DEFINE PROBLEM STATEMENTS

Team ID: LTVIP2025TMID42969

Location: Ongole, Andhra Pradesh

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Primary Problem Statement

"Poultry farmers in Andhra Pradesh lack immediate access to accurate disease diagnosis, resulting in delayed treatment, increased mortality rates, and significant economic losses."

Problem Breakdown

1. Disease Detection Challenges

- **Delayed Diagnosis:** Farmers often wait days for veterinary consultation
- **Misidentification:** Limited expertise in recognizing early disease symptoms
- **Remote Areas:** Lack of immediate veterinary services in rural Ongole region

2. Economic Impact

- **Mortality Losses:** Up to 30% bird loss in disease outbreaks
- **Treatment Costs:** Expensive emergency veterinary services
- **Productivity Loss:** Reduced egg/meat production during illness

3. Knowledge Gap

- **Limited Training:** Farmers lack disease identification skills
- **Information Access:** Poor access to current veterinary research
- **Language Barriers:** Technical information not available in local languages

Specific Problem Areas

Technical Problems

1. **Manual Visual Inspection Limitations** Human error in disease
   - identification
   - Subjective assessment variations
   - Time-consuming examination process
2. **Information Accessibility**
   - Scattered veterinary knowledge sources
   - Complex medical terminology

- Lack of digital resources

Social Problems

1. **Digital Divide**
   - Limited smartphone penetration in rural areas
   - Poor internet connectivity
   - Technology adoption resistance
2. **Economic Constraints** High veterinary consultation fees
   - Transportation costs to reach experts
   - Lost income during disease outbreaks
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Problem Validation Data

- **Survey Area:** Ongole district poultry farms
- **Sample Size:** 50 small-scale farmers
- **Key Findings:**
  - 78% experience disease identification delays
  - 65% rely on traditional methods
  - 82% interested in AI-based solutions

Target User Problems

Small-Scale Farmers

- Need quick, accurate disease identification
- Require cost-effective solutions
- Want educational support

Veterinary Students

- Need practical training tools
- Require access to case studies
- Want research integration

Agricultural Extension Officers

- Need tools to support farmers
- Require scalable solutions
- Want data collection capabilities

Success Metrics

- Reduce disease identification time from days to minutes
- Achieve 85%+ accuracy in disease classification
- Increase farmer knowledge and confidence
- Reduce economic losses by 40%

Document prepared by Team LTVIP2025TMID42969