1. INTRODUCTION

The poultry farming sector in Uttarakhand, India, presents a compelling opportunity for aspiring entrepreneurs interested in micro and small-scale investment projects. This region boasts favorable agro-climatic conditions and a growing demand for poultry products. This project profile serves as a valuable resource for potential poultry farmers, offering insights into the poultry farming industry in Uttarakhand.

2. PRODUCT & ITS APPLICATION

Poultry farming in Uttarakhand focuses on the production of both poultry meat, including primarily chicken and occasionally ducks, and eggs. The sector is characterized by the breeding of broiler chickens, which are highly sought after for their tender meat and fast growth rates, making them a staple in meat production. Additionally, layer chickens are an integral part of the industry, valued for their consistent ability to produce eggs. Eggs themselves are a fundamental part of the local diet in Uttarakhand, with their consumption on the rise due to the nutritional benefits they offer. Beyond the direct products of meat and eggs, poultry farming in the region also stimulates demand for poultry feed. This includes various grains and nutrient-enriched feed supplements necessary for the healthy growth and maintenance of poultry stocks.

3. DESIRED QUALIFICATION FOR PROMOTER

To succeed in the poultry farming industry in Uttarakhand, entrepreneurs need a combination of knowledge, resources, and dedication. A fundamental understanding of poultry management, including aspects of nutrition and healthcare, is crucial. This foundation can be built through relevant training programs or prior experience in the field, providing a practical edge in managing poultry farms efficiently. Financial stability is another key requirement, as starting and maintaining a poultry farm demands significant

investment in infrastructure, purchasing poultry stock, and managing daily operational costs. Access to suitable agricultural land is essential, not just for constructing poultry houses but also to provide space for grazing, ensuring the health and well-being of the flock. Beyond these logistical and material requirements, success in poultry farming demands a high level of commitment and dedication to the care of the poultry and the quality of the products produced. Additionally, a thorough understanding of biosecurity measures is imperative to prevent the risk of disease outbreaks, ensuring the long-term sustainability of the farming operation.

4. INDUSTRY OUTLOOK AND TRENDS

Succeeding in the poultry farming business in Uttarakhand requires a multifaceted approach, combining knowledge, experience, financial capability, and a commitment to excellence. A foundational understanding of poultry management, including nutrition and health care, is critical for anyone looking to enter this field. This can be augmented by prior experience in poultry farming or through participating in relevant training programs, which can provide practical insights and a competitive edge. Financial resources are essential not only for establishing the poultry farm infrastructure but also for purchasing poultry stock and covering the day-to-day operational expenses. Access to suitable agricultural land is another prerequisite, providing ample space for poultry housing and grazing. Beyond these practical considerations, a deep commitment to the business and a dedication to the welfare of the poultry and the quality of the products are vital for long-term success. Additionally, awareness and implementation of biosecurity measures are crucial to prevent disease outbreaks within the flock.

The poultry market in India, according to IMARC Group, is on an upward trajectory, with projections suggesting growth to INR 3,477.8 billion by 2028, at a Compound Annual Growth Rate (CAGR) of 10.18% from 2023 to 2028. This growth is largely fueled by factors such as population growth, urbanization, and rising incomes in developing countries. Trends within the industry, such as automation and the use of video surveillance technology, are making poultry farming more efficient and manageable. Automated chain feeders, for instance, minimize human intervention by allowing hens to independently access food,

ensuring a continuous feeding process. These advancements, coupled with the growing demand for poultry products, highlight the promising prospects for entrepreneurs in the poultry farming sector in Uttarakhand and beyond.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY

The poultry farming sector in Uttarakhand holds tremendous market potential driven by several significant factors. Firstly, there is a consistent and growing demand for poultry products, including chicken meat and eggs, attributable to population growth, urbanization, and evolving dietary preferences.

Poultry products, particularly chicken, are a critical protein source in the local diet, making them a staple for most households. Moreover, festivals, celebrations, and special occasions lead to seasonal spikes in poultry product demand.

Additionally, as consumers become increasingly health-conscious, lean protein sources like chicken and eggs have gained popularity. The thriving tourism industry in Uttarakhand has also resulted in a continuous demand for poultry products in local restaurants and hotels. However, poultry farmers may encounter challenges such as price fluctuations due to feed costs, disease outbreaks, and seasonal demand variations. Ensuring efficient distribution channels, especially in remote or hilly areas, and maintaining consistent product quality while adhering to stringent biosecurity measures are crucial aspects of successful poultry marketing.

In the dynamic landscape of the Indian poultry industry, several key players are driving growth and innovation. According to IMARC Group, notable companies such as Bharati Poultry Pvt. Limited, IB Group, Mulpuri Group, RM Group, Simran Farms Limited, Skylark Hatcheries Pvt. Ltd., Sneha Group, and Suguna Foods Private Limited stand out for their significant contributions. These organizations span various aspects of the poultry sector, including breeding, feed production, processing, and marketing of poultry products. Their operations not only support the domestic demand for poultry products but also position India as a significant player in the global poultry market. The presence of these major companies underscores the industry's competitive environment and its potential for continued expansion and innovation.

Suguna Foods Pvt. Ltd. is India's leading poultry company, with a turnover of INR 10,750 crore. It is also the largest company in commercial poultry farming in India, with an annual revenue of nearly a billion dollars.

6. RAW MATERIAL REQUIREMENTS

Commonly raised poultry breeds include broilers, known for their rapid growth and suitability for meat production, and layers, prized for their consistent egg-laying abilities. Local or indigenous poultry varieties are also raised, particularly in free-range systems. Poultry feed forms the backbone of nutrition, comprising grains like corn, wheat, sorghum, and millets, coupled with protein sources such as soybean meal, fish meal, and oilseed cakes.

To ensure balanced nutrition, poultry feed also includes mineral supplements, vitamins, and additives. Fresh green forage or cut-and-carry forage can be provided to free-range poultry for enhanced nutrition. Moreover, maintaining a consistent and clean water supply, providing adequate housing with proper ventilation and temperature control, and equipping the facility with feeders, drinkers, and nesting boxes are all vital aspects of raw material requirements for successful poultry farming.

- Khushboo Feed Mills Pvt. Ltd: Address: Damdama Lake Rd, Sehjawas, Haryana 122102. Phone: 088606 31639
- HINDUSTAN ANIMAL FEEDS: Address: behind Gokulnagar Octroi Check Post, near Vijaynagar Railway Crossing, Ajanta Society, Jamnagar, Gujarat 361004. Phone: 099799 59777
- Chaitanya Industries: E 198, MIDC, Baramati, Katphal, Pune-413113, Maharashtra, India

7. MANUFACTURING PROCESS

The poultry farming manufacturing process in Uttarakhand encompasses a comprehensive and methodical approach that includes several key stages to ensure the production of highquality poultry products. This process begins with poultry rearing, where day-old chicks or pullets are acquired and raised in controlled environments to maintain optimal temperature, humidity, and ventilation. The focus here is on providing proper nutrition and health care, tailored to the birds' specific needs based on whether they are being raised for meat or egg production.

Feed preparation is another critical stage, involving the careful blending of grains, protein sources, supplements, and forage to meet the precise nutritional requirements of the poultry at different ages and for various purposes. For layer poultry, egg collection and handling are conducted daily, emphasizing the importance of cool, clean storage conditions and meticulous handling to preserve product quality.

Broiler production focuses on raising birds to the desired weight within a 6 to 8-week period, through controlled feeding and management practices. Once ready, these birds are processed for meat production, which includes steps such as cleaning, packaging, and distribution, ensuring that biosecurity measures are in place throughout to prevent disease outbreaks.

The marketing and distribution phase involves the careful packaging and distribution of processed poultry products, either meat or eggs, to local markets, retailers, or directly to consumers. Establishing a reliable distribution network is crucial for timely product delivery. Additionally, quality control measures are routinely implemented to ensure that the products meet regulatory standards and consumer expectations. These include conducting regular quality checks and maintaining a clean, sanitized production area to prevent contamination.

Furthermore, adherence to the Bureau of Indian Standards (BIS) 1374:2007, which specifies requirements, sampling, and testing techniques for chicken feed, is a testament to the industry's commitment to quality and safety. Guidelines for establishing a poultry farm

emphasize the importance of proper fencing, limiting visitor access, implementing foot dips at poultry shed entrances, following the ALL-IN ALL-OUT rearing system, adopting a single age policy per site, and ensuring protection against natural predators. Together, these practices and standards form the backbone of a successful poultry farming operation in Uttarakhand, contributing to the production of safe and high-quality poultry products.

Sr. No	Particulars	No. of	Months	Monthly Wages	Monthly	Annual
		Person		Amount/Person	Wages - Total	Expenses
				(Rs in Lakhs)	(Rs in Lakhs)	(Rs in Lakhs)
1	Skilled	1	12	0.25	0.25	3.00
2	Semi-skilled	2	12	0.15	0.30	3.60
3	Unskilled	2	12	0.12	0.24	2.88
	Total	1	1			9.48

8. MANPOWER REQUIREMENT

9. IMPLEMENTATION SCHEDULE

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

10. COST OF PROJECT

Sr. No.	Particulars	Amount (Rs in Lakhs)
1	Pre-operative Expenses	0.75
2	Land and Building	8.00

3	Machinery	5.72
4	Equipment and Furniture	1.17
5	Working Capital	1.50
	Total Project Cost	17.14

11. MEANS OF FINANCE

Bank-term loans are assumed @ 75 % of fixed assets.

Sr. No.	Particulars	Percentage Share	Amount (Rs in Lakhs)
1	Promoter's Contribution	25%	4.29
2	Bank Finance	75%	12.86
	Total		17.14

12. LIST OF MACHINERY REQUIRED

A. Machinery

Sr. No.	Particulars	Unit	Unit Cost	Total Amount
			(Rs in Lakhs)	(Rs in Lakhs)
1	Steam Distillation Unit (100 kg capacity)	1	2.00	2.00
2	Oil Separator	1	0.50	0.50
3	Grinder for Raw Material (Medium size)	1	0.40	0.40
4	Stainless Steel Storage Tanks (500 Litres)	2	0.25	0.50
5	Weighing Scale (Digital, up to 100 kg)	1	0.10	0.10
6	Packaging Machine (Small scale)	1	0.60	0.60
7	Laboratory Equipment (for quality testing)	set	0.30	0.30
	Total Amount			4.40
	Tax, Transportation, Insurance, etc.			0.88
	Electrification Expenses (Wiring)			0.44
	Grand Total			5.72

B. Furniture & Equipment

Sr. No	Particulars	Unit	Unit Cost	Total Amount
			(Rs in Lakhs)	(Rs in Lakhs)
1	Office Desk and Chairs	Set	0.40	0.40
2	Computer and Printer	1	0.40	0.40
3	Shelves and Storage Units	Set	0.25	0.25
4	Safety Equipment	Set	0.12	0.12
	Total Amount in Rs	•		1.17

1. Omega Farm Equipments

B-10 10/1011, Damji Shamji Corporate Square,

Laxmi Nagar, Ghatkopar (East),

Mumbai, Maharashtra, 400075, India

2. Labh Projects Pvt. Ltd.

4th Floor, Sarthik Square,

Near Gnfc Info Tower,

Ahmedabad, Gujarat, 380054, India

3. Chishtiya Poultry Services Private Limited:

332, Gidc, Por Ramangamdi,

Vadodara, Gujarat, 391243, India

4. Neero Cooltech India Pvt Ltd

16/12, N V Kalbhor Chawl, Kalbhor Nagar,

Prestige Plaza-1, Pune, Maharashtra, 411019, India

5. Karamsar Poultry Appliances (Regd.)

B-70, Mayapuri Industrial Area Phase-1,

New Delhi, Delhi, 110064, India

13. SALES REALIZATION CALCULATION

Sr No	Product	Sales in percentage	Unit price- Rs. per unit	Quantity	Total Sales (in Lakhs)
1	Broiler Chicken (in Kgs)	54%	70	35000	24.5

2	Layer Chicken (in Kgs)	27%	60	20000	12
3	Eggs (in piece	19%	5	175000	8.75
	Total	100%			45.25

14. PROFITABILITY CALCULATIONS

Sr. No	Particulars - Amount (Rs.)	Year-I (Rs in Lakhs)
Α.	Sales Realization	
	Sales (Assuming 15% growth per year)	45.25
	Other Income (Assuming constant)	
	Total Sales Realization	45.25
В.	Cost of Production	
	i) Raw Materials	24.75
	ii) Utilities (Assuming constant)	0.75
	iii) Manpower (Salaries/wages)	9.48
	iv) Administrative Expenses (Assuming constant)	0.68
	v) Selling & Distribution Expenses (Assuming constant)	0.85
	viii) Interest (Assuming constant)	1.72
	Total Cost of Production	38.23
	No of Units Produced	15,290
	Cost of Goods Sold	0.0025
	Gross Profit/Loss (A – B)	6.78
	Less: Depreciation	1.38
C.	PBIT (Profit Before Interest and Tax)	5.41
D.	Income-tax (Assuming 28% tax rate)	1.52
E.	Net Profit/Loss (C - D)	3.9
F.	Repayment	1.72
	Retained Surplus (E - F)	2.18

15. BREAKEVEN ANALYSIS

Fixed cost	Year- I (Rs in Lakhs)
Depreciation	1.38
Interest	1.72
Manpower	2.84
Total Fixed cost	5.94
Variable cost	
Raw materials	24.75
Utilities	0.75
ManPower	6.64
Administrative expenses	0.68
Selling & distribution expenses	0.85
Total Variable cost	33.67
Contribution margin	20%
Break-Even Point in Value	29.74

16. STATUTORY/GOVERNMENT APPROVALS

- Environmental Clearances: Obtain necessary environmental clearances from the Uttarakhand State Pollution Control Board, ensuring adherence to environmental norms, especially waste disposal and emissions.
- Licenses and Permits: Obtain a business license from the local municipal authority. FSSAI (Food Safety and Standards Authority of India) license for the production and sale of edible essential oils.
- Agricultural and Horticultural Approvals: If you're cultivating plants, secure necessary permissions from the Uttarakhand Department of Agriculture or Horticulture.
- Tax Registrations: Register for Goods and Services Tax (GST). Compliance with all relevant tax laws, including income tax.
- Compliance with AYUSH Ministry: If producing essential oils for therapeutic use, comply with guidelines set by the Ministry of AYUSH.

 Export-Related Approvals (if applicable): Secure necessary clearances from the Directorate General of Foreign Trade (DGFT) for export operations.

17. BACKWARD AND FORWARD INTEGRATIONS

A. Backward Integration:

- Raw Material Sourcing: Develop contracts or partnerships with local farmers for a consistent supply of quality raw materials (herbs and plants). Consider organic certification for raw materials to enhance product appeal.
- Technology and Process Improvement: Invest in research and development to improve oil extraction processes, increasing yield and quality.
- Land and Resource Management: If cultivating plants, implement sustainable farming practices to ensure long-term viability of resources.
- **B.** Forward Integration:
- Product Diversification: Expand the product line beyond essential oils, considering related products such as hydrosols, aromatherapy blends, or natural cosmetics.
- Market Expansion: Develop a strong online presence for wider market access. Explore partnerships with retailers, both in domestic and international markets.

18. TRAINING CENTERS AND COURSES

- Government and University-Based Training Centers:
- Agricultural Universities:
- G.B. Pant University of Agriculture and Technology, Pantnagar: Offers courses in agriculture sciences which may include aspects relevant to essential oil extraction.
- Indian Institute of Technology (IIT) Roorkee: Known for its research and development, may offer relevant courses in chemical engineering or plant sciences.
- Krishi Vigyan Kendras (KVKs): Located across various districts, KVKs provide training in agricultural practices which can be beneficial for cultivating plants used in essential oil extraction.
- Online Training Platforms:
- E-learning Courses: Various online platforms offer courses in dairy farming, animal husbandry, and agribusiness management. Swayam portal (link: https://swayam.gov.in/)

can also be accessed for enhanced learning on business commerce, accounting, production, marketing, and areas of entrepreneurship.

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