



Minor Forest Produce Processing and Research Centre (MFPPARC), Bhopal

PROFILE



Health from wild wealth





Background

Non timber forest produces (NTFPs) have served as an engine of livelihood promotion for the forest dwellers in a number of interventions made by Government of Madhya Pradesh. The major forest produces collected in MP are Mahua(Madhuca indica), Amla(Embilica officinalis), Chironji, Bhilma, Honey, Shikakai, Soap nut, Gum karaya (Stirculia urens) Tendu(Diosporos melanoxylon) leaves, Sal(Shorea robusta) seed and various other medicinal plants.

Management, collection as well as trade of NTFPs were always a very important agenda of Government of Madhya Pradesh (GoMP) for providing livelihood opportunity to tribals and forest dwellers. The two stated objectives of GoMP policy associated with management of NTFPs including its procurement, storage, processing, disposal and utilization are “conservation of resources” and “welfare of the tribals and other forest dwellers”. To look after and manage the entire trade as well as development aspect of NTFPs, a cooperative agency was created in 1984 by the GoMP which has a three tier cooperative structure called MP Minor Forest Produce (Trade & Development) Cooperative Federation. MPMFP Fed. is a nodal agency of the state for all NTFP related activities. The proactive intervention done by federation after its inception has resulted into additional livelihood opportunities to forest dwellers through NTFP collection and its marketing. To further enhance the income from NTFP collection and related activities, Federation has decided to establish various NTFP and Medicinal Plants value addition centers. Minor Forest Produce Processing and Research Centre (MFPPARC) at Bhopal is one of such centre.



Minor Forest Produce Processing and Research Centre (MFP-PARC)

Minor Forest Produce Processing and Research Centre (MFP-PARC) is one of the major herbal processing centre set up by MFP Federation. Federation has tried successfully to synergize the efforts of various governmental and semi government agencies for NTFP development program in establishing this centre. Located in Bhopal-MP, one of the most forested state of India, it is a ISO 9001:2008, EMS:14000 and GMP certified herbal pharmaceutical manufacturing unit recognized both by Govt. of India as well as Govt. of Madhya Pradesh.

In consequence of the overall aims and objectives of establishing MFP-PARC, the Centre is being developed to do processing and value-addition of NTFP based raw materials into Ayurvedic proprietary and classical drugs, nutraceuticals and herbal cosmetics products. MFP-PARC is also engaged in creating awareness for the conservation of wild wealth of NTFP in general and Medicinal & Aromatic Plants in particular. This centre is also supporting forest dependent communities to enhance their livelihood by assisting them through sustainable harvesting, primary processing and marketing of NTFPs.

Preamble

Whereas -

- More than 30% of the state's population dwelling in and around forest resources is dependent on the various NTFP resources and the state of Madhya Pradesh is endowed with bounty of such resources which have potential to create good livelihood opportunities and option for such people
- and above resources are under varied intensity of pressures, both nationally and internationally
- and most of such forest products are facing varied degrees of threat and is on the verge of extinction
- and as there is an urgent need and opportunity to add value to such products and increase the market share of such dependent people through scientific research.

in consonance with the above situation and the need; the Government of Madhya Pradesh, through Madhya Pradesh Minor Forest Produce (Trade & Development) Cooperative Federation Ltd. has established a high technology based MFP processing and research centre in the name of Minor Forest Produce Processing and Research Centre (MFPPARC) with its product branded as "Vindhya Herbals"

Vision

NTFP sustainability for Equity

Mission

Develop and strengthen equitable Marketing Platform for NTFPs to enhance livelihood options

Goal

Improved economic status of Forest dependent people through scientific and participatory NTFP management

Objective

The main objectives of establishment and operation of MFPPARC are as follows :

- i. To develop and run a small and medium forest enterprise successfully on cooperative model for the purpose of enhancing economic status of forest dependent people and at the same time helping local bodies to manage their NTFP resources sustainably.
- ii. To provide a professional marketing platform for marketing of raw herbal materials which are of the importance of medicinal, aromatic and dyeing properties and mainly collected by forest dependent people of the State.

The main focus areas of operation of this centre are

- Quality control & development of standards.
- Development of processing technology for NTFP.
- Spreading awareness about herbal wealth.
- Marketing assistance for NTFP & its products.
- Processing & marketing of honey & other herbal products.

MFP-PARC is the largest & state-of-the-art manufacturing unit of Ayurvedic and Herbal product in the state under government sector. Its products are sold under registered trade name of Vindhya Herbals.

Sanjeevani Ayurveda, Bhopal



Location

Minor Forest Produce Processing & Research Centre, Bhopal is housed in a natural habitat and sylvan surroundings in south-east of Bhopal city, in precincts of Bharat Heavy Electricals Township. The centre is spread over a land area of about 11 acres. The lost avian profile and abandoned piece of forest land has come to life since the establishment of this centre. The place is well connected by network of roads, rail heads and places of herbal interest.

Resource Mobilization

It took herculean efforts in terms of obtaining financial help and technical guidance from many organizations in establishing this centre. Federation has accepted a highly challenging task to mobilize various government organizations and dovetail their schemes to finally bring out a successful project. In establishing this centre, financial grants were received from MP Mandi Board, Ministry of Tribal Affairs -GoI, Department of Ayush-GoI, National Medicinal Plant Board-GoI, TRIFED, UNDP besides MP Forest department.

Infrastructure

MFP-PARC infra-structure comprises civil infrastructure of various sections as per GMP & ISO norms, such as Honey processing unit, Herbal powders/ capsules /tableting /Asva- arishta/ Ointment production units, NABL compliant Quality assurance laboratory, Raw material storage godowns, Cold Storage, Herbal nursery, Vermi-compost shed besides other basic civic amenities; like, water, sewage disposal, road-network, electricity back-up system etc.

Human Resource

A senior Indian Forest Service Officer is posted as Chief Executive Officer as the team leader of the centre, assisted by a deputy manager, a range-officer, two foresters and few skeleton office staff. To man and service the Research and Development centre, professionals are recruited on contract basis. Gradually, as the activities of the centre expanded and consolidation process took place, more and more staffs and professional were either recruited on contract basis or posted on deputation from Forest department. While designing the HR structure for the centre, all attempts were made to keep the staffing structure as thin and smart as possible to maintain this centre as profitably operating unit.

Research and Development

A Laboratory equipped with all the facilities for herbal raw material testing is established. The laboratory constitutes three main sections, namely, Taxonomy (Botanical Identification), Analytical Chemistry and Micro- biology sections. Each section is functions under the direction of a qualified Scientist for carrying out specialized task of research and development of various protocols. This laboratory is well equipped for assessing the identity, purity and general quality of NTFPs. The process involves visual macroscopic and microscopic examination, use of thin layer chromatography, determination of foreign matter, ash, water and volatile matter, volatile and fixed oils, swelling index, foaming index, characteristic marker compounds including quantification of contaminants such as pesticide residue, heavy metals and micro-organisms. The laboratory setup for R & D and QC work is well equipped with the advanced

technology instruments/ equipments such as, Gas Chromatograph, High Performance Liquid Chromatograph, U V-vis Spectrophotometer, FTIR, Computerized moisture analyzer, High precision electronic balance, High precision Electronic Microscope for powder microscopy, Muffle furnace, Gel electrophoresis, PCR, Stability chambers, HPTLC, AAS, LCMSMS and other peripherals required for quality evaluation of the plant produce.

Quality Control and Standardization Development Program

Under this program, analysis of different active elements or marker constituent present in different medicinal & aromatic plants has been taken to make them commercially viable. The awareness of Quality parameters prevailing in the national and international market has been provided to the cultivators/collectors aiming at production of good quality raw material. NTFP/ Herbal examination (testing) facility of this lab has been also made available to general public.

Quality Control Laboratory at MFP-PARC offers:

- Development of testing methods for quality evaluation of medicinal plants.

- Study the quality parameters of the raw material prior to processing and of the finished products.
- Testing the plant drug during simple industrial processing techniques such as pulverizing, sieving, grading, straining etc.
- Testing of commercial samples of plant drugs - crude and finished products.
- Establishment of quality standards particularly in absence of local standards regarding the moisture, purity, forms etc.
- Generating data of the quality picture of honey in the state and providing world class testing facilities for honey to the collectors.

Honey processing

MFP-PARC has a modern honey processing unit where natural multi-flora honey collected from forests is processed by a state-of-the-art processing plant designed in consultation with Central Bee Research Institute (CBRI), Pune, India. The Annual capacity of the plant is 24 tonnes. The processed honey is marketed as Vindhya Honey. To tap the huge potential of rock honey production in MP a stakeholder based network for honey collection is under process of development.



Honey Processing Unit, MFP-PARC

Herbal Processing Section

Ayurvedic drug production operations are supervised by well qualified & highly experienced Ayurveda professionals. The center has a state of the art processing facility to produce herbal and ayurvedic products from natural herbs and other ingredients. Currently, the center is producing about 349 classical and patented herbal products under GMP & ISO 9001:2000 certifications. For this production activity, the raw materials are procured mainly through the primary forest produce co-operative societies. In addition to these

societies, the raw material is also procured from JFMCs, self help groups and cultivators of MAPs.

The classical and patent Ayurvedic herbal products comprises of Single Herbal Churna; Classical herbal churna, Ayurvedic oils, Asavas and Arishtas, Vati/ Gutika/ Tablet, Guggulu, Ras/Mandur/Bhasma, Pak/Avlehas; Patent creams/ointments, Patent capsules and other items such as Nutraceuticals, Dental powders and Aonla supari etc. Nearly 300 tonnes of raw material is consumed and processed annually. The number of products manufactured under various categories is given in Table

S.No	Product Category	Products
1	Classical Ayurvedic Churnas (Single & Compound)	121
2	Patent Herbal Capsules	30
3	Ayurvedic Oils	28
4	Aasavas & Aarishtas	41
5	Patent Ayurvedic Churnas	08
6	Patent Creams & Ointments	05
7	Tablet/Gutika/Gugglu	92
8	Paak/Avleha	06
9	Mandur/Bhasm/Parpati	07
10	Honey	01



Automatic liquid filling line, MFP-PARC

Storage

The unit is equipped with GSP(Good Storage Practices) storage facilities for raw material storage sourced from primary societies. Total warehousing capacity housed in the campus is 400 tonnes. These facilities were developed with the assistance made available by NMPB(National Medicinal Plant Board), Ministry of Tribal Affairs, GoI and MFP Federation.

Some of the unique specialty of products manufactured in MFP-PARC under Vindhya Herbal brand is :

- Product of a unit which is a largest successful cooperative body in the state.
- Mostly all products are organic in nature.
- Our products are tested in state-of-the-art in-house laboratory.
- Most of the raw material is sourced from village level minor forest produce cooperative societies.
- ISO 9001: 2000, ISO 14000 and GMP (Good Manufacturing Practices) certified unit.
- Training programs are organized to inculcate awareness about good harvesting practices among the collectors of medicinal & aromatic plants.
- Training programs are also organized for farmers to impart agro-techniques associated with medicinal plants cultivation.
- Profits are returned back to the primary cooperative societies.

Training and Herbal Awareness Program

Looking into the interest of the people in the

traditional healing system and the use of herbal products, the knowledge of the medicinal plants formulations, their consumption pattern and other aspects is made available to students, farmers, small cultivators and people at large through Herbarium, Gene Bank establishment, well developed nursery and demonstration of technique of producing vermi-compost/bio pesticides. Training is imparted to tribal/farmers so that herbal awareness reaches the masses. Regular study and demonstration tour of the centre is also conducted for the students of pharmacy colleges. Awareness generation is also done by organizing Van-melas, seminars, nukkad-sabhas, buyers-sellers meet, debates, competitions and through participation in other trade fairs.

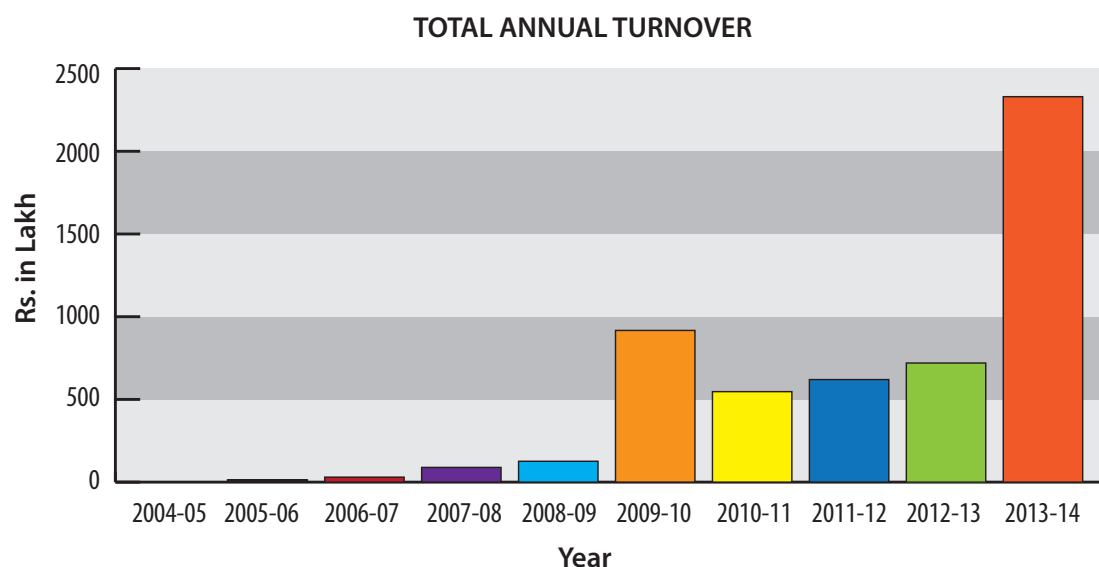
Marketing

The retail marketing of Vindhya Herbal products in Madhya Pradesh is done by a chain of sale outlets named as “Sanjeevni Ayurveda” established in various districts. These are exclusive sale outlets of Vindhya Herbal products. At these centers qualified Ayurvedic doctors also give their services to common people. At present there are 26 Sanjeevni Ayurved sale outlets all over the state. Vindhya Herbal products are available online at www.vindhya herbals.com.

Government of MP has declared this center as a state pharmacy and Department of AYUSH – GoI has also recognized it as one of the eight state pharmacy of the country for the purpose of ASUs drug production and supply to Govt departments. It is on these strength, the products manufactured under brand name of Vindhya Herbal is procured regularly by Ayurvedic (AYUSH) department of states of Haryana, Rajasthan, Andhra Pradesh, Orissa, Madhya Pradesh, J&K, Karnataka and Punjab.

Finances:

MP MFP Federation provides necessary fund as per approved annual budget for production related activities of the centre. The annual budgetary provision ranges from Rs 18-20 Crores. The total annual turnover for 2012-13 was Rs 24 crores. The turnover target for 2013-14 is Rs 300 million. MFPPARC since its inception is showing impressive annual growth in its turnover. Our aim is to further increase it to Rs 1000 million in next five years.



Future Marketing Targets

The targets which have set for increase in retail turnover are :

- Retail Turnover target from Rs 1.90 cr to Rs 5.0cr
- Hiring professional agency for detailed marketing plan preparation.
- Professionalization of 24 Sanjeevni Outlets
- Sanjeevni Outlets at MP & Madhyanachal, New Delhi
- Sanjeevni outlets in Important National Parks
- Collaboration with Jaikisan Suchna Kendra for Rural Online marketing
- International packaging
- Market expansion out of M.P.
- New Veterinary product development for animal husbandry requirements.
- Network development for Rock Honey collection

M.P. State Minor Forest Produce Co-operative Federation, Bhopal has taken a lead in producing certified and reliable herbal care products for the easy reach of the masses. Pioneered researches have converted ayurveda's herbal tradition into a complete range of proprietary formulations at Minor Forest Produce Processing & Research Centre (MFP-PARC) Bhopal dedicated to healthy living and longevity.

