

MoES/P.O./(Geo)/31/2014
Government of India
Ministry of Earth Sciences

Prithvi Bhavan, Lodhi Road,
New Delhi-110003
Dated: 18.07.2018

ADMINISTRATIVE ORDER

Subject: Project entitled "Paleopedological, Sedimentological and thermochronological records of climate change and tectonics during the evolution of Siwalik succession, Punjab re-entrant".

PI: Dr. Pankaj Srivastava, D/o Geology, University of Delhi, Delhi-110007.
Co-PI: Dr. Rohtas Kumar, Wadia Institute of Himalayan Geology, 33, Gen. Mah. Singh Road, Dehradun-248001.
Co-PI: Dr. N.Suresh, Wadia Institute of Himalayan Geology, 33, Gen. Mah. Singh Road, Dehradun-248001.
Co-PI: Dr. R.C.Patel, D/o Geophysics, Kurukshetra University, Kurukshetra-136119.

Sanction of the President of India is hereby conveyed under rule 18 of the Delegation of Financial Power Rules, 1978 for implementation of the above-mentioned project at an estimated cost of Rs. 76,84,600/- (Rupees seventy six lakhs eighty four thousand six hundred only) (i.e. Rs. 34,06,800/- to University of Delhi, Delhi, Rs. 18,08,200/- to WIHG, Dehradun and Rs. 24,69,600/- to Kurukshetra University, Kurukshetra) during the period of three years (2018-19 to 2020-21).

2.0 Objectives:

- Application of an intergrated approach (paleopedology, sedimentology, Fission Track dating) to explore 4 critical sections of the Siwaliks from western part of the Punjab re-entrant for paleoenvironments and hinterland tectonics.
- Evaluate the role of uplift and exhumation of the Dhauladhar Range in late Cenozoic weathering, sedimentation, and paleoprecipitation in the Punjab re-entrant.

2.1 Programme & Implementation Plan:

The interrelationship of exhumation-orography-climate is the key to understand of the evolution of the Himalayan Foreland Basin (HFB). This record is well preserved in the Late Cenozoic successions (<13Ma) of the Siwaliks. Over the years, the basin has been studied extensively with significant information on tectonics, palaeoclimate, sedimentology, and geochronology. Despite this, a knowledge gap still remains there about paleopedology, climate change, and thermochronology for the Siwaliks.

In the present project, fluvial sequences from 4 critical sections (Katliu, Nagrota, Kotla and Kangra Sections) of the Siwaliks (12Ma-5Ma) from western Panjab re-entrant will be studied using an integrated approach involving paleopedology, sedimentology and low-temperature thermochronology (fission track dating) to comprehend the role of climate change and tectonics in the evolution of the Late Cenozoic succession of the HFB.

2.2 Implementing Organization:

The project will be jointly implemented by University of Delhi, Delhi, Wadia Institute of Himalayan Geology, Dehradun and Kurukshetra University, Kurukshetra.

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2.3 Estimated Project Cost:

Total estimated cost of the project is Rs. 76,84,600/- (Rupees seventy six lakhs eighty four thousand six hundred only) (Rs. 34,06,800/- to University of Delhi, Delhi, Rs. 18,08,200/- to WIHG, Dehradun and Rs. 24,69,600/- to Kurukshetra University, Kurukshetra) during the period of three years (2018-19 to 2020-21). The year-wise / item-wise fund requirement is given below:

I. University of Delhi, Delhi					Budget in Rupees	
Sl. No.	Item	1 st Year 2018-19	2 nd Year 2019-20	3 rd Year 2020-21	Total	
A. Recurring						
i.	Manpower Junior Research Fellow (One) @ ₹ 25,000 + 30% HRA p.m. for 1 st & 2 nd yr. and @ ₹ 28,000 + 30% HRA p.m. for 3 rd yr.	3,90,000/-	3,90,000/-	4,36,800/-	12,16,800/-	
ii.	Consumables	50,000/-	50,000/-	50,000/-	1,50,000/-	
iii.	Travel and Field work	1,00,000/-	1,00,000/-	1,00,000/-	3,00,000/-	
iv.	Contingency	40,000/-	40,000/-	40,000/-	1,20,000/-	
Total Recurring		5,80,000/-	5,80,000/-	6,26,800/-	17,86,800/-	
B	Overhead	40,000/-	40,000/-	40,000/-	1,20,000/-	
C. Non-Recurring						
i.	Permanent Equipment (Large capacity Centrifuge and Computer)	15,00,000/-	--	--	15,00,000/-	
Total Non-Recurring		15,00,000/-	--	--	15,00,000/-	
Grand total A+B+C		21,20,000/-	6,20,000/-	6,66,800/-	34,06,800/-	

II. Wadia Institute of Himalayan Geology (WIHG), Dehradun					Budget in Rupees	
Sl. No.	Item	1 st Year 2018-19	2 nd Year 2019-20	3 rd Year 2020-21	Total	
A. Recurring						
i.	Manpower Junior Research Fellow (One) @ ₹ 25,000 + 20% HRA p.m. for 1 st & 2 nd yr. and @ ₹ 28,000 + 20% HRA p.m. for 3 rd yr.	3,60,000/-	3,60,000/-	4,03,200/-	11,23,000/-	
ii.	Consumables (Chemicals, Glassware, Stationary, Cartridge etc.)	35,000/-	45,000/-	35,000/-	1,15,000/-	
iii.	Travel and Field work	1,00,000/-	1,00,000/-	1,00,000/-	3,00,000/-	
iv.	Contingency	50,000/-	50,000/-	50,000/-	1,50,000/-	
Total Recurring		5,45,000/-	5,55,000/-	5,88,200/-	16,88,000/-	
B	Overhead	40,000/-	40,000/-	40,000/-	1,20,000/-	
Grand total A+B		5,85,000/-	5,95,000/-	6,28,200/-	18,08,200/-	

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III. Kurukshetra University, Kurukshetra

Sl. No.	Item	Budget in Rupees			Total
		1 st Year 2018-19	2 nd Year 2019-20	3 rd Year 2020-21	
A.	Recurring				
i.	Manpower Junior Research Fellow (One) @ ₹ 25,000 + 10% HRA p.m. for 1 st & 2 nd yr. and @ ₹ 28,000 + 10% HRA p.m. for 3 rd yr.	3,30,000/-	3,30,000/-	3,69,600/-	10,29,600/-
ii.	Consumables CN glasses (cn2 & cn5), chemicals, glasswares etc, irradiation charges, vehicle hiring and other field expenses	3,65,000/-	3,15,000/-	2,80,000/-	9,60,000/-
iii.	Travel and Field work	70,000/-	70,000/-	70,000/-	2,10,000/-
iv.	Contingency	50,000/-	50,000/-	50,000/-	1,50,000/-
	Total Recurring	8,15,000/-	7,65,000/-	7,69,600/-	23,49,600/-
B	Overhead	40,000/-	40,000/-	40,000/-	1,20,000/-
	Grand total A+B+C	8,55,000/-	8,05,000/-	8,09,600/-	24,69,600/-

	1 st Year 2018-19	2 nd Year 2019-20	3 rd Year 2020-21	Total
University of Delhi, Delhi	21,20,000/-	6,20,000/-	6,66,800/-	34,06,800/-
Wadia Institute of Himalayan Geology (WIHG), Dehradun	5,85,000/-	5,95,000/-	6,28,200/-	18,08,200/-
Kurukshetra University, Kurukshetra	8,55,000/-	8,05,000/-	8,09,600/-	24,69,600/-
Grand Total	35,60,000/-	20,20,000/-	21,04,600/-	76,84,600/-

2.4 Time Schedule: 03 years (2018-19 to 2020-21).

2.5 Description and proposed programme to be implemented by :

This project will be implemented by the University of Delhi, Delhi; Wadia Institute of Himalayan Geology, Dehradun and Kurukshetra University, Kurukshetra through the above-mentioned PIs and Co-PI as per the details given in Annexure-I.

3.0 The expenditure will be booked under the following Budget Head:

'3425'	Other Scientific Research (Major Head)
60.200	Assistance to Other Scientific Bodies (Minor Head)
52	Research Education and Training Outreach
52.00.31	Grant-in-Aid-General
52.00.35	Grants for creation of Capital Assets

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4.0 Other Terms & Conditions:

- Allocation of budget is tentative and subject to changes after review of progress, both physical and financial as recommended by the Committee of Experts.
- **The grantee organisation will maintain separate audited account for the project and the entire amount of grant will be kept in an interest bearing bank account.** The interest earned / accrued should be reported to MoES (financial year wise) while submitting the Statement of Expenditure/Utilization Certificate. The interest thus earned will be treated as a credit to the grantee organisation, which will be adjusted towards future release of grant.
- A list of equipments procured and other assets created for this project from the funds released shall be provided to MoES in the prescribed format as per GFR. The ownership in the physical and intellectual assets created or acquired out of MoES funds shall vest in MoES.
- All equipments / assets procured out of Modes grant shall be maintained by the grantee institute and will be available for use by other researchers.
- All equipments / assets procured from MoES funded shall be maintained in the stock register of the grantee institute and should not treat such assets as their own assets in their Book of Accounts but should disclose their holding and using such assets in the Notes to Accounts specifically. No asset/equipment shall be diverted and /or disposed off without prior approval of the competent authority in MoES.
- Codal provisions as conveyed in GFR, manual on Policies and Procedures for purchase of Goods and GoI instructions issued from time to time for services and requisition of research personnel shall be ensured.
- **This sanction is subject to the condition that the grantee organization will furnish to the Ministry of Earth Sciences, financial year wise Utilization Certificate (UC) in the proforma prescribed as per GFR 2017, audited statement of expenditure (SE) along with up to date progress report at the end of each financial year duly reflecting the interest earned / accrued on the grants received under the project and DBT details of the manpower as per the enclosed proforma.**
- While submitting Utilisation Certificate/Statement of Expenditure, the organisation has to ensure submission of supporting documentary evidences with regard to purchase of equipment/capital assets as per the provisions of GFR 2017. Subsequent release of grants under the project shall be considered only on receipt of the said documents.
- The Position of project staff is co-terminus with the duration of the project & MoES would have no liability towards such manpower costs beyond the duration of the project.
- Overhead expenses are meant for the host institute towards the cost for providing infrastructural facilities and benefits to the staff employed in the project, etc.
- While implementing the programe all relevant procedures will be followed and the Ministry shall be apprised of the progress of the project from time to time.
- The account of the grantee organisation shall be open to inspection by the sanctioning authority and audit (both by C&AG of India and Internal Audit by the Principal Accounts Office of the MoES), whenever the organisation is called upon to do so, as laid down under Rule 236(1) of General Financial Rules 2017.

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- 5.0 This issues under powers delegated to this Ministry and with the concurrence of IFD vide their Dy. No. 226/IFD/5636/2018-19/REACHOUT dated 04.07.2018 and with the approval of the Secretary, MoES vide Dy. No. 5636/Secy/18 dated 09/07/2018.

Archna Srivastava
18.7.18
(Archna Srivastava)

Under Secretary to the Govt. of India

To,

The Pay and Accounts Officer,
Ministry of Earth Sciences,
New Delhi-110003

Copy to:

1. The Principal Director of Audit (Scientific Department) AGCR Building, I.P. Estate, New Delhi 110 002.
2. The Registrar, University of Delhi, Delhi-110007.
3. The Director, Wadia Institute of Himalayan Geology, 33, Gen. Mah. Singh Road, Dehradun-248001.
4. The Registrar, Kurukshetra University, Kurukshetra-136119.
5. Dr. Pankaj Srivastava, D/o Geology, University of Delhi, Delhi-110007.
6. Dr. Rohtas Kumar, Wadia Institute of Himalayan Geology, 33, Gen. Mah. Singh Road, Dehradun-248001.
7. Dr. N.Suresh, Wadia Institute of Himalayan Geology, 33, Gen. Mah. Singh Road, Dehradun-248001.
8. Dr. R.C.Patel, D/o Geophysics, Kurukshetra University, Kurukshetra-136119.
9. Cash Section, MoES, New Delhi.
10. Controller of Accounts, MoES.
11. AS&FA / JS / Sc. G (GRI) / Dir (F) / AD (OL) / IFD, MoES.
12. PPS to Secretary, MoES.
13. Sanction Folder/ File copy.

Archna Srivastava
18.7.18
(Archna Srivastava)

Under Secretary to the Govt. of India