

**Proceedings of the Meeting for Approval of Projects
of Rain Forest Research Institute, Jorhat through
Video Conferencing
26th April, 2016**



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

**Minutes of the Meeting for approval of projects of Rain Forest Research
Institute, Jorhat through video conferencing
26th April, 2016**

The Research Advisory Group (RAG) meeting of Rain Forest Research Institute (RFRI) Jorhat was convened on 10-11 March 2016 to approve the new research projects to be taken up and continuation of ongoing projects in 2016-17. RFRI during the RAG meeting presented 28 ongoing projects for review and 2 new mega multidisciplinary projects for approval. The RAG after review of the ongoing projects recommended continuation of 15 fifteen projects. It also recommended extension of tenure of eight projects, accepted closer of five projects which were due for compilation on 31st March 2016. The two new mega multidisciplinary projects presented by RFRI were also recommended by RAG for approval by ICFRE.

A video conferencing (VC) was held on 26th April 2016 under the Chairmanship of Dr Ashwani Kumar, Director General ICFRE who is also the Chairman of Research Policy (RPC) Committee to approve the projects of RFRI. Dr RSC Jayaraj, Director RFRI Jorhat along the scientists of his Institute was present on VC. Dr GS Goraya DDG (R), Directorate (IC) and ADG of research directorate were present in the meeting along with other officials at ICFRE headquarter Dehradun. The list of participants is given appendix I.

RFRI Jorhat presented its 28 ongoing projects and two new projects for discussion through video conferencing. Fifteen ongoing projects were recommended for continuation in 2016-17 (Annexure I). Eight projects were put up for extension of time period ranging from six months to one year without any additional demand in the budget outlay of the projects. Out of eight projects six were approved for extension in the time period the details of which is given Annexure II. For remaining two projects RFRI, Jorhat was requested to submit detailed justification. In all 21 ongoing projects (15+6) were approved for continuation in 2016-17. The completed five ongoing projects of RFRI, Jorhat in 2015-16 are detailed in Annexure IV.

The Institute was directed to submit the Project Completion Report (PCR) of completed project as per time schedule and also complete the process of submission pending PCR of earlier projects.

Two new mega projects were presented by RFRI, Jorhat for approval in the VC. The same were deliberated upon. The projects were approved with few modifications the details of which are at Annexure-III. The budget requirements of ongoing and new projects are given in tables 1-3.

Approved in continuation of the review meeting of 22-23 January 2016

Approved by Director General, ICFRE (Chairman RPC) at N/33 of the
file No. 3-10/2013/ICFRE(R)/RP/Vol. V on 10th May 2016

Total Budgetary Outlay for the Approved ICFRE Funded Projects

Table 1a: Ongoing projects for the year 2016-17.

Institutes	Total No. of projects presented		No. of projects completed in 2015-16	Total no. of projects approved for continuation in 2016-17	
	No. of Projects	Total Budget Outlay (Rs. In lakhs)		No. of Projects	Total Budget Outlay (Rs. In lakhs)
Ongoing projects without change request	28 (29-1)*	553.482	5	21	403.40

* One project appeared at two places in the proceeding of XVI RPC 2015, the duplicity of the same is corrected.

Table 1b: New projects with ICFRE funding.

ICFRE Institutes	Total no. of projects presented in XVI RPC 2015	
	No. of projects	Total budget outlay (Rs. In lakhs)
RFRI, Jorhat	2	248.08

Table 1c: Total budgetary requirement of ICFRE funded projects for 2016-17.

S. No.	Project type	Total no. of projects approved	Total budget required for 2016-2017 (Rs in lakhs)
			NE component
1	Ongoing Projects for the year 2016-17	21	84.11
2	New Projects Approved by XVI RPC 2015 to be started in 2016-17	2	39.93
3	Budget requirement of miscellaneous research activities (other than research projects)	-	65.00
Total		23	189.04 (say 1.89 crores)

Table 2: Total budgetary requirement for ICFRE funded projects for 2016-17.

Institutes	Sub Head wise total budgetary requirement (Rs in lakhs) for 2016-17					
	Consumables (M&S)	Research expenditure (FRE)	Travel And conveyance (Res)-TE	Capital (Scientific Equipments)	Fellowship	Total
North East (RFRI, Jorhat)						
Ongoing projects	20.35	18.68	18.73	4.2	22.15	84.11
New Projects	2.2	12.65	10.58	-	14.50	39.93
Total	22.55	31.33	29.31	4.2	36.65	124.04

Table 3: Budget requirement for miscellaneous research activities (other than research projects) for the year 2016-17.

S. No.	Institutes	Consumables (M & S)	Research Expenditure (FRE)	Travel and Conveyance (Res – TE)	Capital (Scientific Equipments)	Maintenance of Scientific Equipments	RAG/ RPC Meetings	Total (Rs. in lakh)
1	RFRI, Jorhat (including its centres)	30.00	20.00	10.00	-	4.00	1.00	65.00
Total		30.00	20.00	10.00	-	4.00	1.00	65.00

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.

Rain Forest Research Institute, Jorhat

A. ONGOING PROJECTS (OG):

Thrust area wise list of ONGOING RESEARCH PROJECTS											
SI No.	Project title/PI/Duration (Start and end year)	Total budget outlay (Rs. in lakhs)	Approx. expenditure till 31 st March 2016	Details of budget required for 2016-2017 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of the VC Meeting (2016)
				Budget requirement for 2016-17	Sub Head wise breakup for 2016-17						
					Consumables (M&S)	Research expenditure (FRE)	Travel And conveyance (Res)-TE	Capital (Scientific)	Fellowship		
1	2	3	4	5	6	7	8	9	10	11	12
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth											
OG-45	Adaptation and mitigation measures in relation to shortening of <i>Jhum</i> cycle vis-à-vis soil nutrient status and productivity in different traditional systems of Nagaland RFRI/2015-16/SCD-1. Krishna Giri 3 years (2015- 2018)	12.94	1.32	3.82	1.08	0.60	1.30	0.00	0.84	FA-1	Approved for continuation.
OG-46	Assessment of selected ecosystem services and their inter-linkage with human well being in Dibru-Saikhowa Biosphere Reserve, Assam. Ajay Kumar, 2 years (2015-2017)	7.09	0.91	4.38	0.60	0.50	2.10	0.10	1.08	PA-1	Approved for continuation.
TOTAL		20.03	2.23	8.2	1.68	1.1	3.4	0.1	1.92	FA-1, PA-1	
Thrust area II: Biodiversity conservation and ecological security											
OG-47	Studies on ecological and ethnomycological aspects of wild mushrooms of	17.86	5.87	5.43	1.72	0.30	0.75	0.0 0	2.66	JRF-1 FA-1	Approved for continuation.

Annexure-I (RFRI)

	Meghalaya. Rajesh Kumar 3years (2014-2017)										
OG-48	Population genetic structure of <i>Calamus</i> species and influence of infectious diseases in Mizoram and Tripura, North East India. Hansraj, 3 years (2014-2017)	22.22	15.38	5.71	1.50	0.20	0.35	2.10	1.56	FA-1	Approved for continuation.
OG-49	Investigations on the mortality of <i>Parkia roxburghii</i> in North-East India. Rajib Kumar Borah, 3 Years (2014-2017)	13.94	6.26	4.93	0.62	0.10	1.28	0.00	2.93	JRF -1 PA-1	Approved for continuation.
OG-50	Impact of <i>Mikania micrantha</i> Kunth. ex H.B.K. on microenvironment of native species in Bherjan-Borjan-Padumoni R.F., Dilli R.F. and Abhayapur R.F. of upper Assam. K. N. Baruah, 3 years (2014- 2017)	14.83	4.19	3.84	1.00	0.30	1.00	0.00	1.54	FA-1	Approved for continuation.
OG-51	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. T. N. Manohara, 3 years (2015-2018)	18.55	1.67	5.93	0.50	3.10	1.25	0.00	1.08	PA-1	Approved for continuation.

Annexure-I (RFRI)

OG-52	Studies on changes in Soil Quality and Carbon Buildup under different land use systems in Nagaland. Garurav Mishra, 3 years, (2015-2018)	8.83	0.95	2.91	0.82	0.60	0.65	0.00	0.84	FA-1	Approved for continuation.
OG-53	Assessment, documentation and characterization of lichen diversity in Mizoram, Northeast India. Sandeep Yadav, 3 years (2015- 2018)	17.52	10.98	2.97	0.60	0.10	1.10	0.20	0.97	PA-1	Approved for continuation.
OG-54	Isolation and study the efficiency of <i>Arbuscular mycorrhizal</i> fungi, phosphate and potash solubilizing bacteria in enhancing productivity and nutrient status of degraded soil under shifting cultivation of Karbi Anglong, Assam. D. Dutta, 3 years (2015-2018)	10.98	0.60	3.57	1.08	0.95	0.70	0.00	0.84	FA-1	Approved for continuation.
OG-55	Studies on nurseries diseases of economically important tree species of Mizoram and their management. Hansraj, 3 years (2015-2018)	9.51	2.17	3.41	0.55	0.05	0.85	0.20	1.76	FA-1	Approved for continuation.
OG-56	Mycological investigations on diversity and ecological status of Bambusicolous macro-fungi in Upper Assam.	7.76	2.23	3.88	0.50	0.40	0.40	1.50	1.08	FA-1	Approved for continuation.

Annexure-I (RFRI)

	Vipin Parkash, 2 years (2015-2017)										
	TOTAL	142	50.3	42.58	8.89	6.1	8.33	4	15.26	JRF-2, FA-7, PA-3	
Thrust Area III: Forests and climate change: NIL											
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:											
OG-57	Identification of suitable clones of populus species for Northeast India through genetic evaluation. Mohd. Ibrahim, 5 years, (2014-2019)	29.37	6.11	5.69	1.00	3.00	0.85	0.00	0.84	FA-1	Approved for continuation.
OG-58	AICP programme for Genetic Improvement of <i>Melia composita</i> - RFRI Component. N. Ravi, 10 years (2012-2022)	107.0	21.59	12.45	5.60	3.00	2.00	0.00	1.85	JRF-1	Approved for continuation.
OG-59	Screening of <i>Gmelina arborea</i> Roxb.clone for productivity and stability. N. Ravi, 5 years (2013-2018)	31.98	3.71	2.75	0.00	2.00	0.75	0.00	0.00	Nil	Approved for continuation.
	TOTAL	168.35	31.41	20.89	6.6	8	3.6	0	2.69	JRF-1, FA-1	
	GRAND TOTAL	330.38	83.94	71.67	17.17	15.2	15.33	4.1	19.87	JRF-3, FA-9, PA-4	

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

S. No.	Project title/PI/Duration (Start and end year)	Total approved budget outlay (Rs. in lakh)	Approx. expenditure till 31 st March 2016	Details of budget required for 2016-2017 (Rs. in lakhs)						Recommendations of the VC Meeting (2016)
				Budget Requirement for 2016-17	Sub Head wise breakup for 2016-17					
					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										
OG-60 CR-1	Studies on soil profile attributes under forests and jhum lands areas of some selected sites of Nagaland state. Gaurav Mishra, 3 years (2013-16)	13.50	Not provided by the Institute	0.7	0.25	0.15	0.30	0.00	0.00	Request for change PI from Dr. P. K. Das to Dr. Gaurav Mishra accepted. An extension of six months to complete work of remaining six sites accepted within approved budget outlay.
OG-61 CR-2	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 (2013-2016)	10.08	Not provided by the Institute	2.7	0.13	1.18	0.85	0.00	0.54	One year extension approved (till March, 2017) without any additional budget. No further extension will be granted.
OG-62 CR-3	Exploration of adhesive materials for incense sticks from the plant species. S. C. Biswas, 2 years (2014-16)	7.28	Not provided by the Institute	3.0	0.70	1.20	1.00	0.10	0.00	Approved extension for 10 months (up to March, 2017) to complete the remaining work. Commercialization of the best product for economic gains may be explored. No further extension will be granted.
OG-63 CR-4	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 (2014-16)	7.16	Not provided by the Institute	3.3	0.90	0.40	1.10	0.00	0.90	Approved extension for 10 months (up to March, 2017) to complete the remaining work. Suggested for market linking of the developed products. No further extension will be granted.
TOTAL		38.02	-	9.7	1.98	2.93	3.25	0.1	1.44	

Thrust Area II: Biodiversity conservation and ecological security										
OG-64 CR-5	Studies on the economically important diseases of medicinal and aromatic plants of Assam to develop management practices through organic approach. S. Pandey, 3 years (2013-2016)	7.00	Not provided by the Institute	1.74	0.70	0.05	0.15	0.00	0.84	Approved extension for 1 year upto March 2017. No further extension will be granted.
TOTAL		7.00	-	1.74	0.70	0.05	0.15	0.00	0.84	
Thrust Area III: Forests and climate change										
OG-65 CR-6	A study on distribution and phenological events of <i>Pinus kesiya</i> Royle ex Gordon along an altitudinal gradient at regional scale in North East. India, A. K. Deka, 3 years (2013-2016)	16.25	Not provided by the Institute	-	-	-	-	-	-	Institute to submit detailed justification with status of physical and financial progress in detail for reconsideration of extension.
TOTAL		16.25	-	-	-	-	-	-	-	
Thrust area IV: Forest Genetic Resource Management and Tree Improvement:										
OG-66 CR-7	<i>In-vitro</i> propagation of <i>Vanda coerulea</i> . Satyam Bordoloi, 3 years (2013-16)	4.75	Not provided by the Institute	1.00	0.50	0.50	-	-	-	One year extension upto march 2017 approved. No further extension will be granted.
OG-67 CR-8	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 (2013-2016)	7.00	Not provided by the Institute	-	-	-	-	-	-	Director of the Institute to submit separate detailed justification of physical and financial progress against objectives approved for consideration of extension.
TOTAL		11.75	-	1.00	0.50	0.50	-	-	-	
GRAND TOTAL		73.02	-	12.44	3.18	3.48	3.40	0.10	2.28	

B. NEW PROJECTS:**Thrust area wise list of NEW RESEARCH PROJECTS****Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth**

SI No.	Project title/PI/Duration	Total Cost of the Project (Rs. in Lakhs)	Details of budget required for 2016-2017 (Rs. in lakhs)						Required Manpower (RA/SRF/JRF/ PA/ FA etc.)	Recommendations of the VC Meeting (2016)
			Budget requirement for 2016-17	Sub Head wise breakup for 2016-17						
				Consumables (M&S)	Research Expenditure (FRE)	Travel And Conveyance (Res)- TE	Capital (Scientific Equipments)	Fellowship		
1	2	3	5	6	7	8	9	10	11	
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth										
NW-1	Co-ordinated Research Programme on Agar (<i>Aquilaria malaccensis</i> Lamk.). R.K.Borah Component 1: Genetic Improvement and Silviculture, 10 yrs (2016 – 26) Component 2: Agar based Agroforestry Model, 10 yrs (2016-26) Component 3: Role of Insects in Natural Infection, 3 yrs (2016-19) Component 4: Agarwood Induction through conventional and fungal inoculation method, 5 yrs (2016-21) Component 5: Macro propagation of <i>A. malaccensis</i> Lamk. for Mass Production, 3 yrs (2016-19)	153.00	21.26	1.20	6.65	5.58	Nil	7.83	JRF-5 FA-3	Project approved for implementation. A new component of policy issues may be added. PI / Director are advised to have a relook on project cost particularly in the subhead FRE and Travelling expenses. Accordingly the budget may be revised.
	TOTAL	153.00	21.26	1.20	6.65	5.58	Nil	7.83	JRF -5 FA-3	
Thrust area II- Biodiversity conservation and ecological security: NIL										
Thrust area III- Forest and Climate Change: NIL										

Thrust area IV: Forest Genetic Resource Management and Tree Improvement										
NW-2	Conservation and Evaluation of Bamboo Genetic Resources in Northeast India Sh. Mohd Ibrahim 10 yrs (2016-2026)	95.08	18.67	1.00	6.00	5.00	Nil	6.67	JRF-3 FA-3	Project approved for implementation. PI / Director are advised to have a relook on project cost particularly in the subhead FRE and Travelling expenses. Accordingly the budget may be revised.
	TOTAL	95.08	18.67	1.00	6.00	5.00	Nil	6.67	JRF-3 FA-3	
	GRAND TOTAL	248.08	39.93	2.2	12.65	10.58	-	14.5	JRF-8 FA-6	

C. 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	330.38	17.17	15.2	15.33	4.1	19.87	71.67	JRF-3, FA-9, PA-4	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.
	Ongoing Projects with change request	73.02	3.18	3.48	3.40	0.10	2.28	12.44	-	
2	New Projects	248.08	2.2	12.65	10.58	-	14.5	39.93	JRF-8 FA-6	
	TOTAL	651.48	22.55	31.33	29.31	4.2	36.65	124.04	JRF-11, FA-15, PA-4	

Completed Projects-Rain Forest Research Institute, Jorhat

Sl.No.	Project title/ PI/ Duration	Total Budget Outlay (Rs in lakhs)
Thrust area I: Managing Forests and Forests Products for livelihood support & economic growth		
1	Studies on the traditional knowledge of medicinal plants used by Nepali community in Assam and identification of important species for chemical analysis. Shri H.N. Dhungana, 3 years, 2013-2016	4.99
2.	Studies on the diversity of soil borne entomo-pathogenic fungi in different land used system of North east India and their utility for the management of major defoliators of <i>Gmelina arborea</i> Roxb. and <i>Aquilaria malaccensis</i> Lamk. Shri R. Raja Rishi, 3 years, 2013-2016	8.27
Thrust Area II: Biodiversity conservation and ecological security		
3.	A preliminary investigation on hypotrophy (Dwarfing / stunting of <i>Lilium mackliniae</i> Sealy. Shri Arup Deka, DCF, 2 years, 2014- 2016.	6.76
4.	Assessment of diversity and carbon sequestration potential of above ground woody biomass of semi evergreen forest in Assam. Shri B. Pradhan, 3 years, 2013-2016	10.00
5.	Genetic diversity of <i>Trichoderma</i> strains prevalent in forest type of North Eastern India. Dr. Shailesh Pandey, 3 years, 2013-2016.	27.21
Thrust Area III: Forests and climate change: NIL		
Thrust area IV: Forest Genetic Resource Management and Tree Improvement: Nil		

**Participants of the meeting for approval of projects of Rain Forest Research Institute,
Jorhat through video conferencing
26th April, 2016**

1.	Dr. Ashwani Kumar, Director General, ICFRE
2.	Dr. G.S. Goraya, Dy. Director General (Research), ICFRE
3.	Dr. N.S. Bisht, Director, International Cooperation & DDG (Exten.), ICFRE
4.	Dr. Vimal Kothiyal, ADG (RP), ICFRE
5.	Dr. S.P.S. Rawat, ADG (M&E), ICFRE
6.	Dr. T.P. Singh, ADG (BCC), ICFRE
7.	Smt. Neena Khandekar, ADG (Admin.), ICFRE
8.	Dr. Shamila Kalia, Sci.-F, R. P. Division, ICFRE, Dehradun
9.	Dr. Manish Kumar, Scientist-B, M&E, ICFRE
10.	Dr. Danish Shahab, Research Associate, R.P. Division, ICFRE
11.	Dr. R.S.C. Jayaraj, Director, RFRI, Jorhat through video conferencing
12.	Scientists of RFRI, Jorhat through video conferencing

Program of the meeting for approval of projects of Rain Forest Research Institute, Jorhat through video conferencing at ICFRE HQs

Date - 26th April, 2016
Venue - Committee Room, ICFRE HQs, Dehradun

26-04-2016		Programme	
10.00 -10.30		Addressed by DDG (Res.), DDG (Admin.) and Secretary, ICFRE	
a.m.		Remarks by DG, ICFRE	

<p>Presentation by Director of RFRI, Jorhat and Discussion on:</p> <ol style="list-style-type: none"> 1. Ongoing projects/ongoing projects with change request 2. New Projects 3. Discussion/Wrap up
