

List of the R&D Projects supported under the sub-programmes of NGP Division

Spatial Disaster Risk Reduction(SDRR) Costal Hazard Risk Assessment and Reduction (CHAR)					
S. N.	Project Title	PI Details	Total Cost in Rs.	Date of Sanction	Duration
1.	Mapping Active Tectonic Movements at the East Coast by CORS-GPS and MT-InSAR.	Dr. Abhishek Kumar Rai, IIT, Kharagpur	Rs. 49,02,832/-	26.04.2019	3 years
2.	Vulnerability Analysis and Risk Assessment of Coastal Hazards with Special Reference to Coastal Erosion Along Odisha Coast.	Prof. G.K. Panda, Institute of Green Energy & Geospatial Technology, Jagatsinghpur, Odisha	Rs. 46,42,792/-	01.07.2019	2 years
3.	Development of High Resolution Coastal Relief Model (CRM)- A demonstrative Case Study in Gulf of Khambat.	Dr. Balaji Ramakrishnan, IIT Bombay, Mumbai	Rs. 34,76,000/-	19.03.2019	2 Years
4.	Appraisal and Management of Multi Hazards of Sagar Island, West Bengal.	Dr. Pankaj Kumar Roy, School of Water Resources Engineering, Jadavpur, Kolkata	Rs. 35,53,176/-	24.06.2019	2 years
5.	Impact of 2018 Kerala Floods on the Oceanographic Parameter and Sea Level Variation Along Kerala Coast.	Dr. A A. Mohammad Hatha, Department of Marine Biology, School of Marine Sciences, CUSAT, Cochin, Kerala	Rs. 31,47,188/-	19.08.2019	2 years
6.	FLO-COASTA -Flood Vunerability Mapping of Pondicherry-Cuddalore-Sirkazhi Region.	Dr. R. Selvakumar, School of Civil Engineering, SASTRA Deemed University, Tamil Nadu	Rs. 23,17,744/-	01.09.2019	2 years
7.	Geospatial Monitoring of Microplastic Hazards Along Gulf of Mannar Marine Biosphere Reserve,	Prof. S Ravikumar, Alagappa University, Karaikudi, Tamil Nadu	Rs. 34,69,090/-	12.07.2019	3 years

	Tamil Nadu.				
8	SLR-Coach- Impact of projected sea level rise over the Coastal Region of Chennai, Tamil Nadu	Dr. J. Saranavel, Centre of Remote Sensing, Bharathidasan university, Tiruchirappalli, Tamil Nadu.	Rs. 39,80,086/-	25.09.2020	3 years
9	Prediction of coastal zone vulnerability due to sea level rise under the changing climate.	Prof. Manasa Ranjan Behera, Department of Civil Engineering, IIT Bombay, Maharashtra	Rs. 37,71,422/-	30.01.2020	2 years
10	Coastal Erosion and Risk assessment along Kerala state Geo-Spatial Technologies	Dr. K. Ch. V. Naga Kumar, Department of Engineering, IIT Madras, Chennai, Tamil Nadu	Rs. 16,88,083/-	06.11.2020	2 years
11	Geospatial Technology for Identification of Tsunami Vulnerable Zone and Risk Assessment for Emergency Response System - Tamil Nadu Coast	Dr. T. Ram Kumar, Dept. of Earth Sciences, Annamalai University, Tamil Nadu	Rs. 32,96,160/-	09.02.2021	2 years 6 Months
12	Development of coastal water quality information system(CEIS) for the coastal stage of India	Dr. G. Saravana Kumar, Department of Engineering Design, IIT Madras, Chennai, Tamil Nadu	Rs.26,83,930/-	26.07.2021	2 years
Landslide Hazard Mitigation					
13	Forewarning System for Landslide Prediction along Mangan and Chungthang road, Sikkim	Dr. A.K. Verma, Department of Mining Engineering, IIT BHU, Varanasi, Uttar Pradesh	Rs.43,78,700/-	16.10.2020	3 years
14	Development of Forewarning System for Landslides in the Nilgiris	Prof. S S Chandrasekaran, School of Civil Engineering, Vellore Institute of Technology (VIT), Vellore, Tamil Nadu	Rs.48,67,387/-	28.10.2020	3 years
15	Study of Shear Zone Kinematics in the shillong Plateau Tectono-seismic implications and its	Dr. Sunayana Sarkar, Department of Civil Engineering, Mukesh Patel School of Technology	Rs.20,34,650/-	16.09.2020	3 years

	bearing upon landslide hazards in the northeast region, India	Management and Engineering, Bhakthi Vedanth Swami Marg, Near Cooper Hospital, JVPD Scheme, Vile Parle West, Mumbai, Maharashtra			
16	Geotechnical and Geology study of an active landslide in Himachal Pradesh (HP) for Vulnerability Mapping and Risk Assessment	Prof. Amit Shrivastava, Dept of Civil Engineering, Lovely Professional University, School of Civil Engineering, kapoorthala, Punjab	Rs.24,08,850/-	23.10.2020	2 years
17	Development of low cost Artificial Intelligence System for early detection of landslide	Dr. Naveen James, Department of Civil Engineering, Indian Institute of Technology-Ropar, Rupnagar, Nangal Road, Punjab	Rs.43,43,645/-	23.10.2020	3 years
18	Development of Landslide Early Warning System and Real Time Monitoring, Uttarakhand	Prof. Neelima Satyam, Department of Civil Engineering, IIT Indore, Madhya Pradesh	Rs.58,50,716/-	23.10.2020	3 years
19	Landslide Forewarning System for Manikaran, Himachal Pradesh, India	Dr. Mahesh Thakur, Department of Geology, Centre for Advanced Study in Geology, Panjab University, Sector-14, Chandigarh	Rs.56,72,308/-	18.11.2020	3 years
20	Geological, Geophysical Investigation and Design and Development of Cyber-Physical-System for Early detection of Landslide vis-a-vis Socio Economic Impact Assessment	Dr. Sarada Prasad Pradhan, Department of Earth Sciences, IIT Roorkee, Roorkee, Haridwar, Uttarakhand	Rs.58,95,653/-	19.12.2020	3 years
21	A low-cost MEMS-based and video-based monitoring and early warning system for rainfall induced	Dr. Kala Venkata Uday, School of Computing and Electrical Engineering, Indian	Rs.40,17,555/-	18.12.2020	3 years

	landslides	Institute of Technology, Mandi Kamand Campus, VPO Kamand, Mandi, Himachal Pradesh			
22	Investigation of Rainfall induced landslides and assessment of Risk of the selected landslides along Rishikesh-Badrinath highway in Garhwal Himalaya	Prof. Masood Ahsan Siddiqui, Department of Geography, Jamia Milia Islamia, Central University, Jamia Nagar, New Delhi	Rs.21,97,108/-	20.12.2020	3 years
Geospatial analytics					
23	Risk Assessment by Cable-powered Unmanned Aerial Vehicle in COVID prone high-density areas	Dr. Swarandeeep Sahoo, IIT ISM Dhanbad, Jharkhand	Rs. 26,62,461/-	15.09.2021	6 Months
24	Semantics-driven Theory-guided Analysis for Understanding the Development Pattern and Impact of COVID-19 Pandemic	Dr. Monidipa Das, Indian Statistical Institute, Kolkata, West Bengal	Rs. 14,49,965/-	28.09.2021	1 year
25	Geospatial Analytics for Socio-economic Interventions for Promoting Rural Livelihoods in Post-Pandemic Era: A Study of Paschim Medinipur District of West Bengal	Prof.Soumya Kanti Ghosh, Indian Institute of Technology, Kharagpur, West Bengal	Rs. 18,50,666/-	10.09.2021	1 year
26	Community Health Index CHI Measurement of a locality, based on inter-dependency modelling of healthcare establishments with relevant infrastructure setup	Prof. Bharath Bhikkaji, IIT Madras, Chennai, Tamil Nadu	Rs. 27,18,446/-	29.09.2021	9 Months
27	Dependency Modeling of Healthcare Infrastructure with a	Dr. Tapati Banerjee, National Atlas And Thematic Mapping	Rs. 19,72,324/-	02.12.2021	1 year

	special emphasis to pandemic induced health emergency management: Case Study of West Medinipur District of West Bengal, India	Organisation, Kolkata, West Bengal			
28	Geospatial Analysis and Development of Knowledge Dissemination Resources to Combat COVID-19 and Similar Pandemics in the Villages of Mylavaram and G. Konduru Mandals of Krishna district, Andhra Pradesh	Dr. V Ramakrishna, Lakireddy Bali Reddy College of Engineering, L.B.Reddy Nagar, Krishna District, Mylavaram, Andhra Pradesh	Rs. 17,67,084/-	24.11.2021	9 months
29	Socio-economic Impact of Migration during COVID-19 Crisis in the Sundarbans Region A Study of Sustainable Solutions using Geospatial Analytics	Dr. Sayak Roy chowdhury, IIT Kharagpur, West Bengal	Rs. 16,40,045/-	17.09.2021	6 Months
30	Pan India networked institutional support for COVID revival of socioeconomic activities in agriculture and construction sectors	Dr. Kailash Chandra Tiwari, Delhi Technological University, New Delhi	Rs. 28,49,990/-	16.09.2021	1 year
31	COVID-19 social vulnerability mapping Impact assessment of healthcare infrastructure, co-morbidity, crop residue burning and air quality indicators	Dr. R K Setia, Punjab Remote Sensing Centre, Ludhiana, Punjab	Rs. 10,61,683/-	10.09.2021	1 year
32	Dependency assessment of healthcare infrastructure Comparative study between West Bengal and Mizoram	Dr. Brototi Biswas, Mizoram University, Mizoram, Aizawl	Rs. 5,73,826/-	17.09.2021	9 months
33	Modeling	Dr. Sarbani Roy,	Rs. 8,55,554/-	14.09.2021	1 year

	geographically varying relationships of COVID-19 outcomes with socioeconomic and environmental factors for predictive risk analysis	Jadavpur University, Jadavpur, Kolkata, West Bengal			
Assessment of Regional Hydrological System using Space Borne Gravity Observations (GRACE)					
34	Assessment of Seasonal Variation in Hydrology and Cryosphere of upper Ganga Basin.	Prof. A. P Dimri, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.	Rs. 25,06,800/-	29.04.2019	3 years
35	Assessment of Seasonal Variation in Hydrology and Cryosphere of upper Ganga Basin.	Dr. Vishal Singh, National Institute of Hydrology, Roorkee, Uttarakhand	Rs. 23,19,600/-	29.04.2019	3 years
36	Evaluating Basin-Scale Estimates of Evapotranspiration using Space Based Observations.	Dr. Tajdarul Hassan Syed, Department of Earth Science, IIT Kanpur, Kanpur, Uttar Pradesh	Rs. 21,43,200/-	29.04.2019	3 years
37	Evaluating of the Soil Moisture Estimates using Combination of Water Budget Model and GRACE data.	Prof. Sekhar Muddu, Department of Civil Engineering, India Institute of Science, Bangalore, Karnataka	Rs. 28,55,400/-	29.04.2019	3 years
38	Assessment of Regional Hydrological System using Space Borne Gravity Observations with special reference to groundwater.	Dr. N.C. Mondal, National Geophysical Research Institute (NGRI), Uppal Road, Hyderabad, Telangana	Rs. 37,34,800/-	29.04.2019	3 years
39	Drought and hot-spell Assessment using the GRACE Gravity Records in Major River Basins of India.	Dr. Dileep K Panda, Indian Institute of Water Management, Chandrasekharpur, Bhuvneshwar, Odisha	Rs. 20,68,200/-	29.04.2019	3 years
40	Assessment of deformation due to Hydrological loading in Indo-Gangetic Plain and Garhwal-Kumaon	Dr. Ashutosh Chamoli, Department of Earth Sciences, IIT-Roorkee, Roorkee,	Rs. 18,69,600/-	29.04.2019	3 years

	Himalaya	Uttarakhand			
41	Assessment of Regional Hydrological Systems using Space Geodesy Ganga Basin.	Dr. M. Ravi Kumar, National Geophysical Search Institute (NGRI), Uppal Road, Hyderabad, Telangana	Rs. 21,76,800/-	29.04.2019	3 years
42	Assessment of Regional Hydrological using Space Borne Gravity Observation: Robust Estimation of Deformation due to Hydrological loading in NE-India and Upper Ganga River Basin.	Dr. M. Sithartha muthu Vijayan, Multi- scale modeling programme, CSIR Fourth Paradigm Institute CSIR-4PI, Wind Tunnel Road, Belur, Bangalore	Rs.19,11,800/-	01.05.2019	3 years
43	Evaluation of Anthropogenic Pressures Impact on Hydrological Processes over the Indian Subcontinent using Space borne Gravity Observations.	Dr. Virendra M. Tiwari (Dr. N. Srinivasa Rao), National Geophysical Research Institute, (NGRI), Hyderabad	Rs. 22,96,800/-	29.04.2019	3 years
44	Central Facilities and National Project Coordination- Assessment of Regional Hydrological Systems using Space Borne Gravity Observations.	Dr. Virendra M. Tiwari (Dr. A.P. Singh), National Geophysical Research Institute, (NGRI), Hyderabad	Rs. 2,65,39,048/-	29.04.2019	3 years
45	Technical Coordination of the Project on Assessment of Regional Hydrological Systems using Space Borne Gravity Observation.	Prof. P. Rajendra Prasad Center for Studies on Bay of Bengal Andhra University, Visakhapatnam Andhra Pradesh.	Rs. 5,00,000/-	29.04.2019)	3 years
Geospatial Solutions in Urban Governance					
46	Developing a Spatial Data Infrastructure with Application in urban Transport	Prof. Bhargab Maitra, IIT-Kharagpur, Kharagpur, West Bengal	Rs. 28,87,984/-	02.05.2019	2 years
47	Standard City GML Data Model Strategy for Consistent Modelling of Slums	Dr. Anjana Vyas, CEPT University, Ahmadabad, Gujarat	Rs. 25,13,632/-	26.04.2019	2 years

	Smart Cities Across India				
48	Modelling Spatial Data Intelligence of Pallikaranai-Muttukadu Micro-Watershed of Greater Chennai Region-Flood Occurrence and Return Period Estimation for Sustainable Watershed Management	Dr. R. Jaganathan , Department of Geography, University of Madras, Chennai, Tamil Nadu	Rs. 33,10,252/-	11.07.2019	2 years
49	Shapley Value Based Ambulance Repositioning Using Spatial Temporal Data	Dr. R K Amit, Management Studies, IIT Madras, Chennai, Tamil Nadu	Rs. 16,85,735/-	01.03.2019	2 years
50	Identification, Assessment and Model Building of Urban Morphology using Geospatial Techniques: A Study of Border City Agartala, Tripura	Dr. Saptarshi Mitra , Tripura University Suryamaninagar, Agartala, Tripura	Rs. 20,39,972/-	15.05.2019	2 years
51	A Framework for Modelling Interdependent Healthcare Critical Infrastructure During Extreme Events	Dr. Surya Durbha , Centre of Studies in Resources Engineering, IIT Bombay, Maharashtra	Rs. 20,00,592/-	19.02.20219	2 years
52	Geospatial Location Estimation and Navigation in Autonomous Season Networks/Smart City	Dr. Sudhir Kumar , Indian Institute of Technology Patna – Patna, Bihar	Rs. 28,85,344/-	26.04.2019	2 years
53	Auto BIM: Automatic Discovery and Construction of Building Information Model (Construction and Geo-mapping of Building Information and Energy Model)	Subhankar Mishra , School of Computer Sciences, NISER Bhubaneswar, Odisha	Rs. 18,84,344/-	11.03.2019	2 years
54	Spatio Temporal Air Quality Data Monitoring and Prediction Using	Dr. Pravesh Biyani , ECE Dept, IIIT Delhi	Rs. 32,27,576/-	08.08.2019	2 years

	Moving Vehicles				
55	BIM to GIS Integration & Geospatial Processing	Prof. Kamal Jain , Department of Civil Engineering, IIT Roorkee	Rs. 31,74,292/-	02.05.2019	2 years
56	Development of Smart Parking Management System Using Sensors, IoT, and GIS Technologies	Dr. S.V. Srikanth, Centre for Development of Advanced Computing (C-DAC), Hyderabad	Rs.39,78,920/-	22.08.2019	2 years
57	A framework for Vulnerability Mapping and Integrated early Warning	Dr. Chithra K, Department of Architecture and Planning, NIT Calicut, Kerala	Rs.32,11,358/-	05.10.2020	2 years
58	Developing Framework for Indoor Location Based Services with Seamless Indoor Outdoor Navigation by Expanding Spatial Data Infrastructure	Prof Chandreyee Chowdhury , Computer science and Engineering, Jadavpur University, Kolkata	Rs.24,35,224/-	27.10.2020	2 years
59	Development of Geo-magnetism Based Indoor Navigation System	Dr. P S Kalyan Sasidhar , ICT DA-IICT ,Gujarat	Rs.27,41,332/-	27.10.2020	2 years
60	Sime-Spatial Data Infrastructure for Indoor Navigation and Multi Storey Edifices	Dr. Arun Kanth A Jose, Department of Electronic and Communication Engineering, Muthod Institute of Technology and Science, Kerala	Rs.12,57,872/-	19.11.2020	2 years
61	Development of Industrial Indoor Assets Positioning and Navigation System Using Geo-Spatial Analysis and Ultra Wide Band Technology	Dr. D Sujitha Juliet, Department of Computer Science and Technology, Karunia Institute of technology and sciences, Coimbatore, Tamil Nadu	Rs.27,89,644/-	27.10.2020	2 years
62	IOT Enabled Smart Cities: Pollution, Health and Governance	Dr. Sachin Chaudhari, Signal Processing and Communications Research Centre,	Rs.42,29,355/-	13.10.2020	2 years

		IIT Hyderabad, Gachibowli, Telangana			
63	City GML based 3D Models for Smart Cities in India Using LiDAR Point Cloud	Dr. A M Ramiya, Department of Earth and Space Science, Indian Institute of Space Science and Technology, Thiruvananthapuram, Kerala	Rs.33,29,683/-	27.08.2020	2 years
<u>Geospatial Science</u> <u>Geodesy</u>					
64	National Center for Geodesy	Prof. Onkar Dikshit, Department of Civil Engineering, Indian Institute of Technology Kanpur, Uttar Pradesh	Rs.21,14,04,096/-	28.06.2019	5 years
65	Regional Centers for Geodesy (06 centers)	Coordinated by Prof. Onkar Dikshit, Department of Civil Engineering, Indian Institute of Technology Kanpur, Uttar Pradesh Centers at IIT-Bombay and IRS Anna University,	Rs.1,44,90,080/- (for two centers)	31.03.2022	3 years
		Centers at IIT-ISM Dhanbad, IISST-Trivandrum, MNNIT-Allahabad and MANIT-Bhopal	Rs.1,40,90,720/- (for four center)		