



Export marketing of medicinal and aromatic plants from India

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Medicinal and Aromatic plants have been used for a long time in India, the mention of their usage is as old as 10,000 years. There are about 2000 native plants with curative properties and 1300 species with properties of aroma and flavour. Now a days the Indian systems of Ayurvedic medicines have again emerged as a popular medical systems. India has one of the world's richest medicinal plant heritages. According to study conducted by Exim Bank, there are 880 medicinal plant species that are involved both in national and international trade. As per Exim Bank study 48 species are exported and about 42 imported. Medicinal plants since the time immemorial have been used for the cure of human diseases. Presently about 80 percent of the Indian population is relying on indigenous medicines derived from medicinal plants. Rather, it has been a way of treatment in rural areas and it is also becoming popular among urban population in the form of Ayurveda, Sidha and Naturopaty.

China and India are the two major production centers of medicinal plants having more than 40 per cent of the global bio-diversity. International market for medicinal and aromatic plants is over US\$ 60 billion/year and it is growing at the rate of 6 per cent per annum. India is endowed with a wide range of medicinal plant species. Many of these plants possess tremendous medicinal properties and are being used for extraction of essential oil, aroma and bio-chemical constituents. Accordingly to an All India Ethno Biological Survey carried out by the Ministry of Environment and Forests, Government of India, there are over 8000 species of medicinal plants grown in the country. More than 60 per cent of these plants are found in the tropical forests, spread across the Western and Eastern Ghats. Basic Chemicals, Pharmaceuticals & Cosmetics Export Promotion Council, popularly known as CHEMEXCIL under the Ministry of Commerce and Industry, Government of India has been making all concerted efforts to promote exports of medicinal plants, i.e. value added herbal products. According to the recent estimates, export of medicinal and herbal material is to the tune of Rs. 550 crores from India, during 205-06.

Export marketing of MAPs from India : India's exports of medicinal and aromatic plants in the year 2005-06 dropped items like Ginseng roots fresh, Isobgol, Belladonna leaves, Chirata and Asafoetida. Decline in export was considerable in the case of all the items except Asafoetida, where there was a marginal decline noticed. Increase in export during 2005-06 as against 2004-05 was noticed in the case of Isobgol husk, neem seeds, neem leaves, vinca rosea (herbs) and senna leaves. The table also gives information regarding direction of exports to different countries. The main markets for medicinal and aromatic plants include mainly West Asian countries such as Saudi



Arabia, UAE, Kuwait and Iran. The other Asian Countries like Sri Lanka and Bangladesh are also important clients for Indian medicinal and aromatic plants. Apart from it, medicinal and aromatic plants are being exported to most of the European Countries and United States of America. Though China is an important production centre, it also imports considerable quantity of medicinal and aromatic plant products from India.

Export of aromatic plants and oils from the country showed an increasing trend during 2005-06 as compared to 2004-05 in the case of essential oil for Lavender, Patchouli oil, Geranium oil, lemon grass oil and agar oil. There was a considerable increase in export of Agar oil (14.44 MT), Basil oil (55.2 MT to 112.73 MT) and Sandal oil (105.47 MT to 170.05 MT). However, the declining trend in export of some of the products was not so considerable.

Apart from analyzing the exports in terms of quantity, the value realized from export of these products were also analyzed and results are presented in the Table-1 and Table-2. Highest realization was from export of Isobgul husk in which a revenue of Rs. 20767.27 lakhs was realized, followed by cambodge extract (Rs.3914 lakhs), senna leaves and pads (Rs. 2658.27 lakhs), sandal wood chips and dust (2466.45) and extract of Belladonna (Rs. 1498.24 lakhs). Despite lower quantity of sandal oil, the revenue realization is very high due to higher price for it in the international market. However, quantity of Isobgul and Senna leaves exported was quite high compared to other products, but revenue realized low because of low value of these products.

Export and import policy for MAPs : Basic customs duty and excise duty on import and export of MAPs, parts and extracts is presented in table- 3. It is revealed from the table that basic customs duty on import of MAPs parts and extracts, oils into India is charged at the rate of 30% for all the

Table 1. Export of Medicinal and aromatic plants and parts from India

S. No.	Product	Value in Rs Lacs	Quantity in Tonnes	Major Markets
1	Agarwood (including chips & dust)	41.99	5.27	Saudi Arab, UAE
2	Asafoetida	1104.71	661.23	USA, UAE, UK, Malaysia
3	Basil, hyasop, rose mary sage, savory	356.74	124.17	Germany, Denmark, Belgium, USA
4	Beladonna leaves	41.00	51.63	Bangladesh, UK, Taiwan, Germany
5	Cambodge fruit rind/the dried pericap of the fruits of Garcinia Cambogia	43.27	36.10	France, Iran, Canada, Guinea
6	Cascara Sagrada bark	24.44	15.14	UK, UAE
7	Chirata	18.86	156.28	Japan, Taiwan, Korea
8	Galangal Rhizomes & roots incl. greater Galanga	253.64	387.28	UAE, Japan, Netherlands, Kuwait
9	Garcenia	248.21	40.28	USA, Chez Rep., Korea, Japan, Thailand



10	Ginseng extract including powder	86.43	8.72	USA, Japan
11	Ginseng roots fresh/dried w/n cut crshd/pwdrd	25.14	23.83	USA, Netherland, Saudi Arab, Sri Lanka
12	Gymnema powder	87.86	77.44	USA, Japan, Iran, Mauritius
13	Liquorice roots fresh/dried w/n crshd/pwdrd	99.40	19.98	Saudi Arab, UAE, Germany, UK
14	Mint,incl. leaves(all species)	17.89	16.03	Denmark, Pakistan, Guinea, Saudi Arab
15	Neem leaves/powder	86.10	260.94	Japan, Korea, UAE, Vietnam, Sri Lanka
16	Nux vomica dried ripe seeds	7.64	19.41	Bangladesh, Brazil, UK
17	Psyllium husk (Isobgol husk)	20767.27	21424.45	USA, Australia, Indonesia, Germany, Pakistan, Spain
18	Psyllium seed (Isobgol)	685.40	1024.76	USA, UK, UAE, Germany, Korea, Bangladesh
19	Red Sandal wood powder used in dyeng	61.08	6.28	Algeria, Hong kong, UAE, USA
20	Sandal wood chips and dust	2466.45	129.78	UAE, Saudi Arab, Singapore, Japan
21	Sarsaparilla	16.43	21.90	USA, France, Germany, Italy
22	Senna leaves and pods	2658.27	10584.38	China, Germany, USA, Japan, Poland, Spain, Thailand
23	Serpentina roots	0.91	1.32	UAE
24	Tukmaria	61.98	219.53	UAE, Egypt, Malaysia, Indonesia, Mauritius
25	Vinca rosea (herbs)	331.60	901.27	France, Germany, Hungary, Belgium
26	Zedovary roots	30.63	81.71	Italy, France, Germany, Spain

Note: Triennium average ending year 2006-07.

Source: Calculated and compiled from DGFT data.



Table 2. Export of medicinal and aromatic extracts and oils from India

S. No.	Product	Value in Rs Lacs	Quantity in Tonnes	Major Markets
1	Agar oil	296.68	39.26	Indonesia, UAE, Belgium
2	Bergamont oil (ex-mentha citrate)	12.48	3.08	Sri Lanka, Egypt
3	Camphos oil	18.58	1.28	Germany, Indonesia, Greece
4	Citronella oil (Ceylon type)	78.57	23.64	UK, USA, Tanzania, Sudan
5	Cumin oil	11.38	0.40	Australia, Japan
6	Davana oil	201.38	2.98	USA, Germany, France
7	Essential oil of Vetiver	30.48	4.80	Sri Lanka, Germany, Singapore
8	Essential oils of Geranium	89.05	16.58	France, Vietnam, Austria, Sri Lanka
9	Essential oils of Lavender or Lavandin	8.92	0.35	Thailand, USA, Taiwan, Greece
10	Essntl oil of Peppermint (<i>Mentha piperita</i>)	13877.08	2643.68	USA, France, China, Japan, Germany, Singapore, Paraguay
11	Garlic Oil	73.23	7.95	Germany, Indonesia, USA, UK
12	Lemon grass oil	288.88	58.38	USA, UK, Germany, Singapore, Australia
13	Palmarosa oil	123.42	18.08	UK, USA, Netherlands, Spain
14	Paprika Oil	419.54	59.27	UK, USA, Germany, France,
15	Patchouli oil	40.57	1.33	France, UK, USA
16	Spearmint oil (ex-mentha spicata)	1493.23	209.53	USA, UK, Israel, Germany
17	Spices oil, n.e.s.	241.80	18.61	USA, Japan, France, Korea
18	Turmeric oil	74.99	4.71	USA, UK, France
19	Water-mint oil (ex-mentha aquatic)	28.79	6.98	China, Nepal



20	Ylang ylang oil	3.75	0.13	France, Indonesia
21	Extracts Belladona	1498.24	36.34	Japan, USA, UK, Australia
22	Extracts Cascara sagrada	2.04	0.08	USA, UK, Korea, Spain
23	Extracts, Neem	711.51	36.80	USA, UAE, Spain
24	Gymnema extract	316.95	52.25	USA, UAE, Japan
25	Cambodge extract	3914.84	722.05	USA, Australia, Japan

Note: Triennium average ending year 2006-07

Source: Calculated and compiled from data from DGFT.

Table 3. Import and export duty on MAPs in India

Commodity	Basic Custom Duty (%)	Basic Excise Duty (%)
Spearmint oil	30	16
Horsemint oil	30	16
Agar Oil	30	16
Basil, hyssop, rosemary, sage and savory	30	-
Agarwood	30	-
Asafoetida	30	16
Belladona leaves	30	-
Bergament oil	30	16
Extract of garcinia and gamboge	30	16
Gamboge fruit rind	30	-
Camphor oil	30	16
Cascara sagrada bark	30	-

items. Export duty is charged at the rate of 16% on MAP oils and extracts which are processed or semi-finished items for use in medicinal industry and other uses. While export duty for raw material like bark, rhizomes and roots, leaves, etc. is not given.

The EXIM policy adopted for MAPs parts, and extracts needs revision. In EXIM policy MAPs raw material export is encouraged instead of semi-finished products or extracts. Due to this the country is not reaping the full benefit of the natural wealth available in the country mainly because



Celery seed oil	30	16
Chirata	30	-
Citronella oil	30	16
Cumin Oil	30	16
Davana oil	30	16
Essential oil of vetiver	30*	16
Essential oil of geranium	30*	16
Essential oil of lavender	30*	16
Essential oil of peppermint	30	16
Extracts of Belladonna	30	16
Extracts of cascara sagrada	30	16
Extracts of Neem	30	16
Galangal rhizomes & roots	30	-
Garcenia	30	-

Source: www.cbec.gov.in

of lack of technology available. The policy should focus on encouraging export of finished or semi-finished products of MAPs instead of export of raw materials. Most of the raw materials are being exported either to USA or European Union wherein the processing technology is well developed. After processing these countries are exporting finished products and reaping the benefit of importing raw material from India and other Asian countries.

Institutional efforts to enhance marketing and exports of MAPs from India : National Medicinal Plants Board: The Government of India has set up a national level body namely National Medicinal Plants Board (NMPB) with a view to ensuring availability of medicinal plants and to coordinate all matters relating to their development and sustainable use. The NMPB is conducting schemes on cultivation and marketing of medicinal and aromatic plants in the country.

New foreign trade policy (FTP) : Under the new FTP (2204-09) announced by the Ministry of Commerce & Industry, Government of India, a series of incentives have been offered to promote exports of herbal and medicinal plants. These include

- (i) Duty-free import of capital goods under the Export Promotion Capital Goods (EPCG) scheme,
- (ii) Duty credit scrip equivalent to 5 per cent of the f.o.b. value of exports, and
- (iii) Launching of *Vishesh Krishi and Gram Udyog Yojana*, which is aimed at promotion agri-exports, viz. flowers, vegetables, fruits, minor forest produce, etc.



Provisions for encouraging exports under VKGUY scheme includes:

1. Duty Credit scrip benefits are granted with an aim to compensate high transport costs. Exporters, of products notified in Appendix 37A of HBP v1, shall be entitled for Duty Credit scrip equivalent to 5% of FOB value of exports (realized in free foreign exchange).
2. However, Duty Credit scrip benefits shall be granted only at a reduced rate of 3.5% of FOB value of exports (realized in free foreign exchange) in such cases where exporter has availed benefits under Chapter 4 of FTP for import of Agriculture Inputs (other than catalysts, consumables and packing materials) relating to export item under this scheme.
3. In order to promote indigenous sourcing, a built-in incentive has been introduced under the VKGUY for exporters utilizing domestic raw materials for export production. Such exports would now get additional benefits under VKGUY @ 1.5% of FOB value of exports compared to those who use imported agricultural products who shall get benefits at a reduced rate of 3.5%.

Table 4. List of export Items allowed under Vishesh Krishi and Gram Udyog Yojana (VKGUY)

Sl. No.	VKGUY product code	Description	Date of export from which benefits will be admissible
1.	07A.1 to 11	Oleoresins of Fennugreek, Ginger, Turmeric, Celery seed, Nutmeg, Clove, Capsicum, Coriander, Cumin, Fennel, and other spices	1.4.2004
2	08.33 to 40	Extracts: of Belladonna, Cascara Sagrada, Nux Vomica, Ginseng, Agarose, Neem, Gymnema, Garcenia, etc.	01.04.2004
3	08.54 to 113	Leaves and Powder of neem seed, Ashwagandha, Bhui Aonla, Brahmi, Coleous, Giloe, Kalihari, Makoy, Isabgol, Kalmegh, Madhunashini, Liquorice, Safed Musli, Senna, Sarpagandha, Satawari, Holy Basil, Chitrak, Malkangani, Chandrashoor, Saua, Khurasani ajwain, Guggal, Lemon grass, Palmarosa grass, Java citronella, Jamarosa, Haritaki, Bahera, Mentha, Pachouli, Lavender, Jasmine, Khus, etc.	01.04.2004
4	11.9 to 122	Value added extracts of sonamukhi, Brahmi, Guggal, Turmeric, Gooseberry, Goraka, Liquorice root, Peppermint, Gokhru, Ashwagandha, Ghrita kumari, Neem, Shilajit, Kalmegh, Bhringraj, Banaba, Henna, Holy basil, Bhui amla, Kutki, Red sandal, Sarpagandha, menthe species etc	1.4.2007



Thrust on export of aromatic, medicinal plants by APEDA : The Agriculture and processed Foods Export Development Authority (APEDA) plans to give a renewed thrust for the promotion of export of aromatic and medicinal plants. APEDA is also examining the possibility of promoting agri-export zones specializing in cultivation of aromatic and medicinal plants. Recently, few States have sent their proposal in this regard.

Agri export zones for MAPs : There are two agri export zones for medicinal and aromatic plants as presented in table 5. One in Uttaranchal and other in Kerala.

Table 5. AEZs for MAPs

1	Medicinal & Aromatic Plants	Uttaranchal	Uttarkashi, Chamoli, Pithoragarh, Dehradun and Nainital, Haridwar and Uddamsinghnagar
2	Medicinal Plants	Kerala	Districts of Wayanand, Mallapuram, Palakkad, Thrissur, Idduki, Pathanamthitta, Kollam, Thiruvananthapuram and Ernakulam

Agri export zone for medicinal and aromatic plants in Uttaranchal

- The total investment envisaged in this project was Rs. 18.81 crores with private sector participation to the extent of Rs. 9.05 crores. The share of the Central Govt. was envisaged to be Rs. 5.53 Crores. The contribution of state government is Rs. 4.23 Cr.
- The total export turnover envisaged over five years was Rs. 43.57 crores.

Agri export zone for medicinal plants in Kerala

- This AEZ entails an investment of around Rs. 26.24 Crores out of which Rs. 9.88 Crores will flow from various Central Government Agencies and Rs. 7.85 Crores from State Government Agencies. Private sector is likely to invest around Rs. 8.51 Crores.
- It is expected that during the first 5 years there would be an export of around Rs. 157.00 Crores of Medicinal Plants from this zone.
- More than 3000 farmers are likely to get benefited as a consequence of setting up of this zone.

Import policy for MAPs in India

Most of the medicinal and aromatic plants, parts, extracts and oils are free for imports in the country except some of the products as presented in table 6. Items which do not require any licence under the Exim Policy have been denoted as 'Free' subject to the Licensing Notes contained in the relevant chapter/heading/sub-heading or as may have been indicated under column 4 mentioning conditions relating to the policy and is also subject to any other law for the time being in force. Import of items like *Serpentina roots (rauvolfia serpentina* and other species of *rauvolfias*), Kuth root, Agarwood and Agar oil is restricted in the country as per the import policy.



Table 6. Import policy for MAPs in India

Exim Code	Item Description	Policy	Policy Conditions
1211	Plants and parts of plants (including seeds and fruits), of a kind used primarily in perfumery, in pharmacy or for insecticidal, fungicidal or similar purpose, fresh or dried, whether or not cut, crushed or powdered		
	Liquorice roots, Ginseng roots, Ambrette seeds, Nuxvomica, dried ripe seeds, Psyllium seed (Isobgol), Neem seed, Belladonna leaves, Senna leaves and pods, Neem leaves and powder, Gymnema powder, Cubebe powder, Pyrethrum, Cascara sagrada bark, Psyllium husk (isobgul husk), Gamboge fruit rind, Belladonna roots, Galangal rhizomes and roots, Ipecac dried rhizome and roots, Zedovary roots, Sarasaparilla roots, Sweet flag rhizomes, Sandalwood Chips and dust, Vinca rosea herbs, Mint including leaves (all species), Chirata, Tukmaria, Unab (indian jujuba or chinese dates), Basil, Hyssop, Rosemary, sage and Savory, Lovage, Garcinia,	Free	
12119044	Serpentina roots (<i>Rauvolfia serpentina</i> and other species of rauwolfias)	Restricted	Import will be subject to the provisions of Convention of International Trade in Endangered Species of Wild Fauna & Flora (CITES).
12119046	Kuth root	Restricted	Import will be subject to the provisions of Convention of International Trade in Endangered Species of Wild Fauna & Flora (CITES) and Wildlife (Protection) act 1972.
12119080	Agarwood	Restricted	Import will be subject to the provisions of Convention of International Trade in Endangered Species of Wild Fauna & Flora (CITES).
1302	Vegetable saps and extracts; pectic substances, pectinates and pectates; agar-agar and other mucilages and thickeners, whether or not modified, derived from vegetable products Vegetable saps and extracts :		



	Of liquorice, Belladonna, Cascara sagrada, Nux vomica, Ginseng (including powder), Agarose, Neem, Gymnema, Garacina or gambodge,	Free	
3301	Essential oils (terpeneless or not), including concretes and absolutes; resinoids; extracted oleoresins; concentrates of essential oils in fats, in fixed oils, in waxes or the like, obtained by enfleurate or maceratin; terpenic by-products of the deterpenation of essential oils; aqueous distillates and aqueous solutions of essential oils. Essential oils of citrus fruit:		
	Of Bergamot, Orange, Lemon, Lime, Citronella oil,	Free	
	Other Essential oils other than those of citrus fruit:	Free	
	Of Geranium, Jasmin, lavender or of lavandin, All mint species, vetiver	Free	
3301 29	Other: Anise oil; Cajeput oil; Cananga oil; Caraway oil; Cassia oil; Cedarwood oil; Cinnamon bark oil; Cinnamon leaf oil:	Free	
	Clove leaf/stem oil; Coriander seed oil; Dill oil; Eucalyptus oil; Fennel seed oil; Ginger oil; Ginger grass oil; Clove bud oil:	Free	
	Tuberose concrete; Nutmeg oil; Palmarosa oil; Patchouli oil; Pepper oil; Petitgrain oil; Sandalwood oil; Rose oil:	Free	
	Camphor oil; Lemon grass oil; Ylang ylang oil; Davana oil; Cumin oil; Neem oil; Spices oil n.e.s.; Celery seed oil:	Free	
	Spices oils not else where specified or included	Free	
3301 30	Resinoids:		
33013010	Agar oil	Restricted	Import will be subject to the provisions of Convention of International Trade in Endangered Species of Wild Fauna & Flora (CITES).
	Flavouring essences all types (including those for liquors)	Free	
	Oleorasin of Fennugreek, Ginger, Pepper, Turmeric, Cardamom, Celery seed, Clove, Capsicum, Coriander, Cumin, Fennel,	Free	
33019031	Attars of all kinds in fixed oil base	Free	



Export strategy of MAPs : According to various studies brought out both by the central and the state governments, medicinal plants offer tremendous export potential. For tapping its full potential, there is a need to chalk out a pragmatic export strategy. Some of the points which may merit attention of the policy makers in this respect are as under:

1. There is need to allocate funds for conducting R&D not only to improve varieties of the medicinal plants and enhance their availability but also to establish their efficacy in various clinical conditions.
2. Setting up of Export Promotion Zones exclusively for medicinal plants and herbal products in potential States like Gujarat, Rajasthan, Haryana, Tamilnadu and Andhra Pradesh who have gained significantly in cultivation and processing of medicinal plants and herbs.
3. The active ingredients in the traditional medicinal plants are required to be identified and there has to be a pharmacopia established, and Intensifying R & D activities for finding appropriate technologies for processing of medicinal plants.
4. Efforts need to be concerted to enhance the processing capabilities and technology for MAPs for making and export of finished products rather than to exporting raw material from the country.
5. The timely implementation of the above stated points made is likely to give a thrust to the exports of medicinal plants from the country.

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