



MEMORANDUM OF UNDERSTANDING

between

**Indian Council of Forestry Research and Education,
Dehradun**

and

**Indian Institute of Technology (Indian School of Mines),
Dhanbad**



Indian Council of Forestry Research and Education (hereinafter referred to as "**ICFRE**", which expression, shall unless repugnant to the context thereof, shall mean and include its successors and assignees) through the **Director General, ICFRE, Dehradun** of the First Part.

and

Indian Institute of Technology (Indian School of Mines) (hereinafter referred to as "**IIT(ISM)**", which expression, unless repugnant to the context thereof, shall mean and include its successors and assignees) through the **Director, IIT(ISM), Dhanbad** of the Second Part.

ICFRE and IIT(ISM) are collectively referred to as "Parties" and individually as "Party".

Background

This Memorandum of Understanding (MoU) sets for the terms and understanding between Indian Council of Forestry Research and Education, Dehradun and **Indian Institute of Technology (Indian School of Mines) Dhanbad** to collaborate in applied research programs, capacity building and knowledge sharing on forest, biodiversity conservation, ecosystems, climate change vulnerability, climate change mitigation and adaptation and livelihood of forest dependent communities and other subjects mutually agreed between the two parties.

Preamble

Whereas

Indian Council of Forestry Research and Education is an autonomous body of Ministry of Environment, Forest and Climate Change, Govt. of India and is an apex body in the national forestry research system. It has been undertaking the holistic development of forestry research through need based planning, promoting, conducting and coordinating research, education and extension covering various aspects of forestry. The council deals with the solutions based forestry research in tune with the emerging issues in the sector, including global concerns such as climate change, conservation of biological diversity, combating desertification and sustainable management and development of resources. Topical research by the council enhances public confidence in the ability of forest managers and researchers to successfully handle challenges related to natural resource management. ICFRE has nine Research Institutes and five Research Centres located in different bio-geographical regions of the country for catering to the forestry research needs of the nation.

ICFRE has the following Institutes and Centres:

1. Forest Research Institute (FRI), Dehradun
2. Arid Forest Research Institute (AFRI), Jodhpur
3. Tropical Forest Research Institute (TFRI), Jabalpur
4. Institute of Forest Genetics and Tree Breeding (IFGTB), Coimbatore
5. Himalayan Forest Research Institute (HFRI), Shimla
6. Rain Forest Research Institute (RFRI), Jorhat
7. Institute of Forest Productivity (IFP), Ranchi
8. Institute of Wood Science & Technology (IWST), Bengaluru
9. Institute of Forest Biodiversity (IFB), Hyderabad
10. Forest Research Centre for Skill Development, Chhindwara
11. Forest Research Centre for Eco-Rehabilitation, Prayagraj
12. Forest Research Centre for Bamboo & Rattan, Aizawl
13. Forest Research Center for Livelihood Extension, Agartala
14. Forest Research Centre for Coastal Ecosystem, Visakhapatnam

Objectives of ICFRE:

1. To undertake, aid, promote and coordinate forestry research, education and extension leading to scientific and sustainable management of forest resources in the country.
2. To align forestry research programs in the council with national priorities including achievement of Sustainable Development Goals and combating climate change.
3. To provide scientific advice and policy support to the central and state governments aiding informed decision making in forestry matters of national importance and international commitments.
4. To act as a repository of scientific knowledge related to forestry, environment and climate change, and disseminate such knowledge to various stakeholders.
5. To provide technical assistance and support to states, forest- based industries, tree growers, farmers and others for forest protection, afforestation, agro- forestry and allied activities.
6. To develop appropriate forest based technologies, processes and products for sustainable resource use, livelihoods and economic growth.
7. To provide livelihood support to forest dependent communities through transfer of scientific knowledge and appropriate forest-based technologies.
8. To develop technically qualified human resource for forestry sector.
9. To promote forestry education in the country and facilitate universities in improving quality through technical and financial support including development of uniform curricula.
10. To provide consultancy and capacity building services in environment and forest sector.
11. To develop and maintain National Forest Library and Information Centre for forestry and allied sciences.
12. To develop environment and forest extension programmes and promotes the same through mass media and audio-visual aids.

13. To support and advice Government on technical aspects of international conventions and treaties.
14. To conduct other activities incidental and conducive to attainment of abovementioned objectives, which the council may consider necessary.

Also the council through Forest Research Institute (Deemed) University is running Post Graduate programmes in Forestry, Wood Science & Technology, Environment Management, Cellulose & Paper Technology and PhD. courses.

Whereas

The Indian School of Mines (ISM) Dhanbad was formally opened on 9th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967 it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956. The ISM is constituted as Indian Institute of Technology (Indian School of Mines) Dhanbad by the Gazette of India notification on 23rd June 2017 under Institute of Technology Act, 1961, is administered through IIT Council-the apex body, Government of India under the Chairmanship of Honourable Minister, MoHRD for uniform and smooth governance of Pan-IIT in our country.

Situated in the heart of the country's prime coking coal belt, 260 kms from Kolkata with a campus spread over an area of 393 acres, (with 218 acres of existing campus and 175 acres under acquisition and development) the fully residential IIT(ISM) Dhanbad has all the facilities of world class academic institute. What started as an institution to impart mining education has graduated into a full-fledged technical institution of international acclaim offering a host of programmes like B. Tech., M. Tech., M. Sc. Tech., and MBA.

The IIT(ISM) Dhanbad aims at promoting the cause of basic and advanced research in all core and allied branches of Engineering and Sciences. The Department of Environmental Science and Engineering is one of the multidisciplinary wing of the IIT(ISM) Dhanbad that carry out fundamental and applied research in fields of forest ecology and biodiversity, restoration of aquatic and terrestrial ecosystems, water-air-soil pollution monitoring-assessment-control-treatment in mining and non-mining areas, aquifer mapping, riverfront management, climate change, biotechnology, nanotechnology and allied fields with their applications for the benefit of mankind.

And Whereas

Both the parties have expressed their willingness to consider implementing joint programmes to support forestry research, education and extension through their respective institutions, namely Indian Council of Forestry Research and Education, Dehradun and Indian Institute of Technology (Indian School of Mines) Dhanbad.

Article I: Objective

1.1 Providing a general framework for long term collaboration and mutual understanding in areas of forestry research, education and extension between Indian Council of Forestry Research and Education and Indian Institute of Technology (Indian School of Mines) Dhanbad.

Article II: Scope of Collaboration

Subject to the terms this MoU signed by authorized representatives of each party, the parties hereby agree to cooperate as follows:

2.1 To offer collaboration as felt desirable and feasible on either side and both sides would contribute to the fostering and development of the cooperative relationship between respective organisation on identified areas of research, education and extension.

Article III: Areas of Collaboration

3.1 To develop programs as mutually agreed by both the parties in the following areas:

- i. Knowledge sharing
- ii. Capacity building of stakeholders in the forestry and natural-resources-related sectors
- iii. Workshops, Conferences, Meetings to draw lessons on practices, approaches and interventions
- iv. Facilitation of research and education projects and programs
- v. Joint efforts for synthesizing knowledge in prioritized areas
- vi. Joint seminars/webinars and panels in events, conferences and meetings etc.
- vii. Seeking funding and in-kind resources for these cooperation activities
- viii. Exchange of scientists and Research Scholars

Article IV: Scope of MoU

4.1 Indian Council of Forestry Research and Education and Indian Institute of Technology (Indian School of Mines) through this general Memorandum of Understanding have agreed to discuss opportunities to share resources and jointly undertake consultation, advisory and R&D programmes for their mutual benefit. Programmes and projects will be decided on merits and mutual understanding with respect to operative period of MoU for financial obligations and extent of cooperation. Periodic meetings of joint working groups shall be held as per mutual discussion to review and decide next course of action.

4.2 Both parties agree to provide logistic support to each other. Both parties may submit collaborative programmes for assignments on complementary basis. However, each case will be decided on its own merit, expertise available with the institutes and with mutual consent.

4.3 Structural composition of team members from respective parties will be decided mutually and competent professionals from both the organization will be offered to perform the job with professional prowess. Each programme and case will be decided on merit and mutual understanding and separate agreements will be signed for each assignment after negotiations on case to case basis agreed through mutual consent.

4.4 Both the parties shall maintain their sovereignty and share no liability unless agreed through mutual consent, by way of separate agreement drawn for the purpose.

4.5 In the event that the parties wish to carry out a programme or activity pursuant to this MoU (including those mentioned above), the periodicity, extent of bearing liabilities and terms of such cooperation shall be mutually discussed and agreed upon in writing by both parties through separate agreements prior to the initiation of the particular programme or activity. Any such agreement will detail the terms and nature of the activity and/or project, the

responsibilities of each party, the necessary budget, and the financial responsibilities, if any, of the parties.

4.6. In the event of any dispute/s that may arise in connection with this MoU, the same shall be mutually settled by the Director General, ICFRE and Director, IIT(ISM).

4.7. This MoU shall also construe both the institutions to help, compliment and collaborate in areas of research and extension in the areas of common interest at the level of their regional institute/offices located all over India.

Article V: Protection of Intellectual Property

5.1. It is recognized by both the parties that the allocation of intellectual property rights will occur on the basis of a research and technology management plan developed for the research programmes executed by both the organizations.

5.2. Research outcome will be jointly patented and outcome of the patent will be jointly shared in mutually agreed proportions.

5.3. It is agreed by the parties to undertake not to disclose, divulge, part with, copy in any form for the period as specified in the MoU/agreement any scientific research document, planning, execution and appropriate financial, legal documents involved in the MoU. All personnel involved in collaborative projects from Indian Council of Forestry Research and Education and Indian Institute of Technology (Indian School of Mines) are subject to this non-disclosure clause for the period of this MoU.

5.4. The outcome of the research in the form of publications should be shared by both the organizations and should have the authorship from both the organization with proportional credit to contributors.

Article VI: Limitation of Personnel Activities

6.1. The Parties shall ensure that any personnel engaged in the activities and/or programs under this MoU shall not interfere with the internal political independence, sovereignty, and territorial integrity of the latter, any commercial ventures, and avoid any activities outside the aims of this MoU and any separate written arrangement.

Article VII: Confidential Information

7.1. Each Party's rights, title, interest in its confidential information remains unaffected by the existence of this MoU.

7.2. Neither Party is obliged to disclose any confidential information to the other Party pursuant to this MoU and each Party undertakes to observe confidentiality and secrecy of any information and other data received from the other Party, and any outputs jointly obtained, except as mutually consented to in writing by the other Party, during the period of the implementation of activities under this MoU or any arrangements made pursuant to this MoU.

7.3. Any disclosure or exchange of confidential information will be covered in separate subsidiary arrangements.

Article VIII: Amendment

This MoU can be reviewed or amended at any time by mutual written consent by the Parties. Such revisions or amendments shall enter into force on such date as determined by the Parties and shall form an integral part of this MoU.

Article IX: Dispute Settlement

Any dispute, controversy or difference as to the interpretation of this MoU will be settled amicably by mutual consent between the Parties.

Article X: Validity of MoU

10.1 This MoU shall enter into force on the date of the completion of the signing by the Parties. It shall remain in force for the duration of 05 (Five) years from the date of signing of this MoU and may be extended by mutual written agreement of the Parties.

10.2 Either Party may terminate this MoU at any time by notifying the other Party of its intention to terminate this MoU in writing.

10.3 Unless agreed otherwise by the Parties, the termination of this MoU shall not affect the validity and duration of any ongoing arrangement, activity and contract made under the MoU until the completion of such arrangement, activity and contract.

IN WITNESS WHEREOF, the undersigned have signed this MoU.

Signed in duplicate on this 9th day of Nov, two thousand and Twenty.

For ICFRE



(A. S. Rawat)

Director General

Indian Council of Forestry Research and
Education (ICFRE), Dehradun, Uttarakhand

For IIT(ISM)





Dean (Research & Development)
Indian Institute of Technology
(Indian School of Mines)
Dhanbad - 826004 (INDIA)

(Prof. Shalivahan)
Dean (R&D)


Indian Institute of Technology
(Indian School of Mines)
Dhanbad, Jharkhand

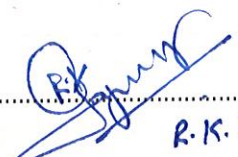
Witness:

1.  ANURAG BHARDWAJ
DIRECTOR (IC)

2.  E. VIKRAM (ADGM&E)

Witness:

1.  ANSHUMALI

2.  R.K. GANGWAR