

Government of India
Ministry of Environment, Forest and Climate Change
(Research in Environment)

AGENDA

4th Meeting of the Technical-cum-Financial Appraisal Committee (TFAC) on Environmental Research and Development Programme.

Venue: Annamalai University, Annamalainagar

Date: 18th -19^h June, 2024

Time: 10.00 AM onwards

18th June, 2024

Agenda Item No.1: Introductory remarks by Chairman/ Member Secretary.

Agenda Item No.2: Confirmation of Minutes of 3rd meeting of the TFAC held on 18th – 19th March, 2024.

Agenda Item No.3: Project proposals to be considered:

3.1 Revised Proposals received as recommended by earlier meeting of the TFAC: (01)

3.2 Project proposals which were referred to experts for comments. (03)

19th June, 2024

3.3 New project proposals received through online mode. (23)

3.4 Proposals in which PI could not attend the earlier meeting of the TFAC. (04)

Agenda Item No. 4 : Review of the progress of the ongoing projects and completed projects for acceptance of the Final Technical Report (FTR):

4.1 Review of the progress of the ongoing projects. (02)

4.2 Review of the completed projects for acceptance of the Final Technical Report (FTR). (10)

Agenda Item No.5: Any other item(s) with permission of Chair.

Agenda Item No.3.0

3.1 Revised Proposals received as recommended by earlier meeting of the TFAC: (01 Cases)

Sr. No	Registration Number	Thematic Areas	Name of PI and Address	Title of Project and Duration
3.1.1	576/2023/RE	Socio-economic issues of environment and Sustainable Development	Dr. Arindam Biswas, IIT Roorkee	Impact of Urban Air quality and Heat stress on Urban Quality of Life

3.2 Project proposals which were referred to experts for comments. (03)

S. No.	Thematic Area	Reg. No., Title of Project & Name of the PI
3.2.1	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	19-5/2023-RE “Assessment of ecosystem services for conservation of an endemic and endangered fruit bat, <i>Latidenssalimalii</i> in KalakadMundanthurai Tiger Reserve (KMTR), Tamil Nadu, India.” Dr.Suthakar Isaac S, St Johns College, Tamil Nadu.
3.2.2	Pollution Prevention - Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	19-2/2023-RE “Extraction of mercury and rare- earth elements from discarded fluorescent lamps” Dr. Nikhil Dhawan Indian Institute of Technology, Roorkee
3.2.3	Use of remote sensing technology for inventorisation, assessment and monitoring of country’s natural resources such as land, water, forests, wetlands, glaciers etc. and for environmental conservation and protection on areas given above	19-3/2023-RE “Climate Change and Surface Waters Security on Wetland Ecosystems over Punjab Region Based on Remote Sensing Models and Techniques for Sustainable Management.” Submitted by Mohit, Punjab Remote Sensing Centre, Punjab

3.3 Proposals received through online for Scrutiny and consideration: (23 cases)

Sr. No	Registration Number	Thematic Area	Name of PI and Address	Title of Project
3.3.1	724/2024/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Prof. Nabeel Ahmad, Dev Bhoomi Uttarakhnad University	Cataloging of potential microbial communities and development of nano-sensor for ecosystem across Himalayan Sulphur springs Sahastradhara, Uttarakhand
3.3.2	704/2024/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Dr. Rajesh Bajpai, North Eastern Hill University, Shillong	Studies on diversity, biomedical applications and conservation of lichens from Narpuh Wildlife Sanctuary, Meghalaya
3.3.3	697/2024/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Dr. V.P. Uniyal, Graphic Era (Deemed to be) University, Dehradun	Impact of Forest Fires on Biological diversity of the Mandakini Catchment Area, Rudraprayag: A Multi-Taxa Approach
3.3.4	712/2024/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Dr. Nitin S. Sawant, Goa University	Evaluation of Ecosystem functioning using Herpetofauna as a model system in Goa and adjoining areas of Maharashtra and Karnataka
3.3.5	715/2024/RE	Pollution Prevention – Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	Dr. C. Amutha, Madurai Kamaraj University, Delhi	Long-term exposure of Bisphenol A on fish reproduction: A comparative study on field and laboratory

3.3.6	716/2024/RE	Pollution Prevention – Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	Dr. Surya Singh, ICMR NIREH Bhopal	Exploring the ecological and human health aspects of microplastics: A pervasive emerging environmental contaminant of concern (MPEECH)
3.3.7	739/2024/RE	Pollution Prevention – Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	Dr. R Saravana Sathiya Prabhakar, Mepco Schlenk Engineering College, Sivakasi	Nano particles enabled catalytic pyrolysis of Prosopis juliflora and steam assisted gasification of bio char for enhanced hydrogen gas recovery
3.3.8	691/2024/RE	Socio-economic issues of environment and Sustainable Development	Dr. Sumedha Jayprakash Shejulpatil, Agricultural Development Trust, Baramati, Pune	Evaluate the efficacy of Homeopathic and Microbial compounds for development of residue free new formulation to manage the Fall Armyworm on maize
3.3.9	772/2024/RE	Socio-economic issues of environment and Sustainable Development	Dr. Balkrishna Sopan Bhople, Punjab Agricultural University, Ludhiana	Biochar-Mediated Management of Invasive Weed (Lantana camara L.) and its Impact on Agronomic Performance and Soil Fertility in the Sub-mountainous Zone of Punjab
3.3.10	719/2024/RE	Taxonomy	Prof. Ram Krishan Negi, University of Delhi	Unlocking Genetic Diversity: Molecular Taxonomy of Freshwater Fish species in the Satluj River, H.P
3.3.11	737/2024/RE	Taxonomy	Dr. Atanu Naskar, ZSI Kolkata	Integrative taxonomy and phylogeny of non-biting midges (Diptera: Chironomidae) from Western Ghats with an emphasis on their ecological and molecular aspects
3.3.12	649/2024/RE	Taxonomy	Dr. Bheem Dutt Joshi, Scientist C, Wildlife Section, Zoological Survey of India, Prani Vigyan Bhawan, New Alipore, Kolkata.	Unravelling Taxonomic Complexity: Phylogeographic Patterns and Cryptic Diversity in the Pethia ticto Complex (Cypriniformes: Cyprinidae) of Indian Rivers
3.3.13	688/2024/RE	Taxonomy	Dr. Trupti Jadhav, DCTs Dhempe College of Arts and Science, Miramar	Taxonomic study of Freshwater Fishes in Goa Using Morphological and Molecular Approaches

3.3.14	733/2024/RE	Sustainable Management of Natural Resources	Dr. Vedpriya Arya, Patanjali Research Foundation Trust, Haridwar	Bioprospecting of Endophytic fungi from Invaluable medicinal plants distributed in different agro-climatic zones of Uttarakhand, India
3.3.15	690/2024/RE	Sustainable Management of Natural Resources	Dr. Neetu Divya, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar	Design and Development of Perovskite Solar Cells (PSCs) by utilizing Quantum Dots Materials
3.3.16	809/2024/RE	Sustainable Management of Natural Resources	Dr. Munendra Kumar, Assistant Professor, Department of Zoology, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh	Analysis of actinomycetes from the diverse habitats of Arunachal Pradesh and study of their impact on nanoparticle synthesis.
3.3.17	775/2024/RE	Sustainable Management of Natural Resources	Dr. Raj Kumar, ICAR-Central Soil Salinity Research Institute, Kach	Developing high-value tree-based plantation systems for economic and ecological security in sodic water environments.
3.3.18	750/2024/RE	Climate Change: Vulnerability & Risk Assessment, Process, Mitigation and Adaptation	Mrs. Minati Bindhani, Women and Child Welfare Society, Delhi	Lecture and Demonstration Programme on "Biodiversity Conservation in the Face of Climate Change.
3.3.19	759/2024/RE	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Dr. Ningappa Changond Hiragond, Yashwantrao Chavan Mahavidyalaya Halkarni	An assessment of avifauna diversity, their migration and conservation status in Yadahalli Chinkara Wildlife Sanctuary, Bagalkot: Karnataka
3.3.20	758/2024/RE	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Prof. Vartika Mathur, Sri Venkateswara College, University of Delhi	Navigating the Lantana Conundrum: Invasion to Restoration through Soil Dynamics and Native Grass Interactions
3.3.21	801/2024/RE	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Dr. Abhijit Das, Wildlife Institute of India, Chandrabani, Dehradun	Frogs are also Wildlife: Conservation of heavily harvested frogs of Sikkim
3.3.22	618/2023/RE	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Prof. Jamal A Khan, Aligarh Muslim University, Aligarh	Biodiversity Characterization and Development of Biodiversity Conservation Plan for Unexplored Sohagi Barwa and Suhelwa Wildlife Sanctuaries of Uttar Pradesh

3.3.23	814/2024/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Prof. Ramanathan, Annamalai University, Annamalainagar	T.	Establishment of Mangrove Gene bank for Germplasm Conservation in South east coast of India for climate change mitigation
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3.4 Proposals in which PI could not attend the earlier meeting of the TFAC: 04 Cases

Sr. No	Registration Number	Thematic Area	Name of PI and Address	Title of Project and Duration
3.4.1	578/2023/RE	Use of remote sensing technology for inventorisation, assessment and monitoring of country"s natural resources such as land, water, forests, wetlands, glaciers etc. and for environmental conservation and protection on areas given above	Dr. H.K. Ramaraju, Dayananda Sagar College of Engineering, Shavigemalleshwar a Hills, Kumaraswamy Layout, Bangalore-560111	Pre processing approaches in Machine learning and Remote Sensing based on Groundwater Potential mapping in the drought prone area of North Eastren part of Tumkur district, Karnataka. Duration: 3 Years
3.4.2	601/2023/RE	Pollution Prevention - Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	Dr. Ramanathan Ayothiraman, Room No 319, Block-Vdepartment of Civil Engineering, Indian Institute of Technology Delhi, Hauz Khas, New Delhi, India	Waste Reutilization for Liquefaction Mitigation Duration: 3 Years
3.4.3	590/2023/RE	Pollution Prevention - Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc	Dr.Bhanu Prakash Vellanki, Department of Civil Engineering, IIT Roorkee, Roorkee, 247667, Uttarakhand	Development of novel biodegradable multifunctional mulching film for sustainable and environmentally friendly agriculture practices. Duration: 3 Years
3.4.4	337/2020/RE	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc) and Evaluation of Ecosystem Services	Dr. Angayarkanni J, Department of Microbial Biotechnology, BharathiarUnivesity, Coimbatore	Plausible role of Bacteriophages present in the High Altitude Himalayan River waters Duration: 2 Years

Agenda Item No.4.0 Review of the progress of the ongoing projects and completed projects for acceptance of the Final Technical Report (FTR):

4.1 Review of the progress of the ongoing projects: (02)

Sr. No	File Number	Name of PI and Address	Title of Project and Duration
4.1.1	22018/18/2019-CS(Tax)	Dr. P. Murugesan, Asst. Professor, CAS in Marine Biology, Annamalai University, Parangipettai-	Taxonomy and mass scale production of selected species of polychaetes for augmenting aquaculture and natural stock.
4.1.2	22018/05/2019-CS (Tax)	Dr. A. Gopalakrishnan, CASMB, Annamalai University, Parangipettai.	Taxonomy and epidemiology of pathogenic viruses and fungi of commercially important fin and shellfishes of Coromandel Coast.

4.2 Review of the completed projects for acceptance of the Final Technical Report (FTR): (10)

Sr. No	File Number	Name of PI and Address	Title of Project and Duration
4.2.1	22018/30/2015-AICOPTAX	Dr. Swetapadma Dash, Scientist C & OIC Zoological Survey of India Gopalpur- Ganjam, Odisha	Diversity of Water-striders (Hemiptera: Gerridae) from Principal Estuaries of eastern coast of India
4.2.2	22018/45/2010-CS(TAX)	Dr. M. S. Saini, Asian Educational Institute, Patiala	"Hymenoptera: Apoidea, Part-I Meliponinae (Stingless bees), Bombinae (Bumble bees) and Xylocopinae (Carpenter bees) from North-East and North-Western Himalaya"
4.2.3	19-38/2018/RE	Prof. S. Jaya Kumar, Pondicherry University, Pudducherry	Assessment of Changes for the Conservation and Management of Sathyamangalam Tiger Reserve.
4.2.4	19-30/2018-RE	Dr. R. Rani Hemamalini, Professor and head/EEE, St. Peter's Institute of Higher Education and Research, Chennai	Design, Development, and Evaluation of Indigenous sensors-based Air Quality Monitoring System and Data Analysis Using Deep Learning
4.2.5	22018/28/2015-CS(Tax)	Dr P.S. Lyla, Prof., CAS in Marine Biology, Annamalai University Parangipettai	Taxonomical investigation on Ostracodes and Branchiopods in the Southeast coast of India.
4.2.6	22018/30/2019-CS (Tax)	Dr. M. Thangaraj, Asstt Prof, CASMB, Annamalai University, Parangipettai	Diversity, molecular taxonomy and phylogenetic assessment of snapping shrimps (Family: Alpheidae) in Palk Bay and Gulf of Mannar.
4.2.7	22018/15(iv)//2015-CS(Tax)	Dr. A. Sarvankumar, Asstt. Professor, CAS Marine Biology, Annamalai University, Parangipetti	Distribution and Identification of Phylum Kinorhyncha, Gastrotricha and Tardigrada in the Island Environments of India.
4.2.8	22018/04/2019-CS (Tax)	Prof. K. Kathiresan, Emeritus Prof., CASMB	Preparation of Checklist of Mangroves.

		Annamalai University, Annamalainagar.	
4.2.9	19-7/2018-RE	Dr Gautam Talukdar, Wildlife Institute of India, Chandrabani, Dehradun.	"Ecology and Recovery of critically endangered Vulture species in Pong Dam Protected Area (PA) and its Eco Sensitive Zone (ESZ) in district Kangra, Himachal Pradesh"
4.2.10	19-31/2018-RE	Dr. Manchi Shirish S., Principal Scientist, SACON-WII, Coimbatore.	"Population, Ecology, Status and Conservation of Indian Swiftlet (Aerodramus Unicolor) west coast and offshore islands in the Western Ghats of Maharashtra"

Agenda Item No.5: Any other item(s) with permission of Chair.
