



**Central Sector Scheme for Conservation,
Development and Sustainable
Management of Medicinal Plants**

OPERATIONAL GUIDELINES



सत्यमेव जयते

NATIONAL MEDICINAL PLANTS BOARD
MINISTRY of AYUSH
GOVERNMENT OF INDIA

CONTENTS

Operational Guidelines for Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants

	Preamble	1
	Objectives of the Scheme	1
	Strategy	3
	National Medicinal Plants Board	3
1.	Components of the Scheme Conservation of Medicinal Plants through multi-pronged strategy	4
1.1	In-situ conservation	
A)	Medicinal Plants Conservation and Development Areas (MPCDAs)	
B)	In-situ resource augmentation	6
1.2	Ex-situ Conservation	7
1.3	Engaging Eco Task Force for rehabilitation of critical Medicinal Plant Habitats	8
1.4	Support to Joint Forest Management Committees (JFMCs) / Panchayats / Van Panchayats /Self Help Groups (SHGs) / Biodiversity Management Committees (BMCs) for setting of local cluster for value addition, drying, warehousing and augmenting marketing infrastructure, etc.	9
2.	Research, Technology Development and Quality Assurance	11
2.1	Research & Development	11
2.2	Quality Assurance	13
2.2.1	Promotion of Good Practices	13
2.2.2	Raw Drug Repositories	14
3.	Awareness Building, Exposure Visits, Education and Capacity Building of Stakeholders through Information Education and Communication (IEC) strategy:	14
3.1.	Participation in Exhibition / Fairs and Publicity Materials	15
3.2	Aushadhi Vanaspati Mitra Program (AVMP)	16
3.3	Organization of Workshops / Seminars / Conferences and participation in AROGYA Fairs	16
3.4	Publication of Periodicals / Magazines and Newsletters	17
3.5	Setting up & Operation of Web Portal	18
3.6	Training and Capacity Building	18
4.	Promotion of Herbal Gardens	19
4.1.	Home Herbal Gardens	19
4.2	School Herbal Garden	20
4.3	Institutional / Public Herbal Gardens	21
4.4	Herbal Gardens of State and National Importance	21
5.	Other Promotional Activities	22

6.	Other Interventions	22
6.1	Bilateral / International cooperation and collaboration with International Agencies	22
6.2.	Marketing	24
a)	Marketing Intervention	25
b)	Minimum Support Price (MSP)	26
7.	Medicinal Plant Species Specific Campaign including use of Multimedia	26
8.	Institutional Strengthening	27
8.1.	Strengthening of State Medicinal Plant Boards (SMPBs)	27
8.2.	Establishing Regional-cum-Facilitation Centres (RCFCs) of NMPB (within existing Government Institutions, Corporations, Centres of Excellence etc.) in different Geographic Zones.	28
9.	Administrative and Financial Arrangements of NMPB	29
9.1	Project Screening Committees (PSCs)	29
9.1.1	The Project Screening Committee relating to "Research & Development" will have the following composition:	29
9.1.2	The Project Screening Committee relating to projects of Conservation (In-situ & Ex-situ), Resource Augmentation etc. will have the following composition:	29
9.1.3	The Project Screening Committee relating to projects of Information, Education and Communication (IEC) and Capacity Building (CB) etc. will have the following composition:	30
9.1.4	The Project Screening Committee relating to projects of Marketing (Import & Export) and Demand & Supply of Medicinal Plants will have the following composition:	30
9.2	Standing Finance Committee (SFC)	30
10.	Procedure for processing project proposal for approval	31
11.	Implementation and monitoring	32
	General conditions	32
12.	Monitoring and Evaluation	34
I.	Monitoring and Evaluation by the State Medicinal Plants Boards.	34
II.	Third Party Monitoring	34
III.	Chief Technical Advisers / Domain Expert for Mentoring	34
	Appendix	35
	Annexure-I Cost Norms for In-situ Resource Augmentation, Ex-situ Conservation and Plantation of Medicinal Trees, Herbs and perennials	38
	Annexure-II Indicative Component/Head-wise Expenditure of grant for Maintenance of Nucleus Centre of SMPBs other than Union Territories (UTs) and North Eastern States.	40

	Table – 1	
	Indicative Component/Head-wise Expenditure of grant for Maintenance of Nucleus Centre of SMPBs which are under Union Territories (UTs) and North Eastern States Table – 2	41
	Terms & Conditions of Financial Assistance (Grant)	42

OPERATIONAL GUIDELINES FOR CENTRAL SECTOR SCHEME FOR CONSERVATION, DEVELOPMENT AND SUSTAINABLE MANAGEMENT OF MEDICINAL PLANTS

Preamble

India is home to diverse range of medicinal plants which have been used for centuries by the local people to meet not only their own primary health care needs but also to address ailments of domesticated animals (Pashuayurveda) & crops. (Vrikshayurveda). Medicinal Plants form the major resource base of our indigenous healthcare traditions. Although in recent years cultivation of medicinal plants has started gaining momentum, still a significant part of our requirements continue to be met from wild sources. In order to meet increasing demand for medicinal plants both domestic and from overseas markets we need to focus on both *ex-situ* cultivation of medicinal plants as well as *in-situ* conservation efforts through systematic surveys, augmenting local medicinal plants and aromatic species of medicinal significance through afforestation as per silvicultural principles and management prescriptions. With this in mind the “*Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants*” was initially approved by the cabinet vide no. CCEA/21/2008 dated 26.06.2008. The scheme was approved with an outlay of Rs. 450.00 crores for XIIth Plan period in the EFC meeting held on 01-12-2014 and continued till 31st March, 2021. The Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants has been further approved for continuation beyond 31st March, 2021 with an outlay of Rs. 322.41 Crores for a period of five years from 2021-22 to 2025-26 in the SFC meeting held on 17th March, 2021

The scheme also focusses on quality R&D, capacity building through trainings, raising awareness through promotional activities like creation of Home/School Herbal Gardens. The scheme also seeks to support programs for quality assurance and standardization through development of Good Agriculture and Collection Practices (GACPs); development of monographs laying down standards of quality, safety and efficacy; development of agro-techniques and a credible institution a mechanism for certification of quality of raw drugs, seeds and planting material. Apart from this, medicinal plants collection and trade accounts for as much as 40 to 50% of the household income in certain forest rich regions, hence, the scheme also aims at livelihood improvement of local communities, especially in forest fringe areas.

The activities proposed to be undertaken in the scheme will also help the country to meet its international obligations in the field of medicinal plant's biodiversity and promoting bilateral / international cooperation which is not only critical for future growth of the sector but also for establishing India as a global leader in the sector.

Objectives of the Scheme:

The efforts of the National Medicinal Plants Board (NMPB) need to be considerably upscaled to tackle the whole range of issues impacting the sustained availability of quality herbs. The strategy needs to focus on both cultivation and collection, together with R&D, promotion and information dissemination through IT dedicated mechanisms for procurement of Medicinal and Aromatic Plants (MAPs), ensuring Minimum Support Price, setting up networked Agri-Mandis for MAPs, drawing up a database of cultivators and growers / cooperatives. Speciality warehousing & strengthening of the supply chain is another priority area. In order to

cater to the domestic market needs of Ayurveda, Siddha & Unani (ASU) industries, promotion of Primary Producer Companies (PPCs) should be taken-up in a focused manner. These organizations would then be brought into the foreground for marketing of their produce (either cultivated or collected from wild). The most important aspect is of-course capacity building of all the stake-holders especially the collectors who constitute the poorest of the poor of society

The main objectives of the scheme are as follows:

- Promote in-situ and / or ex-situ Conservation, Resource Augmentation of medicinal plants which are important to the AYUSH Industry and Folk Medicine.
- In situ conservation measures would involve survey, inventorisation and documentation of important medicinal plants in their native/natural habitat coupled with resource augmentation in eco-systems where they form part of the naturally occurring biotic community, preventing degradation of such eco-systems in a holistic manner and reversing the onslaught of invasive alien weeds;
- Promote ex-situ conservation by supporting such programs in rural / degraded forest / public / non-public / institutional lands / urban & peri-urban lands and waste lands.
- Engage the Eco-Task Force mechanism for reversing habitat degradation of medicinal plants. Conservation & development of eco-systems with medicinal plants bio-diversity.
- Promote R&D in all aspects of medicinal plants, development of agro-techniques, post-harvest management, storage and processing, developing molecular characterization tools etc.
- Enhance livelihood systems based on medicinal plants for farmers, collectors and other stakeholders.
- Ensure Quality Assurance, Maintain Good Quality Gene Pool Sources of medicinal plants and aromatic plants having medicinal applications. Mapping, upgrading, modernizing of Medicinal Plants supply chain and creating/ optimizing market linkages and value addition.
- Quality standardization, Good Collection Practices and Good Agricultural Practices for Medicinal Plants.
- Information, Education and Communication - through seminars, trainings and exposure visits promote capacity building and human resource development through appropriate inter-state and international exposure. Promote publication of documents, monographs, technical bulletins, documentaries, brochures, posters, other publicity materials, etc.
- Take steps to meet India's international obligations in the context of medicinal plant biodiversity and promote bilateral / international cooperation.
- Strengthen NMPB so as to more efficiently co-ordinate all matters related to medicinal plants and function as a clearinghouse of information on medicinal plants including their occurrence, usage, ethno-botanical uses, cultivation practices, Post - harvest practices, markets etc. Institutional Strengthening of SMPBs and creating regional centres to optimize the strategic reach of the AYUSH systems.
- Promote mainstreaming of medicinal plants in climate change mitigation strategies & promote regeneration / afforestation of medicinal plant tree species towards carbon sequestration.
- Take steps to meet India's international obligations in the context of medicinal plant biodiversity and promote bilateral/international cooperation.

STRATEGY

The scheme is proposed to be implemented during 2021-22 to 2025-26 to facilitate conservation and post harvest management of Medicinal Plants for long term sustainability by adopting the following strategy:-

- a) Medicinal Plant Conservation Areas (MPCAs) by systematic survey, geo referencing of existing natural population of medicinal and native aromatic species having medicinal use.
- b) Enhance conservation through *in-situ* and *ex-situ* resource augmentation and artificial re-generation of local populations of medicinal and aromatic plant species.
- c) Expand area under medicinal and aromatic plants species of medicinal values linked with creation of nurseries to maintain good quality propagation material.
- d) Promote R & D to address the technology gaps particularly with respect to quality, documentation, identification of substitutes for important medicinal plants including Rare Endangered & Threatened (RET) listed plants and species with high demand in trade and bio-activity guided phyto-chemical studies, etc.
- e) Improve production, post-harvest technologies, and certification mechanisms for quality standards, Good Agricultural Practices (GAP), Good Field Collection Practices (GFCP) and Good Storage Practices (GSP) value addition and marketing infrastructure.
- f) Stay abreast of International Developments impacting conservation, availability, trade, quality assurance of medicinal plants.
- g) Provide livelihoods and economic benefit to forest dwellers, cultivators, local healers and other stakeholders.

National Medicinal Plants Board

The Medicinal Plants Board was setup under a Government Resolution notified on 24th November 2000. The objective of establishing a Board was to establish an agency which would be responsible for coordination of all matters relating to medicinal plants. The Board has the function of coordinating with Ministries / Department/Organizations /State/UT Governments for development of medicinal plants in general and specifically in the following fields:

- Assessment of demand / supply position relating to medicinal plants both within the country & abroad.
- Advise the concerned Ministries/ Department/ Organizations/ States/ UTs Governments on policy matters relating to schemes and programs for development of medicinal plants.
- Provide guidance in the formulation of proposals, schemes and programs etc. to be taken by agencies having access to land for cultivation and infrastructure for collection, storage transportation of medicinal plants.
- Identification, inventorization and quantification of medicinal plants.
- Promotion of *ex-situ* and *in-situ* conservation and Resource Augmentation of medicinal plants.

- Promotion of co-operative effort among collectors and growers and assisting them to store, transport and market their products respectively.
- Setting up of data base on medicinal plants, dissemination of information and facilitating prevention of patents on plants used in traditional systems.
- Matter relating to import/export of raw material, as well as value added products either as medicine, food supplements or as herbal cosmetics including adoption of better techniques for marketing of products to increase their reputation for quality and reliability in the country and abroad.
- Undertaking and awarding Scientific, Technological research and cost-effectiveness studies.
- Development of protocols for cultivation and control.
- Encouraging the protection of Patent Rights and IPR.

Components of the Scheme

1. Conservation of Medicinal Plants through multi-pronged strategy

1.1 *In-situ* conservation

A) Medicinal Plants Conservation and Development Areas (MPCDAs)

Objectives

In-situ conservation of important medicinal plants in their natural habitats by setting up MPCDAs, as well as strengthening/up gradation of existing Medicinal Plants Conservation Areas (MPCAs) through survey inventory, documentation, protection, and main streaming medicinal plants in habitat management approaches.

Activities

a Setting up Medicinal Plants Conservation and Development Areas(MPCDAs) through survey, documentation of existing natural population of medicinal and aromatic plants, geo referencing. This would include:

- Ascertaining threat status of various medicinal plant species traditionally obtained from the wild.
- Identifying major causes of threat to the populations of threatened species and possible remedy.
- Drawing up of action plan for conservation and sustainable utilization of important medicinal plants species.
- Stakeholders capacity building, documentation (including a good quality pictorial directory), hosting on website, conducting pilot research studies etc. for sustainable utilization, engaging services of qualified taxonomists and other necessary professionals

for the purpose by the concerned State Agency/SMPB, preparation of case studies, promoting conservation values/ sustainability.

b. Revisiting/ Reviewing/ documentation in respect of previously designated MPCAs (established more than three years back under different schemes) for further development like up gradation, improving protection, documentation, communication/ dissemination linking with area management plan, geo referencing, engaging professionals on short term basis, capacity Building, community mobilization, hosting on website, piloting studies on utilization/ sustainability issues etc.

c. Mainstreaming medicinal plant conservation in management approaches based on sound silvicultural/ management principles, conducting systematic survey of local medicinal and aromatics plants with medicinal value, and incorporating sound scientific principles for their management in the Working/ Management Plans and its effective communication to Stakeholders. These management plans should also include details of MPCDAs, where they are constituted.

Eligibility

State Forest / Wildlife Department / Forest Development Corporation / Federations / National and State level Research Organizations/ Universities.

Non-Government/ Voluntary Organizations with expertise in the field (subject to the recommendation of concerned forest department.).

Coverage

On an average an MPCDA should extend over an area of 200 ha. though smaller areas of important medicinal plants bio-diversity including sacred groves can also be considered for MPCDAs.

Norms of Assistance

- To set up MPCDAs, 100% central assistance @ 20,000/- per hectare will be provided.
- For up-gradation/reviewing/ strengthening of previously designated Medicinal Plants Conservation Area (MPCA) which were established more than three years ago under NMPB or other schemes in various states, assistance @ 5,000/- per ha. will be provided.
- For main streaming medicinal plant conservation in management approaches based on sound management / silvicultural principles, a lump sum support of up to Rs.1.50 Lakhs will be provided per Forest Division to the concerned Forest/ Wildlife Division.

Submission of Proposals

The proposals from the State Forest/Wild Life Department in this respect will be submitted to NMPB online in the relevant proforsma. In case proposal is submitted by Forest Division/ Circle a copy of the same should invariably be marked to PCCF / SMPB / Chief Wild Life Warden as well which will help in implementation and monitoring of the project.

Management support

One project management Consultant along with Office Assistant / Data Entry Operator will be permitted to be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state for the component.

B) *In-situ* resource augmentation

Objectives

- Assisted natural regeneration or artificial re-generation of local populations of medicinal and aromatic plant species for conservation of genetic diversity of medicinal plants, thereby complementing the other biodiversity preservation and climate change mitigation interventions being implemented by the country as part of its international obligations.

Activities

- In-situ resource augmentation of medicinal plants species through assisted natural regeneration. Artificial re-generation of local populations of medicinal and aromatic plant species is particularly important in case of species where wild populations have dwindled on account of habitat degradation, and unsustainable harvest. Active interest and engagement of rural communities in such a conservation program is instrumental to address sustainability of the medicinal plant sector as a whole, hence financial support will also be provided for community mobilization through entry point activities.

Eligibility

- State Forest / Wild Life Departments/ Forest Development Corporation.
- Public Sector Corporations / Federations having the mandate to carry out such activities, Voluntary agencies/ Non-Government Organisations with experience in the field (only for technical support and capacity building)
- National and State level Research Organisation/Universities with the agreement of Forest Department.

Norms of assistance

Cost norms for *in-situ* resource augmentation and plantation of medicinal trees, shrubs, herbs, climbers and perennials are given in **Annexure-I**.

Submission of Proposals

The proposal from the State Forest/Wild Life Department will be submitted to NMPB online in the relevant proforma. In case proposal is submitted by Forest Division/ Circle a copy of the same should invariably be marked to PCCF/ SMPB / Chief Wild Life Warden which will help in monitoring the project during its implementation.

Management support

One project management Consultant along with Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring etc.

1.2 *Ex-situ* Conservation

Objective

Ex-situ conservation of medicinal plants species is a complementary action to conserve the genetic diversity of medicinal plant species, thereby reducing pressure on wild habitats and augmenting raw material availability. For many species wild population have dwindled to critical levels and viable populations of these species are not available for initiating in situ conservation action. *Ex-situ* conservation / plantation of medicinal plants will be a reliable seed source and also serve as field gene banks. This will also help in engaging larger number of stakeholders in production and regeneration of important medicinal plants and aromatic species of medicinal value.

Activities

- For expanding area under medicinal plants and aromatic species of medicinal value. Plantations of medicinal plants would be raised in lands outside designated forests. These plantations may be in blocks, strips, boundaries, marginal lands, agro-forestry models etc., in the countryside as well as urban / periurban locations.
- Such plantations would be raised by organisations having ownership / long term lease of lands and requisite technical competence either in-house or hired / outsourced.

Eligibility

- State Forest Departments / Social Forestry Divisions/ State Wild Life Departments.
- Forest Development Corporations / Federations / SMPBs / Integrated Tribal Development Corporations / SC / ST Corporations (in the SC/ST lands) / Municipal bodies / Housing Societies / PSUs / Voluntary Organisations with experience in the field provided they have the required technical competence.
- Scientific Organizations and AYUSH Institutes and other Government Agencies having the mandate/ capacity and interest in the field of medicinal plants.
- Corporate Sector (including reputed AYUSH manufacturers) in partnership with land owners and Panchayats Van Panchayats / BMCs / JFMCs will be considered for project based support subject to forming an SPV and demonstrating commitment by contributing at least Rs.5.00 lakh rupees to an initial corpus to be dedicated for this purpose out of which at least Rs.3.75 lakhs will be contributed by the corporate partner.

Norms of assistance

The cost norms for *ex-situ* plantation of medicinal trees, shrubs, herbs, climbers and perennials is given in **Annexure- I**.

- The Corporate Sector (including AYUSH manufacturers of repute) can also be supported for raising *ex-situ* plantations, including as components in boundary plantations, strip plantation, agro forestry, etc., with adoption of GAP & GFCP. For this purpose a Special Purpose Vehicle (SPV) involving the reputed AYUSH manufacturer and Panchayats or land owners will be formed. Rs. 5.00 Lakh will be provided as initial corpus fund out of which at least 75% will be contributed by the concerned Corporate Sector. Financial support from NMPB will be considered in project mode and transferred

to a separate bank account to be opened in the name of the SPV. Such proposals will be supported in project mode.

Submission of Proposals

The proposal from the State Forest / Wild Life Department will be submitted to NMPB online in the relevant proforma. In case proposal is submitted by Forest Division / Circle, a copy of the same should invariably be marked to PCCF / Chief Wild Life Warden which will help in monitoring the project during its implementation. The proposals by the corporate sector will be submitted to NMPB as well as to SMPB concerned concurrently. The SMPB will render its inputs, if any, within a period of three weeks of receipt of the proposals to the NMPB as well as to the Organization concerned, failing which the proposal will be put up for consideration of the PSC/ SFC.

Management support

One project management Consultant along with Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state.

1.3 Engaging Eco Task Force for rehabilitation of critical Medicinal Plant Habitats

Objective

To secure reverse / acute degradation of natural habitats in various parts of the country along with eco-restoration through plantation of medicinal and aromatic plants.

Activities

The natural habitat of various important medicinal plants are facing high degradation threats. In order to mitigate such threats, Eco-Task Forces have been successfully engaged to secure reverse / acute degradation of natural habitats in various parts of the country. It is therefore, proposed to commission services of Eco-Task forces involving Ex-servicemen / Territorial Army. This effort is to be initiated in a project mode to be approved by the SFC. The concerned State Forest Department, Ministry of Defence and Ministry of Environment, Forests & Climate Change (MoEFCC) will be consulted for taking up any such initiative. Proposals under this component should have a plantation of at least 60% of the area with native species of medicinal plants.

Eligibility

Eco Task Forces set up in different parts of the country.

Coverage

At least 400 hectares per Eco Task Force per annum will be taken up.

Norms of Assistance

The cost norms for this activity will be project based.

Submission of Proposal

The proposals from States will be received by NMPB online which will organize a tripartite initial consultation with MoEFCC and Army / Headquarters before duly considering the project.

Management support

The Project Management Consultant (PMC) along with Office Assistant / Data Entry Operator will be permitted to be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and rendering technical support.

1.4 Support to Joint Forest Management Committees (JFMCs) / Panchayats / Van Panchayats /Self Help Groups (SHGs) / Biodiversity Management Committees (BMCs) for setting of local cluster for value addition, drying, warehousing and augmenting marketing infrastructure, etc.

Objectives

There is a need to channelize production and promote sustainable supply of medicinal plants, through capacity building of JFMCs/Van Panchayat / Panchayats / local SHGs / BMCs about the medicinal plants & aromatic species of medicinal value that are locally available for encouraging sustainable harvest, adoption of good collection practices, proper post-harvest handling, marketing and regeneration of Non Timber Forest Produces (NTFPs), etc. This activity will provide livelihood augmentation to local and forest fringe communities.

Activities

- Support will be provided for creation of facilities (including equipments for value addition through drying, de-stoning, cleaning, grading, pulverizing, processing, powdering, billeting and packaging, extracting, warehousing, etc. Capacity building through training programs and exposure visits on Good Collection Practices, Cultivation Practices and Organic Certification.
- Marketing support will be provided for organizations of stakeholders / buyer-seller meets at Forest Development Agency (FDA) District / Division level, Entrepreneurship development for micro and small enterprises (training).
- Packaging / handling equipment, testing facilities created in individual JFMC / BMC or pooled facilities catering to more than one JFMC / BMC / village / Panchayats will be supported.
- Support will be provided for limited resource augmentation and production of seedlings of medicinal plants & aromatic species of medicinal value, if not supported under any other components of the Scheme.
- Capacity building of primary collectors, women Self Help group (SHG), Public Sector Corporations dealing with NTFP, Tribal Welfare Department and frontline Forestry Personnel duly recommended by Local Forest Department/ SMPB.
- Generation of livelihoods through collection of medicinal plants needs to necessarily be linked with marketing of the produce so collected. In order to facilitate the collector's

livelihood, support needs to be provided in the interregnum between collection and actual marketing which will be recoverable from the final payment made for the produce by the organisation like the Forest Development Corporation or any other agency implementing the scheme. For this it is desirable that working capital should be earmarked by the state government for the implementing agency. NMPB would contribute 50% of the amount so provided by the state government as working capital.

- The JFMCs / Panchayats / Village Institution's resources can be pooled for collective activities / interventions at common strategic nodal locations involving a number of such local institutions of various villages. Thus the concerned Departments / Agencies in their proposals can consider a cluster approach (where feasible) so that investment made in a unit can actually have a ripple beneficial effect on adjoining JFMCs / Panchayats / Hamlets, etc. and the project resource can be pooled to create strategically located collective processing or other common facilities.

Eligibility

- Joint Forest Management Committees (JFMCs) through Forest Development Agencies (FDAs) / Forest Departments.
- Panchayat / Van Panchayats / BMCs / Eco development committees.
- Other state co-operative/corporate bodies in-charge of medicinal Plants collections and trade.
- Reputed NGOs / Academic organisations with a demonstrable track record (only for activities like community mobilization, hand holding, capacity building, exposure visits, market linkages etc.)

Norms of assistance

The assistance will be based on proposals received from the eligible agencies through the Forest Development Agencies (FDAs)/ Biodiversity Management Committees (BMCs) and will be limited to a maximum of Rs.15.00 lakhs per JFMC / Van Panchayats / BMCs. The project proposal should be consolidated at the level of FDA / District and forwarded to the State Government / SMPB. The proposal should be formulated keeping in view the following details:-

- The size of area to which JFMCs / Van Panchayat has access for collection of medicinal plants.
- The species details of medicinal plants being traditionally traded in local / village hatts / mandies and weekly markets in various seasons of the year.
- Local stakeholders involved in collection of medicinal plants and likely to benefit from the project.
- Dependence of community on local traditional Vaidya's, medicinal plants for their healthcare needs.
- Availability of good NGO partners for community capacity building and hand holding.
- Details of the infrastructure of trade centres, processing units, if any present in the area.
- Availability of other alternative livelihood opportunities to the members of the JFMCs / BMCs / SHGs etc.
- Potential for Resource augmentation Sustainable Collection and Market Linkage.

Submission of Proposals

The proposal from the eligible agencies in the relevant proforma will be submitted through State Forest / Wild Life Department to NMPB online. In case proposal is submitted by Forest Division / Circle a copy of the same should invariably be marked to PCCF / Chief Wild Life Warden which will help in monitoring the project during its implementation.

Management support

One project management Consultant along with Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state.

2. Research, Technology Development and Quality Assurance

2.1 Research & Development

Objectives

Development of medicinal plant sector in the country is suffering from scattered and inadequate research on various crucial aspects. The research results need to be consolidated, gaps identified and new initiatives taken to address such research needs.

Activities

(a) Research and Technology Development in the following areas can be supported in project mode:

- Traceability of raw drugs from harvest to consumption level.
- Germination and seed treatment protocols and certification.
- Bio-prospecting, population assessments and conservation biology of Medicinal Plants and Medicinal Aromatic Species (MASs).
- Collection, compilation, documentation, validation and digitization of published scientific information on various aspects of selected Medicinal Plants and their ASU & H formulations and preparations of comprehensive monographs thereof.
- Identification of substitutes/adulterants for traded medicinal plants using pharmacognostic, pharmacological and molecular parameters for their inclusion in Pharmacopoeia.
- Finding substitutes for RET listed medicinal plants and finding use of sustainable alternative plant parts.
- Research aimed at lowering cost of cultivation and production of extracts, phytochemicals, natural colours, flavours and fragrances by using latest R&D technologies.
- Bio-activity Guided Fractionation.
- Development of DNA barcoding, spectrometry HPLC methods etc. for phyto-constituents (preferably the bio-actives / marker compounds) and validation of these methods.
- Study of phyto-chemical variations within available genotypes, chemotypes, ecotypes etc., development of post-harvest treatment, search for elite quality germplasm and development of quality planting material for mass scale propagation.
- Establishment of quality standards in respect of norms related to toxicity and heavy metal content to increase acceptability of botanicals in the International market.
- The impact of invasive species on habitats of native medicinal plants and foreign matter on the

- safety and efficacy of medicinal plants including MASs in their habitat.
- Development of Biotechnological Techniques (BT) & Information Technology (IT) based tools applications related to Medicinal plants.
- Ethno-medicinal documentation and exploration.
- Marketing, econometrics policies / regulatory issues related to Medicinal Plants.
- Establishing National and regional raw drug repositories for references.
- Study the impact of environmental changes like global warming and topographical variations in medicinal plants.
- Setting up of national and regional Botanical Reference Standards (BRS).
- Development of improved planting materials, germ plasm bank, development of improved cultivars / variety etc.
- Development of Agro-techniques of selected medicinal plants.
- Any other emerging issues or suggestions rendered by SFC.

(b) M.-Phil / Ph.D / Post-Doctoral Fellowship programme on subjects related to medicinal plants through various Educational / Research Institutions in the country, will be supported. Applications will be screened by the Project Screening Committee of NMPB, which will also finalise the emoluments based on prevailing arrangements in other similar Institutions. NMPB will also engage directly a limited number of JRF / SRF / Research Assistants, etc. (upto five) as per UGC / DST norms for specific projects while allowing them to enrol in academic institutions to pursue doctoral / other studies. The engagement and emoluments will be finalised by Project Screening Committee on research and bring this to the notice of SFC.

Eligibility

- R&D Institutions under CSIR, ICAR, ICFRE, ICMR, DBT, DST, Councils of Department of AYUSH etc.
- Universities recognised by the UGC.
- Industry both in public as well as private sector with R&D facilities.
- Non-government Organisations/Voluntary Organisations, with demonstrated expertise and infrastructure.
- Government funded institutes/colleges with demonstrable track record infrastructure and expertise.

Norms of Assistance

R&D Institutions / Universities in the public sector / Government Aided colleges etc. will be eligible for 100% assistance. However, organizations / Universities / laboratories / Institutions in private sector will be eligible for 50% assistance.

Submission of Proposals

The proposals for R&D will be invited so that strategic research in critical areas is assigned to competent organizations / scientific professionals. The eligible organization can apply directly to NMPB online in the relevant proforma where the proposal will go through scrutiny by the Project Screening Committee (PSC) before being considered for approval by SFC. Prior to placing before the PSC, wherever appropriate the research proposal can first be referred to subject expert by NMPB for taking expert's opinion on quality of the proposals. For such scrutiny a fee as approved by SFC will be paid to the domain expert by the NMPB for examination and comments.

Management Support

One project management Consultant along with Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state.

2.2 Quality Assurance

Objectives

Today globally companies are looking for traceability of raw materials to their source, as it is obvious that the quality of the end product can only be as good as the quality of the components that go into that product. Hence the importance of maintaining good standards while collecting, cultivating and post-harvest handling of the raw material cannot be over emphasized.

2.2.1 Promotion of Good Practices

- For India to become a global hub in medicinal plants processing, we need to list out the challenges faced by the sector. One of the most important stakeholders is the group of intermediaries who are a very important part of the supply chain from collectors / cultivators to the end users of the raw material. These intermediaries are largely in the private sector and deal with bulk handling of raw material from procurement to storage and sale in the mandies. This is the stage at which there are maximum chances of contamination of the raw material, due to lack of general hygiene. Elimination of such sources of contamination is imperative for tackling the issues of microbial overload in herbal products. In order to do so, extensive capacity building of the intermediaries is required. There is a need to create awareness about maintenance of high standards of hygiene amongst collectors, cultivators, other raw material handlers and traders. This capacity building should be an on-going process through a series of stakeholder meetings, workshops, seminars etc. A strategy will be initiated for registration/devising regulation of important intermediaries in the Market Supply Chain of medicinal plants. This will be done by providing support in a project mode, to appropriate agencies.
- In addition to this, we need to evolve norms for proper handling of raw material i.e. what constitutes good practice as far as raw drug handling is concerned. Also there needs to be in place a system of self-regulation through peer groups in mandies. Consultancies studies will be commissioned for this purpose. This will also be addressed through focussed projects through SFC approval.
- Presently testing is by and large limited to the finished products. Industry has always held that in the absence of supply of contamination free raw material, it is not fair to expect the products to stand up to rigorous testing. Hence, maintaining a chain of practices to ensure good quality of raw material will create a win-win situation for the producers / traders on the one hand by ensuring better prices and the manufacturers on the other by ensuring greater market access. This will also be supported in a consultancy / project mode.

In order, to more effectively address the above challenges the following measures will also be taken in project / consultancy mode:

- a) Development of agro-techniques of selected medicinal plants.

- b) Protection of Good Agricultural Practices (GAP), Good Field Collection Practices (GFCP), Good Harvesting Practices (GHP) & Post Harvesting Practices, Good Storage Practices (GSP). The work done by Quality Council of India (QCI) for GAP & GFCP in the 11th Plan will be taken forward towards actual field implementation in project mode.
- c) Support to testing laboratories, reimbursement of testing charges to stakeholders.
- d) Development of certification protocols for sustainable harvesting of seeds, planting materials and raw drugs from the wild in project mode.
- e) Other measures for Quality certification programmes as necessary.

2.2.2 Raw Drug Repositories

Another important aspect of quality is the true botanical identity of the herb. To ensure proper identity, there is a need to establish multiple Raw Drug Repositories (RDR), which can supply certified samples of Indian medicinal plants on cost basis, to act as Reference Standards.

Phytochemical Reference Standards (PRS) are required for assay purposes. There is a need to create a mechanism in India for consistent supply / sale of PRS required by various Pharmacopoeias for quality assessment of Indian medicinal plants.

For this purpose, it is essential to establish multiple Raw Drug Repositories, in different areas of the country. Each RDR could be encouraged to develop proficiency / core competence, in a few of the above listed scientific areas.

The RDR's should ideally work on development of "Key Distinguishing Characters" (KDC) for Indian medicinal plants so that they can be distinguished from their look alike / adulterants. Some of the techniques are:

- Pharmacognosy parameters like Macroscopy (organoleptic characters)
- Microscopy (Anatomy and powder microscopy), TLC, HPLC etc.
- DNA barcoding and fingerprinting
- Detection of characteristic / marker compounds
- Fingerprinting using new techniques like LC-MS-MS and NMR profile etc.

Norms of Assistance

For national repository of raw drugs / BRS total assistance admissible is Rs.10.00 crores, while for regional raw drug repositories it is Rs. 5.00 crores each to Govt. Organizations.

3. Awareness Building, Exposure Visits, Education and Capacity Building of Stakeholders through Information Education and Communication (IEC) strategy:

Medicinal plant sector involves an array of stakeholders varying from resource managers, cultivators, gatherers, supply chain intermediaries, traders, local healers, researchers to manufactures and exporters. It is necessary to disseminate information on different aspects of medicinal plants like harvesting from wild, cultivation technologies, manufacturing, proper handling of raw material, trade, etc. among various target groups about the importance of development and management through an appropriate outreach strategy, Capacity building, appropriate recognition, incentivisation etc.

Activities

- Publicity through regular participation in Exhibitions/Fairs
- Aushadhi Vanaspati Mitra Program (AVMP)
- Organizing Workshops / Seminars / Conferences / Arogya Fair etc.
- Medicinal Plant Species specific/Campaigns
- Systematic use of Multimedia and other appropriate communication tools.
- Publication of Periodicals/Magazines and Newsletters
- Setting up and operation of Web Portal.
- Training and Capacity Building initiatives.

3.1. Participation in Exhibition / Fairs and Publicity Materials

To promote the message of Indian Medicinal Plants it is essential to participate in International / National / State Level Exhibitions / Fairs associating all important stake holder groups in the country. Besides, Trade fairs or Medicinal Plants Expo, etc. may also be supported or organized by NMPB, to raise awareness on the importance of medicinal plants among the stakeholders and general public.

Activities

- Participation in Exhibitions / Fairs with a focus on botanicals at State, National and International level. Industry and other stakeholders will be encouraged to participate in such expos. NMPB would also participate in such events.
- Developing Souvenirs, Pamphlets, Booklets for display and distribution. Organizing quiz shows for children and students, setting up of interactive kiosks and touch screens and development of role plays.
- Development of different types of herbal kits for distribution to visitors, farmers and other stakeholders.
- Launching mobile exhibitions or Aushadhi Chetna Yatra for spreading the message of medicinal plants through role plays, audio visuals, expert advice on conservation, cultivation, uses etc. of medicinal plants.

Eligibility

NMPB, SMPB, Industry, R&D Institutions / Universities, Government Organizations including Govt. aided Institutions, Non-government Organizations / Voluntary organizations etc.

Pattern of Assistance

Expenditure incurred by the organizations for participation in fairs etc. would be reimbursed subject to prior permission being obtained from NMPB for participation by the concerned organization. Reimbursable items of expenditure would include, hire charges, stall fabrication, developing publicity material, travel and accommodation. Total financial implication for such participation per event will be Rs.1.00 Lakh for state level, Rs. 2.00 Lakhs for National level and Rs.3.00 Lakhs for international level. For private organizations including Industry, the cost would be limited to 50% of the above or the actual expenditure whichever is less (which includes Travel, Accommodation, hire charges, stall fabrication, publicity, etc.) will be reimbursed. The

other activities will be in project mode.

Submission of Proposals

Participation in fairs / exhibitions being time bound need to be examined as and when the proposals are received. Often, by the time the proposals go through the process of screening by PSC and approval by SFC the dates for the events are over. Hence, the CEO, NMPB will also be authorized to approve expenditure on such activities with approval of Competent Authority.

Eligible Organizations can apply to NMPB in the relevant proformas.

3.2 Aushadhi Vanaspati Mitra Program (AVMP)

This aims at recognizing initiatives of individuals /community/institutions involved in conservation / cultivation, post-harvest management, R&D, marketing etc. of MAPs. These should be exemplary and successful initiatives which are creative, sustainable and have helped in improving medicinal plant raw material availability.

Eligibility

SMPB or any other appropriate state level organization recommended by the concerned SMPB will organize such program of Aushadhi Vanaspati Mitra Program of the concerned state.

Norms of Assistance

A total of Rs. 2.00 lakhs will be provided to each state per year, towards meeting the expenditure for three cash awards (not exceeding Rs. 65,000/- put together) and for organization of the event and other logistics. The States may, if they so desire vary the amounts and number of awards depending on the ground realities.

Submission of Proposals

SMPBs can apply to NMPB online in project mode where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

3.3 Organization of Workshops / Seminars / Conferences and participation in AROGYA Fairs

The department of AYUSH organizes Arogya fairs from time to time in different states of the country. NMPB is required to set up stalls and display material in such fairs for which there is a need of a dedicated agency who would not only install Arogya stall but also engage in similar work in other such fairs, buyer/seller meets etc. The agency will be selected as per GFR.

Objectives

Provide a platform for dissemination of the latest information on Medicinal plants to various stakeholders

Activities

Organizing Seminar / Workshop / Conferences / Exhibition / Arogya Fairs at district, regional, state, national and international level for promotion and awareness of medicinal plants.

Eligibility

- Central and State Government organizations.
- Recognized academic / Research / Educational institutions including Government Aided Colleges.
- Registered professional and other philanthropic organizations working on non- profit basis.
- Registered Non-Government Organizations (NGO) / Voluntary Organizations / Trusts with infrastructure and experience in the field of medicinal plants.

Norms of Assistance

The financial assistance would be limited to Rs.1.00 Lakh for organizing district level event, Rs.2.00 lakh for State, Rs.3.00 Lakhs for regional level, Rs.5.00 Lakhs for National level and Rs.10.00 Lakhs for international level event.

Submission of Proposals

Eligible Organization can apply to NMPB online in the relevant proforma where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

3.4 Publication of Periodicals / Magazines and Newsletters

NMPB can undertake publication of books, periodicals etc. through credible organizations which have proven competence in the field.

Activities

- Publication of books on different aspects of medicinal plants.
- Publication of newsletters through outsourcing.
- Subscription / purchase of national and international magazines / journal / periodicals on importance of medicinal and aromatic plants with medicinal value.
- Newspaper / media advertisements on medicinal plants as and when required.

Eligibility

Proposals will be considered from organizations which have proven competence in the field concerned.

Norms of Assistance

100% assistance will be provided in project mode.

Submission of Proposals

Eligible Organizations can apply to NMPB online where the proposal will go through scrutiny by the Project Screening Committee (PSC) before being considered for approval by Standing Finance Committee (SFC).

3.5 Setting up & Operation of Web Portal

This is a felt need as NMPB is time and again called upon by various stakeholders including Ministries of GOI for advice on issues for which in-house competence is lacking and also to create a transparent, open access information source for all stake holders. Interactive portals on medicinal plants accessible to various Stakeholders will be supported. This could include query based platforms covering important aspects like Database, documentation, geographical distribution, clusters, products and other related technical and scientific information. The Portal would be supported by a panel of experts on various aspects of medicinal plants from an array of areas ranging from, cultivation, conservation, IPR issues, emerging national and international trends, etc. Existing well established portals developed by other organizations can also be taken over, up scaled and maintained.

Eligibility

Proposal will be considered from organizations which have proven competence in the field concerned.

Norms of Assistance

- Experts will be provided a fixed remuneration in consultation with the PSC.
- Other cost relating to development, hosting and maintenance of the portal would be project based.

Submission of Proposals

Organizations can apply to NMPB online where the proposal will go through scrutiny by the Project Screening Committee (PSC) before being considered for approval by Standing Finance Committee (SFC).

3.6 Training and Capacity Building

Training plays an important role in spreading best practices on conservation, cultivation, good agricultural practices, good field collection practices, post-harvest management, marketing etc. Trainings will be provided to various stakeholders like cultivators, conservationists, traders, supply chain intermediaries, policy makers and end users.

Activities

- To organise training programmes for capacity building of stakeholders on medicinal plants (including cultivation, conservation, GAPs, GFCPs, GMPs, Storage, PHM and Market Information).
- Demonstration of technologies developed by Institutions at farmers field / conservation areas and natural habitats.

Eligibility

- Central and State Government organizations.
- Recognized Research / Academic / Educational institutions
- Registered professional and other philanthropic organizations working on non- profit basis.
- Registered Non-Government Organizations (NGO) / Voluntary Organizations / Trusts with infrastructure and specific experience in the field of medicinal Plants.

Norms of Assistance

- Rs. 2,000/- per trainee for a minimum of two days with in the state and Rs.5,000/- per trainee outside the state will be provided which will include exposure visits.
- For officers training/exposure visit within the State Rs. 5,000/- per trainee and outside their state the cost will be limited to Rs. 10,000 per trainee.
- Travel cost will be additional to the above cost.

Submission of Proposals

Eligible Organizations can apply to NMPB in the relevant proforma where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

4. Promotion of Herbal Gardens

Herbal Gardens of various kind will be promoted under the scheme to create awareness about traditional usage of medicinal plants. This would include Herbal Gardens of National and State importance as well as at the level of Institutions, Schools, Universities, Colleges and Homes.

Eligibility

- Government Organizations, Universities, Research Institutes, Government Aided Colleges and Schools.
- Non-government Organizations (NGOs), Public Sector Undertakings, Federations, Co-operatives, and Societies including Housing Societies etc.

4.1. Home Herbal Gardens

Encouraging herbal gardens in the homes is a good way to promote use of medicinal plants for primary health care at the household level.

Activities

- Around 20 Medicinal and Aromatic species of which around 10 species (which in addition to medicinal plants could also include a few aromatic / food plants), based on locality specific need and demand will be distributed to interested households. A note on each species, usage and benefit of each species will be provided to the beneficiary by the

implementing agency.

- A Database of all such households, including photographic documentation at various stages of implementation will be submitted to NMPB along with a write-up on the process / approach adopted, benefit accrued and the sustainability mechanism.
- The implementing agency will take steps for raising awareness in the identified locality.
- In case of dense urban localities potted plants and terrace rearing of medicinal plants should be encouraged.
- These initiatives should be dovetailed with activities like Swachh Bharat, use of bio fertilizers, vermicompost etc.

Norms of Assistance

Financial assistance of Rs. 2,500/- per Home Herbal Garden including cost of raising seedling, transportation, awareness raising, documentation, development, dissemination and use of publicity material, folk theatre, special campaigns, etc.

Submission of Proposals

Eligible Organizations can apply to NMPB online in the relevant proformas where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

4.2 School Herbal Garden

Setting up of herbal gardens in schools is a good way of reaching the minds of children and make them acquainted with the commonly available and frequently used medicinal plants.

Activities

- Schools will be encouraged to set up herbal gardens with in their school complex. Schools can have separate plots to make up a total of 500 sq.m. for 10 - 15 species of medicinal plants including tree species.
- Schools will be responsible for maintenance of the Herbal Gardens including irrigation with the active involvement of the students and parent-teacher associations / NGOs and also make special arrangements during school vacation period. Students will be involved in labelling the plants, watering, weeding etc. which will enhance the knowledge of the students about the benefits and uses of the species nurtured by them.
- The material from School Herbal Gardens could be utilized for further propagation.

Norms of Assistance

Assistance will be given @ Rs.25,000/- per school for an area of 500 sq. m. first year for establishment and up to Rs.7,000/- per annum per school as maintenance cost for the next four years. In case, the schools are proposing area for the School Herbal Garden, which is more or lesser than 500 sq.m., assistance can be considered on pro rata basis based on the justification provided.

Submission of Proposals

Eligible Organizations can apply to NMPB online through SMPB in the relevant proforma where

the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

4.3 Institutional / Public Herbal Gardens

To sensitize the AYUSH Professional College students / public at large about the usage of medicinal plants based on indigenous knowledge in colleges, universities, hospitals, other places of educational / recreation / public importance, assistance will be provided for planning and establishing larger herbal gardens.

Activities

- Establishment of herbal garden with medicinal plants and aromatic plants with medicinal value considering the importance of species / varieties of concerned areas.
- Use of proper cultivation practices
- Walking trails, signages etc. to be established in the garden.
- Proper documentation, data collection, harvest and post-harvest management operations to be a part of the herbal garden.
- Material harvested could be used for value addition or further propagation.

Norms of Assistance

- The activities supported would include land development, site protection, setting up irrigation facilities and procurement of basic planting material, laying of beds, planting, initial maintenance, signages, walking trails etc. @ Rs.3.00 lakhs per ha. for establishment.
- Thereafter annual maintenance of the Herbal Garden @ Rs.60,000/- per year per ha. for a maximum of four years.

Submission of Proposals

Eligible Organizations can apply to NMPB online in the relevant proforma where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

4.4 Herbal Gardens of State and National Importance

A few Herbal Gardens of National Importance will be supported in various Eco-regions of the country in project mode. Similarly, Herbal Gardens of State importance can be established to promote and popularize medicinal plants in an organized manner on a bigger scale. These type of gardens will be established at important or prominent places like the Herbal Gardens at President's / Governor's Estates in the past and will be supported for maintenance for a longer period. Similarly, Herbal Gardens can be created in State Secretariats, Institutions of National importance, prominent tourism spots. Defence establishments, Railways, Corporations and Municipalities, etc. in project mode. 2 - 4 such Herbal Gardens will be supported in each state at sites notified by the state government specifically for this purpose in consultation with NMPB.

Activities

Establishment and maintenance of herbal gardens, keeping in view all the required modalities like walking trails, signages, landscaping, planting in beds and proper documentation, etc. Use of

herbal gardens in supplying propagation / raw material will also be explored.

Norms of Assistance

The proposal received in a project mode will be examined at PSC level and financial assistance will be provided as per the actual requirement with the approval of SFC, NMPB.

Submission of Proposals

Eligible Organizations can apply to NMPB online where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

Management Support

One project management Consultant along with Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state.

5. Other Promotional Activities

Support for establishing nursery and development of Quality Planting Material / Germ Plasm Banks

Activities

Support for establishing small nursery as a part of project proposal other than cultivation will be provided

Norms of Assistance

For creation of nursery covering an area of 1 ha Rs.6.25 Lakhs per unit to be given in two installments. The assistance will be to the extent of 100% to public sector / SHGs and 50% of the cost subject to a ceiling of Rs.3.125 Lakhs in private sector. The nursery will have appropriate infrastructure facility (net house, beds, vermi-compost, signage, irrigation system) to hold 50,000 to 70,000 plants. The organization must have a sustainability plan.

Submission of Proposals

Eligible Organizations can apply to NMPB online where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

6. Other Interventions

6.1 Bilateral / International cooperation and collaboration with International Agencies

Ministry of AYUSH is exploring bilateral and international collaboration in the field of medicinal plants with other countries. MOUs for bilateral Collaboration in the field of medicinal plants has already been developed for NMPB which could be appropriately fine-tuned for country specific needs for collaboration requirements. In addition, Collaboration will be explored with international agencies like FAO, World Bank, Asian Development Bank (ADB), UNDP,

TRAFFIC, GEF, etc. for mainstreaming of medicinal plant development strategies.

The traditional knowledge based on genetic resources needs to be brought under international best practices on TK & GRs like Access and Benefit Sharing (ABS), Prior Informed Consent (PIC), etc. There are international agreements and protocols to deal with all of these issues, which are constantly evolving and we need to, not only keep abreast of all such developments but also get them tailored to suit India's interest provided we are in a position to put forth our point of view at the correct time. It is evident that the National Medicinal Plant Board (NMPB) should have a dedicated mechanism to carry out requisite spadework to enable it to forge linkages with likeminded countries and render meaningful inputs to argue our case at the relevant international forums, like the meetings of the Conference of Parties (CoPs) of the Convention on Biodiversity (CBD) especially the current discussions on the ongoing program of work, access and benefit sharing issues under the Nagoya Protocol, trans-boundary issues under the Cartagena Protocol on biosafety etc.

Activities

- Participation in meetings of the relevant agencies at the international level.
- Exchange visits of experts with countries of interest especially those having similar biogeography as India.
- Participation in reputed international seminars/exhibitions on botanicals such as Ingredients Russia, Food ingredient China, Vita Foods South America, Canadian Health Food Association, International Food Ingredients and Additives (IFIA), Japan, Supply Side West, CPHI, World Wide. A list of important events will be drawn up after the approval by the SFC. This would also entail subsidizing industry desirous of such participation on reimbursement basis.
- Setting up information centers on medicinal plants in Indian Missions abroad.
- Providing financial assistance for acquiring international certification.
- Subsidizing specific market promoting activities like product registrations, GRAS (Generally Recognized as Safe) affirmation, international certifications, positive listing of Indian botanicals in the importing countries (viz. ARTG of TGA) etc.
- Resolving issues of botanical ingredients which have been illogically banned by some international regulatory bodies.
- Commissioning studies on international regulations in the medicinal plants sector as knowledge about this is scarce at present.

Eligibility

Proposals from Industry and reputed agencies having experience in international regulation on medicinal plants will be considered in project mode for commissioning studies.

Norms of Assistance

Expenditure incurred by the Industry organizations for participation in international exhibitions/fairs etc. would be reimbursed subject to prior permission being obtained from NMPB for participation by the concerned organization. Reimbursable items of expenditure would include, hire charges, stalls fabrication, developing publicity material, travel and accommodation. Reimbursement would be limited to 50% of the expenditure of Rs.3.00 lakhs whichever is less. Other activities will be supported in project mode with 100% assistance to Public Sector and 50%

of the project cost to the private sector. NMPB can also lead delegations / participate in these events.

(a) Setting up of information centres in Indian Missions abroad

Information Centres for Medicinal Plants are a good way to create awareness of Indian medicinal plants. The extent of financial support for this purpose will be determined on country-basis on the recommendation of the concerned Indian Embassy, as per actual financial implication.

The proposals in project mode formulated by NMPB will be examined and approved by SFC.

(b) Commissioning studies on Specific aspects of medicinal plants

Objectives

To keep pace with the increasing trend in demand for medicinal plants' raw materials, it is necessary to 'periodically update the information on various aspects like production, collection, supply & marketing. Such updating will be done by commissioning subject specific studies from time to time Support for collection of statistical information related with various aspects of medicinal plants may be provided to SMPB or other agencies identified having competence in this area by NMPB or the States.

Major areas of studies

An illustrative list of themes is as below:-

- Developing a data base of National and Regional Traders of medicinal plants and initiate work towards their registrations.
- Developing a data base of Farmers / Cultivators.
- Demand and Supply of Medicinal Plants
- Livelihood / yield studies
- Supply Chain Mapping
- Rationalization of Transit Pass system
- Consolidation of Yield
- Whole sale Price Data
- Developing case studies and success stories

Such studies would be awarded as per GFR provisions.

Norms for assistance

Project based proposals will be considered by PSC/SFC.

6.2. Marketing

Market Information Services are characterized by lack of domain information on techniques and commercial opportunities, absence of Resource Centers with a regional MAP crop focus and

little or no access to international markets. Currently marketing of MAPs happens through Mandis & commodity boards, Agricultural produce marketing committees etc. There are numerous intermediaries. There are examples from states like Uttarakhand where the State Forest Development Corporation have started both fixed and floating mandis which procure MAPs from the doorstep of gatherers thus preventing exploitation and also ensuring remunerative prices.

The following steps will be taken up:

In order to cater to the domestic market needs of ASU industry, promotion of Primary Producer Companies (PPCs) would be taken-up in a focused manner. These organizations would then be brought into the foreground for marketing of their produce (either cultivated or collected from wild).

- Promotion and information dissemination through IT dedicated mechanisms for procurement of MAPs.
- Networked Agri Mandis for MAPs
- Database of Cultivators
- Contract Extractions (PHM)
- Speciality Warehousing & Supply Chain development
- Integration of all Portals with techno commercial information
- Creating an on line MAPs Trade Exchange
- Integration with Krishak Call Centers, KVKs etc.

a) Marketing Intervention

Currently marketing of Medicinal plant produce happens through Mandis and other whole sale markets. Trade is rather opaque and information on prices, arrivals and other trends are not easily accessible to farmers/growers. The following steps will be initiated in order to fill this gap.

Documenting trade practices.

- Generating information on wholesale prices, arrivals and trends in different markets to benefit both growers and buyers.
- Establishing communication network for speedy collection and dissemination of market data for its efficient and timely utilization.
- Preparing farmer's advisories and issuing the same for the Benefit of farmers towards optimizing returns.
- Developing Databases of Cultivators and Cultivars.
- Integrating and mainstreaming of Medicinal Plants through call centres including Kisan call centres initiatives of Ministry of Agriculture & Farmer's Welfare.
- Putting in place an appropriate pricing regime in respect of produce sourced from wild v/s cultivation in favour of cultivated material so as to encourage cultivation and reduce

- pressure on the natural resources.
- Streamlining of HS Codes.

Eligibility

Proposals from reputed agencies having experience in in the field on medicinal plants will be considered in project mode for commissioning studies.

Submission of proposals

Eligible Organizations can apply to NMPB where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

b) Minimum Support Price (MSP)

In order to supplement the efforts of state governments to encourage sustainable collection of medicinal plants, NMPB would support State agencies engaged in procurement of medicinal plants to the extent of 25% of the amount paid by the agency to the collectors.

- Such support from NMPB will be provided to State Governments which have a definite mechanism for providing MSP support for medicinal plants.
- The support of MSP for medicinal plants however will not be automatic but would be considered on a case to case basis in project mode based on the steps taken by State govt. and which are likely to support or result in aiding to help conservation & sustainable livelihoods.
- The mount of MSP support would be released in two instalments subject to the states demonstrating that this measure has a positive impact on conservation & livelihood generation and the material thus produced is used by industry.

Management Support

One Project Management Consultant along with one Office Assistant / Data Entry Operator will be engaged for providing support at NMPB level for activities relating to scrutiny, implementation, monitoring and technical support to the state.

7. Medicinal Plant Species Specific Campaign including use of Multimedia

Species Specific Campaigns will be launched Nationally or at State level for valuable medicinal plants like, Pipli, Chirata, RET species, Amla, Moringa etc. to promote usage and planting including in institutions, schools, homes, etc.. The campaigns will also identify barriers to wide availability and use of such species and seek to address the same. The media publicity both print and electronic would also be a part of the campaign and would be organized by both SMPB and NMPB. Multimedia campaigns for important medicinal plants and its products through radio, TV and print would be taken up to provide information on the importance of medical plants in daily life. For this purpose TV spots would be developed through selected agencies and be telecast on TV, radio and outdoor hoardings, etc. Besides, talk shows and other programs on radio & TV and preparation of documentaries/case studies etc. would be promoted.

Eligibility

- SMPBs and other State Government organizations.
- Recognized academic / Research / Educational institutions
- Registered professional, NGOs and other philanthropic Organizations working on non-profit basis with activities / experience in the field of medicinal plants.

Norms of Assistance

For Medicinal Plant Species specific campaign, financial assistance will be provided to the eligible organisations in project mode.

Submission of Proposals

Eligible Organizations can apply to NMPB online where the proposal will go through scrutiny by the Project Screening Committee (PSC) before approval by Standing Finance Committee (SFC).

8 Institutional Strengthening

8.1. Strengthening of State Medicinal Plant Boards (SMPBs)

- The SMPBs in addition to act coordinating as well as Implementing Agency for various activities supported under NMPB, Ministry of AYUSH's scheme, are expected to synergise various interventions by other State agencies related to Medicinal Plants. In order to encourage the states to have an independent office of the SMPB it is proposed that an annual grant-in-aid upto Rs.35.00 lakhs per annum can be provided to SMPBs other than SMPBs of Union Territories (UTs) and North Eastern States and for SMPBs which are under Union Territories (UTs) and North Eastern States grant-in- aid upto Rs.27.00 lakhs per annum can be provided on annual basis. The assistance/budget will be provided towards remuneration of staff (on contractual basis), to meet the expenditure on recurring and non-recurring office expenses, purchase of equipment, office maintenance, mobility support and miscellaneous expenditure including TA/DA/POL, printing/publicity, meeting/conferences, engaging subject matter specialist/ statistical unit etc. In the interest of co-ordination and synergy, NMPB will also direct the States to employ suitable resources/consultants for specific purposes like preparing database of traders, cultivators, compilation of yield data, demand and supply of medicinal plants from different sources like Forest Department & cultivators, case studies, publication, participation in events related to medicinal plants, exposure visits for stake holders etc. NMPB may also promote special studies to evaluate functioning of SMPBs from time to time. An indicative structure and break-up of head-wise staff support to SMPB is given in **Annexure-II**. Full time CEO / Member Secretary and separate Budget Head for SMPB in the state budget shall be preferred for the Nucleus Centre Grant or else it can be modified by NMPB.
- SMPBs are required to submit annual action plans in advance indicating the various activities and programmes they intend to carry out in the State on year-to-year basis.
- In addition to Nucleus Centre grant, the grant-in-aid can be considered for SMPBs to meet the obligations of Contractual Farming activities / projects of previous plan period, if any.
- SMPBs are required to work in close coordination with Regional-cum-Facilitation Centres

(RCFCs) of NMPB and with other State agencies related to Medicinal Plants.

8.2. Establishing Regional-cum-Facilitation Centres (RCFCs) of NMPB (within existing Government Institutions, Corporations, Centres of Excellence etc.) in different Geographic Zones.

Considering the topographical spread and valuable traditional knowledge on medicinal plants in various parts of the country, the success of AYUSH system in the national context actually depends on region and area specific inputs and active participation of regional units in the implementation of the scheme and facilitation thereof. Coordination with states in respect of NMPB schemes for each region is currently constrained and ham-strung by the absence of adequate outreach in various regions of the country. Hence, there is a need to set up the Regional-cum-Facilitation Centres (RCFCs). However, no significant infrastructure needs to be created, instead such RCFCs will be set up within the existing Government Departments / Institutions (like Institution of ICAR, CSIR, ICFRE, Universities, AYUSH Institutions etc.) in various eco- regions of the country through signing of MOUs by NMPB with the approval of the SFC. The State Medicinal Plants Boards (SMPBs) in a geographic region of the country will also be mentored by these RCFCs. The Regional-cum-Facilitation Centres will be actively engaged in the meetings on technical matters of the SMPBs and also assist in the monitoring of projects sanctioned and other assigned work by NMPB.

It is proposed to set up Seven such RCFCs in existing regional institutions and will have the following coverage:

S.No.	Name of Regional-cum-Facilitation Centre	States / UTs
1.	Northern Region – I	Chandigarh, Delhi, Haryana, Himachal Pradesh, Punjab, Uttarakhand, Uttar Pradesh
2.	Northern Region – II	Jammu & Kashmir, Ladakh
3.	Central Region	Chhattisgarh, Madhya Pradesh
4.	Eastern Region	Bihar, Jharkhand, Orissa, West Bengal
5.	Southern Region	Andaman & Nicobar, Andhra Pradesh, Karnataka, Kerala, Lakshadweep, Puducherry, Tamil Nadu, Telangana
6.	North Eastern Region	Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura
7.	Western Region	Dadra & Nagar Haveli and Daman & Diu, Goa, Gujarat, Maharashtra, Rajasthan

Selection of institutions as Regional-cum-Facilitation Centres (RCFCs)

Research and extension organisations or universities in the above mentioned regions will be identified by open advertisement in Newspapers. The selection of Regional-cum-Facilitation Centres in different institutions shall be undertaken through a committee of 4 or 5 experts which will be constituted as and when required. The same committee shall also periodically review the progress in implementation of the activities of RCFCs and guide NMPB. The support to these regional centres shall be in project mode and shall be decided with the approval of the Secretary, Ministry of AYUSH / Standing Finance Committee. The Budget and activities can be decided with the approval of SFC as and when required.

Pattern of Financial Assistance:

- 100% financial assistance (in project mode) shall be provided for Government Departments and Organizations including Govt. aided institutions (Institutes getting substantial aid), Universities, Research Institutes etc. as decided with the approval of the Secretary, Ministry of AYUSH / Standing Finance Committee .
- Some of the Regional Centres actively engaged in medicinal plants related activities and having adequate expertise & infrastructure can be considered as Centre of Excellence.

Management Support:

Programme Manager, Domain Expert, Consultant, Jr. Consultant along with Office Assistant / Data Entry Operator etc. will be engaged for providing support at NMPB level to co-ordinate the programme / activities.

9. Administrative and Financial Arrangements of NMPB

NMPB is assisted by the Project Screening Committees (PSCs), Standing Finance Committee (SFC) and other Committees constituted as per requirement for Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants of NMPB.

9.1 Project Screening Committees (PSCs)

Project Screening Committees (PSCs) shall be constituted for considering the project proposals received in the Board. The Composition of the Committee may be altered and different committees may be constituted depending upon the activities under the Scheme to enlist the most appropriate professionals for appraising and monitoring the activities under each Committee and each Committee will be chaired by an official member designated by Secretary (AYUSH) as chairperson.

9.1.1 The Project Screening Committee relating to "Research & Development" will have the following composition:

- | | | |
|-------|--|------------------|
| i) | To be nominated by Secretary (AYUSH) | Chairperson |
| ii) | Representative from Botanical Survey of India | Member |
| iii) | Representative from ICAR. | Member |
| iv) | Representative from CSIR. | Member |
| v) | Director General/representative from CCRAS | Member |
| vi) | Representative from D/o Biotechnology | Member |
| vii) | Domain experts (From Govt./ Non-Government) | Member Two |
| viii) | Chief Executive Officer, National Medicinal Plants Board or his representative | Member Secretary |

9.1.2 The Project Screening Committee relating to projects of Conservation (In-situ & Ex-situ), Resource Augmentation etc. will have the following composition:

- | | | |
|-----|--|-------------|
| i) | To be nominated by Secretary (AYUSH) | Chairperson |
| ii) | Representative from Ministry of Environment, Forest and Climate Change | Member |

iii) Representative from Botanical Survey of India	Member
iv) Representative from M/o. AYUSH	Member
v) Representative from ICAR	Member
vi) Domain experts (From Govt. / Non-Government)	Member Two
vii) Chief Executive Officer, National Medicinal Plants Board or his representative	Member Secretary

9.1.3 The Project Screening Committee relating to projects of Information, Education and Communication (IEC) and Capacity Building (CB) etc. will have the following composition:

i) To be nominated by Secretary (AYUSH)	Chairperson
ii) Representative from M/o. AYUSH	Member
iii) Representative from ICAR.	Member
iv) Director General / Representative from CCRAS	Member
v) Representative from M/o. HRD	Member
vi) Domain experts (From Govt. / Non-Government)	Member Two
vii) Chief Executive Officer, National Medicinal Plants Board or his representative	Member Secretary

9.1.4 The Project Screening Committee relating to projects of Marketing (Import & Export) and Demand & Supply of Medicinal Plants will have the following composition:

i) To be nominated by Secretary (AYUSH)	Chairperson
ii) Representative from M/o. Commerce & Industry	Member
iii) Representative from CSIR.	Member
iv) Director General / Representative from NAFED	Member
v) Representative from Industry	Member
vi) Domain experts (From Govt. / Non-Government)	Member Two
vii) Chief Executive Officer, National Medicinal Plants Board or his representative	Member Secretary

9.2 Standing Finance Committee (SFC)

The Board is assisted by Standing Finance Committee (SFC) with following members:

- i) Secretary (AYUSH), Chairperson.
- ii) Additional Secretary and Financial Advisor or representative, Ministry of Health & Family Welfare.
- iii) Joint Secretary or representative, Deptt. of Science and Industrial Research.
- iv) Joint Secretary or representative, Deptt. of Biotechnology.
- v) Joint Secretary or representative, Deptt. of Agriculture Research and Education.
- vi) Joint Secretary or representative, Ministry of Environment, Forests & Climate Change.
- vii) Joint Secretary or Mission Director or representative, National Horticulture Mission, Department of Agriculture & Cooperation.
- viii) Representative of Ayurvedic Industry.
- ix) Representative of Exporters of medicinal / herbal products.
- x) Representative of Growers Associations / Federations.
- xi) Representative of Ministry of Development of North Eastern Region, Government of

India, New Delhi.

- xii) Representative of North Eastern Council, Shillong
- xiii) Domain Experts nominated by Secretary AYUSH (Experience in R&D, Conservation, post- harvest management, Capacity Building etc.) - Two
- xiv) Chief Executive Officer, NMPB - Member Secretary.

The chairman of the SFC will have authority to invite special invitees, representatives from organizations engaged in R&D, quality control, planning and other related disciplines in medicinal plants sector.

The Standing Finance Committee (SFC) shall have the following functions for this scheme:

- i) To consider and approve any financial proposal which is to be included for release of grants.
- ii) To consider and recommend proposals for creation of new posts.
- iii) To consider and approve components of individual projects for which cost norms have not been prescribed and approve revision of the existing cost norms as and when required.
- iv) Any related activity other than the components provided in the guidelines that the Board may refer.
- v) Any alterations in the guidelines based on new emerging facts/situations can be decided by SFC.
- vi) SFC is empowered to approve special intervention for managing any Unforeseen / emergent requirement.
- vii) SFC can also constitute Empowered Monitoring Committee (EMC) / Sub-committee (SC) and delegate power to CEO, NMPB for any administrative / financial issues.

Note: In all above PSCs, two officers from NMPB (nominated by CEO) shall be part of each committee.

Members of PSC / SFC and other committees (other than those from NMPB and Ministry of AYUSH) will be eligible for sitting fee for each meeting of PSC / SFC or as per the approved norms of Central Government.

10. Procedure for processing project proposal for approval

- 1) All project proposals will be submitted to the NMPB. Once these are received in the Board, they will undergo initial scrutiny and then be placed before the concerned Project Screening Committee (PSC) of the Board. The proposals reviewed & recommended by the PSC will be placed before the Standing Finance Committee (SFC) for final approval.
- 2) Other than, in case, when organizations are submitting their proposals through the concerned SMPBs, the SMPBs will have to render their inputs within a period of one month of receipt of the proposals. If they do not offer any specific inputs to NMPB within the time limit, it will be presumed that SMPBs agree with the proposals and will provide necessary support to the implementing agency, if the project is approved by the SFC.
- 3) The Board will be free to take expert opinion on project proposals from any individual/agency wherever necessary.
- 4) The institutions proposing projects are eligible to levy institutional charges, subject to a

maximum of 5% of the total cost of the scheme especially for R & D, Training etc. and other such projects as approved by SFC.

- 5) Once the Board approves a new project, its sanction will be conveyed by the Board to the host institution the sanction letter shall convey expenditure sanction in various broad heads viz. staff, equipment, works, recurring contingencies, etc., as finally approved in each case.

11. Implementation and monitoring

- All project proposal where the duration is one year should generally commence implementation within 3 months of release of first instalment of grant, failing which the sanctions accorded can be withdrawn. For other project proposals of duration of more than one year also normally the implementation has to start within 3 months otherwise the PI should share the justification for delay in implementation of the project.
- The Principal Investigator / Project in-charge (PI) shall submit annual progress report to the Board. The Annual report must contain details about the work done, achievements, results, etc.
- Release of funds can be withheld in the event of non-receipt of utilization certificate and progress reports in time or unsatisfactory progress of work, for ongoing or any previous project approved to the agency.
- On completion of the project, the PI shall submit to the National Medicinal Plants Board a final report in the prescribed proforma, which shall be examined by the concerned programme officer of the Board, for evaluating the project results, their significance and follow-up required therein.
- All publications (books, research papers, popular articles) brought out under the project supported by NMPB shall duly acknowledge the support of NMPB.

General conditions

- i) The project proposals may normally be of 3 years duration. However, in Coordinated/network projects, the project period could be a maximum of 5 years at the discretion of the SFC. The projects of MPCDAs, *In-Situ* Resource Augmentation, Ex-Situ Conservation, Eco-Task Force and creation of Herbal Gardens (other than Home Herbal Gardens) will also be of five years duration. Extension of the project period beyond the approved tenure will be considered with the approval PSC on merit and justification for each proposal.
- ii) Scientists, teachers, officers with relevant academic background, appropriately qualified NGO would be eligible to become PI/ Co-PI. In case the PI is working in Govt. Organisation they should have at least 3 years left to superannuate.
- iii) Any incremental scientific, technical and supporting staff will be on contract basis and their salaries, expenditure on equipments, recurring contingencies, TA (PI and Contractual staff) etc. will be met out of the project grant. The emoluments will be as per the DST pattern for Research and Development or for other as decided by the SFC.
- iv) The projects implemented through private R&D companies/ organizations should comply

with the terms and conditions of IPR protection and will be required to sign a MoU to safeguard government interest.

- v) Any patent filed will be in the joint ownership of NMPB and the concerned organisation / PI.
- vi) In case of NGOs, the agency must have an experience of at least 3 years and good track record in the related field evidenced by the earlier experience and achievements. Also the agency must have qualified key resource persons to successfully implement the project. They will also be required to furnish a list of the projects for which they have received funding during the last five years alongwith the sources there of and the tangible outcomes from such works. The NGOs / Companies will also be required to sign a Bond.
- vii) All NGO's should submit land certificate for ownership of land (in respect of herbal garden) and a certificate for genuiness from Registrar of Co-operative Society / Deputy Commissioner/other concerned civil authority.
- viii) All projects should spell out a clear exit strategy indicating the proposed mechanism for maintenance of assets created.
- ix) The PI shall enjoy the freedom in selection of Co-PI and other staff. The appointment will not be regular in nature, but restricted to the project/scheme on contract basis.
- x) In case of transfer / leaving of PI, Co-PI will hold the charge of the project and will perform the duties of PI. In case there is no Co-PI, the host institute will suggest the name of suitable PI to handle the project. In case of transfer of the PI and the earlier organisation not having appropriate resource person to handle the project the project could be shifted to the institution on the request of the PI concerned. Such decisions will be taken by CEO, NMPB on case to case basis and brought to notice of PSC for information.
- xi) For important projects under implementation which may require technical input from the PSC the PI may be called for presentation from time to time by PSC so that best value could be obtained from such ongoing works.
- xii) Under non-recurring head, financial assistance could be provided for only selected, essential and specialized items of equipments required for project works, for modification of existing structure so for undertaking petty works.
- xiii) The implementing institution, without approval of the CEO, NMPB, shall not re-appropriate funds among different heads of expenditures of a scheme, except in case of recurring contingencies.
- xiv) Component towards rental value of land/lease rent shall not exceed 10% of project cost.
- xv) Expenses towards manpower for supervision, and other technical input shall be as per requirement.
- xvi) Grant-in-aid will be further subjected to the Terms and Conditions as indicated elsewhere in the guidelines or in the letter of sanction.
- xvii) It will invariably be the sole duty of the PI and his organization to abide by all laws while implementing the project.
- xviii) Cost norms for activities in high alpine regions and trans Himalayan regions could be upto 1 ½ times of otherwise prescribed norms. This could be decided by the SFC on a case to case basis.
- xix) For any other components in the Scheme for which specific costs, norms have not been given, these will be considered by SFC in project mode.
- xx) Within approved project period, grants, released in a year will be deemed to be carried forward to the next year if not fully utilized in the initial year.
- xxi) In a need based approach to enable response to changing situations SFC may decide to incorporate additional activities within the overall outlay of the Scheme.
- xxii) Proformas and terms and conditions shall be uploaded on the NMPB website. The same will also be reviewed / fine-tuned from time to time by the PSC and shall be dully intimated to the SFC.

- xxiii) Periodic progress reports received from the PI will be reviewed by the concerned programme officer in the NMPB so as to decide the progress is satisfactory or there are any shortfall or any course correction is needed for which feedback has to be given to the implementing organization.
- xxiv) An annual increase of 10% of the outlay of the sanctioned amount will be provided for conservation & Resource augmentation projects.

12 Monitoring and Evaluation

I Monitoring and Evaluation by the State Medicinal Plants Boards.

The State Medicinal Plant Boards (where they are themselves not the implementing agency) can be involved in monitoring the projects at the field level through their own set of experts for mentoring and suggesting corrective measures. The SMPBs can approach NMPB for offering their willingness for undertaking this assignment. Therefore, field mentoring and monitoring of all projects can be undertaken by SMPB's / other organizations and for this purpose, the services of retired officers of Forests / Horticulture / Agriculture departments, scientists etc. may be hired within this grant approved for SMPB / other organizations.

II. Third Party Monitoring

Third party monitoring is important for the success of any scheme being implemented at the national level. There could be two types of arrangements - either through the system of experts or hiring an agency. One or more National Level Agencies with adequate manpower and infrastructure will be engaged by NMPB to monitor the projects as per requirement. In addition, NMPB may also constitute short term mentoring-cum-monitoring teams from time to time for specific projects, as felt necessary.

III. Chief Technical Advisers / Domain Expert for Mentoring

NMPB will draw up a list of experts and nominate theme wise / species wise experts as Chief Technical Advisers (CTAs) on important themes related to medicinal plants. The CTAs will be asked from time to time to visit States / Project implementation locations to provide hand-holding support on their area of expertise to the states / implementing agencies and for providing such services, CTAs will be reimbursed AC II tier / Economy Class Air fare and local travelling expenses, Boarding / lodging charges etc. and will also be eligible for sitting fee as per rule. However, such hand holding assignments (excluding travel time from their HQ) will be of short duration (3 days or less) after which CTAs will submit the reports to NMPB, for each such assignment.

NMPB can also engage Domain Expert as per requirement for implementation and monitoring of the projects / activities.

Note: The proforma for submission of the proposals and utilization certificates, progress report etc. are available on NMPB's website.

AT A GLANCE

Appendix

IMPORTANT COST NORMS FOR COMPONENT ASSISTANCE

S. No.	Component	Cost	Remarks
1	In-situ conservation		
	A) Establishment of Medicinal Plants Conservation and Development Areas (MPCDAs)	Rs. 20,000 per hectare	100% Central Assistance
	B) Revisit and upgradation of MPCA	Rs. 5000/- per hectare	100% Assistance
	C) Assistance for mainstreaming Medicinal Plants in Management / Working Plans	Rs. 1.50 lakh per forest Division / Wildlife Division	100% Assistance
	D) in-situ resource augmentation	Cost norms of MoEF&CC under National Afforestation Programme	100% Assistance
2	Ex-situ conservation		
	i) ex-situ conservation	Cost norms of MoEF&CC under CSS National Afforestation Programme	As per para 1.2
3.	Eco Task Force for rehabilitation of critical medicinal plant habitats		
	Eco Task Force	Project based	100% assistance to the eligible organization
4.	Support to JFMC/ Panchayats/Van Panchayats/ SHGs		
	Value addition, drying, warehousing and augmenting marketing infrastructure etc.	Rs.15.00 lakhs per JFMC / Panchayats / Van Panchayats / SHGs / BMCs	100% assistance per JFMC / Panchayats / Van Panchayats / SHGs / BMCs
5.	Research, Technology Development and Quality Assurance		
	i) R&D Projects on theme areas	Project based	100% assistance for Govt. Institutions / PSUs, Govt. Aided Institutions etc. and Non-profit making Philanthropic Organizations with requisite expertise. 50% assistance for projects received from private sector organizations
	ii) Network research projects involving two or more institutions	Project based	100% assistance for Govt. Institutions/PSUs, Govt. Aided Institutions etc. and Non-profit making Philanthropic Organizations with requisite expertise. 50% assistance for projects received from private sector organizations
	iii) Raw drug repository of medicinal plants	Rs.10.00 crores for national raw drugs repository and Rs. 5.00 crores each for regional raw drug repositories	100% assistance to Govt. Institutions/PSUs. For private organizations assistance would be decided by SFC in project mode

	ESTABLISHING QUALITY STANDARDS AND CERTIFICATION and other interventions not specifically mentioned elsewhere.	Project based	100% assistance.
6	Awareness Building, Exposure Visits, Education and Capacity Building of Stakeholders through IEC		
	Training and Capacity Building Programmes for field staff of Forest Dept., Institutions, Universities, Horticulture Dept., Agriculture Dept., Growers and Collectors	a) Rs. 2,000 per trainee (farmer) for a minimum of 2 days within the state. b) Rs. 5,000 per head for exposure visits to other states. c). The expenditure on officers training within the State will be Rs. 5,000/- per officer and outside the State the cost would be restricted to Rs. 10,000 per officer (Travel cost will be additional)	100% Assistance 1. Travel cost will be limited to 3 rd AC train fares per participants. However, for Govt. Servants it will be as per entitlement. 2. For places not connected by Rail, travel by available modes will be permitted as approved by the PSC/ SFC.
	Workshops/ Seminar/ Arogya	a) Rs. 1.00 lakhs for District level, b) Rs. 2.00 lakhs for State level, c) Rs. 3.00 lakhs for Regional level, d) Rs. 5.00 lakhs for National level e) Rs. 10.00 lakhs for International level.	100% assistance
	Participation in exhibition/ fair	For participation by other Agencies a) Rs. 1.00 lakh for State level, b) Rs. 2.00 lakhs for National level c) Rs. 3.00 lakhs for International level	100% assistance for Govt. Organizations For Private organizations including industries 50% of the prescribed cost or actual expenditure whichever is less (which includes expenditure on Travel, accommodation, Hire charges, stall fabrication, etc.) will be reimbursed. Participation by NMPB will be as per the actuals.
7	PROMOTION OF HERBAL GARDENS		
	Herbal Gardens of State and National Importance	As per the project proposal	100% assistance
	Institutional/ Public Herbal Garden	a) Rs. 3.00 lakhs per hectare for establishment b) Annual maintenance of the Herbal Garden @ upto Rs. 60,000/- per year per ha. for next four years.	100% assistance
	School Herbal Gardens	a) Rs. 25,000/- per school for an area of 500 sqm. b) Up to Rs. 7,000/- per annum / per school for maintenance for next 4 years	100% assistance

	Home Herbal Gardens	Rs. 2500/- per HHG.	100% assistance
8	MANAGEMENT SUPPORT	Upto 5% of the outlay under the scheme to NMPB	This will include salary and Admn. Expenses of NMPB incl. TE, OE, appointment of Consultants for each component, monitoring, publicity, advertising etc.

Annexure-I

COST NORMS FOR IN-SITU RESOURCE AUGMENTATION, EX-SITU CONSERVATION AND PLANTATION OF MEDICINAL TREES, HERBS AND PERENNIALS

(Adopted from Operational Guidelines of National Afforestation Programme of Ministry of Environment & Forests)

S. No.	Model/ Intervention	Plantation including maintenance	Soil & Moisture Conservation (15% of Plantation cost)	M&E, Microplanning, fencing, awareness raising (10% of plantation cost)	Overheads (10% of Plantation cost)	Entry Point activities (Fixed)	Total
1.	Aided Natural Regeneration (200 plants / hectare)	9750	1460	975	975	4000	17160
2.	Artificial Regeneration (1100 Plants / Hectares)	17100	2565	1710	1710	4000	27085
3.	Mixed Plantation of trees having MFP and medicinal value (1100 plants / hectares)	17100	2565	1710	1710	4000	27085
4.	Regeneration of perennial herbs and shrubs of medicinal value (2000 plants / hectares)	20400	3060	2040	2040	4000	31540

1. The number of plants per hectare are admissible to the costing indicted above. The project proposal envisaging any change in the plantation density would be eligible for a corresponding prorata change in the cost norms. The concerned State Govt. agency shall have to certify that due regard has been given to the agro-climatic factors while preparing the project.
2. The cost norms above have been worked out at the wage rate of Rs. 75.00 per day. Escalation in the cost will be allowed to State Governments only after ensuring that their approved wage rate in the State exceeds the limit of Rs. 75.00 per day. The increase in the cost norms would be proportionate to the increase in the wages. In case the wage rate is less than Rs. 75.00 per day, the cost per hectare would be less (on pro rata basis) than the rates proposed in the scheme.
3. While distributing the cost, total expenditure on the following items together may not exceed 20% of the plantation cost:
 - i) Overheads including staff / establishment / vehicles etc. (not to exceed 10%)
 - ii) Concurrent monitoring and evaluation (not exceed 2%)
 - iii) Micro-planting (not exceed 2%)

- iv) Fencing (not exceed 5%). For projects requiring higher allocation for fencing, funds to the extent 10% of plantation cost may be authorized by suitably reducing the allocation under item (i) above.
 - v) Awareness raising (not to exceed 1%)
4. Implements would be purchased from within the overheads. The watch and ward components over the 5 years after plantation would be allowed as part of maintenance personnel deployed for maintenance would also be made responsible for watch and ward.
 5. Savings under any items above could be used for the activities listed in items other than (i). For examples, savings for fencing and overheads, could be used for extension/Entry point activity.
 6. The sites which are more challenging like higher elevations, refractory, saline, alkaline and acidic lands, very heavy weed infested , rain shadow areas, cold and hot arid areas, areas requiring soil replacement and critical irrigations supplements etc., allowance of 25% over similar treatment model shall be permitted. Details of such problematic areas along with justification should be provided. Cost norms for alpine / trans Himalayan region will be one and half times for the project cost.
 7. Also for improved planning technology like use of tissue culture, clonal seedlings etc., allowance of 25% over similar treatment model shall be permitted. Details of improved technology adopted should be given.

Annexure-II**Indicative Component/Head-wise Expenditure of grant for Maintenance of Nucleus Centre of SMPBs other than Union Territories (UTs) and North Eastern States.****Table – 1**

S.No.	Component / Head	Unit Cost	Total (Rs. in Lakhs)	Grand Total (Rs. in Lakhs)
1.	Provision for Consultants on contract basis – (03 Nos.) (i) Consultant (Medicinal Plants) – (01 No.) (ii) Consultant (Agriculture/ Horticulture) – (01 No.) (iii) Consultant (Botany / Taxonomy) – (01 No.)	1* 12 @ Rs. 35000/- 1* 12 @ Rs. 35000 1* 12 @ Rs. 35000/-	4.20 4.20 4.20	12.60
2.	Provision for Supporting Staff on contract basis - (04 Nos.) (i) Account Assistant – (01 No.) (ii) Office Assistant / Secretarial Assistant– (02 No.) (iii) Peon / Messenger – (01 No.)	1* 12 @ Rs. 22500/- 2* 12 @ Rs. 20000/- 1* 12 @ Rs. 12000/-	2.70 4.80 1.44	8.94
3.	(i) Office Expenses (ii) Advertisement / Publicity / Printing (iii) Recurring expenses on office equipment & Contingency	- - -	2.00 2.00 1.46	5.46
4.	Mobility Support /POL including TA, DA etc.	-	2.00	2.00
5.	(i) IEC Activities (Organising Conferences, Seminar/Webinar, Training Programmes/Workshops etc.) (ii) Data collection, maintenance/ documentation, purchase of books etc.	- -	3.60 2.40	6.00
			Total	35.00

Note : Any change in the components due to the requirements of the State concerned within the total outlay can be considered with the approval of CEO, NMPB.

Indicative Component/Head-wise Expenditure of grant for Maintenance of Nucleus Centre of SMPBs which are under Union Territories (UTs) and North Eastern States

Table – 2

S.No.	Component / Head	Unit Cost	Total (Rs. in Lakhs)	Grand Total (Rs. in Lakhs)
1.	Provision for Consultants on contract basis – (02 Nos.) (i) Consultant (Medicinal Plants) or Consultant (Agriculture / Horticulture) – (01 No.) (ii) Consultant (Botany / Taxonomy) – (01 No.)	1* 12 @ Rs. 35000/- 1* 12 @ Rs. 35000/-	4.20 4.20	8.40
2.	Provision for Supporting Staff on contract basis - (03 Nos.) (i) Account Assistant – (01 No.) (ii) Office Assistant / Secretarial Assistant– (01 No.) (iii) Peon / Messenger – (01 No.)	1* 12 @ Rs. 22500/- 1* 12 @ Rs. 20000/- 1* 12 @ Rs. 12000/-	2.70 2.40 1.44	6.54
3.	(i) Office Expenses (ii) Advertisement / Publicity / Printing (iii) Recurring expenses on office equipment & Contingency	- - -	2.00 2.00 1.00	5.00
4.	Mobility Support /POL including TA, DA etc.	-	1.80	1.80
5.	(i) IEC Activities (Organising Conferences, Seminar / Webinar, Training Programmes / Workshops etc.) (ii) Data collection, maintenance/ documentation, purchase of books etc.	- -	3.00 2.26	5.26
	Total			27.00

Note : Any change in the components due to the requirements of the State concerned within the total outlay can be considered with the approval of CEO, NMPB.

National Medicinal Plants Board

TERMS & CONDITIONS OF FINANCIAL ASSISTANCE (GRANT)

1. The institution/ organization/ Principal Investigator (PI) would maintain a separate statement of Accounts/register. The organization has to maintain an account in Nationalized Bank. The accounts should be operated jointly by two office-bearers. The grant-in-aid will be released through FDA/SFDAs/FDCs in respect of forestry projects and for other projects the Grant-in-aid will be released through the Institute/ organisation concerned.
2. The grantee (NGOs) will execute a bond on Rs. 100/- stamp paper in the **prescribed proforma** with two sureties to the effect that the grantee will abide by all the conditions of the grant. In the event of any failure to comply with these conditions or committing any breach of the bond, the grantee with sureties individually and jointly will be liable to refund to the Government of India the entire amount of the grant together with interest at such rate as is stipulated in the Bond. The requirement of furnishing two sureties will not be necessary if the grantee institution/ organisation is a Society registered under the Societies Registration Act-1860 or is a Cooperative Society. When the bond is also signed by two sureties both of them should be solvent and owner of such assets of value not less than the amount of the Bond as can be attached and sold in execution of a court's decree. This fact should be certified by the District Magistrate or other equivalent authority on the body of the bond.
3. The project for which grant in aid is being sought should commence implementation within a period of 3 months from the date of receipt of grants.
4. If the grant or any part thereof is to be utilised for a purpose other than that for which it is sanctioned, prior approval of the Board should be obtained by the grantee.
5. The payment of the grant-in-aid will be made by this Board through crossed demand draft/RTGS/ECS mode after all the requirements mentioned in this sanction letter have been fulfilled by the grantee.
6. For those PI, who have undertaken NMPB supported projects unsatisfactorily then, project proposals of such PI will not be considered for funding from NMPB for consecutive 3 years after finalisation of the project.
7. Interest generated on the grant-in-aid released by NMPB will need to be refunded to NMPB or adjusted against future releases within the overall amount sanctioned under the project.
8. The payment of grant is subject to the following conditions:
 - a) Submission of agency and bank details.
 - b) Pre-receipt of the grant-in-aid amount.
 - c) The grantee shall furnish a certificate that the person signing the undertaking is duly authorized to operate upon and bind the funds of the grantee organization.

- d) The grantee shall furnish a certificate that the grantee is not involved in any court proceedings relating to the account or conduct of any of its office bearers. A certificate to the effect that the institution is not involved in corrupt practices should also be furnished.
- e) The grantee shall furnish a certificate to the effect that it has not been sanctioned grant-in-aid for the same purpose by any other agency of Central Government/State Government during the same period.
- f) The grantee will not, without the prior sanction of the Government of India, dispose of, or divert the use for any other purpose of permanent and semi- permanent assets that may be created or acquired out of the grant. If and when such body is dissolved the assets are to be reverted to the Government.
- g) Accounts of the grantee should also be open for the test check and regular audit of the comptroller and Auditor General of India at their discretion.
- h) No portion of the grant shall be utilized for furtherance of a political movement prejudicial to the security of the nation.
- i) Grantee Organization/Institutes should submit an undertaking in writing that the grantee agrees to be governed by the conditions of the grant mentioned in this Annexure and the sanction letter.
- j) Private and voluntary organizations receiving recurring grant-in-aid to the tune of Rs.5.00 lacs and above shall submit 5 copies of their Annual Reports including audited Statement of Accounts (English or Hindi) along with soft copy within six months of the close of the financial year.
- k) At the end of the year the grantee shall have to submit five (05) copies of Annual Progress Report (Mentioning physical and financial targets achieved) along with the Utilization Certificate (UC) and audited statement of Accounts failing which grant shall be stopped.

9. Acceptance of UCs will be subject to the following:

- a) The grantee shall maintain a register of all assets acquired out of this grant as per GFR. This register is required to be maintained separately in respect of such sanction and two copies of the same duly signed by the grantee be furnished to this Board annually.
- b) The Register of assets maintained by the grantee should be available for scrutiny by audit or any other person authorized in this behalf by this Ministry.
- c) The grantee should forward to NMPB a Utilization Certificate in form GFR-12A and GFR-12C along with the Audited Statement of Accounts both of which should be duly certified by a Chartered Accountant / Government Auditor and counter signed by PI soon as possible after the close of the financial year and in any case not later than six months of its closing.

10. The cost of computer including UPS and all accessories should be minimum and reasonable and as per the prevalent market rate.
11. Rates of wages applicable for carrying out various works proposed in the projects would be to the extent of prevailing schedule of rates in the State/ UTs/Central Government Institutes.
12. The voluntary organizations have to furnish documentary proof in support of land ownership. The Government organizations have to indicate details about status of land.
13. For extension activities like training, seminar, workshop etc. payment towards boarding lodging and transport, the admissible limit would be as per Government of India norms
14. Resource persons may be paid honorarium and TA/DA as per existing Government of India norms.
15. Expenses on equipment(s) should be need based. Further, in case the institution/organization is already having the same equipment(s); purchase of the equipment(s) for that project shall be avoided as far as possible.
16. Salary on contractual staff should be kept to the minimum. The emoluments to the contractual staff under the R&D projects or other projects shall be as per the norms of the DST/ CSIR.
17. Regular / permanent or hired staff of the institute/organization working as Principal Investigator/ Co-PI will not be eligible for payment of salary from this grant.
18. Sub contracting with in the project is not permissible.
19. Other terms and conditions will be those as applicable in State/Central Government institutes as the case may be.
20. PI has to certify that all applicable laws/rules and legal provisions are followed while preparing the project proposal.
21. It is also to be certified that the project proposal is formulated as per the relevant provisions/ clauses of the guidelines of the Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants.
22. Any patent filed or accepted as an outcome of NMPB's funded project(s) shall be the joint property of the NMPB and the grantee organization. Any commercialization of the patent shall be done only with the explicit approval of NMPB.