

Guidelines for Pig Farming for Agricultural Entrepreneurs

Sittawee Suwatroj and Wanwipha Tailangkha

Abstract—This abstract summarizes guidelines for pig farming tailored to agricultural entrepreneurs, focusing on essential aspects for successful operation. It covers planning and preparation, including feasibility studies and business planning; site selection and housing design to ensure animal welfare and disease prevention; breed and stock selection suited to local conditions; balanced feeding and nutrition strategies; health management through biosecurity, vaccination, and monitoring; breeding and reproduction practices to maximize productivity; waste management aligned with environmental regulations; detailed record-keeping and financial management for operational efficiency; marketing strategies to build customer trust and explore value addition; and continuous learning to adopt best practices and sustain growth. These comprehensive guidelines aim to support agricultural entrepreneurs in establishing and managing profitable, sustainable pig farming enterprises.

Keywords— Productivity Marketing Strategies.

I. INTRODUCTION

The livestock sector plays a significant role in the total output of the agricultural industry. (Maksym, Et al 2022) The primary agricultural sector has greatly benefited from the outcomes of the pig industry. (Nadal-Roig, Et al 2019) According to reports by the Department of Agriculture, Forestry, and Fisheries, the pig industry is a crucial component of the livestock sub-sector within the overall agricultural sector. Maksym, Et al 2022) Pig farming has a high potential to generate considerable economic profit. The authors further state that pig production offers several advantages, including the fact that pigs have a rapid growth rate and a high birth rate. They comment that pigs can efficiently convert the feed they consume into high-quality meat, resulting in higher returns per unit of input compared to most other animals. The authors also note that the texture of pork is excellent and that it is rich in both protein and vitamin B. According to them, these advantages make pigs superior to other animals, making them particularly suitable for large-scale breeding as a strategy to combat protein deficiency. Since pigs can be raised in relatively small spaces, small-scale farmers in Nigeria regard pig farming as one of the most important forms of animal production. Additionally, pigs have a shorter gestation period than other small animals, enabling them to produce more offspring within the same time frame. Compared to cattle, pigs have a shorter gestation

period—114 days—which means they can conceive more frequently and produce more litters throughout the year. Despite these benefits of pig farming, there remains a shortage problem. The authors further observe that this may be due to the difficulties farmers face in developing business plans, which could help attract funding and facilitate planning at every stage of the business. Therefore, this article focuses on issues related. (Rana, & Soto-Blanco, 2024).

II. BUSINESS PLAN DEVELOPMENT AMONG PIG FARMERS

In particular, this article covers concepts related to pig farming, pig farmers, and pigsties, the development of business plans, the development of business plans in pig farming, and issues related to business plan development among pig farmers. Concepts related to pig farming, pig farmers, and pig housing are explored. Pig farming, also known as pig husbandry, is a branch of animal husbandry that mainly involves the breeding and raising of domestic pigs for meat (pork products such as bacon, ham, and smoked ham) and hides. Pigs can be raised in a variety of places, including intensive commercial units, free-range commercial operations, or extensive farming (in which pigs may have the freedom to roam about villages, towns, or cities, or they may be kept in small shelters or housed in pens outside their owner's home). All these options are viable alternatives. In the past, pigs were kept on smaller farms, usually close to the owner's home, and often within the same city or village, providing sources of meat and fat, as well as making use of pigs' ability to convert inedible materials into meat and fertilizer. When pigs were kept at home, they were often fed with leftover scraps from the household kitchen. Large-scale pig farms have been established to help dispose of municipal waste. (Barron, 2011)

All these types of pig farming are still in operation today, but intensive pig farming is the most common form, as it allows large numbers of pigs to be raised very economically. Pig farms, especially those with structures specifically built for housing pigs, are called pigsties or pig houses. A pig house is a structure or building constructed specifically for the purpose of raising pigs in economically developed countries.

III. COMMERCIAL PIG FARMS

The house thousands of pigs in temperature-controlled facilities. The author further notes that pigs are one of the most commonly found livestock species, and each year, more than one billion pigs are slaughtered for the purpose of providing food for humans. Pig skins, fat, and other materials are also used in the production of textiles. To ensure that pigs are well cared for, pig farmers typically tend to these animals

Sittawee Suwatroj and Wanwipha Tailangkha
Doctor of Philosophy Program in Public and Private Management
Innovation, Graduate School, Bansomdeichaopraya Rajabhat University,
Thailand

on a daily basis. A pig farmer refers to a person involved in pig production. The methods by which pig farmers care for pigs affect animal welfare, which, in certain situations, can be related to production measures. Many daily interactions may provoke fear, which can lead to stress and reduced productivity. There are various methods that pig farmers use to care for pigs, which can be classified as leading to either positive or negative reactions from the animals. Many negative interactions with pigs occur when stockpersons have to manage large numbers of pigs. As a result, many pig farmers may neglect animal welfare and fail to establish positive interactions with the pigs. On the other hand, negative interactions include overly aggressive contact (such as slapping, punching, kicking, and biting), the use of electric prods, and sudden movements. However, positive interactions also exist. Interactions between pig farmers and pigs contribute to the overall growth and well-being of the pigs. It is also hypothesized that pigs are often afraid of sudden movements, so good pig farmers usually enter the pig pens with slow, careful movements to reduce fear and minimize stress. Most rural pig farmers raise pigs in free-range areas close to their homes, while those in semi-urban areas keep pigs in semi-intensive systems. Pig pens are usually located around waste disposal sites. Pig farming in Nigeria is mostly practiced in waste disposal areas, and such practices are unsafe because rearing pigs in these locations carries a risk of disease outbreaks. Although there are opportunities for pig farmers in Nigeria, there is still a shortage of pig products in the country due to the slow growth of the pig industry, which may be a result of low farmer participation in the business. It is further noted that this may be due to the challenges farmers face in developing business plans, which could help attract funding and facilitate planning for every stage of the business. (Muirhead, Alexander, & Carr, 2013).

IV. BUSINESS PLAN DEVELOPMENT

A business is defined as an organization or enterprise engaged in commercial, industrial, or professional activities. It is considered as an activity of earning a living or making money by producing or buying and selling products. For a business to succeed, it requires a plan, commonly referred to as a business development plan or simply a business plan. According to Osterwalder, developing a business plan is the process of creating an official written document that outlines business goals, the methods to achieve those goals, and the time frame for accomplishing them. A business plan is a powerful document that tells the story of your company.

The development of a business plan is the process of writing a comprehensive document that enables entrepreneurs to analyze the market and plan business strategies. In the context of this article, business plan development is the culmination of a long, challenging, creative, and iterative process that transforms raw ideas into promising opportunities by thoroughly identifying the benefits, needs, risks, and potential returns of such opportunities and how to seize them. This is especially true in the field of agriculture. Modern agriculture involves crop production and animal husbandry for

human use, including the processing and marketing of agricultural products until they reach the final consumer.

Therefore, modern agriculture is a form of business, and it is crucial to develop a business plan for success in this industry. An agricultural business plan should address the following questions: What is the business concept? Who are the current or target customers? How will customers become aware of the business? Who are the competitors, and how will the intended business differentiate itself from them? How will the basic operations of the business be conducted? Does the management team have the capability to lead the business to success? How much capital is required to establish and operate the business?

An agricultural business plan is thus a detailed declaration of the entrepreneur's intentions, demonstrating the business opportunities within agriculture and the developed concepts to capitalize on those opportunities, including details of all relevant external and internal components, as well as the advantages, risks, and potential returns from leveraging those opportunities. The agricultural business plan provides organizations with guidance regarding objectives, mission, vision, and values, the products or services, target groups, and the strategies to be used for achieving success. Although there is no universally accepted way to write a business plan, there are certain characteristics it should have. All business plans (including agricultural business plans) should be simple and clear, concise yet precise, logical and sequential, represent reality, and use figures where necessary. A business plan can be developed for any agricultural venture, including pig farming.

Business Plan Development in Pig Farming Pig farming businesses also require business plan development. A business plan for pig farming is developed to determine the necessary capital for the venture, the strategies to implement, and the methods for funding the business. According to 2015, there is no formal template for a pig farming business plan, but it generally consists of the following sections: executive summary, company background, market and marketing plan, promotion and distribution strategies, organization and management, legal, regulatory, social, and environmental issues, risk analysis, and the company's financial plan, etc.

The executive summary can be considered the most important section of the pig farming business plan, especially when seeking external funding (Abrams, 2019). As the name suggests, the executive summary presents a concise overview of the key facts in the business plan. It should be noted that although the executive summary is the first presented section in the business plan, it is usually written last. The company background or description provides the basic details about the pig farming business, different from the executive summary, which aims to persuade the reader of the expected success of the business. The background or description provides all necessary information specific to the pig business. You will also need to provide an overview of the sector and industry developments relevant to your business. Connecting these sector/industry developments to current and/or expected business performance is important. In particular, the following points should be addressed: vision, mission, ownership/legal status, milestones, as well as location and facilities. The vision

of a pig farming business may be to become the leading producer of lean pork, using the best pig breeds and employing the most modern pig farming methods. (Kanthi, & Vallabaneni, 2024).

This vision will be included in the basic information section

The market section will consider whether the proposed business is likely to succeed. This part explains who will buy the pigs and pork products produced. It also discusses whether the market is growing or declining, as well as the factors influencing the market. The market refers to all people within a defined geographic area who want certain products or services, have the resources to purchase them, and are within reach to buy pork products. The marketing plan, on the other hand, will discuss how you intend to win over customers and, through these methods, ensure that the pig farm has sufficient sales. The pig farm business plan is also expected to address management, organization, and ownership. It should provide a clear explanation of the proposed ownership structure and the reasons for choosing that structure.

The business plan also includes sections related to legal, environmental, social, and regulatory matters. This part will describe the legal backing of the pig farming business as well as its impact on the environment. It should clarify whether the intended business is environmentally friendly and whether it complies with environmental laws and regulations. The business plan should explain how the business will impact the broader society, including its economic effects, poverty alleviation, and job creation. Another section expected in a pig farming business plan is the risk analysis. The risk analysis section will describe the risks that the pig farming business may face. It will also illustrate mitigation measures to be taken should any of these risks materialize. The business's risk analysis is typically summarized in a SWOT analysis section, which highlights the strengths, weaknesses, opportunities, and threats facing the business (Ireland, 2014). For example, a strength of the proposed pig farm may be its location, which makes it easily accessible to target customers, while a weakness may be initial challenges in securing sufficient funding for the planned project. Opportunities could be that

V. CONCLUSION

There is no good quality lean pork in the market, while a possible threat is that it remains a challenge to convince people to abandon deeply ingrained superstitions about eating pork. The company's financial analysis is also expected to be included in the business plan. Financial analysis is very important because it mostly provides numerical answers to three basic questions that every business plan should answer. The three questions are: Will the proposed business be profitable? Will the business be able to pay its debts as they come due? Will the proposed business create wealth for the owners or founders? Although other elements may be added, the elements discussed are key features of a pig farming business plan.

REFERENCES

- [1] Barron, N. (2011). *The Pig Farmer's Veterinary Book-A Complete Guide to the Farm Treatment and Control of Pig Diseases*. Read Books Ltd.
- [2] Kanthi, S. S., & Vallabaneni, S. (2024). Entrepreneur Development Through Pig Farming. In *Good Practices and Principles in Pig Farming* (pp. 189-212). Singapore: Springer Nature Singapore. https://doi.org/10.1007/978-981-97-4665-1_12
- [3] Maksym, V., Chemerys, V., Dushka, V., Dadak, O., & Martyniuk, U. (2022). Modeling of economic efficiency of pig farming in agricultural enterprises. *Agricultural and Resource Economics: International Scientific E-Journal*, 8(3), 178-199. <https://doi.org/10.51599/are.2022.08.03.09>
- [4] Maksym, V., Chemerys, V., Dushka, V., Dadak, O., & Martyniuk, U. (2022). Modeling of economic efficiency of pig farming in agricultural enterprises. *Agricultural and Resource Economics: International Scientific E-Journal*, 8(3), 178-199. <https://doi.org/10.51599/are.2022.08.03.09>
- [5] Nadal-Roig, E., Plà-Aragonès, L. M., & Alonso-Ayuso, A. (2019). Production planning of supply chains in the pig industry. *Computers and Electronics in Agriculture*, 161, 72- 78. <https://doi.org/10.1016/j.compag.2018.08.042>
- [6] Rana, T., & Soto-Blanco, B. (2024). *Good practices and principles in pig farming*. Singapore: Springer Nature.
- [7] Uirhead, M. R., Alexander, T. J., & Carr, J. (2013). *Managing pig health: a reference for the farm*. Sheffield, UK: 5m Publishing