



Overview Of Housewife's Income In Pig Fattening Businesses In Makale District Tana Toraja District

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Received : June 2, 2026

Revised : June 10, 2026

Accepted: June 17, 2026

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ABSTRACT

This research analyzes the pig fattening business in Makale District, Tana Toraja Regency. The background to this research is the critical role of pig-fattening companies as a source of income for local communities. This research identifies factors such as breeder characteristics, maintenance systems, capital analysis, and revenue as indicators of business success. The method used is direct observation and interviews with breeders who, in this case, have the status of homemakers and were selected at simple random. The data collected consists of primary data, including the respondents' identity and business management, and secondary data from related agencies. Descriptive analysis describes business maintenance management, while income analysis is carried out by calculating total costs and revenues. The research results show that most breeders have quite a long experience, with relatively large production amounts on a household scale. Overall, this fattening business shows a net income of IDR. 237,233,000.00 or IDR. 1,040,495.00/head. In conclusion, the pig fattening business in Makale District, Tana Toraja Regency, has excellent and profitable prospects for farmers, mainly if managed efficiently and sustainably.

Keywords: capital analysis, farmer income, maintenance system, pig fattening

INTRODUCTION

This research focuses on the pig fattening business carried out by homemakers in Makale District, Tana Toraja Regency, South Sulawesi Province. The pig fattening business in this area has become one of the main livelihoods for most local people, especially homemakers. The role of homemakers in family economic activities is becoming increasingly vital in line with socioeconomic changes occurring in society, such as increasing financial needs and the drive to diversify family income sources. The pig farming business has two objectives: producing meat and making a profit (Kanokwan, 2021a). One of the advantages of raising pigs is that pig food can be easily obtained because pigs are a type of domesticated animal that eats all kinds of food ranging from plants and animals (Hatalaibessy et al., 2024a). Pig manure can also be used as a natural fertilizer for the agricultural sector (Hatalaibessy et al., 2024a). Raising pigs is very profitable because it produces meat and contributes to people's lives, such as absorbing labor, using agricultural waste, utilizing agricultural products, and processing livestock products (Manampiring et al., 2020).

In the local context, Makale District is an agricultural area with natural conditions suitable for household livestock activities as a production unit so that households will maximize profits (Noorrahman et al., 2023). With the availability of large areas of land and abundant natural food sources, many families take advantage of these conditions to raise pigs (Oroh et al., 2019). From a cultural perspective, raising pigs also has traditional values passed down from generation to generation (Raruan et al., 2021). Over time, raising pigs has become part

of tradition and an economic source profitable for the community, especially homemakers who participate in this activity (Sarajar et al., 2019).

Economic theory states that the household consumption unit simultaneously aims to maximize utility (Sani et al., 2020). This economic theory in farming and livestock farming households in the Banggai Regency area is not two separate things but one unit in the household economy (Sigiro et al., 2023). Therefore, production influences consumption decisions to support family welfare through the influence of total household income such as pig farming business income, non-pig farming business income, and non-farming income, as well as household expenses (Simarmata et al., 2020).

However, amid pig-fattening businesses' high economic potential, homemakers experience several obstacles (Sritiasni Sritiasni et al., 2023). These obstacles include the problem of limited knowledge of livestock management, limited capital, and lack of access to adequate market information (Warijo et al., 2022). These problems impact the low productivity and income homemakers earn from this business (Wea et al., 2023a). Therefore, this research was conducted to dig deeper into the level of income earned by homemakers in the pig fattening business and what obstacles influence the success of this business (Wea et al., 2023b).

This research explores and analyzes the income level of homemakers in the pig fattening business in Makale District. Apart from that, this research also aims to identify factors that influence this level of income, such as business capital, livestock management, market knowledge, and the government's role in supporting this business. By understanding these factors, it is hoped that effective strategies can be formulated to increase the productivity and income of homemakers through pig-fattening businesses. This research has several gaps which form the basis for further studies. First, most previous research has focused more on technical aspects of animal husbandry, such as feed management, animal health, and fattening techniques, but not much has explored the role of homemakers as the leading actors in these business activities. Homemakers significantly contribute to fattening, from feed management to livestock sales. Second, most existing research still pays little attention to the socioeconomic aspects of homemakers as business actors, especially regarding income and the obstacles they face in the pig-fattening business.

This research's uniqueness (novelty) lies in its holistic approach to looking at the pig fattening business from the perspective of homemakers. This research not only looks at the technical aspects of fattening but also explores the social and economic dynamics among homemakers in Makale District. It is hoped that this approach can provide a new contribution to the literature related to small-scale livestock businesses, especially from a gender perspective. It is also hoped that this research will provide new insight into how empowering homemakers in the pig-fattening business can be implemented effectively in other regions with similar characteristics. Hopefully, this research can provide appropriate policy recommendations to local governments to improve community welfare by developing pig-fattening businesses. By understanding the socioeconomic dynamics of homemakers and their challenges, local governments can design more targeted empowerment programs, such as business management training, providing access to capital, and developing market networks. Apart from that, it is also hoped that local governments can use the results of this research to formulate policies that support women's empowerment in the economic sector, especially homemakers.

This research can also be a reference for non-governmental organizations or organizations working in community economic empowerment. By understanding the factors that influence the income of housewives in pig fattening businesses, these organizations can design more effective intervention programs to increase homemakers' capacity to manage their livestock businesses. These programs can include technical training, developing entrepreneurial skills, and forming joint business groups to strengthen the bargaining power of homemakers in facing the market.

RESEARCH METHODS

This research was conducted in Makale District, Tana Toraja Regency, South Sulawesi Province, from April to June 2024. The population in this study was 76 pig breeders who were housewives. The sample was taken from 20% of the population or 15 respondents using simple random sampling. Data was collected through observation and direct interviews using questionnaire guidelines. This research uses quantitative and qualitative data originating from primary data, namely data collected directly from respondents and secondary data obtained from related agencies. Primary data includes respondent identity, description of livestock business, and maintenance management, while secondary data includes sub-district monograph information (Made et al., 2024). For data analysis, descriptive analysis was used to describe the maintenance management of livestock fattening businesses and income analysis by calculating fixed costs, variable costs, and total costs (Eyferth, 2022). Net income is calculated by subtracting total revenue from total costs (Km Endoh et al., 2024).

RESULT AND DISCUSSION

Results and discussion contain the results of data analysis and in-depth discussion of the phenomena that occur at the research location relevant to the theme of the study. The results of the research should be compared with theories and or previous research findings relevant to the study. Results and discussion can contain data presented in tables and/or figures as well as a description of the discussion or review of the results of data analysis. Tables and figures are numbered sequentially with Arabic numerals and given a title. Tables are displayed without vertical lines, while horizontal lines are only displayed 3 to 4 main horizontal lines, namely 2 horizontal lines for column title items 1 closing line for the bottom row, and/or 1 line before the bottom (if needed). The font size for table contents is a maximum 10 pt without bold. The distance between the table title and the previous sentence is 1 space, between the table title and the table is ½ space, and between the table and the next sentence is 1 space. If the table has many or long columns, a one-column or full-page format can be used. Examples of table and figure presentations are as follows:

Respondent Identity

The respondents in this study were breeders who fatten pigs on a household scale in Makale District, Tana Toraja Regency. These farmers have diverse characteristics, which reflect their socioeconomic background and experience in pig fattening. The characteristics observed include age, education level, business experience, and skills in managing a pig fattening business. Each of these characteristics has a different influence on the success of breeders in running their business.

Age Classification and Education Level of Respondents

The respondents' ages reflect a varied age range, from young to older farmers, where each age group has its own dynamics in managing the business (Arifin et al., 2021). Younger breeders may have more enthusiasm and energy to carry out daily business activities, while older breeders may have more mature experience in facing challenges in the livestock fattening business (Copyright et al., 2024). Apart from that, the education level of the respondents is also a characteristic that can influence their ability to access information and adopt more efficient farming technology or practices. The higher a breeder's education level, the more excellent the opportunity to manage the business with a more modern and practical approach (Agustin et al., 2022).

The number of family dependents is also an essential factor influencing the focus and intensity of the business being run (Kanokwan, 2021b). Farmers with more family responsibilities may have to divide attention and resources between family needs and business activities, which, in the end, can affect the productivity of their business (Setiawan et al., 2023). On the other hand, business experience is a crucial aspect in measuring the success of breeders. The longer someone is involved in the pig fattening business, the more likely they will have more profound knowledge about managing the business, overcoming technical problems, and developing better business strategies (Paulus et al., 2020). Apart from that, the number of livestock owned by each farmer is also an important indicator in assessing the scale of their business. Farmers with more significant livestock numbers may have more opportunities to generate higher incomes but face more complex challenges regarding feed management, animal health, and marketing. Finally, skills in the pig fattening business are essential because they are directly related to the farmer's ability to care for and optimize livestock growth (Gallardo et al., 2023). These skills include understanding feed management, fattening techniques, livestock health care, and effective marketing strategies.

Table 1. Age and Education of Homemakers in the Pig Fattening Business

No	Characteristic	Number (Souls)	%
1	Age		
	>45 year	8	53.33
	≥45	7	46.67
2	Last education		
	Junior High School	4	26.67
	Senior High School	9	60.00
	S1	2	13.33

Source: Processed Data, (2024).

Business Experience

Farmers with more extended experience tend to have more mature business planning abilities due to a better understanding of technical management in livestock activities (Hatalaibessy et al., 2024b). Apart from that, they are also better prepared to face various non-technical challenges that often arise, which, in the end, can increase the productivity of their business (Sarajar et al., 2019). The length of time can measure the experience farmers spend carrying out these activities in the livestock business. The longer someone has been involved in this field, the broader the knowledge and skills they will acquire (Lucio et al., 2021). Table 2 provides a detailed description of the experience of the respondent farmers in running their livestock businesses.

Table 2. Experience of Homemakers in the Pig Fattening Business

No	Experience (Years)	Number (Souls)	Percentage (%)
1	<10	5	33.33
2	≥ 10	10	66.67
Amount		15	100.00

Source: Processed Data, (2024).

Most farmers in Makale District have more than 10 years of experience in fattening pigs (66.67%), while the remainder (33.33%) have less than 10 years of experience. This shows that most breeders have relatively mature knowledge and skills, which can support the sustainability of their business. Meanwhile, the existence of breeders with less than 10 years of experience indicates that there is regeneration or new entrants in this business who require guidance to achieve more optimal success.

Production Amount

Production refers to the physical amount produced by breeders, expressed in kilograms (Gallardo et al., 2023). In the business of fattening pigs, every breeder tries hard to achieve optimal production levels (Wea et al., 2023b). The amount of production achieved in the household-scale pig fattening business by farmers (respondents) in Makale District, Tana Toraja Regency, is listed in Table 3.

Table 3. Total Production of Pig-Fattening Businesses

No	Production amount (Kg)	Number (Souls)	Percentage (%)
1	<1,000	5	33.33
2	≥ 1,000	10	66.67
Amount		15	100.00

Source: Processed Data, (2024).

Table 3. above shows that the number of pig production obtained by respondents with production <1,000 kg was five people, with a percentage of 33.33%. Meanwhile, with a production volume of ≥ 1,000 kg, there were ten people with a percentage of 66.67%.

Pig Fattening Business Maintenance System

The pig fattening business maintenance system is a series of activities and techniques used by farmers to increase pigs' growth and body weight through regular feeding, managing the pen environment, and monitoring animal health (Wea et al., 2023a). The main objective of this rearing system is to achieve an optimal increase in pork production, maintain the quality and health of livestock, and maximize livestock business profits by implementing efficient and sustainable rearing practices. The pig-rearing system is as follows:

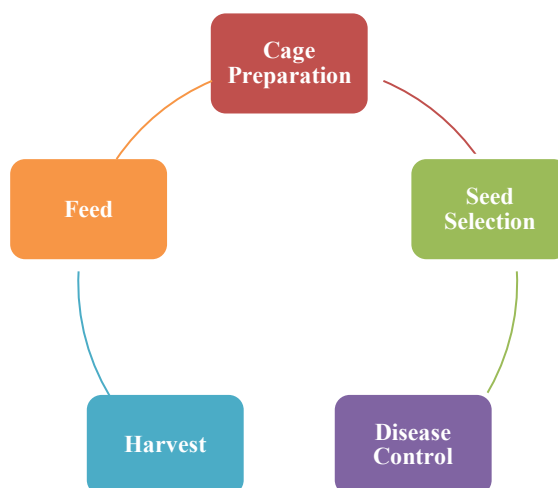


Figure 1. Pig Rearing System
 Source: Processed by the Author (2024)

The pig rearing system in Makale District involves several essential aspects to ensure the success of the fattening business. Preparing the cage is the first step, where the location of the cage must have good air circulation and be far from residential areas. The two types of cages used are battery and group cages, each with advantages and disadvantages. Battery cages make monitoring and control more accessible, but the costs are higher, while group cages are more economical but less optimal in feeding. Seeds are selected using strict selection to obtain superior pig types such as SGI, Berkshire, and Durok. Seedlings are selected based on 2-3 months of age, with prices ranging from IDR 600,000-700,000 per head. Disease control is carried out by keeping the cage clean, providing vitamins, and spraying disinfectant regularly. In terms of feed, farmers provide bran, concentrate, palm oil meal, and other additional feed to meet the nutritional needs of pigs. Feed is given twice a day, namely in the morning and evening. Harvest is carried out when pigs reach a weight of 60-80 kg at the age of 6-7 months, which is considered the optimal period for harvesting.

Analysis of Capital and Income for Pig Fattening Business

Capital analysis

Cost analysis depends on the production facilities used during a specific period and the costs incurred in pig farming business activities. The costs for pig farming in Makale District, Tana Toraja Regency, are as follows:

Table 4. Total Costs of Pig Fattening Business

No	Fee Type	Total Cost (IDR/head)
1	Still	174.785
2	Variable	980.333
Amount		1,155,118

Source: Processed Data, (2024).

Fixed costs are relatively fixed in amount and are always incurred regardless of the production produced. Fixed costs incurred for the pig farming business in Makale District, Tana Toraja Regency, include electricity costs and the depreciation value of equipment and pens. The fixed costs pig farmers must incur at the research location are IDR 174,785.00/head.

Variable costs are costs that are usually called operating costs, meaning that a farmer always incurs costs throughout the production process or costs that always change depending on the size of the production. Variable costs in the pig farming business include seed and feed costs such as bran, concentrate, and vegetables, amounting to IDR 980,333.00/head. Total costs are obtained from the sum of fixed costs and variable costs. So, the total costs that pig farmers must incur are IDR 1,155,118.00/head.

Income

Table 5. Receipts, Costs, and Income from Pig-Fattening Businesses

Respondent Number	Production quantity		Reception (IDR)	Fixed costs (IDR)	Variable Costs (IDR)	Total cost (IDR)	Income (IDR)
	Tail	Kg					
1	19	1,400	35,900,000	2,410,000	15,450,000	17,860,000	18,040,000
2	11	970	32,900,000	2,000,000	12,070,000	14,070,000	18,830,000
3	15	1,235	30,950,000	2,485,000	13,590,000	16,075,000	14,875,000
4	21	1,560	43,400,000	4,550,000	19,780,000	24,330,000	19,070,000
5	8	567	24,700,000	1,842,000	11,500,000	13,342,000	11,358,000
6	11	949	29,300,000	2,050,000	12,090,000	14,140,000	15,160,000
7	14	1,037	33,900,000	2,135,000	13,476,000	15,611,000	18,289,000
8	9	721	25,900,000	1,942,000	12,600,000	14,542,000	11,358,000
9	18	1,280	31,300,000	2,350,000	16,680,000	19,030,000	12,270,000
10	7	489	20,150,000	1,832,000	9,180,000	11,012,000	9,138,000
11	18	1,235	33,400,000	2,420,000	16,320,000	18,740,000	14,660,000
12	19	1,198	36,700,000	2,480,000	16,990,000	19,470,000	17,230,000
13	23	1,600	49,900,000	4,680,000	20,230,000	24,910,000	24,990,000
14	14	1,050	29,300,000	2,105,000	13,676,000	15,781,000	13,519,000
15	21	1,521	42,900,000	4,570,000	19,884,000	24,454,000	18,446,000
Amount	228	16,812	500,600,000	39,851,000	223,516,000	263,367,000	237,233,000

Source: Processed Data, (2024).

Table 5. shows the production of pig fattening businesses in Makale District, reaching 228 heads with total revenue from 15 respondents recorded at IDR 500,600,000.00. Variations in the amount of livestock production and weight affect each respondent's income, where the highest income reaches IDR 49,900,000 and the lowest is IDR 20,150,000.00. Overall, this fattening business shows a net income of IDR. 237,233,000.00 or IDR. 1,040,495.00/head.

CONCLUSION

Based on the research results, it can be concluded that the pig fattening business in Makale District, Tana Toraja Regency, shows significant income potential for farmers. The characteristics of respondents in this study include age, education level, business experience, and business management skills. Business experience significantly influences the success of breeders in carrying out fattening activities. Most breeders have more than 10 years of experience, which reflects a mature level of knowledge and skills.

The livestock rearing system involves cage management, selecting quality seeds, routine disease control, and providing appropriate feed to achieve optimal weight. Regarding production, 66.67% of respondents achieved production above 1,000 kg, which shows their ability to achieve good productivity. Analysis of capital and income reveals that the most significant costs are allocated to feed and housing, but this business can provide profitable income. The total receipts from 15 respondents reached IDR 500,600,000.00 with a total production of 228 heads. Differences in production quantities and selling prices per head affect the income of each respondent. The net income obtained was IDR 237,233,000.00 or IDR. 1,040,495.00/head. Overall, the pig fattening business in Makale District, Kabubapen Tana Toraja, has good prospects if managed efficiently and sustainably, and prototypes. Conclusions must be supported by sufficient research data.

ACKNOWLEDGEMENT

We would like to express our deepest gratitude to the dean, head of the department, and head of the Agribusiness Study Program, Faculty of Agriculture, Bosowa University, for their very high support in the research process. We also express our highest appreciation to the community in Makale District, Tana Toraja Regency, especially to housewife businesses.

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