

The Role of Herbal Drugs in Human Beings in the Shekhawati Region, Rajasthan

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Abstract: Herbal drugs have been integral to human health in the Shekhawati region of Rajasthan, particularly in rural and semi-arid areas where access to modern healthcare is limited. The region's traditional knowledge of medicinal plants, passed down through generations, has been crucial in treating various ailments, enhancing immunity, and supporting preventive healthcare. This study explores the diversity, usage, and therapeutic significance of herbal drugs among the local population. Primary data were collected through surveys and interviews with local healers (Vaidyas) and households. The study reveals that herbal remedies are extensively used for digestive, respiratory, dermatological, and chronic diseases. Sustainable harvesting, scientific validation, and community awareness are essential for preserving this invaluable knowledge.

Keywords: Herbal drugs, Shekhawati region, medicinal plants, human health, Ayurveda, traditional medicine, Rajasthan.

1.1 Introduction

The Shekhawati region, located in northeastern Rajasthan, is characterized by semi-arid conditions, sandy soils, and limited water resources. Despite harsh environmental conditions, it is rich in biodiversity, especially medicinal plants. Herbal drugs derived from these plants have been a cornerstone of healthcare in the region, addressing ailments ranging from common cold and digestive disorders to chronic illnesses like arthritis and diabetes. The reliance on herbal drugs is both cultural and economic, reflecting a sustainable interaction between humans and their natural environment.

1.2 Historical Background

The tradition of herbal medicine in Shekhawati has been closely linked with Ayurveda, folk medicine, and tribal knowledge. Local healers, known as Vaidyas or Bhatt Pansaris, have preserved the knowledge of plant-based remedies for centuries. Classic Ayurvedic texts such as Charaka Samhita and Sushruta Samhita provide guidance on preparation, dosage, and therapeutic uses of plants, which continue to influence local practices. Historical documentation shows that herbal drugs were not only medicinal but also held spiritual and social significance.

1.3 Objectives

1. To identify commonly used herbal drugs in the Shekhawati region.
2. To examine their role in preventing and curing human diseases.

3. To document the traditional knowledge of local healers and households.
4. To assess socio-economic and cultural aspects of herbal drug usage.
5. To suggest strategies for sustainable use and scientific validation of herbal drugs.

1.4 Methodology

- 1. Study Type:** Qualitative and quantitative field-based research.
- 2. Data Collection:** Primary data were collected via structured interviews and questionnaires from 50 local households and 20 traditional healers. Secondary data were obtained from books, journals, and government reports.
- 3. Data Analysis:** The data were analyzed to identify patterns in plant usage, frequency of ailments treated, parts of plants used, and preparation methods.

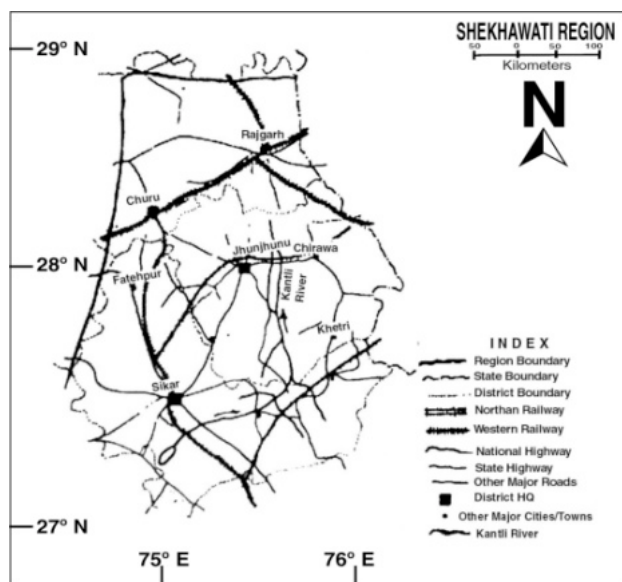
1.5 Study Area

1.6 Study Area

Figure-1.1 shows the area under study i.e. Shekhawati region which is located in the north-eastern part of Rajasthan state and the region has geographical extension from 26°26' to 29°20' N latitude and 74° 44' to 76°34' E longitude on the map of Rajasthan. The area under study covers fully or partly three districts, namely Churu, Jhunjhunu and Sikar. Churu district's out of 7, only 3 tehsils fall under Shekhawati region (Churu, Rajgarh and Taranagar) whereas Jhunjhunu district as a whole with its six tehsils (Buhana, Chirawa, Khetri, Jhunjhunu, Nawalgarh and Udaipurwati) in which Buhana tehsil emerged

out as a new tehsil on the map of Jhunjhunu district (2001), it was no more existence in the year of 1991 and Sikar district also covered fully with it's six tehsils (Data Ramgarh, Fatehpur, Laxmangarh, Neem ka Thana, Sikar and Shri Madhopur). The region has 23 Panchayat Samitis in all. Thus, the region under study has 15 tehsils in total with it's total 15343 sq. km. geographical area which makes 5.6% of the state's total. At the part of district-wise contribution by area point of view in Shekhawati region it is observed that part and portion of Churu district contributes 29%, Jhunjhunu district contributes 31% and Sikar by 40%, respectively.

Figure- 1.1 Location Map of Shekhawati Region



Among these tehsils area point of view, the tehsil of Churu is largest one and Buhana smallest, respectively. District-wise area point of view Sikar stands at first position which is followed by Jhunjhunu and lowest contribution is made by Churu i.e. 1683 sq. km. only.

At the part of population, Shekhawati region contributes 8.7 percent of the state's total in which sex-ratio is 948 females per thousand males in Total Population whereas it is very low i.e. 887 in Child Population for the area under study. The region obtains high Literacy rate which is about 10% more than that of the state's average. Among tehsils, Buhana ranks at first position while as Neem ka Thana contributes lowest in this aspect. The region obtains high density (244) i.e. 50 percent more than that of state's average which is 165 persons per sq. area 2001. The region has also Slum population but it is very low or to say negligible i.e. 2.5% only of the urban area's total.

The whole region has distribution of two types of soils; Sandy soil and Red Loamy soil. The former soil type has obvious distribution in Churu district, the areas of sand dunes topography; the later soil group is mostly distributed over the districts of Jhunjhunu and Sikar (classification based on dominancy, availability and agricultural productivity). The distribution of soil type and it's physical as well as chemical

nature is a significant aspect from vegetation as well as plant species distribution point of view.

On the basis of another type of soil type classification according Prof. Thorpe and Smith based on the origin of the soil, the observations revealed in this direction that Remosols type of soil has distribution in the areas of sand dunes topography; all three tehsils of Churu districts have, Red sandy soil which is more alkaline in nature. Hilly topography soil and Riverine soil have their distribution according the distribution of habitat of study area.

1.6 Observations

I. Diversity of Plants: Over 50 plant species are commonly used in herbal medicine.

Types of Ailments Treated:

1. Digestive disorders (e.g., Aloe vera, Trigonella foenum-graecum)
2. Respiratory problems (e.g., Ocimum sanctum, Adhatoda vasica)
3. Skin diseases (e.g., Neem, Aloe vera, Berberis)
4. Chronic diseases (e.g., Ashwagandha, Guduchi)

II. Preparation Methods: Decoctions, pastes, powders, oils, and infusions.

III. Socio-economic Role: Many households sell medicinal plants or herbal formulations as supplementary income.

1.7 Discussion

Herbal drugs in Shekhawati serve as primary healthcare resources. The reliance on herbal remedies is influenced by affordability, accessibility, and trust in traditional methods. Modern medicine is often used in combination with herbal drugs. The study emphasizes that sustainable harvesting, cultivation, and scientific validation are essential for the long-term preservation of herbal knowledge. Additionally, integrating traditional knowledge with modern healthcare can improve public health outcomes and reduce dependency on synthetic drugs.

1.8 Conclusion

Herbal drugs are integral to human health in the Shekhawati region. They address diverse health issues, preserve cultural heritage, and contribute to socio-economic well-being. Protecting and documenting this knowledge, promoting sustainable use, and encouraging scientific research can ensure that these traditional practices continue to benefit human health for generations.

1.9 Recommendations

1. Promote cultivation of medicinal plants to reduce pressure on wild resources.
2. Conduct scientific research to validate therapeutic efficacy and safety.

3. Document traditional knowledge in digital databases for future reference.
4. Encourage local communities to use herbal drugs alongside modern medicine responsibly.
5. Develop government-supported training programs for young healers and farmers.

References

- [1.] Chopra, R.N., Nayar, S.L., & Chopra, I.C. (1996). Glossary of Indian Medicinal Plants. New Delhi: CSIR.
- [2.] Kirtikar, K.R., & Basu, B.D. (1999). Indian Medicinal Plants (Vol. I–IV). Dehradun: International Book Distributors.
- [3.] Jain, S.K. (2001). Medicinal Plants of India. Lucknow: Indian Council of Agricultural Research.
- [4.] Sharma M.K. (2007). Medical Plant Geography, Rachana Publication, Jaipur
- [5.] Sharma, M.K. (2018). Applied Phytogeography of Medicinal Plants in Shekhawati Region, Rajasthan (Ph.D. thesis). University of Rajasthan, Jaipur.
- [6.] Sharma M.K. et.al. (2023). Biodiversity of Medicinal Plants. S. N. Publishing Company, Jaipur
- [7.] Sharma M.K. et.al. (2023). Phyto-Chemistry. S. N. Publishing Company, Jaipur
- [8.] Sharma M.K. et.al. (2025). Global Biogeography : Present, Past and Future. S. N. Publishing Company, Jaipur
- [9.] Sharma M.K.(2025) Geographical Basis of Sustainable development for Shekhawati Region, Rajasthan, Journal - Research Reinforcement, Volume-(12), Issue- 2 (Nov.2024 to April-2025) , 2348-3857, p.185-189.
- [10.] Sharma M.K.(2025) Regional Geography and Sustainable development : The Case Study of Shekhawati Region, Rajasthan, Journal -IJGAES, Volume-(13), Issue-1(Jan.- Jun.,2025) , 2348-0254, p.25-33.
- [11.] Singh, R., & Singh, H. (2010). Role of medicinal plants in rural healthcare in Rajasthan. Journal of Medicinal Plants Studies, 2(3), 45–52.
- [12.] Patil, P., & Patil, S. (2015). Traditional herbal medicine in semi-arid regions of India. International Journal of Herbal Medicine, 3(4), 10–18.
- [13.] Nadkarni, K.M. (2002). Indian Materia Medica. Bombay: Popular Prakashan.