# HERBAL COLOUR MANUFACTURING UNIT

#### 1. INTRODUCTION

Herbal colors are natural, plant-based dyes derived from herbs, flowers, fruits, leaves, bark, and other botanical sources. These colors are eco-friendly, non-toxic, skin-safe, and biodegradable, offering a sustainable alternative to synthetic chemical dyes.

The demand for herbal colors is growing steadily across industries like food processing, cosmetics, personal care, textiles, festivals (like Holi), and handicrafts. This project proposes a Herbal Colour Manufacturing Unit to produce high-quality, certified organic colors for multiple sectors.

Given Uttarakhand's natural biodiversity and herbal wealth, it offers an ideal environment for sourcing raw materials sustainably for herbal color production.

#### 2. MARKET DEMAND AND TRENDS

The demand for herbal colors is witnessing significant growth in India and globally. Consumers are increasingly shifting toward natural and eco-friendly alternatives due to rising awareness of the harmful effects of synthetic chemicals on human health and the environment. Herbal colors, being biodegradable, skin-safe, and free from toxins, are becoming preferred choices for applications in textiles, cosmetics, personal care, and food industries.

The global market trend shows a preference for organic and plant-based ingredients across all sectors, positively impacting the herbal color segment. Festivals like Holi in India have seen a surge in the use of herbal colors, driven by health-conscious consumers and public awareness campaigns. The rising popularity of organic textiles and sustainable fashion movements has further opened new avenues for herbal color usage in the clothing industry. With increasing export demands and the Indian government's push for organic product promotion through initiatives like the Organic India Mission and AYUSH schemes, the market trends strongly favor the growth of herbal color manufacturing units.

# 3. DESIRED QUALIFICATIONS FOR PROMOTER

The promoter of a herbal color manufacturing unit should ideally possess a strong educational background in fields like Chemistry, Ayurveda, Botany, or Life Sciences. A diploma or degree in Chemical Engineering, Natural Sciences, or Cosmetic Technology can also be highly beneficial. Technical knowledge about natural product extraction, organic certification standards, and production hygiene practices is essential for consistent quality.



Besides technical expertise, understanding business management, marketing, and regulatory compliance is crucial. A promoter with prior experience in natural product formulation, organic industry practices, or herbal processing units would have an added advantage. Familiarity with sustainability principles, product branding, and modern retail or e-commerce platforms will further strengthen the promoter's ability to grow and sustain the business in an increasingly competitive organic market.

#### 4. BUSINESS OUTLOOK AND OPPORTUNITIES

The future of herbal color manufacturing is auspicious, supported by consumer trends favoring eco-conscious living and natural products. In India, festivals like Holi, Ganesh Chaturthi, and Raksha Bandhan have traditionally used colors, and with increasing awareness, the switch to herbal alternatives is accelerating. Beyond festive usage, industries such as organic textiles, organic food processing, handicrafts, and Ayurvedic cosmetics are adopting natural colors to meet global demand for sustainable products.

Government initiatives supporting organic production, MSME development, and export facilitation provide an encouraging environment for herbal color enterprises. New business opportunities include developing edible-grade herbal colors for sweets and beverages, cosmetic-grade natural pigments for skincare and makeup products, and entering into textile dyeing collaborations with organic apparel brands. Export markets in Europe, the USA, and Japan, where consumers are willing to pay premium prices for certified natural products, further enhance the profitability prospects for a well-managed herbal color manufacturing unit.

### 5. MARKET POTENTIAL AND MARKETING ISSUES

The herbal color market offers strong and promising opportunities both within India and internationally, driven by changing consumer preferences, environmental concerns, and the rise of organic and natural product industries. Various industries such as textiles, cosmetics, food processing, and festivals are increasingly adopting natural alternatives to synthetic colors. Herbal colors, safe, eco-friendly, and biodegradable, meet the new consumer demand for healthier, chemical-free products.

# **Key Drivers of Market Potential:**

### 1. Growing Preference for Natural Products:

Consumers are becoming more aware of the adverse effects of synthetic chemicals on their health and the environment. There is a sharp shift toward natural and plant-based products, especially among urban and educated consumers.

## 2. Expanding Organic Textile Industry:

The organic fashion movement globally demands natural dyes for fabrics to comply with organic certifications. Natural colorants are increasingly replacing synthetic dyes in textile production for brands focusing on sustainability.



#### 3. Festival and Cultural Market:

During festivals like Holi, Ganesh Chaturthi, and other regional celebrations, there is a noticeable increase in demand for herbal colors. People now prefer safe, skin-friendly colors for themselves and their children.

#### 4. Rise of Natural Cosmetics and Personal Care Products:

Herbal colors are used in organic skincare and cosmetic products such as lipsticks, blushes, and eyeliners. The "clean beauty" trend fuels the adoption of natural ingredients, including natural pigments.

# 5. Growth in Organic Food and Beverages Sector:

The food industry increasingly uses natural colorants in candies, bakery items, and beverages. Herbal edible-grade colors are replacing chemical food dyes, opening another revenue stream for herbal color manufacturers.

### 6. Export Opportunities:

Europe, the USA, Australia, the UAE, and Japan have strong demand for certified organic and herbal color products, especially in the food, textiles, and cosmetics sectors. Exporters prefer suppliers with organic certification and standardized quality.

## 7. Government Support for Organic Enterprises:

Government schemes like Paramparagat Krishi Vikas Yojana (PKVY), Organic India Mission, and incentives under MSME programs encourage natural product manufacturing units, offering subsidies and marketing assistance.

#### 8. Eco-Conscious Consumer Behavior:

Younger consumers and millennials actively seek brands that support sustainability, ethical sourcing, and chemical-free production, making herbal colors a favorable category.

### **Challenges to Address:**

- Price competition with cheaper synthetic dyes.
- Awareness building among rural and semi-urban customers about the benefits of herbal colors.
- Consistency in shade, shelf-life, and certification to meet export standards.

# 6. BUSINESS INPUTS AND RAW MATERIAL REQUIREMENTS

### **Key Raw Materials:**

- Flowers (Marigold, Hibiscus, Rose, Palash, Tesu)
- Leaves (Neem, Indigo)
- Roots (Turmeric, Madder)
- Bark and seeds (Tamarind seed, Arjun bark)
- Fruit peels (Pomegranate, Amla)

#### **Other Requirements:**



- Solvents (water or food-safe solvents)
- Stabilizers and drying agents (natural-based)
- Organic preservatives (optional, for shelf-life)
- Packaging materials: paper bags, eco-friendly pouches, glass jars

# 7. MANUFACTURING PROCESS

# 1. Raw Material Sourcing:

Collection of fresh or dried herbal sources.

# 2. Drying and Grinding:

Drying materials (if needed) and grinding them into a fine powder.

## 3. Extraction (Optional Step for Liquid Colors):

Water or ethanol-based extraction for liquid or concentrate colors.

### 4. Filtration and Purification:

Removing impurities and achieving a consistent particle size.

## 5. Blending and Shade Matching:

Combining natural extracts to achieve desired hues.

## 6. Drying (Spray Drying/Sun Drying):

For powdered colors.

# 7. Packaging:

Packaged in eco-friendly, airtight containers for storage and sales.



# 8. LIST OF MACHINERY AND EQUIPMENT

Sr. No.	Equipment	Quantity	Estimated Price per Unit (₹ Lakhs)	Total Amount (₹ Lakhs)	Purpose
1	Herbal Grinder and Pulverizer	1	2.50	2.50	Grinding herbs into fine powder
2	Tray Dryer / Solar Dryer	1	2.00	2.00	Drying raw herbs or powders
3	Extraction Tank (Optional for liquids)	1	1.50	1.50	Herbal extract production (liquid)
4	Filter Press	1	1.00	1.00	Filtration of liquid colors
5	Powder Mixing and Blending Machine	1	0.80	0.80	Blending powders for shade matching
6	Semi-Automatic Packaging Machine	1	0.80	0.80	Packing powders into bags or pouches
7	Weighing Scales (High Precision)	2	0.10	0.20	Accurate weighing during packaging
8	Storage Bins, Trays, Sieves, Trolleys	-	0.20	0.20	Manual handling and raw material storage
9	Work Tables and Sorting Stations	-	0.20	0.20	Processing and manual sorting



# Total Machinery and Equipment Cost: ₹9.20 Lakhs

# **Important Notes:**

- Prices are approximate and based on medium-scale capacity equipment.
- Prices may vary ±10–15% depending on suppliers and specifications (manual/semi-automatic).
- Sourcing from MSME vendors, IndiaMart, TradeIndia platforms, or direct manufacturers like Aroma Herbals (Dehradun), Techno Agencies, and Eco Green Units (Pan-India) is possible.
- For export-grade production, stainless steel body machines (GMP certified) are recommended (higher cost).

# 9. MANPOWER REQUIREMENT

Role	Number of Staff	<b>Monthly Salary (₹)</b>	Annual Cost (₹)
Production Supervisor	1	30,000	3,60,000
Processing Workers	4	15,000	7,20,000
Packaging Operators	2	12,000	2,88,000
Marketing Executive	1	20,000	2,40,000
Administrative Assistant	1	18,000	2,16,000
Total	9 Staff		18,24,000

## 10. IMPLEMENTATION SCHEDULE

Activity	Timeline	
Land and Infrastructure Setup	Month 1	
Procurement of Machinery	Month 1–2	
Hiring and Training Staff	Month 2	
Trial Production and Product Testing	Month 2–3	
Launch of Marketing and Sales	Start of Month 4	



# 11. COST OF PROJECT

Particulars	<b>Estimated Cost (₹ Lakhs)</b>	
Land Lease/Rent Setup	2.00	
Building Renovation and Setup	3.00	
Machinery and Equipment	8.00	
Raw Material Procurement (Initial Stock)	5.00	
Branding, Packaging, and Marketing	2.00	
Licenses and Certifications	0.50	
Working Capital (6 months)	5.00	
Total Project Cost	25.50 Lakhs	

# 12. MEANS OF FINANCE

Source	Amount (₹ Lakhs)	Percentage (%)
Promoters' Equity Investment	10.20	40%
Bank Term Loan	15.30	60%
Total	25.50	100%

# 13. SALES REALIZATION AND PROFITABILITY

Particulars	Year 1 (₹ Lakhs)	Year 2 (₹ Lakhs)	Year 3 (₹ Lakhs)
Revenue	35.00	50.00	70.00
Operating Expenses	24.00	32.00	40.00
EBITDA	11.00	18.00	30.00
Interest and Depreciation	2.00	1.50	1.00
Profit Before Tax (PBT)	9.00	16.50	29.00
Income Tax (@25%)	2.25	4.13	7.25
Net Profit After Tax (PAT)	6.75	12.37	21.75



### 14. BREAK-EVEN ANALYSIS

Particulars	Value	
Annual Fixed Costs	₹18.24 Lakhs	
Average Margin on Products	35–40%	
Annual Sales Required to Break Even	₹30–32 Lakhs	
Estimated Break-even Time	12–14 months	

# 15. STATUTORY APPROVALS REQUIRED

- MSME/Udyam Registration
- GST Registration
- Factory License (if manufacturing exceeds prescribed limits)
- Pollution Control Board Clearance (Green Category Unit)
- FSSAI Registration (for edible-grade herbal colors)
- Trademark Registration (Optional but recommended for branding)
- Organic/NPOP Certification (optional for premium export markets)

### 16. TRAINING CENTRES AND COURSES

- National Institute of Natural Fibers and Dyes (NINFAD), Gujarat
- National Institute of Fashion Technology (NIFT): Textile and Dyeing Programs
- Central Institute for Research on Cotton Technology (CIRCOT), Mumbai
- KVIC Training Centers (Khadi and Village Industries Commission)
- Swayam Portal and edX.org for online certifications in Organic Product Processing

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.

