



SMALL-SCALE BROILER POULTRY FARMING: SKILLS TRAINING FOR FARMERS

DR. MANDEEP SINGH AZAD

UNIT-V

TRAINING INDEX

01

Smart Small-Scale Farming

Why broiler farming is the ideal choice

02

Feeding Fundamentals

Getting poultry nutrition and balance right

03

Feed Formulation

Determining what to feed and quantities

04

Summer Management

Beating the heat for healthy broilers

05

Seasonal Care

Rainy and winter environmental controls

06

Health & Business

Disease prevention and getting started



Why Broiler Farming Works



Rapid Maturity: Broilers reach full market weight in just 5-6 weeks, allowing for frequent production cycles and fast profit realization for farmers.



Space Efficiency: High-yield broiler operations do not require large land areas, enabling successful farming on smaller, more manageable plots of land.



Bank Support: Financial institutions actively approve loans for poultry ventures, recognizing the industry's reliability and established business models.



Financial Accessibility: Poultry farming requires significantly lower startup capital compared to other livestock, making it ideal for new entrepreneurs.



Market Demand: There is a consistently strong local demand for chicken meat, ensuring a stable and reliable revenue stream for agricultural businesses.



Healthy broilers in optimal conditions

HEALTHY BROILER POULTRY



Broiler Nutrition Fundamentals

01

Energy Requirements

High-energy grains like corn form the caloric foundation of broiler diets, providing fuel for rapid growth and peak metabolic performance.

02

Protein Foundations

Complete protein profiles are achieved by blending animal sources like fish meal with plant proteins from quality corn and soybean meals.

03

Vitamins & Minerals

Inclusion of essential micronutrients is mandatory to support bone development, immune function, and overall physiological health in the flock.

The synthesis of these nutrients, anchored by clean water access, ensures healthy poultry growth, optimized feed conversion, and superior final product quality.



Three-Phase Poultry Feeding Plan

Phase 1: Starter

Feed 0.5 kg chick starter crumbles. Use specific feeder setup for early growth and health.

Week 1 - Week 2



Week 3 - Week 4



Phase 2: Grower

Provide 1.5 kg grower pellets. Adjust feeder height for birds to ensure optimal development.

Phase 3: Finisher

Supply 1.5 kg finisher pellets. Maintain feeder spacing for birds during the final growth stage.

Week 5 - Week 6



Efficient Poultry Feeding Systems



POULTRY FEEDING

Quality feeding equipment ensures consistent nutrition and optimal growth rates throughout the production cycle. Modern systems provide precise delivery of nutrients, reducing waste and maintaining hygiene within the broiler house. Efficient management of these automated feeders and waterers is critical for achieving professional agricultural standards and maximizing flock health.



Managing Summer Heat Stress



Above 35°C: Birds exhibit panting behavior, significantly reduced feed intake, and blood becomes alkaline, which leads to critical bone weakening.



Productivity Loss: Egg production and feed efficiency decline sharply as birds struggle to maintain thermal balance during severe summer heat waves.



Post-Mortem Signs: Examination often reveals specific internal markers that confirm heat-related mortality and guide future flock management strategies.

Critical Poultry Heat Stress Impact

Extreme temperatures trigger metabolic shifts, reducing immune resistance and increasing E.coli susceptibility.

Farmers must monitor signs like panting, high water intake, and poor weight gain to prevent sudden death.





Summer Heat Protection Actions

CLEAN WATER

Provide cool, clean water and add electrolytes to help birds maintain hydration and balance during peak heat.

COOL FEEDING

Feed birds during the coolest times of the day to reduce metabolic heat production and prevent heat stress.

AIRFLOW FLOW

Maximize ventilation and avoid overcrowding to ensure consistent airflow and lower ambient temperatures.

SHADE AREAS

Provide outdoor shade and install ceiling insulation to block solar radiation and keep the environment cool.



Poultry Ventilation Systems

Effective ventilation systems are critical for managing heat stress and maintaining optimal air quality for broiler health



Rainy Season Management Action Plan

Shed Space

01

Ensure a 5-meter clear perimeter around the shed to prevent water accumulation and facilitate better site ventilation.

Roof Repair

02

Thoroughly inspect and seal all roof holes before the monsoon starts to prevent internal leaking and structural damage.

Rain Shield

03

Deploy durable polythene sheeting during heavy rain events to protect vulnerable areas from direct moisture penetration.

Floor Care

04

Maintain dry floors by regularly applying fresh litter and lime to absorb moisture and inhibit any bacterial growth.

Drainage Fix

05

Optimize site drainage systems to prevent water pooling, ensuring all excess rainfall flows away from the main facility.

Feed Storage

06

Securely store adequate feed supplies in advance to ensure livestock nutrition is maintained during period of heavy rains.



Litter Quality Hand Test Guide

Importance of Litter

Proper litter condition is vital for bird health. It prevents footpad dermatitis, reduces ammonia levels, and ensures overall flock comfort through ideal 25% moisture.

01

Corrective Measures

If litter is too wet, take immediate action by removing the saturated material, improving ventilation, and adding lime powder to absorb excess surface moisture.

03

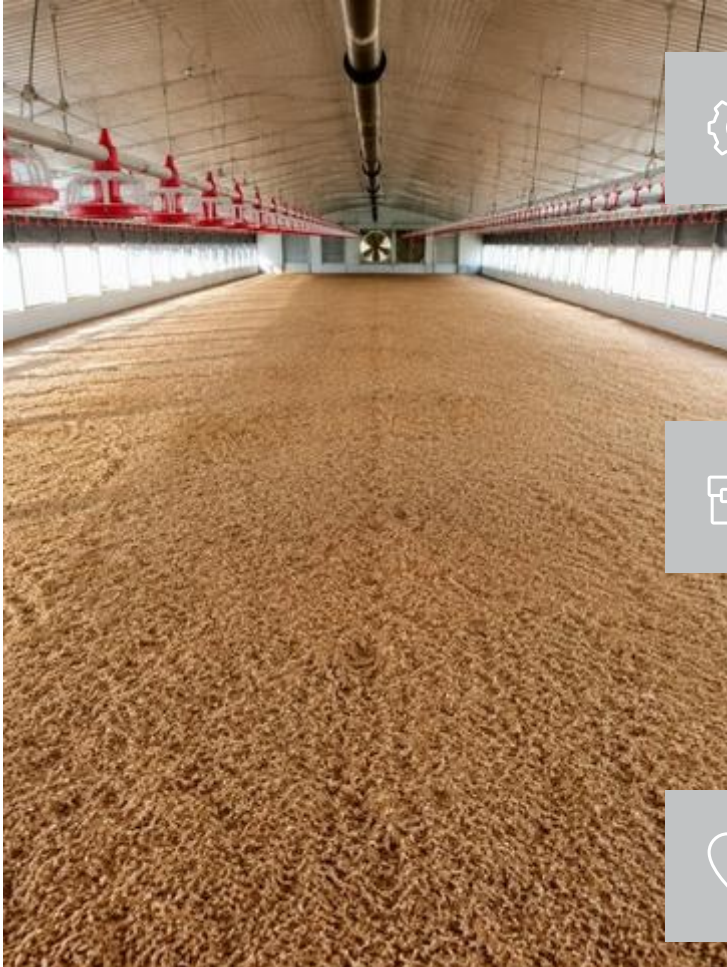
02

Hand Test Method

Perform a press-and-release test. Squeeze a handful of litter; it should form a ball that crumbles easily when released, indicating the correct moisture balance.



Poultry Litter Management Guide



Optimal Litter Depth

Maintaining proper litter depth is crucial for bird health, providing necessary insulation and cushioning to prevent footpad dermatitis and breast blisters.



Dry Condition Control

Keeping bedding dry is essential to prevent disease outbreaks, as moisture promotes bacterial growth and increases harmful ammonia levels in the air.



Regular Maintenance

Consistent litter management ensures optimal flock performance by creating a sanitary environment that supports uniform growth and high welfare standards.



Winter Management Actions



Heating Solutions: Utilize space heaters and heat lamps to maintain optimal barn temperatures, ensuring birds remain warm and active during extreme winter cold.



Air Management: Cover windows to block drafts while maintaining controlled air exchange to remove excess moisture and harmful ammonia from the environment.



Litter Maintenance: Keep bedding material dry and clean through regular replacement, preventing foot pad issues and minimizing the risk of respiratory infections.



Hydration Supply: Provide a constant source of clean, unfrozen drinking water, which is critical for maintaining metabolic health and high feed consumption rates.



Feeder Accessibility: Increase the total number of feeders in the house to ensure all birds can reach nutrients without competition during peak feeding times.



Nutritional Availability: Ensure fresh feed is available all day long, supporting a high-energy diet of 3400 kcal/kg ME to meet cold-weather thermal needs.



Disease Prevention & Health Management

Daily Monitoring & Isolation

01

Observe birds daily for symptoms and remove sick individuals immediately to prevent the spread of disease within the entire professional poultry flock.

Hygiene & Habitat Control

02

Disinfect equipment regularly and maintain dry, clean litter to ensure a sanitary living environment that minimizes bacterial and viral growth.

Medical & Bio-Security

03

Follow vaccination schedules strictly and quarantine all new birds for 7 days to protect the existing population from external health threats.



Small-Scale Poultry Farming Success



Modern Poultry Farming Strategic Infrastructure

Small-scale operations can achieve commercial-quality results with proper planning, management, and commitment to best practices. Professional infrastructure is the foundation of high-yield farming success.



Broiler Farming Business Case

Financial Appeal

Broiler farming offers a fast 5-6 week production cycle, high ROI, low startup capital, minimal space requirements, and very straightforward licensing processes for new farmers.

Market Edge

Market advantages include consistently established local demand, highly affordable protein products, and a robust, growing global demand for high-quality poultry and meat.

Social Impact

Key benefits cover local employment creation, perfect compatibility with other farming activities, and the widespread availability of bank loans for agricultural business expansion.



Broiler Farming Action Plan

1. Plan Your Setup

Choose a strategic location, start with 50-100 birds, and secure a reliable feed supply for growth.

2. Master the Feeding Cycle

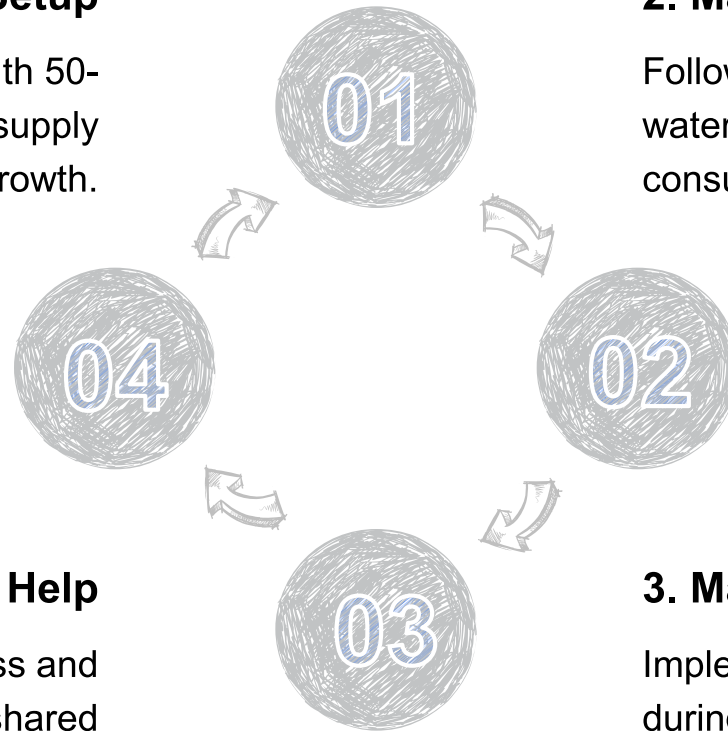
Follow the 3-phase plan, provide clean water 24/7, and monitor daily feed consumption for health.

3. Manage Each Season

Implement summer cooling, ensure dryness during rainy periods, and maintain warmth in winter.

4. Know When to Call Help

Contact a vet at the first sign of illness and join a farmer cooperative for shared resources.



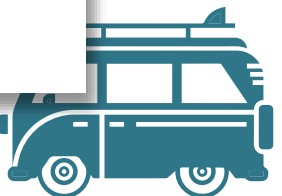
Professional Agricultural Knowledge Transfer



Success in poultry farming begins with proper training, dedication to best practices, and continuous learning from each production cycle for long-term growth.

FARMER TRAINING SUCCESS

Empowering farmers with modern agricultural knowledge ensures sustainable yields and improved livelihoods for the entire rural community today.





THANK YOU — HEALTHY FLOCKS, HEALTHY PROFITS!

"Start with what you have. Learn every cycle. Grow your flock and your income."