnation of preservatives. Ajmal Samani, 5 years, 2017-2022.	14.60	6.52	0.30	0.50	0.20	4.50	1.02	1 PA	Approved
NW-24	Evaluation of Indigenous Tree Species for Reclamation of Salt Affected Lands in Agro-Climatic Zones of Eastern Uttar Pradesh. Alok Yadav, 3 Years, 2017-2020.	6.36	2.73	0.10	1.50	0.50	0.00	0.63	1 FA	Approved
NA-4	Fragrant oxime ethers from naturally occurring odoriferous carbonyl compounds. Dr. V.K. Varshney, 3 Years, 2017-2020.	12.16	-	-	-	-	-	-	-	Not Approved. Does not meet the required score on technical criteria of Project Assessment
NW-25	Enzymatic intervention for quality improvement of essential oil from <i>Cyperus scariosus</i> and <i>Zanthoxylum armatum</i> . Dr Rashmi, 3 years, 2017-2020	10.07	3.84	0.50	0.60	0.20	1.10	1.44	1 JRF	Approved

Annexure-II (FRI)

NW-26	Performance evaluation of imported timbers after treatment with conventional (CCA, CCB) and environmental-safe (ZiBOC) preservative in prototype cooling tower. Ajmal Samani, 3 Years, 2017-2020.	11.06	4.92	0.30	3.40	0.20	0.00	1.02	1 PA, 1-Unskilled worker	Approved. Fellowship part of the project will be worked separately later.
NW-27	Assessment of decay in trees by non destructive technique. Dr. Y M Dubey, 1 and half year,	4.05	3.35	0.10	0.60	0.15	2.50	0.00	-	Approved.
NW-28	Nutritional and quality evaluation of selected wild edible plants as a source of functional food. Dr. Y. C. Tripathi, 3 years, 2017-2020.	14.32	5.19	1.00	0.75	0.50	1.50	1.44	1 JRF	Approved.
NA-5	Conservation of diminishing underutilized fruit species in Vindhyan Region of Eastern Uttar Pradesh for their Documentation. Dr Anita Tomar, 3 Years, 2017-2020	6.95	-	-	-	-	-	-	-	Not approved. Inadequate project justification.
NA-6	Evaluation of various provenances of <i>Quercus leucotrichophora</i> A. Camus (Banj Oak) for improvement in fodder characteristics and productivity. Meena Bakshi, 4 years, 2017-2021.	17.58	-	-	-	-	-	-	-	Not Approved. Does not meet the required score on technical criteria of Project Assessment
	Total	321.68	120.13	16.75	32.49	6.25	40.75	23.89	12 JRF, 4 FA, 2PA, 2 unskilled,	
Thrust area II: Biodiversity conservation and ecological security										
EF-3	Establishment of Western Himalayan Raw Drug Repository. Dr AK Sharma, 2 years, 2017–2019	80.76	-	-	-	-	-	-	-	Approved ' <i>in principle</i> ' for external funding. Explore funding from NMPB
NW-29	Molecular characterization of selected medicinal plants of Uttarakhand. Ranjana Negi, 3 years, 2017-2020.	23.80	7.02	3.00	1.00	0.50	0.00	2.52	1 JRF 1 PA	Approved. RPC suggested identifying SSR sequences which could be developed into

Annexure-II (FRI)

										markers.
NA-7	Studies on Fibers morphology of Indian Hardwoods and Development of Database for their efficient utilization by industry. Dr. Sangeeta Gupta, 3 years, 2017-18.	10.00	-	-	-	-	-	-	-	Not presented by FRI. Hence not approved
NW-30	Digitization and enrichment of National Forest Insect Collection (NFIC) of Forest Research Institute Phase-II (minute insects). Dr. Sudhir Singh, 3 years, 2017-20	30.28	13.10	0.60	9.01	0.050	2.00	1.44	1 JRF, 3 skilled and one highly skilled worker	Approved
NW-31	Butterflies associated with different forest types/sub-types in Uttarakhand. Dr. Arun P.Singh, 3 years, 2017-2020	19.04	6.88	0.10	1.00	0.50	3.00	2.28	1 JRF 1 FA	Approved. RPC suggested to include in the project study of host plant associations also.
NW-32	Studies on taxonomy and host range of larval parasitoids, <i>Apanteles</i> spp. (Hymenoptera: Braconidae) from Uttarakhand and Haryana. Dr. Mohd. Yousuf, 3 years, 2017-2020.	10.26	3.04	0.40	0.80	0.40	0.00	1.44	1 JRF	Approved.
NA-8	Molecular Phylogenetic study of Indian Meliaceae. Dr. Anup Chandra, 3 years, 2017-2020.	39.64	-	-	-	-	-	-	-	Not Approved. Does not meet the required score on technical criteria of Project Assessment
	Total	83.38	30.04	4.10	11.81	1.45	5.00	7.68	4 JRF, 1 FA, 1 PA, 3 skilled 1 highly skilled	
Thrust area III- Forest and Climate Change										
NW-33	Carbon Sequestration and Carbon stock estimation from the Soils under different Forest Covers in Uttarakhand. Dr. Vijender Pal Panwar, 4 years, 2017-2021	12.90	2.70	0.60	1.95	0.15	0.00	0.00	-	Approved
	Total	12.90	2.70	0.60	1.95	0.15	0.00	0.00	-	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:										

Annexure-II (FRI)

NW-34	Evaluation of Germplasm and Transcriptome studies in Eucalypts for Water logging and Salinity. Dr. Santan Barthwal, 3years, 2017-2020.	51.96	31.89	2.05	4.60	0.30	23.50	1.44	1 JRF	Approved
NW-35	Study of structural dynamics and genetic improvement of <i>Grevillea robusta</i> A. Cunn (Silver Oak). M.S. Bhandari, 3 years, 2017-2020 4 years, 2017-2021.	44.14	13.72	2.75	5.75	1.50	0.00	3.72	2 JRF, 1 FA 1 JRF	Approved with following modifications – Only one JRF approved. Project period increased to 4 Years ie 2017-2021 within same budget. Resubmit modified project.
NW-36	Screening of poplar clones for resistance tolerance against poplar leaf defoliator, <i>Clostera cupreata</i> But. Dr Arvind Kumar, 3 years, 2017-2020.	13.06	6.24	1.30	1.30	0.20	2.00	1.44	1 JRF	Approved with following modification - Modify title by replacing the word 'resistance' with 'tolerance'.
NW-37	Characterization of the Hill Bamboo Species (Ringal) of the North-Western Himalayas for their Conservation and Genetic Improvement. R K Meena, 3years, 2017-2020.	46.08	19.22	3.50	4.50	2.50	4.40	4.32	3 JRF	Approved.
NW-38	Molecular Mechanism of Rhizome Growth and Development in <i>Dendrocalamus strictus</i> . Dr. Santan Barthwal, 3Years, 2017-2020.	34.96 19.96	22.59 7.59	3.50	2.15	0.50	15.00 0.00	1.44	1 JRF	Approved. Equipment of Rs 15.00 lakhs in this project not approved. Budget out lay accordingly reduced to Rs 19.96 lakhs.
NA-9	Genetic Evaluation of <i>Dalbergia latifolia</i> (Rose Wood) in Northern India. M.S. Bhandari, 3 Years, 2017-2020.	96.76	-	-	-	-	-	-	-	Not Approved. Could not satisfy the RPC about the plan of action, especially related to selections from the range of distribution.

Annexure-II (FRI)

NA-10	<i>In vitro</i> propagation of phenotypically promising Eucalypts and molecular evaluation of genetic fidelity of clones. Dr Shambhavi Yadav, 3 years, 2017-2020.	28.36	-	-	-	-	-	-	-	Not Approved. Explanation of objective, action plan & methodology not satisfactory.
NA-11	Evaluation and micro-propagation of superior genotypes of <i>Bambusa nutan</i> . J.M.S. Chauhan, 3 years, 2017-2020.	14.95	-	-	-	-	-	-	-	Not Approved. Novelty over earlier/ ongoing work on the subject not satisfactorily explained.
	TOTAL	175.2	78.66	13.10	18.30	5.00	29.90	12.36	7 JRF	
	GRAND TOTAL	593.16	231.53	34.55	64.55	12.85	75.65	43.93	23 JRF, 5 FA, 3 PA, 2 unskilled, 3 skilled, 1 highly skilled	

D. Budget Summary of Ongoing and New Projects:

10	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	449.01	20.31	54.17	9.60	61.70	19.49	165.27	2 SRF, 6 JRF, 1 PA, 3 FA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	593.16	34.55	64.55	12.85	75.65	43.93	231.53	23 JRF, 5 FA, 3 PA, 2 unskilled, 3 skilled, 1 highly skilled	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	TOTAL	1042.17	73.36	115.12	23.25	137.65	63.42	396.87	2 SRF, 29 JRF, 8 FA, 4 PA, 2 unskilled, 3 skilled, 1 highly	

Himalayan Forest Research Institute, Shimla

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-29	Survey and evaluation of silvipastoral systems in Himachal Pradesh and its role in sustaining community livelihood. Dr. Swaranlata, 5 years, 2016-2021.	25.00	0.00	2.84	5.12	0.40	1.78	1.50	0.00	1.44	1 JRF	Approved for continuation.
OG-30	Studies on changing forest insect-pests status of high altitude transitional zones and their management in Himachal Pradesh. Dr. Ranjeet Singh, 5 years, 2016-2021	25.00	0.00	3.63	6.128	0.20	0.40	0.80	2.10	2.628	1 JRF 1 PA	Approved for continuation.
OG-31	Analyzing impact of control burning on plant diversity and soil properties in chirpine forests. Dr. Ranjeet Kumar, 4 years, 2016-2020.	11.00	0.00	1.94	2.54	0.30	0.20	0.60	0.00	1.44	1 JRF	Approved for continuation.
	TOTAL	61.00	0.00	8.41	13.789	0.90	2.38	2.90	2.10	5.51	3 JRF, 1PA	
Thrust Area II: Biodiversity conservation and ecological security												
OG-32	Ecological studies in Alpine pastures of District Shimla, Himachal Pradesh. Dr R. K. Verma, 4 years, 2016-2020.	9.25	0.00	1.195	2.27	0.35	0.20	0.70	0.00	1.02	1 PA	Approved for continuation.

Annexure-III (HFRI)

	Total	9.25	0.00	1.19	2.27	0.35	0.20	0.70	0.00	1.02	1 PA	
Thrust Area III: Forests and climate change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement												
OG-33	Standardization of grafting technique in <i>Cedrus deodara</i> (Roxb.) G.Don). Rajesh Sharma, 3 years, 2016-2019.	5.96	0.00	2.11	1.68	0.08	1.15	0.35	0.10	0.00	-	Approved for continuation.
	Total	5.96	0.00	2.11	1.68	0.08	1.15	0.35	0.10	0.00	-	
	Grand Total	76.21	0.00	11.72	17.74	1.33	3.73	3.95	2.20	6.53	3 JRF, 2 PA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for Livelihood Support & Economic Growth												
OG-34 CR-5	Standardization of Agro-Techniques and Evaluation of Growth Parameters of <i>Juniperus polycarpus</i> C. Koch under Nursery and Field Conditions. Sh PS Negi, 5 years, 2016-2021.	19.48	0.00	1.895	3.32	0.30	1.25	0.75	0.00	1.02	1 PA	Request to modify title Not Accepted. RPC suggested moving beyond nursery and include field trials in the project.
	Total	19.48	0.00	1.89	3.32	0.30	1.25	0.75	0.00	1.02	1 PA	
Thrust area II- Biodiversity conservation and ecological security: NIL												

Annexure-III (HFRI)

Thrust area III- Forest and Climate Change												
OG-35 CR-6	Carbon sequestration potential of existing land use system in Lahaul Valley, Himachal Pradesh. Dr KS Kapoor, 5 years, 2016-2021.	20.80	0.00	2.38	4.34	0.72	1.75	0.85	0.00	1.02	1 PA	Request to drop Kangra from the scope of study in the project accepted.
Total		20.80	0.00	2.38	4.34	0.72	1.75	0.85	0.00	1.02	1 PA	
Thrust area IV- Forest Genetic Resource Management and Tree Improvement: NIL												
Grand total		40.28	0	4.27	7.66	1.02	3.00	1.60	0.00	2.04	2 PA	

C. NEW APPROVED PROJECTS OF XVII RPC 2016 TO BE STARTED IN 2017-2018:

S.no.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of RPC December 2016
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
1	2	3	4	5	6	7	8	9	10	11
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth										
NW-39	Community dependency on Oak forests for fodder and comparative analysis of different Oak species of Himachal Himalayas for nutritive value and leaf biomass production. Project Coordinator: Dr. Sandeep Sharma, Scientist-F PIs: Sh. S. P. Negi, CF; Dr. P. S. Negi, Scientist-B; Dr. Swaranlata, Scientist-B Duration: 3 Years, 2017-2020	28.94	9.98	1.00	1.50	2.50	1.50	3.48	1 JPF 2 PA	Approved

Annexure-III (HFRI)

NW-40	Status, germplasm collection and multiplication of priority medicinal plant species for promoting their large-scale cultivation in the cold desert of Ladakh. PI: Dr. Joginder Chauhan, Research Officer, Co-PI: Dr. Vaneet Jishtu, Sci 'C' 5 years, 2017-2022 PI from NRISR, Leh: Dr. Padma Gurmet	40.19	7.05	0.50	2.00	1.50	1.00	2.05	1 JRF 1 PA	Approved with the following comments - Budget of HFRI component only approved. Check status of approval of NRISR component submitted by Dr. Padma Gurmet to NMPB. Submit HFRI component for funding to NMPB, after incorporating more components of MoU between ICFRE (HFRI/ FRI) and NRISR.
	TOTAL	69.13	17.03	1.50	3.50	4.00	2.50	5.53	2 JRF, 3 PA	
Thrust area II- Biodiversity Conservation and Ecological Security										
Mod-6	Establishment of Long Term Research Sites for Ecological and Growth Studies in Different Forest Types of Himachal Pradesh Project Coordinator: Dr. R.K. Verma, Sci-F PIs: Dr Sandeep Sharma, Sci-F Dr. Ashwani Tapwal, Sci-E Dr. Pawan Kumar, Sci-D Duration: 5 Years, 2017-2022	51.75	-	-	-	-	-	-	-	To be re-submitted with the following modifications - AFRI and HFRI to work out and employ common methodology based on FSI grids used during Forest Types of India survey in 2012-13. Measure CO ₂ sequestration with other standard methods also. Use vulnerable grids identified by IISc. Resubmit modified project for final approval by DG ICFRE.
NW-41	Identification, Ecological Assessments for Selection & Screening of Superior and Insect-Pest Resistant Clones of Salix for their Cultivation, Production Trends and Conservation in the Cold Deserts of Himachal Pradesh and Jammu & Kashmir. Project Coordinator: Dr. K.S. Kapoor, Scientist-G & Group	54.88	9.80	1.10	1.30	1.90	1.00	4.50	1 JRF, 3 PA	Approved with following conditions - Budget of HFRI component only approved. Extend time period to 7 years. Accordingly revise the budget of HFRI. Pose the combined project to

Annexure-III (HFRI)

	<p>Coordinator Research PIs for HP: Dr. Ranjeet Singh, Scientist-F Dr. Rajesh Sharma, Scientist-F Dr. Sandeep Sharma, Scientist-F, Dr Vaneet Jishtu, Scientist-C PIs for J&K: Dr. T H Masoodi, Chief Scientist and Associate Director R & E. (SKAUST) Co-PI: Sh. Shah Alam Khan, Assistant Professor, Dr .Feroz, Assistant Professor Duration: 5 Years, 2017-2022</p>									Tribal Welfare Ministry/ Rural Development Ministry/ SFD etc.for funding. Resubmit modified project.
	TOTAL	54.88	9.80	1.10	1.30	1.90	1.00	4.50	1 JPF , 3 PA	
Thrust area III- Forest and Climate Change: NIL										
Thrust area IV- Forest Genetic Resource Management and Tree Improvement: NIL										
	GRAND TOTAL	124.01	26.83	2.60	4.80	5.90	3.50	10.03	3 JRF, 6PA	

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	116.49	2.35	6.73	5.55	2.20	8.57	25.40	3JRF, 4PA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	124.01	2.60	4.80	5.90	3.50	10.03	26.83	3 JRF, 6 PA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	Total	240.50	4.95	11.53	11.45	5.70	18.60	53.43	6 JRF, 4 PA, 6 PA	

Institute of Forest Biodiversity, Hyderabad

A. ONGOING PROJECTS (OG)

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL												
OG-36	Screening for establishing bio-efficiency of ethno-Insecticidal plants from the forest of Andhra Pradesh. Dr. Deepa M., 3 years, 2016-2019.	11.75	0.00	6.072	2.812	0.58	0.06	0.30	0.00	1.872	1 JRF	Approved for continuation.
	Total	11.75	0.00	6.072	2.812	0.58	0.06	0.30	0.00	1.872	1 JRF	
Thrust Area II: Biodiversity conservation and ecological security:												
OG-37	Development of integrated pest management system (IPM) for <i>Sapindus trifoliatus</i> of Andhra Pradesh. Dr. Deepa M, 3 years, Jan 2016- Dec.2018	12.08 7.00	0.387	2.72	2.92	0.80	0.60	0.50	0.0	1.02	1 PA	Approved for continuation. Budget outlay of the project revised to Rs 7.00 lakhs.
OG-38	Natural regeneration studies of important tree species of Nallamalais, Seshachalam hills and Kaundinya Wildlife sanctuary of Eastern Ghats of Andhra Pradesh. Mr M B Honnuri, 5 years, 2013-2018	27.08 13.00	6.09	1.09	4.79	0.00	0.79	0.94	0.00	3.06	3 PA	Approved for continuation.

Annexure-IV (IFB)

OG-39	Impacts of nutrient loading from droppings of nesting migratory waterfowl in the wetland ecosystem of <i>Nelapattu</i> bird sanctuary, Andhra Pradesh Mr. Anish V. Pachu, 3years, 2016-2019.	16.52	0.00	4.42	5.371	1.00	0.975	0.900	0.00	2.496	1 JRF	Approved for continuation with Mr. Jayaprasad as new PI.
	TOTAL	36.52	6.477	8.23	13.08	1.8	2.36	2.34	0	6.58	1 JRF, 4 PA	
Thrust Area III: Forests and climate change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement												
OG-40	Productivity improvement in <i>Pterocarpus santalinus</i> L.f. through mass selection and selective breeding. Dr. S. Pattanaik, 5 years, 2016-2021.	40.0	0.0	0.31	9.57	1.50	1.68	1.0	2.5*	2.89	1 JRF 1 Mali	Approved for continuation.
	Total	40.0	0.0	0.312	9.57	1.50	1.68	1.0	2.5*	2.89	1 JRF 1 Mali	
	GRAND TOTAL	88.27	6.48	14.61	25.46	3.88	4.10	3.64	2.50	11.34	3 JRF, 4 PA, 1 Mali	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR): IL

C. NEW PROJECTS OF XVII RPC 2017 TO BE STARTED IN 2017-2018:

S. No.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:										
NW-42	Exploring the potential of natural biostimulant on the growth and biochemical content in <i>Rauwolfia serpentina</i> (L.) Benth. ex Kurz Mr. Pankaj Singh, 3 years, 2017-2020.	21.16 18.16	10.62 7.62	3.00	2.10	1.50	3.00 0.00	1.02	1 PA	Approved with following conditions – Scientific equipment/ facilities of FRI to be used, and, thus, procurement of new equipment not approved. Accordingly the budget has been revised to 18.16 lakh.
NW-43	Identification of indigenous species of <i>Trichogramma</i> (Hymenoptera: Trichogrammatidae) and their assessment against major insect pests of teak in Telangana and Andhra Pradesh. Dr. Deepa M., 5 years, 2017-2022.	23.50	4.94	1.00	1.20	0.50	0.20	2.04	2 PA	Approved with following conditions - Include identification of virulent strains in the objectives. Use protocols developed at TFRI. Build extension component of capacity building of JFMC/ communities for multiplication and use of <i>Trichogramma</i> . Consult the statistician of ICFRE for sampling techniques. Rationalise budget. Resubmit modified project.
TOTAL		41.66	12.56	4.00	3.30	2.00	0.20	3.06	3 PA	
Thrust Area II: Biodiversity conservation and ecological security: NIL										

Annexure-IV (IFB)

NA-12	Survey of mangrove and associated flora and fauna – A baseline data collection with relevance to mangrove conservation along coastal Andhra Pradesh. Mr. D. Jaya Prasad, 5 years, 2017-2022	65.25	-	-	-	-	-	-	-	-	Not Approved. Unsatisfactory explanation of the status of knowledge and gaps analysis.
TOTAL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Thrust Area III: Forests and Climate Change: NIL											
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:											
NW-44	Recovery programme for <i>Syzygium alternifolium</i> – an endangered species from Eastern Ghats. Dr. S. Pattanaik, 5 years, 2017-2022	48.93 44.00	15.12 12.12	2.60	1.00	0.50	10.00 7.00	1.02	2 PA	Approved with the following condition- Cost of equipment reduced to Rs. 7 Lakh & budget accordingly downscaled to Rs. 44 Lakh.	
TOTAL		44.00	12.12	2.60	1.00	0.50	7.00	1.02	2 PA		
GRAND TOTAL		85.66	24.68	6.6	4.3	2.5	7.2	4.08	5 PA		

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	88.27	3.88	4.10	3.64	2.50	11.34	25.46	3 JRF, 4 PA, 1 Mali	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	85.66	6.60	4.30	2.50	7.20	4.08	24.68	5 PA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	Total	173.93	10.48	8.40	6.14	9.70	15.42	50.14	3 JRF, 9 PA, 1 Mali	

Institute of Forest Genetics and Tree Breeding, Coimbatore

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-41	Evaluation of windbreaks for enhancing water use efficiency, crop productivity and climate change resilience in farmlands in semi-arid regions of Tamil Nadu. Dr C. Buvaneswaran, 4 years, 2016-2020.	11.55	0.00	1.00	3.51	0.10	1.00	0.75	0.00	1.66	1 JRF	Approved for continuation.
OG-42	<i>Ailanthus excelsa</i> –for alternate protein: as a potential of fodder in terms of nutritive value and qualitative assessment of other secondary compounds. Dr. S. Murugesan, 3 years, 2016-2019.	13.94	0.00	4.16	4.91	1.00	1.95	0.30	0.00	1.66	1 JRF 1 Unskilled	Approved for continuation. PI change to Smt R. Sumathi, RO also approved.
OG-43	Insect pests of out planted saplings of ToF (Trees Outside Forests) species and their management. Dr. John Prasanth Jacob, 3 years 2016-2019.	21.99	0.00	1.95	4.05	0.25	0.40	1.00	0.00	2.40	1 JRF 1FA	Approved for continuation.
	Total	47.48	0.00	7.11	12.47	1.35	3.35	2.05	0.00	5.72	3 JRF, 1 FA, 1 unskilled	
Thrust Area II: Biodiversity conservation and ecological security												

Annexure-V (IFGTB)

OG-44	Invasion impacts of <i>Acacia mearnsii</i> on changes in soil fertility status of shola forests in the Western Ghats. Dr AC Surya Prabha, 3 2 Years, 2016-2018.	15.89 8.00	0.00	1.35	5.69	0.75	2.70	0.80	0.00	1.44	1 JRF	Approved for continuation. Budget outlay of the project downscaled to Rs 8.00 lakhs. Project was initially approved for 2 years by RPC 2015/16. PI to correct project duration accordingly.
OG45	Biocolourant: Bioprospecting of selected accessions of Red tamarind as eco friendly and protective natural dye in textiles/foods. Dr. S. Murugesan, 3 years, 2016-2019.	15.54	00.00	4.86	5.61	1.00	2.40	0.55	0.00	1.66	1 JRF 1 Unskilled	Approved for continuation. PI change to Dr. N. Senthil also approved
		23.44	0.00	1.00	11.30	1.75	5.10	1.35	0.00	3.10	2 JRF 1 Unskilled	
Thrust Area III: Forests and climate change: Nil												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:												
OG-46	Genetic improvement of <i>Casuarina</i> for growth and pulp yield through intra and interspecific hybridization. Dr. A. Nicodemus, 5 years, 2016-2021.	24.07	0.00	5.86	3.84	0.50	1.40	0.50	0.00	1.44	1 JRF	Approved for continuation.
OG-47	Testing of new set of provenances of <i>Acacia mangium</i> and estimation of genetic gain from first and second generation seed orchards. Dr Maheshwar Hegde, 5 4 years, 2016-2020.	18.14	0.00	0.50	2.75	0.50	0.75	0.50	0.00	1.00	1 SRF	Approved for continuation. RPC 2015/16 had approved the project for 4 years. PI to note and make correction.
OG-48	Isolation and characterization of Cinnomoyl CoA Reductase gene in <i>Casuarina equisetifolia</i> . Dr. A. Shanthi, 3 years, 2016-2019.	16.71	0.00	4.36	5.24	3.5	0.20	0.10	0.00	1.44	1 JRF	Approved for continuation.

Annexure-V (IFGTB)

OG-49	Incorporating resistance in Eucalyptus to <i>Leptocybe invasa</i> Fisher & La Salle (Hymenoptera: Eulophidae) through expression of insect specific dsRNA. Dr NV Mathish, July 2012 to March 2018	29.754	16.30	5.05	6.26	3.92	0.85	0.05	0.00	1.44	1 JRF	Approved for continuation.
OG-50	Production of multi-parent intercross populations of eucalyptus for salinity tolerance. Dr. R. Yasodha, 3 years, 2016-2019.	27.36	0.00	3.83	7.54	3.7	2.5	0.5	0.00	0.84	1FA	Approved for continuation.
OG-51	Strategies for inducing early flowering in eucalyptus. Dr. V.K.W. Bachpai, 4 years , 3 years, 2016-2019.	15.31	0.00	3.11	4.01	0.90	1.40	0.30	0.00	1.41	1 FA	Approved for continuation. RPC 2015/16 had approved the project for 3 years. PI to note and make correction.
OG-52	Assessment of <i>Calophyllum inophyllum</i> clones for oil yield and site specificity, Dr. R. Anandalakshmi, 5, 2016-2021.	20.84	0.00	3.00	6.51	0.20	1.75	0.40	2.50	1.66	1 JRF	Approved for continuation.
OG-53	Development of seed pelleting techniques for commercially important tree species, Dr R Anandalakshmi, 5 3 years, 2016-19.	12.00	0.00	2.00	2.70	0.50	1.00	0.40	0.00	0.80	1 FA	Approved for continuation. RPC 2015/16 had approved the project for 3 years. PI to note and make correction.
OG-54	Evaluation and Popularization of <i>Neolamarckia cadamba</i> (Roxb.) Miq in Tamil Nadu and Kerala, Dr A Vijayaraghavan, 6 years, 2016-2022.	33.71	0.00	2.80	4.76	0.10	2.30	0.70	0.00	1.66	1 JRF	Approved for continuation.
OG-55	Evaluation of second generation <i>Eucalyptus camaldulensis</i> clones for higher productivity. Dr A Vijayaraghavan, 6 years, 2016-2022.	30.10	0.00	2.00	8.06	0.10	4.90	0.70	0.70	1.66	1 JRF	Approved for continuation.
OG-56	Biology, ecology and management of the <i>Casuarina</i> seed pests. Dr A Balu, 4 years, 2016-2020.	13.68	0.00	3.00	3.41	0.25	0.90	0.60	0.00	1.66	1 JRF	Approved for continuation.

Annexure-V (IFGTB)

OG-57	Genetic improvement of <i>Swietenia macrophylla</i> for higher productivity. Dr M V Durai, 4 years, 2016-2020	23.18	0.28	1.65	4.96 3.86	0.4	1.2	0.6	0.00	1.66	1 JRF	Approved for continuation. Budget total corrected. PI may note.
OG-58	Selection and screening of germplasm of <i>Accacia nilotica</i> L. to improve Productivity in Tamil Nadu. Dr. K. Panneer Selvam, 5 years, 2016 – 2021.	38.97	0.00	3.65	14.38 14.31	0.00	9.00	1.81	1.10	2.40	1JRF, 1 FA	Approved for continuation. Budget total corrected. PI may note.
	TOTAL	303.82	16.58	40.81	74.42 73.25	14.57	28.15	7.16	4.30	19.07	9 JRF, 1 SRF, 4 FA	
	GRAND TOTAL	374.75	16.58	54.12	98.18 97.02	17.67	36.6	10.56	4.30	27.88	1 SRF, 14 JRF, 5 FA, 1 unskilled	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL												
Thrust Area II: Biodiversity conservation and ecological security: NIL												
Thrust Area III: Forests and climate change:												

Annexure-V (IFGTB)

OG-59 CR-7	Screening tree species for intra-specific variation in carbon sequestration potential under elevated CO2. Dr. C. Buvanewaran, 3 Years, 2014-2017	9.57 8.50	1.17	1.00	3.69	1.50	1.25	0.10	0.00	0.84	FA -1	Project extension of one year upto March 2018 approved with the following condition - Budget outlay reduced to Rs 8.50 lakhs.
	Total	8.57	1.17	1.00	3.69	1.50	1.25	0.10	0.00	0.84	FA -1	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement: NIL												
OG-60 CR-8	Establishment of second generation seed orchards of Eucalyptus and selection clones for high productivity in Eucalyptus. Dr. V.Sivakumar, 5 years, 2012-2017	39.98	7.14	3.50	10.58 9.98	1.00	5.00	1.10	0.00	2.88	1 JRF	Approved two years extension upto March 2019.
OG-61 CR-9	Evaluation of inter-specific hybrid clones of Eucalypts for productivity and wood traits. D. Rajasugunasekar, 1.9.2014 – 2017	10.58 8.50	2.19	2.46	2.50	0.30	0.64	0.60	0.00	0.96	1FA	Approved one year extension upto March 2018, with budget reduced to Rs. 8.50 lakh.
OG-62 CR-10	Germplasm assemblage and Improvement of <i>Leucaena leucocephala</i> (Lam.) de Wit for industrial biomass productivity. A. Durai, 5 years, 2013-2018	14.22 9.50	3.10	2.50	2.70	0.20	1.50	0.50	0.00	0.50	1 skilled	Approved for continuation. Change in PI to Dr A Nicodemus approved on transfer of Sh Durai. Durai will continue as Co-PI. Budget reduced to Rs. 9.50 lakh.
OG-63 CR-11	Genetic diversity assessment for management of Eucalyptus seed orchards. Dr. Rekha R. Warriar, 5 years, 2012-2017	47.60	12.64	6.15	7.19	5.30	0.35	0.10	0.00	1.44	1 JRF	Approved two years extension upto March 2019, within the approved budget.
OG-64 CR-12	Evaluation of genetic resources of <i>Melia dubia</i> in Tamil nadu and Kerala for productivity enhancement in tree farming. Dr.Rekha R. Warriar, 5 years, 2012-2017	41.90	13.85	3.46	5.40	1.50	1.25	0.25	0.00	2.40	1 JRF 1 FA	02 years extension granted upto March 2019. The project is a part of a 10-year AICP on the subject.

Annexure-V (IFGTB)

OG-65 CR-13	Characterization of DNA Barcoding in <i>Pterocarpus</i> species. Dr. A. Shanthi, 3 years, Nov 2014- Oct 2017	21.41 7.00	0.33	2.25	2.40	2.00	0.20	0.20	0.00	0.00	-	Approved one year extension upto March 2018. Budget outlay reduced to Rs 7.00 lakhs.
OG-66 CR-14	Productivity studies on commonly cultivated bamboo species in different agro climatic zones of Tamil Nadu. Shri. M. Maria Dominic Savio, 5 years, 2012- 2017	19.11 12.50	4.29	2.75	4.156	0.00	1.00	1.50	0.00	1.656	1 JRF	Approved one year extension upto March 2018. Budget outlay reduced to Rs 12.50 lakhs.
OG-67 CR-15	Exploration, collection and evaluation of Forest Genetic Resources and Development of National Gene Bank. Dr. K. Palanisamy, 5 years, 2012- 2017	39.71	7.42	8.79	7.66	1.00	2.50	2.50	0.00	1.66	1JRF	Approved two years extension upto March 2019.
	Total	206.69	50.96	31.86	41.99	11.30	12.44	6.75	0.00	11.496	5 JRF, 2 FA 1 skilled	
	GRAND TOTAL	215.26	52.13	32.86	45.68	12.8	13.69	6.85	0.00	12.336	5 JRF, 3FA, 1 skilled	

C. NEW APPROVED PROJECTS OF XVII RPC 2016 TO BE STARTED IN 2017-2018:

S.no.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:										
NW-45	Agroforestry Interventions and Conservation of Tree Genetic Resources of <i>Acacia leucophloea</i> in traditional 'Korangadu' Silvi-pasture system towards fodder security PI-1) Dr. C. Buvaneshwaran, PI-2) Dr. R. Anandalakshmi, 3 years, 2017-2020	19.35	6.76	0.50	3.10	1.50	0.00	1.66	1JRF	Approved. Institutional charges to be removed from all internally funded projects of IFGTB.
NW-46	Development of biopesticide formulation from seed oil of <i>Simarouba glauca</i> DC for use in forestry. Dr.N. Senthil kumar,	11.25	3.66	0.50	1.10	0.40	0.00	1.66	1 JRF, 1 Unskilled	Approved. Review the work done by GKVK, Bangalore on this species.
	TOTAL	30.60	10.42	1.00	4.20	1.90	0.00	3.32	2 JRF, 1 unskilled	
Thrust Area II: Biodiversity conservation and ecological security:										
NW-47	Spatial mapping and modelling of wattle invasion for Sustainable management of Shola Grassland Ecosystem of Tamil Nadu. Dr A Rajasekaran, 3 years, 2017-2020	15.69	5.54	0.50	1.00	1.00	1.20	1.84	1 SRF	Approved. Idukki district of Kerala may be included in the study within the existing budget. Accordingly modify the title.

Annexure-V (IFGTB)

NW-48	Identification of superior strains of Arbuscular mycorrhizal fungi and <i>Rhizobium</i> for improving planting stocks of <i>Pterocarpus santalinus</i> L. (Presented in RAG 2016). Dr. A. Karthikeyan, 4 Years, 2017-2021.	20.16	3.42	1.26	0.00	0.50	0.00	1.66	1JRF	Approved.
NA-13	Assessment of plant diversity of Nelliampathy forests, Nemmara Forest Division. Dr C Kunhikannan, 3 Years, 2017-2020.	25.49	-	-	-	-	-	-	-	Not Approved. Such work should be taken as short-term assignment for the SFD.
TOTAL		35.85	8.96	1.76	1.00	1.50	1.20	3.50	1 SRF, 1 JRF	
Thrust Area III: Forests and climate change: NIL										
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:										
NW-49	Evaluation of Promising Clones of <i>Tamarindus indica</i> L for Higher Fruit Productivity. Shri A. Mayavel, 5 years, 2017-2022.	32.32	5.87	0.55	2.15	1.25	0	1.92	1 SRF	Approved
NW-50	Genetic Improvement of <i>Thespesia populnea</i> , Dr. Kannan Warriar. 4 years, 2017-21.	18.45	3.66	0.75	0.95	1.00	0	0.96	1FA	Approved
NA-14	Evaluation of clones of <i>Tectona grandis</i> and <i>Melia dubia</i> to identify superior performers. Smt K. Shanthi, 5 years, 2017-2022.	18.80	-	-	-	-	-	-	-	Not Approved. Basis of work and project methodology not explained well.
NA-15	Evaluation of water culture method for cutting propagation of Eucalyptus clones. KS Venkataramanan, 3 years, 2017-20.	8.26	-	-	-	-	-	-	-	Not Approved. Outcome of the project will not be viable due to poor survival rate of plantlets produced this way.
NW-51	<i>Industrees</i> for Industries: Deployment, Demonstration & release of <i>E.tereticornis</i> X <i>E.grandis</i> selection to farmers as a veneer and pulp tree crop. Dr. B. Nagarajan, 3 years, 2017-2020.	10.25	3.41	1.00	0.70	0.75	0.00	0.96	1 FA	Approved

Annexure-V (IFGTB)

NA-16	Assemblage and conservation of seed sources of Teak genetic resources. Dr. R. Anandalakshmi, 3 years, 2017-2020.	33.31	-	-	-	-	-	-	-	-	Not Approved. Objectives not clearly defined. Need for cryo-preservation and its subsequent use not explained. .
NA-17	Development of a WebGIS for monitoring Teak (<i>Tectona grandis</i> L.f.) genetic resources in Tamilnadu and Kerala. Dr A Rajasekaran, 3 years, 2017-2020.	12.80	-	-	-	-	-	-	-	-	Not Approved. Software already available with TeakNet/ NBPGR may be assessed first.
NW-52	Germplasm assemblage of Dalbergias its characterization and evaluation. Dr KR Sasidharan, 4 years, 2017-2021.	25.83	5.26	0.50	2.35	0.75	0.00	1.66	1 JRF	Approved.	
NA-18	Exploration, Collection & Assemblage of Bamboo genetic resources from Tamil Nadu & Kerala and Establishment of Bamboo Field Gene Bank. M. Maria Dominic Savio, 3 years, 2017-2020.	26.49	-	-	-	-	-	-	-	-	Not Approved. Make this proposal as part of Council level Integrated project on bamboos. Stand alone projects serve little purpose.
NW-53	Investigations on Casuarina mortality in different agro-climatic zones of Tamil Nadu and developing of suitable management measures including identification of tolerant materials. Dr. V. Mohan, 3 years, 2017-2020.	14.50	4.76	0.75	1.50	0.85	0.00	1.66	1 JRF	Approved	
NA-19	Assessment of Genetic Variation in <i>Gmelina arborea Roxb.</i> populations of southern Indian Region. Dr. D. Thangamani, 4 years, 2017-2021.	25.44	-	-	-	-	-	-	-	-	Not Approved. Merge with the similar project of TFRI, and make the PI of this as CoPI in the TFRI project.
NA-20	Evaluation of <i>Pongamia pinnata</i> germplasm for genetic variation and Biodiesel Production. Dr. D. Thangamani, 4 years, 2017-2021.	24.38	-	-	-	-	-	-	-	-	Not Approved. Objectives and outcomes of the project not clearly explained.

Annexure-V (IFGTB)

NA-21	Exploration, evaluation and documentation of forest genetics resources in Karnataka state. Dr. M.V. Durai, 3 years, 2017 -2020.	15.95	-	-	-	-	-	-	-	Not Approved. Objectives, scope, methodology, and outcomes of the project not clearly explained.
NA-22	Exploration, collection, conservation, characterization and documentation of Forest Genetics Resources of India. Dr. K. Palanisamy, 5 years, 2017-2022	171.04	-	-	-	-	-	-	-	Not Approved. Objectives, scope, methodology and outcomes vary vague. Such projects should be in the form of comprehensive long term programmes.
	TOTAL	101.35	22.96	3.55	7.65	4.60	0.00	7.16	1 SRF, 2 JRF, 1 FA	
	GRAND TOTAL	167.80	42.34	6.31	12.85	8.00	1.20	13.98	2 SRF, 7 JRF, 1 FA, 1 unskilled	

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	590.01	30.47	50.29	17.41	4.30	40.22	142.69	1SRF, 19JRF, 8FA, 1 Skilled	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	167.80	6.31	12.85	8.00	1.20	13.98	42.34	2 SRF, 7 JRF, 1 FA, 1 unskilled	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	Total	757.81	36.78	63.14	25.41	5.50	54.20	185.03	3SRF, 26 JRF, 9 FA, 1 unskilled, 1 skilled	

Institute of Forest Productivity, Ranchi

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-68	Field evaluation and domestication of high yielding cultivars of <i>Withania somnifera</i> Dunal among the rural people of Jharkhand and West Bengal. Sh. Sanjeev Kumar, 3 years, 2016 – 2019.	10.76	0.00	3.53	3.69	0.85	1.40	0.60	0.00	0.84	1 FA	Approved for continuation.
	Total	10.76	0.00	3.53	3.69	0.85	1.40	0.60	0.00	0.84	1 FA	
Thrust Area II: Biodiversity conservation and ecological security												
OG-69	Risk Assessment of <i>Lantana camara</i> using Spatial Distribution Modeling Approach in Latehar District. Dr. Sharad Tiwari, 3 years, 2016 – 2019.	18.98	0.00	5.23	6.23	1.00	2.00	1.50	0.00	1.73	1 JRF	Approved for continuation.
	Total	18.98	0.00	5.23	6.23	1.00	2.00	1.50	0.00	1.73	1 JRF	
Thrust Area III: Forests and climate change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement												

Annexure-VI (IFP)

OG-70	Single Nucleotide Polymorphism (SNP) marker discovery to resolve <i>Bambusa tulda-longispiculata-nutans-teres</i> complex in bamboo taxonomy. Dr. Sanjay Singh, 4 years, 2016 – 2020.	12.00	0.00	4.23	2.90	0.62	0.52	0.00	0.00	1.76	1 JRF	Approved for continuation.
OG-71	Chemical and genetic diversity of <i>Moringa oleifera</i> for value addition in eastern India as food supplement. Sh. Pankaj Singh, 3 years, 2016 – 2019.	9.90	0.00	3.53	3.59	1.60	0.75	0.40	0.00	0.84	1 FA	Approved for continuation. Change of PI to Sanjay Singh approved because of transfer of original PI Sh Pankaj Singh.
OG-72	Collection, conservation and evaluation of <i>Melia dubia</i> Germplasm from North-Bengal, Orissa hills and other parts of India for identification and release of superior clones. Sh. Aditya Kumar, 5 years, 2013-2018	67.50 50.00	26.71	11.36	9.36	3.80	1.70	1.00	0.00	2.86	1 JRF 1 FA	Approved for continuation. Budget outlay reduced to Rs 50.00 lakhs.
OG-73	Genetic evaluation and improvement of <i>Flemingia semialata</i> and <i>Flemingia macrophylla</i> used for lac cultivation in Jharkhand. Sh. Aditya Kumar, 3 years, 2016– 19.	12.62	0.00	3.84	4.49	2.15	1.20	0.30	0.00	0.84	1 FA	Approved for continuation.
	Total	84.52	26.71	22.96	20.34	8.17	4.17	1.70	0.00	6.30	2 JRF, 3FA	
	Grand Total	114.26	26.71	31.72	30.26	10.02	7.57	3.80	0.00	8.87	3 JRF, 4 FA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR): NIL

C. NEW APPROVED PROJECTS OF XVII RPC 2016 TO BE STARTED IN 2017-2018:

S.no.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:										
NA-23	Development of soil based approach for control of <i>Dalbergia sissoo</i> mortality in Bihar state. Dr PK Das, 2 years, 2017-2019.	30.162	-	-	-	-	-	-	-	Not Approved. Literature review needs to be more comprehensive.
NA-24	Standardization of vermin-compost production technique from different organic material including temple waste and assessment of plant nutritive value. Dr. PK Das, 2 years, 2017-2019.	17.06	-	-	-	-	-	-	-	Not Approved. Techniques for vermicompost production are already available. It should be part of regular nursery work.
TOTAL		0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	
Thrust area II- Biodiversity conservation and ecological security: NIL										
Thrust Area III: Forests and climate change:										
NW-54	Estimation of Soil Carbon stock under different land use in Dalma Sanctuary and Betla National Park in Jharkhand. Dr. M. Ray, 2 years, 2017-2019.	19.90	7.80	3.00	1.20	2.30	0.00	1.30	1 JRF	Approved. Include impact of silvicultural practices in enhancement of soil carbon.
Total		19.90	7.80	3.00	1.20	2.30	0.00	1.30	1 JRF	
Thrust area IV- Forest Genetic Resource Management and Tree Improvement										
NW-55	Standardization of clonal propagation technique for mass multiplication and <i>ex situ</i>	8.92	3.04	0.55	1.05	0.60	0.00	0.84	1 FA	Approved. Get nomenclature of the species

Annexure-VI (IFP)

	conservation of <i>Feronia limonia</i> Linn. Sh. R. S. Prasad, ROI; 3 years, 2017-2020.									resolved from BSI. Select plants on the basis of fruit size and high fruit yield.
	TOTAL	8.92	3.04	0.55	1.05	0.60	0.00	0.84	1 FA	
	GRAND TOTAL	28.82	10.84	3.55	2.25	2.90	0.00	2.14	1 JRF, 1 FA	

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. in lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	114.26	10.02	7.57	3.80	0.00	8.87	26.57	3 JRF, 4 FA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	28.82	3.55	2.25	2.90	0.00	2.14	10.84	1 JRF, 1 FA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	TOTAL	143.08	13.57	9.82	6.70	0.00	11.03	37.41	4 JRF, 5 FA	

Institute of Wood Science and Technology, Bengaluru

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-74	Studies on acoustical behaviour of different types of natural fibres for their utilization as sound absorbing materials. Dr. S.K. Sharma, 3 years, 2016-2019.	16.65	0.00	2.41	12.27	0.20	1.00	0.05	10.00	1.02	1 PA	Approved for continuation.
OG-75	Estimation of important wood quality parameters and identification of timber species by rapid and non destructive technique using Near Infrared Spectroscopy (NIRS). Dr. S.R. Shukla, 3 years, 2016-2019.	20.00	0.00	7.18	12.61	0.25	1.49	0.20	8.80	1.87	1 JRF	Approved for continuation.
OG-76	Formaldehyde emission reduction from panel products. Dr. Anil Kumar Sethy, 3 years, 2016-2019.	5.85	0.00	1.99	2.03	0.50	0.51	0.00	0.00	1.02	1 PA	Approved for continuation.
OG-77	Biological degradation and weathering behaviour of wood-polymer composites. Dr. Pankaj Aggarwal, 3 years, 2016-2019.	19.42	0.00	7.16	5.69	1.55	1.00	0.25	0.00	2.89	1 JRF 1 PA	Approved for continuation.
OG-78	Efficacy of Nano metal oxides as wood preservative. Mrs. D. Venmalar, 3 years, 2016-2019.	10.65	0.00	3.21	3.97	1.75	0.25	0.1	0.00	1.87	1 JRF	Approved for continuation.

Annexure-VII (IWST)

OG-79	Screening of High oleoresin yielding forest plants of Western Ghats and standardisation of extraction methods. Mr. Chandrashekar.B.S., 3 years, 2016-2019.	10.70	0.00	3.00	4.57	1.70	0.50	0.50	0.00	1.87	1 JRF	Approved for continuation.
OG-80	Gas Chromatography-Mass Spectrometry (GC-MS) Based Authentication of Sandalwood Oil. Dr.S S Bisht, 2 years, 2016-2018.	6.88	0.00	1.90	4.98	2.28	2.10	0.60	0.00	0.00	-	Approved for continuation.
OG-81	Determination of treatability and durability of imported timbers as per Bureau of Indian Standards. Dr. R. Sundararaj, 6 years, 2012-2018	8.80 7.00	2.97	1.35	1.50	0.30	0.20	1.00	0.00	0.00	-	Approved for continuation. Budget outlay reduced to Rs 7.00 lakhs.
OG-82	Incidence, forecast and control of emerging and re-emerging disease problems in nurseries & plantations of sandalwood. Dr. A. Muthukumar, 5 years, 2016-2021.	11.76	0.00	0.41	2.02	0.35	0.15	0.50	0.00	1.02	1 PA	Approved for continuation.
	TOTAL	108.91	2.97	28.61	49.64	8.88	7.20	3.20	18.80	11.56	4JRF, 4PA	
Thrust Area II: Biodiversity conservation and ecological security: NIL												
Thrust Area III: Forests and climate change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:												
OG-83	All India Co-ordinated Project on genetic improvement of <i>Melia dubia</i> . (AICP). Dr. Geeta Joshi, 10 years, 2012-2022	107.0	12.45	4.50	5.17	2.50	0.30	0.50	0.00	1.87	1 JRF	Approved for continuation.
OG-84	Selection and Improvement of Natural dye yielding plants. Sh HC Sindhu Veerendra, 4 years, 2016-2020	14.589	0.00	3.40	3.572	0.60	0.40	0.70	0.00	1.87	1 JRF	Approved for continuation.
	Total	121.59	12.45	7.90	8.74	3.10	0.70	1.20	0.00	3.74	2 JRF	
	GRAND TOTAL	230.5	15.42	36.51	58.38	11.98	7.90	4.40	18.80	15.30	6 JRF, 4PA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
1	2	3	4	5		6	7 Consumables (M&S)	8 Research Expenditure (FRE)	9 Travel and Conveyance (Res-TE)	10 Capital (Scientific Equipments)	11 Fellowship	12
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:												
OG-85 CR-16	Identification, pattern of distribution, proportion of tension wood and study of certain physical and anatomical characters in <i>Melia composita</i> Syn. <i>Melia dubia</i> Cav. Wood of two different ages. Dr. M. Sujatha, 3 years, 2016-2019.	13.16 16.16	0.00	2.62	11.12	0.70	1.10	0.30	8.00	1.02	1 PA	Approved for continuation. Budget outlay enhanced to Rs 16.16 due to approving additional Rs. 3.00 lakhs for equipment.
OG-86 CR-17	Study on microwave assisted direct biodiesel production from <i>Pongamia pinnata</i> (L.) seed oil by two phase solvent extraction. Ritesh D. Ram, 3 years, 2014-17	11.0	3.00	4.40	3.50	1.50	0.00	0.10	0.00	1.90	1 JRF	Approved one year extension upto March 2018 within the approved budget outlay.
OG-87 CR-18	A Study on Implication of legislation/ deregulation policy (2001) on Sandalwood cultivation in Karnataka. Smt P. R. Triveni, 1 year, 2016-2017.	3.14	0.00	1.80	1.34	0.00	0.50	0.50	0.00	0.34	1 PA	Approved one year extension upto March 2018 within the approved budget outlay.
Total		30.3	3.00	8.82	15.96	2.20	1.60	0.90	8.00	3.26	1JRF, 2PA	
Thrust Area II: Biodiversity conservation and ecological security: NIL												
Thrust Area III: Forests and climate change: NIL												

Thrust area IV: Forest Genetic Resource Management and Tree Improvement: NIL											
	GRAND TOTAL	30.30	3.00	8.82	15.96	2.20	1.60	0.90	8.00	3.26	1JRF, 2PA

C. NEW APPROVED PROJECTS OF XVII RPC 2016 TO BE STARTED IN 2017-2018:

S.no.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11
Thrust area I-Managing Forests and Forests Products for livelihood support & economic growth										
NW-56	Development of bamboo lumber using different bamboo species and evaluating its utilization potential as alternate to solid wood lumber for different structural applications. Dr. S. K. Sharma, 3 years, 2017-2020.	29.36	20.7	1.00	2.00	0.30	16.0	1.40	1 JRF	Approved. Development should be followed by commercialization.
NW-57	Value-addition of low density woods by producing nano-wood-composites (NWC) with enhanced properties for high end applications. Dr. S.R. Shukla, 3 years, 2017-2020	36.58	23.37	3.50	1.50	0.50	16.0	1.87	1 JRF	Approved.
NA-25	Enrichment of IWST xylarium with authenticated wood samples and to study their physical and anatomical properties. Mrs. S. Shashikala, 5 years, 2017-2022.	43.0	-	-	-	-	-	-	-	Not Approved. It is not a research project. Management of Xylarium should be taken under FRE (Other).
NW-58	Eco-friendly method of wood protection by hot oil treatment. Dr. K.K. Pandey, 3 years, 2017-2020.	10.29	3.35	1.00	0.85	0.10	0.00	1.40	1 JRF	Approved.
NW-59	Weathering of coatings on thermally modified wood. Dr. K.K. Pandey, 3	12.84	7.20	1.00	0.70	0.10	4.00	1.40	1 JRF	Approved.

Annexure-VII (IWST)

	years, 2017-2020.									
NW-60	Nanocellulose Networked Natural Fiber Composites. Dr. Shakti Singh Chauhan, 2 years, 2017-2019.	8.19	4.07	0.50	1.25	0.00	0.60	1.72	1 JRF	Approved.
NW-61	Pretreatment of <i>Pongamia pinnata</i> (L.) seed for deacidification and rapid oil extraction. Mr. Ritesh D. Ram, 3 years, 2017-2020.	12.88	3.60	1.00	1.00	0.20	0.00	1.40	1 JRF	Approved. Consult the works of IIP, Dehradun on this species.
NW-62	Development of organo-metallic complex of Eucalyptus spp and <i>Lantana camara</i> extracts and its evaluation as semi bio preservative. C.N. Vani, 3 years, 2017-2020.	5.00	2.25	1.75	0.30	0.20	0.00	0.00	Nil	Approved.
NW-63	Exploration of methods to enhance the shelf-life and fixative property of Neem based eco-friendly preservatives. Mr. B.S. Chandrashekar, 4 years, 2017-2021.	19.04	3.97	1.00	0.60	0.50	0.00	1.87	JRF	Approved.
NW-64	Isolation, Identification and Evaluation of the Chemical Markers in <i>Pterocarpus santalinus</i> L. f. (Red Sanders) Wood Grown in Different Locations. Dr. S.S. Bisht, 4 years, 2017-2021.	25.49	10.77	1.00	0.70	0.20	7.00	1.87	JRF	Approved. Differentiation of Red Sanders populations with markers may be attempted.
NA-26	Gasification properties of selected forest weeds. R. Ezhumalai, 3 years 2017-2020.	22.36	-	-	-	-	-	-	-	Not Approved. The proposed technology is old and tested. Cases of successful use of gasifiers are far too few. The project does not explain how the proposal would be successful, especially given the high costs involved in collection and transport of weeds to the unit.
NA-27	Studies on the utilization and formulation of native strains of entomopathogenic fungi <i>Metarizhium</i> for the management of important forest pests. R.Raja Rishi, 4 years, 2017- 2021.	18.17	-	-	-	-	-	-	-	Not Approved. Commercial formulations already available and can be used to assess their efficacy..
	TOTAL	159.67	79.28	11.75	8.9	2.1	43.6	12.93	8 JRF	

Thrust area II- Biodiversity conservation and ecological security:										
NA-28	Investigations on the invasive and pest status of the whitefly <i>Aleurothrixes trachoides</i> (back) (Hemiptera: Aleyrodidae), in South India and development of management measures. Dr. R. Sundararaj, 4 years, 2017- 2021.	19.52	4.80	0.70	0.20	1.00	0.00	2.90	1 JRF 1 PA	Not Approved. Currently it is a problem of agriculture, with no known impact on forestry species.
EF-4	Refinement of micropropagation protocol and <i>in-situ</i> conservation of <i>Oroxylum indicum</i> – highly traded threatened medicinal plant of Western Ghats. Dr Ashutosh Srivastava, 3 years, 2017-2020.	18.446	-	-	-	-	-	-	-	Approved for external funding. Explore funding from NMPB after refining the project by matching title and objectives.
NA-29	Monitoring and development of Integrated Pest Management for the emerging insect pests of important bamboo species. R.Raja Rishi, 3 years, 2017- 2020.	10.25	-	-	-	-	-	-	-	Not Approved.
	Total	19.52	4.80	0.70	0.20	1.00	0.00	2.90	1 JRF 1 PA	
Thrust area III- Forest and Climate Change – NIL										
Thrust area IV- Forest Genetic Resource Management and Tree Improvement										
NW-65	Management of Marihal bamboo (<i>Dendrocalamus stocksii</i> (Munro) M. Kumar, Remesh & Unnikrishnan) and <i>Dendrocalamus strictus</i> in agroforestry and block plantations. Dr SyamViswanath, 2 years, 2017- 2019.	10.63	6.42	1.80	1.60	1.00	0.00	2.02	1 JRF	Approved
NW-66	Studies on propagation of a valuable timber species, <i>Diospyros ebenum</i> J.Koenig ex Retz. through seeds and <i>in vitro</i> techniques. Smt. Tresa Hamalton, 3 years, 2017 –2020.	21.65	7.43	2.00	2.45	0.80	0.30	1.88	1 JRF	Approved Reproductive biology component to be included in the work.
NW-67	Establishment and evaluation of Provenance Cum progeny trial of	29.73	6.08	0.60	1.60	2.00	0.00	1.88	1 JRF	Approved.

Annexure-VII (IWST)

	<i>Aquilaria malaccensis</i> (Agar) in Karnataka (Phase-I). Dr. N.Ravi, 5 years, 2017-2022.									Assess existing plantations of the species in southern India.
	TOTAL	62.01	19.93	4.40	5.65	3.80	0.30	5.78	3 JRF	
	GRAND TOTAL	241.20	104.01	16.85	14.75	6.9	43.9	21.61	12 JRF, 1 PA	

D. Budget Summary of Ongoing and New Projects:

Sl. No	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	260.80	14.18	9.50	5.30	26.80	18.56	74.34	7JRF, 6PA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	241.20	16.85	14.75	6.90	43.90	21.61	104.01	12 JRF, 1 PA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	TOTAL	502.00	44.79	24.85	12.90	63.60	44.91	167.33	19 JRF, 7 PA	

Rain Forest Research Institute, Jorhat

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:												
OG-88	Adaptation and mitigation measures in relation to shortening of jhum cycle vis-à-vis soil nutrient status and productivity in different traditional systems of Nagaland. Dr. Krishna Giri, 3 years, 2015-2018	12.94 12.00	3.50	3.82	3.64	0.50	1.90	0.40	0.00	0.84	1 FA	Approved for continuation. Budget outlay reduced to Rs 12.00 lakhs.
OG-89	Co-ordinated Research Program on Agar (<i>Aquilaria malaccensis</i> Lamk.). Dr RK Borah, 10 years, 2016-2026	153.43	0.00	0.00	22.14	1.20	7.65	6.08	0.00	7.20	5 JRF, 3FA	Approved for starting the project with project period changed to 2017-2027.
TOTAL		165.43	3.50	3.82	25.78	1.70	9.55	6.48	0.00	8.04	5JRF, 4FA	
Thrust Area II: Biodiversity conservation and ecological security:												
OG-90	Studies on changes in soil quality and carbon buildup under different land use systems in Nagaland. Dr. Gaurav Mishra, 3 years, 2015-2018.	8.83 7.50	1.51	2.91	2.34	0.65	0.40	0.45	0.00	0.84	1 FA	Approved for continuation. Budget outlay reduced to Rs 7.50 lakhs.
OG-91	Assessment, documentation and characterization of lichen diversity in Mizoram, Northeast India. Shri Sandeep Yadav, 3 years, 2015-2018	17.52	11.33	2.50	2.77	0.85	0.00	0.95	0.00	0.97	1 PA	Approved for continuation

Annexure-VIII (RFRI)

OG-92	Isolation and study the efficiency of Arbusular mycorrhizal fungi, phosphate and potash solubilizing bacteria in enhancing productivity and nutrient status of degraded soil under shifting cultivation of Karbi Anglong, Assam. Dr D. Dutta, 3 years, 2015-2018.	10.98 9.50	1.02	3.57	3.94	0.25	2.45	0.40	0.00	0.84	1 FA	Approved for continuation. Budget outlay reduced to Rs 9.50 lakhs.
OG-93	Studies on nurseries diseases of economically important tree species of Mizoram and their management. Sh Hans Raj, 3 years, 2015-2018	9.51	2.17	3.41	2.96	0.40	0.05	0.65	0.10	1.76	1PA	Approved for continuation
	TOTAL	44.03	16.03	12.39	12.01	2.15	2.90	2.45	0.10	4.41	2FA, 2PA	
Thrust Area III: Forests and climate change:												
OG-94	A study on distribution and phonological events of Pinus kesiya along an altitudinal gradient at regional scale in North East India Himalayas. Sh AK Deka, 4 years, 2014-18.	16.25 10.50	3.49	3.20	2.50	0.05	0.15	2.30	0.00	0.00	-	Approved for continuation.
	Total	10.50	3.49	3.20	2.50	0.05	0.15	2.30	0.00	0.00	-	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:												
OG-95	Identification of suitable clones of populous species for North East India through genetic evaluation. Mohd. Ibrahim, 5 years, 2014-2019.	29.37	4.17	5.69	5.48	0.50	2.50	0.90	0.00	1.58	1 JRF	Approved for continuation.
OG-96	Conservation and Evaluation of Bamboo Genetic Resources in Northeast India, Mohd Ibrahim, 10 years, 2016-26	95.08	0.00	0.00	18.67	1.00	6.00	5.00	0.00	6.67	3JRF, 3FA	Approved for starting the project with project period changed to 2017-2027.
	Total	124.45	4.17	5.69	24.15	1.50	8.50	5.90	0.00	8.25	4 JRF, 3FA	
	GRAND TOTAL	344.41	27.19	25.10	64.44	5.40	21.10	17.13	0.10	20.70	9JRF, 2PA, 7FA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR)

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth												
OG-97 CR-19	Assessment of selected ecosystem services and their inter-linkage with human wellbeing in Dibru-Saikhowa Biosphere Reserve, Assam. Sh Ajay Kumar, 2 years, 2015-2017	7.09 5.50	0.93	3.10	1.00	0.25	0.10	0.65	0.00	0.00	-	Six months extension upto September 2017 approved without any extra cost. Project outlay reduced to Rs 5.50 lakhs.
	Total	5.50	0.93	3.10	1.00	0.25	0.10	0.65	0.00	0.00	-	
Thrust Area II: Biodiversity conservation and ecological security												
OG-98 CR-20	Investigation in to the mortality of <i>Porkia Roxburghii</i> G. Don in North East India. Dr. R. K. Borah, 3 years, 2014-2017.	13.94	7.12	3.44	2.81	0.00	0.60	0.75	0.00	1.46	1 SRF, 1PA	Approved six months extension upto September 2017. Proposed modification to the fourth objective to survey and document variation in disease incidence/ pest attack in different populations approved, collect seed such populations and raise seedlings.

Annexure-VIII (RFRI)

OG-99 CR-21	Standardization of nursery techniques of selected wild fruit-plants of North East India for their effective conservation and development of value added products for inclusive growth. Dr. T.N. Manohara, 3 years, 2015-2018.	18.552 14.50	1.67	5.93	5.88	0.60	3.45	0.75	0.00	1.08	1 PA	Request of RFRI for designating Dr. Rajesh Kumar as new PI accepted. Budget outlay reduced to Rs 14.50 lakhs.
	Total	28.44	8.79	9.35	8.69	0.60	4.05	1.50	0.00	2.54	1SRF, 2PA	
Thrust Area III: Forests and climate change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement												
OG-100 CR-22	All India coordinated project for genetic improvement <i>Melia composita</i> – RFRI Component. Dr N Ravi, 10 year, 2012- 2022	107.00	23.43	12.45	10.02	2.50	3.50	1.80	0.00	2.22	1 JRF	Approved for continuation. Request for change of PI to Sh. Satyam Bordoloi approved.
OG-101 CR-23	Screening of <i>Gmelina arborea</i> Roxb. clones for productivity and stability. Dr. N. Ravi, 5 years, 2013 – 2018	31.98 11.00	5.93	0.80	3.00	0.30	1.80	0.90	0.00	0.00	-	Approved for continuation. Budget outlay reduced to Rs 11.00 lakhs. Request for change of PI to Dr Papori Borpuzari approved.
	Total	118.00	29.36	13.25	13.02	2.80	5.30	2.70	0.00	2.22	1 JRF	
	Grand Total	151.94	39.08	25.70	22.71	3.65	9.45	4.85	0.00	4.76	1 SRF, 1 JRF, 2 PA	

C. NEW APPROVED PROJECTS OF XVI RPC 2015 TO BE STARTED IN 2016-2017:

S.no.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11
Thrust area I-Managing Forests and Forests Products for livelihood support & economic growth										
EF-5	Effective and efficient use of bamboo both as timber and fodder GIS-based distributional mapping & creation of digital bamboo resource databank/s for timber and fodder yielding bamboo species (RFRI Component). Coordinator: Dr. R.S.C. Jayaraj, IFS, Director, RFRI, Jorhat PI: Dr. Vipin Parkash, Scientist-E Duration: 5years (2017-22)	64.97	-	-	-	-	-	-	-	Approved. Budget component of other ICFRE Institutes also to be built in. Funding for the project may also be explored from DBT/ DST. Explore avenues of involving NBPGR and other research organizations.
NW-68	Performance evaluation of native plant growth promoting rhizobacteria for crop productivity enhancement in <i>jhum</i> fields of Nagaland. Dr. Krishna Giri, 2 years, 2017-19.	5.50	2.82	0.70	0.31	1.00	0.00	0.81	PA-1	Approved. Capacity building of local communities for production of biofertilizers and its uses should be included in the project for effective use of project outcomes.
	Total	5.50	2.82	0.70	0.31	1.00	0.00	0.81	1 JRF, 1PA	
Thrust area II- Biodiversity Conservation and Ecological Security										
NW-69	Exploration and utilization of wild mushroom diversity in Mizoram. Sh Rajesh Kumar, 3 years, 2017- 2020	13.92 10.70	4.94 4.20	0.50	0.20	1.50	0.00	2.74 2.00	1 JRF 1PA	Approved. Only one JRF approved.

Annexure-VIII (RFRI)

										Accordingly budget outlay reduced to Rs 10.70 lakhs.
NW-70	Expression profiling of mevalonate (MVA) pathway and methyl erythritol 4-phosphate (MEP) pathway transcripts in <i>Cymbopogon winterianus</i> under pathogen stress. Dr. Shailesh Pandey, 2 years, 2017-19	16.00	11.26	10.00	0.10	0.35	0.00	0.81	1 PA	Approved.
NA-30	Studies on natural regeneration status of <i>Dipterocarpus retusus</i> , <i>Terminalia myriocarpa</i> , <i>Michelia champaca</i> , and <i>Shorea assamica</i> in forest of upper Assam. Sh DK Meena, 3 years, 2017-20	12.07	-	-	-	-	-	-	-	Not Approved. Does not meet the required score on Technical criteria of Project Assessment.
NW-71	Assessment, Documentation and Characterization of Lichen diversity of Tripura, North – East India. Sandeep Yadav, 3 years, 2017-2020	8.89	3.46	0.25	0.15	1.00	1.00	1.06	1 JRF	Approved.
NW-72	Micro-propagation of rare and endangered species of Orchids of Mizoram and re-introduction in wild. Sandeep Yadav, 3 years, 2017- 2020	15.68	7.17	1.80	0.50	0.75	2.50	1.62	1 JRF, 1 FA	Approved. Short-list species from the Red-listed orchids of Mizoram, and select species on which NBPGR and ICAR centre are not working. Contact NBPGR for details.
	Total	51.27	26.09	12.55	0.95	3.60	3.50	5.49	3JRF, 1 PA, 1FA	
Thrust area III- Forest and Climate Change:										
NW-73	Phyto-diversity and carbon stock assessment of Trees Outside Forests in Assam using Remote Sensing and GIS. Dr. Dhruva Jyoti Das, 3 Years, 2017-2020.	26.57	6.57	0.00	0.15	2.50	1.00	2.92	1 JRF 2 PA	Approved. Keep in view FSI/ IPCC guidelines on root length.
	Total	26.57	6.57	0.00	0.15	2.50	1.00	2.92	1 JRF 2 PA	
Thrust area IV- Forest Genetic Resource Management and Tree Improvement: Nil										
	Grand Total	83.34	35.48	13.25	1.41	7.10	4.50	9.22	4 JRF, 4 PA, 1 FA	

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	496.35	9.05	30.55	21.98	0.10	25.46	87.14	1 SRF, 10JRF, 2PA, 7FA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	83.34	13.25	1.41	7.10	4.50	9.22	35.48	4 JRF, 4 PA, 1 FA	New projects approved in RAG on 10 th and 11 th March 2016 will be taken up for implementation as new projects for 2016-2017. Accordingly the budget requirement for new projects will be added.
	TOTAL	579.69	22.30	31.96	29.08	4.60	34.68	122.73	1 SRF, 14 JRF, 6 PA, 8 FA	

Tropical Forest Research Institute, Jabalpur

A. ONGOING PROJECTS (OG):

S. No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakh)	Cumulative expenditure till 31 st March 2016	Approx. expenditure during 2016-17	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
					Budget Requirement for 2017--18	Sub Head wise breakup for 2017-18						
						Consumables (M&S)	Research Expenditure (R&D)	Travel and Conveyance (Res- TE)	Capital (Scientific Equipments)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12	13
Thrust area I: Managing Forests and Forests Products for Livelihood Support & Economic Growth:												
OG-102	Field evaluation of biopesticides, ivermectin and spinosad against major insect larval defoliators. Dr N Roychoudhury, 3 years, 2016-2019.	6.37	0.00	0.10	2.09	0.10	0.85	0.30	0.00	0.84	1 FA	Approved for continuation.
OG-103	Development of fast food products enriched with <i>Moringa oleifera</i> (Drumstick) leaves and skill upgradation training to rural women. Dr Vishakha Kumbhare, 3 years, 2016-2019.	6.00	0.00	0.03	1.49	0.30	0.94	0.25	0.00	0.00	-	Approved for continuation.
	Total	12.37	0.00	0.13	3.58	0.40	1.79	0.55	0.00	0.84	1 FA	
Thrust Area II: Biodiversity Conservation and Ecological Security:												
OG-104	Biodiversity, Regeneration and life-history feedback of forest communities in response to canopy openings under selection cum improvement felling system. Dr Sanjay Singh, 5 years, 2016-2021.	16.92	0.00	0.72	3.64	0.00	1.00	1.20	0.00	1.44	1 SRF	Approved for continuation.
OG-105	Documentation of insect fauna & flora of mangrove ecosystems in Odisha. Dr. N. Roychoudhury, 3 years, 2016-2019.	9.27	0.00	0.21	3.14	0.45	0.65	1.20	0.00	0.84	1 FA	Approved for continuation.

Annexure-IX (TFRI)

OG-106	Documentation of biodiversity of forest fungi of central India, Dr. R K Verma, 3 years, 2016-2019.	10.98	0.00	0.10	3.98	0.15	1.05	0.50	0.00	2.28	1 JRF 1 FA	Approved for continuation.
OG-107	Studies on maturation and viability of seeds of five important tropical species: <i>Adina cordifolia</i> , <i>Mitragyna parviflora</i> , <i>Lannea coromandelica</i> , <i>Ougeinia oojeinensis</i> and <i>Anogeissus acuminata</i> for effective collection and seed storage. Dr. M. Kundu, 4 years 2016-2020.	8.86	0.00	0.57	2.29	0.30	0.55	0.60	0.00	0.84	1 FA	Approved for continuation.
	Total	46.03	0.00	1.60	13.05	0.90	3.25	3.50	0.00	5.40	1 SRF, 1JRF, 3FA	
Thrust Area III: Forests and Climate Change: NIL												
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:												
OG-108	"All India Coordinated programme for genetic improvement of Teak". with four sub projects: ID No. 193. PIs - (i) Dr. Yogeshwar Mishra, (ii) Dr. R. Sett, (iii) Ms. Trisa Dominic, Dr. S.A. Ansari, 10 years, 2012-2022	412.68	22.20	3.00	32.42	7.00	13.20	5.50	0.00	6.72	4 SRF, 3 FA	Approved for continuation.
OG-109	Studies on improving adventitious rooting in <i>Dalbergia latifolia</i> Roxb. and field performance of its rooted plantlets. Dr Pramod Kumar, 5 years, 2016 – 2021.	11.80	0.00	0.22	2.34	0.50	0.70	0.30	0.00	0.84	1 FA	Approved for continuation.
	TOTAL	424.48	22.20	3.22	34.76	7.50	13.90	5.80	0.00	7.56	4 SRF, 4FA	
	Grand Total	482.88	22.2	4.95	51.39	8.8	18.94	9.85	0	13.8	5 SRF, 1 JRF, 8 FA	

B. ONGOING PROJECTS (OG) WITH CHANGE REQUEST (CR): NIL

C. NEW APPROVED PROJECTS OF XVI RPC 2015 TO BE STARTED IN 2016-2017:

S. No.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2017-2018 (Rs. in lakhs)						Required Manpower (RA/SRF/ JRF/ PA/ FA etc.)	Recommendations of RPC January 2017
			Budget requirement for 2017-18	Sub Head wise breakup for 2017-18						
				Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital Scientific Equipments	Fellowship		
1	2	3	4	5	6	7	8	9	10	11

Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:

NW-74	Evaluation of phytochemicals from forest species- <i>Terminalia bellirica</i> , <i>Acacia concinna</i> , <i>A. auriculiformis</i> , <i>Sapindus laurifolius</i> and <i>Ziziphus mauritiana</i> for removal of chemical residues from edible produce. Smt Neelu Singh, 3 years, 2017-2020.	10.26	3.44	1.00	0.65	0.15	0.20	1.44	1 JRF	Approved. Nutritional value of vegetables before or after the treatment need to be studied.
NW-75	Development of integrated insect pest and disease control system for <i>Albizia</i> and <i>Dalbergia</i> in plantations in M.P. & M.S. Dr. P.B. Meshram, 3 years, 2017-2020.	13.55 11.75	4.39	0.20	0.75	2.00	0.00	1.44	1 JRF	Approved. Reduce the cost of travel to Rs 4.00 lakhs. Total budget outlay accordingly reduced to Rs 11.75 lakhs.
NW-76	Determining bio-control efficacy of spiders against insect pests of paddy based on agro-forestry system. Dr. S. Chakrabarti, 3 years, 2017-2020.	12.42	4.20	1.00	2.00	0.20	0.00	1.00	1 JRF	Approved.

Annexure-IX (TFRI)

NW-77	Study on ecophysiology of seed germination and seedling survival for restoration of natural regeneration of four threatened/ rare species of Central India. Dr. Maitreyee Kundu, 5 years, 2017-2022.	16.35	5.99	0.40	3.75	1.00	0.00	0.84	1 FA	Approved with following conditions - Restrict work to 2 species i.e. <i>Dalbergia latifolia</i> and <i>Litsea</i> sp. Work on <i>Oroxylum</i> sp. has been funded by NMPB and threat status of other species mentioned in project document is not clear. Change title to “Study on ecophysiology of seed germination and seedling survival for restoration of natural regeneration of two threatened species of Central India.”
NW-78	Integrated Approach for development of standard techniques of some socio-economically important species of Madhya Pradesh. Shri. N.D. Khobragade, 3 years, 2017-2020.	19.56	7.44	1.50	2.00	1.00	1.50	1.44	1 JRF	Approved. Title may be changed as “Integrated approach for development of standard nursery techniques and value added products of some socio-economically important species of Madhya Pradesh”. Take the work to forest nursery to demonstrate the work to SFD. Increase project duration by 01 year ie 2017-2021.
NW-79	Development of delivery system for field application of <i>Canthecona furcellata</i> as biological control agent against major insect pests. Sh. Subhash Chander, 3 years, 2017-2020.	10.87	5.79	0.20	1.10	0.50	3.15	0.84	1 FA	Approved. Refer Ph.D. work on this species by Dr. Basera, a student of Dr. Mukhtar Ahmed.
NW-80	Development of <i>Gmelina</i> based agroforestry system in Madhya Pradesh. Dr. Nanita Berry, 4 years, 2017-2021.	12.42	3.18	0.80	0.90	0.40	0.00	1.08	1 FA	Approved.

Annexure-IX (TFRI)

NW-81	Developing a predictive fire model on forests of Maharashtra with relation to various factors and to delineate suitable strategies. Sh. Dheeraj Gupta, 3 years, 2017-2020.	16.00	10.00	1.00	2.00	4.00	3.00	0.00	-	Approved. Simultaneously, explore funding from SFD Maharashtra/ M.P.
	Total	109.63	44.43	6.10	13.15	9.25	7.85	8.08	4JRF, 3FA	
Thrust Area II: Biodiversity Conservation and Ecological Security										
NW-82	Population dynamics, structure and genetic diversity of <i>Pterocarpus marsupium</i> in the Tropical forests of Madhya Pradesh. Dr. Sanjay Singh, 4 years, 2017-2021.	24.76	12.54	2.00	0.30	0.80	8.00	1.44	1 JRF	Approved.
NW-83	Biodiversity of Satpura Agro-climatic region with special reference to dependencies of Tribals. Smt. Shalini Bhowate, 3 years, 2017-2020.	9.10	2.67	0.25	1.00	1.00	---	0.42	1 FA	Approved with the following condition - Review work under Community Biodiversity Registers before taking up the project.
	TOTAL	33.86	15.21	2.25	1.30	1.80	8.00	1.86	1JRF, 1FA	
Thrust Area III: Forests and Climate Change										
NW-84	Understanding plant-water relations to annual weather fluctuations in dominant forest tree species in Madhya Pradesh. Sh. M. Rajkumar, 3 years, 2017-2020.	12.40 11.00	6.50	0.00	1.50	1.00	4.00	0.00	-	Approved with the following conditions - Work to be taken up on 5 selected tree species. Travel cost reduced to Rs 1.60 lakh. Total budget outlay also reduced to Rs. 11.00 lakh.
NW-85	Assessment of impact of constructed water harvesting structure on soil moisture/ vegetation in Bundelkhand using Remote Sensing & GIS techniques. Sh. Dheeraj Gupta, 1 year, 2017-2018.	5.50	5.50	2.00	0.50	0.50	2.50	0.00	-	Approved
	Total	16.50	12.00	2.00	2.00	1.50	6.50	0.00	--	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:										

Annexure-IX (TFRI)

Mod-7	Selection and improvement of disease/ insect pest resistant clones of <i>Gmelina arborea</i> . Dr. Fatima Shirin, 5 years, 2017-2022.	19.54	-	-	-	-	-	-	-	-	To be re-submitted with the following modifications - Align title with objectives. Include insect pest/ disease tolerance work under controlled conditions for quick and reliable results. Resubmit project after suggested modifications. DG ICFRE to take the final decision
NW-86	Evaluation of progeny trials of <i>Tectona grandis</i> and production of improved planting stock resistant to defoliator and leaf skeletonizer. Dr. Fatima Shirin, 3 years, 2017-2020.	10.76	2.84	0.50	0.40	0.50	0.00	1.44	1 JRF	Approved with the following modifications - The word “resistant” should be replaced by ‘tolerant’ in the title. Use appropriate terminology for the title and objectives of the project.	
	TOTAL	10.76	2.84	0.50	0.40	0.50	0.00	1.44	2 JRF		
	GRAND TOTAL	170.75	74.48	10.85	16.85	13.05	22.35	11.38	6JRF, 4FA		

D. Budget Summary of Ongoing and New Projects:

Sl. No.	Research Projects	Total Budget Outlay (Rs. in lakhs)	Sub Head wise breakup of budgetary requirement (Rs. In lakhs) for 2016-17						Man Power	
			Consumables (M&S)	Research Expenditure (FRE)	Travel and Conveyance (Res-TE)	Capital (Scientific Equipments)	Fellowship	Total		
1	Ongoing Projects	482.88	8.80	18.94	9.85	0.00	13.80	51.39	5 SRF, 1 JRF, 8 FA	Priority is to be given for completion of ongoing projects. All necessary budget support is to be given to ongoing projects before starting new projects.
2	New Projects	170.75	10.85	16.85	13.05	22.35	11.38	74.48	6JRF, 4FA	New projects will be started subject to availability of funds after fulfilling liability of ongoing projects.
	TOTAL	635.63	19.65	35.79	22.90	22.35	25.18	125.87	5 SRF, 7 JRF, 12 FA	

ICFRE funded completed projects in 2016-17
Arid Forest Research Institute, Jodhpur

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
Thrust Area II: Biodiversity Conservation and Ecological Security		
CP-1	A coordinated project on integrated management of khejri mortality for socio-economic upliftment in Rajasthan. Dr. K.K. Shrivastva, 5 years, 2010-2017	99.72
Thrust Area III: Forests and climate change: NIL		
Thrust Area IV: Forest Genetic Resources Management and Tree Improvement:		
CP-2	Assessment of variability, improvement and refinement of cloning techniques of <i>Tecomella undulata</i> (sm.). Seem /Desha Meena, 5 years, 2012-17	52.42
CP-3	All India Coordinated Project For Genetic Improvement of <i>Melia composite</i> . Pravin H. Chawhaan, 10 years, 2013-2022	86.00

Forest Research Institute, Dehradun

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
Thrust Area II: Biodiversity conservation and ecological security:		
CP-4	Inventorization, characterization and conservation strategies of selected rare and endangered plant species of India. Dr. Anup Chandra, 5 years, 2012-17	23.9
CP-5	Digitization of herbarium (Dehradun Herbarium) of Forest Research Institute. Ms. Ranjana Negi, 8 years, 2008-2017	61.13
CP-6	Restoration of Sand Stone Mining Area of Vindhyan Region through Microbial Technology. Dr. Kumud Dubey, 5 years, 2012-2017	14.00
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-7	Process refinement for extraction of quality fiber and optimal isolation of bioactive constituents from <i>Agave sisalana</i> . Dr. Y.C. Tripathi, 5 years, 2011-2017	8.40
CP-8	Phytochemical screening of selected wild edible plants for exploration of new sources of Luteolin. Dr. Y.C. Tripathi, 4 years, 2011-2017	8.65
CP-9	Structural studies and utilisation of <i>Acacia tortilis</i> gum exudates Dr. Vineet Kumar, 3 years, 2012-2017	4.5
CP-10	Utilisation of <i>Pinus roxburghii</i> needles for value added products Dr. Vineet Kumar, 3 years, 2012-2017	4.50

CP-11	Prospecting fungal resources for development of natural dye .Dr. Rakesh Kumar, 3 years, 2012-2017	6.18
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Himalayan Forest Research Institute, Shimla

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:		
CP-12	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 Himalayas. Dr Sandeep Sharma, 5 years, 2012-2017	15.50
CP-13	Status, Survey and Mapping of Ashtavarga Group of Medicinal and Aromatic Plants (MAPs) in Himachal Pradesh. Dr Vaneet Jishtu, 5 years, 2012-2017	19.75
Thrust Area II: Biodiversity conservation and ecological security: NIL		
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement: NIL		

Institute of Forest Biodiversity, Hyderabad

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
CP-14	Bioassay of plant extractives for antibacterial activity of marine biofilm isolates. M.V. Rao, 4 years, 2013-2017	12.53
Thrust Area II: Biodiversity conservation and ecological security:		
CP-15	Ecological diversity of Kawal tiger reserve in Andhra Pradesh-A bench mark study. Mr M B Honnuri, 4 years, 2013-2018 (Closed)	13.32

Institute of Forest Genetics and Tree Breeding, Coimbatore

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
CP-16	Mapping and monitoring of Casuarinas and Eucalyptus Plantations in Tamilnadu using RS and GIS. R.Vivekanandan, 3 years, 2013 – 2017	10.50
Thrust Area II: Biodiversity conservation and ecological security: NIL		
CP-17	Population structure, regeneration status and pollination ecology of <i>Dalbergia latifolia</i> and <i>D. sissoides</i> . Dr. K. R. Sasidharan, 5 years, 2011-2017	7.50

Annexure-X

Thrust Area III: Forests and climate change		
CP-18	Assessment of soil organic carbon under different land uses in Tamil Nadu. Dr. A. C. SuryaPrabha, 3 years, 2013-2017	6.00
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-19	Selection of clones of <i>Acacia auriculiformis</i> with desirable stem form and wood properties for short rotation timber production. Sh. Maheshwar Hedge, 5 years, 2010-2017	19.22

Institute of Forest Productivity, Ranchi

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
Thrust Area II: Biodiversity conservation and ecological security: NIL		
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-20	Tree Borne Oil seeds (TBOs) in community lands for Improved Livelihoods of Vulnerable Groups of Jharkhand. Dr Animesh Sinha, 5 years, 2012-2017	23.34

Institute of Wood Science and Technology, Bengaluru

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:		
CP-21	Wood modification of <i>Melia composita</i> for improving its dimensional stability and durability. (AICP- 2012-2017), Dr. K.K. Pandey, 3 years	7.54
CP-22	Liquefaction of Wood and value added products from the liquefied wood. Dr. S.S. Chauhan, 3 years, 2013-2017	3.35
Thrust Area II: Biodiversity conservation and ecological security: NIL		
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-23	Vegetative propagation and silvicultural practices for selected tropical timber species for plywood and panel wood industries. Dr. Geeta Joshi, 4 years, 2011-2017	12.25
CP-24	Refinement and standardization of protocols for <i>in vitro</i> propagation and genetic fidelity studies of micro propagated plants of two bamboo species <i>Bambusa balcooa</i> and <i>Thyrsostachys oliveri</i> . Dr. Ashutosh Srivastava, 4 years, 2011-2017	15.48

Rain Forest Research Institute, Jorhat

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth:		
CP-25	Studies on soil profile attributes under forests and jhum lands areas of some selected sites of Nagaland state. Gaurav Mishra, 3 years (2013-17)	13.50
CP-26	Raising planting materials of selected cane species and establish plantation in fringe villages of Assam and Mizoram to sustain rural livelihood. H.R. Bora, 3 years (2013-2017)	10.08
CP-27	Exploration of adhesive materials for incense sticks from the plant species. S. C. Biswas, 2 years (2014-17)	7.28
CP-28	Evaluation of forest fruits for the nutritional value and develop value added products for economic enhancement of the local people. S. C. Biswas, 2 years (2014-17)	7.16
Thrust Area II: Biodiversity conservation and ecological security:		
CP-29	Studies on ecological and ethnomycological aspects of wild mushrooms of Meghalaya. Rajesh Kumar, 3years, 2014- 2017	17.862
CP-30	Impact of <i>mikania micrantha</i> Kun th. ex HBK on micro environment of native species in Bherjan, Borjan, Padumoni R.F., Dilli R.F. & Abhayapur R.F. of Upper Assam, P.I. Dr. K. N. Barua, Research Officer, 3 years, 2014-17	14.83
CP-31	Mycological investigations on diversity and ecological status of Bambusicolous macro-fungi in Upper Assam. Dr. VipinParkash, 2 years, 2015-2017	7.76
CP-32	Studies on the economically important diseases of medicinal and aromatic plants of Assam to develop management practices through organic approach. S. Pandey, 3 years (2013-2017)	7.00
	Population genetic structure of <i>Calamus</i> species and influence of infectious diseases in Mizoram and Tripura, North East India. Shri Hans Raj, 3 years, 2014-2017	22.22
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-33	<i>In- vitro</i> propagation of <i>Vanda coerulea</i> . Satyam Bordoloi, 3 years (2013-17)	4.75
CP-34	Study on seed source variation for germination and seedling growth and establishment of seedling seed orchard or <i>Michelia champaca</i> . Mohd Ibrahim, 3 years (2013-2017)	7.00

Tropical Forest Research Institute, Jabalpur

Sl. No.	Project title / PI/ Duration	Total Budget outlay (Rs. in lakhs)
1	2	3
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth: NIL		
Thrust Area II: Biodiversity conservation and ecological security		
CP-35	Standardization of the techniques for germination, collection and maintenance of maximum viability of four important tropical species: <i>Bridelia retusa</i> , <i>Sterculia urens</i> , <i>Boswellia serrata</i> and <i>Saraca indica</i> . Dr. Maitreyee Kundu, 4 years, 2012-2016 (Change request)	4.50
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:		
CP-36	Studies on the causes of <i>Gmelina arborea</i> mortality in plantation of MP, CG and its integrated management. Dr. R.K. Verma, 3 years, 2013 – 2017	2.80
CP-37	Genetic improvement of <i>Dalbergia latifolia</i> Roxb. through selection and evaluation of germplasm in central India. ID No. 204. PI- Dr. Fatima Shirin, Duration- April 2013-March 2016 Sub-project 1:- Survey and selection of plus trees and establishment of progeny trials of <i>Dalbergia latifolia</i> . Sub-project 2:- To refine existing micro-propagation protocols of <i>Dalbergia latifolia</i> for production of improved planting stock. (Change request)	13.56 11.81
CP-38	Collection and morpho-molecular characterization of critically endangered <i>Litsea glutinosa</i> germplasm from Madhya Pradesh and Chhattisgarh. Dr. Naseer Mohammad, 3 years, 2013- 2017	6.00

Participants of XVII RPC held on 16-18 January 2017 at Board room of ICFRE, Dehradun

1.	Dr. Shashi Kumar, Director General, ICFRE
2.	Dr. G.S. Goraya, Dy. Director General (Research), ICFRE
3.	Sh. Arun Singh Rawat, Dy. Director General (Admin), ICFRE
4.	Dr. Neelu Gera, Dy. Director General (Education), ICFRE
5.	Sh. Vipin Choudhary, Dy. Director General (Extension) and Director (I/C), ICFRE
6.	Dr. U. Prakasham, Director, TFRI, Jabalpur
7.	Dr. Savita, Director, FRI Dehradun
8.	Dr. N.K. Vasu, Director, AFRI, Jodhpur
9.	Dr. V.P. Tewari, Director, HFRI, Shimla
10.	Dr. R.S.C. Jayaraj, Director, RFRI, Jorhat
11.	Dr. G.R.S. Reddy, Director, IFB, Hyderabad
12.	Dr. R.S. Prashanth, Director, IFGTB, Coimbatore
13.	Dr. S.A. Ansari, Director, IFP, Ranchi
14.	Sh. Surendra Kumar, Director, IWST, Bengaluru
15.	Sh A.K. Wahal, Ex- PCCF & HOFF, Arunachal Pradesh
16.	Dr. M.N. Jha, Retd. Scientist, FRI Dehradun
17.	Prof (Dr.) Y. S. Negi, IIT Roorkee, Saharanpur Campus
18.	Dr. Kuldeep Singh, Director, NBPGR, New Delhi
19.	Dr. C.N. Pandey, Principal Technical Advisor, FIPPI
20.	Dr. Lal Singh, Director, Himalayan Research Group, Shimla
21.	Ms Pratima Gupta, NITI Aayog, New Delhi
22.	Dr. S.S. Samant, Scientist, GP Pant NIHESD, Kullu, HP
23.	Sh Mohan Karnat, GCR, IWST, Bangalore
24.	Dr. Rajesh Sharma, Scientist – F, HFRI Shimla
25.	Dr. Girish Chandra, Scientist-C, ICFRE
26.	Sh Ranjit Raina, Farmer, Punjab
27.	Dr. K. Gurusurthi, Retd.Scientist,IFGTB, Coimbatore
28.	Sh.A.C. Lakshmana, Former Secretary to Govt. of Karnataka, Mysore
29.	Prof (Dr.) V. K. Sah, Ecology Department, Pantnagar University, Pantnagar
30.	Dr. K.S. Kapoor Scientist-G & GCR, HFRI, Shimla
31.	Dr. N.S.K. Harsh, Scientist G & GCR, FRI, Dehradun
32.	Dr.T.S. Rathore, GCR, AFRI, Jodhpur
33.	Sh P. Subramanyam GCR, TFRI, Jabalpur
34.	Dr. S. Murugesan, GCR, IFGTB Coimbatore
35.	Dr.Vimal Kothiyal, ADG (RP), ICFRE
36.	Dr.S.P.S. Rawat, ADG (M&E), ICFRE
37.	Dr. Shamila Kalia, Scientist F, RP Division, ICFRE
38.	Dr. V.R.S. Rawat, Scientist-F, ADG(BCC), ICFRE
39.	Dr. Shilpa Gautam, Scientist- D, BCC Division, ICFRE
40.	Dr. R.S. Rawat, Scientist-C, BCC Division, ICFRE
41.	Dr. Manish Kumar, Scientist-B, M&E, ICFRE
42.	Dr. Shailendra Kumar, Scientist-B, RP Division, ICFRE

Annual Research Seminar of ICFRE

Theme – ICFRE's Initiative towards enhancing country's green cover and wood production through development of high-yielding germplasm of tree species

Date - 16th January, 2017
Venue - Board Room, ICFRE HQs, Dehradun
Time - 0930-1330 hrs

Programme					
Species	Program Coordinator	Introduction	Process & Outputs	Multiplication	Presentation Time
<i>Casuarina equisetifolia</i> & <i>C. junghuniana</i>	Dr A Nicodemus IFGTB	0930-1015 hrs			
<i>Dalbergia sissoo</i>	Dr NSK Harsh FRI	1045-1115 hrs			
<i>Melia dubia</i>	Dr A Kumar FRI	1115-1200 hrs			
Eucalyptus	Dr HS Ginwal FRI	Dr HS Ginwal FRI	Dr Shiv Kumar IFGTB	Dr Shiv Kumar IFGTB	1200-1245 hrs
Bamboo	Dr HS Ginwal FRI	Dr HS Ginwal FRI	Dr S Vishwnath I WST	Dr Thakur FRI	1245-1330 hrs

XVII RESEARCH POLICY COMMITTEE (RPC) MEETING OF ICFRE

Date - 16th to 18th January, 2017
Venue - Board Room, ICFRE HQs, Dehradun

<u>Day 1: 16-01-2017</u>	Programme
2.45 PM- 3.15 PM	Introduction and Presentation by DDG (Research)
	Opening remarks by DG, ICFRE
3.15-6.15 hrs	
Thrust Area I Managing Forest and Forest Products for Livelihood Support and Economic Growth	
3.15 PM – 04.00 PM	Arid Forest Research Institute, Jodhpur (ongoing - 4, change request - 2, new - 7) (45 Minutes)
<i>04.00 PM – 04.15 PM Tea</i>	
4.15 PM – 06.15 PM	Forest Research Institute, Dehradun (ongoing-7,change request - 1, new-27) (120 Minutes)
Day 2: 17–01-2017	
9.30 AM – 9.45 AM	Himalayan Forest Research Institute, Shimla (ongoing -3, change request -1, new-2) (15 Minutes)
9.45 AM -10.00 AM	Institute of Forest Biodiversity, Hyderabad (ongoing- 2, change request- 1, new- 2) (15 Minutes)
10.00 AM – 10.15AM	Institute of Forest Genetics and Tree Breeding, Coimbatore (ongoing-3, change request-0 , new-2) (15 Minutes)
10.15 PM – 10.25 PM	Institute of Forest Productivity, Ranchi (ongoing -1, change request-0, new- 2) (10 Minutes)
10.25 AM – 11.25AM	Institute of Wood Science & Technology, Bangalore (ongoing - 9, change request- 3, new-12) (75 Minutes)
<i>11.25 AM – 11.40 AM Tea</i>	
11.40 AM–11.55 AM	Rain Forest Research Institute, Jorhat (ongoing -2, change request-1, new-2) (15 Minutes)
11.55 AM – 12.40 PM	Tropical Forest Research Institute, Jabalpur (ongoing-2, change request-0, new-8) (45 Minutes)
12.40 PM – 01.30 PM	ICFRE Presentation of concept on 15 priority areas suggested by MOEF
<i>01.30 PM - 02.15 PM Lunch</i>	
Thrust Area II Biodiversity Conservation and Ecological Security	
02.15 PM – 02.30 PM	Arid Forest Research Institute, Jodhpur (ongoing-0, change request- 2, new-2) (15 Minutes)
02.30 PM – 03.10 PM	Forest Research Institute, Dehradun (ongoing-0,change request-0, new-7) (40 Minutes)
<i>03.10 PM – 03.20 PM Tea</i>	
03.20 PM – 03.35 PM	Himalayan Forest Research Institute, Shimla (ongoing-1, change request-0, new-2) (15 Minutes)
03.35 PM – 03.45 PM	Institute of Forest Biodiversity, Hyderabad (ongoing -2, change request-1, new-1) (10 Minutes)
03.45 PM -04.00 PM	Institute of Forest Genetics and Tree Breeding, Coimbatore (ongoing-2, change request-0, new-3) (15 Minutes)
04.00 PM- 04.05 PM	Institute of Forest Productivity, Ranchi (ongoing,-1 change request-0, new-0) (05 Minutes)
04.05 PM – 04.20 PM	Institute of Wood Science & Technology, Bangalore (ongoing-0, change request-0, new-3) (15 Minutes)
04.20 PM – 04.50 PM	Rain Forest Research Institute, Jorhat (ongoing-4, change request-2, new-5) (30 Minutes)
04.50 PM- 05.05 PM	Tropical Forest Research Institute, Jabalpur (ongoing-4, change request-0, new-2) (15 Minutes)

Thrust Area III- Forest and Climate Change	
05.05 PM- 05.10 PM	Arid Forest Research Institute, Jodhpur (ongoing-0, change request-0, new-1) (5 Minutes)
05.10 PM- 05.20 PM	Forest Research Institute, Dehradun (ongoing-4,change request- 0, new-1) (10 Minutes)
05.20 PM -05.25 AM	Himalayan Forest Research Institute, Shimla (ongoing,-0 change request-1, new-0) (05 Minutes)
	Institute of Forest Biodiversity, Hyderabad (ongoing, change request, new) (No Project)
Day 3 : 18-01-2017	
09.30 AM – 09.35 AM	Institute of Forest Genetics and Tree Breeding, Coimbatore (ongoing-0, change request-1, new-0) (5 Minutes)
09.35 AM– 09.40 AM	Institute of Forest Productivity, Ranchi (ongoing-0, change request-0, new-1) (5 Minutes)
	Institute of Wood Science & Technology, Bangalore (ongoing, change request, new) (No Project)
09.40 AM-09.45 AM	Rain Forest Research Institute, Jorhat (ongoing-1, change request-0, new-0) (05 Minutes)
09.45 AM– 09.55 AM	Tropical Forest Research Institute, Jabalpur (ongoing-0, change request-0, new-2) (10 Minutes)
Thrust Area IV Forest Genetics Resources Management and Tree Improvement	
09.55AM -10.15 PM	Arid Forest Research Institute, Jodhpur (ongoing-4, change request-0, new-4) (20 Minutes)
10.15 AM –11.00 AM	Forest Research Institute, Dehradun (ongoing-4,change request-0, new-8) (40 Minutes)
	Himalayan Forest Research Institute, Shimla (ongoing-1, change request-0, new-0) (01 Minutes)
11.00AM -11.15 PM Tea	
11.15 AM -11.20 PM	Institute of Forest Biodiversity, Hyderabad (ongoing-1, change request-0, new-1) (5 Minutes)
11.20PM – 12.35 PM	Institute of Forest Genetics and Tree Breeding, Coimbatore (ongoing-13, change request-8, new-14) (75 Minutes)
12.35 PM – 12.45 PM	Institute of Forest Productivity, Ranchi (ongoing-5, change request-0, new-1) (10 Minutes)
12.45 PM -01.00 PM	Institute of Wood Science & Technology, Bangalore (ongoing-2, change request-0, new-3) (15 Minutes)
01.00PM -02.00 PM Lunch	
02.00 PM – 02.05 PM	Rain Forest Research Institute, Jorhat (ongoing-2, change request-2, new-0) (5 Minutes)
02.05 PM- 02.15 PM	Tropical Forest Research Institute, Jabalpur (ongoing-2, change request-0, new-1) (10 Minutes)
Budget requirement of research activities other than research projects	
02.15 PM – 3.00 PM	3-5 minutes each Institutes – 45 minutes
Break for Tea of 15 minutes	
Thrust area V: Extension	
Over view of ICFRE Extension programs by DDG (Extension) – 10 minutes	
3.10 PM-3.20 PM	FRI Dehradun (2 projects)
03.20 PM-05.00 PM	Wrap up of RPC and finalization of proceedings of RPC
	Remarks by RPC member and Directors of Institutes
	Closing remarks by DDG (R), ICFRE
	Concluding Remarks by DG, ICFRE