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MEMORANDUM OF UNDERSTANDING

Between

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



Botanical Survey of India (BSI), Kolkata



This Memorandum of Understanding is made on this the 15th day of February, Two Thousand Twenty One (2021) A.D.

BETWEEN

Indian Council of Forestry Research and Education, (ICFRE), Dehradun was established in 1986. It is an autonomous organization under Ministry of Environment, Forest & Climate Change, New Delhi. Its vision is to achieve long-term ecological stability, sustainable development and economic security through conservation and scientific management of forest ecosystems, having its office at New Forest, Dehra Dun, Uttarakhand- 248006, having nine institutes and five research centres alongwith FRI Deemed to be University hereinafter identified and referred as "ICFRE", duly represented through Director General, Indian Council of Forestry Research and Education (ICFRE), Dehra Dun, Uttarakhand, (which expression, unless repugnant and /or inconsistent to the context thereof, shall mean and include his successors in office and assigns) for THE FIRST PARTY.

AND

The President of India, in exercise of the power vested upon him under article 299 of Constitution of India, duly represented on his behalf through **Director**, **Botanical Survey of India (BSI)**, **Kolkata** having its head office at CGO Complex, 3rd MSO Building DF Block, Sector -1, Salt Lake City, Kolkata -700064 and its regional centres, hereinafter identified and referred as "**BSI**" (which expression, unless repugnant and / or inconsistent to the context thereof shall mean and include his successor in office and assigns) for **THE SECOND PARTY**.

WHEREAS

Indian Council of Forestry Research and Education (ICFRE) and Botanical Survey of India (BSI), (both under Ministry of Environment, Forest and Climate Change, Government of India) have agreed that for encouragement and development of cooperation and exchange in areas of mutual academic interest, it is desirable to enhance research and educational processes at both the institutions and to strengthen mutual understanding between their respective staff, research scholars and students and also to seek mutual support in planning and executing programs, promoting excellence in respective areas of research in plant diversity and forestry and education.

The Botanical Survey of India (BSI) and Indian Council of Forestry Research and Education (ICFRE) do hereby enter into this memorandum of Understanding for

academic, educational, research cooperation and have set forth the following Articles on Mutual Agreement containing the terms and conditions thereof.

ARTICLE-1: RATIONALE

AND WHEREAS

BSI is the apex research organization under the Ministry of Environment, Forest and Climate Change, Government of India for carrying out taxonomic/floristic studies on wild plant resources of the country through survey, documentation and conservation. It was established on 13th February, 1890 with the basic objective to explore the plant resources of the country and to identify the plant species with economic virtues. The goals of BSI are (i) to undertake intensive floristic surveys of different geographical regions of the country and collect accurate and detailed information on the occurrence, distribution, ecology and economic utility of plants in the country, (ii) to collect, identify and distribute materials which may be of use to educational and research institutions, and (iii) to act as custodian of authentic collections in well planned herbaria and to document the plant resources in the form of local, district, state and national flora, (iv) inventorying of endemic, rare and threatened plant species, (v) evolving conservation strategies, studies on fragile ecosystems and protected areas like Sanctuaries, National Parks and Biosphere Reserves, (vi) conservation, multiplication and maintenance of germplasm of endemic and threatened species, wild ornamentals and other plant genetic resources, in botanic gardens and orchidaria and (vii) ethno-botanical and geo-botanical studies and development of national database on herbarium specimens and live plant collections, plant genetic resources, plant distribution and nomenclature,

BSI has following regional centres:

- 1. Andaman and Nicobar Regional Centre, Port Blair
- 2. Arid Zone Regional Center, Jodhpur
- 3. Arunachal Pradesh Regional Centre, Itanagar
- 4. Central Regional Centre, Allahabad
- 5. Deccan Regional Centre, Hyderabad
- 6. Eastern Regional Centre, Shillong
- 7. Northern Regional Centre Dehradun
- 8. Sikkim Himalya Regional Center, Gangtok
- 9. Southern Regional Centre, Coimbatore
- 10. Western Regional Centre, Pune
- 11. High Altitude Western Himalayan Regional Centre, Solan

The goals of BSI have also direct relevance to the following goals of the Ministry, vis a vis. "Conservation of the country's natural resources including its lakes and rivers, its biodiversity, forests and wildlife and the prevention and abatement of pollution"

AND WHEREAS

ICFRE is an apex body in the national forestry research system, 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 solution 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

Main thrust areas of ICFRE are as under:

- i. To undertake, aid, promote and coordinate forestry education, research and their applications.
- ii. To develop and maintain a National Library and Information Centre for Forestry and allied sciences.
- iii. To act as a clearing house for research and general information related to forests and wildlife.
- iv. To develop forestry extension programmes and propagate the same through mass media, audio-visual aids and extension machinery.
- v. To provide consultancy services in the field of forestry research, education and allied sciences.
- vi. To undertake other jobs considered necessary to attain these objectives.

Also the council through FRI (Deemed) University is conducting PG (Forestry, Wood Science & Technology, Environment Management, Cellulose and Paper Technology) and Ph.D. (Forestry) courses.

ARTICLE-2: PREAMBLE

AND WHEREAS

Botanical Survey of India (BSI) Kolkata and Indian Council of Forestry Research and Education (ICFRE), Dehra Dun have realized the need for a close linkage in terms of research and academic activities for encouragement and development of co-operation and exchange in areas of Forestry, Ecology and mutual academic interest. It is desirable to enhance research and educational processes at both the Institutions and to strengthen mutual understanding between their respective staff, research scholars and students and also to seek mutual support in planning and executing programs promoting excellence in respective areas of research and education. In compliance to this idea, both have decided to sign this Memorandum of Understanding (MoU).

ARTICLE-3: GENERAL

NOW THIS INDENTURE WITNESSETH AS FOLLOWS:

- 1. Both the parties have expressed their willingness to consider implementing joint programs initially to support scientific research and extension in the field of forestry and environment.
- 2. The Indian Council of Forestry Research and Education (ICFRE) and Botanical Survey of India (BSI) agree on their academic and educational needs like exchange of Scholars and Scientific staff, exchange of Students, exchange of academic information and materials subject to the provisions under the Biodiversity Act (2002) and or any other legal bindings by the Govt. of India.
- 3. The bonafide students and research scholars of both the organizations will have access to research facilities at ICFRE and BSI.
- 4. ICFRE will recognize and accept BSI scientists as Supervisor/ Co-Supervisor (as applicable) for Ph.D. degree programmes of ICFRE subject to fulfillment of the guidelines of both organizations.
- 5. The scientists and students of ICFRE shall be allowed to avail the library facilities of BSI with the prior permission of the Director/Library-in-charge of BSI. The scientists and Ph.D. scholars of BSI shall vice versa be given the library facilities at ICFRE with prior permission of the competent authority concerned.
- 6. Both parties are interested in exploring in good faith, opportunities for future collaborations in the field of forestry sector and floral diversity of the country through their respective institutions, namely ICFRE and BSI.

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ARTICLE 4: AREA AND SCOPE OF CO-OPERATION

- 1. To develop programs and research projects as mutually agreed by both the parties in the field of:
 - i. Floral diversity
 - i. Plant systematics/taxonomy (both conventional and molecular)
 - iii. Bio-geographical and ecological studies
 - iv. Long term ecological monitoring.
 - v. Climate change response, adaptation and mitigation aspects
 - vi. Development and strengthening of national databases (herbaria, repositories etc.)
 - vii. Digital information management systems and cyber taxonomy
 - viii Biodiversity conservation
 - ix. Ethno-botanical studies and bio-prospecting
 - x. Environmental impact assessment
 - xi. Organizing workshops and imparting training in Botanical nomenclature and Herbarium methodology
 - xii. Forestry education, training and capacity building for scientific upliftment and benefit of forestry sector and to strengthen the cooperative relationship between respective institutions.
- 2. To collaborate on the issue of exchange of students and research scholars on mutual basis.
- 3. To strengthen mutual understanding between their respective staff, research scholars and students and also to seek mutual support in planning and executing programs promoting excellence in respective areas of research and education.
- 4. ICFRE and BSI through this general Memorandum of Understanding have jointly agreed to share resources and jointly undertake consultation, advisory and R&D programmes for their mutual benefit. However, programmes and projects will be decided on merit and mutual understanding with respect to operative period of this MoU and financial obligations and extent of cooperation.
- 5. The Honorarium, TA/DA, etc. as applicable can be provided to the faculty members/ Scientists/ technical staff of ICFRE and BSI, as per rule.
- 6. Both parties hereto have agreed to provide logistic support to each other. Both parties hereto may submit collaborative programs for assignments on complimentary basis on all India basis so as not to repeat the work done by respective institutes. However, each case will be decided on its own merits, expertise available with the institutes and with mutual consent.
- 7. Structural composition of team members from respective parties will be decided mutually and most competent professionals from both the organization will be offered to perform the job with professional prowess.
- 8. Both the parties shall maintain the sovereignty and share no liability unless agreed through mutual consent, by way of separate MoU drawn for the purpose.

- 9. In the event that the parties wish to carry out a program 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 MoU prior to the initiation of the particular program or activity. Any such MoU should 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.
- 10. Now, therefore, both ICFRE and BSI wish to enter into long term cooperation and mutual understanding in areas of forestry and environmental research, education and extension.
- 11. This MoU is of general nature and does not imply any financial obligations or legal binding on either of the parties.
- 12.Periodic meetings shall be held as per mutual discussion to review and decide next course of action.

ARTICLE-5: DISPUTE RESOLUTION, JURISDICTION AND CHOICE OF LAW

- 1. In the event of any dispute that may arise in connection with this MOU, the same shall be mutually settled by the Director General, ICFRE, Dehra Dun and the Director, Botanical Survey of India, Kolkata and if could not be settled both the Director General, ICFRE, Dehra Dun and Director, Botanical Survey of India, Kolkata shall appoint an arbitrator on mutual consent. Such process of arbitration shall be guided by the provision of the Arbitration and Conciliation Act 1996 (as amended upto date).
- 2. BSI would have liberty to refer, on certain policy related issues for the advice of the Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi and similarly, the ICFRE would seek the advice of its competent authority or the Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi, if required to bring a consensus of both the parties.
- 3. This MoU shall also construe both the institutions to help, compliment and collaborate in areas of research in the areas of common interest at the level of their regional institute/offices located all over India.

ARTICLE 6: PROTECTION OF INTELLECTUAL PROPERTY

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

- 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. All personnel involved in collaborative projects from ICFRE and BSI are subject to this non-disclosure clause for the period of this MoU.
- 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 7: VALIDITY OF MoU

- 1. This MoU shall be valid for Ten (10) years from the date of execution unless extended on mutual consents of both the parties. This MoU can be terminated through prior three months written notice addressed to the respective offices as herein above mentioned by either of the parties. The MoU may also be revised for deletion addition modification of any clause(s) as and when felt necessary through mutual consultations of the both the parties herein before mentioned.
- 2. It is further agreed that the Director General, ICFRE, Dehra Dun and the Director, BSI, Kolkata through periodic meetings will monitor the progress of this MoU.

IN WITNESS WHEREOF the parties hereto have signed sealed and delivered this Memorandum of Understanding (MoU) on the day, month and year written herein before.

For and on behalf of ICFRE, Dehra Dun For and on behalf of the President of India

Arun Singh Rawat) Director General RE, Dehra Dun, Uttarakhand

(Dr. A.A. Mao) of Scientist - G निदेशक Director

Botanical Survey of India निर्मा मुन्द्रमण BOTANICAL SURVE

Witnesses

ICFRE with BSI

Witnesses:

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