



Indian Society of Plant Genetic Resources

c/o National Bureau of Plant Genetic Resources

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Comments and Suggestions on

Biological Diversity (Amendment) Bill, 2021

Salient issues requiring further revision and/or clarifications

- An expert group of members of ISPGR (Annexure 5) examined the Amendment Bill critically and observed that there is need to include further changes, especially with respect to the following issues:

A. Changes in Principal Act (BDA 2002) dealing with Agro-biodiversity (Section 13) for Delegation of Powers to Department of Agriculture Research and Education (DARE), Ministry of Agriculture & Farmers Welfare (under Section 16)

There is need for **special treatment for access and use of Genetic Resources for Food and Agriculture (GRFA)**, also known as Biodiversity for Food and Agriculture, a major subset of agrobiodiversity. The Amendment has rightly given importance to sustainable use of **cultivated medicinal plants**; similar treatment is required for GFRA, since the research, development and breeding using GFRA is very important for ensuring long-term food, nutritional and health security for humanity. To facilitate efficient access and use, **powers need to be delegated to Secretary DARE & DG ICAR (Ministry of Agriculture & Farmers' Welfare) for access and use of GRFA, under Section 13 of the BDA 2002, in the Amendment Bill 2021.**

(Please see Annexure 2 for detailed rationale and justification)

B. Section 2 in the Amendment Bill 2021 regarding definitions of terms

It is submitted that some of the **definitions** need **rectification** both in the **Amendment Bill 2021** (e.g. "access", "bio-survey", "biological resources", "derivatives", "folk varieties"), as well as in the **Principal Act** ("Commercial utilization", "agrobiodiversity"). Further, certain terms have **not been defined** in the Principal Act and Amendment Bill like "occurring in India", "conventional breeding", "traditional practices", "codified traditional knowledge" and "farmers' varieties". These need to be included in the Act for clear interpretation, and for harmonization with other related statutes e.g. Protection of Plant Varieties and Farmers Rights Act (PPV&FRA), 2001.

(Please see Annexure 4 for detailed suggestions and comments)

C. Concerns regarding conservation of biological diversity

Amended bill facilitates registered AYUSH practitioners (indigenous medicine) to access any biological resource and associated knowledge for commercial utilisation, without giving prior intimation to the State Biodiversity Boards (SBB). This raises ecological concerns and may lead to greater trade in biodiversity as opposed to primary objective of the BDA 2002, namely **conservation and sustainable utilization of biodiversity and associated knowledge.**

1. Detailed Justification and Rationale

A. Changes in Principal Act (BDA 2002) dealing with Agro-biodiversity (Section 13) for Delegation of Powers to Department of Agriculture Research and Education (DARE), Ministry of Agriculture & Farmers Welfare (under Section 16)

Powers be delegated to Secretary, Department of Agricultural Research and Education (DARE) & Director General (DG), ICAR (Ministry of Agriculture & Farmers' Welfare) for access and use of agrobiodiversity [Genetic Resources for Food and Agriculture (GRFA)]

Background:

1. Genetic Resources for Food and Agriculture (GRFA) are the basic requirement indispensable for genetic improvement of crops/animals/fish etc. which in turn are the basic requirements for food, nutritional and health security. Their distinctive features and special nature is well-recognized and constitute the most important part of biodiversity (called agro-biodiversity) important for sustenance of humanity.
2. Reiterating the fact that GRFA are very important for food security and no country is self-sufficient in terms of GRFA, access to a wide range of GRFA and related information is crucial for sustainable agriculture and food security.
3. In 2001, at the global level, Food and Agriculture organization of the United Nations promulgated a legally binding International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) (www.planttreaty.org), in harmony with CBD, to (i) recognize the enormous contribution of farmers to the diversity of crops that feed the world; (ii) establish a global system to provide farmers, plant breeders and scientists with access to plant genetic materials and (iii) ensure that recipients share benefits they derive from the use of these genetic materials. The ITPGRFA facilitate PGRFA under a multilateral system of exchange for crops listed under Annex 1 of the text of the treaty (<https://www.fao.org/3/i0510e/i0510e.pdf>).
4. India ratified the ITPGRFA on June 10, 2002. To fulfill its obligations to provide facilitated access to PGRFA, Ministry of Environment & Forest and Climate Change (MoEF&CC) vide its notification No. S.O. 3232 (E) dated 17.12.201, in consultation with the National Biodiversity Authority (NBA), declared that the Department of Agriculture & Cooperation (now designated as Department of Agriculture and Farmers' Welfare, DA&FW) under the Ministry of Agriculture and Farmers' Welfare (MoA&FW) may from time to time specify such crops as it considers necessary from the crops listed in the Annex-1 of the ITPGRFA, being food crops and forages covered under the MLS thereof; and accordingly exempt them from Section 3 & 4 of BDA 2002, for the purpose of utilization and conservation for research, breeding and training for food and agriculture. Thus, for the purpose of utilization and conservation or research, breeding and training for food and agriculture, are accessed and used as per the guidelines (<https://agricoop.nic.in/en/guidelines/seeds>) of DA&FW.

5. Further, the DA&FW under MoA&FW is also responsible for providing the best planting materials available in the world to the Indian farmer and to increase productivity, farm incomes and export earnings under the **New Policy on Seed Development, 1988** (<https://agricoop.nic.in/en/divisiontype/seeds>). This includes import of seeds and planting materials on case-to-case basis under license issued by **Plant Protection Adviser** on the basis of the recommendations of **EXIM Committee**.
6. The **Department of Agricultural Research and Education (DARE)** under the MoA&FW coordinates and promotes agricultural research and education in the country, primarily through **Indian Council of Agricultural Research (ICAR)**, an autonomous body under its administrative control (<http://dare.nic.in/about-us/about-the-departments>). DARE is a premier research organisation for coordinating, guiding and managing research and education in agriculture including horticulture, fisheries and animal sciences in the entire country. This is done through >97 ICAR institutes, 53 agricultural universities, 6 Bureaux, 18 National Research Centres, 25 Project Directorates, and 89 All India Coordinated Research Projects spread across the country, making it one of the largest **national agricultural research systems** in the world.
7. As per allocation of business (w.e.f. 1973), and as per list I of the Seventh Schedule of the Constitution of India, **international cooperation and assistance in the field of agricultural research and education including relations with foreign and international agricultural research institutions and organizations is assigned to ICAR/DARE**. Consequential to the business allocated, ICAR/DARE has the mandate to introduce, exchange and explore new resources in crops, animals, fish, microbes and insects from other countries. The release of new varieties in these resources is dependent on **unrestricted use of useful genetic resources** (collectively known as Biodiversity for Food and Agriculture or GRFA) (see achievements on <https://icar.org.in/>).
8. The rules/guidelines for the purpose of exchange of GRFA, are being followed by DARE through duly approved instruments like **Material Transfer Agreements** for Indian (<http://www.nbpgr.ernet.in/Downloadfile.aspx?EntryId=7379>) and foreign (<http://www.nbpgr.ernet.in/Downloadfile.aspx?EntryId=7380>) researchers/farmers/ breeders. These were formulated in consultation with MoEF&CC and NBA. The import and quarantine procedures for exchange of GRFA are also delegated to ICAR/DARE including issuance of phytosanitary certificates and import permits under the Plant Quarantine (Regulation of Import into India) Order 2003 (<https://plantquarantineindia.nic.in/pqispub/pdf/files/pqorder2015.pdf>). For all material exported through ICAR/DARE using MTAs, information is duly provided to the NBA as per provisions of Section 5 of BDA 2002. Thus, ICAR/DARE is already fully geared to execute exchange of GRFA as per provisions of BDA 2002.
9. Conservation, research, and sustainable use have been the mandate of five National Bureaus (for GRFA of plants, animal, fish, microbes and insects) established by ICAR. The institutional infrastructure, trained human resources, expertise and experience in the area of GRFA exists with ICAR in India. ICAR has been partnering NBA in all technical, scientific, and implementation matters ever since NBA has started functioning. Just as ICFRE has been added in addition to the Ministry, ICAR need to be included as the *ex officio* member to assist/oversee matters related to access to GRFA, exchange internationally, conservation ex situ, documentation and data-cross-

talks, technological advances posing challenges to conventional systems, etc.

10. With the enactment of BDA 2002, subsequent BDA Rules 2004, and regulations, **a decline of exchange of GRFA has been experienced**, affecting the overall research especially for genetic improvement. ICAR-National Bureau of Plant Genetic Resources (NBPGR) has found that only 27% of the requests of Indian scientists for germplasm access from other countries have been met after implementation of the BDA 2002 (<http://naas.org.in/policy%20briefs/PB11-Towards%20Revision%20of%20Biological%20Diversity%20Act%202002.pdf>). This issue was flagged by ICAR/DARE in earlier consultations with NBA and MOEF&CC.
11. The purpose of the Amendments should be to facilitate the allocation of business to different Ministries and Departments rather than affecting the activities in adversely. For example, ease of doing business has been addressed in case of **normally traded commodities** such as **cultivated medicinal plants** in the Amendment. However, the issues faced by **breeders, scientists, researchers** in India and those in other countries, has not been addressed in the Bill. The foreign researchers provide germplasm requested by Indian scientists free of cost (or with minimal handling charges on per sample basis). However, they do not receive such response from Indian researchers due to BDA regulations. For example the prescribed fee as per Form No. 1 of BDA Rules 2004 (Rs 10,000/- for application, besides subsequent monetary ABS) often acts as a **deterrent for foreigner researchers as well as farmers**, seeking **GFRA for research purposes**. To rectify this, there is need to allow **reciprocal exchange and good-will exchange** on a case-to- case basis. under Act with delegation of powers to DARE.

ISPGR Proposal :

- **Under Section 13 (1) of BDA 2002, definition of “Agro-biodiversity” to be modified as follows:**

“Agro-biodiversity” means components of biological diversity including their wild relatives/forms, collected, developed and maintained for the purpose of agriculture, food, fodder, fibre, fuel, health and nutritional security.
- **Under Section 16 (Delegation of Powers) of BDA 2002, it is proposed that the regulatory powers and functions on access and use of agrobiodiversity (GRFA) be delegated to the Secretary, DARE & DG, ICAR for expediting exchange of agrobiodiversity, keeping in view the mandate of DARE/ICAR.**
- **In Section 8 (4) (b), under the listed *Ex officio* members, the Indian Council of Agricultural Research (ICAR) to be added.**

ISPGR observation on the Stated objectives of The Biological Diversity (Amendment) Bill, 2021

Stated objectives	Observations of ISPGR
The Biological Diversity (Amendment) Bill, 2021 (no 158 of 2021) seeks to achieve the following objectives (as mentioned in the statement of objectives of the draft bill)	
(i) reduce the pressure on wild medicinal plants by encouraging cultivation of medicinal plants;	This objective is very welcome considering that Indian flora has a very rich diversity of medicinal plants, many of which are under threat due to over-exploitation from natural habitats, besides degradation of ecosystem itself, which harbour these species. However, the number of cultivated medicinal plants is still very limited, and it remains to be seen how the rules would be formulated to define “cultivated medicinal plants” under Section 7(1) and 7(2) of the Amendment. This would directly have implications on the <i>in situ</i> conservation and sustainable utilization of wild medicinal plants.
(ii) encourage Indian system of medicine	We support the implied spirit of this objective. However, it remains to be seen how implementation of the revised BDA clauses would impact <i>in situ</i> conservation, sustainable utilization and benefit sharing mechanisms related to wild medicinal plants, in light of observations made by the Hon’ble High Court of Uttarakhand, in the case of Divya Pharmacy v. Union of India, 2018 SCC.
(iii) facilitate fast-tracking of research, patent application process, transfer of research results while utilising the biological resources available in India without compromising the objectives of United Nation Convention on Biological Diversity and its Nagoya Protocol;	It is agreed that the stated objectives have been broadly achieved through the amendments. However, there are some concerns about delegation of powers within and outside the NBA (detailed later).
(iv) decriminalise certain provisions	We agree with the amendments.
(v) bring more foreign investments in the chain of biological resources , including research, patent and commercial utilisation, without compromising the national interest.	It remains to be seen if the changes would indeed attract “foreign investments”.

Section-wise comments of ISPGR on

Selected proposed Amendments in the Biological Diversity (Amendment) Act, 2021 compared to the Principal Biological Diversity Act 2002

Section No.	THE BIOLOGICAL DIVERSITY ACT, 2002 No. 18 of 2003	THE BIOLOGICAL DIVERSITY (AMENDMENT) BILL, 2021 (158 of 2021)	ISPGR Comments and Suggestions
	PREAMBLE		
	<p>An Act to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto.</p> <p>WHEREAS India is rich in biological diversity and associated traditional and contemporary knowledge system relating thereto.</p> <p>AND WHEREAS India is a party to the United Nations Convention on Biological Diversity signed at Rio de Janeiro on the 5th day of June, 1992;</p> <p>AND WHEREAS the said Convention came into force on the 29th December, 1993;</p> <p>AND WHEREAS the said Convention reaffirms the sovereign rights of the States over their biological resources;</p> <p>AND WHEREAS the said Convention has</p>	<p>2. In the Biological Diversity Act, 2002 (hereinafter referred to as the Principal Act), in the preamble,—</p> <p>(a) for the word “party”, the word “Party” shall be substituted;</p> <p>(b) for the words beginning with “AND WHEREAS it is considered necessary”, and ending with “give effect to the said Convention”, the following shall be substituted, namely:—</p> <p>“AND WHEREAS India is a Party to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity which was adopted on the 29th October, 2010 in Nagoya, Japan;</p> <p>AND WHEREAS it is considered necessary to provide for conservation, sustainable utilisation, fair and equitable sharing of the benefits arising out of utilisation of</p>	<ul style="list-style-type: none"> • The lines “AND WHEREAS the said Convention has the main objective of conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of utilization of genetic resources” from the Principal Act needs to be retained. • This is to give accurate context about the need of this act (India’s obligation to be fulfilled under the CBD, 1993), especially with respect to the words “sustainable use of its components”, which does not feature in the Amendment.

	<p>the main objective of conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of utilization of genetic resources;</p> <p>AND WHEREAS it is considered necessary to provide for conservation, sustainable utilization and equitable sharing of the benefits arising out of utilization of genetic resources and also to give effect to the said Convention.</p> <p>BE it enacted by Parliament in the Fifty-third Year of the Republic of India as follows:—</p>	<p>biological resources and also to give effect to the said Convention.”.</p>	
	CHAPTER – I PRELIMINARY		
	Amendment of Section 2 - Definitions		
2	<p>In this Act, unless the context otherwise requires,</p> <p>a) "benefit claimers" means the conservers of biological resources, their byproducts, creators and holders of knowledge and information relating to the use of such biological resources, innovations and practices associated with such use and application;</p>	<p>3. In section 2 of the principal Act,—</p> <p>(i) for clause (a), the following clauses shall be substituted, namely:—</p> <p>‘(a) “access” means collecting, procuring or possessing any biological resource occurring in or obtained from India or associated traditional knowledge thereto, for the purposes of research or bio-survey or commercial utilisation;</p> <p>(aa) “benefit claimers” means the</p>	<ul style="list-style-type: none"> • “access” means <i>collecting or procuring</i> or <i>acquiring</i> any biological resource occurring in or obtained from India. The term “possessing” under the definition of the term “access” is not in consonance with the requirements of prior approval or prior intimation under the Act. While the words ‘collecting’, ‘procuring’ or ‘acquiring’ denote an act of coming into possession of the biological resources or associated traditional knowledge occurring in India and which need to be preceded by a prior approval or prior intimation, as may be applicable; the word ‘possessing’ denotes already having or belonging. Therefore, it is not clear as to how could a person would obtain prior approval for

		holders of associated traditional knowledge thereto (excluding codified traditional knowledge only for Indians) and information relating to the use of such biological resources, innovations and practices associated with such use and application;’;	a biological resource or associated traditional knowledge that is already in their possession. Hence it is suggested to remove the word “possessing” from definition of word “access” (Section 3(i) (a) of Amendment).
2.	(b) "biological diversity" means the variability among living organisms from all sources and the ecological complexes of which they are part, and includes diversity within species or between species and of eco-systems;	(ii) in clause (b), after the words “biological diversity”, the words ‘or “biodiversity” ’ shall be inserted;	<ul style="list-style-type: none"> The inclusion of the term ‘access’ needs to be consistently implemented under the provisions of the Act. At present, word “access” and “obtain” are used interchangeably in the text this needs to be rectified, to avoid any future legal issues.
2	(c) "biological resources" means plants, animals and micro-organisms or parts thereof , their genetic material and by-products (excluding value added products) with actual or potential use or value, but does not include human genetic material;	<p>iii) for clauses (c) and (d), the following clauses shall be substituted, namely:—</p> <p>(c) “biological resources” include plants, animals, micro-organisms or parts of their genetic material, derivatives (excluding value added products), with actual or potential use or value for humanity, but does not include human genetic material;</p>	<ul style="list-style-type: none"> The definition of the term "biological resources" as given under the Principal Act needs to be retained, except for the use of the word “derivative” instead of “by-products”. Following definition is proposed: <i>“biological resources” includes plants, animals and micro-organisms or parts thereof, or parts of their genetic material and derivatives (excluding value added products) with actual or potential use or value for humanity, but does not include human genetic material;</i>
2	(d) "bio-survey and bio-utilization " means survey or collection of species, subspecies , genes, components and	(d) “bio-survey” means survey or collection of any taxa, varieties , genes, components and extracts of	<ul style="list-style-type: none"> In the definition of the word “bio-survey”, the words “species, subspecies” from the Principal Act have been replaced by the words “taxa, varieties” in the

	<p>extracts of biological resource for any purpose and includes characterization, inventorisation and bioassay;</p>	<p>biological resource for any purpose;'</p>	<p>Amendment.</p> <ul style="list-style-type: none"> Scientifically, variety is a taxonomic rank below that of species and subspecies, but above that of form. In case of cultivated crops 'variety' is a term equivalent to "cultivar". The word "taxa" includes species, subspecies, varieties, cultivars and forms. Further, the use of the term "gene" in the above definition may be replaced with "genome". Genes denotes only functional units of heredity in the form of DNA/RNA of an organism, while genome includes the DNA/RNA and their regulatory elements (e.g. miRNA). Hence, following definition is proposed under section 2(d): <p><i>"bio-survey" means survey or collection of any taxa, genomes, components and extracts of biological resource for any purpose;</i></p>
<p>2</p>	<p>(f) "Commercial utilization" means end uses of biological resources for commercial utilization such as drugs, industrial enzymes, food flavours, fragrance, cosmetics, emulsifiers, oleoresins, colours, extracts and genes used for improving crops and livestock through genetic intervention, but does not include conventional breeding or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping;</p>	<p>No change</p>	<ul style="list-style-type: none"> In the Amendment, definition of the word "Commercial Utilization" has been retained as in the Principal Act. We suggest following change: <p><i>"Commercial utilization" means end uses of biological resources for commercial (monetary) gains for production, sale or licensing of products/processes such as drugs, industrial enzymes, food flavours, fragrance, cosmetics, emulsifiers, oleoresins, colours, extracts and genes used for improving crops and livestock through genetic intervention, but does not include conventional breeding or methods used by breeders for improvement of genetic resources for food and agriculture or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping;</i></p>

		(iv) after clause (f), the following clause shall be inserted, namely:— <i>(fa) “derivative” means a naturally occurring biochemical compound or metabolism of biological resources, even if it does not contain functional units of heredity;</i>	<ul style="list-style-type: none"> It is suggested that the term “derivative” as defined under the Nagoya Protocol may be used. Thus under Section 2(fa) “derivative” may be defined as follows: <i>“Derivative” means a naturally occurring biochemical compound resulting from the genetic expression or metabolism of biological resources, even if it does not contain functional units of heredity.</i>
2	(g) "fair and equitable benefit sharing" means sharing of benefits as determined by the National Biodiversity Authority under section 21;	(v) after clause (g), the following clauses shall be inserted, namely:—	
		<i>(ga) “folk variety” means a cultivated variety of plant that was developed, grown and exchanged informally among farmers;</i>	<ul style="list-style-type: none"> As per Sections 2(ga), of the Amendment, new definition of “folk varieties” has been provided. To our understanding the definition of farmers varieties as provided under section 2 I (1) (2) in PPV&FRA 2001 needs to be used for the purpose of BDA 2002: [(I) “farmers’ variety” means a variety which— (i) has been traditionally cultivated and evolved by the farmers in their fields; or (ii) is a wild relative or land race of a variety about which the farmers possess the common knowledge;]
		<i>(gc) “landrace” means primitive cultivar that was grown by ancient farmers and their successors;’;</i>	<ul style="list-style-type: none"> Globally, plants under cultivation are grouped broadly into two categories (i) modern varieties (developed through a formal system of breeding and selection, usually by plant breeders. These varieties typically are genetically

			<p>homogenous, displaying stable characters over generations.</p> <p>(ii) landraces/traditional varieties (also called heirloom varieties, farmers' varieties), which have been selected and developed by farmers through years of cultivation and seed saving for the next season, often handed down through generations. These varieties are selected by farmers for adaptation to local conditions and food preferences. They are typically genetically heterogeneous and variable. These varieties are associated with cultivation continuity in relatively large area, by choice by a community. They have arisen from primitive cultivars which were selected and cultivated by the farmers for many generations.</p> <ul style="list-style-type: none"> • Further, wild species and wild relatives of crops are the naturally occurring plant species which have common ancestry with crops and can cross with crop species. <p><u>In light of this, it is suggested that Sections 2(ga) and 2(gc) be carefully redefined to remove ambiguity and overlap (landrace, folk varieties and farmers varieties)</u></p>
		<p>(gb) "India" means the territory of India as referred to in article 1 of the Constitution, its territorial waters, seabed and sub-soil underlying such waters, continental shelf, exclusive economic zone or any other maritime zone as referred to in the Territorial Waters, Continental Shelf, Exclusive Economic Zone and other</p>	<ul style="list-style-type: none"> • This sub-clause has provided the spatial and geographical context for defining "India", and is appreciated. However, for the context of various sections of the BDA 2002 (2a, 3(1), 4, 19) the phrase "occurring in, or obtained or accessed from, India" needs to be qualified in terms of biological resources <i>per se</i>, such as to distinguish <ol style="list-style-type: none"> 1. indigenous (native) biological resources,

		<p>Maritime Zones Act, 1976, and the air space above its territory;</p>	<ol style="list-style-type: none"> 2. biological resources that are available in India but were imported (exotic) and have naturalized, 3. biological resources imported in India (post-CBD), 4. Exotic/imported material that may arrive in future for commercial and/or research purpose. <p>Would biological resources in the categories 3 and 4 be deemed to “Occur in India” and subject to benefit sharing and other provisions of the BDA 2002? This would be counter-intuitive to the sections 6(1) and 18(4) as applicable to biological resource obtained from foreign source and being used/propagated India.</p> <ul style="list-style-type: none"> • <u>Hence qualifying the phrase “occurring in, or obtained or accessed from, India” requires detailed scientific and legal deliberation, before its clarification in the Amendment.</u>
<p><u>SOME ADDITIONAL DEFINITIONS REQUIRED IN THE AMENDMENT</u></p> <ul style="list-style-type: none"> • The definition of “codified traditional knowledge” needs to be provided in the Amendment, for sake of clarity, certainty and in consonance with the <u>Nagoya Protocol</u>, as follows: <p><i>“Codified traditional knowledge” is traditional knowledge which is in some systematic and structured form, in which the knowledge is ordered, organized, classified and categorized in some manner. These include knowledge disclosed in writing in ancient scriptures and are in public domain, including Ayurveda, Siddha, Unani systems of medicine, amongst others.</i></p> • The definition of “Conventional breeding or traditional practices” needs to be provided, which is missing both in the Principal Act and the Amendment. Following definition may be considered: <p><i>“Conventional breeding or traditional practices” means those methods of breeding and practices that are being used by growers or cultivators or farmers or local communities or breeders in India in agriculture, forestry, aquaculture, horticulture, sericulture, poultry, dairy farming, animal husbandry or bee keeping, etc.</i></p> 			

	<p>CHAPTER – II</p> <p>Amendment of section 3 Certain persons not to undertake Biodiversity related activities without approval of National Biodiversity Authority</p>		
3	<p>(1) No person referred to in sub-section (2) shall, without previous approval of the National Biodiversity Authority, obtain any biological resource occurring in India or knowledge associated thereto for research or for commercial utilization or for bio-survey and bio-utilization.</p>	No change	<ul style="list-style-type: none"> Section 3 (1) of the Principal Act, should be consistent with Section 19 and be amended as :— <p><i>3(1) No person referred to in sub-section (2) shall, without previous approval of the National Biodiversity Authority, access any biological resource occurring in India or traditional knowledge associated thereto for research or for bio-survey or commercial utilization.</i></p>
	<p>Amendment of section 5. Sections 3 and 4 not to apply to certain collaborative research projects</p>	<p>(i) in marginal heading, for the words and figures “Sections 3 and 4”, the words “Certain provisions” shall be substituted;</p>	No Comments
5	<p>(1) The provisions of sections 3 and 4 shall not apply to collaborative research projects involving transfer or exchange of biological resources or information relating thereto between institutions, including Government sponsored institutions of India, and such institutions in other countries, if such collaborative research projects satisfy the conditions specified in sub-section (3).</p>	<p>7. In section 5 of the Principal Act, in sub-section (1), the following sub-section shall be substituted, namely:— “(1) The provisions of clause (a) of sub-section (1) of section 3 shall not apply to collaborative research projects involving transfer or exchange of biological resource or associated traditional knowledge thereto between institutions,</p>	<p>There is no clause (a) of sub-section (1) of section 3. Hence the amendment may be corrected as follows:</p> <p><i>(1) The provisions of sub-section (1) of section 3 shall not apply to collaborative research projects involving transfer or exchange of biological resource or associated traditional knowledge thereto between institutions, including Government sponsored institutions of India, and such institutions in other countries, if such collaborative research projects satisfy the conditions specified in sub-section (3)”.</i></p>

		including Government sponsored institutions of India, and such institutions in other countries, if such collaborative research projects satisfy the conditions specified in sub-section (3).”.	
	Substitution of new section for section 7. Prior intimation to State Biodiversity Board for obtaining biological resource for certain purposes		
7	<p>7. No person, who is a citizen of India or a body corporate, association or organization which is registered in India, shall obtain any biological resource for commercial utilization, or bio-survey and bio-utilization for commercial utilization except after giving prior intimation to the State Biodiversity Board concerned:</p> <p>Provided that the provisions of this section shall not apply to the local people and communities of the area, including growers and cultivators of biodiversity, and vaidas and hakims, who have been practicing indigenous medicine.</p>	<p>9. For section 7 of the principal Act, the following section shall be substituted, namely:—</p> <p>“7. (1) No person, other than the person covered under sub-section (2) of section 3, shall access any biological resource and its associated knowledge for commercial utilisation, without giving prior intimation to the concerned State Biodiversity Board, subject to the provisions of clause (b) of section 23 and sub-section (2) of section 24: Provided that the provisions of this section shall not apply to the codified traditional knowledge, cultivated medicinal plants and its products, local people and communities of the area, including growers and cultivators of biodiversity, vaidas, hakims and</p>	<ul style="list-style-type: none"> • The manner of issuing certificate of origin for cultivated medicinal plants needs clarification; otherwise it causes apprehension that by exempting cultivated medicinal plants and its products, from unrestricted access for commercial utilization by the local people and communities of the area, including growers and cultivators of biodiversity, vaidas, hakims and registered AYUSH practitioners who have been practicing indigenous medicines, including Indian systems of medicine, may lead to exploitation of these important biological resources, many of which are already threatened.

		<p>registered AYUSH practitioners who have been practicing indigenous medicines, including Indian systems of medicine for sustenance and livelihood.</p> <p>(2) The manner of issuing certificate of origin for cultivated medicinal plants shall be such as may be prescribed.”</p>	
	CHAPTER - III		
	National Biodiversity Authority		
	Amendment of section 8		
	Establishment of National Biodiversity Authority		
8	<p>8.(1) With effect from such date as the Central Government may, by notification in the Official Gazette, appoint, there shall be established by the Central Government for the purposes of this Act, a body to be called the National Biodiversity Authority.</p> <p>(2) The National Biodiversity Authority shall be a body corporate by the name aforesaid, having perpetual succession and a common seal, with power to acquire, hold and dispose of property, both movable and immovable, and to contract, and shall by the said name sue and be sued.</p> <p>(3) The head office of the National Biodiversity Authority shall be at</p>	<p>10. In section 8 of the principal Act,—</p> <p>(a) for sub-section (3), the following sub-section shall be substituted, namely:—</p> <p>“(3) The Head office of the National Biodiversity Authority shall be at Chennai and the Central Government may, by notification in the Official Gazette, establish regional offices in other places in India.”;</p> <p>(b) in sub-section (4),—</p> <p>(i) for clauses (a), (b) and (c), the following clauses shall be substituted, namely:—</p> <p>“(a) a Chairperson, who shall be an</p>	<ul style="list-style-type: none"> • While it is appreciated that representatives from Ministry of Agriculture & Farmers’ Welfare and Department of Agricultural Research and Education (DARE) are explicitly included as <i>ex-officio</i> members, there is a great need to include member(s) from Indian Council of Agricultural Research (ICAR), to represent the vast component of agrobiodiversity (biological diversity for food and agriculture) that is being managed through its five national bureaus (on plants, animals, fish, microbes, and insects) and >97 research institutes. The bureaus and other ICAR institutes are also the designated depositories under the BDA 2002. • Just like ICFRE has been added in addition to the MoEF&CC, the ICAR needs to be included as the <i>ex officio</i> member to assist/oversee matters related to access to GRFA, international exchange, <i>ex situ</i> conservation, documentation and data-cross-talks, technological advances posing challenges to conventional systems, etc.

	<p>Chennai and the National Biodiversity Authority may, with the previous approval of the Central Government, establish offices at other places in India.</p> <p>(4) The National Biodiversity Authority shall consist of the following members,</p> <p>(a) a Chairperson, who shall be an eminent person having adequate knowledge and experience in the conservation and sustainable use of biological diversity and in matters relating to equitable sharing of benefits, to be appointed by the Central Government;</p> <p>(b) three ex officio members to be appointed by the Central Government, one representing the Ministry dealing with Tribal Affairs and two representing the Ministry dealing with Environment and Forests of whom one shall be the Additional Director General of Forests or the Director General of Forests;</p> <p>(c) seven ex officio members to be appointed by the Central Government to represent respectively the Ministries of the Central Government dealing with –</p> <p>(i) Agricultural Research and Education; (ii) Biotechnology;</p>	<p>eminent person having adequate knowledge, expertise and experience in the conservation and sustainable use of biological diversity and in matters relating to fair and equitable sharing of benefits, to be appointed by the Central Government;</p> <p>(b) sixteen ex officio members to be appointed by the Central Government, representing the Ministries dealing with—</p> <p>(i) Agricultural Research and Education; (ii) Agriculture and Farmers Welfare; (iii) Ayurveda, Unani, Siddha, Sowa Rigpa, Yoga and Naturopathy and Homoeopathy; (iv) Biotechnology; (v) Environment and Climate Change; (vi) Forests and Wildlife; (vii) Indian Council of Forestry Research and Education; (viii) Earth Sciences; (ix) Panchayati Raj; (x) Science and Technology; (xi) Scientific and Industrial Research; (xii) Tribal Affairs;</p>	
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	<p>(iii) Ocean Development; (iv) Agriculture and Cooperation; (v) Indian Systems of Medicine and Homoeopathy; (vi) Science and Technology; (vii) Scientific and Industrial Research;</p> <p>(d) five non-official members to be appointed from amongst specialists and scientists having special knowledge of, or experience in, matters relating to conservation of biological diversity, sustainable use of biological resources and equitable sharing of benefits arising out of the use of biological resources, representatives of industry, conservers, creators and know ledge-holders of biological resources.</p>	<p>(c) four representatives from State Biodiversity Boards on rotational basis;</p> <p>(ii) in clause (d),— (A) for the word “specialists”, the words “specialists, legal experts” shall be substituted; (B) for the word “equitable”, the words “fair and equitable” shall be substituted; (iii) after clause (d), the following clause shall be inserted, namely:— “(e) a Member-Secretary, who shall have experience in matters relating to biodiversity conservation, to be appointed by the Central Government.”</p>	
	Conditions of service of Chairperson and members		
10	The Chairperson shall be the Chief Executive of the National Biodiversity Authority and shall exercise such powers and perform such duties, as may be prescribed.	The Chairperson shall be the Chief Executive of the National Biodiversity Authority and shall exercise such powers and perform such duties, as may be prescribed.	
		<p>10 A. (1) The Member-Secretary shall be the chief coordinating officer and the convener of the National Biodiversity Authority and shall assist that Authority in the discharge of its functions under this Act. (2) The Member-Secretary shall</p>	With the inclusion of this clause (chief coordinating officer and the convener), and in case of conflict of opinion between Chairperson and Member Secretary, whose decision will prevail? It is not clear with this amendment.

		perform such other functions as may be prescribed.	
	Delegation of powers		
16	The National Biodiversity Authority may, by general or special order in writing, delegate to any member, officer of the National Biodiversity Authority or any other person subject to such conditions, if any, as may be specified in the order, such of the powers and functions under this Act (except the power to prefer an appeal under section 50 and the power to make regulations under section 64) as it may deem necessary	The National Biodiversity Authority may, by general or special order in writing, delegate to any member or Member-Secretary , officer of the National Biodiversity Authority or any other person subject to such conditions, if any, as may be specified in the order, such of the powers and functions under this Act (except the power to prefer an appeal under section 50 and the power to make regulations under section 64) as it may deem necessary	<ul style="list-style-type: none"> • At the international level, the Food and Agriculture organization of the United Nations (FAO) recognizes the specific role of genetic resources for food and agriculture (GRFA) for food and nutritional security of the world, interdependence of different countries for these GRFA, human interventions required for their management and conservation, involvement of large number of genetically diverse lines or germplasm required for their improvement. • Hence, emphasis on free flow of germplasm has been enshrined in the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA). • Due to the implementation of BDA 2002, exchange of GRFA has been adversely effected. • Further, ICAR/ DARE being one of the nodal departments of the Ministry of Agriculture, is mandated for research and development in the field of agricultural research and education. As per allocation of business (w.e.f.1973), and as per list I of the Seventh Schedule of the Constitution of India) the international cooperation and assistance in the field of agricultural research and education including relations with foreign and international agricultural research institutions and organizations is also assigned to ICAR/DARE. Consequential to the business allocated, ICAR/ DARE has the mandate to introduce, exchange and explore new resources in crops, animals, fish, microbes and insects from other countries. • Keeping in view, the importance of agrobiodiversity (Biodiversity for Food and Agriculture) which is the

			mandate of DARE for efficient discharge of its roles and responsibilities, it is proposed that the <u>regulatory powers and functions on agrobiodiversity (GRFA) components be delegated to the Secretary DARE & DG ICAR for expediting exchange of agrobiodiversity under Section 16 (Delegation of Powers) of the BDA</u>
	CHAPTER IX DUTIES OF THE CENTRAL AND THE STATE GOVERNMENTS		
40	Power of Central Government to exempt certain biological resources	Provisions of this Act not to apply in certain cases.	<ul style="list-style-type: none"> We recommend that the original marginal text for section 40 (Power of Central Government to exempt certain biological resources) be retained as such. This is because by using this section international obligations of providing access to genetic resources [e.g. International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)] can be fulfilled. Following modification is suggested:
40	Notwithstanding anything contained in this Act, the Central Government may, in consultation with the National Biodiversity Authority, by notification in the Official Gazette, declare that the provisions of this Act shall not apply to any items , including biological resources normally traded as commodities	29. For section 40 of the principal Act, the following section shall be substituted, namely:— “40. Notwithstanding anything contained in this Act, the Central Government may, in consultation with the National Biodiversity Authority, by notification in the Official Gazette, declare that all or any of the provisions of this Act shall not apply to biological resources when normally traded as commodities or to the items derived from them, including agricultural wastes, as notified and cultivated medicinal plants and their products for entities covered under section 7, registered as per the regulations made or as prescribed:	<p><i>“40. Notwithstanding anything contained in this Act, the Central Government may, in consultation with the National Biodiversity Authority, by notification in the Official Gazette, declare that all or any of the provisions of this Act shall not apply to biological resources when normally traded as commodities or to the items derived from them, including agricultural wastes, as notified and cultivated medicinal plants and their products, and “genetic resources for food and agriculture” under any international treaty/law where India is a signatory. for entities covered under section 7, registered as per the regulations made or as prescribed:</i></p>

			<i>Explanation: Inclusion of the words “genetic resources for food and agriculture” is to ensure that provisions of this act do not affect the rights and obligations deriving from any existing (e.g. crops listed under the Annex 1 ITPGRFA or any such future international agreements.</i>
	CHAPTER - X Biodiversity Management Committees		
		Substitution of new section for section 44. Application of Local Biodiversity Fund. Application of Local Biodiversity Fund	
44	<p>44.(1) Subject to the provisions of subsection (2), the management and the custody of the Local Biodiversity Fund and the purposes for which such Fund shall be applied, be in the manner as may be prescribed by the State Government.</p> <p>(2) The Fund shall be used for conservation and promotion of biodiversity in the areas falling within the jurisdiction of the concerned local body and for the benefit of the community in so far such use is consistent with conservation of biodiversity.</p>	<p>32. For section 44 of the principal Act, the following section shall be substituted, namely:—</p> <p>“44. (1) The Local Biodiversity Fund shall be utilised in accordance with the regulations and the guidelines made in this behalf, for—</p> <p>(a) the conservation of biodiversity including restoration of areas;</p> <p>(b) the socio-economic development of the community without compromising the conservation concerns; and</p> <p>(c) the administrative expenses of the Biodiversity Management Committee.</p> <p>(2) The Fund shall be utilised in such manner as may be prescribed by the State Government.”.</p>	<p><u>With respect to Section 44 (1) (c), there is need for defining the maximum amount (percentage) of Fund which may be utilized for meeting the administrative expenses of the Biodiversity Management Committee, and major percentage be devoted to subsection 44- (a) and (b). This is to encourage conservation of biological resources and their sustainable utilization by local communities, which is the main aim of the CBD 1993 as well as BDA 2002</u></p>

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