



भारतीय उष्णदेशीय मौसम विज्ञान संस्थान
(पृथ्वी विज्ञान मंत्रालय, भारत सरकार का एक स्वायत्त संस्थान)
डॉ. होमी भाभा मार्ग पाषाण, पुणे- ४११ ००८

INDIAN INSTITUTE OF TROPICAL METEOROLOGY
(An Autonomous Institute of the Ministry of Earth Sciences, Govt. of India)
Dr. Homi Bhabha Road, Pashan, Pune - 411 008. India



प्रो. रवि एस. नन्जुण्डेया
निदेशक

Prof. Ravi S. Nanjundiah
Director



Ref: IITM/Metflux/NG/2019-20

Date: 16 September 2019

The Registrar
Tezpur University
Tezpur-784082, Assam

Sub: Sanction of project on “Soil-Plant-Atmosphere Study in Relation to Net CO₂ Flux from Terrestrial Ecosystem of Assam”

Sir,

The Advisory Committee for the MetFlux India Project made an assessment of the project in a meeting held at the Mausam Bhavan, IMD, New Delhi on 9th July 2019. The recommendations are given below.

The data presented by the PI showed relatively high values of positive NEE during the night time, which may have been triggered by high soil respiration. Hence the PI should arrange to install a Soil CO₂ sensor to quantify the heterotrophic respiration. An EC sensor within the canopy should be used to characterise the under story carbon fluxes. Other biophysical parameters such as, plant biomass, leaf area index, fresh litter fall etc. should also be measured on a regular basis. The Committee advised to carry out rigorous estimation of the NEE and its partitioning into the GPP and ecosystem respiration. The relation between NEE and various biophysical parameters should be examined. Since a large area of the forest turns to wetland on a seasonal basis, the Methane fluxes may also be measured. The Committee, in principle, recommends allocating funds to meet the operational costs for the next three years, viz, 2019-2020, 2020-2021, and 2021-2022.

Based on the recommendation of the Committee, the Director, IITM, Pune hereby approves the continuation of the above mentioned project for a period of three years (2019-2022). An amount of Rs. 17,75,400/- is being sanctioned for the current financial year (Apr 2019 to Mar 2020).

....2/-

The year wise break up details of funds under the above mentioned project is furnished below.

S/ N	Description	1st Year	2nd Year	3rd Year
01	Manpower; Project Assistant – 01 (salary may be revised as per the MoES notification)	2,64,000	2,64,000	2,64,000
02	Contingency/consumable including a portable cabin to house the sensors, battery etc.	8,00,000	4,00,000	4,00,000
03	Travel	2,00,000	2,00,000	2,00,000
04	Other Cost (Battery replacement/ Additional panels for new systems/ Fencing maintenance/Repainting of tower)	3,50,000	2,50,000	2,50,000
05	Sub-Total	16,14,000	11,14,000	11,14,000
06	Overhead (10 % of (01+02+03+04))	1,61,400	1,11,400	1,11,400
09	TOTAL (05+06)	17,75,400	12,25,400	12,25,400

The basic terms and conditions are appended in the annexure.

Kindly acknowledge the receipt of this letter.

Sincerely yours,



(Prof. Ravi Nanjundiah)

**Annexure:
Terms and Conditions:**

1. Duration of the project will be until 31 Mar 2022. Further extension of the project is based on the satisfactory progress and at the discretion of the Director, IITM.
2. Salary/Wages to be decided as per the MoEs Rules.
3. Allocation of budget is tentative and subject to change after reviewing progress, both physical and financial as recommended by the Advisory Committee.
4. A list of equipment procured and other assets created for this project shall be provided to IITM. All equipment/assets procured shall be maintained in the stock register of IITM.
5. All the instruments provided by IITM and the data generated will always remain the property of IITM and will be returnable after the expiry of the agreement.
6. While implementing the program all relevant procedures will be followed and IITM shall be apprised of the progress of the project from time to time.
7. Utilization certificate and statement of expenditure for the expenditure incurred on the project shall be submitted at the end of each financial year and also at the end of the project in the prescribed Pro forma.
8. The detailed project report has to be submitted in triplicate within one month after completion of the project in addition to monthly progress report.
9. The PI/Co-PI should be responsible in getting the approval from the concerned forest department to carry out the observational work at the current tower site until the tenure of the project. A copy of the approval letter should be submitted to the Director, IITM.

Program Implementation:

The project under consideration will be carried out by Dr. (Mrs.) Nirmali Gogoi and her team involved in the eco-system flux study under the Metflux India Project. IITM will provide full monetary support while the Tezpur University will be responsible in arranging administrative and logistic requirements. Progress will be monitored by a team constituted by the Director, IITM.



Dr. S. Chakraborty
Dy. Project Director, Metflux Project

CC:

1. Dr. (Mrs.) nirmali Gogoi
Department of Environmental Science
Tezpur University, Tezpur-784082
2. Account Section, IITM, Pune
3. Office Copy