

# Introduction to Pig Production

## Introduction to Pig Production

Key concepts, stages, and best-practice considerations for a successful swine enterprise.

### 1. Why Pig Production?

| Advantage                    | Explanation                                                                           |
|------------------------------|---------------------------------------------------------------------------------------|
| High Feed-to-Gain Efficiency | Pigs convert feed to body weight faster than many livestock species.                  |
| Short Production Cycle       | From birth to market weight (~100kg) takes 5-6 months.                                |
| Versatile Market             | Whole carcass, pork cuts, specialty products (e.g., bacon, ham).                      |
| Adaptable to Various Systems | Small-holder backyard units, medium-scale farms, or intensive confinement operations. |

### 2. Basic Biology & Breeds

| Category                | Common Breeds                               | Main Traits                                                                 |
|-------------------------|---------------------------------------------|-----------------------------------------------------------------------------|
| Maternal (sow) lines    | Large White, Landrace, Duroc (maternal)     | Excellent mothering ability, large litters, good milk production.           |
| Terminal (market) lines | Duroc, Pietrain, Hampshire                  | Rapid growth, high lean meat yield, good feed conversion.                   |
| Hybrid (cross-bred)     | Large White × Landrace, Duroc × Large White | Combine maternal and terminal strengths; most commercial herds use hybrids. |

Key physiological points

- **Gestation:** ~114 days (~3 months + 3 weeks).
- **Lactation:** 3–4 weeks; piglets weaned at 21–28 days.
- **Finishing:** 90–120 days to reach market weight (~100–120 kg).

### 3. Production Stages

| Stage | Objective | Typical Management Actions |
|-------|-----------|----------------------------|
|       |           |                            |

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|                                    |                                                            |                                                                                                                                                                                                                                                                           |
|------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Breeding &amp; Gestation</b> | Produce healthy, fertile sows and boars.                   | <ul style="list-style-type: none"><li>• Select breeding stock (genetics, health).</li><li>• AI or natural service (AI preferred for genetics).</li><li>• Provide gestation diet (2.5% CP, 13% ME).</li><li>• Farrowing crates or pens (2m<sup>2</sup> per sow).</li></ul> |
| <b>2. Farrowing</b>                | Safely deliver piglets and ensure early survival.          | <ul style="list-style-type: none"><li>• Provide warm creep area (30°C at birth, decreasing to 24°C).</li><li>• Monitor for dystocia, provide colostrum within 2h.</li><li>• Split lot by weight/age.</li></ul>                                                            |
| <b>3. Nursery</b>                  | Grow piglets to ~20kg and prepare for weaning.             | <ul style="list-style-type: none"><li>• High protein starter diet (18-20% CP).</li><li>• Maintain ambient 25-28°C, good ventilation.</li><li>• Phase feeding (grower, finisher).</li></ul>                                                                                |
| <b>4. Grow-out / Finishing</b>     | Achieve target market weight with optimal carcass quality. | <ul style="list-style-type: none"><li>• Reduce CP to 16-17% CP, increase energy.</li><li>• Space 0.7–0.9m<sup>2</sup> per pig, provide ad lib water.</li></ul>                                                                                                            |
| <b>5. Marketing / Slaughter</b>    | Deliver safe, high quality pork to processors.             | <ul style="list-style-type: none"><li>• Record weight, health status.</li><li>• Follow pre-slaughter fasting (12h) and handling guidelines.</li></ul>                                                                                                                     |

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## 4. Housing & Environmental Management

| Component           | Recommended Practice                                       |
|---------------------|------------------------------------------------------------|
| <b>Housing type</b> | Farrowing rooms, nursery barns, and finishing sheds (all?) |