

AYURVEDIC CHURNA

1 INTRODUCTION

Churna is a fine powder made by certain drugs or combination of drugs. Each ingredient is pulverized separately and mixed together. Churna is also called as raj and Kshada. There are many varieties of Churnas and every Churn has its own demand in the Market. Ayurvedic pharmacy comprises of different sections such as Vati, Asava, Arista, Lehya, Lepa etc under one unit.

The term "Ayurveda" combines the Sanskrit words *ayur* (life) and *veda* (science or knowledge). It is one of the traditional medicinal systems, with an established history of many centuries. It is based on the belief that health and wellness depend on a delicate balance between the mind, body, and spirit.

The primary focus of Ayurvedic medicine is to promote good health and prevent illness, rather than fight disease. Other traditional systems include Siddha, Unani, Iranian, Islamic, Vietnamese, Chinese, Acupuncture, Muti, Ifá, African and other treatments all over the globe. When adopted outside of its traditional culture, traditional medicine is often called complementary and alternative medicine (CAM)

There are three kinds of ingredients used in Ayurvedic medicines:

1. Herbal
2. Mineral and
3. Animal

The herbal medicines dominate the practice of Ayurveda. The worldwide use of herbal products decreased in the 20th century as these were believed to be less profitable than synthetic drugs and medicines. Post 1960, increasing concerns over the side effects of

the synthetic drugs and medicines led to an increase in the demand for traditional alternative medicines across the world. Herbal medicine is still the mainstay of about 60% of the world population, mainly in developing countries for their primary healthcare needs.

This potential also needs to be tapped since our country has a lot of medicinal plants, plants with essential oils and the demand in the overseas markets for its concentrates is growing fast. Since the flavourists and perfume experts are facing the challenging tasks of creating and developing complex compositions to meet the present and future consumer demand, it is also necessary to set up world standard research and development facilities in this sector.

The proposed manufacturing facility for Ayurveda Churna would be a GMP certified facility, licensed by the State Drug controlling authority. The facility will focus on "new generation medicines" instead of classical Ayurvedic products.

2 PRODUCT AND ITS APPLICATION

In India, alternate medicinal system, commonly referred to as "Indian system of Medicine and Homeopathy" (ISM&H) includes

- Ayurveda
- Siddha
- Unani and
- Homeopathy

This particular project profile focuses is mainly on **Ayurveda Churna**



Churna is the common drugs of present era & these medicines may be used without doctor's prescription. The Ayurvedic drugs are derived from vegetable sources from the various parts of the plant like root, steam. Leaf, flower, fruit extract or plant as a whole.

There are about 21 varieties of compound formulations in which some of the single drugs of animal origin (52 nos.), Mineral origin (55 Nos.) and plant origin (351 Nos.) are used. The details of the single drugs and other particulars can be had from the Ayurvedic Formulary of India, published by Govt. of India, Ministry of Health and Family Welfare.

Since ancient times India are a preacher for Ayurvedic medicines and its use for mankind. Earlier their use was only confined to the rural area, but due to increasing side effects of allopathic medicines use of such type medicines increasing both in rural and urban areas and demand for Ayurvedic medicines is increasing till date. The rural areas are still using Ayurvedic medicines for the treatment of their sickness and only in chronic disease cases use to take allopathic medicines.

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3 DESIRED QUALIFICATIONS FOR PROMOTER

The promoter should ideally be having formal qualifications in the field of Ayurveda (Bachelor or Diploma). A formal qualification in Naturopathy may also do. Further he / she should have experience of working in a unit manufacturing Ayurvedic medicines

4 INDUSTRY OUTLOOK/TREND

The Indian herbal medicines market includes OTC, ethical and classical formulations and home remedies of Ayurveda, unani, homeopathy and siddha systems of medicines. Over the period of 2008 and 2013, the herbal medicine market in the country grew at a CAGR of 26.7%¹. The growth of herbal medicines reflects the shifting trend of consumers from allopathic to herbal medicines

5 MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

The Indian herbal market consists of herbal products such as herbal hair care, herbal skin care & other herbal personal care products, as well as herbal medicines _ The Indian herbal medicines market includes OTC, ethical and classical formulations and home remedies of Ayurveda, unani, homeopathy and siddha systems of medicines _ Over the period of 2008 and 2013, the herbal medicine market in the country grew at a CAGR of 26.7%¹. The growth of herbal medicines reflects the shifting trend of consumers from allopathic to herbal medicines

In India, there are about 20 well-recognized manufactures of herbal drugs and 140 medium or small-scale manufactures. In addition, thousands of vaidyas have their own miniature manufacturing facilities. About 1200 licensed small manufactures in India are on record. The estimated current annual production of herbal drugs is around Rs. 100 crores. This value is low as compared to the production allopathic pharmaceuticals, which is around Rs. 800 crores. The demand for herbal medicines is increasing and it is estimated that the production of herbal drug may be around Rs. 4000 crores in the year

2010 AD. There are 1650 herbal formulation in Indian market and number of major plants involved in their formulation is 540.

Medicinal plants have been a major source of cure of human diseases since time immemorial. Today, one fourth of the world population depends on traditional medicines. Despite the introduction of antibiotics since the 1940's, even 80 per cent of the population today relies on indigenous medicinal plants and the drugs. It is estimated that the global traditional medicine market is growing at the rate of 7-15 per cent annually. The medicinal plant value is about Rs.5000 crores in India and it is estimated that the country exports about Rs.550 crore worth of herbal drugs but with the rich and diverse botanical resources in our country, this is not an impressive export performance considering the worldwide herbal market worth US 60 billion dollars.

In order to withstand competition in the global market, it is necessary to create a brand image, especially in cosmeceuticals and natural products. Craze among the people for a slim body, fair skin as fashion is growing considerably. Out of the Rs.12, 000 crores industry, Rs.700 crores belongs to skincare products and Rs.100 crores for general cosmetics. Over and above current herbal drugs used in cardio vascular is 27%; respiratory 15.3%, digestive 14.4%; hypnotics and sedatives 9.3%; miscellaneous 12%. The perfumery industry is also around Rs. 700 crores.

The Indian herbal industry is likely to double from present Rs. 7,500 crore to Rs. 15,000 crore by 2015, according to a new study published on Friday.

The study, brought out by the Associated Chambers of Commerce and Industry (ASSOCHAM) has viewed that the domestic herbal industry will grow rapidly in the coming years and by 2015, it is expected that the size of the domestic market will rise to Rs. 15,000 crore, reflecting a compound growth rate of over 20 percent.

Releasing the study, ASSOCHAM Secretary General, D.S Rawat said that ideally, the niche market that India can focus on include Ayurvedic Medicines and Dietary

Supplements (including health drinks), extracts, Oils and other derivatives, skin care and beauty aids.

According to the study, the Indian domestic market can be broadly segmented into two categories. The first one will cover raw materials required by the industrial units and direct consumption for household remedies, whereas the second category will cover ready to use finished medicines, health supplements etc.

The study has found that there is a strong demand for raw stock which mainly comprises Amla, Isabgol, Senna, Henna, Ashwagandha, Aloe-vera and Myrobalans (Hartaki), which accounts for over 75% of the raw materials used in Ayurvedic preparations. In terms of volume, it is estimated that current consumption of the key raw ingredients (as mentioned above) totals approximately 400,000-500,000 MT.

With value addition, the market for herbal based products is around Rs.7, 500 crores, which is roughly the current size of the Indian market, it is stated.

The study points out that globally the dependence on herbal medicines, dietary supplements and skin and beauty aids will continue to gain greater share in view of the awareness and comfort level which is akin to the use of organic food products.

The ASSOCHAM study, however, is of the view out that India's share in the global herbal market is very meagre considering the country's rich source of medicinal plants and traditional treasure of knowledge in this area.

A quick estimate of the potential reveals that India can generate raw stock of around Rs. 300 billion and easily achieve around Rs. 150 billion value added products. Thus, India is hardly able to exploit less than 50% of its potential, the study adds.

The Associated Chambers of Commerce and Industry of India (ASSOCHAM) has projected that the market size of herbal industry which is currently estimated at Rs. 7, 500 crores (Rs. 75 billion) will double to levels at Rs. 15, 000 crore by 2015 since this

industry would be growing at a compounded annual growth rate of over 20% henceforth.

In a study brought out by ASSOCHAM on Herbal Industry and Global Market 2015, it is pointed out that India's rich source of medicinal plants and traditional treasure of knowledge in this area, its share at present is considered very meagre. A quick estimate of the potential reveals that India can generate raw stock of around Rs. 300 billion and easily achieve around Rs.150 billion value added products. Thus, India is hardly able to exploit less than 50% of its potential. Interestingly both raw materials (herbs) and herbal products have ready market globally.

6 RAW MATERIAL REQUIREMENTS

A large number of herbs, medicinal plant extracts, etc would be required for this project. This is because one particular formulation would have about 8 to 10 active ingredients. Raw materials is different type of herbal plants, mineral, sugar, honey, Bhasma etc are available indigenously and consumables including packaging materials like glass bottles, paper containers etc. is available

All the raw materials such as herbs, minerals etc. for preparation of Ayurvedic medicines are available in India abundantly, particularly in N.E. Region and Himalayan Range as a whole. States like Gujarat also have large biodiversity and availability of medicinal plants.

7 MANUFACTURING PROCESS

- **Ayurvedic Churna / Powder**

Ayurvedic powdered medicines are prepared by drying ingredients. These dry ingredients are powdered by using Crusher or Grinder type. These powders in exact proportions are blended together in stainless steel cone blender.

After testing these are filled in Glass/ Plastic containers. These containers are labeled and packed in corrugated Cardboard Boxes, which are also labeled. The manufacturing process needs direct supervision of manufacturing Ayurvedic Chemist

- **Asava :**

The required quantity of water, to which jaggery or sugar as prescribed in the formula is added, is boiled and cooled. This is poured into the fermentation pot, vessel or barrel. Fine powder of the drugs mentioned in the formula are added. The container is covered with a lid and the edges are sealed with clay smeared cloth wound in seven consecutive layers. The rest of the process is as in the case of Arista.

- **Rasayan Rasa or Rasa Yoga :**

Ayurvedic medicine containing mineral drugs as main ingredients are called Rasa Rasayan or Rasa-Yoga. They are in pill form or in powder form. First minerals such as Abhraka. Drugs such as abhraka maksika, svarna, rajata, tamra, karmsya etc. are used only in bhasma form in these preparations. Drugs such as gandhaka, manahisila etc. are used in purified form. Where rasa and gandhaka are drugs, kajjali (Mixture of equal amount of sulphur & mercury) is prepared first with these two and then only other drugs are added in small quantities and ground in the khalva itself and mixed well. Bhavana with the prescribed svarasa, kvatha etc.; should be given to this for a prescribed period.

- **Use of Modern technology**

It is also necessary to integrate modern knowledge with traditional knowledge. The drugs and products of the industry are working on the scientifically defined techniques and explained with modern biological and chemical definitions and tools, and that alone will give a therapeutically active herbal original drug available for health care worldwide.

- **Quality Control and Standards**

At present there is no pharmacopeial standard on each of the active ingredients of Ayurvedic medicine like allopathic medicine. For standardization and quality control of Ayurvedic drugs, various steps can be followed like physical description, physical tests, pharmacoginised techniques etc, to ascertain the species of plant and study their pharmacoginostic character for the purpose of identification detection and analyzing the crude drug.

Generally quality of Ayurvedic products is fully dependent on the quality of raw materials and process of manufacture. The quality control process of some Ayurvedic formulations can be contained from 'Pharmacopeias Laboratory of India Medicine, near ALTC, Ghaziabad (U.P)'. The products are to be manufactured as per Indian system of medicines of Ministry of Health.

Schedule "T" is to be followed as per Food & Drugs Administration norms.

8 MANPOWER REQUIREMENTS

Sr. No.	Designation	Number	Apprx. Salary (Rs. per month)
1	Analytical Chemist	1	7000
2	Sales representative	1	8000
3	Clerk cum Accountant	1	5000
4	Skilled Worker	2	8000
5	Unskilled Worker	2	9000
	Sub Total		37000
	Perks @ 15 %		5550
	Total		43050/- Say 43000/-

9 IMPLEMENTATION SCHEDULE

The implementation time required for this project will be approximately eight months after arranging the finance from the bank

Sr. No	Activity	Time
1	Preparation of Project report	Six weeks
2	E M Registration & approval from Director of Ayurveda	One month
3	Financial/Loan from Banker or Financial Institutions	Two months
4	Power connection/Building construction Six months	One month
5	Machinery procurement & Trial run.	Two months
6	Recruitment of Staff & Labour	One month
7	Actual commercial production	One month

10 COST OF PROJECT

The total cost of project is estimated as below:

Sr. No	Component	Particulars	Cost (Rs. Lacs)
1	Land	300 sq mtrs @ Rs. 500/-	1.50
2	Building	150 Sq. mtrs @ Rs. 2000/	3.00
3	Plant & Machinery	As per list	5.20
4	Other Assets	-	0.50
5	P & P Expenses	-	0.20
6	Contingencies @ 10 %		0.50
7	WC Margin	As per separate table	0.75
		Total	11.65

11 MEANS OF FINANCE

- Term Loan : Rs.8.00 lacs
- Promoter own contribution : Rs. 3.65 lacs

12 WORKING CAPITAL CALCULATION

Particulars	Duration	Estimated cost (Rs. Lacs)
Raw materials/ Packing materials	1 month	1.00
Working expenses	1 month	0.50
Finished goods	15 days	0.60
Receivable	7 days	0.40
	Total	2.50

13 LIST OF MACHINERY REQUIRED AND THEIR MANUFACTURERS

Sr. No.	Machine	Number	Apprx. Cost (Rs. Lakhs)
1	Pulveriser with 7.5 Hp and 2.5 HP motor	2	1.20
2	Disintegrator with 7.5 Hp size with sieve of different mesh size	2	0.60
3	Hammer Mill or Ball Mill	1	0.70
4	Earthen Pots with lid for bhasma production	12 @ 2 kg each	0.60
5	Hot Air oven with 24 trays	1	0.70
6	Mixing machines	1	0.40
7	QC and Testing equipments	-	1.00
		Total	5.20

INDICATIVE SOURCES:

- Pharmatech Engineers, Indore
- Ambica Machineries, Vatva, Ahmedabad
- ARV Engineering, Thane

14. PROFITABILITY CALCULATIONS

At 100 % capacity utilisation (indicative) :

- Installed Capacity : 65,000 containers
- Each @ Rs. 30.00
- Total Sales turnover: 19,50,000/-
- Cost of production & other expenses: 12.50 lacs
- Profit : Rs. 7.00 lacs

Profitability projections (Indicative only)

Particulars	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
Capacity utilisation (%)	60	75	80	80	80
Production (number)	39000	48750	52000	52000	52000
Sales	11.70	13.65	15.60	15.60	15.60
Expenses	7.50	8.75	10.00	10.00	10.00
Gross profit	4.20	4.90	5.60	5.60	5.60
Profit to Sales (%)	35.50	35.80	35.90	35.90	35.90

Note: The profitability basis and projections are indicative and on approximate basis only.

Key Assumptions and The basis of profitability calculation:

As mentioned above, The Unit will have capacity of 65,000 containers / Annum. The capacity build up is taken considering the sales related from OEM/ Retail network that is built up by the entrepreneur based on his prior experience in the industry.

This project has to have group of **Ayurvedic churna**. The sales prices of these products vary. Accordingly an average sales price of Rs. @ Rs. 30.00 per unit has been assumed. The cost of production, inclusive of major cost heads such as raw materials, labour & power has been considered based on prevailing industry standards and assumed @ 65 %.

On indicative basis, power Costs are considered at Rs 5/- per Kwh and fuel cost is considered at Rs. 50/- per litre. The depreciation of plant is taken at 10-12 % and

Interest costs are taken at 12 % depending on type of industry. All these are wherever applicable.

It may be kindly noted that basis / assumptions for such kind and size of the projects in a profile can be on indicative basis only. At the same time it does provide a reasonably accurate scenario.

15 BREAKEVEN ANALYSES

FC X 100 : 15.00 X 100 = 1500

FC + Profit : 15.00 +16.00 = 31

BEP = 48.30 %

16 STATUTORY/ GOVERNMENT APPROVALS

Generally quality of Ayurvedic products is fully dependent on the quality of raw materials and process of manufacture. The quality control process of some Ayurvedic formulations can be contained from 'Pharmacopica Laboratory of India Medicine, near ALTC, Ghaziabad (U.P)'. The products are to be manufactured as per Indian system of medicines of Ministry of Health. Schedule "T" is to be followed as per Food & Drugs Administration norms. MSME & GST registration, IEC Code for Export of end products and local authority clearance may be required for Shops and Establishment, for Fire and Safety requirement and registration for ESI, PF and Labour laws may be required if applicable and approval from Pollution Control Board.

17 BACKWARD AND FORWARD INTEGRATION

As forward integration, Entrepreneur may think of going for the production of newer dosage forms.

18 TRAINING CENTERS/COURSES

For Ayurvedic & allied industry training and short term courses may be availed from the Institutions of Aurvedic Research & Education in respective states. Also EDP centers. Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship development programs help to run businesses successfully and are available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.