



Uttarakhand Forest Policy, 2001

(Translated version)

1. Preamble: The National Forest Policy, 1988 declared by the Indian Government is applicable in all the states of the country including Uttarakhand. The State of Uttarakhand has a predominance of forests and the topographical diversity of plains and mountainous regions makes it a repository of diverse flora and fauna. It is also the place of origin of significant rivers such as the Ganga, Yamuna and Sharda. The forests of the state have a significant effect on the environmental stability and ecological balance of the entire country. Therefore keeping in mind the variety, diversity, environmental impact and the self-employment opportunities that these forests generate, it has become imperative to formulate a state level policy for the rehabilitation, expansion and use of trees, forests, wildlife and the vast multitudes of vegetation including medicinal plants found in the forests of Uttarakhand.

2. Basic Objectives:

Following are the basic objectives of the State Forest Policy in Uttarakhand-

2.1- The foremost objective of State forest policy is to provide environmental stability and ecological balance. In comparison to the fulfillment of this main objective the derivation of economic benefit from forests is only a secondary objective.

2.2 – To prepare the strategy and work plan in regard to conserve and promote the existent biodiversity, and wild life and its implementation.

2.3 – Mainstreaming the conservation and sustainable use of medicinal plants and restoring the fragile ecosystem of Uttarakhand by checking the reckless exploitation of medicinal plants, unsustainable harvesting practices, lack of focus on cultivation, absence of robust market mechanism, illegal trade, loss of traditional knowledge, inadequate coordination at the administrative level and overlapping jurisdiction of various departments.

2.4- Development of natural and planted forests in the State as well as all other different kinds of plants through conservation, promotion, prudent and scientific management.

2.5- Afforestation in denuded and vacant forest land, rivers, lakes, ponds and catchment areas. Efforts will be made to formulate and implement various water and land conservation schemes to necessitate prevention of floods and droughts and also bring about decrease in silting of riverbeds.

2.6- Efforts will be made to increase the existing forest area and productivity of trees.

2.7- Efforts will be made to bridge the gap between demand and supply of fuel wood, fodder, minor forest produce including medicinal plants, and timber for the weaker sections and local domestic demands.

2.8- Acknowledging the commercial potential of medicinal plants in national and international markets, and also for meeting the livelihood needs of the local communities of Uttarakhand;



2.8- Efficient management will be made regarding prudent utilization of forest wood and other forest produce and their alternatives maybe developed so as to de-pressurize demands on bio-diversity.

2.9- To make effort to provide opportunity for local self-employment and poverty alleviation in the State with the help of forestry programs and eco-tourism while keeping vegetation cover unimpaired.

2.10- For the purpose of re-establishing a viable association between the local communities and the forest area and in order to elicit local participation in forestry, the Van Panchayat system and Joint Forest Management should be strengthened and large scale ecological development work wherein women are given important roles should be executed.

2.11 Keeping in mind the fact that there has been a paradigm shift in the conservation and sustainable use practices for medicinal plants at the national and state level with a greater emphasis on participatory forest management.

2.12. To achieve sustainability in forest management while maintaining the forests, watersheds, wildlife, bio diversity and habitats and to strive for enhanced livelihoods of the people especially women and other resource poor groups, the core principles of sustainable development, precautionary principle, integrated management, through a decentralized government framework while keeping in mind the gender and equity concerns has to be kept in mind.

2.13 *Policy and Policy Measures as a continuous Process:* Economic, environmental, social and institutional frameworks and resource needs are rapidly changing, within Uttarakhand and at the national and global scenarios. The Forest Policy and measures thus need a regular review and adaptation to address these changes through appropriate institutions and processes.

3. Essentials of Forest Management:

3.1- Effort should be made to conserve trees, forest, wildlife, all kinds of vegetation including medicinal plants and forest land and productivity of the same should be improved. The factors endangering the safety of forests should be identified and they should be neutralized by taking recourse to all proper legal, administrative and management solutions.

3.2- The forest cover should be increased by continuous efforts towards afforestation and plantation of new saplings.

3.3- Special measures should be undertaken to promote natural regeneration of trees and other vegetation including medicinal plants in forests.

3.4- Efforts should be made towards meaningful management of protected areas, national parks and wildlife sanctuaries and the importance should be given to such schemes that decrease the conflict between human populace and wildlife.

3.5- Efforts should be made to obtain willing co-operation of the local population for promotion and conservation of forests such as strengthening Van Panchyats, Joint Forest Management, ecological developmental works and compensation of damage done by wildlife, obtaining solutions for the fulfillment of the consumption needs of village residents as regards fuel wood, grass, minor forest



produce including medicinal plants and timber. Women should be accorded prominent roles in such decision-making.

3.6- Solemn efforts should be made to adopt scientific management of minor forest produce including medicinal plants, bamboo etc, agriculture, eco-tourism at scenic areas, use of minor minerals, fisheries etc in order to generate employment for the local population including encouraging cultivation of medicinal plants and other horticultural plants in order to dissuade from rampant harvest from wild and conserving wild stock of such species from further depletion.

3.7- Scientific management of rivers should be adopted while keeping into consideration its ecology.

3.8- Efforts should be made to conserve natural and man-made historical and cultural sites by properly identifying them.

3.9 Efforts should be made to ensure availability of proper irrigation facilities to farmers carrying out cultivation of medicinal plants or horticultural plants on forestland, along with agricultural subsidies and loans.

3.10- In order to achieve above objectives forest research, training and management should be adopted and properly implemented by keeping in mind the real situations and needs.

3.11 Special efforts are required to provide equal space in institutions and mechanisms of decision making to bring to the forefront, the perceptions, attitudes and choices of all stakeholders especially the economically and socially backward and more importantly, women. The role of women in the protection of forests including medicinal plants is irreplaceable as they play a key role in the conservation and collection of forest produce. Women have a strong linkage to the traditional knowledge systems associated with the forest produce especially medicinal plants.

4. Strategy:

4.1- Forest area- According to National Forest Policy 1988, the hilly areas should have a forest cover of 2/3rd of the geographical area. Uttarakhand is documented to have 64.8% area as forest land but on the ground only 43.5% forest cover exists. Therefore, it is imperative to expand the forest and tree covers which will facilitate in containing soil erosion and provide stability to sensitive Himalayan eco-system. The difference of 21.3% in the documented forest cover and the real forest cover which is equivalent to approximately 11,000 sq km. If we assume that half of this area is snow clad, sandy and stony, even then there is 5,500 sq km of area where natural regeneration/afforestation could be deployed to enhance the green cover. A detailed work plan and availability of financial resources would be required to implement the same through Governmental efforts and public co-operation.

4.2- Tree plantation, social forestry and agricultural forestry- In the backdrop of vacant and undulated forest land and depending upon the eco-system, fuel wood and animal fodder availability could be made through concentrated planting and agriculture. Effort should be made to enhance the cultivation of medicinal plants and non-timber forest produce in mountainous regions and cultivation of aromatic and industrial varieties on private lands in plains of Uttarakhand.



(a) In order to acquire public co-operation and participation in plantation, the slogan of '*apnagaonapna van, apnashaharapna van*' along with other suitable slogans will also be popularized. Co-operation will be obtained from private and public sector institutions, NGOs, van panchayats, gram panchayats and Governmental departments and the best workers will be given awards of '*van mitr*' (friends of forests) and '*paryavaranmitr*' (friends of environment) every year.

(b) Historical, spiritual, mythological and '*satyamshivamsundaram*' forest parks should be established. In addition, ornamental and shady trees would be planted along travel routes with a view to increase the green cover.

(c) Efforts will be made to increase green cover in cities by planting trees along the road and action will be taken to develop a green belt by identifying local bodies, registered builders, housing colonies etc.

(d) Effort will be made for plantation of appropriate species in the sensitive soil-erosion zones.

(e) Public awareness will be enhanced vis-a-vis cyclical lopping of trees so that forests can develop on their own.

4.3 Conservation of natural forests - Apart from plantation, it is also imperative that the existing natural forests, planted forests as well as different kinds of vegetation, especially medicinal plants should be provided security. Effort should be made to identify those who damage forests and strong legal action will be initiated against them. And in order to necessitate this, relevant changes in the existing rules will be made. No encroachment of forest land would be tolerated. At the same time, the demarcation of forest lands should be completed in a time bound manner. Special efforts should be made to contain the damages of forests through fire or excessive grazing. The cases of non-forest use of forest land should be decided expeditiously as per the rules. Effort will also be made to provide necessary financial resources to enhance forests.

4.4 Soil and water conservation and collection – Special efforts should be made to conserve the soil and water in the forests of the mountainous regions with special importance to the conservation of water in water catchment areas would be made so that drying up water sources could be recharged. Excessive unregulated grazing over time has resulted in increased soil erosion. Hence, a policy for grazing in forest areas should be formulated.

4.5 Non-timber forest produce – Non-timber forest produce (NTFP) has a special significance in the State of Uttarakhand. Its use by the local population is essentially for the purposes of food consumption, medicines etc. Innovative methods can be adopted to link NTFP to employment generation and poverty alleviation. Such produce include gum, medicinal plants, grass, bamboo, fruits, flowers etc. Efforts will be made to identify all such NTFP and necessary arrangement for security, regeneration, optimum collection and marketing will be done.

4.5.1. As mandated under the National Working Plan Code, a NTFP working circle will be created for the growth and management of NTFP in which special emphasis will be given to medicinal plants and its threat assessment.



4.5.2 The schedule of royalties for collection of NTFP including medicinal plants for commercial purposes should be revised on a periodic basis and published in every forest division with the assistance of Forest Department and in consultation with the Horticulture Department.

4.5.3 Training and capacity building of the communities should also be carried out on sustainable harvesting practices of NTFP and medicinal plants by the State Medicinal Plant Board, Forest Department as well as the Horticulture Department and related technical institutions.

4.5 –A - Conservation of medicinal plants– Efforts will be made to achieve sustainable Medicinal Plant management while maintaining its forests, watersheds, wildlife, biodiversity and habitats and to strive for enhanced livelihoods of the people of the state, especially women and other resource poor groups through the development of Medicinal Plants for which following measures will be adopted by the State Medicinal Plant Board (SMPB) acting as the nodal body in charge of development of medicinal plants–

- a) Medicinal Plants should be defined as a subset of ‘forest produce or minor forest produce’ and a list of Medicinal Plants will be prepared keeping into consideration the list prepared by National Biodiversity Authority.
- b) To draw out specific management strategies, medicinal plants should be categorized separately such as Rare, Endangered or Threatened (RET) or viable for trade or those which are necessary for bonafide livelihood needs. Sustainable harvesting practices shall be prescribed and distinguished for those species which are important to the community for sustenance and those species viable for commercial purpose. Such practices developed as protocols should then be popularised far and wide in the state through media, school curriculum, folk songs, educational and research institutions among the key stakeholders such as farmers, forest department officials, collectors etc.
- c) A list should be prepared and cross-checked with the list of threatened, prohibited, exempted and available medicinal plants prepared by the State administration and the state-specific list released by the National Medicinal Plant Board. Such threat assessment should ideally also be compared with the global availability of such species in order to be protected from an illegal export scenario. This comparison can be made with the list of exports/imports under the Director General of Foreign Trade, the IUCN Red list as well as Appendices to the CITES. This exercise is to be done in Protected Areas, Reserve Forests, Protected Forests, Civil Forests and Panchayat Vans as the case may be.
- d) The threat assessment of medicinal plants as envisaged above should be followed by a recovery plan for the threatened/vulnerable species and should be implemented in a time bound manner.
- e) *Rapid Resource Survey of the availability and threat assessment of medicinal plants should be carried out periodically every 5 years.*
- f) A robust and legally backed framework should be created for in-situ conservation in the form of a Medicinal Plant Conservation Area(MPCA) with the involvement of communities especially in medicinal plant rich forest areas keeping into consideration among other things, preparation of a conservation and development plan for the MPCA, roles and responsibilities of the management and development body as well as SMPB, trade and marketing of medicinal plants, benefit sharing arrangement (if any), penalties for violation of the agreement and dispute resolution. Further,



guidelines should be issued by the State to give executive strength to activities of the existing MPCAs to ensure sound management including regular fund flow.

- g) The conservation of medicinal plants should be given a focus in the existing management plan framework of Protected Areas especially National Parks and Sanctuaries under the Wildlife Protection Act, 1972. This should be in consonance with the amendment that has been made to the National Working Plan Code.
- h) A regulatory regime, shall also be introduced which defines 'bonafide personal use' and specifies the type of species and quantity allowed to be collected even for bonafide personal use after a thorough assessment of the needs of the community. The rights and concessions regarding access and use of minor forest produce including medicinal plants also need to be included in the working scheme/plan for the management of forest to be prepared by the Forest Department in consultation with the horticulture department and more importantly the local community.
- i) The provisions on access of biological resources including medicinal plants under the Biodiversity Act and Rules , the transit of such biological resources needs to be made compatible with Indian Forest Act (Uttaranchal Amendment), 2001
- j) Community Reserve Management Committees should make their plans for the management of the Conservation Reserve as well as Community Reserve under the Wildlife Protection Act, 1972 focusing on medicinal plants access, collection, conservation and management, benefit sharing, clearly defining rights and duty regime of the community, forest department, NGOs and functions of the Committee itself.
- k) Gram Sabha should delineate Community Forest Reserve (CFR) under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 and make rules for the management, protection, regeneration of medicinal plant diversity. A Forest Protection Committee may also be constituted by the Gram Sabha to ensure the protection of such CFRs and the linkage with Van Panchayats should be ensured.
- l) Ensuring viability tests, prior to introducing species for large scale cultivation, determination of technical pre-requisites such as seasonality, altitude, area, establishment of processing units, providing adequate financial support and other hand holding measures such as market support and research through a careful planning process.
- m) Registration of farmers undertaking cultivation of medicinal plants including landless farmers cultivating on share crop basis.
- n) Establishment of herbal mandis/markets for disposal of harvest, regulating market functionaries, providing a minimum support price to farmers, coordinating between the buyers and sellers.
- o) Criteria for fixing of price for each species of medicinal plants may be evolved by the State Medicinal Plants Board which includes, source of species i.e. extracted from forests or cultivated, quality, quantity, category of species, threatened, commercially important, rate in the national and international market, processed or unprocessed etc.



- p) Establish a mechanism to identify cultivars from wild varieties and the practice of issuing a Certificate of Origin for such varieties should be made mandatory.
- q) Establish an on-line medicinal plant trade exchange portal to act as a medium of interaction between the buyer and the seller.
- r) Establishment of distillation units for processing medicinal plants.
- s) Efforts should be made to prepare a Conservation, Development and Harvest (CDH) scheme wherein issues such as identification of endemic medicinal plants, rapid mapping exercise, medicinal plants development compartment and establishment of the Joint Harvesting Team must be given special focus.
- t) Certification of medicinal plants based on sustainable forest management criteria and indicators and other standard global practices should be initiated and promoted.
- u) Schemes under the various other departments such as Agriculture, Biotechnology, Rural Development, Agricultural Research and Education, Ministry of Environment and Forests and Family Welfare, etc. for the development of medicinal plants must be tapped for the benefit of local population and the sector.

4.6 Conservation of bio-diversity – Special efforts will be made to achieve the objective of conservation and development of national parks wildlife sanctuaries and biosphere reserves that will include adopting progressive management strategies, ecological development research, public awareness campaign, training, environmental education etc. Bio-diversity conservation will also be given due importance in areas other than afore-mentioned protected areas.

4.6.1 Those areas comprising of rare and endangered species of flora including medicinal plants should be constituted as Bio-diversity Heritage Sites and should be managed by the local community through enabling Rules under the Biological Diversity Act, 2002 in consultation with the Central Government.

4.6.2 Community Reserves may be constituted on such lands outside National Parks or Sanctuaries or Conservation Reserve where community ownership and control is undisputed such as community forest or private owned forests, as applicable in the state among others for conservation of biodiversity.

Efforts will be made to minimize the damage affected by wildlife and necessary compensation will be given wherever required. The Forest department will work in this direction on war footing and efforts will be made to protect the farmer's harvest from any destruction caused by wildlife. Any investigation or examination for the conservation of bio-diversity will be done by the Forest department based on the following fundamental principles.

Fundamental Principles –

1. Local traditional knowledge on bio-diversity including medicinal plants should be collated, scientifically analyzed and duly published
2. Rare species of vegetation/ medicinal plants and animals should be identified for the purpose of in-situ conservation.
3. Rare and endangered species of animals should be regularly counted.



4. Rare species of plants including medicinal plants should be allowed to be naturally regenerated and timely surveys should be undertaken to assess the situation.

5. The adverse factors affecting the ecosystem should be identified and regulated.

6. Efforts should be made to disseminate knowledge about various aspects of bio-diversity including medicinal plants and its benefits to the local population, and analyze the national and international laws toward the benefit of the locals.

- a) Solution based appraisal of protected areas with bio diversity including medicinal plants will be executed on a long term basis and new work plans will be made and implemented.
- b) Semi-mountainous regions in the conservation areas will be identified and accorded similar protection as bio-diversity conservation areas.
- c) Efforts will be made to establish coordination between universities and research centers to carry out research on different aspects of biodiversity including medicinal plants.
- d) The management plans of different ranges will specifically include bio-diversity related activities and emphasis will be made on plantation, rehabilitation and conservation of local species of plants especially medicinal plants.
- e) To popularize eco-tourism, areas of bio-diversity, usefulness of medicinal plants would be advertised so ensure employment and economic benefits to the local population.
- f) The forest employees posted outside conserved areas will also be trained in wildlife conservation, sustainable use of medicinal plants and made aware and responsible.
- g) In order to make local population aware, workshops at village level will be organized and nature interpretation centers will be established along with nature clubs and nature tours should be organized for students.

4.7 Forest research and technology training –Forest research will be strengthened in the State and a State forest research institution would be established. In order to improve the productivity of forest area, high quality seeds, plantation material, collection and development would be taken up in the research where high quality cloning should also be developed. For this purpose, biotechnology education would be encouraged. In the State, in order to facilitate plantation on not so fertile and undulated lands, relevant plant species should be selected in which medicinal plants, fodder etc. would be planted and the possibility of its cultivation should then be assessed. Apart from this, work should be done on assessing the possibility of utilization of other forest produce such as pine cone and lantana which will be of importance for the protection of forests from fire and improvement of grasslands. The Forest Department would be provided with necessary resources and forest officials duly encouraged. The forest related researches which are being organized at different universities and other institution would also be analyzed and special efforts will be made to provide information about the useful inventions to the common people. In order to make forest research more efficacious and public oriented, a state level forest research advisory committee would be institutionalized.

4.7.1. Research and Development on medicinal plants- The government shall promote cost effective research on MPs sector that responds to the needs of local communities, government agencies, private investors and other stakeholders. Institutional co-ordination and collaboration between researchers and end users shall be improved. Applied research on MPs shall be addressed through a specialized research



and development (R&D) unit managed by the SMPB. Participatory research relevant to sustainable MPs management and enhancing livelihoods shall be promoted with the involvement of stakeholders. Appropriate rural technologies shall be promoted for conservation and sustainable utilization of MPs. Support shall be given to the SMPB by way of infrastructure as well as agreements with pharmaceutical agencies which have the technical know-how to take care of R&D.

- a) Promoting HRDI as a leading institution on herbal research and development would require a number of essential measures including
 - fixed tenure leadership of interested and qualified professionals,
 - scientists with secured jobs with adequate resources for research and
 - short-term, medium-term and long-term perspective for the state on the manner in which research inputs would help in medicinal plants propagation and development including linkages with national and global institutions to be updated with the latest in scientific advancement in the MP sector.
- b) Trainers maybe deployed by the SMPB/HRDI to provide assistance to the farmers of medicinal plants concerning all activities related to medicinal plants and also to help other stakeholders in this sector.
- c) Inputs from HRDI, CIMAP, ICFRE and other related institutions to SMPB and vice-versa should be ensured for scientific advancement of MPs in the state.
- d) Assistance must be given by state for an upgradation of AYUSH drug testing laboratories.
- e) Updated and comprehensive pharmacopoeias of MPs must be published at the earliest.
- f) Linkage of research findings through institutions such as HRDI with registered cultivators and more importantly hand holding farmers with scientific research inputs.
- g) Strengthening of field level cadres is essential for conserving the MP rich areas in difficult terrains.
- h) Training and Capacity Building of frontline staff could go a long way in strengthening the regulatory regime at the ground level. Such measures should not only be limited to policing but also include the knowledge of the MP sector, the relevance of MPs in improving local health and enhancing skills for community mobilization for their involvement in the MP sector.

4.8 Forest dependent Industries – In the State, both the forests managed by government as well as plantation areas have an environmental significance. These cannot be viewed merely as a source of revenue. The timber produced according to the management schemes of the forest as well as other forest produce will be fixed at the market rate. Efforts should be made that through plantation of trees, saplings and sowing of seeds on unfertile and undulated lands forest land forest produce should be maximized. Along with that cultivation of medicinal plants on private lands should also be encouraged provided that there is pre-existence of industries for these forest produce so that the relevant industries can be run on the basis of sale. For this purpose, the Forest Department / Forest Development Corporation would play the role of a catalyst. These forest based enterprises may be based on mining,



fishery, medicinal plant, agriculture, gum based industry, flowers, honey, leaves, lantana, pirul, bamboo, ringal, gucchi etc. that are significant and special emphasis should be provided to them.

4.8.1. The state government should develop incentives to encourage MPs based enterprise to procure raw material from sources other than government forests. The MPs based industries in rural areas shall be regulated through Gram Sabhas or traditional village institutions. Special attention shall be given to value addition and diversification of MPs products. Value addition through high quality secondary and tertiary processing that reduces inefficiency and wastage and enhances the longevity of the forest based product shall be promoted. Further, major buyers should be kept in the loop, so that the ultimate aim of benefitting the farmers is achieved.

4.8.2. A strong regulatory regime should be put in place to check unauthorized contractors or private agents for collection of medicinal plants and feeding into the ayurvedic companies. The medicinal plants based industries in rural areas should be regulated through the Gram Sabhas or traditional village institutions.

4.9 Mining in forest areas-Mining activities would not be encouraged as a general rule in forest areas. Only such mining would be allowed which is significant for sustainable development and includes collection of stones, gravel and sand including collection from rivers flowing in forest areas. Necessary compensatory and flood control measures should also be undertaken in a scientific manner to maintain the environmental stability, wherever such exploitation would be done. Sand mining from rivers and canals in forest area and collection of stones and gravel will be undertaken through the Uttarakhand Forest Development Corporation.

4.10 Expansion of forests and related consciousness – In Uttarakhand, lives of the local people are deeply linked to the forests which makes them well aware of its utility and significance. But increased population, unbridled grazing and unsustainable harvesting of minor forest produce especially; medicinal plants are putting unprecedented pressures on the eco-system that is degrading the State of forests and quality of forest produce. In order to conserve and expand the forest, public consciousness should be increased so as to obtain co-operation. For this purpose, assistance and collaboration will be sought of various organizations including government, non-government and private sector.

4.11 Mitigating pressure on forests – Integrated effort should be made to obtain co-operation of renewable energy and animal husbandry departments in order to decrease the dependence of villages on forests for timber, fuel and fodder. In order to regulate excessive grazing, programs to feed the animals while retaining in their holds will be endorsed and effective use of forest produce will also be encouraged.

4.12 Forest Information Management System– For exchange of forest related information, operation of MIS (Management Information System) and GIS (Geographic Information System) will be given importance to, so as to facilitate improvisation of the quality of planning, execution, monitoring & evaluation in the State.

4.13 Land Use Planning and forestry with special focus on medicinal plants- The need for land use planning becomes imperative to balance the competing demands of different sectors in order to promote balanced land use and check the diversion of prime lands under forestry and agriculture. The



forest sector shall be an integral part of the land use planning including that of medicinal plants. Land under medicinal plants' cultivation, especially land under government control needs to be safeguarded for providing sustained benefits to the community and diversion of such land to other purposes should be done after careful examination from the social and environmental standpoint.

4.14 Human Resource Development – In order to optimize the capacity of forest employees, specialized training, evaluation of work, encouragement of work etc. would be taken recourse to. Efforts will be made to increase the capacity of employees which would be utilized for conservation and development of forests. For this purpose, the forest training institutions would be strengthened.

4.14.1 Training and capacity building of the community should also be carried out on sustainable harvesting practices of NTFPs including medicinal plants which could be carried out by the State Medicinal Plant Board (SMPB), Forest Department as well as the Horticulture Department and the related technical institutes.

4.14.2 Training and Capacity Building of frontline staff could go a long way in strengthening the regulatory regime at the ground level. Such measures should not only be limited to policing but also include the knowledge of the MP sector, the relevance of MPs in improving local health and enhancing skills for community mobilization for their involvement in the MP sector.

4.14.3 Practitioners of traditional medicine or traditional healers should be formally recognized in order to bring them into the health care pool.

4.15 Improvement in services – In order to establish the significance of the forest department vis-à-vis the local population, certain reforms are considered necessary. Important amongst them are reforms with regard to acts, rules, regulations, codes, handmade notebooks, citizen charter, high quality personal and financial management, transparency, de centralization of power etc.

4.16 Financial Management- All works relating to forestry such as conservation of natural forests, planted forests and wildlife and forest related research, are long term. Hence, the financial resources should also be provided for a similar duration (3-5 years). Various kind of sub-works within the departments need to be clarified and state and centre financed plans should provide a certain ratio of resources for forestry alone. Apart from this, revenue obtained from natural forests, forest awareness centers, forest rest house, forest roads, national parks and wildlife conservatories should contribute towards a forest development fund wherein Forest Development Corporation and other institutions can also offer help.

4.16.1 The State Government should also promote self-generating mechanisms on mobilization of resources such as value addition to forest products, market linkages and herbal tourism to supplement the financial resources to the sector.

4.17 Employment generation programs – Unemployment is a burning issue in Uttarakhand and various line departments, with the forest department playing an affirmative role, can work towards finding a recourse. Forestry work is labor oriented. Forest produce provides employment opportunities to the village population. Tree plantation is also an employment generating work. These programs should be



linked with other programs of the State in such a manner that forestry program should be given priority. Such programs should be conducted by the Forest Department and Forest Development Corporation.

4.17.1 Capacity and skill development is integral in fetching opportunities for the local communities in the forest sector including in medicinal plants.

4.18 Forest Development Corporation– Forest Development Corporation has been established in order to disburse forest produce based on scientific criteria for collective consumption. The Corporation will have an important role in various industries such as food related industry, medicinal plants, stones, sand mining and eco-tourism.

4.18.1 Forest Development Corporation should act as a nodal agency for facilitating various activities towards commercialization of medicinal plants and a corpus fund may be provided for the same. The Corporation should also provide a recognition certificate to every local trader.

4.19 Formation of Van Panchayats – Van Panchayat system has been prevalent in Uttarakhand for several years and the Panchayati Van areas are being efficiently managed by the established Van Panchayats in numerous villages. Efforts will be made to establish Van Panchayats in other villages based on the availability of Civil Soyam forest land. These Van Panchayats will work towards fodder produce, afforestation, in situ and ex situ conservation of medicinal plants, water and soil conservation works and the powers, duties, rights and responsibilities of the community or the farmers, forest department and other line departments wherever applicable needs to be clearly defined.

4.19.1 The priorities and specific needs of each forest division should be formulated in consultation with the community/farmers at the time of submission of the micro plan and funds for the activities should be released accordingly. In the micro plan, benefit sharing arrangements should be made on mutually agreed terms that should include provisions for ploughing back the revenue generated from the sale of minor forest produce including medicinal plants for next year's activities.

4.19.2 There should be provisions for adjudication of disputes, appropriate forum for dispute resolution, appellate authority, manner of representation, and penalty for contravening the provisions of the management/micro plan.

4.19.3 Buffer areas adjoining Medicinal Plant Conservation Areas such as Medicinal Plant Development Areas should be under the control and management of Van Panchayats and clear incentives should be accorded to the local communities dependent on the MPDAs for their livelihoods in order to facilitate conservation of endemic species. Efforts will be made to further strengthen this institution.

4.20 Public co-operation – In order to achieve successes in forestry programs, it is of utmost importance that this should be done as a public movement. Public cooperation is needed to protect forests of the State. Joint forest management programs will be made operational in denuded forests and local participation will be elicited in various programs for fire management, grazing management, assisted natural regeneration, afforestation, plantation of medicinal plants, conservation of non-timber forest produce, development and cultivation programs. Such programs through participative methods will/may be taken up by the State Medicinal Plant Board and Forest Department in co-ordination with the Horticulture Department. In order to manage conserved areas properly the villages situated in such



areas would be encouraged to participate in programs pertaining to eco-development as well as medicinal plant development. Special efforts will be made to seek contribution of women, students, Gram Panchayats, Van Panchayats, Village Forest Committees, Van Suraksha Committees, youth welfare groups, women welfare groups, Governmental and Non-Governmental Institutions towards forestry programs with a special focus on NTFP development. Educational and other institutions and people doing progressive work in field of forestry would be rewarded. Apart from this a ban would be enforced to throw non- biodegradable waste in forest areas.

4.20.1 Organic cultivation of MPs on private lands shall be promoted through grower co-operatives, contract farming or other public private arrangements in a cost effective manner. Other schemes such as home herbal gardens, nurseries for good quality planting materials and herbal gardens maybe promoted with the help of the people as well as through innovative incentives.

4.20.2 In fact clear incentives should be accorded to the local communities dependent on the medicinal plant rich areas for their livelihoods in order to facilitate conservation of endemic species.

4.21 Conservation of environment- A Pollution Control Board would be established in the State to control noise, air, water, soil pollution. In industrial areas, green belts would be developed to reduce pollution. Water sources, snow covered areas and rivers would be protected from pollution on the basis of public co-operation.

4.22 Review of implementation of State forest policy - At the instruction of the Chief Minister of Uttarakhand, RajyaVanikiParishad will review the implementation of the State forest policy and issue necessary directions from time to time. The State Chief secretary will head the Executive Committee under RajyaVanikiParishad and advice regarding the implementation of forest policy.

4.23 Relation with National Forest Policy, 1988 - Uttarakhand State Forest Policy will be in consonance with the provisions of National Forest Policy, 1988.

4.24 Relation with International Agreements and Covenants- India has signed a number of international agreements that influence the forest sector such as the Convention on Biological Diversity, World Trade Organization, Kyoto Protocol and Convention International Trade Endangered Species of fauna and flora and is party to other non-legally binding instruments such as the Forestry Principles and United Nations Forum on Forests. The State Government shall meet its national obligations to these Agreements, Protocols and Conventions through enabling instruments such as executive orders, policy and legislative measures for the promotion of forests.