HIMALAYAN HERB PROCESSING UNIT

1. INTRODUCTION

The Himalayan Herb Processing Unit in Uttarakhand is a facility dedicated to the processing and extracting of medicinal herbs found in the Himalayan region. These herbs are known for their therapeutic properties and are often used in traditional medicine, Ayurveda, and herbal products. The unit aims to harness the potential of these herbs, supporting local farmers by providing a platform for the sustainable cultivation and processing of these plants. By focusing on eco-friendly practices, the unit helps preserve the rich biodiversity of the Himalayas while contributing to the region's economic development and the wellness industry.

2. MARKET DEMAND AND TRENDS

The market demand and trends for Himalayan herb processing in Uttarakhand are shaped by a growing interest in natural wellness products and sustainable, locally sourced ingredients. Key factors contributing to this demand include:

- 1. **Rising Health Consciousness**: There is an increasing global preference for natural and organic products. Herbal medicines, teas, and essential oils from Himalayan herbs are gaining popularity, especially in the wellness, beauty, and food industries.
- 2. Ayurveda and Traditional Medicine: The global resurgence of interest in Ayurveda and traditional healing systems drives demand for Himalayan herbs, which are integral to these practices. The processing of herbs like Ashwagandha, Brahmi, and Tulsi is expanding into both domestic and international markets.
- 3. **Sustainability Trends**: Consumers and businesses are focusing on sustainability. Himalayan herb processing units are aligning with eco-friendly practices, which resonates well with environmentally conscious consumers.
- 4. **Export Potential**: The international market for natural and organic health products is rapidly growing, especially in North America, Europe, and parts of Asia. Himalayan herbs are in demand for export due to their unique properties and their association with purity and natural healing.
- 5. **Government Support**: The Indian government is promoting initiatives for organic farming, rural development, and herbal exports, which is further encouraging the growth of herb processing units in Uttarakhand.

3. DESIRED QUALIFICATION FOR PROMOTER

The promoter of a Himalayan Herb Processing Unit in Uttarakhand should ideally possess a combination of technical knowledge, business acumen, and an understanding of the local ecosystem. Ideal qualifications include degrees in Agriculture, Horticulture, Herbal Sciences, Business Administration, and Ayurvedic Medicine. Experience in herbal product manufacturing,

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supply chain management, and rural development is crucial. Key skills needed are sustainable farming practices, regulatory knowledge, leadership, marketing, and branding expertise. This combination ensures effective sourcing, processing, and promotion of Himalayan herbs, leveraging local resources and market demand.

4. BUSINESS OUTLOOK AND OPPORTUNITIES

The business outlook for a Himalayan Herb Processing Unit in Uttarakhand is highly promising, driven by a combination of growing global demand for natural wellness products, the unique geographical advantages of the region, and the increasing focus on sustainability. One of the main factors contributing to this demand is the rising consumer preference for natural, organic, and sustainably sourced products. Himalayan herbs, known for their medicinal and therapeutic properties, are gaining popularity in the wellness, beauty, and healthcare industries. The revival of traditional medicine, particularly Ayurveda, is fueling the demand for herbal supplements, teas, and oils made from these herbs.

The market potential for Himalayan herb processing is vast, both domestically and internationally. Within India, the growing health-conscious middle class and the rising interest in Ayurvedic remedies are creating significant opportunities. Moreover, the international market for herbal products, especially in regions like North America, Europe, and parts of Asia, presents untapped potential.

Uttarakhand's unique location in the Himalayan region provides direct access to various medicinal plants, reducing dependency on external suppliers and ensuring authenticity in raw materials. Technological advancements, particularly in extraction and processing techniques, present opportunities to improve product quality and operational efficiency. By adopting modern techniques like cold-pressing and steam distillation, producers can maintain the purity of active ingredients and improve the overall quality of herbal products.

Additionally, leveraging automation can help scale production and meet increasing demand. As the demand for eco-friendly and natural products continues to rise, the opportunity to market Himalayan herbs as premium, pure, and effective solutions becomes even more viable.

5. MARKET POTENTIAL AND MARKETING ISSUES

The market potential for a Himalayan Herb Processing Unit in Uttarakhand is significant, driven by domestic and international demand for herbal products. As consumers worldwide become more health-conscious and prefer natural, organic, and sustainable products, the demand for herbal wellness items such as teas, supplements, essential oils, and cosmetics is increasing. Himalayan herbs, known for their purity and medicinal properties, are particularly well-suited to this trend. In India, the growing middle class and increasing preference for Ayurvedic and traditional medicine further enhance the market opportunities. Internationally, countries in North America, Europe, and parts of Asia are increasingly seeking high-quality, natural products, with Himalayan herbs being highly regarded due to their association with purity and healing properties.

Marketing Issues

Despite the promising market potential, several marketing challenges need to be addressed for the success of a Himalayan Herb Processing Unit in Uttarakhand. One of the primary issues is **brand awareness**. While Himalayan herbs are recognized globally for their healing properties, the processing unit itself may not be well known. Building a strong brand identity through effective marketing strategies is essential to differentiate the products in a competitive market. The challenge lies in educating consumers about the quality, sourcing, and benefits of the products, particularly in international markets where consumer awareness of Himalayan herbs may be limited. **Regulatory and certification issues** also pose challenges. For products to meet global quality standards and gain market acceptance, it is crucial to obtain certifications such as organic, fair-trade, and GMP (Good Manufacturing Practice).

6. BUSINESS INPUTS AND MATERIAL REQUIREMENTS

Setting up a Himalayan Herb Processing Unit in Uttarakhand involves a combination of raw materials, machinery, infrastructure, skilled labor, and operational inputs to ensure a smooth and efficient production process. Below are the key business inputs and material requirements necessary to establish and run the unit successfully:

1. Raw Materials (Herbs)

The primary input for the processing unit is the raw Himalayan herbs. These herbs must be sourced sustainably from the Himalayan region and include a variety of medicinal plants such as:

- Ashwagandha (Withania somnifera)
- Tulsi (Ocimum sanctum)
- Brahmi (Bacopa monnieri)
- Turmeric (Curcuma longa)
- Himalayan Jatamansi (Nardostachys jatamansi)
- Moringa (Moringa oleifera)
- Aloe Vera (Aloe barbadensis)

These herbs can be cultivated locally or sourced from nearby farmers, ensuring sustainability and high quality. Depending on the specific product line (e.g., teas, supplements, oils), the unit may need a variety of plant materials.

2. Cultivation Inputs

- Seeds or Saplings: For establishing herb plantations if the unit is involved in cultivation.
- **Fertilizers and Pesticides**: Organic and eco-friendly fertilizers for maintaining healthy crops.
- Water Resources: Adequate water sources (such as rainwater harvesting or local water bodies) for irrigation.

• Labor: Skilled labor for planting, tending, and harvesting crops.

3. Processing Materials

- **Herb Drying Materials**: Drying is a crucial part of processing. The unit will require drying racks or drying machines (solar or electric) to remove moisture from herbs before extraction or packaging.
- **Extracting Solvents**: Depending on the type of product being produced, solvents like alcohol, water, or CO2 for extracting essential oils or active compounds from the herbs.
- **Packaging Materials**: Eco-friendly packaging materials such as glass jars, biodegradable plastics, aluminum, and paper. Packaging must be suitable for maintaining the freshness and potency of the herbs.
- **Storage Containers**: Proper storage materials to protect dried herbs or extracts from contamination, moisture, and sunlight.

4. Machinery and Equipment

The processing unit will need several types of machinery and equipment to efficiently extract, process, and package the herbal products:

- Herb Grinders: To crush dried herbs into powder form for making capsules, powders, or teas.
- **Extraction Machines**: For extracting essential oils or active ingredients using techniques such as steam distillation, cold pressing, or solvent extraction.
- **Blenders and Mixers**: For blending powdered herbs or creating formulations for products like supplements, skincare, or beverages.
- **Packaging Machines**: Automated or semi-automated machines for filling products into bottles, sachets, or jars, as well as labeling and sealing.
- **Quality Control Lab Equipment**: Instruments for testing the purity, potency, and safety of products, including moisture meters, microscopes, and spectrophotometers for chemical analysis.

5. Infrastructure Requirements

- **Processing Facility**: A clean, safe, and well-ventilated facility for herb processing, extraction, and storage. The facility should comply with safety standards and have proper waste disposal systems in place.
- **Electricity Supply**: A reliable power supply for running machines, especially for drying, extraction, and packaging processes. In some remote areas, backup generators or solar energy systems may be necessary.
- Water Supply: A consistent and clean water source for cleaning the herbs, extracting ingredients, and supporting the overall processing needs.
- Waste Management System: Proper systems to handle plant waste, packaging waste, and other byproducts. This could include composting organic waste and recycling packaging materials.

he operations and execution process of a Himalayan Herb Processing Unit in Uttarakhand involves a series of well-coordinated steps that span from sourcing raw materials to delivering finished products to the market. Each stage must be efficiently managed to ensure high-quality output, adherence to regulatory standards, and profitability. Below is an overview of the key steps involved in the process:

1. Sourcing and Procurement of Raw Materials

• **Cultivation**: If the unit is involved in cultivating its own herbs, it will first need to secure the land and establish the plantation. Local farmers may also be engaged in cultivating the herbs, providing a steady supply of raw materials.

Receiving and Initial Processing

- **Sorting and Cleaning**: Once the herbs arrive at the processing facility, they must be sorted for quality, removing any damaged or substandard herbs. The herbs are then thoroughly cleaned to remove dirt, pesticides, or other contaminants.
- **Drying**: The cleaned herbs are dried to reduce moisture content, preventing mold and preserving the active compounds. Depending on the type of herb, drying can be done using solar dryers, mechanical dryers, or in a controlled environment to ensure the right temperature and humidity levels.

The operations and execution process of a Himalayan Herb Processing Unit in Uttarakhand involves a structured approach that includes sourcing, processing, quality control, packaging, and distribution. Efficient execution across all these stages is essential for producing high-quality herbal products that meet the growing demand for natural wellness solutions. By incorporating sustainable practices and focusing on quality, a processing unit can successfully cater to both domestic and international markets, establishing itself as a trusted brand in the herbal products industry.

| Sr. No | Particulars | No. | No of month in year | Wages/Salaries per month (Rs. In Lakhs) | Annual Expense (Rs. In Lakhs) |
|-----------|--|-----|---------------------------|---|--|
| 1 | Self-employed (Owner and Production Manager) | 1 | - | - | - |
| 2 | Skilled Labour | 1 | 12 | 0.1 | 1.2 |
| 3 | Un-Skilled Labour | 2 | 12 | 0.08 | 1.92 |

8. MANPOWER REQUIREMENT

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| 4 | Helper | 1 | 12 | 0.06 | 0.72 |
|-------|----------------------------|---|----|------|------|
| 5 | Sales and Marketing Person | 1 | 12 | 0.12 | 1.44 |
| 6 | Chemical Engineer | 1 | 12 | 0.25 | 3 |
| Total | | | | | 8.28 |

9. IMPLEMENTATION SCHEDULE

| Sr. No. | Activity | Time Required (in months) |
|---------|--|---------------------------|
| 1 | Acquisition Of premises | 2 |
| 2 | Construction (if applicable) | 2 |
| 3 | Procurement & installation of Plant & Machinery | 2.5 |
| 4 | Arrangement of Finance | 1.5 |
| 5 | Recruitment of required manpower | 1 |
| 6 | Total time required (some activities shall run concurrently) | 9 |

10. COST OF PROJECT

| Sr. No | Particulars | Annual Expenses (Rs. in lakhs) |
|--------|---------------------------------|--------------------------------|
| 1 | Land | - |
| 2 | Building (Rented) | 0.12 |
| 3 | Plant & Machinery | 18.50 |
| 4 | Equipment and Furniture Exp. | 0.42 |
| 5 | Misc. Fixed Asset | 0.02 |
| 6 | Preoperative & Preliminary Exp. | 0.06 |
| 7 | Working Capital | 51.66 |
| | Total Project Cost | 70.78 |

11. MEANS OF FINANCE

12. LIST OF MACHINERY AND EQUIPMENT

A. MACHINERY

| Sr. No | Particulars | Unit | Price per Unit(Rs. in lakhs) | Total Amount (Rs. in lakhs) |
|--------------------|-------------------------|------|------------------------------------|--------------------------------|
| 1 | Extraction Unit | 1 | 8.00 | 8.00 |
| 2 | Crushing Unit | 1 | 3.50 | 3.50 |
| 3 | Distillation Unit | 1 | 4.00 | 4.00 |
| 4 | Drying and Testing Unit | 1 | 2.50 | 2.50 |
| 5 | Packing Machine | 1 | 0.50 | 0.50 |
| Grand Total Amount | | | | 18.50 |

B. FURNITURE & EQUIPMENT

| Sr. No | Particulars | Unit | Price per Unit(Rs. in lakhs) | Total Amount (Rs. in lakhs) |
|-----------|--|------|--|--------------------------------------|
| | Tools (Roasting Pan, Gas Stove, Induction, | | | |
| 1 | Grinder, measuring spoon, pot etc.) | 0 | 0.10 | 0.10 |
| | Furniture and Set Up (Work Table, Storage shelves, | | | |
| 2 | Packaging Station etc.) | 0 | 0.00 | 0.25 |
| 3 | Fixture (Light, Fan, Cabinets etc.) | - | 0.00 | 0.05 |
| 4 | Others (Labelling Equipment, Gloves, Masks, etc.) | | | 0.02 |
| | Total Rs. | | | 0.42 |

13. SUPPLIERS OF MATERIALS AND EQUIPMENT

The availability of raw materials and equipment from local manufacturers is a promising advantage for the entrepreneur. Choosing the right mix of products and suitable machinery and tooling to facilitate modern and flexible processes is essential. Here are some of the suppliers of business equipment and raw materials an entrepreneur can consider:

Himalayan Herbals

- **Products**: Organic Himalayan herbs and extracts.
- Contact: Himalayan Herbals, Dehradun, Uttarakhand.
- **Phone**: +91-135-2711492
- **Email**: info@himalayanherbals.com
- Website: <u>www.himalayanherbals.com</u>

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Shivalik Herbs

- **Products**: A variety of Himalayan medicinal herbs including ashwagandha, tulsi, brahmi, and turmeric.
- Contact: Shivalik Herbs, Nainital, Uttarakhand.
- **Phone**: +91-999-955-0775
- **Email**: info@shivalikherbs.com
- Website: <u>www.shivalikherbs.com</u>

• Indian Machine Mart

- **Products**: Herbal extractors, grinding machines, packaging machines.
- Contact: Indian Machine Mart, Delhi.
- **Phone**: +91-981-123-2345
- **Email**: info@indianmachinemart.com
- Website: <u>www.indianmachinemart.com</u>
- Bharat Process Equipment
 - **Products**: Herbal oil extraction machines, mixers, blenders, and other processing equipment.
 - **Contact**: Bharat Process Equipment, Mumbai, Maharashtra.
 - **Phone:** +91-22-2778-0046
 - **Email**: info@bharatprocess.com
 - Website: <u>www.bharatprocess.com</u>
- Uttarakhand Packaging
 - **Products**: Custom eco-friendly packaging, biodegradable bags, glass bottles, plastic containers.
 - **Contact**: Uttarakhand Packaging, Dehradun, Uttarakhand.
 - **Phone**: +91-135-2765400
 - **Email**: info@uttarakhandpackaging.com
 - Website: <u>www.uttarakhandpackaging.com</u>

Sr. No Product Sales in Percentage INR Dried Herbs 25.0% 9000000 1 2 Herbal Essential Oil 25.0% 6750000 3 15.0% Tinctures 4 Ayurvedic Formulations 10.0%

14. SALES REALIZATION

| Total | 100.00% | 15750000 |
|-------|---------|----------|
| | | |

PROFITABILITY PROJECTION

| Sr. No | Particulars | Annual Expenses (Rs. in lakhs) |
|--------|---------------------------------|--------------------------------|
| А. | Sales realisation | 256.50 |
| B. | Cost of production | |
| i) | Raw materials | 8.60 |
| ii) | Utilities | 0.32 |
| iii) | Manpower Cost (Salaries/wages) | 8.28 |
| iv) | Administrative expenses | 0.31 |
| v) | Packaging Cost | 0.50 |
| vi) | Material Lost Cost | 0.10 |
| vii) | Selling & distribution expenses | 0.84 |
| viii) | Repairs & maintenance | 0.10 |
| ix) | Rent | 0.45 |
| x) | Interest | 3.94 |
| xi) | Misc. expenses | 0.00 |
| | Total (B) | 23.44 |
| | Gross profit/loss (A – B) | 233.06 |
| | Less: Depreciation | 1.91 |
| C. | PBIT | 231.15 |
| D | Income-tax | - |
| Е | Net profit/loss | 231.15 |
| F. | Repayment (Annual) | -3.52 |
| G | Retained surplus (E-F) | 234.66 |

15. BREAK-EVEN ANALYSIS

| Fixed cost | | |
|----------------------|------|--|
| Land & Building Rent | 0.45 | |
| Depriciation | 1.91 | |
| Interest | 3.94 | |
| Manpower | 2.48 | |
| Total Fixed cost | 8.79 | |
| Variable cost | | |
| Raw materials | 8.60 | |
| Utilities | 0.32 | |

| ManPower | 5.80 |
|---------------------------------|-------|
| Administrative expenses | 0.31 |
| Selling & distribution expenses | 0.84 |
| Total Variable cost | 15.87 |
| | |
| Contribution margin | 20% |
| Break-Even Point in Value | 43.94 |

16. STATUTORY APPROVALS

To establish Herbal Processing unit in Uttarakhand, you must obtain several statutory approvals and comply with various regulations. Here are the key steps and requirements:

1. Business Registration: Business registration has to be made with the appropriate local authorities within the Local Municipal Corporation or Panchayat.

2. Trade License: A trade license is required to operate a retail business. GST Registration: Goods and Services Tax (GST) registration is a must for taxation purposes

3. FSSAI (Food Safety and Standards Authority of India) Approval: This approval ensures that the product meets the food safety standards laid out by the Food Safety and Standards Act, 2006.

4. Pollution Control Board (State Pollution Control Board - SPCB) Approval: The production unit will require approval from the Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) to ensure compliance with water and air pollution control norms.

5. Organic Certification (As per requirement): If you wish to market your spirulina as organic, you will need to obtain organic certification from recognized bodies such as India Organic (under the National Program for Organic Production - NPOP) or USDA Organic for international markets

You can legally operate a driving school in Uttarakhand by following these steps and obtaining the necessary approvals.

These approvals are fundamental for legally establishing and operating a driving school unit.

17. TRAINING CENTERS AND COURSES

Uttarakhand Organic Farming Association (UOFA)

- **Focus Areas**: UOFA promotes organic farming in Uttarakhand, including the cultivation of medicinal herbs. They offer training on sustainable herb cultivation and organic farming methods that could be highly beneficial for a herbal processing unit.
- **Courses Offered**: Organic farming techniques, herb cultivation, processing, and valueadded products.
- Location: Dehradun, Uttarakhand.
 - **Phone**: +91-135-2713775
 - Email: uofa2005@gmail.com
 - Website: <u>www.uofa.in</u>

3. National Medicinal Plants Board (NMPB)

- Focus Areas: The NMPB under the Ministry of AYUSH offers various initiatives to support the herbal industry, including training on medicinal plant cultivation, processing, and product development.
- **Courses Offered**: Workshops and training on medicinal plant processing, extraction techniques, and value-added product development.
- Location: New Delhi (online and regional centers).
 - **Phone**: +91-11-26511772
 - Email: nmpb@nic.in
 - **Website**: www.nmpb.nic.in

4. Herbal Training Institute

- Focus Areas: This institute offers specialized training in herbal medicine production, including the processing of Himalayan herbs. It also covers areas like herbal formulation, extraction techniques, and the use of herbs in therapeutic products.
- **Courses Offered**: Certificate courses in herbal medicine preparation, herb processing, formulation of herbal products, and Ayurvedic medicine.
- Location: Haridwar, Uttarakhand.
 - **Phone**: +91-1334-224400
 - **Email**: herbaltraining@haridwar.com
 - Website: <u>www.herbaltraininginstitute.com</u>

5. Indian Institute of Herbal Medicine and Research (IIHMR)

- **Focus Areas**: IIHMR offers various training programs related to the healthcare industry, with a focus on herbal medicine. Their courses include topics such as herbal formulation, clinical research in herbal medicine, and product development.
- **Courses Offered**: Diploma and certificate courses in herbal medicine, herbal product processing, and quality assurance.
- Location: Jaipur, Rajasthan (offering online courses as well).
 - **Phone**: +91-141-3924700
 - Email: iihmr@iihmr.edu.in
 - Website: <u>www.iihmr.edu.in</u>

6. Baba Farid Institute of Herbal Medicine

- Focus Areas: This institute provides training on the processing and formulation of herbal medicines, with a particular focus on medicinal plants and herbs used in Ayurveda.
- **Courses Offered**: Herbal product processing, Ayurvedic formulations, herbal extraction techniques, and product development.
- Location: Dehradun, Uttarakhand.
 - **Phone**: +91-135-2644875
 - **Email**: info@babaferidinstitute.com
 - Website: <u>www.babaferidinstitute.com</u>

The Swayam portal (link: https://swayam.gov.in/) can also be accessed for enhanced learning on business commerce, accounting, production, marketing, and areas of entrepreneurship.

Entrepreneurship programs that help run businesses successfully are also available from institutes like the Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer

Only a 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 Bikery any recommendation.