Summary records of the 1st Meeting of the reconstituted Technical-cum-Financial Appraisal Committee (TFAC) on Environmental Research and Development Programme (ERDP) held on 12th – 13th October, 2023 under the Chairmanship of Dr. Rup Lal, Prof., (Retired), Acharya Narendra Dev College, University of Delhi, New Delhi-110019.

The 1st meeting of the reconstituted TFAC on ERDP has been organized as per the schedule. Shri Ravindra Kumar Tiwari, Deputy Secretary, MoEFCC has gave a detailed introduction of the revamped ERDP. He has also informed that the SFC of the revamped ERDP and the guidelines of the revamped scheme have been approved by HMEFCC. Further, he has said that under the new revamped programme, the main objective would be to promote Environmental Research on critical areas/gaps, as identified by the Ministry, through reputed institutions, Government funded Institutions and professional organizations (including NGOs) along with the existing thematic areas of R&D Scheme. This would facilitate decision making for policy and planning of the Ministry's programmes and activities.

List of participants is Annexed.

Agenda Item No. 1.0.

The Chairman welcomed the participants to the meeting and requested MS, TFAC to initiate the discussions on the Agenda Items.

Agenda Item No. 2.0.

2.1: Confirmation of Minutes of 20th TFAC meeting held on 30.05.2022.

The TFAC was informed that the minutes of the 20th meeting of the Technical-cum-Financial Appraisal Committee held on 30th May, 2022 were circulated to all the Members and no comments have been received on the minutes of the meeting.

Decision Taken: After discussion, the TFAC decided confirm the minutes of its 20th meeting held on 30th May, 2022.

Agenda Item No. 3.0.

3.1 New project proposals received through online on the MIS Portal. (126 number):

The TFAC was informed that as per the decision already taken by the Ministry i.e. the guidelines, 2022 of the revamped scheme are under finalization and pervious received applications/ proposals will be entertained on the basis of the new thematic areas of the scheme, these proposals may not be considered for funding.

Decision taken: The TFAC, based on the decision already taken by the Ministry and in order to support the new identified thematic areas/gaps for research, is agreed with the decision. The Committee, however, advised the PIs to apply as per the identified thematic areas/gaps of the revised guidelines, 2022, if otherwise applicable and interested.

3.2 Consideration of the revised proposal which were placed in the earlier TFAC meetings or internally scrutinized (**26 project proposals**):

	SI	Reg. No./Title/Pl	Comments of TFAC	Recommendations
	3.2.1	230/2020/RE	The committee observed that	As decided by the
		Delving Microbial	the project requires revision,	TFAC, the PI has
l		Diversity in The Nilgiris	as the PI is an agricultural	submitted the revised

	Shola Forest to Augment microbial consortia for efficacious regeneration of Shola tree species. Dr. M. Tilak Forest College and Research Institute, Tamil Nadu	Microbiologist and not familiar with tree species. The PI should have a Co-PI who is familiar with the restoration of degraded Sholas. The PI should contact Dr. Vasant Vasco of Ooty, who is an expert on restoration of Sholas, for collaboration. The revised proposal will be further considered in the next meeting of the committee. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received.	proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.
3.2.2	Production of sustainable high impact strength and self-healing paver blocks using industrial waste as a green concrete. Dr.Muthukannan, Deptt of Civil Engg., Kailashlingam Academy of Research and Education, Madurai	The Committee observed that since the PI of project no.2 and the PI of project no.4 are from the same institute but dealing with different waste material. The committee suggested that both the PIs should submit a combined integrated project of waste utilization after getting permission from Central Pollution Control Board and State Pollution Control Board with respect to utilization of incinerated biomedical waste ash. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation has suggested to refer the revised proposal to the following experts for their comments: i. Dr. Rajesh Kumar, CBRI; and ii. Dr R Mohana, Mepco Schlenk Engg College.
3.2.3	245/2020/RE Extraction of mercury Extraction of mercury and rare- earth elements from discarded fluorescent lamps. Dr. Nikhil Dhawan Indian Institute of Technology, Roorkee.	The Ministry has internally returned the proposal due to absence of certificate. Now, the PI has upload the revised certificate.	The proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Director, NPL, ii. Director, IICT; and

			iii. Head, Deptt of Env. Sc, Anna University. iv. Head, Env Sc, Andhra University
3.2.4	Valuation of mangrove ecosystems in Mumbai Metropolitan Region: Implications for economic, developmental, ecological and climatic benefits and recommendations for ecosystem conservation. Prof.Trupti Mishra Indian Institute of Technology, Bombay Mumbai	The Committee suggested that the PI should also take into account the services of ecological significance for valuation of mangroves. The Committee also pointed out that primary data have to be collected for measuring the mitigation and adaptation potential of mangroves to climate change. The PI should revise the project accordingly and resubmit it for further consideration. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC has observed that a lot of work have been done on the area and hence the proposal did not recommend for funding.
3.2.5	373/2018/RE Development of a sustainable hybrid biophysical method for palm oil mill effluent (POME) treatment. Mr. Karthik Balasundaram, Visvesvaraya National Institute of Technology, Nagpur.	The committee suggested that the comments received from CPCB be sent to PI for his responses and revise the project keeping in view the suggestions made by CPCB and re-submit it for further consideration. Earlier taken up in the 19th	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.
3.2.6	16/2021/RE Climate Change and Surface Waters Security on Wetland Ecosystems over Punjab Region Based on Remote Sensing Models and Techniques for Sustainable Management. Dr. Mohit Punjab Remote Sensing Centre, Ludhiana.	following: • taking account of State Action Plan on Climate Change (Punjab) submitted	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments: i. Director, IIRS, ii. Director, WISA iii. Head, Director, Atmosphere Division, IIT, Delhi

3.2.7	86/2021/RE Remote Sensing and GIS based Ecosystem Services Valuation of Agro forestry Systems Prevailing in Punjab – A case study. Dr.Dikesh Chandra Loshali, Punjab Remote Sensing Centre, Ludhiana	in the state with timeline of historical data availability; • Budget is adequate for this project; and • Wetlands characterisation and dynamics study should be enhanced with SAR and hyperspectral satellite data applications. Investigators should bring out the potential of above mentioned technologies. The PI may revise the project as per the suggestion of the Committee and re-submit it for further consideration in the next meeting. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received. The committee suggested that the PI should include agroforest ecosystem and aquaculture and also evaluate the nutrients cycle and the livelihoods generated by ecosystems. The PI should revise the project and resubmit it for further consideration by the Committee. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments: i. Director, IIRS, ii. Director, WISA iii. Head, Director, Atmosphere Division, IIT, Delhi iv. Dr Girish Pujar, Scientist, ISRO,
3.2.8	141/2021/RE Assessment of ecosystem services for conservation of an endemic and endangered fruit bat, Latidenssalimalii in Kalakad Mundanthurai Tiger Reserve (KMTR), Tamil Nadu, India Dr.Suthakar Isaac S	The committee observed that PI should focus on the factors that make the species endangered. The Committee pointed out that to minimise public health risks due to microbiome of the bat, the PI should involve a virologist and a doctor in the project. Thus the PI should revise the project and re-submit it for	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Director, FRI,

Tamil Nadu Committee. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received. 3.2.9 82/2021/RE Molecular Assessment of diversity pattern of Clitellata (Annelida) including exotic / invasive assemblage and their association with soil factors in hotspots of biodiversity of India. Prof. Shweta Yadav Dr. Harisingh Gour Vishwavidyalaya, Sagar, MP. 3.2.10 38/2021/RE Molecular Assessment of diversity pattern of Clitellata (Annelida) including exotic / invasive assemblage and their association with soil factors in hotspots of biodiversity of India. Prof. Shweta Yadav Dr. Harisingh Gour Vishwavidyalaya, Sagar, MP. 3.2.10 38/2021/RE Ecosystem Services Valuation for Natural Capital Accounts: A decided by the TFAC Meeting. Accordingly, a revised proposal for funding. Addu iiii. Head, CAS in Botany, Madras University iv. Director, IIFM v. Dr. C. G. Kushalappa, Former Dean (Forestry), College of Forestry, Ponnampet Kodagu, Karnataka As decided by the TFAC, the PI has submitted the revised proposal has been placed before the TFAC for TFAC for India for comments. The proposal alongwith comments will be placed in the next meeting for further consideration. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised proposal was received The objectives are well As decided by the TFAC, the PI has usubmitted the revised proposal to the TFAC, the PI has usubmitted the revised proposal to the proposal		St Johns College,	further consideration by the	
3.2.9 82/2021/RE Molecular Assessment of diversity pattern of Clitellata (Annelida) including exotic / invasive assemblage and their association with soil factors in hotspots of biodiversity of India. Prof. Shweta Yadav Dr. Harisingh Gour Vishwavidyalaya, Sagar, MP. 3.2.10		Tamil Nadu	Earlier taken up in the 19 th TFAC Meeting. Accordingly, a revised	iii. Head, CAS in Botany, Madras University iv. Director, IIFM v. Dr. C. G. Kushalappa, Former Dean (Forestry), College of Forestry, Ponnampet Kodagu,
3.2.10 39/2021/RE Ecosystem Services defined and the outcome of Valuation for Natural Capital Accounts: A achieving sustainable roposal to the	3.2.9	Molecular Assessment of diversity pattern of Clitellata (Annelida) including exotic / invasive assemblage and their association with soil factors in hotspots of biodiversity of India. Prof. Shweta Yadav Dr. Harisingh Gour Vishwavidyalaya,	that the PI should restricts studies to two or three objectives and select one study from Northeast and Western Ghats. The PI should select only one area from North East and Western Ghat. However, the Committee also suggested that the project be referred to Zoological Survey of India for comments. The proposal alongwith comments will be placed in the next meeting for further consideration. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the
case study of Nilgiri Biosphere Reserve. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi, Bangalore-560072. Dr. M Balasubramanian, Institute of for Social	3.2.10	Ecosystem Services Valuation for Natural Capital Accounts: A case study of Nilgiri Biosphere Reserve. Dr. M Balasubramanian, Institute of for Social and Economic Change, Nagarabhavi,	The objectives are well defined and the outcome of this project may help in achieving sustainable developmental goals at the local level. However, the committee suggested that the valuation of the ecosystem services should be redesigned at the market prices for non-timber forest products at the district level. Consequently, the PI may revise the project and resubmit it for further consideration. Earlier taken up in the 19th TFAC Meeting. Accordingly, a revised	TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the
3.2.11 109/2020/RE Due to absence of the As decided by the Certificate of recognition the TFAC, the PI has	3.2.11	109/2020/RE	Due to absence of the	

	Studies on Ecology, phytosociology, reproductive biology and Conservation action for threatened ten iconic endemic trees in south Western Ghats, Kerala. Dr. Jose Mathew Sanatana Dharma College, Sanatanapuram-688003	project was not taken up for consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal for consideration in the next meeting of TFAC. Earlier taken up in the 18th TFAC Meeting. Accordingly, a revised proposal was received.	proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments: i. Director, FRI, ii. Director, NBRI iii.Director, BSI, iv. Head, CAS in Botany, Madras University v. Director Kerala Foest Research Institute, Peechi, Kerala.
3.2.12	Development of microwave irradiated rice straw for animal feeding to combat straw burning issue and increase productivity. Dr. Rajesh Kumar, LalaLajpat Rai University of Veterinary and Animal Sciences, Hisar.	The committee desired to examine the work done by PI as evident by publications before taking decision on the project and PI was asked to send the publications to all the members by e-mail. The project was, therefore, deferred. Earlier taken up in the 18th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments: i. Director, NBRI ii. Director, IARI, Bareli iii. Director, SVBP University of Ag and Tech, Meerut, iv. Director, IIFM
3.2.13	144/2020/RE A novel framework for pedestrian health index based on pedestrian exposure to traffic emissions. Dr.BhadradriRaghuram Kadali National Institute of Technology, Warangal, Kazipet, Telangana.	Due to absence of the Certificate of recognition the project was not taken up for consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal for consideration in the next meeting of TFAC. Earlier taken up in the 18th TFAC Meeting.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Director, PCI, Delhi ii. Head, Respiratory, AIIMS, Delhi

		Accordingly, a revised proposal was received.	iii. MS, SPCB, Telangana iv. Director, IIFM
3.2.14	201/2020/RE Green Production of Nano-Concrete from Fly Ash and Construction Waste: Experimental studies, modelling through Artificial Intelligence and in-situ application. Dr.Jagannath Roy Central University of	The PI could not be able to give presentation due to problem in internet connectivity at his end. The Committee decided that the project be considered in the next meeting of TFAC. Earlier taken up in the 18th TFAC Meeting.	As already recommended, the PI may be called to present the project proposal before the TFAC in its next meeting.
3.2.15	other rare metals from e-waste. K. Jayasankar, CSIR-National Institute	The Committee after discussions, decided that objectives be revised as given below: i) Develop low temperature plasma and microwave based process to recover the metal value, glass fibre and activated charcoal from waste PCBs. ii) Recoveryand concentration of rare earth metals (La, Nd, Sm, Ce, Pr) and key precious metals such as gold, silver, platinum and palladium in treated PCBs. iii) Recycling of non-metallic materials such as polycarbonates and carbon from e-waste for their profitable use. iv) In-depth analysis of dioxins and furans from these particulates/gaseous releases and from liquid wastes during pyrolysis and their precursors to develop optimal operating windows for reducing harmful emissions from a wide variety of waste PCBs. The Committee also suggested that Microwave kiln may be deleted. The Committee sought responses from PI on the points	As already recommended, the PI may be called to present the project proposal before the TFAC in its next meeting.

0.040	400/0000/DE	mentioned above before considering it further for funding. Earlier taken up in the 3 rd TFAC Meeting. Accordingly, a revised proposal was received.	
3.2.16	106/2020/RE Status, ecology and conservation threats on rails (Rallidae) with special reference to climate change in selected wetlands of Tamil Nadu. Dr. N. Ezhilarasi Government Arts College, Coimbatore.	The committee observed that methodology provided is weak and the project requires revision. The Committee recommends that the PI may consult an expert working at Salim Ali Centre for Ornithology and Natural History (SACON) for revision and resubmit for further consideration by TFAC. Earlier taken up in the 18th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.
3.2.17	Investigating the Gamma Ray Shielding Characteristics of Red Mud Originate from Various Locations of India Dr.ShabiThankarajSala mmal, CSIR-Advanced Materials and Processes Research Institute, Habibganj Naka, Bhopal.	The Committee observed that project may give a technology for use of red mud in fabricating gamma ray shielding blocks. Since, the PI has no expertise in radioactivity, the committee advised the PI to involve an expert from BARC. About 45% of the project budget is meant for the purchase of Equipment. The PI should make efforts to get such funding from CSIR itself or industrial partners. The Committee suggested PI to revise the project and reduce the budget by	TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the
		excluding the equipment grant and resubmit it for further consideration by TFAC. The PI was also asked to explore the partial funding and sponsorship by the user agency. Earlier taken up in the 18 th TFAC Meeting.	

		Accordingly, a revised proposal was received.	
3.2.18	Studies on Biodiversity and Management of Plantation Crop Combination Agroforestry System and adjoining Natural Forests in Nilgiris, Western Ghats, Tamil Nadu. Dr.P.Rajendran Tamil Nadu Agricultural University, Coimbatore.	The committee observed that it is not clear that what permutation and combinations of species are important from commercial /industrial point of view and also from socio-economic point of view. Proposal does not clearly mention the challenges facing plantations from forestry point of view and the indicator species (insects etc.) in the ecosystem. Besides phytochemical characterisation, it is also required to evaluate the role of mycorrhiza for integrity of ecosystem. It is not clear that what crop combination will increase or decrease the invasive species. It was decided that PI should revise the proposal in the light of above comments and resubmit it for further consideration by TFAC. Earlier taken up in the 18th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.
3.2.19	123/2020/RE Some studies on usage of Phase Change Material on Thermal Comfort of buildings. Dr. S. Muthuvel Kalasalingam Academy of Research and Education Krishnankoil, Tamil Nadu	The PI could not be able to make presentation due to problem in the internet connectivity at his end. It was decided that the project should be considered in the next meeting of TFAC. Earlier taken up in the 18 th TFAC Meeting.	As already recommended, the PI may be called to present the project proposal before the TFAC in its next meeting.
3.2.20	184/2020/RE Development of potential low-cost wood substitute panels using Industrial waste for forest conservation and environmental protection.	The Committee observed that similar proposals have been recommended by this committee earlier. The PI should review the literature and bring out clearly how the present studies are different from the studies already	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for

	Mrs. N. Chella Kavitha, Mepco Schlenk Engineering College, Sivakasi	carried out. The PI should focus on the development of technology package and demonstration of the technology package developed. The PI should revise the proposal in the light of above comments and resubmit it for further consideration by TFAC. Earlier taken up in the 18th TFAC Meeting. Accordingly, a revised proposal was received.	
3.2.21	148/2020/RE Mitigation measures for air pollutants and heat islands by urban forest management — Quantification of the present scenario and extrapolation of future prospects. Dr.Bhanu Pandey, Central Institute of Mining and Fuel Research, Dhanbad.	The committee after deliberations observed that the evaluation of "Heat Island Effect" of Dhanbad Region is not clear. The committee also decided that the PI may focus his study on the title of his study and revise his proposal to provide specific details in terms of the objectives methodology and model proposed including its validation, expected output, expected outcome, thereof for further considerations of the revised project proposal. Earlier taken up in the 14 th TFAC Meeting. Accordingly, a revised proposal was received.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The revised proposal has been placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.
3.2.22	50/2021/RE Creation of road accidents (high severity) social cost model for Madurai city. Mrs. Bharathi S. Sethu, Institute of Technology, Kariapatti.	Required recognition certificate of the Institute. The Ministry has internally returned the proposal due to absence of certificate. Now, the PI has upload the revised certificate.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Director, MSE, ii.Director, IEG, DU iii. MS, SPCB, Tamil Nadu iv. Director, IIFM

3.2.23	Application of arsenic and chromium tolerant bacteria isolated from Gangetic plains of Bihar for environment cleaning and testing its bioremediation potential for welfare of human health. Prof.Akhileshwari Nath, S.S. Hospital and Research Institute, Patna	Required recognition certificate of the Institute. The Ministry has internally returned the proposal due to absence of certificate. Now, the PI has upload the revised certificate.	TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Director, ITRC, Lucknow ii. Head, Civil, IIT, Roorkee iii. Director, IICT iv. MS, CPCB,
3.2.24	70/2021/RE Converting waste cooking oil to Biodiesel Using Green Catalyst and Catalyst Regeneration Studies. Prof. A. Geetha Bhavani, Prof & Head, Chemistry, Noida International University, Noida	Required recognition certificate of the Institute. The Ministry has internally returned the proposal due to absence of certificate. Now, the PI has upload the revised certificate.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments: i. Dr. P. Shanmugam, CLRI ii. Head, CES, Anna University iii. Director, IICT iv. Dr. Tara Prasad Prof, Barkatullah University, v. Dr. P. Ramana, Prof and HOD-Forest Products and Utilization, College of Forestry, Sirsi.
3.2.25	204/2020/RE Study to increase bio- fertilizer production by 20% using waste water for dual benefits: soil fertility and water treatment. Dr. P. S. Vijaya Kumar,	Due to absence of the Certificate of recognition the project was not taken up for consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments:

	Institute of Nanoscience and Technology, Mohali.	for consideration in the next meeting of TFAC. Earlier taken up in the 18 th TFAC Meeting. Now, the PI has upload the revised certificate.	i. Head, Soil Sciences, IARI, ii. Director, CSSRI, Karnal iii. Director, IIFM iv. Director- NBSS- LUP, Regional Centre, Bengaluru.
3.2.26	58/2022/RE Study and detailed analysis of sediments of Indian part of Sundarbans delta in connection with the trend of sea level change to deduce the biosphere-eco-climatic changes since late Quaternary and also the future vulnerability prediction. Dr.Argha Sarkar Bangabasi College, Kolkata.	Required 'signed declaration' certificate of the Institute as per the prescribed format. The ministry has requested internally to update and upload the "Signed Declaration" instead of letter of agreement in the main application. Now, the PI has upload the same.	As decided by the TFAC, the PI has submitted the revised proposal to the Ministry. The TFAC after detailed deliberation has suggested to refer the proposal to the following experts for their comments i. Head, Soil Sciences, IARI, ii. Director, CSSRI, Karnal iii. Director, IIFM iv. MS, SPCB.
		e earlier TFAC meeting but revi	sed proposal yet to be
	d /37 cacac):		
	d (32 cases): Reg ID/PI/Address	Earlier decision taken	Recommendations
3.3.1	Reg ID/PI/Address 106/2021/RE Analysis of Heavy Metals and Pesticide Residues in Soil and Water Samples of Selected Districts of Andhra Pradesh. Dr.Venkata Kanaka SrivaniMaddala Vignans Foundation for Science Technology and Research (deemed to be University) Andhra Pradesh.	Earlier decision taken Earlier taken up in the 19 th TFAC Meeting. The revised proposal yet to be received. The committee observed that the project is simply a monitoring of soils and water samples. There is no novelty in the project in the absence of correlative studies with new disease observed in local population. The project in its present form is not suitable for grant-in-aid. The PI may formulate new proposal by including a toxicologist and a medical doctor/ faculty as coinvestigators and the same may be submitted to the Committee.	Recommendations The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
SI	Reg ID/PI/Address 106/2021/RE Analysis of Heavy Metals and Pesticide Residues in Soil and Water Samples of Selected Districts of Andhra Pradesh. Dr. Venkata Kanaka SrivaniMaddala Vignans Foundation for Science Technology and Research (deemed to be University)	Earlier taken up in the 19 th TFAC Meeting. The revised proposal yet to be received. The committee observed that the project is simply a monitoring of soils and water samples. There is no novelty in the project in the absence of correlative studies with new disease observed in local population. The project in its present form is not suitable for grant-in-aid. The PI may formulate new proposal by including a toxicologist and a medical doctor/ faculty as co-investigators and the same may be submitted to the	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the

	Dr.Sushen Pradhan Department of Science and Technology, Gangtok, East Sikkim	Government of Sikkim. The revised proposal yet to be received.	several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.3	44/2021/RE Understanding the movement patterns, landscape utilization patterns and hibernation behaviour of Asiatic black bear in Himachal Pradesh for bearhuman conflicts management Dr.Lalit Kumar Sharma, Zoological Survey of India, Kolkata	The Ministry has requested internally to submit the registration certificate of the institution. The revised proposal yet to be received.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.4	24/2021/RE Removal of heavy metals by using natural az`z`dsorbentsDr.Shas hikantMise HKEs PDA college Engineering, Gulbarg	The Ministry has requested internally to submit the registration certificate of the institution. The revised proposal yet to be received.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.5	376/2020/RE Scientific validation of a widely accepted taxonomic marker, COI across the animal taxa in barcoding for species identification Prof. S. Janarthanan University of Madras Madras	The Ministry has requested internally to submit the registration certificate of the University by UGC, as the PI had uploaded certificate issued by HoD. The revised proposal yet to be received.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.6	337/2020/RE Plausible role of Bacteriophages present in the High Altitude Himalayan River Waters. Dr.Angayarkanni J Bharathiar University, Coimbatore	Earlier Proposal has taken up in the 18 th TFAC Meeting. PI could not be able to make presentation due to problem in internet connectivity at his end. The project be placed in the next meeting of TFAC for consideration.	As already recommended, the PI may be further called to present the project proposal before the TFAC in its next meeting.
3.3.7	333/2020/RE	Earlier Proposal has taken up in the 18 th TFAC Meeting. The	The TFAC has appraised that no

	The present status of laterite habitats in Kerala: A Pilot study to establish Laterite Biodiversity National Park in Kerala, India. Mr. Shijith P P, Mahatma Gandhi Government Arts College, Mahe.	Committee has requested to submit recognized certificate of the institution issued by UGC. The revised proposal yet to be received.	revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.8	307/2020/RE Restoration of the Upper Reaches of River Teirei under the Dampa Tiger Reserve/Sanctuary using Biosystems Engineering. Dr. R Zonunsanga Mizoram University Tanhril, Aizawl	Earlier Proposal has taken up in the 18 th TFAC Meeting. PI could not be able to make presentation due to problem in internet connectivity at his end. It was decided that the project be considered in the next meeting of TFAC.	As already recommended, the PI may be further called to present the project proposal before the TFAC in its next meeting.
3.3.9	276/2020/RE Natural distribution, ecological niche modelling, selection of CPTs, its evaluation and nursery production of sandal (Santalum album Linn.) Dr.Binu N. Kamalolbhavan College of Forestry, Kerala	Earlier Proposal has taken up in the 18 th TFAC Meeting. PI could not be able to make presentation due to problem in internet connectivity at his end. It was decided that the project be considered in the next meeting of TFAC.	As already recommended, the PI may be further called to present the project proposal before the TFAC in its next meeting.
3.3.10	221/2020/RE Development of carbonless ECO cementitious Structural elements via synergistic Utilization of sustainable industrial waste and Nano material. Dr. R. Anuradha SNS College of Technology, Coimbatore.	Earlier Proposal has taken up in the 18th TFAC Meeting. Due to absence of the Certificate of recognition the project was not taken up for consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal for consideration in the next meeting of TFAC.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.11	190/2020/RE Development of biodiversity park at	Earlier Proposal has taken up in the 18 th TFAC Meeting. Due to absence of the Certificate of recognition the	The TFAC has appraised that no revised proposal is received from the PI

	Aligarh Muslim University, Aligarh Prof.Nafees A Khan Aligarh Muslim University, Aligarh.	project was not taken up for consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal for consideration in the next meeting of TFAC.	despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.12	Assessment of Economic Valuation of Ecosystem Services for Conservation and Management of Biodiversity in Karnataka State Forest Dr. Vilas Jadhav Institute for Social and Economic Change Naagarabhaavi	Earlier Proposal has taken up in the 18th TFAC Meeting. The Committee observed that proposed methodology is not clear. The study area comes under Protected Areas and hence requires permission from the Field Directors for the proposed study. The Committee suggested that PI should focus on only one National Park and refine the methodology. The PI may also include an expert in ecological economics as Co-PI. It was decided that the PI should revise the proposal in light of above comments and resubmit the revised proposal for further consideration by TFAC.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.13	Exploration of avifaunal diversity nexus with biotic and abiotic environment of Karaivetti Bird Sanctuary, Tamil Nadu towards developing of ecological resilience concepts for Conservation. Dr. M. Selvamurugan Agricultural College and Research Institute, Eacha.	Earlier Proposal has taken up in the 18 th TFAC Meeting. The PI could not be able to make presentation before the Committee due to problem in internet connectivity at his end. It was decided that the Project should be considered in the next meeting of TFAC.	As already recommended, the PI may be further called to present the project proposal before the TFAC in its next meeting.
3.3.14	150/2020/RE Identification & Assessment of pesticide contaminated sites in Maharshtra: Soil Health	Earlier Proposal has taken up in the 18 th TFAC Meeting. Due to absence of the Certificate of recognition the project was not taken up for	The TFAC has appraised that no revised proposal is received from the PI despite sending

	Monitoring, Stakeholder analysis & Modelling Dr.HemaDiwan National Institute of Industrial Engineering, Mumbai	consideration by the Committee and the PI was asked to resubmit the proposal along with all requisite documents including Certificate of Recognition as mentioned in the online portal for consideration in the next meeting of TFAC.	several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.15	assessment, ecological analysis and conservation management of dayingering memorial wildlife sanctuary in Arunachal Pradesh.	Earlier Proposal has taken up in the 15 th TFAC Meeting. The committee noted that the Botanical survey of India has a Zonal office in Arunachal Pradesh and the BSI Zonal office could be associated with the study and the PI should involve BSI in the	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not
	Dr.AmalBawri North Eastern Institute of Folk Medicine, Arunachal Pradesh.	present study. In addition, the field director of DayingEring Wildlife sanctuary and the state Forest Department need to be associated in the project. The committee also noted that the PI has started in the application that the North Eastern institute of folk medicine is an autonomous institute of Ministry of Ayush, the PI may furnish details of the autonomous status of the institute. The committee after deliberation s decided that the PI should revise the proposal in the light of above suggestions and the revised proposal will be placed in the committee for further consideration.	recommend the present study.
3.3.16	487/2018/RE Management of Parthenium in degraded forest in North-East region of India through replacement by native grasses and underwood	Earlier Proposal has taken up in the 15 th and19 th TFAC Meeting. The Committee observed that the project in its present form cannot be recommended and the project should be revised	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after
	species. Prof. N. Irabanta Singh, Manipur University, Imphal	on the following lines: The PI should select 50 acres in forest for this project.	detailed deliberations, did not recommend the present study.

		Duration should be one	
		year.	
		• Cost should not exceed ₹5.0 lakh.	
		Based on the progress	
		achieved, the project may be extended for another	
		year after review.	
		The eligibility of PI to receive	
		the grant under the Scheme	
2 2 4 7	404/2049/DE	should be ascertained.	The TEAC has
3.3.17	424/2018/RE Forest products trade	Earlier Proposal has taken up in the 14 th Meeting.	The TFAC has appraised that no
	scenario in India	The committee recommended	revised proposal is
	Dr. Manmohan Yadav,	that the proposal may be	received from the PI
	Indian Institute of	revised in consultation with	despite sending several reminders.
	Forest Management, Bhopal	the Research and Training Wing (RT) Division of the	several reminders. The TFAC has, after
	2.nopa.	Forest wing of MoEFCC and	detailed
		keeping in view of the	deliberations, did not
		suggestions made by the committee and resubmitted	recommend the
		for further consideration.	present study.
		The PI had submitted revised	
		proposal in the	
		correspondence section instead of main application.	
3.3.18	393/2018/RE	Earlier Proposal has taken up	The TFAC has
	Fabrication, Vibration	in the 19 th TFAC Meeting.	appraised that no
	and Wear studies on Cotton waste and	The committee mentioned recommendation of his	revised proposal is received from the PI
	Flyash based Green	project subject to submit the	despite sending
	Composite.	MOU with industry to the	several reminders.
	Dr. V. Arumuganrahu	Ministry.	The TFAC has, after detailed
	Dr. V. Arumugaprabu Kalasalingam Academy		deliberations, did not
	of Research and		recommend the
	Education		present study.
	Krishnankoil, Virudhunagar		
3.3.19	88/2018/RE	Earlier Proposal has taken up	The TFAC has
	Studies on habitat	in the 5 th TFAC Meeting.	appraised that no
	degradation and	The Committee	revised proposal is
	restoration of specific Elephant habitats and	desired that Ministry should obtain the comments of Shri	received from the PI despite sending
	elephant corridors	S.P. Vashisht, Chief	several reminders.
	including assessment of	Conservator	The TFAC has, after
	land use pattern for	of Forests, Forest	detailed
	population management and conflict mitigation	Department, Government of Assam.	deliberations, did not recommend the
	across the Upper	The Committee, after	present study.
	Brahmaputra Valley.	deliberations, decided that the	,

	Dr. Narayan Sharma	PI should revise/ modify the	
	Cotton University	project as per the aforesaid	
	Guwahati.	observations.	
3.3.20	266/2018/RE Assessing effects of linear infrastructure on wildlife:	Earlier Proposal has taken up in the 1st TFAC Meeting. The Committee after	The TFAC has appraised that no revised proposal is
	Landscape level characterization and	deliberations desired that the project be modified to	received from the PI despite sending
	spatial prioritization for impact mitigation.	study PAs and their ESZs of one State only and reduce the cost of the project for all the	several reminders. The TFAC has, after detailed
	Ms. MalvikaOnial Wildlife Institute of India,	components such as Travel, equipment, fellows, etc. and	deliberations, did not recommend the
2.2.24	Deharadun	resubmit for reconsideration.	present study.
3.3.21	252/2018/RE Evaluating the	Earlier Proposal has taken up in the 1st TFAC Meeting.	The TFAC has appraised that no
	ecosystem services of mangroves and	The committee after deliberations desired that the	revised proposal is received from the PI
	seagrasses in Andaman and Nicobar Islands	PI rework the project after discussions with all	despite sending several reminders.
	with special reference to climate change.	concerned as suggested above and based on the	The TFAC has, after detailed
	Dr. K. Ramesh Wildlife Institute of India,	aforesaid suggestions/ observations and submit for	deliberations, did not recommend the
3.3.22	Deharadun 249/2018/RE Assessment of the	reconsideration. Earlier Proposal has taken up in the 1st TFAC Meeting.	proposal for funding. The TFAC has appraised that no
	status of endemic and threatened plants across the protected	The Committee was of the view that the WII study should be in collaboration with BSI so	revised proposal is received from the PI despite sending
	areas of Arunachal Pradesh	that there is no overlapping/duplication of work. The Committee, after	several reminders. The TFAC has, after detailed
	Dr.Navendu Page	deliberations, recommended	deliberations, did not
	Wildlife Institute of India, Dehradun.	the project for funding subject to BSI being made as co-PI/ co-institution of the project. In	recommend the present study.
		addition, the State Forest Department must also be	
		involved. The Committee after deliberations recommended for funding of the project	
		incorporating these revisions.	
3.3.23	254/2018/RE Engaging community in conservation of Covert	Earlier proposal has taken up in the 1st& 6th TFAC Meeting. The Committee after	The TFAC has appraised that no revised proposal is
	Species in Meghalaya, Northeast India.	deliberations decided that the Project proposal be sent to	received from the PI despite sending
	Dr.Abhijit Das Wildlife Institute of India,	BSI and ZSI for their comments and meanwhile the PI should relook the proposal	several reminders. The TFAC has, after detailed
	Dehradun.		deliberations, did not

		for innovation for its further	recommend the
3.3.24	251/2018/RE A landscape-level assessment of elephant occupancy, habitat connectivity and human-elephant conflicts across Terai-Arc landscape for population management and conflict mitigation. Dr.BivashPandav Wildlife Institute of India, Dehradun.	consideration. Earlier proposal has taken up in the 1st TFAC Meeting. The Committee desired that the views of Project Elephant be obtained and attached with the revised project and on whether such a project/similar project is under implementation. The Committee also desired that the genetic study component be removed from the study as it is being done in greater depth by another group funded by DBT and	present study. The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
		resubmit the modified	
3.3.25	268/2018/RE A study the effectiveness of relocation and rehabilitation of programmes of communities from PAs and TRs. Dr.RuchiBadola, Wildlife Institute of India, Dehradun	Earlier proposal has taken up in the 1st TFAC Meeting. The Committee requested PI to examine also how dovetailing of other schemes/ programmes of Central and State Governments has helped in the relocation. The Committee requested the PI to take up one TR of a State after detailed consultations with the CWLW of that State, and revise the expected outputs and outcomes of the project in the light of above comments and resubmit the proposal for funding. Letter of the CWLW should also be attached with the revised project.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.26	194/2018/RE Assessment of carbon stock of the restored and natural mangroves of Pichavaram, Tamil Nadu. Dr.V.Selvam MS Swaminathan Research Foundation, Chennai	The Ministry has requested internally to revise the details of Co-PI, Breakup of the cost of the project and Location.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.27	238/2018/RE Ecology of		The TFAC has
	selected high-altitude	in the 1st TFAC Meeting.	appraised that no

2.2.20	wetlands of India for developing Conservation and Management Plans. Dr.J.A. Johnson Wildlife Institute of India,Dehradun.	deliberations recommended the project for funding subject to modification of the project in the light of comments made by the Committee: i) restriction of studies to two high altitude natural wetlands in Central Himalaya, Uttarakhand and; (ii) reduce the budget substantially. The revised proposal may be submitted for funding. Accordingly, Revised proposed received in the correspondence section instead of main application.	revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.28	To develop strategies for conservation and sustainable use of medicinal plants through traditional methods and agriculture practices. Dr. Ashish Kar The Energy and Resources Institute, New Delhi	The Ministry has requested internally to revise the details of Co-PI, Breakup of the cost of the project and Location.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.29	189/2018/RE Impact of atmospheric deposition and roof materials on harvested rainwater quality. Dr. G. P. Shiva Shankara Dayananda, Sagar College of Engineering	The Ministry has requested internally to revise the details of Co-PI, Breakup of the cost of the project and Location.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.30	147/2018/RE Assessment of quality of life, ecological footprints and environmental vulnerability of selected slums of Jammu city (J&K) India PiyushMalaviya University of Jammu Jammu Tawi	Earlier Proposal has taken up in the 19th TFAC Meeting. The project proposal was presented by the PI before the Committee for the first time. The committee discussed at length and decided that the PI requires co- investigator with specialization with the work that has been proposed in the	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.

		project. The project is multi-disciplinary in approach and require coordination with the municipal committee of Jammu. The PI may reduce the budget by deleting equipment grant, if the instruments are already available in the University. The Committee decided that the PI may revise the project and re-submit it for further consideration in the next meeting.	
highwa causing deaths	cation of able areas/es of railway and y crossings g elephant cut Singh Sewa Trust,	The Ministry has requested internally to revise the details of Co-PI, Breakup of the cost of the project and Location.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.
3.3.32 133/20 Valuing ecosys designi instituti arrange sustain manag ecosys peninsi Dr. Sur Forest	forest forest tem services and onal ements for able ement of forests tems in southern ular India. Tesh Kumar College and oth Institute,	Earlier proposal has taken up in the 5th TFAC Meeting. The Committee desired that studies of Dr Sukumar, IISc may also be consulted. The ICFRE Institute in Coimbatore may also be contacted. The Committee, after deliberations, decided that the PI may revise the project on these lines and resubmit the proposal afresh for consideration of the Committee.	The TFAC has appraised that no revised proposal is received from the PI despite sending several reminders. The TFAC has, after detailed deliberations, did not recommend the present study.

3.4 (A) List of projects where comments have not been received yet from other					
Division	s and Institutes referred	in the 18th TFAC n	meeting (04 c	ases):	
SI	Reg No./ PI/Address	Comments rece	eived from	Recommendations	
3.4.1	211/2020/RE	Comments ha	as been	The proposal along-	
	Systematics, Diversity	received from Di	irector, ZSI,	with the comments as	
	and Conservation of	Kolkata.		received from the ZSI	
	Cockroaches			has been considered	
	(Insecta: Blattodea) in			by the TFAC. After	
	Western Ghats of			detailed deliberations,	
	Tamil Nadu, India.			the Committee did	
				not recommend the	
				proposal for funding.	

	Dr. S Maria Packiam,		
	Research Guide &		
	Assistant Professor,		
	Environmental		
	Sustainability		
	Research Unit, Loyola		
	College, Chennai.		
3.4.2	270/2020/RE	As recommended by the	The TFAC has
	Technology	Committee, the proposal has	appraised that the
	Development and	been referred to the	proposal has been
	Bioreactor Designing	identified experts for their	referred to the
	for Exploitation of	comments. No comments	identified experts for
	Sago Mill Wastes in		their comments and
	Connection with	them till now.	no comments have
	Biofuel and		been received from
	Biomanure		them till now.
	Production.		The TFAC has, after
	D DA4 4		detailed deliberations,
	Dr. P.M. Ayyasamy,		did not recommend
	Assistant Professor		the present study.
	Department of		
	Microbiology, Periyar		
	University,		
	PeriyarPalkalai		
3.4.3	Nagar, Salem. 277/2020/RE	As recommended by the	The TFAC has
3.4.3	Habitat Analysis and	As recommended by the Committee, the proposal has	The TFAC has appraised that the
	Studies On Human-	been referred to the	proposal has been
	Wildlife Interactions	identified experts for their	referred to the
	and Its Impact On the	comments. No comments	identified experts for
	People in A	have been received from	their comments and
	Fragmented	them till now.	no comments have
	Landscape of	thom the riow.	been received from
	Attappady Block in		them till now.
	Nilgiri Biosphere		The TFAC has, after
	Reserve.		detailed deliberations,
			did not recommend
	Mr. Shaji M,		the present study.
	AssttProf., Dept. of		
	Wildlife Sciences,		
	College of Forestry,		
	Thrissur.		
3.4.4	334/2020/RE	As recommended by the	The TFAC has
	Genetic Assessment	Committee, the proposal has	appraised that the
	of the Musk Deer	been referred to the	proposal has been
	Populations in	identified experts for their	referred to the
	Western Himalaya.	comments. No comments	identified experts for
	D 01/0 :	have been received from	their comments and
	Dr. S K Gupta,	them till now.	no comments have
	Scientist-E,		been received from
	Wildlife Institute of India, Dehradun.		them till now.
	LOGIO LIODIOGUID	1	i l

3.4 (B)	Project proposals	which were referred to the exp	The TFAC has, after detailed deliberations, did not recommend the present study.
	373/2020/RE— Designing and demonstration of catalysis hybridized bioreactor for anaerobic biogas production by diversified waste. Dr.Shivaraju HP, JSS Academy of Higher Education and Research, Sri Shivarathreswaran agara, Mysore, Karnataka.		The proposal has been sent to the experts for their comments followed by several reminders. The Ministry is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.6	12/2021/RE- Ecology of non Apis insect pollinators in KalakadMundanthur ai Tiger Reserve (KMTR), Tamil Nadu. SRM Institute of Science and Technology, Kattanku	As per recommendations of the earlier TFAC meeting, the proposal was referred to Prof. Renee Borges, IISc, Bangalore for her comments.	The proposal was sent to the suggested expert for her comments followed by several reminders. The Ministry is not received any comment from her. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.7	108/2021/RE- Environmental Impact assessment of developmental policies on Gekkonidae family of reptiles in and around Loktak Lake, Manipur and policy prescriptions for the conservation of the same. Dr. Soma M. Ghorai, Hindu	As per recommendations of the earlier TFAC meeting, the proposal was referred to the following experts for their comments: - Wildlife Division of the Ministry; and - Zoological Survey of India.	The proposal has been sent to the experts for their comments followed by several reminders. The Ministry is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.

	College, University		
	of Delhi, Delhi.		
3.4.8	82/2021/RE	As per recommendations of	The proposal was sent
	Molecular	the earlier TFAC meeting,	to the suggested expert
	Assessment of diversity pattern of	the proposal was referred to the Zoological Survey of	for their comments followed by several
	Clitellata (Annelida)	India for their comments.	reminders. The Ministry
	including exotic /	maia for their comments.	is not received any
	invasive		comment from them so
	assemblage and		far. The TFAC has
	their contemporary		been updated the
	association with soil		status and the TFAC
	factors to restore soil		has decided that the
	quality and to		proposal may be
	mitigate soil		treated as not
	degradation. Prof. Shweta Yadav,		recommended for funding.
	Dr.Hari Singh Gour,		Turiumg.
	Vishwavidyalaya (A		
	Central University).		
3.4.9	66/2021/RE	As per recommendations of	The proposal has been
	Identification of	the earlier TFAC meeting,	sent to the experts for
	seagrass meadows	the proposal was referred to	their comments
	using side scan	the following experts for their comments:	followed by several
	sonar and towed camera around the	- Director, National Institute	reminders. The Ministry is not received any
	east coast of South	of Oceanography, Goa; and	comment from them.
	Andaman.	- NRSC, Hyderabad	The TFAC has been
	Prof. P.M. Mohan,		updated the status and
	Pondicherry		the TFAC has decided
	University,		that the proposal may
	R.V.Nagar,		be treated as not
	Kalapet,		recommended for
3.4.10	Puducherry. 139/2021/RE	As nor recommendations of	funding.
3.4.10	Utilization of lignin	As per recommendations of the earlier TFAC meeting,	The proposal has been sent to the experts for
	for the production of	the proposal was referred to	their comments
	value-added	the following experts for their	followed by several
	products by a	comments:	reminders. The Ministry
	metabolically	- Dr.Sahoo, Imtech	is not received any
	engineered	Chandigarh,	comment from them.
	bacterium.	- Dr.Apte, BARC, Bombay	The TFAC has been
	Dr.SaurabhJyotiSar	- Dr. Prashant, IIT, Bombay	updated the status and the TFAC has decided
	ma,		that the proposal may
	Bennett University,		be treated as not
	Greater Noida.		recommended for
			funding.
3.4.11	132/2021/RE-	As per recommendations of	The proposal has been
	Mapping, Monitoring	the earlier TFAC meeting,	sent to the experts for
	and management of seaweeds resources	the proposal was referred to	their comments followed by several
	scawccus resources		followed by several

	and its utilization as a component of blue carbon farming in coastal region of Tamil Nadu and Gujarat Dr.(Mrs.). P. NilaRekha, Central Institute of Brackish Water Aquaculture, Chennai.	the following experts for their comments: - National Institute of Oceanography, Goa; - IIRS, Dehradun, and - Central Marine Research Institute, Bhavanagar	reminders. The Ministry is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.12	148/2021/RE— "Development and Evaluation of a Microbial Consortium for the Bioremediation of Pesticide— Contaminated Soil in Southern Western Ghats of Tamil Nadu". M. Karthikeyan, Tamil Nadu Agricultural University, Tamil Nadu Agricultural University Coimbatore	As per recommendations of the earlier TFAC meeting, the proposal was referred to the following experts for their comments: - Dr.AtyaKapley, NEERI, and - Dr. Prashant, IIT, Bombay	The proposal has been sent to the experts for their comments followed by several reminders. The Ministry is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.13	30/2021/RE— Design and Development of Novel Hybrid Treatment Technology for the removal of Antibiotics and Organics from Health Care Wastewater. Dr.Srikantha H, Jain Deemed to be University. Faculty of Engineering and Technology Jain Deemed.	As per recommendations of the earlier TFAC meeting, the proposal was referred to Dr.Venkata Mohan, Indian Institute of Chemical Technology, Hyderabad for comments.	The proposal was sent to the suggested expert for their comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.14	129/2021/RE– Exploration of fish diversity in Feni River eco-system of Tripura Using	As per recommendations of the earlier TFAC meeting, the proposal was referred to the following experts for their comments:	The proposal has been sent to the experts for their comments followed by several reminders. The Ministry

	Machine Learning Techniques: strategies for conservation. Dr. Mrinal Kanti Bhowmik, Tripura University, Suryamaninagar, Tripura	- National Institute of Fisheries, Bombay; and - IIT, Bombay (Al Deptt).	is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.15	143/2021/RE Pollutant sensing and removal from water by functionalized nanomaterials. Dr.Anupam Agarwal, Sharda University Greater Noida,	As per recommendations of the earlier TFAC meeting, the proposal was referred to Dr. Ruchi Anand, IIT Bombay for comments.	The proposal was sent to the suggested expert for their comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.16	97/2021/RE Development of a simulation driven sustainability assessment system for the buildings sector. Dr. Albert Thomas, Indian Institute of Technology, Mumbai	As per recommendations of the earlier TFAC meeting, the proposal was referred to the Central Building Research Institute, Roorkee for their comments.	The proposal was sent to the suggested expert for comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.17	329/2020/RE Evaluation of the Ecosystem services of major estuaries of Goa in supporting the livelihood of traditional communities. Dr.Sreekanth G B, ICAR-Central Coastal Agricultural Research Institute, Goa	As per recommendations of the earlier TFAC meeting, the proposal was referred to the State Coastal Zone Management Authority concerned for their comments.	The proposal was sent to the suggested expert for comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not

			recommended for funding.
3.4.18	261/2020/RE Development of Sustainable Construction Materials using Waste Tyre Rubber in Fly ash based Geopolymer Concrete and Strength Prediction using Machine Learning. Dr. P Partheeban, Anna University, Guindy, Chennai.	As per recommendations of the earlier TFAC meeting, the proposal was referred to the Central Building Research Institute, Roorkee for comments.	The proposal was sent to the suggested expert for comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.19	114/2021/RE Development of Green and Economic Concretes using Coal and Construction Industry Wastes: Assessing and Optimizing the Environmental Interests. Dr.Navdeep Singh, Dr B R Ambedkar National Institute of Technology, Jalandhar	As per recommendations of the earlier TFAC meeting, the proposal was referred to the Central Building Research Institute, Roorkee for comments.	The proposal was sent to the suggested expert for comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.20	46/2020/RE Documentation of overall energy savings through Life Cycle Energy Analysis for a diverse range of building materials, technologies and building typologies specifically in respect of the	As per recommendations of the earlier TFAC meeting, the proposal was referred to the following experts for their comments: - Climate Change Division of MoEF&CC, - Housing and Urban Development Corporation (HUDCO) of the Ministry of Housing and Urban Affairs, and	The proposal alongwith the comments of the experts was placed before the TFAC for consideration. The TFAC after detailed deliberation, did not recommend the proposal for funding.

3.4.21	Indian housing sector. Dr. Mr. Rajesh Malik, REVA University, Rukmini Knowledge Park, Kattigena. 278/2020/RE Nanocarbon based materials for the	- Bureau of Energy Efficiency (BEE) of the Ministry of Power. As per recommendations of the earlier TFAC meeting, the proposal was referred to	The proposal has been sent to the experts for their comments
	detection and removal of Hg and Pb ions from industrial areas in Himachal Pradesh and their application for developing a practical device for water cleaning. Dr.Neeraj Gupta, Central University of Himachal Pradesh, Camp Office, Dharamshala	the following experts for their comments: - Ruchi Anand, IIT Bombay - Nishu Verma, IIT Kanpur	followed by several reminders. The Ministry is not received any comment from them. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4.22	Dr. Sarah Jaison Production of bio- butanol from fruit waste. PSGR Krishnammal College for Women, Avinashi Road, Peelamedu, Coimbatore.	As per recommendations of the earlier TFAC meeting, the proposal was referred to Dr. Sahoo, Imptech, Chandigarh for comments.	The proposal was sent to the suggested expert for comments followed by several reminders. The Ministry is not received any comment from them so far. The TFAC has been updated the status and the TFAC has decided that the proposal may be treated as not recommended for funding.
3.4 (C) Project proposal ar	e under consideration of TFAC	
3.4.23	404/2018/RE	• 11 th TFAC Date	The TFAC after
	Impact of Gold Mine Tailings On Agriculture, Environment and Household Health in Kolar District.	 20.12.2019 for examine of project site. 10th TFAC Date 11.12.2019, project was deferred. 7th Meeting of TFAC TFAC Meeting Date - 24(2042019) 	detailed deliberation has agreed to retain the earlier decision with the following formulation: - MS, TFAC - Dr. R Vasudev and Dr IP Pandey, Members, TFAC
	Dr. V. Suresh Babu, National Institute of Rural Development And Panchayati Raj,	04/09/2019) Proposal received on 15/07/2019.	- One representative from KSPCB.

Ministry of Rural The Committee The after proposed Development, deliberations was of the view Committee sub-Government of that the project requires committee may visit the India, multi-disciplinary approach project site to examine Rajendranagar, and organisations such as the various aspects of Hyderabad. ICMR, Land Use, Karnataka the proposed study and SPCB, etc should submit a report to the involved right in the planning **TFAC** for further stage itself. consideration of the The Committee was also of project at the earliest. the view that a subcommittee consisting of MS, TFAC and two members of TFAC Shri VP Yadav and Shri G Rambabu along with representatives of KSPCB may visit the project site to examine the various aspects of the proposed study and submit a report to the TFAC

for further consideration of

Agenda Item No. 4.0. Review of the progress of the ongoing projects:

the project.

- 4.1 Review of the progress of the ongoing projects under ERDP
- 4.1.1 **19-7/2018/RE** Ecology and Recovery of critically endangered Vulture species in Pong Dam Protected Area (PA) and its Eco Sensitive Zone (ESZ) in Kangra, Himachal Pradesh.

Dr.Gautam Talukdar, Wildlife Institute of India, Dehradun.

Project details: This ongoing project was started on 6th November, 2019 for a period of 3 years at a total cost of ₹85,23,200/-. The tenure of the project is going to be over on 05thNov, 2023. A total of ₹69,18,858/- (in 03 instalments) has been released so far, out of approved project cost of ₹85,23,200/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The Committee has asked the PI to explain the socio-economic parameters and coordination with Vulture Conservation Breeding Centre, Pinjore of the proposed study and the PI replied the answers adequately. The PI has also requested to extend the project tenure by 31.03.2024 within the already sanctioned outlay to complete the study initiated. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also suggested to focus on the dissemination of research work and plan an awareness workshop on the use of diclofenac and the importance of the vultures in the study areas. The Committee has also agreed to extend the project tenure upto 31.03.2024 without any additional financial support.

4.1.2 **19-15/2018/RE** - An integrated approach for conservation of Takin (Budorcastaxicolor) in North East India: Linking species ecology and traditional ecological knowledge.

Dr.Gopi G.V, Wildlife Institute of India, Chandrabani, Dehradun.

Project details: This project was started on 07th Nov, 2019 for a period of 3 years with a total cost of ₹68,23,960/-. The tenure of the project has been extended upto 06.11.2023 within the already approved outlay. A total of ₹61,41,564/- (in 04 instalment) has been released so far out of approved project cost of ₹68,23,960/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The Committee has asked the PI to explain the large study area, number of the species and social-cultural value of the proposed study and the PI replied the answers satisfactorily. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also agreed to release the further amount, if any on receipt of the required documents.

4.1.3 **19-14/2018/RE** - Assessing fine scale distribution pattern, population and habitat status of northern Swamp Deer (Rucervusduvauceliduvauceli) across upper Gangetic Plains of North-India.

Dr.Samrat Mondol, Wildlife Institute of India, Chandrabani, Dehradun.

Project details: This ongoing project was started on 6th November, 2019 for a period of 3 years with a total cost of ₹52,91,240/-. The tenure of the project has been over 05.09.2023. A total of ₹51,61,220/- (in 04 instalments) has been released so far out of approved project cost of ₹52,91,240/-.

Decision taken: The PI has presented the findings of the project before be TFAC. The Committee has asked the PI regarding the estimated number of the swamp deer in the study area and use of the remote sensing and the PI has replied the answers satisfactorily. Based on the presentation made by the PI, the Committee adjusted the findings of the project as **satisfactory**. The Committee has also agreed to release the further amount, if any on receipt of the required documents from the PI/Institution.

4.1.4 **19-13/2018/RE** - Securing habitats for threatened mountain ungulates through robust population assessment and conservation planning.

Dr. Vishnupriya Kolipakam, Wildlife Institute of India, Dehradun.

Project details: This ongoing project was started on 7th Nov, 2019 for a period of 2 years 6 Months with a total cost of ₹74,38,940/-. The project tenure has been completed on 06.05.2023. A total of ₹66,95,046/- (in 03 instalments) has been released so far against a sanctioned outlay of ₹74,38,940/-.

Decision taken: The PI has presented the findings of the project before be TFAC. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as **satisfactory**. The Committee also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.

4.1.5 **19-4/2018-RE -** Assessment of Disease Prevalence in Ungulates in Protected Areas of North East India.

Dr. S. Sathyakumar, Scientist-G, Wildlife Institute of India, Dehradun.

Project details: This project was started on 12th December, 2019 for a period of 2 years 6 months with a total cost of ₹75,87,485/-. The tenure of the project has been over on 11th June, 2023. A total of ₹68,28,737/- (in 03 instalments) has been released so far out of approved project cost of ₹75,87,485/-.

Decision taken: On behalf of the PI, Dr. Vishnupriya Kolipakam has been presented the findings of the project before be TFAC. The Committee has taken a serious note on it and suggest that the PI should present the progress before the TFAC except any emergency/causality. Based on the presentation, the Committee adjusted the findings/FTR of the project as **satisfactory** and accept the FTR. The Committee also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.

4.1.6 **19-21/2018/RE -** Quantification of the Economic and Ecological Services of Eco-tourism as a Livelihood Option for the Sustainability of the Rhino Population in Manas Tiger Reserve, Assam.

Dr. Ajay Kumar, Rain Forest Research Institute, Assam.

Project details: This project was started on 09th January, 2020 for a period of 2 years with a total cost of ₹19,61,560/-. The tenure of the project has been extended upto 08.04.2023. A total of ₹17,65,404/- (in 03 instalments) has been released so far out of approved project cost of ₹19,61,560/-.

Decision taken: The PI could not present the progress/findings before be TFAC due to his transfer from Assam to FRI, Dehradun on 10.10.2023. The Committee suggested the PI to present the findings before it in its next meeting.

4.1.7 **19-30/2018-RE -** Design, Development and Evaluation of Indigenous Sensors Based Air Quality Monitoring System and Data Analysis Using Deep Learning.

Dr. R. Rani HemaMalini, St. Peters Institute of Higher Education and Research, Avadi, Chennai.

Project details: This project was started on 31st December, 2019 for a period of 3 years with a total cost of ₹48,53,240/-. A total of ₹43,67,916/- (in 03 instalments) has been released so far out of approved project cost of ₹48,53,240/-.

Decision taken: The PI has presented the findings of the project before be TFAC. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as **satisfactory**. The Committee also suggested the PI to intimate the information regarding patent filed / registered under the project to the Ministry. The Committee also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.

4.1.8 **19-31/2018/RE -** Population Status, Ecology and Conservation of the Indian Swiftlet (Aerodramus unicolor) West Coast and Offshore Islands in the Western Ghats of Maharashtra.

Dr.ManchiShirish, Salim Ali Centre for Ornithology and Natural History, Coimbatore.

Project details:This project was started on 31st December, 2019 for a period of 3 years with a total cost of ₹49,77,000/-. The tenure of the project has been extended upto 31.12.2023. A total of ₹48,62,478/- (in 04 instalments) has been released so far out of approved project cost of ₹49,77,000/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has also requested to further extend the project tenure by a period of 3 months i.e. upto 31.03.2024 within the already approved outlay. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also agreed to extend the project tenure upto 31.03.2024 within the already approved outlay.

4.1.9 **19-29/2018-RE -** Ecological assessment of endemic and threatened Laughing thrushes of the Western Ghats to develop conservation plan for securing their population and habitats.

Dr. S. Babu, Salim Ali Centre for Ornithology and Natural History, Anaikatty, Coimbatore.

Project details: This project was started on 31st December, 2019 for a period of 3 years with a total cost of ₹53,71,000/-. The tenure of the project has been extended upto 30.06.2024. A total of ₹42,17,482/- (in 03 instalments) has been released so far out of approved project cost of ₹53,71,000/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that the envisaged objectives have been achieved as per the set methodology and the project activities are doing well. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.

4.1.10 **19-22/2018/RE -** Emerging infectious disease in birds across a gradient of alien invasive trees mapped using Remote Sensing on Shola Sky Islands.

Dr. Robin Vijayan, Indian Institute of Science Education and Research Tirupati.

Project details: This project was started on 21st January, 2020 for a period of 3 years with a total cost of ₹78,13,491/-. The tenure of the project has been extended upto 20.01.2024. A total of ₹76,44,248/- (in 04 instalments) has been released so far out of approved project cost of ₹78,13,491/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that the envisaged objectives have been achieved as per the set methodology and requested 6 month's extension to achieve the targeted objectives. Based on the presentation made by the PI,

the Committee adjusted the progress of the project as satisfactory. The Committee also agreed to extend the project tenure upto 31.03.2024 within the already approved outlay as the project tenure had earlier extended for a period of one year. The Committee also recommended to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent. 4.1.11 19-26/2018/RE-Tracking and assessment threats of highly critically endangered scaly giant Chinese Pangolin (Manispentadactyla) with special reference to sensitization of local communities for its long-term conservation in north-eastern States of India. Dr. Janmejay Sethy, Amity University, Gautam Budhh Nagar, Noida. Project details: This ongoing project was started on 28th May, 2020 for a period of 3 years with a total cost of ₹36,70,941/-. The tenure of the project will be completed on 27thMay, 2024. A total of ₹35,49,501/- (03 instalment) has been released so far out of approved project cost of ₹36,70,941/-. Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that the envisaged objectives have been achieved as per the set methodology. Based on the presentation made by the PI, the Committee adjusted the progress of the project as satisfactory. The Committee also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent. 4.1.12 19-38/2018/RE - Assessment of Changes for the Conservation and Management of Sathyamangalam Tiger Reserve. Prof. S. Jayakumar, School of Life Sciences, Pondicherry University, Puducherry. **Project details:** This project was started on 12th June, 2020 for a period of 2 years with a total cost of ₹49,63,400/-. The tenure of the project has been extended upto 08.12.2023. A total of ₹42.33,703/- (in 02 instalments) has

been released so far out of approved project cost of ₹49,63,400/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that the envisaged year-wise objectives have been achieved as per the set methodology. Based on the presentation made by the PI, the Committee adjusted the progress of the project as satisfactory. The Committee also recommended to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

19-45/2018/RE - Development of low energy- low carbon ECO cementitious 4.1.13 binders via synergistic use of low graded industrial wastes for sustainable development.

Er. Rajesh Kumar, CSIR Central Building Research Institute, Roorkee.

Project details: This project was started on 24th June, 2020 for a period of 3 years with a total cost of ₹37,42,600/-. The tenure of the project has been extended upto 23.12.2023. A total of ₹30,82,773/- (in 03 instalments) has been released so far out of approved project cost of ₹37,42,600/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has requested to extend the project tenure from 23.12.2023 to 31.03.2024 without any financial support. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also recommended to extend the tenure from 23.12.2023 to 31.03.2024 without any financial support. The Committee further agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

4.1.14 **19-44/2018/RE -** Development of performance improved precast lightweight composite materials using solid waste.

Dr. Rajni Lakhani/ Er. Rajesh Kumar, CBRI, Roorkee.

Project details: This project was started on 14th July, 2020 for a period of 3 years with a total cost of ₹66,77,000/-. The tenure of the project has been extended upto 30.06.2024. A total of ₹57,28,700/- (in 03 instalments) has been released so far out of approved project cost of ₹66,77,000/-.

Decision taken:Er Rajesh Kumar, the PI (initial PI has retired) has presented the progress of the project before be TFAC. The PI has informed the Committee that the project work will be completed within the stipulated time frame. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee also agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

4.1.15 **19-1/2021-RE-**

4.1.16

NIR Light reflective Nano composite plastering mortar/coating towards climate change adaptation in buildings.

Dr. K. Jeyasubramanian, Mepco Schlenlk Engineering College, Sivakasi.

Project details: This project was started on 19thMarch, 2021 for a period of 3 years with a total cost of ₹19,61,210/-. The tenure of the project will be completed on 18.03.2024. A total of ₹12,40,160/- (in 02 instalments) has been released so far out of approved project cost of ₹19,61,210/-.

Decision taken: The PI could not attend the meeting. The Committee suggested the PI to present the progress before the TFAC in its next meeting.

19-47/2020/RE-Habitat distribution modelling and reinforcement of two threatened trees in the Kerala region of the Western Ghats for the improvement of their conservation status.

Dr. Radha RK, Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Thrissur, Kerala.

Project details: This project was started on 21st March, 2022 for a period of 3 years with a total cost of ₹14,40,000/-. The tenure of the project will be completed on 20.03.2025. A total of ₹5,90,000/- (in 01 instalments) has been released so far out of approved project cost of ₹14,40,000/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that the threatened threes have medicinal value and their fruits are also edible. Based on the presentation made by the PI, the Committee rated the progress of the project as **satisfactory**. The Committee also recommended to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

4.1.17 **19-49/2020/RE-**Exploration and Conservation of edible and Medicinal Mushroom Diversity and Documentation of Ethno Mycological Knowledge from Forests of Coimbatore District of Western Ghats for Restoration of Nutritional Security Through Recycling of Agro Forest Wastes.

Dr. G. Thiribhuvanamala, Tamil Nadu Agricultural University, Lawley Road, Coimbatore.

Project details: This project was started on 10th March, 2022 for a period of one and half year with a total cost of ₹12,74,200/-. The tenure of the project will be completed on 07.09.2023. A total of ₹7,44,050/- (in 01 instalments) has been released so far out of approved project cost of ₹12,74,200/-.

Decision taken: The PI could not attend the meeting as she has not received funds because the released funds were automatically returned in the CNA account.

4.1.18 **19-48/2020/RE-**Understanding the Relationship Between Forest and Water in The Context of Changing Climate Variables of Narmada Catchment.

Dr. Bhaskar Sinha, Indian Institute of Forest Management, Bhopal.

Project details: This project was started on 17th March, 2022 for a period of 2 years with a total cost of ₹30,76,500/-. The tenure of the project will be completed on 16.03.2024. A total of ₹17,48,250/- (in 01 instalments) has been released so far out of approved project cost of ₹30,76,500/-.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has requested to extend the project tenure for a period of 6 month's duration within the already approved outlay. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee suggested the PI that his request for further extension would be considered in the next TFAC meeting.

4.1.19 **19-46/2020/RE -** An exploration of the mangroves of the Eco-Sensitive Zone of Bhadrak wildlife division (Odisha) for their fungal endophyte diversity.

Dr. T.S. Suryanarayanan, Vivekananda Institute of Tropical Mycology, Chennai.

Project details:This project was started on 25th March, 2022 for a period of 3 years with a total cost of ₹25,98,000/-. The tenure of the project will be completed on 24.03.2025. A total of ₹14,59,069/- (in 02 instalments) has been released so far out of approved project cost of ₹25,98,000/-.

Decision taken: The PI has presented the progress of the project before be TFAC. Based on the presentation made by the PI, the Committee rated the progress of the project as **satisfactory**.

4.2. Review of the progress of the ongoing projects under AICOPTAX

4.2.1 F. No.22018/15(i)/2015-CS(Tax)

Taxonomical Investigation of Lesser Known Marine Animals of India Phylum: Cnidaria (Class:Anthozoa) and Phylum: Porifere (Marine).

Dr. K. Vinod, Principal Scientist, CFMRI, Kochin.

Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.

4.2.2 F. No. 22018/01/2019-CS(Tax)

Exploring efficacy of plants and microbes for remediation of E-waste contaminatedsoil.

Dr. Pammi Gauba, Prof & Head, Department of Biotechnology, Jaypee Institute of Information and Technology, A-1, Sector 62, Noida.

Decision taken: On behalf of the PI, Ms. Ritika Garg, research scholar has presented the progress of the project before be TFAC. Ms. Ritika Garg has requested the Committee to release the next instalment and to extend the project tenure for a period of one more year within the already sanctioned project cost. Member-Secretary, TFAC has appraised the Committee that the Ministry has already been extended the project tenure by one more year within the already approved outlay. Based on the presentation, the Committee adjusted the progress as **satisfactory**.

4.2.3 F. No. 22018/02/2019-CS (Tax)

Diversity of herpetofauna of Goa, Maharashtra and Karnataka.

Dr. Nitin S. Sawant, Assistant Prof., Department of Zoology, Goa University, Goa.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that all the envisaged year-wise objectives have been achieved as per the SOP and also requested to extend the project tenure for a period of 6 months within the already sanctioned project outlay. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee has also agreed to extend the project tenure for a period of 6 months without any additional financial support.

4.2.4 F. No. 22018/05/2019-CS (Tax)

Taxonomy and epidemiology of pathogenic viruses and fungi of commercially important fin and shellfishes of Coromandel Coast.

Dr. A. Gopalakrishnan, CASMB, Annamalai University, Parangipettai.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has also requested to extend the project tenure upto 31.03.2024 without any additional support. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory.** The Committee has also agreed to extend the project tenure upto 31.03.2024 without any additional support.

4.2.5 F. No. 22018/12/2019-CS (Tax)

Biosystematics and Biodiversity Studies of Trichgrammatids Hymenopters: chalcidodiea: Trichogrammatidae).

Dr.Shoeba Binte Anis, Associate Professor, Section of Entomology, Deptt. of Zoology, AMU, Aligarh.

Decision taken: The PI has presented the progress of the project before be TFAC. The PI has informed the Committee that all the envisaged year-wise objectives have been achieved as per the set methodology. She has also requested to release the next instalment at the earliest as the last year's funds were automatically returned to the CAN. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory.** The Committee has also agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

4.2.6 F. No. 22018/18/2019-CS(Tax)

Taxonomy and mass scale production of selected species of polychaetes for augmenting aquaculture and natural stock.

Dr. P. Murugesan, Asst. Professor, CAS in Marine Biology, Annamalai University, Parangipettai- 608502.

Decision taken: The PI has presented the progress of the project before be TFAC. The Committee has asked the PI to explain the importance of the polychaetes and the technology developed. The Committee has also asked the explanation for mass cultivation and production of the species. The PI has given proper explanation on technology developed and its replication, mass cultivation and production. The PI has also requested to extend the project tenure upto 31.03.2024 without any additional financial support. Based on the presentation made by the PI, the Committee adjusted the progress of the project as **satisfactory**. The Committee has also agreed to extend the project tenure upto 31.03.2024 without any additional financial support.

4.2.7 F.No.22018/28/2019-CS(Tax)

Morphological and molecular taxonomy of termites (Insecta: Isoptera) from Peninsular India and studies on their potential human food.

Dr.KalleshwaraSwamy, C. M., Asstt. Prof., Entomology, College of Agriculture, University of Agriculture and Horticulture Science (UAHS) Navile, Shimoga.

Decision taken: On behalf of the PI, research scholar has presented the progress of the project before be TFAC. Based on the presentation, the Committee adjusted the progress of the project as **satisfactory**. The Committee has also agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

Agenda Item No. 5.0. Review of the progress of the completed projects.

5.1. Review of the findings/FTR of the completed projects of AICOPTAX:

5.1.1	F. No. 22018/18/2016-RE(Tax) Qualitative Assessment and Inventorization of Phytoplankton Diversity of Water bodies in States of Punjab and Haryana.
	Dr. Amrik Singh Ahluwalia, Algal Biology and Diversity Lab, Department of Botany, Panjab University, Chandigarh- 160014, Email: phykos@pu.ac.in
	Decision taken: The PI could not attend the meeting. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.2	F. No. 22018/15(iv)//2015-CS(Tax) Distribution and Identification of Phylum Kinorhyncha, Gastrotricha and Tardigrada in the Island Environments of India.
	Dr. A. Sarvankumar, Asstt. Professor, CAS Marine Biology, Annalmalai University, Parangipetti, Email: asarvaan@gmail.com
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.3	F. No. 22018/16/2016-CS(Tax) Freshwater Diversity of Peninsular India (excluding Tamil Nadu) Taxonomic enumeration and Developing Online Flora.
	Dr. Karthick Balasubramaniam, Scientist 'D', Division of Plant Science, Agharkar Research Institute, GG Agarkar Road, Pune -411004. Email: karthickbala@aripune.org
	Decision taken: The PI has presented the findings of the project before be TFAC. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as satisfactory . The Committee accepted the FTR and also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.
5.1.4	F. No. 22018/15/2015- CS(Tax) Investigations on the Phytoplankton Diversity of the Freshwater habitats of Odisha and West Bengal.
	Dr. Jai Prakash Keshri, Professor, CAS in Botany, The University of Burdwan-Burdwan-713104, Email:keshrijp@gmail.com
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.5	F. No. 22018/19/2015-CS (Tax) Marine Algal Diveris of East coast region of India with special reference to Molecular Phlogen of some green Phytoplankton.
	Dr.Mrutyunjay Jena, Algology Laboratory, Department of Botany, Behrampur University, Berhampur, Email: mrutyunjay.jena@gmail.com
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.

E 1 C	F. No. 22049/24/2045 CS/Tay)
5.1.6	F. No. 22018/21/2015-CS(Tax) Assessing Phytoplankton diversity in difference fresh water habitats of Assam, Tripura & Arunachal Pradesh.
	Dr.Partha Pratim Baruah, Professor, Department of Botany, Guwahati University, Guwahati – 781014, Email: ppbaruah@gauhati.ac.in
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.7	F. No. 22018/20/2015 Biodiversity of freshwater Planktonic algae of Tamil Nadu, South India: Survey, Collection, identification and Conservation"
	Dr. S. Nagraj, Assistant Professor, CAS in Botany, University of Madras, Guindy Campus, Chennai-600025, Email: nagalilly@gmail.com
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.8	22018/03/2015-RE(Tax)
	Taxonomic Study of Tettigoniidae (Orthoptera) of India.
	Dr. Pawan Kumar, Tropical Forest Research Institute, Jabalpur. Ph. No. 9816040246, Email: kumarp@icfre.org
	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting.
5.1.9	22018/03/2015-RE(Tax) Taxonomic Study of Tettigoniidae (Orthoptera) of India.
	Dr. Sudhir Singh Collaborator, Forest Research Institute, Dehradun Email: sudhirs@icfre.org
5.1.10	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting. F. No. 22018/22/2015-CS(Tax) Study of Diversity of Marine Macro Algae of Andhra Pradesh.
	Dr. M. Palanisamy, Scientist C, Botanical Survey of India, Southern Regional Centre, T.N.A.U, Campus, Lawely Road Post, Coimbatore.
	Decision taken: The PI has presented the findings of the project before be TFAC. The PI has also requested to the PI to publish the findings of the project and required some funds for the said purpose as the unspent balance has been returned to the Ministry. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as satisfactory and accepted the FTR. The Committee has also suggested the PI to apply afresh for publish the findings of the project, if otherwise eligible.

5.1.11	F. No. 22018/14/2015-CS(Tax)	
	Research Project on Freshwater Phytoplankton diversity of Bihar, Jharkhand	
	States of India: Survey and conservation.	
	Dr. RK Gupta, Scientist-C, Cryptogamic Unit, CNH Building Botanical Survey	
	of India, AJCB Botanic Garden, Howrah-711103.	
	Email: rkguptabsi@yahoo.com	
	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to	
	present the findings before it in its next meeting.	
5.1.12	F.No.22018/02/2015-CS(Tax)	
0.1.12	Taxonomic studies on the Tubulifra (Insecta: Thysanoptera of India.	
	Dr. Vilkas Kumar Cajantiet C. Cantra for DNA Tayonamy Malagular	
	Dr.Vikas Kumar, Scientist C, Centre for DNA Taxonomy, Molecular	
	Systematics Division, ZSI, Kolkatta-700053.	
	Email: vikaszsi77@gmail.com	
	Busheling to the Control of the Cont	
	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to	
	present the findings before it in its next meeting.	
5.1.13	F. No. 22018/10/2015-CS(Tax)	
	Advanced Training and Research in Plant Biosystematics.	
	Dr. Radhe Shyam Sharma, Deptt of Environmental Studies, University of	
	Delhi, Delhi-110007 Email:rads26@hotmail.com	
	,	
	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to	
	present the findings before it in its next meeting.	
5.1.14	F. No. 22018/17/2015-CS (Tax)	
0.1.11	Phytoplankton of Fresh Water Habitats of Meghalaya, Mizoram & Nagaland	
	States of India.	
	States of India.	
	Dr.Papiya Ramanujan, Associate Professor, Botany, North Eastern Hill	
	University, Shillong-793022, Email: papiyaramanujam@yahoo.com	
	Offiversity, Offinorig-7,00022, Email: papiyaramanujam@yanoo.com	
	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to	
	, , , , , , , , , , , , , , , , , , , ,	
F 4 4 5	present the findings before it in its next meeting.	
5.1.15	F. No. 22018/30/2015-CS(Tax)	
	Diversity of Water-striders (Hemiptera: Gerridae) from Principal Estuaries of	
	eastern coast of India.	
	Dr.S wetapadma Dash, Scientist C, Zoological Survey of India, Gopalpur-	
	610002, Email: oasisnainital@yahoo.co.in	
	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to	
	present the findings before it in its next meeting.	
5.1.16	22018/12(ii)/2015-CS(Tax)	

Taxonomic stubs and distribution of lesser known phylum chaetognatha from east and west coast of India. Dr. C. Stella, Professor, School of Marine Science Department of Oceanography and Coastal Area Studies, Algappa University, Thondi-623409. Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting. 5.1.17 F.No.22018/15(ii)/2015-CS (Tax) Distribution and identification of Phylum kinorhyncha, Gastrotricha and Tardigrada in the Island Environments of India. Dr. P M Mohan Department of Ocean Studies and Marine Biology, Pondicherry University, Port Blair, Email: registrar@pondiuni.edu.in **Decision taken:** The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting. 5.1.18 F. No. 22018/04/2015-CS (Tax) Zygentoma (Thysanura): Apterygotalnsecta. Dr. A.K. Scientist-F Hazra. & Emeritus Scientists, (ZSI), Vidyasagar College, Kolkata, Email: dr.ashishazra@gmail.com, Mob: 9432351148. **Decision taken:** The PI has presented the findings of the project before be TFAC. The PI has also requested to release the balance funds as only 1st instalment was released. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as satisfactory and accepted the FTR. The Committee has also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent. 5.1.19 F. No.22018/28/2015-CS(Tax) Taxonomical investigation on Ostracodes and Branchiopods in the Southeast coast of India. Dr P.S. Lyla, Prof., CAS in Marine Biology, Annamalai University Parangipettai, Email: dr.lailanair3@gmail.com Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting. 5.1.20 F. No. 22018/04/2019-CS (Tax) Preparation of Checklist of Mangroves. Prof. K. Kathiresan, Emeritus Prof., CASMB Annamalai University, Annamalainagar.

	Decision taken: The PI could not present the progress/findings before be	
	TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before the Committee in its next meeting.	
5.1.21	F. No. 22018/07/2019-CS (Tax)	
	Preparation of Checklist of Meiofauna.	
	Dr. S. Bijoy Nandan, Prof.& Head of Department of Marine Biology & Biochemistry, CUST, Cochin.	
5.1.22	Decision taken: The PI has presented the findings of the project before be TFAC. The PI has also requested to the Committee to release the balance funds to settle the project account. Based on the presentation made by the PI, the Committee adjusted the findings/FTR of the project as satisfactory and accepted the FTR. The Committee has also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent. F. No. 22018/30/2019-CS (Tax) Diversity, molecular taxonomy and phylogenetic assessment of snapping shrimps (Family: Alpheidae) in Palk Bay and Gulf of Mannar.	
	Dr. M. Thangaraj, Asstt Prof, CASMB, Annamalai University, Parangipettai.	
5.1.23	Decision taken: The PI could not present the progress/findings before be TFAC due to pre occupied engagement. The Committee suggested the PI to present the findings before it in its next meeting. F. No. 22018/60/2019-CS (Tax) Taxonomic and Ecological studies on Arachnids of Trans and Western Himalaya, India.	
	Dr. V.P. Uniyal, Scientist- G, Wildlife Institute of India, Dehradun-248001.	
	Decision taken: On behalf of the PI, Ms Irena, research scholar has presented the findings of the project before be TFAC. Based on the presentation, the Committee adjusted the findings/FTR of the project as satisfactory and accepted the FTR. The Committee has also agreed to release the remaining amount, if any on receipt of the required documents through proper channel from the project proponent.	
5.1.24	F. No. 22018/35/2019-CS (Tax) Taxonomic Status of Super Family Bombycoidea (Lepidoptera) From Indian Himalayas.	
	Dr. Amritpal Singh Kaleka, Assistant Professor, Department of Zoology & Environmental Sciences, Punjabi University, Patiala.	
	Decision taken: The PI could not attend the meeting. However, Mr. Vijendra Nehra, research scholar has attended the meeting and inform the Committee that he has not received his fellowship till now. The Committee advised the PI to present the findings before the Committee it in its next meeting. The Committee has also agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.	
5.1.25	F. No. 22018/45/2010-CS(TAX)	

"Hymenoptera: Apoidea, Part-I Meliponinae (Stingless bees), Bombinae (Bumble bees) and Xylocopinae (Carpenter bees) from North-East and North-Western Himalaya".

Dr. M.S. Saini, Asian Educational Institute, Patiala

Decision taken: The PI could not attend the meeting. The Committee advised the PI to present the findings before the Committee it in its next meeting. The Committee has also agreed to release the next instalment, if due on receipt of the required documents through proper channel from the project proponent.

5.2 Review of the progress of the completed projects for acceptance of the Final Technical Report (FTR) under ERDP: 05

SI	F. No./Title/the PI/Address	Recommendations
5.2.1	19-56/2013-RE Impact of Environmental Bioaerosol Pollution on Human Health: A "case-control Study" for Exacerbation of COPD in North Indian Population.	The PI has presented the findings of the project before be TFAC. Now, the PI had submitted Final Technical Report (FTR) of the research project and also requested to the release of remaining amount at the earliest.
	Dr.Chirashree Ghosh, Department of Environmental Studies, University of Delhi, Delhi.	Based on the presentation made by the PI before the TFAC, the Committee adjusted the findings of the project as satisfactory . The Committee accepted the FTR and also agreed to release the balance amount, if any to the project proponent on receipt of the required documents from the PI/Institution through proper channel.
5.2.2	19-43/2018/RE Sustainable utilisation of Industrial waste materials for the development of cement less-ferro cement precast panels for Impact load.	The PI has presented the findings of the project before be TFAC. Now, the PI had submitted Final Technical Report (FTR) of the research project and also requested to the release of remaining amount at the earliest.
	Dr. R. MohanaMepco, Schlenk Engineering College, Sivakasi, Tamil Nadu.	Based on the presentation made by the PI before the TFAC, the Committee adjusted the findings of the project as satisfactory . The Committee accepted the FTR and also agreed to release the balance amount, if any to the project proponent on receipt of the required documents.
5.2.3	3-6/2020-RE Microbial communities in changing climatic regime: Analysis of primary and secondary risk factors. Dr. VartikaMathur,	The PI has presented the findings of the project before be TFAC. Now, the PI had submitted Final Technical Report (FTR) of the research project and also requested to the release of remaining amount at the earliest.
	Sri Venkateswara College, University of Delhi, Delhi.	Based on the presentation made by the PI before the TFAC, the Committee adjusted

		the findings of the project as satisfactory . The Committee accepted the FTR and also recommended to release the balance amount, if any on receipt of the required documents from the PI.
5.2.4	Nano Bio Remediation of Textile. Dr. P. Jegathambal, Karunya Institute of Technology & Science, Coimbatore.	The PI has presented the findings of the project before be TFAC and also requested to the release of remaining amount at the earliest. Based on the presentation made by the PI before the TFAC, the Committee adjusted the findings of the project as satisfactory . The Committee accepted the FTR and also agreed to release the balance amount, if any to the project proponent on receipt of the required documents through proper channel.
5.2.5	Assessment of Landfill Gas Recovery and Utilization and Reduction of GHG Emission at the Madurai landfill, Tamil Nadu, India. Dr. D. Brindha Thiagarajara College of Engineering, Madurai.	The PI has presented the findings of the project before be TFAC and also requested to the release of remaining amount at the earliest. Based on the presentation made by the PI before the TFAC, the Committee adjusted the findings of the project as satisfactory . The Committee accepted the FTR and also agreed to release the balance amount, if any to the project proponent on receipt of the required documents.
5.2.6	19-112/2010-RE Sequential production of biodiesel, hydrogen and methane as a Bio-refinery Concept using Leather Solid waste and effluent Treatment Sludge's. Dr. P. Shanmugam, CLRI, Chennai.	The PI could not attend the meeting before the TFAC despite his confirmation. The PI has informed that he is not able to present the findings before the Committee due to bad health condition. The Committee suggested the PI to present the findings before it in its next meeting.

Agenda Item No. 6.0 Any other matter with permission of Chair.

As desired, the Member-Secretary, TFAC has informed the Committee that revised guidelines for Environmental Research and Development Programme (ERDP) will be uploaded on the Ministry's web portal soon for wider publicity. The Ministry will also invite the fresh research proposals from the various research institutions, universities etc. on the new identified thematic areas thereafter.

The meeting ended with a vote of thanks to the Chair.

List of the participants (12.10.2023).

S. No.	Expert Members	Remarks
1.	Prof. Rup Lal	Chairman
2.	Dr. I.P. Pandey	Member
3.	Shri Sushil Gupta (Online)	Member
4.	Dr. R. Vasudeva (Online)	Member
5.	Dr. T. Ramanathan	Member
6.	Sh. Ravindra Kumar Tiwari	Special Invitee
7.	Dr.Rajendra Kumar	Member-Secretary

SI. No.	Name of the participant	
1.	Dr. Gopalakrishnan (PI), CASMB, Annamalai University, Parangipettai.	
2.	Dr.P. Murugesan, (PI), CAS in Marine Biology, Annamalai University, Parangipettai.	
3.	Dr. S. Jayakumar, (PI), School of Life Sciences, Pondicherry University, Puducherry.	
4.	Dr. Radha R K, (PI), Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Thrissur.	
5.	Dr. Gopi. G.V, (PI), WII, Dehradun.	
6.	Dr.Samrat Mondol, (PI), WII, Dehradun.	
7.	Dr.Vishnupriya Kolipakam, (PI), WII, Dehradun.	
8.	Dr.Nitin S. Sawant, (PI), Assistant Professor, Department of Zoology, Goa University, Goa.	
9.	Sh. Robin Vijayan, (PI), Indian Institute of Science Education and Research, Tirupati.	
10.	Er. Rajesh Kumar, (PI), CSIR Central Building Research Institute, Roorkee.	
11.	Dr. B. Santhini, (PI), St. Peters Institute of Higher Education and Research, Chennai.	
12.	Dr. R. Rani Hema Malini, (PI), St. Peters Institute of Higher Education and Research, Avadi, Chennai.	
13.	Dr. S. Babu, (PI), Southern Regional Centre, WII, Coimbatore.	
14.	Dr.ManchiShirish, (PI), Southern Regional Centre, WII, Coimbatore.	
15.	Dr. A.K. Hazra, (PI), Scientist–F & Emeritus Scientists (ZSI),Vidyasagar College,Kolkata.	
16.	Dr.Bhaskar Sinha, (PI), IIFM, Bhopal.	
17.	Dr.GautamTalukdar,(PI), WII, Chandrabani, Dehradun.	
18.	Dr. (Mrs) Shoeba B.Anis, (PI), Associate Prof., Zoology, AMU, Aligarh.	
19.	Ms. Ritika Garg, Research Scholar , JPIIT, NOIDA.	
20.	Sh. Debanjan Jana, Research Scholar.	
21.	Ms. Nida Zaidi, Research Scholar .	
22.	Dr.Ranjith M, (PI), Research Scholar.	
23.	Dr. M.B. Govinda Rajulu, Research Scholar.	
24.	Ms.Malyasri Bhattacharya, Research Scholar .	

List of the participants (13.10.2023).

S. No.	Expert Members	Remarks
1.	Prof. Rup Lal	Chairman
2.	Dr. I.P. Pandey	Member
3.	Shri Sushil Gupta (Online)	Member
4.	Dr. R. Vasudeva (Online)	Member
5.	Dr. T. Ramanathan	Member
6.	Sh. Ravindra Kumar Tiwari	Special Invitee
7.	Dr. Rajendra Kumar	Member Secretary

S.No	Name of the Participant		
1.	Dr. A. K.Hazra, PI, Scientist–F		
	& Emeritus Scientists, (ZSI), Vidyasagar College, Kolkata.		
2.	Dr.M.Palanisamy, PI, Scientist C, Botanical Survey of India, Kolkata.		
3.	Dr.S.BijoyNandan, PI, Prof.& Head of Department of Marine Biology &		
	Biochemistry, CUST, Cochin.		
4.	Dr. A. Gopalakrishnan, PI, CASMB, Annamalai University, Parangipettai.		
5.	Prof. Chirashree Ghosh, PI, Botany, University of Delhi.		
6.	Dr.P. Jegathambal, PI, Karunya Institute of Technology & Science,		
	Coimbatore.		
7.	Dr. D. Brindha, PI, Thiagarajara College of Engineering, Madurai.		
8.	Dr. Janmejay Sethy, PI, Amity University, Gautam Budhh Nagar.		
9.	Prof.Vartika Mathur, PI, Botany Venkteswara College, D.U.		
10.	Dr. Pooja Gokhale Sinha, Co-PI, Department of Botany, Sri		
	Venkateswara College, New Delhi.		
11.	Dr. P. Murugesan, PI, Asst. Professor, CAS in Marine Biology, Annamalai		
	University, Parangipettai		
12.	Dr. K. Balasubramaniam, Sc 'D', Agharkar Research Institute, Pune.		
13.	Sh. Debanjan Jana, Research Scholar.		
14.	Ms. Irina Das Sarkar, Research Scholar.		
15.	Ms. S.M. Leela Bharathi, Research Scholar.		
