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**ECONOMIC PERFORMANCE AND VIABILITY OF SMALL-SCALE PIG FARMS IN THE
CONTEXT OF THE AGRO-FOOD MARKET**

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Abstract: The study evaluates the economic performance of a representative 100-head pig farm using cost–benefit and sensitivity analyses. Results indicate that feed expenditures account for 68% of total production costs, while a 20% increase in feed prices generates negative profitability.

Introduction

Small-scale pig farming plays an important role in rural development and food security in Eastern Europe; however, increasing feed costs, market volatility, and sanitary restrictions significantly affect its economic sustainability. Therefore, the present study evaluates the economic performance, profitability, and resilience of a representative small-scale pig farm operating under Romanian agro-food market conditions using cost–benefit and sensitivity analyses.

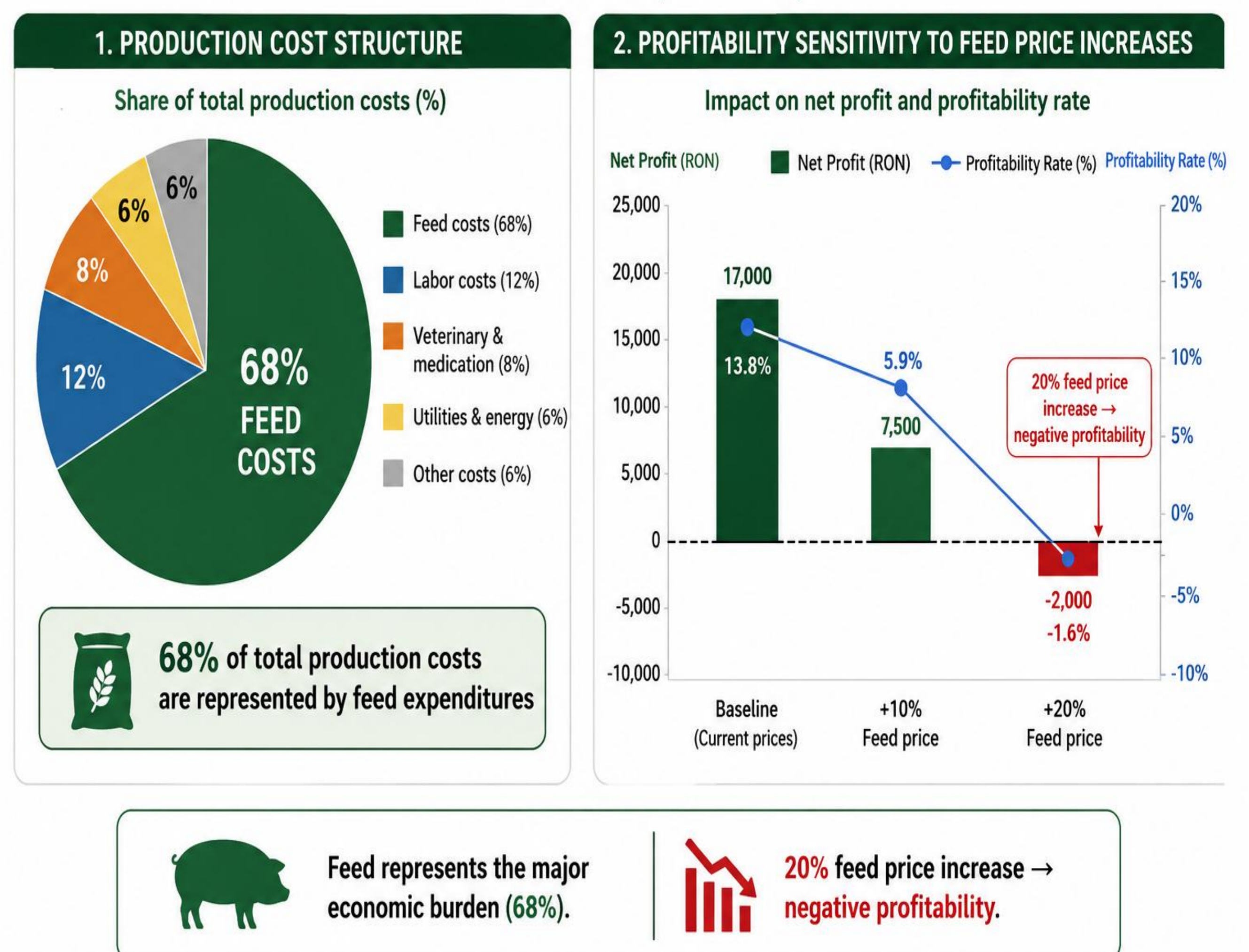
Material and method

- Quantitative case study
- Representative 100-head pig farm
- Selling price: 12.7 RON/kg
- Economic indicators:
 - TC
 - TR
 - NP
 - PR
- Cost–Benefit Analysis
- Sensitivity Analysis:
 - +10% feed costs
 - +20% feed costs

Results and discussions

ECONOMIC VULNERABILITY OF SMALL-SCALE PIG FARMS

Feed costs drive profitability



Feed costs account for approximately 68% of total production expenditures, representing the main economic burden of the farm. A 20% increase in feed prices generates negative profitability, highlighting the vulnerability of small-scale pig farms.

Conclusions

- Small-scale pig farms can remain viable under stable market conditions
- Feed price volatility represents the principal economic risk.
- Cost optimization and diversification strategies are essential.
- Short food supply chains may improve farm resilience. Policy support is necessary for long-term sustainability.