



# Challenges and Strategies of Marketing of Medicinal Plants

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Received: 30 Jul 2023; Received in revised form: 28 Aug 2023; Accepted: 09 Sep 2023; Available online: 15 Sep 2023

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**Abstract**— *Fieldwork undertaken in specific locations between 2019 and 2021 is crucial to the findings of this study. This study draws on secondary data collected from interviews with key informants at medical drug manufacturing firms in Rajasthan's Jaisalmer area. The study's overarching goal is to assess the current state of the market for medicinal plants, with a focus on easily accessible varieties, as well as the opportunities, threats, and tactics associated with marketing these products in the region under investigation.*

**Keywords**— *Challenges, Strategies, Marketing, Medicinal Plants.*

## I. INTRODUCTION

Medicinal plants have been giving mankind with natural remedies and therapeutic compounds to treat a wide range of ailments for centuries, sometimes without recognition or praise. These plants, whose tales are woven into the tapestry of humankind, have been an integral part of both traditional medicine and modern science and medicine. Even as our understanding of medicinal plants grows, they continue to offer considerable promise as potential answers to the challenges facing contemporary medicine. This in-depth look into the realm of medical plants sheds light on the importance of medicinal plants throughout history, their many practical uses, their ecological worth, and the rapidly expanding body of knowledge that surrounds them.

Medicinal plants are those that have a long history of being used to cure a wide range of medical conditions. These plants have been used for this function because they contain compounds with medicinal properties. These plants have been used for thousands of years in ancient medicinal practices around the world, and they continue to be crucial in modern Western medicine, pharmaceuticals, and herbal remedies. Plants are used in several traditional medical practices. Because of their potential to cure, prevent, or relieve a wide range of human health disorders, the natural chemicals found in medicinal plants are in great demand.

The use of therapeutic plants is highly valued in the Indian medical traditions of Ayurveda, Siddha, and Unani. These

customs have been around for centuries. They have played, and continue to play, a significant part in India's healthcare delivery system, treating a broad variety of medical ailments and adding to the country's rich cultural heritage. However, several species of medicinal plants in India have been depleted due to excessive harvesting, the loss of habitat, and the use of harvesting techniques that are not sustainable. It has become clearer in recent years that protecting medicinal plants and making responsible use of these precious resources is essential to ensuring their long-term availability.

## II. LITERATURE REVIEW

**Nautiyal, Sunil & Smitha, K. (2020)** All of India's biological zones are home to the wide variety of flora and fauna that call India home. The value of traditional medicinal herbs has been acknowledged, and a large segment of the Indian people depends on them for survival. The cultivation of medicinal plants has the potential to generate cash, which may improve living conditions and lessen poverty in the local area. But presently, many businesses involved in the manufacturing of fragrance compounds and medicines are placing heavy demands on the natural environment and habitat of India's medicinal plants. This research aims to combine existing knowledge on medicinal plant growing in India and to examine the potential and constraints of medical plant production in the

country. An attempt has been undertaken to provide the groundwork for increasing food security in India by maximizing the harvest of medicinal plants. Two incidences, one involving the Bhotiya of the Central Himalayan Region and the other involving the Soliga of the Biligiri Ranga-swamy Temple Tiger Reserve (BRTR), have been recorded as the basis for this endeavor. Finally, a SWOT analysis of India's medicinal plant industry and food security has been presented.

**Khasim, Shaik & Long, Chunlin (2020)** Traditional medical practices have relied heavily on plants as a means of treating illness and promoting wellness. Both modern and traditional medicinal methods across the globe continue to make extensive use of plants. This is so even though we have made great strides in the creation of synthetic drugs and antibiotics. Traditional medicine is still used by one-third of the global population today because it is safe and effective in treating a wide range of illnesses. This book serves as a comprehensive introduction to medicinal plants, including topics such as their biotechnology, applications, varieties, and dialogues. Biodiversity and conservation, ethnobotany and ethnomedicine, bioactive compounds from plants and microbes, and biotechnology are the four main branches of research in the field of medicinal plants. There is a wide range of study into medicinal plants that is represented here. Each part includes discussions on current events. Biotech, botany, microbiology, and pharmaceutical science researchers and graduate students will find this book to be an indispensable resource. Medical professionals (especially those who practice Ayurveda and allopathy), the pharmaceutical industry (particularly those involved in drug creation and synthesis), and agricultural scientists may all benefit from this resource.

**Raj, Dr & Jhariya, Manoj (2019)** There was evidence that plants were useful for both food and medicine as far back as ancient times. Medically useful plants have long been an important therapeutic aid in treating a broad range of human ailments. People in rural areas of India often rely on traditional remedies. The indigenous knowledge that has allowed these remedies to develop throughout time has been passed down from generation to generation. These medicinal resources are under constant threat from environmental deformations, especially climate change. Therefore, it is crucial to implement prompt measures and legislative legislation to protect these global resources. Use of medicinal plants in a sustainable manner has the potential to greatly benefit the preservation of these species. Similarly, in-situ and ex-situ conservation techniques are very important for maintaining their status and are useful strategies for making the most of the plants' economic potential. The purpose of this chapter is to examine the state of medicinal plants, both wild and cultivated, by looking at

factors including their diversity, consumption habits, risk of extinction, conservation efforts, and contribution to rural and tribal communities.

**G.B, Deepa & Mark, Arthur (2017)** The environment on Earth is degrading at an alarming pace due to a variety of human initiatives. Such degradations have been taken extremely seriously by the international community, as has the need to safeguard biodiversity for future generations. Sincere efforts have been made by international organizations to understand the existent environmental concerns, and legislation and regulatory measures have been initiated to advise and aid the member states. In turn, this allows member nations to implement regional conservation and sustainable use projects. The goal of this research is to compile a list of existing efforts at the international and national levels to formulate policies and regulatory measures that aid in the conservation and sustainable use of natural resources, especially medicinal and aromatic plants.

**Chen, Shilin & Yu, Hua & Luo, Hongmei (2016)** Despite the quick rate at which many medicinal plants are becoming extinct, herbal treatments made from them remain in great demand across the globe. Examining global trends, developments, and possibilities for methods and procedures for the conservation and sustainable use of medicinal plant resources, this article offers a reliable reference for the preservation and responsible use of these valuable natural assets. We emphasized the importance of incorporating conservation strategies (including in situ and ex situ conservation and growing methods) and resource management (including appropriate farming practices and solutions for sustainable use) into the process of ensuring the long-term viability of medicinal plant resources. This is so because conservation efforts assist guarantee that healing plants will be accessible in the years to come. We propose using biotechnological techniques to boost medicinal plant production and tailor their efficacy. These techniques include tissue culture, micropropagation, synthetic seed technology, and procedures based on molecular markers.

### III. MARKETING CHANNELS OF MEDICINAL PLANTS

There are two major influences that have led to the growth of medicinal plants: pull and push. The pull effect, in this context, first refers to the factors that entice farmers to grow therapeutic and aromatic crops rather than more conventional crops. This phenomenon is influenced by a number of factors, such as price competition, preexisting distribution routes, price guarantees provided by intermediaries, and the monopolistic control imposed by a group of producers on the cultivation of specific

commodities. Uncertainty in the net income from traditional seasonal crops may be ascribed to flaws in variables and product markers, which has a significant impact on the push effects. There are already well-established markets for medicinal and aromatic crops, therefore their development is promoted. There are three main marketing avenues to pursue in this industry.

Gatherer/Cultivator-----Pharmacy

Sida, Desmodium, Pseudarthia, Kaempferia, and many more are marketed in this way since they are easily replaced or adulterated. While the channel maintains its dedication to the signed-up farmers, in this case the gatherer gets the whole of the money provided by the pharmaceutical user.

Gatherer/Cultivator -----Trader-----  
Pharmacy

The market often employs the pathway from gatherer to pharmacist to trader. There is a little widening of the price gap between this channel and the preceding one. The trader is primarily responsible for generating income. This strategy involves the introduction of a new party—a commission agent. A commission agent buys the raw materials from the farmer or gatherer and then sells them on to the dealer. Increases in market margin are seen. About 70% of the value due to the farmer is paid to the commission agent according to the pharmacy's pricing structure. This is accomplished by combining product acquired from multiple gatherers and growers (sellers) and then selling the combined batch to pharmacies and/or dealers in large quantities. During the Eighth Five Year Plan, the Department of Agricultural and Cooperation, Ministry of Agriculture launched the Central Sector Scheme on Development of Medicinal and Aromatic Plants. There is 500 billion rupees for the plan. At 16 State Agricultural Universities and 3 Regional Research labs (RRL) affiliated with the Council of Scientific and Industrial Research (CSIR), initiatives were implemented to increase the production of high-quality planting material, as well as the creation of herbal gardens and regional analytical labs. Beginning in 2016, the State Department of Horticulture and Agriculture led efforts to build demonstration plots that included seed multiplication facilities. During the whole Ninth Five Year Plan, the program received a total of Rs.14.50 crores in funding. Area extension and farmer training were two examples of the Ninth Five Year Plan's efforts that were carried over into the next Ten-Year Plan. Beginning in November of 2020, state agencies will be able to include various components into their operating strategy.

Table 1 Future demand for Medicinal Plants for drug production

Medicinal Plants	Quantity available at present (in Kgs.)						Expected quantity in future (in Kgs)					
	Mean	Median	S. D	Min	Max	Total	Mean	Median	S. D	Min	Max	Total
Sida rhombifolia	1260	300	1372.22	200	3000	6300	4380	900	5155.28	600	12010	21900
Tinospora cordifolia	220	.00	303.31	.00	600	1100	440	.00	606.63	.00	1200	2200
Desmodium gangeticum	812	400	629.06	300	1500	4060	2284	900	2023.93	720	4500	11420
Salopami (pseudarthria viscida)	760	300	676.75	200	1500	3800	2240	900	2073.16	400	4500	11200
Adhatoda vasica	890	400	806.54	250	2010	4450	2160	1200	1934	500	4500	10800
Cassia seena	640	300	585.66	200	1500	3200	1320	600	1136.66	400	3000	6600
Adatoda	660	600	328.63	300	1000	3300	1660	1200	853.23	900	3000	8300

With the use of the survey questionnaire, we were able to estimate future medicinal plant supplies (Table 1). Through the examination of (a) the existing literature and (b) data obtained from the investigation on (i) the utilization of botanicals by herbal manufacturing units and (ii) the trading of plant raw drugs in Mandis, which are centers of raw drug commerce, a comprehensive compilation of 960 species of medicinal plants has been derived, which serve as the basis for 1289 botanical raw drugs traded within the country. All species recognized as potential substitutes, adulterants, or equivalents in the commercial trade of important botanical raw medicines are included in the presented inventory. Whether or whether they have been discovered in studies of the herbal industry or raw medicine markets, the species on this list are all heavily harvested from their native habitats. The list's goal is to accurately acknowledge authors while connecting trade or common names to the most up-to-date botanical nomenclature.

#### IV. MARKETING STRATEGIES

1. A major increase in the utilization of native plant species and the collecting and commerce of alien species has resulted from the worldwide desire for ecologically friendly products, especially natural treatments, Flavors, and fragrances.
2. Second, determining who the ultimate sellers and buyers are is a major issue in this sector.
3. Third, there has to be less of a gap between producers/collectors and dealers or buyers since the present gap is large and unjust.
4. Fourth, it's important to set up links between the NTFPs industry and its producers and collectors to improve everyone's knowledge of and involvement in the sector.
5. The evaluation and management of the resource base, the implementation of optimal harvesting and processing procedures, the resolution of trade concerns, and the protection of intellectual property rights

associated with traditional medicines as practiced by indigenous communities all necessitate the creation of a comprehensive management action plan.

6. For the creation of conservation, growing, and harvesting systems that may successfully fulfill the demand for cheap and easily available pharmaceuticals, investments are necessary.
7. Concurrently, efforts must be made to preserve local and cultural knowledge about the best ways to utilise a broad variety of biological resources, and to put that information to use as soon as possible.

## V. CONCLUSION

The success of a product's marketing campaign depends on a reliable supply of high-quality inputs. Providing the necessary scientific documentation might complicate the process of bringing innovative plants to markets. Global demand and supply dynamics for medicinal plants, herbal products, and herbal drugs are analyzed in depth to shed light on the market's intricacies and uncover opportunities for improvement. Taking into account the specific market conditions, strategies, and materials and products at play, a more in-depth evaluation of the various obstacles is required. It's possible that other businesses or even countries may benefit from learning from studies of successful marketing methods used in specific circumstances.

## REFERENCES

- [1] Nautiyal, Sunil & Smitha, K. & Kaechele, Harald. (2020). Medicinal Plant Biodiversity in India: Harnessing Opportunities for Promoting Livelihood and Food Security. 10.1007/978-3-030-32463-6\_7.
- [2] Khasim, Shaik & Long, Chunlin & Thammasiri, Kanchit & Lutken, Henrik. (2020). Medicinal Plants: Biodiversity, Sustainable Utilization and Conservation. 10.1007/978-981-15-1636-8.
- [3] Raj, Dr & Jhariya, Manoj & Yadav, Dhiraj Kumar & Banerjee, Arnab. (2019). Conservation Issues, Challenges, and Management of Medicinal Plant Resources: A New Dimension Toward Sustainable Natural Resource Management. 10.1201/9780429057274-5.
- [4] G.B, Deepa & Mark, Arthur & Rao, Jagannatha. (2017). Global and national initiatives on policy and regulatory measures for conservation and sustainable use of medicinal and aromatic plants.
- [5] Chen, Shilin & Yu, Hua & Luo, Hongmei & Wu, Qiong & Li, Chun-Fang & Steinmetz, Andre. (2016). Conservation and sustainable use of medicinal plants: Problems, progress, and prospects. Chinese Medicine. 11. 10.1186/s13020-016-0108-7.
- [6] Kasagana, V.N. & Karumuri, S.S. (2011). Conservation of medicinal plants (past, present & future trends). 3. 1378-1386.
- [7] Shinwari, Zabta. (2011). Efforts On Conservation and Sustainable Use of Medicinal Plants of Pakistan. Pakistan Journal of Botany. 43. 5-10.
- [8] Malik, Rashid & Siddique, M.A.A. & Sofi, P A & Butola, Jitendra. (2011). Ethnomedicinal Practices and Conservation Status of Medicinal Plants of North Kashmir Himalayas. Research Journal of Medicinal Plant. 5. 515-530. 10.3923/rjmp.2011.515.530.
- [9] Kala, Chandra Prakash. (2011). Medicinal Plants and Sustainable Development.
- [10] Krishnan, Peringattulli & Decruse, S. & Radha, R. (2011). Conservation of medicinal plants of Western Ghats, India and its sustainable utilization through in vitro technology. In Vitro Cellular & Developmental Biology - Plant. 47. 110-122. 10.1007/s11627-011-9344-9.
- [11] WHO, 2003. WHO guidelines on good agricultural and collection practices (GACP) for medicinal plants, P.1
- [12] Winston, David & Maimes, Steven. "Adaptogens: Herbs for Strength, Stamina, and Stress Relief," Healing Arts Press, 2007.
- [13] Wishvas Rane (2003). Have DRUG PRICES fallen? Economic and Political Weekly. Vol. XXXVLLI No.44.Pp4640-4642.
- [14] Zabta K. Shinwari (2010), Medicinal plants research in Pakistan, Journal of Medicinal Plants Research Vol. 4(3), pp. 161-176.
- [15] Zabta Khan Shinwari and Syed Shahinshah Gilani, (2003) Sustainable harvest of medicinal plants at Bulashbar Nullah, Astore (Northern Pakistan), Journal of Ethno pharmacology, Volume 84, Issues 2-3, Pages 289-298