Legal Literacy Manual for Local Communities on Legal and Policy Regime for Medicinal Plants

Submitted to

Uttarakhand State Medicinal Plants Board

Submitted by

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LEGAL LITERACY MANUAL FOR LOCAL COMMUNITIES ON
LEGAL AND POLICY REGIME FOR MEDICINAL PLANTS

1. BACKGROUND AND INTRODUCTION

India is the largest producer of medicinal herbs and is called the botanical garden of the world. There are several states in India which have a rich treasure trove of medicinal plants (MPs) and Uttarakhand is one such important herbal state home to several rare and endangered species of medicinal plants growing naturally within its forest area which is about 65% of the total area of the state. Besides being a biodiversity asset of the state in national and international markets, MPs also meet the livelihood needs of rural people in Uttarakhand. However, MPs sector have been largely unregulated in the state as there are no specific policy and legal framework on MPs. As a result there is large scale exploitation of the resources due to presence of unsustainable harvesting and cultivation practices. This manual is an attempt to inform practitioners, students and people at large about the legal, policy and administrative framework on MPs in the state of Uttarakhand in order to not only increase the awareness but help the numerous stakeholders to benefit from this sector both in terms of livelihoods as well as resource.

2. OBJECTIVES

The objective of this manual is to universalize the knowledge on the law and policy regime concerning conservation and management of MPs in the state of Uttarakhand. This module also tries to build a holistic perspective of the premise, concepts, definition and institutional mechanisms for effective implementation of the legal regime to facilitate speedy realization of envisaged benefits to the stakeholders.

The objective of the manual is to sharpen understanding on the following aspects:

a. An overview of the law and policy regime governing MPs
b. Concept and scope of conservation and sustainable use of MPs
c. Various aspects of traditional knowledge, traditional medicinal knowledge and the efficacy of this regime in protecting the knowledge associated with MPs.
d. Trade regulatory mechanisms for MPs
e. Law and policy regime which concern cultivation of MPs in India especially Uttarakhand.

f. Institutional questions to be addressed in the MPs sector.

3. RELEVANCE

In spite of the prevalent use of MPs, the resource is weakly regulated in the state. In effect, there are major issues affecting this valuable resource such as overuse or exploitation of certain species of MPs, unsustainable harvesting practices, lack of focus on cultivation, absence of robust market mechanism, illegal trade, loss of traditional knowledge, lack of coordination at the administrative level, overlapping jurisdiction of various departments and absence of a strong administrative body for the development of the MPs sector. Apart from these, there are also some larger issues such as the autonomy of the local communities towards management of their resources and access and benefit sharing aspects of natural resources and free, prior and informed consent of local communities as provided in various international commitments of India. These issues dictate that existing policy and law regime not only needs to be understood by stakeholders especially local communities, but also they need to be aware of the lacunas and ensure the enforcement of their rights and obligations.

4. LAW AND POLICY REGIME IMPACTING MEDICINAL PLANTS

- Plethora of laws which impact MPs directly or indirectly and these include national and state Acts/Rules, policies, orders, guidelines, judgments as well as international instruments, opinions etc.

- The Constitution of India is the most important law of the land and even though there is no specific mention of MPs in it, the Directive Principles of State Policy enjoins upon the State, the responsibility to protect and improve the environment and to safeguard and improve the forest and wildlife of the country.\(^1\) Every citizen also has a duty to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.\(^2\)

- The Constitution further stipulates the State to foster respect for international law and treaty obligations.\(^3\) In addition, if India has ratified an international treaty concerning MPs, then the Parliament will have the power to give effect to such treaty by way of making a law or amending an existing law.\(^4\)

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1. Article 48-A, Constitution of India
2. Article 51A (g), Constitution of India
3. Article 51 (c), Constitution of India
4. Article 253, Constitution of India
Policies which generally govern MPs include the National Environment Policy, 2006, the National Conservation Strategy 1992, the National Forest Policy 1988, the National Industrial Policy, the Draft Biotechnology Strategy, the Draft National Tribal Policy, 2012 and the National Agricultural Policy, 2000 at the central level and the Uttarakhand Forest Policy, 2001, the Draft Uttarakhand Biotechnology Policy and the Industrial Policy of Uttarakhand, 2001 at the state level.

The primary laws which discuss MPs from a conservation point of view include the Biological Diversity Act, 2002 (BD Act), the Wild Life Protection Act, 1972 (WLPA), the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, (FRA) and Rules, 2007, Indian Forest Act, 1927 (IFA) and the Joint Forest Management Resolution, 1990, including their amendments (JFM) at the national level.

Concept of Participatory Forest Management (PFM) especially the Van Panchayats is covered within the Uttaranchal Panchayati Forest Rules, 2005 (VP Rules).


The institutional set up provided under the laws and Rules such as Uttar Pradesh Forest Corporation Act, 1974, related amendments and the Uttaranchal Self Reliant Co-operatives Act, 2003 for the management, processing, supervision and development of forest produce are relevant in this context.

The laws governing the commercial, marketing and transit aspect of forest produce include the Uttarakhand Agriculture Production Marketing (Development and Regulation) Act, 2011, U. P. Transit of Timber and Other Forest Produce Rules, 1978 and the Uttarakhand Tax on Entry of Goods into Local Areas Act, 2008.

Then there are those laws dealing with specific forest produce such as the Uttar Pradesh Tendu Patta (Vyapar Viniyaman) Adhiniyam, 1972 dealing with sale, purchase and transport of tendu leaves and the Uttar Pradesh Resin and Other Forest Produce (Regulation of Trade) Act, 1976 dealing with regulation of resin.
5. CONSERVATION AND SUSTAINABLE USE OF MEDICINAL PLANTS

- Various species of MPs are on the verge of extinction because of the loss of their natural habitats and unregulated exploitation, hence the need for their conservation and sustainable use.
- There is also a linkage between climate change and depletion of MPs resource base which has to be resolved at the earliest.
- MPs can be protected under the BD Act since it is a part of biological resources which is defined within this Act.
- The BD Rules, 2004 formed under the BD Act provides for the conservation and sustainable use of MPs as well as access and benefit sharing (ABS) provisions for communities who have contributed to the conservation of MPs and related Traditional Knowledge (TK). The Uttarakhand State Biodiversity Rules need to be notified thus further strengthening biodiversity protection regime in the state.


a. Effect of Biodiversity Heritage Sites in conserving MPs rich areas

- In situ conservation of MPs can be done by notifying areas with rare, endangered and threatened (RET) species of MPs in consultation with local bodies as Biodiversity Heritage Sites (BHS). Rules for management and conservation of BHS have to be devised by State Government in consultation with Central Government. Currently, Medicinal Plants Conservation Areas (MPCAs) have been created on forest land by the Forest Department in the State. These areas could be converted into BHS to give them a legal sanctity and also for effective participatory forest management.

b. Role of Biodiversity Management Committees towards community participation in conserving MPs

- Another important provision to elicit support from local communities for conservation efforts is the formation of Biodiversity Management Committee (BMC) by every local body. It should consist of a Chairperson and not more than six persons nominated by the local body, of whom not less than one third should be women and not less than 18% should belong to Scheduled Castes, Scheduled Tribes. Its responsibility includes promoting conservation, sustainable use and documentation of biological diversity.

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5 Section 37, BD Act  
6 Section 41, BD Act
including preservation of habitats, conservation of land races, folk varieties and chronicling of knowledge relating to biodiversity.

- The National Biodiversity Board and State Biodiversity Board shall consult BMCs while taking any decision relating to use of biological resources and knowledge associated with such resources found within their jurisdiction. BMCs may also collect fees from persons accessing or collecting biological resources for commercial purposes.

- In accordance with the BD Rules, 7 539 BMCs have already been constituted within the state at the Village Panchayat, Development Block and District levels. 8 Functions of the BMCs include preparing and maintaining People’s Biodiversity Registers which is to contain information on availability and knowledge of local biodiversity resources, their uses, etc. and advising National Biodiversity Authority or State Biodiversity Board for granting approval to maintain data about the local vaids and practitioners using biological resources. 9

**c. Access and Benefit Sharing Mechanism within the BD Act including preparation of Peoples’ Biodiversity Registers as an incentive for local communities**

- The ABS regime provided within the BD Act refers to restriction of access to biological resources by outsiders and benefit sharing as equitable sharing of benefits arising from the commercial utilization of biological resources, their by-products, innovations and practices associated with their use and applications and knowledge in accordance with mutually agreed terms and conditions between the person applying for such approval, local bodies concerned and the benefits claimers. 10

- Recording the knowledge on the existence of MPs as well as their uses in the PBR is a great step towards ensuring ABS with local communities. At present, the preparation of these PBRs in the state is in its initial phase, wherein PBR preparation of bio-diversity rich areas is being taken up in association with government institutions and NGOs. 11

- Another important component of the ABS regime is the aspect of prior and informed consent (PIC) according to which sufficient information should be provided to the local communities, by parties wanting to utilize the biological resources or associated TK, regarding the aims, risks,
implications, etc. of using the knowledge, including its potential commercial value.\(^\text{12}\) Moreover, this consent must be free.

- Even though the BD Act and Rules does not cater to PIC, the Rules provide for an application form as per which interested persons applying for access to/collection of biological resources for commercial utilization and associated TK, need to give details on whether interests of local communities are affected or not.\(^\text{13}\)

5.2. Conservation of MPs through Participatory Forest Management

- Provisions of FRA and VP Rules are significant in highlighting the ways in which community efforts towards conservation of forest land contributes towards conservation of MPs as well.
- The WLPA also offers legal space to involve communities in the management of Protected Areas especially in and around the national parks and sanctuaries by creating Conservation Reserves and Community Reserves.

**a. Impact of Uttarakhand Panchayat Forest Rules 2005 on Medicinal Plants Conservation**

- The Van Panchayats are perhaps the most important institutions in the state of Uttarkhand that may be effectively involved for conservation of MPs. It is therefore important to know its constitution, rights and duties.

**Formation of Van Panchayat**

- On an application made by at least one fifth of the adult residents who have resided in the revenue village, including any land bordering the village, which has been constituted as Reserve Forest or declared a Protected Forest or is a forest belonging to the Government, or on the resolution passed in the meeting of the concerned Gram Sabha, the Sub-Divisional Magistrate concerned shall start the proceeding in this regard on the recommendation of the Forest Department and notify such village as a Panchayati Van.\(^\text{14}\)

- All customary rights of the rights holders in a Panchayati Van such as collection of fallen fuel wood, minor forest produce including MPs, lopping of branches of trees, cutting of grass, shall be recognized, recorded and governed under a Micro Plan to be prepared for a period of five years by the Management Committee of a Van Panchayat.\(^\text{15}\)

- Duties of users in the concerned Panchayati Van include providing help in forest fire control, reporting forest offences such as encroachment, illicit

\(^{12}\) Article 8 (j), Convention on Biological Diversity, 1992  
\(^{13}\) Form I under Rule 14, BD Rules  
\(^{14}\) Rule 3, VP Rules  
\(^{15}\) Rule 6 read with Rules 12 and 19, VP Rules.
grazing or illicit felling to the Management Committee and providing support for protection of old plantations established earlier or plantations carried out by the Management Committee.\(^{16}\)

- The VP rules provide that the forest produce including MPs from a Panchayati Van shall be managed according to the Micro Plan prepared for the respective Panchayati Van.
- Authority is given to the Sarpanch to send a request to the DFO about the quantity of forest produce including MPs required by the villagers for their bonafide needs.\(^{17}\) The DFO after considering the request shall pass necessary order in this regard. Before granting these bonafide needs, care should be taken to ensure that such grant does not adversely affect forest conservation.\(^{18}\)
- After the above mentioned requirements are fulfilled, the Van Panchayat can pass a proposal to sell the forest produce including MPs for domestic use, use by small scale industries or by village industries with the prior consent of the DFO.
- In the circumstance that the Van Panchayat after the above mentioned requirement are fulfilled, thinks that there is surplus forest produce, it will send a request to the Forest Range officer.
- Subsequently, the Forest Range officer shall send such a request with the minimum price and his comments and suggestions to the DFO. Once the consent of the DFO is received the forest produce will be sold by way of an auction as per the rules prescribed in this regard.

**b. Conservation of Community Forest Resource under the Forest Right Act**

- MPs are currently also read as part of forest produce\(^ {19}\) or more specifically minor forest produce as mentioned in FRA and thus maybe protected under this regime.\(^ {20}\)
- The FRA also vests in the community, a right to protect, regenerate, conserve and manage a Community Forest Resource (hereinafter CFR) which they have been protecting and conserving for sustainable use.\(^ {21}\) A CFR is a customary common forest land within the traditional or customary boundaries of the village or seasonal use of landscape in the case of pastoral communities, including reserved forest, protected forest and protected areas.

\(^{16}\) Rule 6 (b), VP Rules.
\(^{18}\) Rule 19, VP Rules.
\(^{19}\) Section 2(4), IFA,1927.
\(^{20}\) Section 2(i), FRA.
\(^{21}\) Section 3(i), FRA.
such as Sanctuaries and National Parks to which the community had traditional access. Such CFR may include a rich MPs resource base.

- Further, the FRA also empowers the right holders to perform certain duties towards conservation of forest, biodiversity and wildlife. This includes, preservation of habitat of Forest Dwelling Scheduled Tribes and Other Traditional Forest Dwellers and their natural and cultural heritage from any form of destructive practices as well as protecting catchment areas, water resources and ecologically sensitive areas.

**c. Conservation Reserves and Community Reserves: Eliciting community participation for conservation and sustainable use of MPs growing in Protected Areas**

- Conservation reserves maybe created after consulting the local communities on those government lands adjacent to a national park or sanctuary or those areas which link one Protected Area to another with the objective of protecting MPs resource base.

- Chief Wildlife Warden is the highest authority to manage the conservation reserves, and take steps to preserve and improve the wildlife and its habitat and the people residing in the conservation reserve are mandated to assist the Chief Wildlife Warden to preserve and protect wildlife, to prevent fire, in detecting forest offences among others.

- To carry out these functions with the help of the community a Conservation Reserve Management Committee is constituted by the State Government to advise the Chief Wildlife Warden in his/her duties.

- The Committee shall comprise of a representative from the forest and wildlife division as member secretary, along with one representative each from every village panchayat, within whose jurisdiction the conservation reserve is situated, along with three representatives from non-government organization working in the field of wildlife protection and one representative each from the department of agriculture and animal husbandry. The Committee can also regulate its own procedure including the quorum.

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22 Section 2(a), FRA.
23 Section 5, FRA.
24 Section 36-A (2), WLPA.
Similarly, a Community reserve\textsuperscript{25} maybe constituted by the State Government on any private or community land not comprised within a sanctuary, national park or a conservation reserve. This is an area where an individual or a community has volunteered to conserve wildlife and its habitat.

A Community Reserve Management Committee is constituted by the state government for conserving and managing the community reserve. It comprises of five representatives nominated by the village Panchayat or where such Panchayat does not exist, by the members of the Gram Sabha, along with one representative of the state forest and wildlife department under whose jurisdiction the community reserve is located.\textsuperscript{26}

More importantly, the Committee has the power to prepare and implement the management plan for the community reserve and to take steps to ensure the protection of wildlife and its habitat in the reserve.\textsuperscript{27}

Further, after the notification to declare Community Reserve is issued the land use cannot be changed within the community reserve except in accordance with a resolution passed by the management committee and the approval by the state government. The committee also has the power to regulate its own procedure including the quorum.\textsuperscript{28}

6. TRADITIONAL KNOWLEDGE AND ITS IMPLICATIONS ON MEDICINAL PLANTS

It must be understood that protection of traditional medicinal knowledge is directly linked with the conservation of MPs.

The MPs have a commercial value only because of their medicinal properties, which are known to the communities in the form of TK.

The communities have also been responsible for the conservation of MPs as a part of ecosystem in which they survive, sustainably using the resources found within this ecosystem for their day to day needs.

Thus there is an implied ownership which the communities have over these biological resources including MPs and the associated TK. Protection of this TK would ensure that the MPs are also conserved.

\textsuperscript{25} Section 36-C, WLPA.
\textsuperscript{26} Section 36-D, WLPA.
\textsuperscript{27} Section 36-D (3), WLPA.
\textsuperscript{28} Section 36-D (5), WLPA.
6.1. Protection of Traditional Medicinal Knowledge within the Intellectual Property Regime

- At present, legal protection is available to TK within the IP regime, within the Patents Act, 1970, the Geographical Indications of Goods (Registration and Protection) Act (GI Act), 1999 and the Protection of Plant Varieties and Farmers’ Rights Act, 2001 (PPVFRA). However, the term TK is not defined anywhere in the Indian legislations even though protection has been made available within the FRA, the BD Act, the Patents Act and the Drugs and Cosmetics Act.

- The Patents Act provides protection over inventions in India. These inventions must satisfy the criterion of novelty, obviousness and utility. Thus pharmaceutical inventions using any MPs must heed the following conditions while applying for patents:
  - Source and Geographical origin of biological material in any invention using traditional medicinal knowledge must be cited within the application for patents.\textsuperscript{29}
  - TK of any community itself cannot be a patentable subject matter.\textsuperscript{30}

- Another key legislation in the context of TK and MPs is the GI Act. Geographical Indications (GI) is defined to signify any goods also including agricultural or natural goods originating from certain territory or geographical location, also including processing of such goods from such location.\textsuperscript{31}

- This particular IP could help conservation and sustainable use of MPs through TK, by providing a legal space for communities to apply for registration of any medicinal product/formulation, exclusive to them. However, such product or formulation should be specific to a certain geographical location for the same to be registrable under this Act.

- PPVFRA is an important legislation which recognizes farmers’ rights.

- This legislation helps protect TK of any farmer or community of farmers responsible towards development of a particular variety of MP, if such variety is registered within the Act.

- It recognizes the community’s contribution to evolution and conservation of a MPS.

- Provisions for benefit sharing with communities, in case of commercial utilization of a MPS are also given.

\textsuperscript{29} Section 10 (4) (d) (ii) (D), Patents Act, 1970
\textsuperscript{30} Section 3, Patents Act, 1970
\textsuperscript{31} Section 2 (e), GI Act
6.2. Role of traditional healers in Conserving Traditional Medicinal Knowledge

- Practitioners of traditional medicine or traditional healers should be recognized in order to conserve the local medicinal knowledge they possess.
- Currently, under the BD Act, exemption is provided to vaids, hakims who have been practicing indigenous medicine, in such access for the purpose of their medical practice.\(^{32}\)
- Manufacture of Ayurvedic, Siddha and Unani drugs by traditional healers or Vaids and hakims for the use of their own patients is exempted under the Drugs and Cosmetic Act, 1940 as well.
- The United Province Indian Medicine Act, 1939 is a significant legislation which provides a space for development of Indian medicine\(^{33}\) and the term ‘Indian medicine’ in the context of this Act means Ayurvedic or UnaniTibbi system of medicine.\(^{34}\)
- Practitioner is also defined as a person who practices the above-mentioned form of medicinal system. While Vaidya is defined as a person who practices Ayurveda, Hakim is someone who practices UnaniTibba form of medicine.
- A register shall be maintained under this Act to record the names of Vaidyas, Hakims, surgeons and midwives recognized under this Act to be so and this shall be a valid proof of their registration.
- Their eligibility to be registered is given within the Schedule appended to this Act and includes the requirement of a degree/ diploma from any University or institution for the Indian System of Medicine or from the Board of Indian Medicine or any other such University or institution recognized by the Board within or outside the State of Uttarakhand.
- A registered practitioner under this Act would be recognized under all related State and Central Acts as a legally qualified medical practitioner with the appropriate powers vested in him.
- A Vaidya or Hakim can even hold appointment as a medical officer for health or as a physician in the state Ayurvedic or Unani hospitals provided he or she has qualified himself from any institution affiliated to the Board.
- There is another kind of list prepared within this very Act which deals with practitioners belonging to the indigenous system of medicine. This list shall also be maintained by the Registrar. Thus any person who can prove to the satisfaction of the Registrar that he has been regularly practicing Ayurveda,

\(^{32}\) Section 7, BD Act  
\(^{33}\) Preamble, United Province Indian Medicine Act, 1939  
\(^{34}\) Section 2 (ii), United Province Indian Medicine Act, 1939
UnaniTibba, surgery, midwifery or any such related branches can have his name entered.

- It is to be noted that no person may practice these forms of medicine without having his name listed in the List of persons belonging to indigenous systems or without registration under Section 27 and unauthorized practice is subject to fine.
- There are also a set of Rules attached to the Act relating to the Enlistment of Person in Practice belonging to Indigenous system which recognizes persons practicing indigenous system of medicine and lays down the procedure for their recognition under the Act.

6.3. **Documentation of Traditional Medicinal Knowledge**

- Documentation of TK on various uses of MPs, especially which is not recorded in written format is very crucial towards conserving MPs.
- Local traditions in the conservation of MPs resource base should also be recorded for posterity.
- Creation of Traditional Knowledge Digital Library is a significant step in this direction.
- Presently, the TKDL only includes Ayurvedic, Siddha and Unani forms of medicinal knowledge and the know-how belonging to local communities has no available form of protection.
- If such knowledge is recorded in a PBR and this PBR is then linked to the TKDL, the protection system would be much more efficient and widespread. Efforts to preparing such PBRs have been initiated in the state.

7. **PROMOTION OF CULTIVATION OF MEDICINAL PLANTS**

- MPs are usually extracted from the forest areas even though the climate in Uttarakhand is congenial towards the cultivation of MPs.
- Cultivation/ domestication of wild species of MPs are often suggested as a way to meet the growing market demand and to conserve existing resources in the wild.
- In lieu of this, the State Medicinal Plant Board has implemented various projects to encourage farmers to take up cultivation of MPs as alternate livelihood options, capacity building on cultivation, harvesting, value addition, packaging and marketing of these cultivated varieties. At present there are about 26,000 farmers cultivating MPs in the state registered under the Horticulture Department.
In this context, PPVFRA has been a boon with a separate Chapter on Farmers’ rights.

The PPVFRA provides for recognition and reward, based on the contribution of farmers to conserve and preserve the genetic resources of land races and wild relatives, which have formed the basis for the development of registrable varieties. The reward is to be given from gene fund stipulated within the Act. In 2007, the PPVFR Authority started the Plant Genome Savior Community Recognition for this purpose.

Moreover, farmers have been given the right to register a variety bred, evolved or conserved (whether new or extant) by them, as its breeder under this legislation.

Guidelines set forth by the World Health Organization (WHO) prescribe good agricultural and collection practices for MPs which should also be studied in detail by prospective cultivators of MPs.

8. REGULATION OF TRADE ON MEDICINAL PLANTS

Due to the increasing dependence on MPs for trade purpose as well as domestic use, the demand for MPs has increased manifold resulting in a huge trade at the local, regional, national and international level.

Harvesting medicinal plants for commercial use, coupled with the destructive harvest of underground parts of slow reproducing, slow growing and habitat-specific species, are the crucial factors which affects the conservation of MPs.

Export of MPs in processed and unprocessed form is a major cause of concern since many of the traded varieties are no longer available as they used to be.

A shift from subsistence use to commercial sale has in many locales resulted in larger volumes of certain species being harvested beyond sustainable levels.

Existence of numerous middlemen involved between collection of plant drugs and their sale to consumers, often severely depresses prices paid to collectors, thereby encouraging over-harvesting to supplement income.

Since MPs are part of the larger category of MFP, the state government may make rules granting licenses for the access, collection, trade and transit of MFP for commercial use.

There is usually no restriction imposed by states on the species or quantity of MFP to be collected by the community for bonafide personal use from USF and from Sanctuaries and National Parks. Further, access to forest
produce in Reserved Forest, Panchayati Van, Protected Areas is regulated by the provisions of IFA (as applicable in Uttarakhand) Van Panchayat Rules of 2005, WLPA as the case may be.

- Power to impose royalty for NTFP including MPs has been given to the state governments unless such NTFP is exported outside the country, which then is imposed by the Central government through the EXIM Policy.

- Setting up of mandis for the sale of MFP and related products has been initiated in Uttarakhand especially through the Agriculture Production Marketing (Development and Regulation) Act, 2011, which contains provisions for setting up private mandis, and constitution of regulatory authority to ensure a level playing field between the Government controlled and private mandis.

- Another advantage this state has is in the form of a Forest Development Corporation which has been empowered as the authority for removal and disposal of forest resources, which includes NTFP and medicinal plants and setting up of workshop/factories for processing of the forest raw material including medicinal plants. Local bodies such as GaonSabhas or KshetraSamitis have a responsibility of assisting this Corporation whenever required.35

- In addition to the above measures, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1975, Appendices I and II also have a bearing on inter state and intra state trade of MPs especially in preventing illegal trade in rare, endangered or threatened species of MPs.

- In India, legislative basis for the implementation of CITES lies in the WLPA, Export and Import (EXIM) Policy and the Customs Act, 1962.

- Schedule VI of the WLPA lists all the plants of Indian origin which are endangered and which are also presently included in Appendix I of CITES.

- With respect to Appendix II, a CITES Permit may be given by the competent authority of the Region under the EXIM Policy in accordance with the ITC HS classification (issued by the Director General for Foreign Trade under Ministry of Commerce) of export or import of items which lists plants, plant portions and their derivatives and extracts, that are prohibited for export.

- The enforcement of CITES provisions is presently being carried out by the Customs officials and Regional Deputy Directors, Wildlife Crime Control Bureau through the Customs Act, 1962 at the point of Import/Export and by

35 Section 27(1) read with Section 2(b), The Uttar Pradesh Forest Corporation Act, 1974
the State Wildlife Departments headed by Chief Wildlife Wardens under the WLPA elsewhere.

- Another important legislation, which regulates access to MPs from wild, is the BD Act wherein any person or organization wanting to utilize the biological resources shall have to apply to the National Biodiversity Authority in a prescribed form.

- Principle of benefit sharing with local communities for the commercial utilization of biological resources such as MPs is also given within this Act by way of a tripartite agreement between the persons applying for such approval, local bodies concerned and the benefit claimers.
Annexure 1

List of medicinal plants banned for collection, allowed for collection and those requiring sustainable collection (along with scientific names)³⁶

<table>
<thead>
<tr>
<th>Banned for Collection</th>
<th>Allowed for Collection</th>
<th>Requiring Sustainable Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>SslamPanja/Dactylorhizahatagirea</td>
<td>BhumiAonla/Phyllanthusniruri</td>
<td>Psahanbhed/Berginaciliata</td>
</tr>
<tr>
<td>Ridhi /Habenariaintermedia</td>
<td>Neem/Azadirachtaindica</td>
<td>Malkanghani/Celastruspaniculatus</td>
</tr>
<tr>
<td>Vriddhi/Habenariaedgeworthii</td>
<td>Bala/Sidaspp</td>
<td>Kari Patta/Murrayakoenighii</td>
</tr>
<tr>
<td>Kakoli/Fritillatarioylei</td>
<td>Atibala/Abutilon indicum</td>
<td>Priyangu/Callicarpamacrophylla</td>
</tr>
<tr>
<td>KshirKakoli/Liliumpolypyllm</td>
<td>Mungparni/Phaseolustrilobus</td>
<td>Nirgundi/Vitexnegundo</td>
</tr>
<tr>
<td>Jivak/Malaxiscylindrostachya</td>
<td>Shahatara/Fimariavalantii</td>
<td>GandhaPrasarni/paederiafoetida</td>
</tr>
<tr>
<td>Rhishbhak/Malaxismuscifera</td>
<td>Punarnava/Boerhaaviadiffusa</td>
<td>Harar, Bahera, Aonla/Tripphala</td>
</tr>
<tr>
<td>Salam Mishri/Eulophiadabia</td>
<td>Arand/Ricuscommunis</td>
<td>Satavar/Asparagus isora</td>
</tr>
<tr>
<td>Jatamansi/Nardostachysjatamansi</td>
<td>Gokhru/Tribulusterristris</td>
<td>MarorPhali/Helicteresisora</td>
</tr>
<tr>
<td>Karvi/Gentianakurro</td>
<td>Bhringraj/Eclipta alba</td>
<td>Bael/Aeglemarmelos</td>
</tr>
<tr>
<td>Satua/Paris polyphylla</td>
<td>Apamarg/Achyranthesaspera</td>
<td>Vasa/Adhatodavasica</td>
</tr>
</tbody>
</table>

³⁶Notification No. 2882/10/-2-2004-9(4)/2001 dated 27 December 2004 issued by the Additional Secretary, Government of Uttarakhand
<table>
<thead>
<tr>
<th>Plant Name</th>
<th>Plant Name</th>
<th>Plant Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chirayta/Swertiachirata</td>
<td>Aank/Calatropis spp</td>
<td>Vidarikand/Peurariatuberosa</td>
</tr>
<tr>
<td>Kingora/Berberis spp</td>
<td>Dhatura/Dathraspp</td>
<td>Patha/Cissampelos Pareira</td>
</tr>
<tr>
<td>Atis/Aconitum heterophyllum</td>
<td>Makoy/Solanumnigrum</td>
<td>Ratti/Abrus precatorius</td>
</tr>
<tr>
<td>Meetha/Aconitum balfourii</td>
<td>Mansparni/Teramnuslabialia</td>
<td>Amalas/Cassia fistula</td>
</tr>
<tr>
<td>Kutki/Picrorrhizkurroa</td>
<td>Agyagh/Cymbopogonspp</td>
<td>Kapur Kachri/Hedychium spicatum</td>
</tr>
<tr>
<td>Genthi/Dioskoreadeltoidea</td>
<td>Pudina/Menthaspp</td>
<td>Tejpat/Cinnamomum tamala</td>
</tr>
<tr>
<td>Salparni/Desmodiumgangeticum</td>
<td>Kamal Phul/------</td>
<td>Bhutkeshi I/Selenium tenuifolium</td>
</tr>
<tr>
<td>Prsnaparni/Urariapicta</td>
<td>GulabPhul/-------</td>
<td>Bhutkeshi II/Tanacetum dolichophyllum</td>
</tr>
<tr>
<td>Bach/Acoruscalimus</td>
<td>GurhalPhul/-----</td>
<td>Ginjaru/Stephaniaglabra</td>
</tr>
<tr>
<td>Giloe/Tinospora Cordifolia</td>
<td>Tulsi/----------</td>
<td>Sarpunkha/Tephrosiapurpured</td>
</tr>
<tr>
<td>Meda/Maha Meda/Polyonatum sp</td>
<td></td>
<td>Lajvanti/Mimosa pudica</td>
</tr>
<tr>
<td>DoluArcha/Rheum spp</td>
<td></td>
<td>Nirpati/Kedarpati/Skimmialaureola</td>
</tr>
<tr>
<td>Sarpagandhaa/Rauvolfiaserpentina</td>
<td></td>
<td>Chitrak/Plumbago zeylanicum</td>
</tr>
<tr>
<td>Kalihari/Gloriosa superba</td>
<td></td>
<td>Indrayan/Trichosanthesspp</td>
</tr>
<tr>
<td>Timru/Zanthoxylum armatum</td>
<td></td>
<td>Patthar Laung/Didymocarpus aromaticus</td>
</tr>
<tr>
<td>Van Pyaj/ Urgenia indica</td>
<td>Moss/ -------</td>
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<td>------------------------</td>
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<td></td>
</tr>
<tr>
<td>ShankhPushpi/ Convllvulusalsinoides</td>
<td>Lichens/ -------</td>
<td></td>
</tr>
<tr>
<td>Manjitha/ Rubiacordifolia</td>
<td></td>
<td></td>
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<tr>
<td>Balchari/ Arnebiabenthamii</td>
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<td></td>
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<tr>
<td>Thuner/ Taxubaccata</td>
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<td></td>
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<tr>
<td>Dhup/ Jureneadolomiae</td>
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<td></td>
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<tr>
<td>Tagar/ Valeriangjatamansi</td>
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<td></td>
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<tr>
<td>Cheura/ Angeligglauea</td>
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</tbody>
</table>
ANNEXURE 2
List of medicinal plants promoted for cultivation by state Government
(source: Website of the Uttarakhand State Medicinal Plant Board)

1. Aconitum hetrophyllum
2. Picrorhizakurrooa
3. Saussureacostus
4. Nardostachysjatamansi
5. Swertiachirayita
6. Podophyllumhexandrum
7. Alliumstracheyi
8. Carumcarvi/ Buniumpersicum
9. Chrysanthemum cinerariaefolium
10. Valerianajatamansi
11. Rubiacordifolia
12. Amomumsubulatum
13. Coleus barbatus
14. Rosmarinusofficinalis
15. Pelargonium graveolens
16. Rauvolfiaserpentina
17. Gloriosasuperba
18. Asparagusracemosus
19. Cymbopogonflaxuosus
20. Matrichariachamomilla
21. Silybummarianum
22. Stevia rebaudiana
23. Piper longum
24. Centellaasiatica/ Bacopamonnieri
25. Ammimajus
26. Digitalis lanata
27. Cinnamomumtamala
28. Madhucabutyracea
29. Terminaliachebula
30. Terminaliabelerica
31. Emblicaofficinalis
32. Pleurospermumangelicoides
33. Angelica officinalis
34. Sapindusmukurossii
35. Rosa sp.
36. Menthaarvensis
37. Thymus serphyllum
38. Lavendulaofficinalis
ANNEXURE 3
Plants in Negative list of CITES, WLPA and BD Act

I. Medicinal Plants listed under CITES Appendices\(^{37}\)

<table>
<thead>
<tr>
<th>Prohibited Plants under Appendix I of CITES</th>
<th>Endangered Plants under Appendix II of CITES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Saussurea costus</td>
<td>1. Rauvolfia serpentine</td>
</tr>
<tr>
<td>2. Podophyllum hexandrum</td>
<td>2. Cyathea spinulosa</td>
</tr>
<tr>
<td>3. Euphorbia species</td>
<td>3. Dioscoreadeltoides</td>
</tr>
<tr>
<td>4. Ranunculaceae- Golden seals, yellow adonis, yellow root</td>
<td>4. Taxus Wallichiana</td>
</tr>
<tr>
<td>5. Picrorhiza kurroa</td>
<td></td>
</tr>
<tr>
<td>6. Valerianaceae</td>
<td></td>
</tr>
<tr>
<td>7. Nardostachys grandiflora</td>
<td></td>
</tr>
<tr>
<td>8. Zingiberaceae</td>
<td></td>
</tr>
<tr>
<td>9. Aconitum species</td>
<td></td>
</tr>
<tr>
<td>10. Dactylorhiza hatagirea</td>
<td></td>
</tr>
<tr>
<td>11. Gentianakurro</td>
<td></td>
</tr>
<tr>
<td>12. Swertia chirayita</td>
<td></td>
</tr>
</tbody>
</table>

II. Medicinal Plants specified in WLPA particular to Uttarakhand

As per Schedule VI of the WLPA, *kuthis* the only medicinal plant that is governed by the provisions of the WLPA.

Notes:

1. Plants and plants portions of cultivation origin of species specified in any of the Schedules of WLPA or Appendix I of CITES are free, subject to production of a Certificate of Legal Possession in favor of the exporter, issued by the DFO having jurisdiction where the exporter is situated. In case of species listed in Schedule VI of WLPA, subject to the exporter complying with the provision of S.17A of the Act. In case of species listed in Appendix I of CITES subject to registration of the nursery and appropriate CITES documentation from the Asst. Management Authority.

\(^{37}\)http://www.cites.org/eng/app/appendices.php
2. Plants and plant portions of wild origin, of species specified in any of the Schedules of WLPA or Appendix I of CITES are prohibited from being exported. Special exemption can be granted for the purpose of research, education and life-saving drugs on case by case basis by DGFT, on the recommendation of Ministry of Environment & Forests.

2. Plants, Plant portions of wild or cultivation origin, of species specified Appendix II or III of CITES are free to be exported subject to production of certificate of Legal Possession in favour of the exporter, issued by the DFO having jurisdiction where the exporter is situated.

3. Plants, plant portions of wild or cultivation origin, of species not specified in any of the Schedules of WLPA or Appendix I, II, III of CITES are free to be exported subject to obtaining a Certificate of cultivation from District Agriculture Officer or District Horticulture Officer or DFO.

4. In respect of CITES species, a CITES permit of export shall be required.

5. Exports shall be allowed only through the Ports of Mumbai, Nhava Sheva, Kolkata, Cochin, Delhi, Chennai, Tuticorin, Amritsar, Calicut, Thiruvananthapuram, Kandla and Mundra.

6. Except for the documents prescribed above, no additional information/NOC/documents shall be required to be furnished by the Exporter to any authority of State or Central Government.

III. Plants listed within BD Act on the verge of extinction prohibited or regulated as the case maybe³⁸

1. Aconitum balfourii
2. Aconitum heterophyllum
3. Aconitum violaceum
4. Eremostachyssuperba
5. Gentianodeskurroo
6. Indopiptadeniaoudhensis
7. Meizotropispellita
8. Nardostachysgrandiflora
9. Pinguicula alpine
10. Trachysarpustakil
11. Turpenianapalensis

³⁸Notification No. S.O. 999(E) dated 15th April 2009 issued by the Central Government in Consultation of the Government of Uttarakhand
12. Schreberasweitinoides
13. Cytheaspinulosa
14. Phaiustankervilii
15. Pectilissussane
16. Diplomeris hirsute
ANNEXURE 4
List of important Government Orders
(For a detailed analysis of the government orders kindly refer to the chapter on Administrative Notifications in the Compendium)

1.1. Annual meetings of right holders of Van Panchayats: The focus on Cordyceps in 2001 (January 2001)

1.2. Simplification of the registration procedure of farmers, establishment of HRDI as the nodal agency (May 2001)

1.3. The Formation of Medicinal Plants Board at the Central and State Levels (January 2003)

1.4. Establishment of a Managing Committee for Handling the Administrative Affairs of HRDI (March 2003)
   4. Notification no. 138/FRD/Udyaan/30/2002-03 Dated 04 March 2003

1.5. The Implementation of the Conservation, Development and Harvesting Scheme (CDH) and a Joint Harvesting Team39 (August 2003)

1.6 Co-Ordination Between Agencies for the Collection Of MPS (October 2003)

1.7. CDH scheme whereby those farmers who had permission to collect were also given permission to sell their collected produce (November 2003)

1.8. Deployment of Trainers \(^4\) (February 2004)
   8. Notification no. 172/FRD/Horticulture/05/2005

1.9. Establishment of Herbal Gardens (March 2004)

1.10. State Grants for Entrepreneurs (May 2004)

1.11. Medicinal Plant Mandis \(^4\) (June 2004)

1.12. Merging the Forest Areas Close to the Mandis with the Related Mandis (September 2004)
   12. Letter no. N.C.-340/Medicinal Plants Dated 01.09.2004

1.13. Procedure for Disposal of Medicinal plants (September 2004)
   13. Letter no. 105/FRD/04

1.14. The Sustainable Harvesting of Medicinal Plants Associated with the State’s Forests

\(4\) Notification no. 172/FRD/Horticulture/05/2005
\(4\) No. 105/FDC/2004 Dated 21 June 2004

1.15. Simplification of the Registration Process (May 2005)
15. No. 633/XVI/05/5(89) /05 Dated 10 May 2005

1.16. Grants to registered farmers (August 2005)
16. No. 848/XVI/05/5(122)/05 Dated 03 August 2005

1.17. Requirement for Setting up Nursery and Registration thereof (October 2005)

1.18. Addition of “van kakdi” to the list of prohibited plants (Sept 2006)

1.19. Transfer of Bheshaj development Scheme and District Bheshaj Union from the Co-operative Department to the Horticulture Department of Uttarakhand (December 2006)
19. Notification No. 1750/XVI/05/5(123)/2005 dated 18 December 2006

1.20. Chief Executive Officer of the Medicinal Plant Board to be appointed as the Registrar of all the Medicinal Plant Co-operative Units (May 2007)

1.21. Range distribution\(^42\) for harvesting, qualifications of the collector of medicinal plants and regulation of collection and pricing (August 2007)
1.22. Establishment of medicinal plant ‘mandis’ under the leadership of Managing Director, Uttarakhand Forest Development Corporation (November 2007)


1.23. Steps taken by the various departments for making policy decisions and program co-ordination to bring about clarity, transparency and quality in the administrative process (December 2007)

23. Notification No. 1742/XVI/05/5(123) 2007 Dated 18 December 2007