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## The scope and market of alternative medicine and India's potential to become a global distributor

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### ABSTRACT

*The use of alternative medicine and therapies has been on a rise in the last few decades. Herbal medicine has become popular not just in developing countries but in Europe and America as well. India, with its rich heritage of non-conventional medical treatments and therapies along with its natural abundance of flora and fauna can become an international hub for herbal medicine. In this paper, we explore the scope of alternative medicine and analyze the market available for the same both domestic and foreign. We also try to narrow down on significant hurdles which Indian herbal exports face and solutions for the same.*

**Keywords**—Herbal medicine, Market potential, Market share, India, Export

### 1. INTRODUCTION

Although the scope and use of alternative medicine have increased significantly, its market has not been critically analyzed yet. Through this paper, the reader will grasp an understanding of the hidden potential of alternative medicine as well as the benefits associated with the use of herbal treatments.

It has been known for a while that allopathy has a few disadvantages including but not limited to acute allergic reactions, frequent drug resistance and only short term relief. In the last few decades, both the public as well as the scientific community has begun to appreciate the role of alternative medicine in treating both minor and major illnesses. In this paper, we analyze the scope of herbal medicine, the market value and India's share in the sale of herbal products. We also mention the hurdles faced by the Indian herbal producers in becoming global distributors.

The data and corresponding observations concluded from the analysis of said data shall be particularly useful for Biotechnologists from an academic perspective as well as Bio-business entrepreneurs who plan to work with herbal medicine and treatments but are unsure of the market available.

This paper provides sufficient information about the scope of the herbal medicine market and what it lacks. This information can be utilized by these Bio-business entrepreneurs to ensure that they have an edge in the market by assuring the buyer of the quality of the product being sold. They will also realize, by means of this paper, the need to network and change the consumer's perspective of Indian made products by providing guarantees and full refund in case of faulty, defective or an inferior quality product.

### 2. HERBAL MEDICINE

Herbal medicine, or phytotherapy, is the investigation of utilizing homegrown solutions for treating the sick. It consequently covers everything from therapeutic plants with ground-breaking activities, for example, Digitalis and Belladonna, to those with very delicate activity, for example, chamomile, mint and numerous others.

Alternative medicine has found principle use in dermatological treatments. According to survey data, 35–69% of patients with skin disease have used complementary and alternative medicine (CAM) in their lifetime.

### 3. HOMOEOPATHY

Homoeopathy was born near the end of the 18th century and predates modern principles of pharmacology. It is still the most widely sought alternative system among patients favouring CAM for the treatment of their skin diseases [20]. Dermatologic conditions for which homoeopathic remedies had been reported anecdotally to be useful include seborrheic dermatitis, acne,



Several indigenous plant species have been patented in India under the geographical patent status and researches are going on to establish their undisputed role in curing or treating numerous illnesses.

40 patented polyherbal formulations representing a variety of combinations of 93 Indian herbs from 44 families are available in the Indian market [25]. The global market for herbal medicines currently stands at over \$60 billion annually, with annual growth rates of between 5% and 15% [10].

### 8. THE PRESENT STATUS OF THE HERBAL MEDICINE MARKET

The herbal medicine market in 1991 in the countries of the European Union accounted for \$6 billion [6]. In 2003, the world market for herbal medicines was estimated at 60 billion US dollars [9]. According to WHO estimates, the present demand for medicinal plants is the ~US \$14 billion a year and by the year 2050, it would be ~US \$5 trillion [12]. The Indian herbal drug market share is about \$1 billion and the export of herbal crude extract generates revenue of around \$80 million [8].

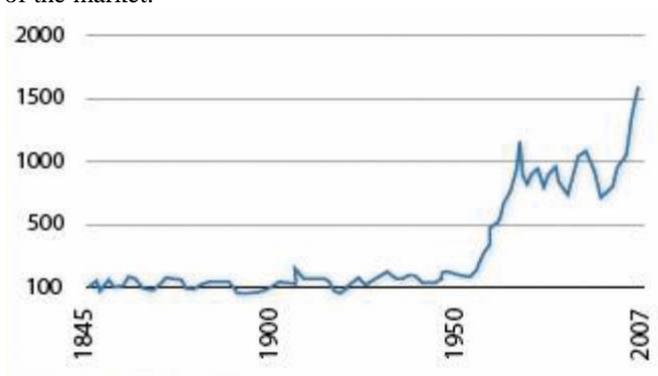
India is the second largest producer of castor seeds in the world, producing about 1,25,000 tonnes of seeds per annum [16]. The annual turnover of Indian herbal industry was estimated to be around the US \$ 300 million in Ayurvedic and US \$million in Unani medicine. In 1998-1999, it again went up to the US \$31.7 million and in 1999-2000, the total turnover was the US \$48.9 million for Ayurvedic and herbal products [18].

It is estimated that more than 7800 manufacturing units are involved in the production of natural health products and traditional plant-based formulations in India, which require more than 2000 tonnes of medicinal plant raw material annually[28,29].

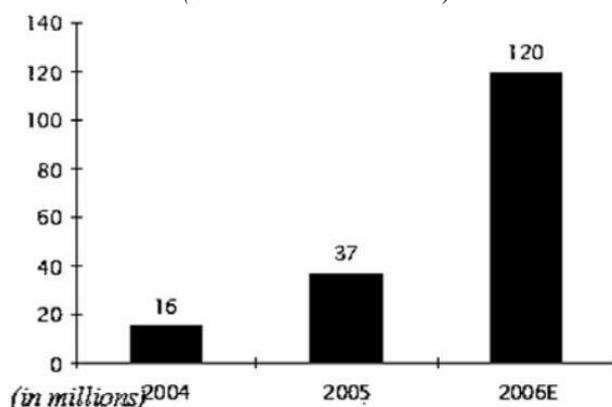
Traditional Chinese Medicine (TCM) uses more than 5000 plant species, while India uses about 7000. However, still in the international market, TCM is better established when compared to Indian Ayurvedic medicine.

Indian herbal medicines market is reputedly worth around the US \$1 billion worldwide, as against the global market for herbal medicines which is in the region of US \$62 billion, with the Chinese herbal medical market accounting for the US \$19 billion [30,31].

India seems to be lagging behind and is ranked third in the herbal medicine category, with less than 2% of global market share, while China occupies nearly 30% of the market.



**Fig. 2: Increase of export of traditional Indian herbs every year (in crores)**  
(Source: *The Economist*)



**Fig. 3: Increase of export of traditional Chinese herbs every year (in millions)**  
(Source: *International Journal of Green Pharmacy*)

The domestic herbal market has now crossed the Rs.5000 crore mark and is set to reach further heights in the future. Herbal exports from India are worth Rs.450 crore, whereas a decade back the amount was barely Rs.100 crore [32,33].

### 9. MARKET OF HERBAL MEDICINES IN WESTERN COUNTRIES

According to the World Health Organization, herbal medicines represent a market value of about US \$43 billion a year [17,22,23].

**Table 1: Contribution of various countries in the herbal medicine market in the years 1991,1996, and 1997.**

Country	Amount (US dollars)
The year 1991	
Europe	6 billion
Germany	3 billion
France	1.6 billion
Italy	0.6 billion
Others	0.8 billion
The year 1996	
Europe	10 billion
USA	4 million
Others	5 billion
The year 1997	
Europe	7 billion
Germany	3.5 billion
France	1.8 billion
Italy	700 million
United Kingdom	400 million
Spain	300 million
Netherlands	100 million

## 10. LIMITATIONS IN THE COMMERCIALIZATION OF HERBAL PRODUCTS IN FOREIGN COUNTRIES

In 1947, around 6700 tons of Derris ellipticaroots were imported into the USA from southeast Asia, but then this decreased to 1500 tons in 1963[27]. In 1990, imports of pyrethrum in the USA totalled just over 350 tons [26]. Some botanical insecticides have lost their regulatory status as approved products in North America and Western Europe. Due to this, the only botanical compound that is approved for use in the USA is neem (*Azadirachtaindica*A. Juss.) Although regulatory approval is pending in Canada and Germany. Botanical insecticides constituted 1% of the world insecticide market by 1997, but annual sales growth in the range of 10–15% seems possible [4]. Commercialization of neem for use in North America and Europe has taken many years in spite of the fact that Neem insecticides easily fulfil the criteria [5].

There have been reported unlicensed preparations of herbal medicines which account for over 80 percent of herbal sales [6]. British herbal market still remains unregistered mainly because of the two reasons: lack of acceptable data on efficacy, safety and quality, and high licensing fee [23].

In France, the list of acceptable ingredients of phytomedicines exceeds more than 200 herbs [6].

In a study of 62 medicinal samples and herbal tea samples, 18% and 9% were respectively found contaminated with *A. flavus* [24]. The majority of Ayurvedic formulations available in the market are either spurious, adulterated or misbranded [24].

## 11. CONCLUSION

- Through the study of the available data, the authors have come to the conclusion that even though India has a rich history with herbal and alternative medicine as well as is home to more than 7000 ingredients utilized in the preparation of herbal products it has failed to establish itself as a market leader.
- This can be attributed to several factors such as an absence of studies in the field of herbal medicine which has resulted in a lack of scientific evidence supporting the effectiveness of alternative medicinal products in treating illnesses. This creates apprehension in the public and deters people from purchasing herbal products.
- Secondly, the sale of unlicensed and spurious products has led to a complete lack of confidence in the public in regards to herbal medicine and treatments.
- India has the potential to become a world leader in alternative medicine, however, to do so the producers and exporters need to rebrand themselves and guarantee the consumers that their product is authentic and unadulterated.
- A scientific study to test the effectiveness of herbal treatments needs to be undertaken by the government. This data should be reproducible so that it can be shared with other regulatory bodies abroad. This will ensure that the sale of herbal exports is supported by the domestic government and is regulated and approved by the respective institute or body.
- In the coming decades, India will emerge as a leading distributor or herbal medicine.

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