

<u>Venue</u>

VVIP Hall, Kalaivanar Arangam, Chennai

Proceedings of the 53rd Authority Meeting of the National Biodiversity Authority, held on 22nd May 2019

The fifty third Authority meeting of the National Biodiversity Authority (NBA) was held on 22nd of May 2019 at the Conference Hall of Kalaivanar Arangam, Chennai under the Chairmanship of Shri Anil Kumar Jain, Chairman, National Biodiversity Authority and Additional Secretary, MoEF&CC. The list of participants is placed at **Annex-I**.

At the outset, Dr. Purvaja Ramachandran, Secretary NBA welcomed the Chairman, NBA, Members and Special Invitee for the meeting and briefed the agenda for the meeting. Thereafter, the Chairman, NBA welcomed all the members and appreciated their participation in the celebration of International Day for Biological Diversity (IDB) 2019. He also informed about the additional charge given to Dr. Purvaja Ramachandran as Secretary, NBA since Shri T. Rabikumar demitted the office upon completion of his tenure. Members also expressed their appreciation to Shri T. Rabikumar towards the service rendered by him during his tenure at NBA. The Authority recorded its appreciation and gratitude by recognizing his valuable services.

The International Day for Biological Diversity, 2019 (IDB) was celebrated by the NBA in association with the Government of Tamil Nadu on 22nd May, 2019 at Chennai. The Secretary, NBA apprised that the Chairman, NBA, Dr. Sujata Arora, Advisor, MoEF&CC and Dr. J. R. Bhatt, Advisor, MoEF&CC have extended their eminent guidance for IDB celebrations, for the successful conduct of the IDB and placed on record her sincere gratitude to them.

Thereafter, the agenda items were considered as under:

53.01: Confirmation of the Proceedings of the 52nd Authority meeting

The draft proceedings of the 52nd Authority meeting of the National Biodiversity Authority held on 19th March 2019 at New Delhi was circulated to the

Members for seeking their comments. In response, comments were received from Dr. Sujata Arora which has been incorporated appropriately.

Decision: The members confirmed the proceedings of the 52nd Authority Meeting.

Action: NIL

53.02: Action Taken Report of the 52nd Authority Meeting.

The Secretary, NBA apprised members about the actions taken and actions that are in progress on the decisions taken in the 52nd Authority Meeting.

Decision: Members noted the action taken report.

Action: NIL

53.03: Preparation for International Day for Biological Diversity (IDB) - 2019

The National level celebration of IDB-2019 was jointly organized by the MoEF&CC, Government of India and NBA in association with the Government of Tamil Nadu on 22nd May, 2019 at Kalaivanar Arangam, Chennai. The theme for IDB 2019 was "Our Biodiversity, Our Food, Our Health". Dr. Jayanthi Murali, IFS, Director of Department of Environment, Government of Tamil Nadu was nominated as a Nodal officer for the event.

2. The IDB celebration was inaugurated by the Honorable Vice President of India, Shri. M. Venkaiah Naidu. Other dignitaries who took part in the celebrations were Shri. A.K.Jain, IAS, Chairman, NBA, and Additional Secretary, MoEF&CC; Shri. Hans Raj Varma, IAS, Additional Chief Secretary, Govt. of Tamil Nadu, Shri. Shambu Kallolikar, IAS, Principal Secretary, Govt. of Tamil Nadu and Dr. Purvaja Ramachandran, Secretary, NBA.

3. Several renowned personalities in the field of biodiversity/ environment, senior officials from the departments of the Central and State Governments (viz. Environment, Forest, Rural Development and Panchayati Raj, Coast Guard, State Biodiversity Boards, Members of the Authority, scientists and researchers, members of BMCs also participated on this occasion. Around 1200 participants comprising of School students, Women Self-Help groups, Eco-clubs, NGOs, etc. also attended the event and made it a grand success.

4. During the celebrations, a thematic exhibition was organized and several departments of State and Central Government organizations, CSOs and NGOs participated to create awareness on conservation and sustainable use of biodiversity for human well-being.

5. Members appreciated the NBA Secretariat for grand celebration of IDB 2019 and expressed the presence of the Honorable Vice President of India as Chief Guest, would create significant awareness about biodiversity conservation among public at large.

Action: NIL

53.04: To consider a Report of the Expert Committee to review the "Guidelines on Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulations, 2014" and suggest appropriate measures thereof

Pursuant to the decision taken in the 48th Authority and direction of the MoEF&CC, NBA vide office order dated 23.01.2019, an expert committee was constituted under the Chairmanship of Shri A.K.Goyal, IFS (Retd.,) Former Special Secretary, Ministry of Panchayati Raj and Shri C. Achalender Reddy, IFS, Director, CIPS, ASCII as co-chair to review the Guidelines on ABS Regulations, 2014 and suggest appropriate measures thereof.

The committee considered the issues raised by the stakeholders such as seed sector, AYUSH, cosmetic and biotechnology, research/ academic Institutions, etc., and made deliberations in its meetings on various issues viz. exemption of small and cottage industries, exemption of start-up industries, Value Added Products, NTAC, powers of SBB, shareholding pattern of the entities under section 3(2), access to traditional knowledge in public domain and reciprocal exchange of biological resources and information under International collaborative research projects. The Chair of the EC submitted a report along with a draft revised notification on "Guidelines on Access to Biological Resources and Associated Knowledge and Equitable Sharing of Benefits Regulations, 2019" for consideration.

This was placed before the 52nd Authority meeting held on 19th March, 2019 vide agenda item no 52.06, in which the revised guidelines had been presented to the Members. The Authority decided to host the draft guidelines in the NBA website to seek comments from the public. Subsequently the revised (draft) Guidelines on ABS, 2019 was hosted in the NBA website on 24th April 2019 inviting comments of the public within a period of 30 days. Technical Officer (Benefit Sharing) apprised the members that till date, NBA has received six comments from Ayurvedic Drug Manufacturers Association (ADMA), Delhi, and from Metahelix and Scientists. ADMA has also requested for extending the call for receiving comments by another month.

The Secretariat also apprised that AYUSH department in the stakeholders meeting suggested that the traders of raw materials should be exempted from ABS as they are only the link in the supply chain of bio resources and do not *per se* accesses the bio resources. This point, raised by AYUSH department has been considered in the revised Draft Guidelines of the ABS. Secondly, the committee has also considered incorporating the powers of the SBBs with regard to regulation of access to biological resources for commercial utilization and imposing the benefit sharing component in the preamble of the revised draft Regulations suitably.

Secretary, NBA mentioned that the revised Draft Guidelines of the ABS was also sent to the State Biodiversity Boards (SBB) for their comments. But till date, only one or two SBBs have responded. The Chairman directed that Regional meetings shall be conducted in Chennai, Delhi and Kolkata, covering all the SBBs to discuss their views and critical comments on the revised Draft Guidelines of the ABS within a month.

The members deliberated on issue of levying the benefit sharing amount on the bio resources used for commercialization. Shri. Darshan Shankar opined that the benefit sharing amount should be levied on the raw materials used in the products rather than the finished products. Dr. Sanjay Kumar mentioned that type of bio resource (wild/ cultivated/ annual crop), stage in the life cycle, cultivation stage, harvesting stage, foreign exports should also be considered appropriately in the revised Guidelines of ABS. Dr. P.C. Bhattacharya suggested that the use of bio resources is different in the north east of India and mentioned that a separate mechanism of benefit sharing should be considered for the North eastern states of India.

Chairman, NBA suggested that further discussion and decisions can be deferred to the next Authority meeting after receiving the comments from the public and the regional consultations of the SBBs.

Decision:

- 1. Authority decided to extend the timeline for inviting comments of the public on the revised (draft) Guidelines on ABS, 2019 for another 30 days.
- 2. Authority directed the NBA secretariat to have regional level consultation meetings with the State Biodiversity Boards in Chennai, Delhi and Kolkata covering all the SBBs to ascertain their views / comments on the revised Draft Guidelines of the ABS within a period of one month.
- 3. Authority decided that comments of the public and inputs received from the regional consultations shall be compiled and the same may be examined by the expert committee constituted for this purpose and revise the draft guidelines. Thereafter, the revised guideline shall be placed before the Authority for consideration.

Action: Secretary, NBA

53.05: To consider the revised Guidelines for Operationalization of Biodiversity Management Committees (BMCs)

The members were informed that NBA with the help of Expert Committee developed an Operational Guidelines for BMCs and the same was released by the Hon'ble Minister of Environment, Forest and Climate Change in March 2013. The experience gained over a period by implementing the above guidelines, the SBBs / BMCs have provided inputs from time to time for consideration, which lead the NBA to consider revision of the said guidelines. Accordingly, an expert committee was constituted in February, 2015 under the chairmanship of Smt. Gayathri Ramachandran, IAS, (Retd.) to revise the existing guidelines of BMCs. After ascertaining the views/comments of the different stakeholders including state biodiversity boards through field visits, regional consultations, the committee prepared their report along with the draft (revised) guidelines and submitted to NBA. Pursuant to the decision of the 39th authority meeting held on 14th October, 2016, a Core Expert Group (CEG) was constituted to further improvise the revised (draft) guidelines with tenure of three months. Accordingly, CEG met in September 2017 at NBA, Chennai and revised the draft guidelines. Subsequently, draft (revised) guidelines was hosted in the NBA website in November, 2017 inviting comments / suggestion from the public by giving a month's time. In the meantime, draft (revised) guidelines was also discussed in the 12th SBB Annual meet held in November 2017 with a view to ascertain the comments of the State Biodiversity Boards.

The comments offered by the public/stakeholders and state biodiversity boards have been incorporated appropriately in the draft guidelines and also minor modifications have been effected in the guidelines by the NBA secretariat.

The Ministry of Tribal Affairs submitted their comments on the revised Guidelines for Operationalization of BMC and mentioned that the Forest Rights Act (FRA) also has similar mandate as given in the revised BMC Guidelines and constitution of BMCs and their activities would complement the activities under the FRA. Chairman, NBA suggested that the comments given by the Ministry of Tribal Affairs may be considered and the Guidelines modified appropriately.

Chairman, NBA deferred the discussion on the revised Guidelines for Operationalization of BMCs to the next Authority meeting.

Decision: The Authority deferred the discussion on the revised Guidelines for Operationalization of BMCs to the next Authority meeting

Action: Secretary, NBA

53.06 Ratification of decisions on Form-B applications

Under agenda item 32.06 of 32nd Authority meeting, it was decided as follows: -

- a) The Chairman, NBA is authorized to accord approval or otherwise for Form- B applications, without referring to the SBB and the EC on ABS.
- b) The approval or otherwise on the applications accorded shall be placed in the subsequent authority meetings for ratification.

Accordingly, the decision of the Chairperson, NBA on the **eight (8)** Form-B applications was placed for ratification

Decision: The Authority considered and ratified the decisions taken on Form B applications

Action: NIL

53.07: To consider the applications for access to Red Sanders wood approved by the Chairperson, NBA

The Secretary NBA informed the members that following the auction of Red Sanders conducted by the Andhra Pradesh Forest Development Corporation and Department of Revenue Intelligence (DRI) through STC and MMTC, NBA received ten (10) applications from successful bidders for seeking approval of NBA for access to Red Sanders wood. It was also informed that applications were scrutinized as per the procedure approved by the Authority in its 32nd (32.07) & 35th Authority (35.03 & 35.19.01).

In the 32nd Authority meeting (32.07), it was decided as follows:

- a) Members authorized the Chairman, NBA to accord approvals to such applications without following the normal procedure. On receipt of benefit sharing amount from the bidder/ applicant, the approval may be accorded in the form of agreement between NBA and the applicant.
- b) The approvals on the applications shall be placed in the subsequent authority meetings for ratification.

Accordingly, applications (10) which were approved by the Chairperson, NBA on receipt of benefit sharing component i.e. 5% of the auctioned amount from the respective applicants, were considered and ratified by the Authority.

The Chairman, NBA flagged the issue of mode of utilization of the interest accumulated from the benefit sharing amount received especially on the access of Red Sanders. The Technical officer (Benefit Sharing) submitted that based on the report developed by the expert committee formed to develop a comprehensive policy for utilizing the amount received by the NBA/SBB as benefit sharing from the export of Red Sanders, it was recommended that the interest amount accrued may be used for the research and development on Red Sanders. However, Chairman, NBA suggested that the interest amount accumulated from the benefit sharing amount may be utilized by NBA for its activities such as awareness programs. He also suggested that a finance plan may be developed and devised for the use of the interest that has been accumulated on the benefit sharing amount received for Red Sanders.

Decision:

- 1. The Authority considered and ratified the decisions taken on the Red Sanders applications.
- 2. Authority decided that the interest amount accumulated as benefit sharing realized on access to Red Sanders may be used by NBA for their activities such as enhancing awareness on biodiversity.

Action: Secretary, NBA

53.08: To consider engaging National Institute of Rural Development and Panchayati Raj (NIRD&PR) for conducting Capacity building programme to the PRIs/ BMCs/ SBBs

National Institute of Rural Development and Panchayati Raj (NIRD&PR), is a centre of excellence in rural development and Panchayati Raj which builds capacities of rural development functionaries, elected representatives of PRIs, bankers, NGOs and other stakeholders through inter-related activities of training, research and consultancy. Under the CEBPOL project, NBA-CEBPOL and NIRD had signed a Memorandum of Understanding on 24th July, 2018 by which NIRD conducted four training programs for the Master Trainer/ Training of Trainers/ representatives of PRIs on biodiversity Governance in general and formation of BMCs and documentation of PBRs in particular. NBA proposed to engage the NIRD&PR for a period of one year for conducting five capacity building programs to the various stakeholders, region wise which was placed before the Authority.

Secondly, it is to emphasize that the Principal Bench, Hon'ble National Green Tribunal (NGT), New Delhi issued order to constitute Biodiversity Management Committees (BMCs) and document People's Biodiversity Registers (PBRs) in all local bodies in the State. The document of PBR is a continuous exercise to be performed by the BMCs with the support of technical support groups / SBBs. Therefore, extending capacity building programs to the BMCs/ PRIs/ SBB is essential. Dr. Sujata Arora apprised the members that 1,48,000 BMCs have been

constituted by 31st March 2019 after a series of meetings with different states in forming the BMCs at different levels. A report has been submitted to NGT on the update of constituting BMCs in the country. Consequently, NGT has issued another order to constitute the rest of the BMCs and have directed to submit a report on it in August 2019. Dr. Sujata Arora also mentioned that few states such as Tamil Nadu, Assam and West Bengal have constituted BMCs at the Block level and has been completed.

Chairman, NBA suggested that school students of classes 9th -12th of different Panchayats may be engaged to collect information including photographs and geo tag the flora and fauna in their Panchayats for a minimal amount for developing the PBRs. He also mentioned that this issue can be discussed in the Regional meeting of SBBs.

Shri. Darshan Shankar suggested that the BMCs may be constituted at the Taluk level and include schools and other related agencies, which will reduce the number of BMCs and the cost for the preparation of the PBRs

The members deliberated on developing a software for digitizing the PBR for which technical officer (Benefit Sharing) mentioned that a similar software has been developed by Kerala State Biodiversity Board. To this, Chairman, NBA mentioned that this software can be converted in different languages and used by all the states for digitizing PBRs. Shri. Darshan Shankar suggested that there are databases such as Indian Biodiversity Portal, IBIN, ENVIS, NRSC can be used in developing the PBRs and also expedite the process. He also mentioned that, FRLHT has a database on medicinal plants which can be shared with the SBBs for preparation of PBRs. Dr. Sujata Arora mentioned that developing such a national database is an important activity mandated by law, and the process of development of such a database, India Biodiversity Information Facility (InBIF), by NBA needs to be expedited.

The Chairman, NBA suggested that State Biodiversity Boards (SBB) can be engaged to train the Master Trainer/Training of Trainers / representatives of PRIs instead of NIRD&PR. The SBBs may be given the required funds for the training programs through grant-in-aid of NBA.

Decision:

- 1. The State Biodiversity Boards may be engaged and given required funds to develop training programs for the Master Trainer/ Training of Trainers / representatives of PRIs instead of NIRD&PR.
- Authority decided that preparation of PBRs be undertaken in a more strategic manner inter alia by involving students and relevant organizations including BSI and ZSI, and phasing out the activity to have PBRs initially at Taluka level.
- 3. Authority directed the Secretariat to expedite the development of software for digitizing the PBRs with the support of NIC.
- 4. Authority decided that NGT may be apprised through proper channel that BMC formation may not be required at all local bodies, as some States have decided to form BMCs at certain level like Taluk / Block / Zilla Parishad.
- 5. Authority decided that databases on biological resources that have already been developed by different organizations or agencies can be collated and brought into one platform at a national level for the user groups and also compliment the preparation of PBRs.

Action: Secretary, NBA

53.09: Items for information

(A) Details of Form-C applications received by the NBA

NBA has received 103 Form – C applications for deposition of microorganisms in other country's repository for claim of novel species for publication in journals since March 2016 – January 2019 and the same have been reported to the Authority from time to time. The Secretariat has received 45 such intimations since March, 2019.

(B) Monitoring of patents published by the Indian Patent Office (IPO):

NBA secretariat has initiated monitoring of patent applications that are being published by the IPO every month so that the patent office as well as the applicant can be informed in advance of the inventions that would potentially fall under the purview of Section 6 and would require obtaining prior approval of NBA.

The IPR section has scrutinised 1173 applications for the months of October 2018, November 2018 and December 2018 so far and sent communications to the IPO in 164 cases, informing them that the said invention would fall under the purview

of Section 6 and that NBA's approval was necessary which has been published by IPO in their website.

(C) Proposal to incorporate about BD Act in the Syllabus of Graduates:

In the 47th Authority meeting, it was suggested that NBA needs to create more awareness on the provisions of the BD Act. The members suggested that the provisions of the BD Act can be communicated directly to Universities of various States and other scientific agencies, to create awareness among students and researchers regarding Biological Diversity Act 2002 and also include the same in their syllabus. Accordingly, so far, NBA has sent correspondence to universities in Kerala (16), Karnataka (39), Andhra Pradesh (23) and Telangana (14).

(D) Visit of law students to NBA:

Final year students of Bachelor of Law Degree from Vellore Institute of Technology, Kelambakkam, Chennai, visited NBA on 25th February 2019. The Advisor Law, Technical Officer (Benefit Sharing) and Technical Officer (IPR) made detailed presentation about the provisions of the BD Act.

(E) Visit of the Technical Officer (Benefit Sharing), NBA to Istanbul, Turkey:

The Community of Practice Workshop on the Nagoya Protocol on Access and Benefit-Sharing for European, CIS, Arab and Asian countries of the UNDP-GEF Global ABS Project and their partner countries/institutions was held from 9th to 12th April 2019 Istanbul, Turkey. Technical Officer (Benefit Sharing) made a presentation on India's ABS Legal Frame work - Practical Experiences", "Documenting TK (TKDL & PBR) – Experience from India" and also participated actively in the discussions on ABS mechanism and other related issues in the workshop.

Decision: Authority members took note of the items (A) - (E) as information

Action: NIL

53.10: To consider a proposal of Bombay Natural History Museum to designate them as a repository u/s 39 of BD Act, 2002

The MoEF&CC in consultation with the NBA designated 15 National Institutions/Organizations as repositories vide notifications No.26-15/2007-CSC dated 28.08.2008, No.26-15/2007-CSC dated 12.09.2012 and No.26-15/2007-CSC dated 08.07.2013 under section 39 of the BD Act to keep in safe custody of the different categories of biological resources including voucher specimens deposited with them. In 2016, NBA (Authority) with the help of experts issued a guideline for designated repositories and communicated the same to all the repositories.

Accordingly, a Core Expert Group (CEG) was constituted and developed eligibility criteria for designation of repositories under section 39 of the BD Act and recommended the same to the Authority for consideration. The Authority in its 46th meeting held in July, 2018 considered and approved the eligibility criteria for designating the institutes /organizations as national repositories u/s 39 of the Act.

In this context, MoEF&CC vide letter dated 18th January 2019 forwarded a proposal of the Director, Bombay National History Society (BNHS) addressed to the Secretary (EFCC) with a request to consider BNHS as a designated repository to keep safe custody of species of marine, fresh water and terrestrial fauna. NBA communicated the proposal of BNHS to Dr Dinesh Mishra, Member, NBA and Dr Sanjappa, Member, EC on ABS and former director of BSI with a request to examine the proposal. Comments were received from the Members stating that since BNHS is a society and not public funded institution, it cannot be considered as a national repository based on the Guidelines. BNHS can be considered only after the guidelines for considering BNHS as a national repository but decided that the Guidelines need not be amended as there is provision of a public funded agency to be considered as a national repository. The members deliberated that BNHS receives funds from various sources including state government agencies and MoEF&CC and hence can be considered for designating it as a national repository.

Dr. J.R Bhatt proposed and Chairman, NBA agreed that a sub-committee may be formed comprising of Shri. Darshan Shankar, Dr.Yogesh Souche and Dr. Sanjay Kumar to develop a list of criteria to identify institutes; and designate them as National repositories. The sub-committee may also visit BNHS and scrutinize, based on the criteria developed. The recommendations of the sub-committee may be placed in the subsequent Authority meeting for consideration.

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Decision:

Authority decided to form a sub-committee comprising of Shri. Darshan Shankar, Dr. Yogesh Souche and Dr. Sanjay Kumar to visit BNHS for examining the facilities/ infrastructure/ specimens held by them for safe custody of the specimens in light of the criteria developed to designate as repositories u/s 39 of the BD Act and recommendations of the sub-committee may be placed in the subsequent Authority meeting for consideration.

Action: Secretary, NBA

53.11: Any other matter with the permission of the Chair.

53.11.01: Status of Applications received under the OM dated 18.03.2019 issued by the MoEF&CC under section 48 of the Act and issues faced on process of such applications

1. The MoEF&CC issued an Office Memorandum on 10.9.2018 directing the NBA to consider and regulate the activities of the users of biological resources/ knowledge who have not been obtained approval from NBA in normal course within a period of 100 days' from the date of issuance of OM. In pursuance of the Ministry's OM, NBA received 274 applications from different quarters seeking approval for the past activities. The deadline was 18.12.2018. Of which, 232 applications have been considered for processing and 32 applications are under process and remaining 10 applications have been returned to the applicant.

Subsequently, Ministry issued an another OM dated 18.03.2019 providing another 60 days window period to the users of biological resources/ knowledge who have not obtained approval from NBA in normal course. The deadline was 16.05.2019. During this period, NBA received 171 applications from different stakeholders/ users. On analysis of applications, there are about 53 individuals and 54 entities who had applied under this O.M. of which 16 entities are fresh applicants. NBA has received 26 applications after the deadline of the O. M. i.e. up to two days after the deadline. As there were some glitches in the online application system, the members deliberated that only these 26 applications can be accepted and endorsed along with the applications received during the O.M. period.

The members in the 52nd Authority meeting vide agenda item no. 52.04 decided that NBA shall return the incomplete applications where the required

information is not furnished within the stipulated time to the applicants and advise them to apply afresh availing the facility under O.M dated 18.03.2019. However, due to un-foreseen administrative reasons, these applications could not be returned by the secretariat and deadline of 60 days had lapsed on 16.05.2019. The members discussed the issue and mentioned that those applications that have not been returned, the applicant can be asked for the required additional information to complete the application and the applicant to submit the required information within 30 days.

Decision:

- The 26 applications that have been received after 16-5-2019 shall be accepted and endorsed but further applications will not be entertained in the O.M.
- Those incomplete applications that were received under the O.M. dated 10-9-2018 and have not been returned, shall be asked for the required information to complete the application.

Action: Secretary, NBA.

ANNEXURE-1

List of Participants

Official Members

1. Shri. Anil Kumar Jain, IAS Chairman, National Biodiversity Authority &

Additional Secretary, MoEF&CC

2. Dr Sujata Arora

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Non-Official Members

5. Dr. Dinesh Misra,

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6. Shri. Darshan Shankar,

Chancellor, Trans Disciplinary University, C/o Foundation for Revitalization of Local Health Traditions (FRLHT), 74/2, Jarakabande Kaval, Post Attur via Yelahanka, Bangalore - 560 064

7. Dr. Parimal Bhattacharjee

Professor & Head, Department of Zoology, A/3 Asiyana Housing Complex Maligon Guwahati-781011

8. Dr. Yogesh Shouche

Senior Microbiologist, National Centre for Cell Science Department of Biotechnology Lab, University of Pune Campus, University Road, Ganeshkhind, Pune, Maharashtra – 411 007

3. Dr. Sanjay Kumar,

Director, Institute of Himalayan Bioresource Technology, Post Box No.6, Palampur Himachal Pradesh – 176 061

4. Dr. M A Atmanand,

Director, National Institute of Ocean Technology, Ministry of Earth Sciences, Velachery-Thambaram Main Road, Narayanapuram, Pallikaranai, Chennai – 600 100

Secretary to the Authority

Dr. Purvaja Ramachandran.

Secretary, National Biodiversity Authority, Chennai –600 113

Special Invitee:

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