

Effects of Pig farming is Entrepreneurial in Bellary, Karnataka

Dr. Gangadhar L

Guest lecture, Development of Economics , Koppal University Koppal

Abstract

Pig farming in Ballari district fosters rural entrepreneurship by generating income, employment, and self-reliance among farmers. It promotes small-scale enterprise development and livelihood diversification. This study examines the financial viability, production efficiency, environmental health issues, and market challenges of pig farming enterprises based on primary data collected from 20 respondents in 2025. The findings reveal that 50% of farmers operate at a moderate production level (6–10 quintals annually), while 40% remain at a low level. Environmental issues such as bacterial diseases (50%) and fever (40%) are significant constraints. Market challenges are more prominent at state and local levels. The study suggests improved sanitation, enhanced market access, and technical support to strengthen entrepreneurial potential and sustainability.

1. Introduction

Pig farming is an important component of animal husbandry involving the breeding and rearing of domestic pigs for meat and other by-products. It is widely practiced in various forms, including intensive commercial systems, free-range farming, and small-scale traditional methods.

Pigs are considered highly productive livestock due to their:

1. High reproductive rate
2. Rapid growth
3. Low feed cost
4. Short generation interval

These characteristics make pig farming a viable and profitable enterprise, particularly for small and marginal farmers. In India, pig farming plays a crucial role in supporting economically weaker sections by ensuring food security and income generation.

The term entrepreneur originates from the French word *entreprendre*, meaning “to undertake.” Entrepreneurship involves risk-taking, innovation, and the effective management of resources. Pig farming in Ballari district has emerged as a significant entrepreneurial activity, especially among certain communities, contributing to socio-economic development.

In Ballari district, certain communities identify pig rearing as a key aspect of their socio-economic productivity, with 20 individuals selected from four taluks within the Ballari jurisdiction; additionally, the rate of pig rearing in urban areas has increased relative to both urban and rural populations in Ballari. These articles show rearing occurs outside urban and rural areas.

Review of literature:

While specific research on Bellary is scarce, pig farming across Karnataka plays a vital role in rural livelihoods. In 2025, over 30,000 rural families in Karnataka rely on pig farming as a key income source, underscoring its importance in agricultural diversification and rural resilience (farmonaut.com).

Particularly for small and marginal farmers, pig farming offers quick returns, high reproduction rates, and minimal land requirements, making it a practical entrepreneurial choice (farmonaut.com). Additionally, it complements agricultural systems—organic pig waste enhances soil fertility and supports crop cycles, reinforcing its integration into diversified rural economies (farmonaut.com).

A broader study of livestock entrepreneurs in Karnataka reveals key demographic and socioeconomic characteristics relevant to pig farming ventures. Among 160 livestock entrepreneurs across various divisions (including regions adjacent to Bellary), most were males aged 35–50, with middle-school education, small-to-medium landholdings (2–3 acres), and moderate experience (5–10 years) in animal husbandry. Over half had annual incomes exceeding Rs. 400,001 (journalajees.com).

These traits suggest that pig farming entrepreneurs in Bellary likely share similar profiles—relatively educated, moderately experienced individuals leveraging small landholdings to diversify income through animal husbandry.

Though data from Bengaluru may not directly apply to Bellary, it offers useful benchmarks. In Bengaluru, pig fattening operations with a herd of 40 delivered net returns of Rs. 133,955 over eight months, with a Benefit-Cost Ratio (BCR) of 1.23 and Internal Rate of Return (IRR) at 14.6%. Breeding farms with 10 sows and one boar yielded annual net profits of Rs. 236,790, BCR of 1.31, and IRR of 17.43% (journalacri.com).

These figures indicate that well-managed pig enterprises in Karnataka can be financially viable and efficient—potentially replicable in Bellary where similar economic and agro-climatic conditions exist.

A 2025 study in Kerala highlights that many pig farming entrepreneurs lack awareness of legal and regulatory requirements—covering licensing, spatial norms, environmental compliance, waste management, and inspection protocols. Only 20% showed high awareness, with 44% at low levels. Constraints included lack of access to quality animals, subsidies, market linkages, infrastructure, and high interest rates (journaljsrr.com).

Although this research is Kerala-specific, Bellary pig farmers likely face comparable hurdles—underscoring the need for training, regulatory support, and infrastructure to ensure sustainable entrepreneurial outcomes. In Belagavi, a farmer named Shri Ramesh Vaidu adopted modern reproductive technologies (e.g., artificial insemination, estrus synchronization) through support from the

ICAR institute. This led to a 74% increase in submission rate, 56% in conception rate, and 40% in pregnancy rate. His annual income tripled, monthly income reached Rs. 80,000, and he saved Rs. 9,000 in breeding costs. His success inspired neighboring farmers (en.krishakjagat.org).

Another case involves an 18-year-old woman, Namrata, who integrated pig farming with Azolla cultivation and locally sourced feed. With support from ICAR, effective biosecurity, and efficient management, she earned over Rs. 2 lakhs from piglet and finisher sales—empowering her educational and economic independence (icar.org.in).

These stories illustrate how technical guidance, innovation, and institutional support can catalyze entrepreneurial success in pig farming—a principle that could be applied to Bellary.

A 2025 analysis of pig farming in Karnataka highlights key challenges: disease outbreaks (especially African Swine Fever), market instability, environmental management (waste disposal, odor), limited access to inputs (feed, veterinary services, credit), and socio-cultural resistance (farmonaut.com).

Addressing these through integrated solutions—such as biogas generation from manure, composting, FPOs, digital advisory systems, and traceability platforms—can enhance sustainability, profitability, and environmental compliance (farmonaut.com).

Research Gap:

There is limited district-level research focusing specifically on Ballari. Existing studies lack:

1. Micro-level household data
2. Analysis of entrepreneurial behaviour
3. Environmental and health assessments
4. Market structure evaluation

This study addresses these gaps through field-based analysis.

Objectives:

Below is a set of well-defined research objectives tailored to investigate the entrepreneurial effects of pig farming in Bellary, Karnataka. We ground these objectives in broader Karnataka-level findings and address the specific research gaps previously identified.

1. To assess the financial viability and production efficiency of pig farming in Ballari
2. To examine the adoption of modern technologies and sustainable practices
3. To identify environmental, disease, and market-related challenges

We have designed these objectives to steer a comprehensive study that encompasses the economic, social, regulatory, technological, and environmental aspects of pig farming entrepreneurship in Bellary. If you would like, I can help develop a research framework, methodology, or survey instruments aligned with these objectives.

Research Method and Scope:

Below is a detailed outline of the research methodology and scope for studying the entrepreneurial effects of pig farming in Bellary, Karnataka. Each section is structured to ensure clarity, relevance, and rigour.

Research Design and Approach: Case Study Component: Select a few representative pig-farming enterprises in Bellary for in-depth analysis aligned with successful approaches used in agricultural entrepreneurship research in Bellary.

Sampling and Study Area: Include key taluks of Bellary known for pig-rearing activities, ensuring diversity in agro-climatic and socio-economic contexts.

Sampling Technique: Use stratified random sampling to capture variation across farm sizes. The sample was divided into 10 small, 10 medium, production types fattening vs. breeding, and demographics tribal vs. non-tribal households. For qualitative case selection, apply purposive sampling to choose entrepreneurs illustrating different levels of technology adoption or enterprise performance.

Data Collection Methods: Gather data on demographics, landholding, income sources, costs, revenues, investment, and access to subsidies. Include questions on awareness of government schemes: NLM-EDP, Pashu Bhagya, and Yuva Kanaja. Analyse local records, subsidy scheme documents, and extension materials related to pig farming in Bellary.

The study primarily focused on the Bellary district, drawing relevant comparisons with broader pig-farming contexts in Karnataka. Focus on current practices and recent data within the past 2–3 years, capturing evolving trends, especially post-2025 developments.

Ethical Considerations: Ensure informed consent and confidentiality for all participants. Secure ethical clearance from relevant institutional review boards or local authorities, as appropriate.

Significance of the study:

Housing for pigs: You can build a pig for not much money by utilising easy-to-get items. It needs to be built based on the weather and the way pigs are raised. But you need to make sure there is sufficient airflow, plenty of shade, no heat, no odour, no drafts, and no moisture. You also need to make separate pens for each stage of the manufacturing cycle in the pig building. The number and size of the pens depend on how many pigs you intend to have in each stage of production. Additionally, ensure that your pigs have an outdoor area where they can roam freely.

Pig Food and Feeding: Feeding pigs is an important part of running a pig farm for money. In general, the health and growth of animals rely on how much healthy food they can receive. Oats, grains, corn, wheat, rice, sorghum, and various millets are the main ingredients in pig feed. You do, however, need to add certain protein supplements, such as fish meal, oil cakes, and animal meal. You can also use packaged feed that has the right combination of nutrients. A pig requires a lot of clean, fresh water every day, about 1.5 to 2 gallons for six months.

Management and Care: You must care for your pets and protect them from illness and other health risks. Some of the male pigs can also be castrated when they are 3 to 4 weeks old. You need to provide the sow healthy food, especially when she is nursing, and be careful when breeding piglets, boars, and other pregnant sows. Make sure you vaccinate the piglets between the ages of 2 and 4 weeks to keep swine fever from spreading. To keep the pigs secure, don't let guests walk about the farm for any reason other than this.

Provide the pigs food in a way that works: One important part of commercial farming is feeding pigs in a way that saves time and money. The nutritional level of the meal has a big effect on the pigs' health and development rate. Oats, wheat, rice, grains, sorghum, maize, and various millets are the main constituents of pig feed. Make sure to add some protein supplements, such as oil cakes, meat and fish meal, and so on. In addition to this, ensure that there is plenty of water accessible because pigs require it every day. This comes to around 1.5–2 litres of water every six months.

Put your attention on marketing: This is true for all enterprises, not just the pig farming industry. You can readily sell pigs when they are old enough to be killed since there is a lot of demand for them both locally and internationally. But the problem doesn't go away when you have to compete with other farmers. This is where marketing comes in. A good marketing campaign that emphasises your product quality and pig farming health and safety will attract customers from your country and abroad. The above advice will help you with every step needed for your business to succeed. But as a newbie, you may have many questions about pig breeds and animal husbandry.

Pork that has been processed: There isn't much of a market for processed pork products, and most of what is sold in this market comes from other countries. There are few local businesses that make processed foods like bacon and sausages, but the industry is small and the amounts are minimal. Most of these places don't export, though. These places do not handle hog flesh.

Effects of Pig farming is Entrepreneurial in Bellary, Karnataka.

Pig farming in Bellary promotes rural entrepreneurship by generating income, employment, and self-reliance among farmers. It encourages small-scale enterprise development, improves livelihood security, and supports economic diversification. However, challenges such as disease, limited market access, and inadequate financial support restrict its full entrepreneurial potential in the region.

The financial viability and production efficiency of pig farming enterprises :

SI No	Viability and production efficiency (annual of the Quintal)	Frequency	Percentages
01	1-6	08	40
02	6-10	10	50
03	10 above	02	10
Total		20	100

(Field work 2025).

The above table illustrates the presidency of a pig producer; A majority of pig farming enterprises (50%) produce 6–10 quintals annually, indicating a moderate level of financial viability and production efficiency. About 40% of farms fall in the lower production range (1–6 quintals), suggesting limited resources, small-scale operations, or inefficiencies. Only 10% achieve high production (above 10 quintals), reflecting that a small number of farms are highly efficient and financially viable. The data indicates that most pig farming units operate at a medium level of productivity, with fewer farms achieving high efficiency. This highlights the need for: Improved feeding and breeding practices, Access to veterinary services, better financial and technical support.

Environmental, disease :

SI No	Disease	Frequency	Percentages
01	Fuer	08	40
02	Bacteria	10	50
03	Others Disease	02	10
Total		20	100

(Field work 2025).

The majority of environmental health issues are bacterial diseases (50%), indicating poor sanitation and water contamination. Fever cases (40%) are also significant, often linked with environmental factors such as pollution, unsafe drinking water, and seasonal changes. Other diseases (10%) form a smaller portion but still indicate the presence of diverse health risks. The data suggests that environmental conditions play a major role in spreading bacterial diseases and fever. Improving sanitation, clean water access, and public health awareness can help reduce these diseases.

Market challenges:

SI No	market	Frequency	Percentages
01	Local market	08	40
02	State markets	10	50
03	National markets	02	10
Total		20	100

(Field work 2025).

The above table shows the details of the market. the highest challenges are faced in state markets (50%), indicating issues like competition, pricing, transportation, or regulatory barriers at the state level. Local market challenges (40%) are also significant, possibly due to limited demand, low purchasing power, or market access constraints. National market challenges (10%) are comparatively low, suggesting fewer participants or limited exposure to national-level markets. The findings show that market-related problems are more concentrated at the state and local levels, highlighting the need for Better market linkages, Improved infrastructure, Policy support for small producers.

Findings:

1. A majority (50%) of respondents suffer from bacterial diseases, indicating poor sanitation and unsafe water conditions.

2. Fever cases (40%) are also high, showing the impact of environmental pollution and seasonal health risks.
3. Only 10% reported other diseases, but it still reflects the presence of diverse environmental health problems.
4. State-level markets (50%) pose the highest challenges due to competition, transportation, and regulatory barriers.
5. Local markets (40%) also show significant constraints such as low demand and limited access. Only 10% face issues in national markets, indicating limited participation at that level.
6. Financial Viability and Production Efficiency Most pig farmers (50%) produce 6–10 quintals annually, showing moderate efficiency.
7. A significant portion (40%) falls in the low production category (1–6 quintals), indicating limited resources and traditional practices. Only 10% achieve high production (above 10 quintals), suggesting that advanced and efficient farming practices are not widely adopted.
8. Pig farming enterprises are largely small-scale and moderately productive. Environmental and market-related constraints significantly affect both health and income of farmers. Lack of awareness, infrastructure, and institutional support limits growth.

Suggestions:

1. Ensure access to clean drinking water and sanitation facilities.
2. Conduct regular health camps and awareness programs in rural areas.
3. Strengthen disease prevention through vaccination and hygiene practices.
4. Provide training on modern pig farming techniques (breeding, feeding, housing).
5. Improve access to veterinary services and quality feed.
6. Promote use of scientific and sustainable farming methods.
7. Develop better market linkages from local to state and national markets.
8. Improve transportation and storage infrastructure.
9. Encourage formation of farmer cooperatives or producer groups.
10. Provide subsidies and low-interest loans for pig farmers.
11. Introduce insurance schemes to reduce risk.
12. Promote government schemes related to livestock development.
13. Organize skill development and training programs for farmers.

14. Increase awareness about government policies and schemes.

15. Encourage participation in extension services and workshops.

Conclusions:

Pig farming in Ballari district plays a vital role in promoting rural entrepreneurship by generating income, employment, and livelihood security. Despite its potential, challenges such as disease prevalence, market barriers, and limited institutional support restrict its growth. With appropriate policy interventions, training, and infrastructure development, pig farming can become a sustainable and profitable entrepreneurial activity in the region.

References:

1. Food and Agriculture Organization (2019). Smallholder Pig Production and Marketing Systems. Rome: FAO.
2. National Bank for Agriculture and Rural Development (NABARD) (2020). Status of Livestock Sector in India. Mumbai: NABARD.
3. Ministry of Fisheries Animal Husbandry and Dairying (2021). Annual Report on Livestock and Pig Farming Development. New Delhi.
4. Indian Council of Agricultural Research (ICAR) (2018). Handbook of Pig Production and Management. New Delhi.
5. World Health Organization (2020). Environmental Health and Disease Control. Geneva: WHO.
6. Government of Karnataka (2022). Livestock Development Policies and Programs in Karnataka. Bengaluru.
7. Kumar A. and Singh D. (2017). Economics of Livestock Farming in India. New Delhi: Academic Publications.
8. Birthal P. S. (2015). Livestock Sector in India: Opportunities and Challenges. New Delhi.
9. The 19th Livestock Census All India Report for 2012.
10. Report from ICAR.