

Recent Developments for Access to Plant Genetic Resources in India and their Implications

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Being party to the Convention on Biological Diversity (CBD), Parliament of India enacted the Biological Diversity Act (BDA), 2002 and the National Biodiversity Authority (NBA) was established in 2003. The implementation of the BDA, 2002 was initiated after the Biological Diversity Rules (BDR), 2004 were notified and the application forms for access to biological resources and for seeking intellectual property rights were put in place through these notifications/regulations. Access to biological resources in India is now regulated as per the provisions laid out in BDA, 2002 and BDR, 2004. However, there were many issues which were not addressed in the first set of rules notified through BDR 2004. Such issues have been highlighted here. The implications of these notifications especially for access to biological resources for researchers within and from outside India are discussed here. Relevant and important clauses from the notification/regulations are reproduced for ready reference.

Key Words: Access, Biological resources, Biological Diversity Act, ITPGRFA, Material Transfer Agreement, National Biodiversity Authority, Standard Material Transfer Agreement, Value added products

Introduction

Genetic resources were freely accessible as they were regarded as common heritage of humankind before the Convention on Biological Diversity (CBD) came into existence. Sovereign rights over these resources were highlighted in the context of managing and accessing genetic resources by different countries. Thus, access to genetic resources post-CBD is a highly deliberated issue amongst the researchers/breeders/community dealing with their utilization and conservation. However, exchange of plant genetic resources (PGR) is essential for all crop improvement programmes. Crop improvement eventually plays a significant role in sustainable agriculture, food and nutritional security, and helps to mitigate adverse effects of climate change on agricultural production. Apprehensions related to access to biological resources raise several questions such as ownership and accessibility (Evenson, 1999; Hamilton *et al.*, 2005) such as who owns the biological resources conserved at national level or at International Research Centers. Can these resources be shared or priced? How to ensure their utilization by others and share equitable benefits? These issues are being put forth in various national level meetings to the policy makers at different levels, including those beyond the scientific communities. This paper is an attempt to

raise awareness on these issues and to define and bring clarity on access to biological resources in the light of recent developments and notifications.

After the enactment of BDA, 2002 and dealing with exchange of PGR in the country at NBPGR, it was noted that the flow of Plant Genetic Resources for Food and Agriculture (PGRFA) was much restricted after the CBD came into force when compared to before its implementation by different countries. However, collections from International Research Centres were not affected by CBD (Tyagi *et al.*, 2006). On the other hand countries that were party to International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) including India were obliged to provide facilitated access to PGRFA to all member countries for the crops listed in Annex 1 of ITPGRFA. The BDA, 2002, therefore, needs to be implemented in synergy with ITPGRFA obligations. Specific provisions in the BDA, 2002 were needed to be included/revised/amended for accessing PGRFA which includes PGRFA beyond their origin/sovereignty [*e.g. In trust material*—held by Consultative Group on International Agricultural Research (CGIAR) Centers collected before 1993 and referred to as CG institute hereafter].

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For such policy deliberations, Indian Council of Agricultural Research (ICAR) had established a high level National Advisory Board on Management of Genetic Resources (NABMGR) to discuss and advise the concerned departments for harmonization of access and benefit sharing issues. During its tenure of three years, five meetings were held. Important recommendations were made to streamline the process of access of germplasm. It was one of the recommendations of the Board that the implementation of the ITPGRFA in the national system needed to be adopted urgently and the proposal put forth by India for designation of material for the Multilateral System (MLS) of the ITPGRFA. In response, the guidelines for 'Implementation of ITPGRFA were developed and Central Government, in consultation with National Biodiversity Authority (NBA) notified exemption for access to Annex I crops of the ITPGRFA, and declared that Department of Agriculture and Co-operation (DAC), Ministry of Agriculture (MoA) as the nodal department. DAC may from time to time notify the crops listed in Annex 1 of the Treaty to the NBA for exemption. This exemption came after a series detailed discussions in the Board meetings and its sub-committees.

Further, as per the definition provided for 'Biological resources' under BDA, 2002, biological resources include plants, animals and microorganisms 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. Therefore, PGRFA were included under the definition of biological resources. BDA, 2002, hence, does not differentiate between biological resources and PGRFA, which are of utmost importance for food and nutritional security, and sustainable agriculture. Most of the cultivated crops are part of PGRFA but not all of them are of Indian origin. The term research is also defined under the Act as study or systematic investigation of any biological resource or technological application that uses biological systems, living organisms or derivatives thereof to make or modify products or processes for any use.

The value added products defined under the Act are products which may contain portions or extracts of plants and animals in unrecognizable and physically inseparable form. This definition does not specifically mention vegetable oils, proteins, starch, *etc.* which are used directly as food products. Another definition in the Act on commercial utilization says, the end uses of

biological resources such as drugs, industrial enzymes, food flavours, fragrances, cosmetics, emulsions, oleoresins, colours, extracts, and genes used for improving crops and livestock through genetic interventions, but does not include conventional breeding or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping. The definitions and use of term conventional breeding or traditional practices is being interpreted differently by different stakeholders. Do conventional practices include hybrid seed production, or use of artificial insemination in animals to produce desirable progeny was highly debated.

Regulations on Access to Biological Diversity

Chapter II of the BDA, 2002 defined the Regulations for access to biological diversity and the Section 3 mentions that certain persons cannot obtain any biological resource occurring in India for research or commercial utilization, without the approval of the NBA (www.nbaindia.org). These persons include those who are not citizens of India, or are non-resident Indians, or companies not registered or incorporated in India. These also include Indian companies registered in India with foreigners managing the company or provide fund to these.

Section 5 of the Act provides for exemptions from Section 3 and Section 4 for access to Indian genetic resources by nationals of other countries, covered under the collaborative research projects/Memoranda of Understanding (MoU)/Work Plans. Such collaborative research projects must conform to the policy guidelines issued by the Ministry of Environment, Forests and Climate Change (MoEF &CC), S.O 1911 (E). However, if any researcher/institutions was intending to send any biological material for deposition in international repositories for the purpose of patents or for new species recognition or taxonomic review were not able to do so under Section 5. A cost of paying requisite fees was also involved in transfer of material. For all other requests not covered under any collaborative research projects the non-Indian applicant as described above, was required to obtain prior approval of NBA.

The above provisions were subjected to individual interpretations with regard to access under BDA, 2002. After detailed deliberations in various meetings/fora, notifications/regulations were put in place by NBA and MoEF & CC to bring more clarity on access of biological resources by different types of users of biological

resources for example, the term ‘occurring in India’ is ambiguous as all the PGRFA occurring in the country are not ‘Indian’. Thus, these questions are being raised on the interpretation of the definitions from time to time.

Recent Notifications

The notification issued recently has further stressed some of the provisions, as indicated below:

G.S.R 827 dated November 21, 2014 on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization (see Annexure 1) (http://nbaindia.org/uploaded/pdf/Gazette_Notification_of_ABS_Guidlines.pdf).

(A) Regulation 13: Conducting of non-commercial research or research for emergency purposes outside India by Indian researchers/government institutions—

- (1) Any government institution which intends to send biological resources to carry out certain urgent studies to avert emergencies like epidemics, *etc.*, shall apply to NBA.
- (2) The NBA shall, on being satisfied with the application accord its approval within a period of 45 days from the date of receipt of the application. The applicant shall be required to deposit voucher specimens in the designated national repositories before carrying/sending the biological resources outside India and a copy of proof of such deposits shall be endorsed to NBA.

Implications

This provision implies that any Indian researcher going abroad for any approved basic research activity could carry biological resource with the approval of NBA which shall be granted within 45 days, as opposed to six months as prescribed for other cases of access and sending material outside India.

Secondly, any government institution could send material in the interest of the nation in the same manner for testing/screening or taxonomic studies to a foreign institution in cases of emergent threats to biological resources and complete taxonomic studies, without the need to formulate any collaborative research project. Such approval shall also be granted by NBA within 45 days. Fees for access shall not be required in such cases.

(B) Regulation 17: Certain activities or persons are exempted from approval of NBA or State Biodiversity Board (SBB), namely:

- (a) Indian citizens or entities accessing biological resources and/ or associated knowledge, occurring in or obtained from India, for the purposes of research or bio-survey and bio-utilization for research in India;
- (b) Collaborative research projects, involving the transfer or exchange of biological resources or related information, if such collaborative research projects have been approved by the concerned Ministry/ Department of the State or Central Government and conform to the policy guidelines issued by the Central Government for such collaborative research projects
- (c) Local people and communities of the area, including growers and cultivators of biological resources, *vaidis* and *hakims*, practising indigenous medicine, except for obtaining intellectual property rights;
- (d) Accessing biological resources for conventional breeding or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping, in India;
- (e) Publication of research papers or dissemination of knowledge, in any seminar or workshop, if such publication is in conformity with the guidelines issued by the Central Government from time to time;
- (f) Accessing value added products, which are products containing portions or extracts of plants and animals in unrecognizable and physically inseparable form and
- (g) Biological resources, normally traded as commodities notified by the Central Government under section 40 of the Act.

Implications

This implies that all Indians could access biological resources for research use within India. Secondly, local communities and traditional medical practitioners could use biological resources occurring in India without the need for prior intimation to the SBB except when seeking a patent.

Also, any Indian or non-Indian entity could access biological resource for traditional plant breeding and for other traditional practices of plant and animal improvement if the research was being carried out within India. Therefore, any seed company or private research organization doing conventional (traditional) plant breeding in India could access plant varieties and germplasm from public or private resources. Such

access shall however be based on the mutual agreements/terms and conditions as laid down by the provider(s)/Institution(s).

Scope of International Treaty of Plant Genetic Resources for Food and Agriculture

This Treaty relates to PGRFA and defines PGRFA as any genetic material of plant origin of actual or potential value for food and agriculture (<http://www.planttreaty.org/>). Genetic material is defined as any material of plant origin, including reproductive and vegetative propagating material, containing functional units of heredity. Thus, the scope of BDA, 2002 being all biological resources, it does not differentiate PGRFA from other resources but these are of utmost importance for food and nutritional security and sustainable agriculture.

Regulations of Access to PGRFA

The provisions for facilitated access to PGRFA are laid down in Article 12 of the Treaty. The access to be provided solely for the purpose of utilization and conservation for research, breeding and training for food and agriculture, provided these are not for chemical, pharmaceutical and/or other non-food/feed industrial uses. Access is provided with all available passport data. However, Intellectual Property (IP) or other rights which limit the facilitated access cannot be claimed. There is a provision for the material which is under development and access to such material is at the discretion of the developer.

Article 12.4 describes the provisions of providing access to PGRFA pursuant to a standard material transfer agreement (SMTA), adopted by the Governing Body, which embodies the benefit-sharing provisions set forth in Article 13.2d.

Article 10 defines the establishment of a multilateral system (MLS), which is efficient, effective, and transparent, both to facilitate access to PGRFA, and to share the benefits arising from the utilization of these resources in a fair and equitable way. Treaty also recognizes the sovereign rights of States over their own PGRFA and access should be consistent with national legislation.

The PGRFA covered under the MLS established under the Treaty is covered under Article 11. The PGRFA covered under the MLS and referred to as Annex I crops is listed according to criteria of food security and interdependence (see list at Annexure I). The MLS as identified in Article 11 includes all PGRFA which

are in the public domain, *ex situ* collections of the CG institutes, and in other international institutions, and encourages contracting parties to put their collections in the multilateral system.

Article 15 states that PGRFA listed in Annex I of this Treaty and held by the CG institutes and those collected before its entry into force and held by the CG institutes shall be made available in accordance with the provisions of the Material Transfer Agreement (MTA) pursuant to agreements between the CG institutes and the Food and Agriculture Organization (FAO).

A total of 4, 87,793 accessions (as on February 2015) are included in the MLS by 33 contracting parties (countries) *viz.* Armenia, Austria, Belgium, Brazil, Canada, Cyprus, Czech Republic, Egypt, Estonia, France, Germany, Italy, Jordan, Kenya, Lebanon, Madagascar, Malawi, Morocco, Namibia, The Netherlands, Poland, Portugal, Romania, Rwanda, Senegal, Spain, Sudan, Sweden, Switzerland, Tanzania, UK, Uruguay and Zambia.

India being signatory to ITPGRFA has an obligation as a Contracting Party and needs to provide facilitated access to the Contracting Parties of Treaty for the crops listed in Annex 1. Notification for exemption of Annex 1 crops is issued by Government of India through DAC, MoA on February 16, 2014 including the approved Guidelines for the implementation of the ITPGRFA (Office Memorandum No. 13-5/2013 SD-V). MoEF & CC has also issued a notification for exemption of Annex crops of the Treaty. (http://nbaindia.org/uploaded/pdf/Gazette_Notificaiton_on_exemption_of_crops_listed_in_the_Annex-I_of_the_ITPGRFA.pdf) (Annexure 2) Thus, as per the notification issued the access under the MLS is exempted from Section 3 and 4 of the BDA, 2002 (18 of 2003) and is on par with Section 5 under which the collaborative research projects are exempted from Section 3 and 4.

Implications

As per the guidelines developed which are notified by DAC, MoA, Government of India (GOI), the supply of PGRFA of Annex 1 Crops and held in 'trust' by the CG institutes shall also be made available in accordance with the provisions of SMTA with the concurrence of the DAC, MoA, the National Focal Point (Fig. 1).

The exemption thus ensures facilitated access to PGRFA as per the provisions of the Treaty and use of SMTA for

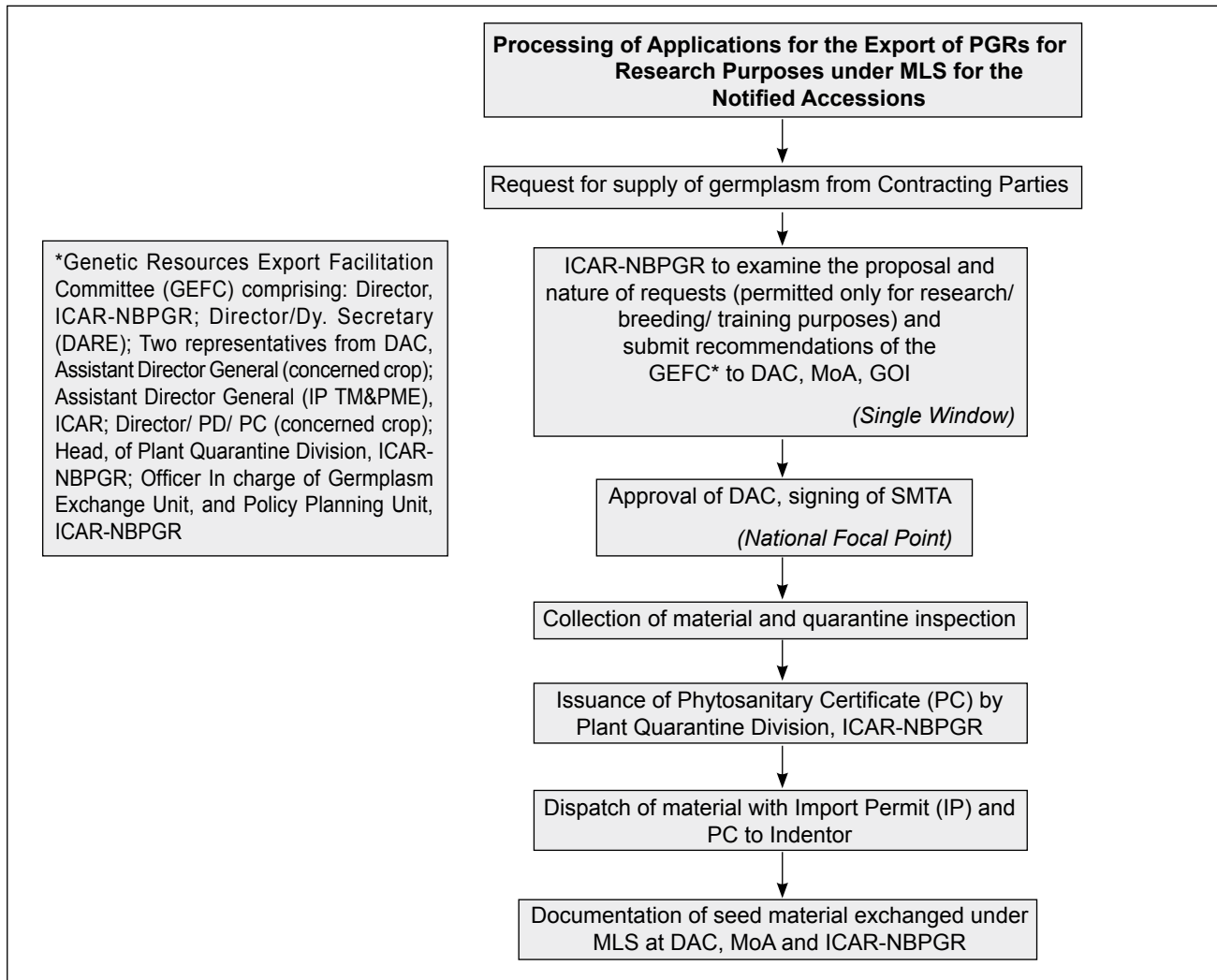


Fig. 1

such transfer of PGRFA. The following are the major categories of accessing PGRFA:

- Access to crops listed in Annex 1 of the Treaty only
- Access to and from contracting parties only
- Access to and from CG Centers
- Access for the purpose of utilization and conservation for research, breeding and training for food and agriculture only
- Access to PGRFA held by CG Centers including those collected before 1993 referred to as “in trust” or “FAO designated material”
- Access with the terms and conditions of the SMTA
- Use of SMTA required for material accessed through SMTA to any third or subsequent user
- No Intellectual Property Rights (IPR) is to be granted on the material “in the form received”
- Transfer of any material accessed from MLS and received under SMTA to any third party after signing the SMTA

For example, as an obligation, ICRISAT a CG Institute based in India has the mandate to undertake export of germplasm of their mandate crops and can be categorized under these sub-heads for exporting germplasm to its collaborators as described in Fig. 2.

However, if IPR (patents) is sought on derivatives of the PGRFA accessed from India, permission from NBA would be mandatory, as the above mentioned notification

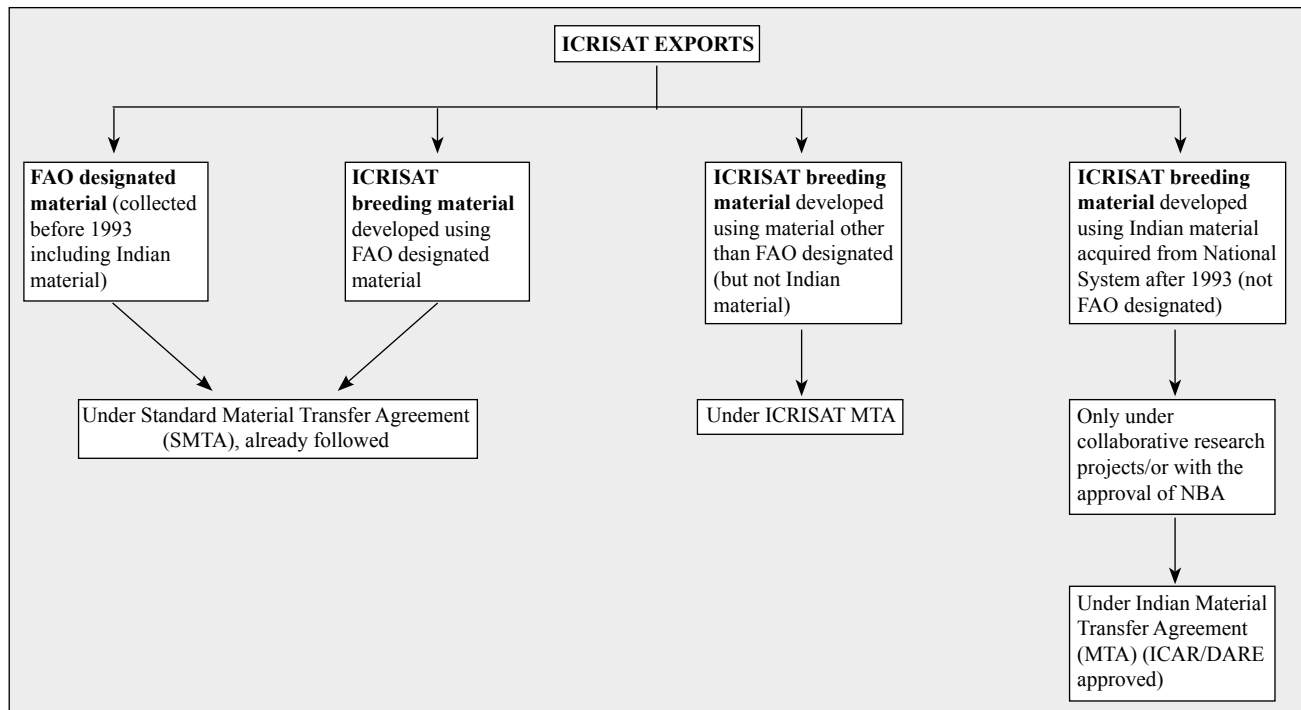


Fig. 2. Categories on material ICRISAT shares with its collaborators

provides exemption for access to PGRFA, only for Section 3 and 4 of the BDA, 2002 and not Section 6.

It may also be noted that India has also ratified the Nagoya Protocol (NP) on Access and Benefit Sharing (ABS) and is one of the countries already having domestic measures in place on ABS (<http://www.cbd.int/abs/>). The NP recalls and recognises the MLS of ABS established under the ITPGRFA in the context of poverty alleviation and climate change and acknowledges the fundamental role of Treaty and FAO Commission on Genetic Resources for Food and Agriculture in harmony with the CBD. The protocol provides a strong basis for greater legal certainty and transparency for both providers and users of genetic resources. However, some issues in the NP were not covered by BDA, 2002 such as user country measures. These also need to be put in place now.

Conclusions

After notification of the BDR, 2004, the application forms for access to biological resources and for seeking IPRs were put in place. It was felt that some issues were not addressed in the first set of rules notified through BDR, 2004. Researcher/institutions in India intending to send any biological material abroad were not able to do so under Section 5. Also, a cost of paying requisite

fees was involved in transfer of material. Now, with the notification as discussed above any Indian researcher/government institution which intends to carry/send the biological resources outside India to undertake basic research other than collaborative research referred as per section 5 of the Act, shall apply to the NBA. Further, Indian or non-Indian entities could access biological resources for traditional plant breeding and for other traditional practices of plant and animal improvement if the research is being carried out within India. Also, PGRFA, which are of utmost importance for food and nutritional security and sustainable agriculture may be exchanged as per the provisions of the Treaty and guidelines notified by Government of India, including those held in 'trust' by IARCs could be made available in accordance with the provisions of SMTA with the concurrence of the DAC, MoA, GOI the National Focal Point. This paper is an attempt to generate awareness on above issues.

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support of ICAR for constitution of the NABMGR, and the keen involvement of the Chairman and Members of the Board to streamline the process of exchange of germplasm is also acknowledged.

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Annexure I

CROPS OF THE TREATY (ANNEX I)

Food crops (35)

Crop	Genus	Observations
Breadfruit	<i>Artocarpus</i>	Breadfruit only.
Asparagus	<i>Asparagus</i>	
Oat	<i>Avena</i>	
Beet	<i>Beta</i>	
Brassica complex	<i>Brassica</i> et al.	Genera included are: <i>Brassica</i> , <i>Armoracia</i> , <i>Barbarea</i> , <i>Camelina</i> , <i>Crambe</i> , <i>Diplotaxis</i> , <i>Eruca</i> , <i>Isatis</i> , <i>Lepidium</i> , <i>Raphanobrassica</i> , <i>Raphanus</i> , <i>Rorippa</i> , and <i>Sinapis</i> . This comprises oilseed and vegetable crops such as cabbage, rapeseed, mustard, cress, rocket, radish, and turnip. The species <i>Lepidium meyenii</i> (maca) is excluded.
Pigeonpea	<i>Cajanus</i>	
Chickpea	<i>Cicer</i>	
Citrus	<i>Citrus</i>	Genera <i>Poncirus</i> and <i>Fortunella</i> are included as root stock.
Coconut	<i>Cocos</i>	
Major aroids	<i>Colocasia</i> , <i>Xanthosoma</i>	Major aroids include taro, cocoyam, dasheen and tannia.
Carrot	<i>Daucus</i>	
Yams	<i>Dioscorea</i>	
Finger Millet	<i>Eleusine</i>	
Strawberry	<i>Fragaria</i>	
Sunflower	<i>Helianthus</i>	
Barley	<i>Hordeum</i>	
Sweet Potato	<i>Ipomoea</i>	
Grass pea	<i>Lathyrus</i>	
Lentil	<i>Lens</i>	
Apple	<i>Malus</i>	
Cassava	<i>Manihot</i>	<i>Manihot esculenta</i> only.
Banana/Plantain	<i>Musa</i>	Except <i>Musa textilis</i> .

Contd.

Contd.

Crop	Genus	Observations
Rice	<i>Oryza</i>	
Pearl Millet	<i>Pennisetum</i>	
Beans	<i>Phaseolus</i>	Except <i>Phaseolus polyanthus</i> .
Pea	<i>Pisum</i>	
Rye	<i>Secale</i>	
Potato	<i>Solanum</i>	Section <i>tuberosa</i> included, except <i>Solanum phureja</i> .
Eggplant	<i>Solanum</i>	Section <i>melongena</i> included.
Sorghum	<i>Sorghum</i>	
Triticale	<i>Triticosecale</i>	
Wheat	<i>Triticum</i> et al.	Including <i>Agropyron</i> , <i>Elymus</i> , and <i>Secale</i> .
Faba Bean/Vetch	<i>Vicia</i>	
Cowpea et al.	<i>Vigna</i>	
Maize	<i>Zea</i>	Excluding <i>Zea perennis</i> , <i>Z. diploperennis</i> , and <i>Z. luxurians</i> .

Forages (29)

Genera	Species
Legume Forages	
<i>Astragalus</i>	<i>chinensis, cicer, arenarius</i>
<i>Canavalia</i>	<i>ensifolmis</i>
<i>Coronilla</i>	<i>varia</i>
<i>Hedysarum</i>	<i>coronarium</i>
<i>Lathyrus</i>	<i>cicera, ciliolatus, hirsutus, ochrus, odoratus, sativus</i>
<i>Lespedeza</i>	<i>cuneata, striata, stipulacea</i>
<i>Lotus</i>	<i>corniculatus, subbiflorus, uliginosus</i>
<i>Lupinus</i>	<i>albus, angustifolius, luteus</i>
<i>Medicago</i>	<i>arborea, falcata, sativa, scutellata, rigidula, truncatula</i>
<i>Melilotus</i>	<i>albus, officinalis</i>
<i>Onobrychis</i>	<i>viciifolia</i>
<i>Ornithopus</i>	<i>sativus</i>
<i>Prosopis</i>	<i>affinis, alba, chilensis, nigra, pallida</i>
<i>Pueraria</i>	<i>phaseoloides</i>
<i>Trifolium</i>	<i>alexandrinum, alpestre, ambiguum, angustifolium, arvense, agrocicerum, hybridum, incarnatum, pratense, repens, resupinatum, rueppellianum, semipilosum, subterraneum, vesiculosum</i>
Grass Forages	
<i>Andropogon</i>	<i>gayanus</i>
<i>Agropyron</i>	<i>crisatum, desertorum</i>
<i>Agrostis</i>	<i>stolonifera, tenuis</i>
<i>Alopecurus</i>	<i>pratensis</i>
<i>Arrhenatherum</i>	<i>elatius</i>
<i>Dactylis</i>	<i>glomerata</i>
<i>Festuca</i>	<i>arundinacea, gigantea, heterophylla, ovina, pratensis, rubra</i>
<i>Lolium</i>	<i>hybridum, multiflorum, perenne, rigidum, temulentum</i>
<i>Phalaris</i>	<i>aquatica, arundinacea</i>
<i>Phleum</i>	<i>pratense</i>
<i>Poa</i>	<i>alpina, annua, pratensis</i>
<i>Tripsacum</i>	<i>laxum</i>
Other Forages	
<i>Atriplex</i>	<i>halimus, nummularia</i>
<i>Salsola</i>	<i>vermiculata</i>

Annexure II

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
(National Biodiversity Authority)
NOTIFICATION
New Delhi, the 21st November, 2014

G.S.R 827.—In exercise of the powers conferred by section 64 read with sub-section (1) of section 18 and sub-section (4) of section 21 of the Biological Diversity Act, 2002 (18 of 2003), hereinafter referred to as the Act, and in pursuance of the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization to the Convention on Biological Diversity dated the 29th October, 2010, the National Biodiversity Authority hereby makes the following regulations, namely-

13. Conducting of non-commercial research or research for emergency purposes outside India by Indian researchers/ Government institutions.-

- (1) Any Indian researcher/ Government institution who intends to carry/ send the biological resources outside India to undertake basic research other than collaborative research referred to in section 5 of the Act shall apply to the NBA in Form 'B' annexed to these regulations.
- (2) Any Government Institution which intend to send biological resources to carry out certain urgent studies to avert emergencies like epidemics, etc., shall apply in Form 'B' annexed to these regulations.
- (3) The NBA shall, on being satisfied with the application under sub-regulation (1) or sub-regulation (2), accord its approval within a period of 45 days from the date of receipt of the application.
- (4) On receipt of approval of the NBA under sub-regulation (3), the applicant shall deposit voucher specimens in the designated national repositories before carrying sending the biological resources outside India and a copy of proof of such deposits shall be endorsed to NBA.

17. Certain activities or persons exempted from approval of NBA or SBB –

The following activities or persons shall not require approval of the NBA or SBB, namely:--

- (a) Indian citizens or entities accessing biological resources and/ or associated knowledge, occurring in or obtained from India, for the purposes of research or bio-survey and bio-utilization for research in India;
- (b) collaborative research projects, involving the transfer or exchange of biological resources or related information, if such collaborative research projects have been approved by the concerned Ministry or Department of the State or Central Government and conform to the policy guidelines issued by the Central Government for such collaborative research projects;
- (c) local people and communities of the area, including growers and cultivators of biological resources, and vaidas and hakims, practising indigenous medicine, except for obtaining intellectual property rights;
- (d) accessing biological resources for conventional breeding or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping, in India;
- (e) publication of research papers or dissemination of knowledge, in any seminar or workshop, if such publication is in conformity with the guidelines issued by the Central Government from time to time;
- (f) accessing value added products, which are products containing portions or extracts of plants and animals in unrecognizable and physically inseparable form; and
- (g) biological resources, normally traded as commodities notified by the Central Government under section 40 of the Act.

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE
NOTIFICATION
New Delhi, the 17th December, 2014

S.O. 3232(E).—Whereas, India is a party to the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) having signed and ratified the said treaty on 10th June, 2002;

and Whereas, the objectives of the ITPGRFA are conservation and sustainable use of plant genetic resources for food and agriculture and fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security;

and Whereas, article 12 of the ITPGRFA provides for facilitated access to plant genetic resources for food and agriculture under the Multilateral System by the contracting parties; and Whereas, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization to the Convention on Biological Diversity dated the 29th October, 2010 is the instrument for implementation of access for benefit sharing provisions of the Convention on Biological Diversity;

and Whereas, article 4 of the said Nagoya Protocol provides that the protocol does not apply for the party or parties to the specialized instrument in respect of the specific genetic resource covered by and for the purpose of the specialized instrument;

and Whereas, Section 40 of the Biological Diversity Act, 2002 (18 of 2003) empowers the Central Government to exempt certain biological resources from the provisions of the said Act.

Now, therefore, in exercise of the powers conferred by section 40 of the Biological Diversity Act, 2002 (hereinafter referred to as the said Act), and in fulfilment of the obligations of the Government of India to the ITPGRFA for providing facilitated access to the plant genetic resources for food and agriculture, the Central Government, in consultation with the National Biodiversity Authority, hereby declares that the Department of Agriculture and Cooperation may, from time to time specify such crops as it considers necessary from amongst the crops listed in the Annex I of the ITPGRFA, being food crops and forages covered under the Multilateral System thereof, and accordingly exempts them from Section 3 and 4 of the said Act, for the purpose of utilization and conservation for research, breeding and training for food and agriculture: Provided that such purposes shall not include chemical, pharmaceutical and/or other non-food or feed industrial uses. 2. The Department of Agriculture and Cooperation shall keep the National Biodiversity Authority informed of all crops as may be specified by it from time to time, for providing access to plant genetic resources for food and agriculture under the ITPGRFA for the purposes aforesaid.