

## **Project Profile for Floriculture for Devotional Garlands in Uttarakhand**

### **1. INTRODUCTION**

Floriculture for devotional garlands represents a unique blend of cultural tradition and rural enterprise in Uttarakhand. With thousands of temples, pilgrimage sites, and seasonal fairs (melas), the demand for fresh flower garlands such as marigold, rose, jasmine, and rudraksha-infused malas is perennial. However, much of the supply is currently met through imports from plains like Haridwar, Meerut, and Haldwani. A locally rooted floriculture venture tailored specifically for devotional garland production can create new livelihood opportunities while catering to the expanding religious economy of the state.

The proposed floriculture project will focus on cultivating flower varieties with high demand for religious use, including hardy and pest-resistant types suitable for the state's mid- and low-altitude zones. Flowers will be grown in open fields and polyhouses, depending on altitude and climate, and processed into garlands, loose petals, and floral accessories. By training local women and youth in flower cultivation, harvesting, and garland-making, the unit will promote decentralized employment, skill development, and rural microenterprise growth.

Moreover, this initiative aligns well with Uttarakhand's cultural economy, eco-tourism, and sustainable development vision. The production of devotional garlands adds value to raw floriculture, encourages biodiversity in farming, and strengthens community identity. It also reduces the carbon footprint of imported flowers and enables religious institutions to support local farmers. Over time, the enterprise can evolve into a regional brand offering organic, traceable, and aesthetic floral products rooted in Himalayan culture.

### **2. INDUSTRY OVERVIEW**

The floriculture sector in India has seen rapid growth over the past two decades, driven by urban landscaping, religious ceremonies, weddings, and export-oriented florists. Devotional flower use forms a major sub-sector, especially in temple economies, pilgrimage towns, and spiritual tourism circuits. In Uttarakhand, where millions of pilgrims visit Char Dham sites, Kedarnath, Badrinath, Haridwar, and numerous local temples each year, the market for garlands and floral offerings is vast but underdeveloped from the supply side.

Despite the ecological suitability of the state's climate for many floriculture varieties, organized flower cultivation remains limited to pockets around Dehradun, Haldwani, and parts of Pauri and Almora. In most hill districts, floriculture is practiced in isolated plots without market integration, packaging knowledge, or cold chain access. This results in lost opportunities, particularly in segments like garlands, where perishability, freshness, and aesthetics are critical. Moreover, the lack of post-harvest handling and organized garland units means that even locally grown flowers are often sold as loose produce without value addition.

Government schemes like the National Horticulture Mission, MIDH, and the Devbhoomi Udyamita Yojana now recognize floriculture as a viable high-return enterprise, particularly for women and youth. Infrastructure support for polyhouses, drip irrigation, vermicompost units, and floriculture training has increased. However, focused efforts on devotional garland production—combining cultivation with value addition and market linkage—are still rare. A specialized unit in this niche can therefore fill a critical gap in the local value chain while leveraging cultural continuity and seasonal market cycles.

### **3. PRODUCTS AND APPLICATIONS**

The primary product of the proposed enterprise will be fresh devotional garlands made from locally cultivated flowers. These include single-flower garlands of marigold or chrysanthemum, combination garlands of rose and jasmine, and customized floral malas for special temple rituals, weddings, and spiritual events. Other applications include floral hair accessories, petal cones for religious ceremonies, and dried flower packets for hawan and puja rituals. These garlands can be produced in various lengths, patterns, and designs, catering to different religious aesthetics and price points.

Beyond finished garlands, the unit can also sell loose flowers in bulk to temples, religious trusts, event managers, and local florists. Additionally, partially processed flower bundles—sorted, cleaned, and bundled for quick garland assembly—can be supplied to women SHGs or other producers, enabling backward and forward enterprise linkages. Over time, the enterprise may explore fragrance extraction, organic dye preparation from flowers, and dried flower exports as higher-value extensions of the core floriculture business.

Applications for devotional garlands span a wide spectrum: daily temple offerings, special pooja ceremonies, marriage rituals, religious tourism festivals, and even packaging for eco-

conscious gifting. In high-traffic religious zones like Haridwar, Rishikesh, and Char Dham sites, local sourcing of garlands adds value for both consumers and service providers. With growing demand for eco-friendly, locally made alternatives to plastic or synthetic garlands, the enterprise has potential to align cultural, ecological, and commercial values in a scalable way.

#### **4. DESIRED QUALIFICATIONS FOR PROMOTERS**

The ideal promoter for this project should possess a combination of agricultural and cultural understanding, preferably with prior experience in horticulture, floriculture, or SHG-based handicrafts. Formal education in agricultural sciences or vocational training in floriculture would be an asset, but hands-on experience in flower farming or event-based flower decoration is equally important. The promoter must also be familiar with the flowering cycles, climatic needs, and pest control practices of marigold, rose, tuberose, and chrysanthemum.

In addition to technical skills, the promoter should have a keen sense of design and cultural aesthetics, as garland-making involves manual creativity, colour coordination, and understanding of ritual norms. The ability to train others, especially women and youth, in both flower cultivation and garland preparation is key. Promoters associated with local temples, SHG federations, or farmer clusters can use these networks to scale operations through training and subcontracted work.

Entrepreneurial qualities such as marketing ability, supply chain coordination, and quality control will be crucial to ensure consistent delivery, especially during peak pilgrimage seasons. A proactive promoter will also need to work with tourism departments, temple boards, and local vendors to establish sales outlets. Understanding cold chain basics, post-harvest flower care, and transport logistics will make the venture more robust. Promoters with ties to eco-tourism ventures or yoga ashrams can further diversify market access.

#### **5. BUSINESS OUTLOOK AND TRENDS**

The business outlook for devotional garlands is robust due to a combination of cultural continuity and emerging market trends. With millions of pilgrims visiting Uttarakhand annually, demand for floral offerings remains constant across seasons and religious sites. The rise in spiritual tourism, wellness retreats, and nature-based rituals has enhanced the relevance

of fresh and eco-conscious flower products. Moreover, events like weddings and local fairs contribute to seasonal spikes in demand, creating windows for higher earnings.

There is a noticeable shift towards sourcing flowers and garlands locally, particularly in temple economies that seek to reduce plastic waste and encourage community livelihoods. Devotional garlands made with organic flowers or native species are gaining traction among urban and international tourists who value authenticity and sustainability. In response, temple committees, hotels, and yoga centres are increasingly willing to partner with local producers for their floral needs.

At the policy level, floriculture is recognized as a high-potential sector under the MIDH, the Uttarakhand Organic Commodity Board, and MSME promotional schemes. Trends like biodegradable packaging, women-led floral cooperatives, and floral crafts for export are creating new demand niches. A devotional garland unit that blends traditional knowledge with modern branding and distribution strategies can grow steadily and eventually diversify into a multiproduct floriculture enterprise.

## **6. MARKET POTENTIAL AND MARKETING ISSUES**

The market for devotional garlands in Uttarakhand is vast, diverse, and underutilized from a local production standpoint. Daily offerings at temples in Haridwar, Rishikesh, and the Char Dham circuit—along with rituals in ashrams, wedding events, spiritual workshops, and cultural melas—create constant demand for marigold, rose, jasmine, and mixed garlands. Many of these are currently supplied from the plains, with significant cost additions due to transport, packaging loss, and freshness deterioration. A localized garland production unit in hill districts can offer fresher products at competitive prices with greater traceability and cultural alignment.

Apart from institutional buyers like temple trusts and spiritual centers, new markets are emerging through wellness resorts, yoga schools, and eco-retreats that use garlands for décor, rituals, or guest greetings. These entities are increasingly inclined toward sustainably sourced, biodegradable floral products, particularly those associated with local women's groups or cooperative models. Furthermore, packaging innovations—such as boxed garlands with moisture-retentive cloth or reusable trays—can help tap into urban and online buyers seeking spiritual gifting items.

Despite this market potential, several marketing challenges exist. The short shelf-life of fresh flowers necessitates accurate demand forecasting, cold-chain awareness, and robust logistics. Pricing pressures from lowland suppliers, especially during peak season, require that quality and customization become the local unit's main differentiator. Building trust among bulk buyers, establishing regularity of supply, and training staff to maintain uniform design and hygiene are critical for scaling. Strategic outreach to temple boards, SHG fairs, government melas, and spiritual events is essential for visibility.

## 7. RECOMMENDED FLOWER VARIETIES FOR GARLANDS

The project will focus on cultivating flower species that are both suitable for garland-making and adaptable to the agro-climatic zones of Uttarakhand. Marigold (*Tagetes erecta* and *Tagetes patula*) is the backbone of most garlands due to its bright colour, pest resistance, and year-round demand. It thrives between 600–1,500 meters and requires well-drained loamy soil and moderate irrigation. Varieties such as Pusa Narangi Gaiinda and Hybrid Orange have good shelf life and yield. Marigold is used in both single and mixed garlands for poojas, daily temple rituals, and processions.

Rose (*Rosa indica* and its hybrids) is the next essential flower, especially for combination garlands and floral décor. Desi red roses and small hybrid varieties are in high demand for their fragrance and vibrant colours. While rose cultivation requires slightly more care—especially against fungal infections—its value and market price justify the effort. Jasmine (*Mogra/Chameli*) and Tuberose (*Rajnigandha*) are also culturally valued for their fragrance, used particularly in garlands for evening rituals, bridegroom malas, or spiritual décor.

Other support flowers and fillers such as Chrysanthemum, Aster, and foliage like Ashoka leaves or mango greens can be grown as companion crops or sourced locally. Experimentation with high-altitude specialty flowers like Rhododendron or seasonal wildflowers can add a unique identity to the garlands. The unit may also explore integrating Rudraksha beads (sourced from plains) for premium malas. A diversified mix ensures both visual appeal and economic resilience against market fluctuations.

### Table: Recommended Flowers for Garland Production

Flower Type	Preferred Varieties	Suitable Altitude (m)	Cultivation Method	Use in Garlands
Marigold	Pusa Narangi Gaienda, Hybrid Orange	600–1,500	Direct seeding, transplanting	Base flower in all religious garlands
Rose	Desi red, hybrid small roses	800–1,800	Bush planting, drip irrigation	Fragrant layers and centerpiece flowers
Jasmine (Mogra)	Local fragrant types	700–1,300	Trellis with staking	Bridal and temple malas
Tuberose (Rajnigandha)	Single/double varieties	600–1,200	Bulb planting	Fragrant garlands, evening rituals
Chrysanthemum	Yellow/white button types	800–1,800	Seasonal sowing, raised beds	Mixed pattern garlands, decoration
Foliage/Fillers	Ashoka leaves, banana fiber	All altitudes	Intercropping or collection	Structural support, visual contrast

## 8. RAW MATERIALS AND INFRASTRUCTURE REQUIRED

The success of a devotional garland floriculture unit depends on access to high-quality flower seeds or saplings, soil nutrition inputs, garland-making materials, and basic post-harvest infrastructure. The primary raw materials include hybrid seeds or nursery saplings of marigold, rose, jasmine, and tuberose, along with farmyard manure, vermicompost, and pest-repellent sprays (preferably organic). Biodegradable packaging items like cloth wraps, banana leaves, or areca plates may be used for garland packaging to maintain freshness and sustainability.

For garland-making itself, the project will require needle-thread kits, flower grading trays, sharp scissors or snippers, and buckets for soaking. Packing tables, jute twine, wooden crates, and soft cloths for moisture retention are essential to preserve flower quality during transport. Optional additions like flower drying racks, herbal sprays for freshness, and decorative accessories (colored threads, beads, rudraksha inserts) can enhance the aesthetic appeal and diversity of offerings. Efficient water access for irrigation and flower cleaning is also critical.

The core infrastructure includes 0.25 to 0.5 acres of cultivable land (owned or leased), net houses or polyhouses for delicate species like rose and jasmine, and shaded areas for garland preparation. A small thatched or bamboo shed with tables for processing, storage of tools and materials, and temporary refrigeration or cool boxes for flower storage is recommended. A separate composting unit using crop waste and cattle dung supports organic soil enhancement. Solar drying racks and LED lighting may be added for off-grid efficiency. The infrastructure can be built in phases and scaled based on demand.

**Table: Raw Materials and Infrastructure Requirements**

Component	Details	Remarks
Flower Seeds/Saplings	Marigold, rose, jasmine, tuberose	Locally sourced or from certified vendors
Growing Inputs	Compost, cow dung, neem spray, wood ash	For organic cultivation
Garland Tools	Needles, threads, scissors, baskets, crates	Essential for post-harvest processing
Packing Materials	Cloth wraps, jute twine, banana leaves	Eco-friendly and cost-effective
Watering System	Pipes, cans, sprayers	Manual or gravity-based preferred in hill zones
Net House/Polyhouse	300–500 sq ft per unit	For climate-sensitive flowers like rose and mogra
Processing Shed	10' x 15' bamboo or tin-roofed shed	For garland-making and storage
Composting Area	Open pit or bin with shading	Supports sustainable nutrient cycle
Cold Storage Box	Ice box or cool box (optional)	For maintaining freshness during transport

## 9. OPERATIONAL FLOW

The floriculture and garland-making unit will follow a cyclical and seasonally aligned operation plan. In the first phase, land is prepared by ploughing, composting, and laying beds or installing polyhouse structures, depending on the flower type. Seeds or saplings are planted in well-prepared rows or containers and irrigated as needed. Pest management is carried out using neem oil, wood ash, or other organic methods. Flower harvesting begins within 45 to 90 days depending on species and season.

Once harvested, flowers are graded and sorted manually based on size, freshness, and variety. This step is essential for quality consistency in garlands. Garland-making is carried out either at the field processing shed or at a decentralized home unit if SHGs are involved. Standard sizes of garlands are prepared (e.g., 18-inch, 36-inch, mala for deities, mala for wedding rituals), and packed in biodegradable wraps or crates. Moisture is retained with wet cloth or banana leaf packing for short-distance delivery.

Marketing and delivery operations are scheduled to align with local temple routines, weekly markets, or seasonal festivals. Orders from institutional buyers are tracked through a simple logbook or WhatsApp catalogue system. Feedback from buyers, especially in terms of freshness and design, is used to improve product planning. The operational model is designed to be low-cost, repeatable, and suitable for training rural women and youth in production and basic management.

## **10. SUITABLE LOCATIONS IN UTTARAKHAND**

Floriculture for devotional garlands is best suited for mid- to low-altitude zones in Uttarakhand, ranging from 600 to 1,500 meters above sea level. These zones support year-round cultivation of marigold, chrysanthemum, and rose with relatively stable climates. Areas near pilgrimage centers and mandis such as Haridwar, Rishikesh, Kotdwar, Srinagar (Garhwal), Almora, Nainital outskirts, and Haldwani are ideal due to access to both markets and transport infrastructure.

Villages around religious hotspots or temple clusters benefit from proximity to local demand. These include Devprayag, Rudraprayag, Kalimath, Guptkashi, and Jakholi in Garhwal, and Bhimtal, Betalghat, and Ramgarh in Kumaon. These areas offer moderate temperatures, manageable humidity, and farmer familiarity with horticulture crops. They also allow for linking flower production with tourism or spiritual homestays, expanding market options.



The availability of land, SHG networks, water sources, and connectivity to nearby towns should be considered when selecting a site. Clusters with FPO presence or Krishi Vigyan Kendras provide institutional support for scale and training. Location decisions can also be aligned with convergence plans under NRLM, DUY, or MIDH for ease of infrastructure financing and market access.

## 11. MANPOWER REQUIREMENTS WITH COST

A small yet efficient team is needed to run the floriculture and garland-making unit, particularly during planting, harvesting, and peak festival seasons. The team should include one Field Supervisor responsible for overseeing flower cultivation, irrigation schedules, pest management, and harvesting timelines. This individual should ideally have prior experience in floriculture or vegetable farming and be paid a monthly salary of ₹18,000–₹20,000.

For garland-making, two skilled artisans are essential. These could be trained local women capable of maintaining quality, speed, and design aesthetics in the garland-making process. Each artisan may receive ₹10,000 per month, with seasonal bonuses during peak demand months. Additionally, 2–3 daily wage laborers (₹350–₹400/day) may be employed for activities like weeding, flower picking, garland assembly, and market delivery. Their engagement can be flexible based on volume.

A part-time Administrative Assistant is needed to maintain sales records, process orders, manage procurement of inputs, and handle scheme-related documentation. This position may be paid ₹6,000–₹8,000 monthly. As demand grows, this structure can expand with cluster-level artisans, shared marketing staff, or mobile delivery agents. The total annual manpower cost is estimated between ₹4.5–₹5.5 lakhs.

**Table: Manpower Requirements and Cost**

Position	No. of Staff	Monthly Salary (₹)	Duration	Annual Cost (₹)	Responsibilities
Field Supervisor	1	₹20,000	12 months	₹2,40,000	Crop planning, pest management, harvesting

Position	No. of Staff	Monthly Salary (₹)	Duration	Annual Cost (₹)	Responsibilities
Garland Makers (SHG)	2	₹10,000	12 months	₹2,40,000	Garland design, packing, seasonal customization
Admin Assistant (Part-time)	1	₹7,000	12 months	₹84,000	Record-keeping, orders, buyer communication
Daily Wage Workers	2–3 (seasonal)	₹350/day	4–5 months	₹60,000 – ₹75,000	Weeding, harvesting, packing, delivery
<b>Total Estimated Cost</b>	–	–	–	₹4,80,000 – ₹5,50,000	Inclusive of core team and seasonal labor

## 12. IMPLEMENTATION SCHEDULE

The floriculture project will follow a 12-month cycle starting with land preparation and infrastructure setup in the initial months. Months 1–2 will focus on fencing, compost preparation, and procurement of seeds/saplings. Polyhouse/net house structures and irrigation systems will be installed during this phase. Garland-making equipment and basic packing materials will also be sourced.

From Month 3, flower sowing or transplanting will begin depending on the species. This will be followed by routine crop care, weeding, organic pest control, and irrigation. Harvesting of marigold and early rose varieties starts by Month 4 or 5. Garland production and market outreach will intensify from Month 6 onwards, especially around the monsoon festival period. Seasonal peaks during Navratri, Diwali, and Char Dham yatra must be aligned with planning.

By Month 9, feedback collection, expansion assessment, and procurement for the next planting cycle will begin. Training and collaboration with SHGs may be scheduled in off-peak months to build artisanal capacity. A second crop cycle may be introduced after Month 10 to maintain year-round flower availability.

**Table: Implementation Schedule**

Timeline (Months)	Key Activities
Month 1–2	Land prep, fencing, polyhouse installation, seed procurement
Month 3	Planting/transplanting, irrigation setup, garland tool procurement
Month 4–5	First harvests (marigold), sorting, pest control, staff onboarding
Month 6–8	Garland-making, festival order planning, outreach to temples and hotels
Month 9–10	Expansion planning, SHG training, composting cycle reset
Month 11–12	Second-cycle planting, quality review, financial reconciliation

### 13. ESTIMATED PROJECT COST

The estimated cost of establishing a small- to medium-scale floriculture and devotional garland unit is ₹9.5–₹11.5 lakhs. Around ₹2.5–₹3 lakhs will be used for basic infrastructure including land development, net house setup, compost units, and a flower processing shed. Another ₹2 lakhs are needed for seeds, irrigation tools, pest control supplies, and garland-making kits.

Working capital for labor, input purchase, packaging, and transport for the first year is estimated at ₹4.5–₹5.5 lakhs. A contingency reserve of ₹50,000 is recommended for price fluctuations or weather shocks. The budget may be optimized if land is owned and labor is pooled via SHGs. Cost-sharing through convergence schemes will further reduce the upfront investment.

**Table: Estimated Project Cost**

Component	Estimated Cost (₹)	Details
Infrastructure (shed, fencing, net house)	₹2,50,000 ₹3,00,000	Includes compost pit, storage, irrigation layout
Seeds, Inputs & Tools	₹2,00,000 ₹2,25,000	Seeds/saplings, sprays, tools, compost
Working Capital (1st Year)	₹4,50,000 ₹5,50,000	Labor, transport, packaging, marketing
Contingency	₹50,000	For pests, rainfall variation, repair

Component	Estimated Cost (₹)	Details
Total Project Cost	₹9,50,000 ₹11,25,000	Excluding land ownership

#### 14. MEANS OF FINANCE

The project can be financed using a mix of promoter equity, institutional credit, and government grants. The promoter may contribute ₹2–2.5 lakhs through land, labor, or setup capital. Term loans worth ₹6–7 lakhs may be availed from nationalized banks under horticulture/agriculture lending programs. These may be linked with interest subvention under Agri Infrastructure Fund or State Rural Livelihood Missions.

Government schemes like MIDH and DUY provide capital grants of 20–40% for floriculture projects. SHG federations may also help access revolving funds or shared infrastructure. With proper documentation and project viability, convergence from Forest or Tourism departments is also possible. This diversified financing ensures affordability and long-term viability.

**Table: Means of Finance**

Source	Contribution (₹)	% of Total Cost	Remarks
Promoter's Equity	₹2,00,000 ₹2,50,000	20–25%	Land, shed, manual labor
Bank Loan (MSME/Horticulture)	₹6,00,000 ₹7,00,000	55–65%	3–5 year repayment with subsidy
Government Grants (DUY/MIDH)	₹1,50,000 ₹2,00,000	15–20%	Capital subsidy for floriculture
<b>Total Estimated Cost</b>	₹9,50,000 ₹11,25,000	100%	Can be optimized through SHG-based operations

#### 15. REVENUE STREAMS

The primary revenue stream for the project is the sale of fresh devotional garlands, priced according to design complexity, flower type, and market location. Standard marigold garlands may sell for ₹10–₹20 each, while rose or jasmine-infused malas can range from ₹30 to ₹80 depending on size and design. Premium temple malas or special-event floral sets for weddings and festivals may command even higher rates. Based on a conservative output of 20,000–30,000 garlands per year, the total annual income from garland sales alone is expected to be ₹5–7 lakhs.

A secondary stream comes from the sale of loose flowers to temples, spiritual hotels, and puja samagri sellers. This includes bulk marigold by weight, rose petals, and small jasmine bunches. Loose flower sales may add ₹1–1.5 lakhs annually, especially during yatra season or festival weeks. An additional income stream may arise from custom orders, including pre-packaged garland sets for weddings, decorative flower cones, and hospitality malas for guests in eco-tourism centers.

Over time, the unit may diversify into floral training workshops, seedling sales, or leasing land to SHGs for floriculture. Dried garland souvenirs and eco-gift boxes can be explored for online or tourist retail. This multi-channel revenue model ensures resilience across seasons and strengthens community linkages.

**Table: Revenue Streams**

Revenue Source	Unit Price (₹)	Estimated Volume (Annual)	Annual Revenue (₹)	Remarks
Marigold Garlands	₹10 – ₹20	15,000 – 20,000 units	₹2,00,000 – ₹3,50,000	Sold to temples, vendors, and SHGs
Rose/Jasmine Garlands	₹30 – ₹80	5,000 – 8,000 units	₹2,00,000 – ₹3,20,000	Higher value for special occasions
Loose Flower Sales	₹30 – ₹60/kg	1,000 – 1,500 kg	₹1,00,000 – ₹1,50,000	Sold by weight to temples or markets

Revenue Source	Unit Price (₹)	Estimated Volume (Annual)	Annual Revenue (₹)	Remarks
Custom Orders & Eco-Gifts	₹200 – ₹500/set	100 – 200 orders/year	₹30,000 – ₹80,000	Includes eco-garlands, puja kits, wedding packages
Training/Consulting	₹250 – ₹500/person	30 – 50 trainees/year	₹10,000 – ₹25,000	Optional SHG trainings in floriculture
<b>Total Estimated Revenue</b>	–	–	₹5,40,000 – ₹9,25,000	Varies with design, demand, and seasonality

## 16. PROFITABILITY ESTIMATE

In the first year, the unit is expected to generate moderate revenue (₹5–6 lakhs) with lower net profit margins (10–15%) due to setup costs, team training, and market exploration. Net profits in Year 1 may range between ₹50,000 to ₹1 lakh. As market linkages stabilize and productivity improves in Year 2, revenue may grow to ₹7–8.5 lakhs with net profit margins increasing to 25–30%, yielding ₹2–2.5 lakhs annually.

By Year 3, with diversified garland types, custom orders, and SHG contracts, revenues may cross ₹10 lakhs with profit margins of 35% or more. Once recurring expenses stabilize and seasonal forecasting improves, the enterprise becomes more profitable with scalable potential. Seasonal planning, waste reduction, and bulk procurement will play key roles in maintaining profitability.

**Table: Profitability Projection**

Year	Revenue (₹)	Expenses (₹)	Net Profit (₹)	Profit Margin (%)	Remarks
Year 1	₹5,50,000 – ₹6,00,000	₹5,00,000 – ₹5,50,000	₹50,000 – ₹1,00,000	10–15%	Setup phase, learning curve
Year 2	₹7,00,000 – ₹8,50,000	₹5,00,000 – ₹6,25,000	₹2,00,000 – ₹2,50,000	25–30%	Stronger networks, repeat orders
Year 3	₹9,00,000 – ₹11,00,000	₹6,00,000 – ₹7,25,000	₹3,00,000 – ₹3,75,000	30–35%	Diversification, SHG partnerships

## 17. BREAK-EVEN ANALYSIS

The break-even point for the floriculture unit is expected by the middle or end of Year 2. With an annual fixed cost of ₹4.5–₹5 lakhs and an average gross margin of 30–35%, the unit must generate about ₹6.5–₹7 lakhs in revenue to recover its investment. If a government subsidy offsets initial capital investment, break-even may be achieved sooner—within 14–16 months.

Bulk orders from temples or tourism institutions can accelerate this process. Clear scheduling, demand tracking, and SHG collaboration are key levers to reducing risk and ensuring predictable cash flows. Post break-even, the enterprise generates surplus that can fund value addition or scale-up efforts.

**Table: Break-Even Analysis**

Parameter	Value (₹)	Remarks
Fixed Annual Costs	₹4,50,000 – ₹5,00,000	Salaries, inputs, tools, packaging
Variable Cost per Cycle	₹1,00,000 – ₹1,50,000	Flower replanting, labor, logistics
Revenue Needed to Break-Even	₹6,50,000 – ₹7,00,000	Achievable by Year 2 with stable output

Parameter	Value (₹)	Remarks
Time to Break-Even	16–20 months	Sooner if SHG/temple contracts are secured
Post Break-Even Profit	₹2–4 lakhs/year	With consistent volume and diversification

## 18. MARKETING STRATEGIES

Marketing strategies must combine local cultural engagement with modern sales methods. The most effective approach is forming partnerships with temples, mutts, spiritual trusts, and dharamshalas for consistent garland orders. Advance registration of the garland unit with temple boards, SHG federations, and NRLM buyer networks builds credibility and repeat business.

Promotional booths at Char Dham fairs, yoga festivals, or horticulture melas can improve brand visibility. Word-of-mouth among purohits and spiritual event organizers is especially effective. Adding QR-coded tags to garlands explaining their eco-friendly and local origin can enhance consumer value perception. A basic WhatsApp-based catalogue with images and prices helps streamline B2B orders.

Long-term, the unit may develop branded garland boxes for gifting, spiritual retreats, or weddings. Listings on platforms like Amazon Karigar or Instagram stores focused on devotional decor can access premium buyers. Temple souvenir shops and florists may also retail the products under consignment or fixed contracts.

## 19. MACHINERY REQUIRED

The unit relies primarily on hand tools and light equipment. These include scissors, pruning knives, weeding tools, baskets, twine dispensers, and portable tables for garland assembly. A water tank or drip system ensures flower hydration. Packing tables, cloth wraps, trays, and crates are also essential.

For units with higher output, optional tools include flower grading tables, moisture-retaining boxes, or pedal-operated garland rollers. If dried garlands or value-added products are planned,



a solar dryer and basic cutter tools may be procured. All tools are available in Dehradun, Haldwani, or via agriculture input vendors online.

## **20. ENVIRONMENTAL BENEFITS**

This project promotes circular economy practices and biodiversity preservation. Flower cultivation improves soil fertility, supports pollinators, and diversifies monoculture cropping patterns in villages. Compost from flower waste and neem-based sprays minimizes chemical use, promoting regenerative agriculture.

Replacing plastic garlands with fresh biodegradable ones directly addresses temple waste and river pollution issues. The unit also minimizes carbon footprint by sourcing and selling locally, reducing flower imports from other states. Integration with cow-based farming systems (panchagavya, gobar) ensures climate-smart cultivation.

## **21. FUTURE OPPORTUNITIES**

In the long run, the unit can expand into a floral cooperative producing bulk garlands for religious tourism circuits. Branding Uttarakhand-made garlands with GI-linked flowers or Himalayan herbs may open up export and gifting avenues. Integration with wedding planners, temple boards, and eco-resorts can drive scale.

The enterprise may also become a training center for SHG women in floriculture and floral artistry. Dry flower decor, essential oil extraction, or incense preparation from floral waste offer additional product lines. If demand continues, satellite units can be set up in Char Dham zones through a mentorship or franchise model.

### **Disclaimer**

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