

Introduction

Medicinal plants are considered as gift of nature for the wellbeing of human society. Mankind are dependable since time immemorial on medicinal plants to maintain their positive health and cure diseases. There are details description of use of medicinal plants for the benefit of human beings in various manuscripts available in different countries.

Ayurveda the ancient system of Indian medicine plays a vital role in maintenance of positive health and cure of diseases. Medicinal plants are one of the integral sources of ayurvedic medicine. It is observed that there are lots of medicinal plants which can give relief to sufferer where other measures fail to give satisfactory result.

Zinger, Turmeric, Indian gooseberry (Amla), Holey basil are examples of some highly economically valuable medicinal plants. In Indian market fresh rhizome of zinger cost Rs.1000-1500/-per kg, root of turmeric cost Rs 1000-1500/-per kg, fruit of Indian gooseberry (Amla) cost Rs.1200-1500/-per kg and fresh leaves of holey basil cost Rs.150-200/-per kg.

Anxiety, Hypertension, Diabetes Mellitus etc. are common disorders in the present era. These ailments can be controlled with regular use of medicinal plants without any adverse effect. Further it is also to be noted that the medicinal plants which are used for these conditions bears highly economic value along their export rate is also satisfactory.

Indian atmosphere is favorable for cultivation of these medicinal plants and proper strategy in this aspect will definitely help the growth of Indian economy.

Indian and Global Market for Medicinal Plants

Medicinal plants are considered as rich resources of phytochemicals which are very beneficial in restoring health and cure ailments.

China, France, Germany, Italy, Japan, Spain, UK and US are largest global market for medicinal plants. China is top in this list and trade of US has been growing at an average of 10% per annum.

Chinese state media reported that 57 numbers of traditional medicinal centers were under development in places like the UAE, Germany and France. Traditional Chinese Medicine (TCM) is available more than 180 countries and the industry is worth more than \$60 billion a year.

The global trade in plant-based drugs is estimated as \$32-43 billion which is expected to increase US \$500 billion in the 21st century. According to WHO the international market of herbal products will grow to \$5 trillion by the year 2050.

According to Export-Import bank of India there are 880 numbers of medicinal plants species involved in all India trade. Another survey conducted by the Ministry of Environment and Forest; Government of India reveals that there are over 8000 species of medicinal plants grown in the country. About 70% of these plants are found in the tropical forest spread across the Western and Eastern Ghats.

Trade in medicinal plants in India was estimated at Rs2,300 crore, which is expected to increase to Rs5,000 crore by the turn of this century.

Survey conducted by the Confederation of Indian Industry (CII) Indian Ayurvedic industry to grow to Rs 30,000 crore by the end of the 2018.

Considering the economic importance of medicinal plants there is an urgent need to cultivate them with the help scientific knowledge. It will help to explore their full economic potential and save them from extinction.

CULTIVATION AND PROPOGATION OF SOME MEDICINAL PLANTS HAVING HIGH ECONOMIC VALUE

There are some medicinal plants demand of which are very high. India is the richest source of flora and fauna. Geographical variations provide India different types of climate, soil type and environment.

Pudina (*Mentha spicata*), Tulsi (*Ocimum sanctum*), Satavari (*Asparagus racemosus*), Vacha (*Acorus calamus*) are examples of some economically valuable medicinal plants. These can be cultivated in a large scale with the help of modern scientific technology in suitable places of the country.

Table-1

Showing Hindi, English and Botanical names, Family, Useful medicinal parts of some economically valuable Medicinal Plants.

Sl. No.	Hindi Name	English Name	Botanical Name	Family	Useful Parts
01	Pudina	Common Mint	<i>Mentha spicata</i>	Lamiaceae	Whole plant
02	Tulsi	Holy basil	<i>Ocimum sanctum</i>	Lamiaceae	Whole plant
03	Safed Musli		<i>Chlorophytum tuberosum</i>	Liliaceae	Root
04	Ada	Zinger	<i>Zingiber officinalis</i>	Zingiberaceae	Rhizome
05	Brahmi	Thyme leaved gratiola	<i>Bacopa monnieri</i>	Scrophulariaceae	Whole plant
06	Haldi	Turmeric	<i>Curcuma longa</i>	Zingiberaceae	Rhizome
07	Satavari	Wild asparagus	<i>Asparagus racemosus</i>	Liliaceae	Tuberous Root
08	Bach	Sweet flag	<i>Acorus calamus</i>	Araceae	Tuberous root
09	Amla	Indian rose berry	<i>Embelica officinalis</i>	Euphorbiaceae	Fruit and Seed
10	Aswagandha	Indian gingseng	<i>Withania somnifera</i>	Solanaceae	Root
11	Bahara	Belliric myrobalan	<i>Terminalia bellirica</i>	Combretaceae	Fruit and Seed
12	Harar	Chebulic myrobalan	<i>Terminalia chebula</i>	Combretaceae	Fruit and Seed
13	Pipulmul	Indian long pepper	<i>Piper longum</i>	Piperaceae	Fruit
14	Mulathi	Liquorice	<i>Glycyrrhiza glabra</i>	Fabaceae	Root
15	Methi	Fenugreek	<i>Trigonella foenum graecum</i>		Leaf and Seed
16	Gudmari	Small Indian Ipecacuana	<i>Gymnema sylvestris</i>	Asclepiadaceae	Whole plant
17	Isabgul	Ispaghula	<i>Plantago ovate</i>		Seed and Husk
18	Sankhapushpi	English speedwheel	<i>Convolvulus prostrates</i>	Convolvulaceae	Whole plant
19	Ghikumari	Indian aloe	<i>Aloe vera</i>	Liliaceae	Leaf, Leaf juice
20	Kali mirch/Mirch	Black peeper	<i>Piper nigrum</i>	Piperaceae	Fruit

Table-2

Showing Market price of these economically valuable Medicinal Plants

Sl No	Hindi Name	Market Price (Rs/Kg)
01	Pudina	200-250
02	Tulsi	2000
03	Satavari	900-1000
04	Safed Musli	2500-3000

05	Ada	1000-1500
06	Brahmi	2700-3000
07	Haldi	700-1000
08	Bach	600-700
09	Amla	300-500
10	Aswagandha	300-400
11	Bahara	300-500
12	Harar	300-500
13	Pipulmul	1000-1200
14	Mulathi	800-1000
15	Methi	500-800
16	Gudmari	600-700
17	Isabgul	300-350
18	Sankhapushpi	500-700
19	Ghikumari	1000-1500
20	Kali mirch/Mirch	1000-1200

Table-3

Showing Ideal conditions for cultivation of these economically valuable Medicinal Plants

SI No	Hindi Name	Ideal conditions for cultivation
01	Pudina	Well drained loam or sandy loam soil having PH between 6 and 8.2.
02	Tulsi	Well drained soil, humid weather long days and high temperature.
03	Satavar	Sandy well drained soil
04	Ada	Sandy or clayey loam soil with rich humus.
05	Brahmi	Damp area on variety of soils.
06	Haldi	Sandy loam soil.
07	Bach	Clayey loams and light alluvial soil of river banks.
08	Amla	Well drained fertile loamy soils.
09	Asgandh	Well drained soil like sandy-loam or light red soil having PH of 7.5 to 8.
10	Bahera	Deep sandy loam soil with good subsoil drainage.
11	Harar	Clay and sandy soils.
12	Pippulmul	Limestone soil.
13	Mulathi	Sandy-loam fertile soil having PH of 6 to 8.2.
14	Methi	Loams and clay loams soil with proper drainage.
15	Gudmar	Variety of soils and agro-climate conditions.
16	Isabgul	Well drained loamy soil having PH from 4.7 to 7.7.
17	Sankhapuspi	Sandy loam, Black cotton and red sandy soils.
18	Ghikumari	Moderately fertile heavier soils viz. black cotton soil
19	Safed musli	Irrigated well drained loamy to sandy loam soils rich in organic manure.
20	Kali mirch/Mirch	Well drained red laterite or alluvial soils with high humus content.

CONCLUSION

In conclusion it can be stated that appropriate selection of medicinal plants and cultivation in ideal environment with the help of modern scientific tools will definitely help in economic growth of India.