

Frequently Asked Questions

Q. 1. What are breeder, foundation and certified seeds?

Breeder seed: Breeder seed is seed or vegetative propagating material directly controlled by the originating or sponsoring plant breeder of the breeding programme or institution and/ or seed whose production is personally supervised by a qualified plant breeder and which provides the source for the initial and recurring increase of foundation seed. Breeder seed shall be genetically so pure as to guarantee that in the subsequent generation i.e. certified foundation seed class shall conform to the prescribed standards of genetic purity. The other quality factors of breeder seed such as physical purity, inert matter, germination etc. shall be indicated on the label on actual basis.

Foundation seed: Foundation seed shall be the progeny of Breeder seed or be produced from foundation seed, which can be clearly traced to Breeder seed. Thus foundation seed can even be produced from foundation seed during the production of Foundation Seed the minimum seed certification standard shall be the same for both foundation seed stage-I and II. The certification tag shall be white colour for both foundation seed stage-I and II. The production of foundation seed stage I and II shall be supervised and approved by the certification agency and be so handled as to maintain specific genetic identity and genetic purity and shall be required to conform to certification standards specified for the crop / variety being certified.

Certified Seed: Certified seed shall be the progeny of foundation seed and its production shall be so handled as to maintain specific genetic identity and purity according to the standards prescribed for the crop being certified. Certified seed may be the progeny of certified seed provided this reproduction does not exceed three generations beyond foundation seed stage-I.

Q.2 What is hybrid seed?

The first generation resulting from crossing of two varieties or parents. Hybrid (certified) seed is the first generation resulting from the cross of two approved inbred lines or parents, one of which is male sterile.

Q.3 What is Labeled Seed?

The seed notified under Section 5 of the Seeds Act, 1966, such seed sold in the market has to be labeled as prescribed under Section 6(a) and (b) of the Seeds Act Such seed is called Labeled Seed.

Q. 4. What is process and procedure of certification of seeds?

- Receipt and scrutiny of application;
- Verification of seed source, class and other requirements of the seed used for raising the seed crop;
- Field inspections to verify conformity to the prescribed field standards;
- Supervision of post-harvest stages including processing and packaging;
- Seed sampling and analysis, including genetic purity test and/or seed health test, if any, in order to verify conformity to the prescribed standards; and
- Grant of certificate and certification tags, tagging and sealing.

Q. 5 Which are the agencies authorized for certification of seeds?

Agencies (State Governments or Autonomous Bodies), which are notified under Section 8 of the Seeds Act are authorized for certification of seeds. At present there are 21 state Seed Certification Agencies in the country.

Q. 6 Which are the agencies that can produce certified seeds?

Anybody willing to come forward to produce certified seed can produce certified seed. At present State Seeds Corporations, National Seeds Corporation, State Farm Corporation of India, State Departments of Agriculture, Private Companies, Cooperatives and individual farmers are producing certified seed.

Q. 7 What is Seed Replacement Rate?

Seed Replacement Rate is the percentage of area sown out of total area of crop planted in the season by using certified/quality seeds other than the farm saved seed.

Q.8 What are Genetically Modified, transgenic crop/ seed?

Genetically Modified seed is developed by application of biotechnology wherein a specific gene from other genus is inserted by genetic manipulation to make it resistant against certain characteristics like insect pest resistance, for example in the Bt. cotton, Cry1 AC gene has been incorporated in the cotton seed from a soil bacteria i.e. Bacillus thuringiensis which make it resistant against the attack of boll worm.

Q.9. How are the IPR issues being dealt in India with respect to Seeds Sector?

The department has enacted legislation known as Protection of Plant Varieties and Farmers' Rights Act, 2001 to protect plant breeder's rights. The main objectives of the legislation are to (a) stimulate investments for research and development both in the public and the private sectors for the development of new plant varieties by ensuring appropriate returns on such investments; and (b) facilitate the growth of seed industry in the country through domestic and foreign investment which will ensure the availability of high quality seeds and planting material to Indian farmers. PVP & Farmer's authority is being set up.

Q. 10 What are the areas of application of Biotechnology in Agriculture?

Biotechnology is a tool that has been widely accepted worldwide for improvement of cultivars with regard to

- a) Insect pest resistance
- b) Tolerance to drought, cold and salinity condition
- c) Nutrition enhancement
- d) Post harvest quality
- e) Value addition.

Apart from the above, the Task Force appointed by the Department of Agriculture & Cooperation under the Chairmanship of Dr. M.S. Swaminathan has recommended the following:

"Biotechnological applications should be viewed comprehensively. Both r-DNA and non-r-DNA applications such as fermentation, bio-processing, bio-pesticides, bio-fertilizers, tissue-culture, micro-propagation and related technological components which are important for Indian agriculture including animal husbandry and fisheries should be viewed as integral components of the planning and promotion of biotechnological applications in agriculture."

Q.11. What are the GM crops approved in India?

So far, four Bt. cotton hybrids have been approved for commercial cultivation by GEAC, MOEF. Out of four hybrids approved so far, Bt. MECH-12, Bt. MECH-162 and Bt. MECH-184 are of M/s. Mahyco – Monsanto and RCH 2 Bt of M/s. Rasi Seeds Pvt. Ltd. These hybrids are being cultivated in six states, namely Gujarat, MP, Maharashtra, AP, Karnataka and Tamil Nadu. North India likely to be released during 2005 However, transgenic mustard, corn, brinjal, tomato are also under various stages of testing and trials.

Q.12. What are the penalty provisions for sale of spurious seed?

If any person contravenes any provisions of the Seeds Act/Rules, on conviction be punishable:

- a) For the first offence with fine which may extend to five hundred rupees, and
- b) in the event of such person having been previously convicted of an offence under this section, with imprisonment for a term which may extend to six months, or with fine which may extend to one thousand rupees, or with both.

Q 13. What are the rules for export and import of seeds?

Export/import are governed by EXIM Policy of 2002-07 issued by Ministry of Commerce. Under EXIM Policy, provision is made to import which governed by the New Policy on Seed Development, 1988 read with Plant Quarantine Order, 2003 and amendments made thereon. For restricted items the EXIM committee of DAC is empowered to take decision of import/export.

Q.14. What is NSC?

The National Seeds Corporation Ltd.(NSC), a Public Sector Undertaking under the administrative control of the Department of Agriculture and Cooperation, was established in the year 1963 under the Companies Act, 1956 with the objective of producing and distributing Seeds of high quality to the farmers. The Corporation undertakes the production of seeds through Contract Growers. NSC is dealing with about 560 varieties in 79 crops.

Q.15. Does Government of India has its own farm to produce seeds?

Government of India does not have its own farm for production of seed; however, State Farm Corporation of India, Government of India Undertaking operates Central State Farms in different states. SFCI was set up in 1969 under Companies Act to take quality seed production in Central State Farms. Over the passage of time keeping in view the economic viability of these farms only 6 farms have been retained and others were returned to State Governments since land was taken on lease for a prescribed period of time.

Q.16. To whom the farmers have to approach when the seed fail to perform?

Director of Agriculture/Joint Director of Agriculture/Seed Inspector of the areas concerned.

Q.17. Is there any facility for the farmer to get the seed tested before sowing?

Seed users and seed producers could get the seed sample tested in the State Seed Testing Laboratories with the minimum fee prescribed to obtain the result to be used as information for seeding, selling or labeling purposes.

Q.18. What is DUS Testing?

DUS stands for Distinctness, Uniformity and Stability. This is a criterion on the basis of which the Plant Breeders' Rights will be granted to a variety by the Authority. DUS test will be used as main criteria for deciding the novelty of a variety. The formulation of National test guidelines for DUS testing has been entrusted to ICAR. Out of 35 crops DUS test guidelines for 30 crops are already prepared. Balance 5 is under finalization.

Biodiversity Act

What is the Convention on Biological Diversity

The Convention on Biological Diversity (CBD) is a landmark in the environment and development field, as it takes for the first time a comprehensive rather than a sectoral approach to the conservation of Earth's biodiversity and sustainable use of biological resources. It is a framework of agreement in two senses. In the first sense, it leaves it upto the individual Parties to determine how most of its provisions are to be implemented. This is because its provisions are mostly expressed as overall goals and policies, rather than as hard and precise obligations as in, for example, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Nor does it tend to set targets, but emphasizes the need to place the main decision making at the national level and unlike other treaties there are no lists, accepted sites or species to be protected.

What is the origin and history of the CBD

It was in the year 1984 that the need to have in place a global convention on biological diversity started gaining momentum. In response, the United Nations Environment Programme (UNEP) in the year 1987 recognized the need to streamline international efforts to protect biodiversity. It therefore established an ad hoc working group to investigate "the desirability and possible form of an umbrella convention to rationalize current activities in the field...." This group by 1988 concluded that a) the existing treaties were inadequate to address the issue of conservation and sustainable use and b) a new global treaty on biological diversity was urgently needed. Organisations such as the World Conservation Union (IUCN) and the Food and Agricultural Organisation (FAO) contributed draft articles in addition to specific studies commissioned by the UNEP. The UNEP Secretariat prepared the first draft and the formal negotiating process was started in 1991. The Inter-governmental Negotiating Committee for a Convention on Biological Diversity (INC) was given the task of ensuring the adoption of the Convention. On May 22, 1992 the nations of the world adopted the CBD in Nairobi and on June 5, 1992 the CBD was tabled at the UN Conference on Environment and Development in Rio de Janeiro where a record 150 countries signed the Convention.

Explain the salient features of the CBD

The Convention on Biological Diversity (CBD) was negotiated and signed by nations at the UNCED Earth Summit at Rio de Janeiro in Brazil in June 1992. The Convention came into force on December 29, 1993. India became a Party to the Convention in 1994. At present, there are 175 Parties to this Convention.

The main objectives of the Convention are:

- Conservation of biological diversity;
- Sustainable use of the components of biodiversity;
- Fair and equitable sharing of benefits arising out of the utilization of genetic resources.

Re-affirming the sovereign rights of Parties over their own biodiversity, the Convention balances conservation with sustainable utilisation and access to and use of biological resources and associated knowledge with equitable sharing of benefits arising out of such use. The CBD offers opportunities to India to realise benefits from its rich biological resources and associated traditional knowledge.

The CBD stipulates that the parties, even though having sovereign rights over their biological resources, would facilitate access to the genetic resources by other parties subject to national legislation and on mutually agreed terms. The CBD also provides for equitable sharing of benefits arising from the utilisation of traditional knowledge and practices, with holders of such knowledge. This has made it necessary for a legislation to be put in place, which lays down the framework for providing access, for determining the terms of such access and for ensuring the equitable sharing of benefits.

We already have a number of Acts relating to forestry, wildlife etc. Why do we need this legislation on biodiversity?

At present following acts deal with aspects relating to biodiversity:

- Indian Forest Act, 1927
- Wildlife (Protection) Act, 1972
- Forest (Conservation) Act, 1980

India Forest Act and Forest (Conservation) Act deal with management of forests and conservation of forestland respectively. Wildlife (Protection) Act is for the protection of wild animals, birds and plants, and basically aims at protecting, propagating or developing wildlife or its environs through national parks, sanctuaries etc. In addition, the Act has a provision to prohibit picking and uprooting etc. of specified plants.

This Act covers protection of flora and fauna in notified sanctuaries and national parks, six specified plant species and regulates hunting of animals specified in Schedules appended to the Act. The Act thus leaves out from its scope the following:

1. wild flora outside the notified sanctuaries and National parks (many of which located outside forest areas including deserts, coastal and marine systems, grasslands, riverine systems, wetlands)
2. although the act provides for protection of a number wild animals which are included in Schedules, it leaves out a large number of invertebrates (out of the 81,000 animal species so far described from the country about 68,000 are invertebrates) and micro organisms
3. The Act also does not deal with the following:
 - Issue of access to biological resources and benefit sharing
 - Protection of traditional knowledge and equitable sharing of benefits arising out of the use of such knowledge.

The purpose of the Biodiversity Bill is to realize equitable sharing of benefits arising out of the use of biological resources and associated knowledge. The proposed legislation primarily addresses the issue concerning access to biological resources by foreign individuals, institutions or companies.

India's richness of biodiversity

India is one of the 12-mega biodiversity countries of the world. With only 2.4% of the land area, India already accounts for 7-8% of the recorded species of the world. Over 46,000 species of plants and 81,000 species of animals have been recorded in the country so far by the Botanical Survey of India, and the Zoological Survey of India, respectively. India is an acknowledged centre of crop diversity, and harbours many wild relatives and breeds of domesticated animals.

Name the mega biodiversity countries

Biodiversity is not equally distributed all over the globe. Certain countries are characterized by high species richness and more number of endemic species. These countries are known as Mega biodiversity countries. Twelve such countries have been identified. Together, these countries harbour 60- 70% of the world's recorded biodiversity. These countries are: Brazil, Colombia, Ecuador, Peru, Mexico, Madagascar, Zaire, Australia, China, India, Indonesia and Malaysia.

Why it has taken more than five years to prepare legislation?

Biodiversity is a multi-disciplinary subject involving diverse sectoral activities and actions. The number of stakeholders in biological diversity is large. This include Central Government, State Governments, institutions of local self government, scientific and technical institutions, experts, NGOs, industry etc. One of the major challenges before India lies in adopting an instrument, which helps realise the objectives of equitable sharing of benefits enshrined

in the Convention on Biological Diversity. In doing so, various conflicting interests and concerns have to be reconciled. For example:

- Interests of the local practitioners of indigenous systems of medicines and local people in the use of biological resources and products are important issues.
- Research and development work by the academic community would also require free access to resources even though results of their research may have to be subject to some regulation for the purposes of commercial exploitation, at least by people outside India.
- India is also an exporter of large quantities of commodities of primary sector. These commodities would fall within the definition of biological resources.
- India is also strong in agricultural Research & Development (R&D) and exchange of resources for such R&D has been a common practice in the past. In some cases, such practices may be required in future too. Legislation has to take note of this requirement.
- Adopting an extensive and intensive consultation process involving all stakeholders over a period of more than five years, the Ministry of Environment and Forests has developed an outline of the Biological Diversity Legislation.

Could we not have developed such legislation without the CBD?

The bio-resources of the country have been shared freely with other countries treating biodiversity as a common human heritage in the past. Also, outsiders have accessed the knowledge systems and practices of the local and indigenous communities freely in the past. But in the post-CBD era, this scenario has changed.

The CBD enjoins upon the contracting Parties to facilitate access to genetic resources for environmentally sound uses by other Parties on Mutually Agreed Terms (MAT) and with Prior Informed Consent (PIC) of the country providing these resources. Recipient country is to provide fair and equitable sharing of benefits arising from the use of genetic resources transferred. Facilitation of access can be provided only through national legislation and/or regulations.

What does the Biodiversity Act - 2002 primarily address?

The Biodiversity Act - 2002 primarily addresses access to genetic resources and associated knowledge by foreign individuals, institutions or companies, to ensure equitable sharing of benefits arising out of the use of these resources and knowledge to the country and the people.

What are the structures of Biodiversity Act – 2002

A three tiered structure at the national, state and local level is to be established.

National Biodiversity Authority (NBA): All matters relating to requests for access by foreign individuals, institutions or companies, and all matters relating to transfer of results of research to any foreigner will be dealt with by the National Biodiversity Authority.

State Biodiversity Boards (SBB): All matters relating to access by Indians for commercial purposes will be under the purview of the State Biodiversity Boards (SBB). The Indian industry will be required to provide prior intimation to the concerned SBB about the use of biological resource. The State Board will have the power to restrict any such activity, which violates the objectives of conservation, sustainable use and equitable sharing of benefits.

Biodiversity Management Committees (BMCs): Institutions of local self government will be required to set up Biodiversity Management Committees in their respective areas for conservation, sustainable use, documentation of biodiversity and chronicling of knowledge relating to biodiversity. NBA and SBBs are required to consult the concerned BMCs on matters related to use of biological resources and associated knowledge within their jurisdiction.

Will this legislation become another bureaucratic hurdle?

No. The legislation provides for a transparent participatory and decentralized approach.

Is there any overlap in the functions of NBA and SBB?

There is no overlap in the functions of NBA and SBB. Their domains and functions are very distinct from each other. All matters relating to requests by foreign individuals, companies or institutions and all matters relating to transfer of results of research to any foreigner, will be dealt with by NBA. All matters relating to access by Indians for commercial purposes will be under the purview of the concerned State Biodiversity Boards.

Will this legislation affect research in biological resources?

There is no requirement under the legislation for seeking permission of the National Biodiversity Authority for carrying out research, if it is carried out in India by Indians, as well as under collaborative research projects that have been drawn within the overall policy guidelines formulated by the Central Government. The only situations that would require permission of the NBA are: (i) when the results of any research which has made use of the country's biodiversity is sought to be commercialised, (ii) when the results of research are shared with a foreigner or foreign institution, and (iii) when a foreign institution/individual wants access to the country's biodiversity for undertaking research

Will this legislation impact collaborative research projects?

This legislation will not prohibit collaborative research projects. Section 5 exempts collaborative research projects from sections 3 and 4, provided these conform to the policy guidelines issued by the Central Government.

Do Indian researchers require approval for obtaining biological resource for research purposes?

The Indian researchers neither require prior approval nor need to give prior intimation to SBB for obtaining biological resource for conducting research in India.

How will the proposed legislation check biopiracy?

To check bio piracy, the proposed legislation provides that access to biological resources and associated knowledge is subject to terms and conditions, which secure equitable sharing of benefits. Further, it would be required to obtain the approval of the National Biodiversity Authority before seeking any IPR based on biological material and associated knowledge obtained from India.

The instances which have very prominently come to light in the recent past of the patents being secured in USA on brinjal, bitter-gourd, jamun, turmeric and neem pertain to patents being granted on use of biological material which is already known in India and therefore there is nothing new/innovative in the grant of patent. This does not in any way prevent the use of these biological materials within the country in whatever manner they are being used. These instances highlighted the need for the documentation of the knowledge of Indian system of medicine, to prevent such cases by proving that such use is already in vogue and therefore does not qualify for grant of patent.

Does the legislation provide for any exemptions?

The legislation provides for the following exemptions

- Exemption to local people and community of the area for free access to use biological resources within India
- Exemptions to growers and cultivators of biodiversity and to Vaidis and Hakims to use biological resources.
- Exemption through notification of normally traded commodities from the purview of the Act
- Exemption for collaborative research through government sponsored or government approved institutions subject to overall policy guidelines and approval of the Central Government

What is the reason for bringing the body corporates, associations or organizations incorporated or registered in India with any non-Indian participation in its share capital or management under the provisions section 3?

The reason for including such entities under the purview of section 3 is for effective monitoring of their activities with respect to use of biological resources. Since Indian citizens owe allegiance to the Constitution of India, it is easy to monitor and regulate their activities within existing legal framework. However, the same is not possible in the case of nationals who are not citizens of India.

Why value added products have been excluded from the definition of biological resources?

The intention of the bill is not to cover value added products of biological resources. Though the biological resources by definition do not include value added products, an explicit exemption has been mentioned to allay the fears of Indian industry so that export of value added products is not hampered.

What is implied by value added product? Can you give few examples?

Value added product implies products containing portions/extracts of plants and animals in unrecognisable and physically inseparable form. For example: Chyawanprash, Isabghol, Pudina Hara, Turmeric creams etc.,

Does the Indian industry require prior approval of the SBB?

The Indian industry is required to give prior intimation to the concerned SBB about obtaining the biological resources for commercial purposes. The SBB will have the power to prohibit or restrict any such activity, which violates the objectives of conservation, sustainable use and equitable sharing of benefits.

Whether the legislation on biodiversity would come in the way of development of Ayurvedic industry and would it jeopardize the health care delivery systems and affect international trade?

The Act does not aim at banning the use of medicinal plants. It provides that for commercial use of resources and related knowledge by Indians only, prior intimation to the State Biodiversity Board is required. Section 40 provides for an exemption for items for exclusion from the purview of this Act. Hakims and vaidas will continue to have free access to resources and knowledge. An explicit provision to this effect has been made in section 7.

India has several practitioners of Indian systems of medicines who use herbs etc, for medicine and healthcare. Will such use be affected by the legislation?

The Act does not aim at banning the use of medicinal plants by vaidas and hakims. They will continue to have free access to resources and knowledge. An explicit provision to this effect has been made.

Will this legislation affect the use of bio-resources by local people?

No. An explicit exemption has been made in section 7 for local people and communities, including growers and cultivators of biodiversity, and vaidas and hakims. Moreover commercial utilization has been defined in section 2, which also specifically excludes traditional practices and use in agriculture, horticulture, poultry, dairy farming, animal husbandry etc.

How the concept of prior informed consent (PIC) with the concerned local people will be formalized in the proposed legislation?

The provision of mandatory consultation of BMCs by the NBA and SBBs would ensure formalisation of PIC by the communities and the involvement of BMCs in the decision making process.

India is an exporter of huge quantities of commodities (bio-resources) of primary sector, would the legislation affect this kind of trade?

The legislation empowers the Central Government to exempt by notification certain items, which are normally traded as commodities, so as not to adversely affect their trade.

Does the legislation provide for protection of traditional knowledge? If yes, how?

The subject of protection of knowledge, practices and innovations of local people and communities is quite complex. The informal knowledge available with people presents following difficulties in being recognized for purposes of intellectual property protection:

- Community is not a legal entity.
- Knowledge is quite often in parallel held by individual organizations, groups of people, communities.
- The conditions of novelty and innovative step necessary for grant of patent are not satisfied.

Considering these complex nuances, an enabling provision for protection of traditional knowledge has been made under this legislation. The modalities for protecting indigenous knowledge are still emerging and evolving and therefore the measures for doing so have been left open and flexible under this provision. It provides for inter alia registration of knowledge, and for developing sui generis system for protecting traditional knowledge.

Who are the benefit claimers?

The benefit claimers are conservers of biological resources, creators and holders of knowledge and information relating to the uses of biological resources.

What kinds of benefits are envisaged under the benefit sharing arrangement approved by the NBA?

While granting approvals, NBA will impose conditions, which secure equitable share in the benefits arising out of the use of biological resources occurring in India or knowledge relating to them. These benefits could include monetary gains, grant of joint ownership of IPRs, transfer of technology, association of Indian Scientists in R&D, setting up of venture capital fund etc.

To whom will the monetary benefits be given?

In cases where specific individuals or group of individuals are identifiable, the monetary benefits will be paid directly to them. Otherwise, the amount will be deposited in the National Biodiversity Fund.

Examples of bio resources used for commercial utilization

1. Drugs : Taxol, Quinine
2. Industrial enzymes : Papaine
3. Food flavour : Vanilla
4. Fragrance : Jasmine, Lavender, Rose
5. Cosmetics : Sandalwood
6. Emulsifier : Gumghatti
7. Oleoresins : Clove, Black pepper, Ginger

Is there any overlap between Biodiversity Bill and Plant Varieties Protection Act?

There is no overlap between Biodiversity Bill and Plant Varieties Protection (PVP) Act. The scope and objectives of these two legislations are different. The PVP legislation accords intellectual property rights to a person for developing a new plant variety. On the other hand, the biodiversity legislation is primarily aimed at regulating access to biological resources and associated knowledge so as to ensure equitable sharing of benefits arising from their use. In order to harmonise both the legislations, an exemption has been provided under Section 6(3) of the Biodiversity Bill for applicants seeking protection under the PVP Act.

Why an exemption has been provided in Section 6(3) of the Biodiversity Bill for applicants seeking protection under the PVP Act.

This has been done to harmonise the two legislations and to avoid overlap of procedural requirements. The purport of Section 6(3) is to ensure that before grant of IPRs, it becomes possible to realize equitable sharing of benefits arising out of the use of biological resources and knowledge. As the PVP legislation also has a provision for benefit sharing, an exemption has been provided in the Biodiversity Bill for applicants seeking protection under the PVP Act. The Authority under the PVP legislation would be required to endorse a copy of the right granted under this Act to the NBA of the Biodiversity Bill.

Is there any overlap between the Biodiversity Bill and Patents (second Amendment) Act 2002?

There is no overlap between these two legislations. The scope and objectives of the two legislations are different. The Patents (second Amendment) Act has been enacted to meet the obligations arising out of the TRIPs agreement in the area of intellectual property. From the biodiversity point of view, the Patents (Second Amendment) Act excludes plants and animals from the purview of the Act, for the purpose of patenting. In addition, it provides that the patent applicant should disclose the source and geographical origin of the biological material when used in an invention. Further, non-disclosure or wrongful disclosure of source of biological material and any associated knowledge will result in opposition to the grant of patent or revocation of the patent.

Why an exemption has been provided for patent seekers in section 6(1) of the Biodiversity Bill?

Section 6(1) provides that prior approval of NBA is necessary before applying for any kind of IPRs based on any research or information on a biological resource obtained from India. However, in case of patents, permission of the NBA may be obtained after acceptance of the patent but before sealing of the patent. This has been done to protect the priority date of the patent applicant.

What is the concept of Heritage sites? How are they different from Protected Areas?

Section 37 provides for designating heritage sites. These are areas of biodiversity importance, which harbour rich biodiversity, wild relatives of crops, or areas, which lie outside the protected area network. The purpose is not to cover the already designated protected areas such as national parks and wildlife sanctuaries.

Will the provisions of Section 37 on biodiversity Heritage Sites not duplicate the existing protected areas?

The purport of section 37 is not to cover the already designated protected areas, but to cover sites, which harbour wild relatives of crops, or areas, which lie outside such protected area network. The State government has to designate such areas in consultation with the local self-governments. The State governments are also required to frame rules for conservation and management of such heritage sites. So designation of Biodiversity Heritage sites is vested with the State Governments.

How does the Bill address the concern relating to threatened species?

Section 38 provides for notifying threatened species and prohibits or regulates their collection. It also provides for taking appropriate steps to rehabilitate and preserve those species, thereby ensuring their conservation and management.

What is rationale behind establishing repositories

Section 39 provides for designating some premier institutions of the country (e.g. BSI, ZSI, NBPGR etc.) as repositories for keeping different categories of biological resources for safe custody and posterity?