

CHAPTER I INTRODUCTION

I.1 Background

As noted in figure I.1, the Indonesian economy is heavily reliant on the agricultural sector, which employs over 30% of the working force and contributes over 13% of the nation's GDP. A growing number of stakeholders, including the government and Micro, Small, and Medium-Sized Enterprises (MSMEs), are paying more attention to the usage of organic fertilizers in an attempt to boost agricultural output and preserve environmental sustainability. MSMEs in the agriculture industry, particularly those producing organic fertilizer, have a significant opportunity to support both national food security and economic growth. MSMEs that produce organic fertilizer contribute to the supply of sustainable agricultural inputs while also boosting rural farmers' incomes and creating jobs. In recent years, Indonesia has seen a rise in the use of organic fertilizers. However, there are still a number of obstacles that farmers must overcome before they may use organic fertilizers (Statistik, 2023).

Lapangan Usaha	2019	2020	2021*	2022**
(1)	(2)	(3)	(4)	(5)
PDB Harga Berlaku (Miliar Rupiah) dan Distribusi PDB (%)				
A. Pertanian, Kehutanan, dan Perikanan	2 012 742,8	2 115 494,5	2 254 541,3	2 428 900,5
	12,71	13,70	13,28	12,40
B. Pertambangan dan Penggalian	1 149 913,5	993 541,9	1 523 650,1	2 393 390,9
	7,26	6,43	8,97	12,22
C. Industri Pengolahan	3 119 593,8	3 068 041,7	3 266 905,5	3 591 774,7
	19,70	19,87	19,24	18,34
D. Pengadaan Listrik dan Gas	185 115,3	179 741,6	190 047,2	204 673,7
	1,17	1,16	1,12	1,04
E. Pengadaan Air, Pengelolaan Sampah, Limbah dan Daur Ulang	10 736,1	11 305,4	12 026,1	12 537,1
	0,07	0,07	0,07	0,06
F. Konstruksi	1 701 741,2	1 652 659,6	1 771 726,7	1 912 978,7
	10,75	10,70	10,44	9,77

Figure I. 1 PDB Indonesia 2024

One of the biggest problems is that inorganic fertilizers still hold most of the market share. Many farmers still use inorganic fertilizers because they work faster and are cheaper because the government gives them money. Even though the long-term benefits of organic fertilizers are known, they still use them.

MSMEs who work with organic fertilizers also have trouble getting to technology, money, and markets. Most MSMEs that make organic fertilizer still employ primitive technologies in their production, which affects the quality and consistency of their products. On the other side, more and more people are learning about sustainable farming and organic products, which is fantastic news for small businesses that make organic fertilizer.

Because MSMEs in the agriculture industry have both opportunities and problems when it comes to organic fertilizers, more research is needed to find good ways to help them grow. This involves things like getting more manufacturing capacity, coming up with new technologies, getting loans, and growing the market. So, it is envisaged that MSMEs that make organic fertilizer can help Indonesia's agriculture become more sustainable in the best way possible.

For this reason, I conducted research on MSMEs that are involved in agriculture and have an organic fertilizer field named CV BAS (Bernas Andalan Sejati) in Kahean, Dolok Batu Nanggar, Simalungun Regency, North Sumatra. The enterprise that is being offered is the production of organic fertilizers.

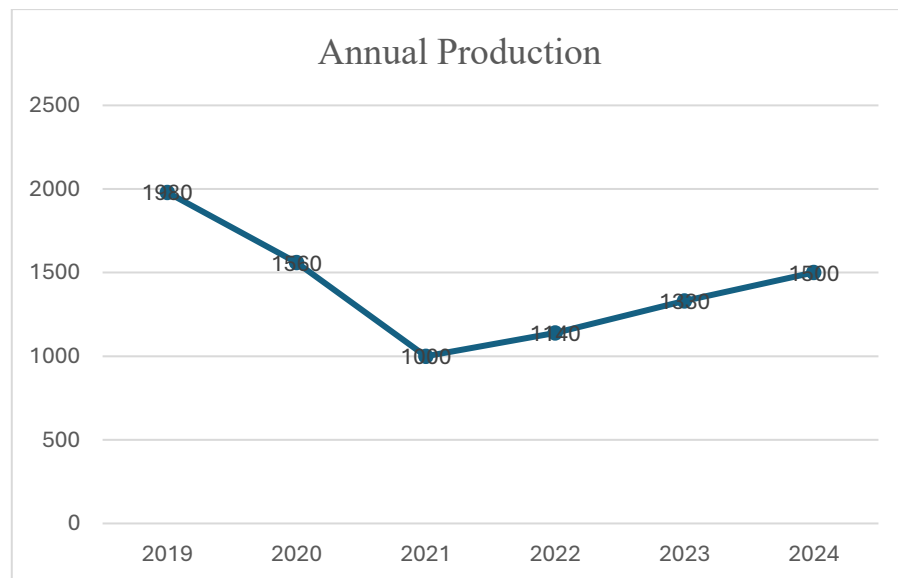


Figure I. 2 CV Annual Fertilizer Production Ammount 2019 - 2024

Figure I.2 illustrates the annual production trajectory from 2019 to 2024. Production has diminished markedly from 1,930 tons in 2019 to merely 1,000 tons in 2021 as a result of COVID-19. Following this decline, production exhibits a modest resurgence: 1,140 tons in 2022, 1,330 tons in 2023, and further increasing to 1,500 tons in 2024. This indicates a very stable recovery phase during the previous three years, following a significant contraction during the 2019–2021 timeframe.

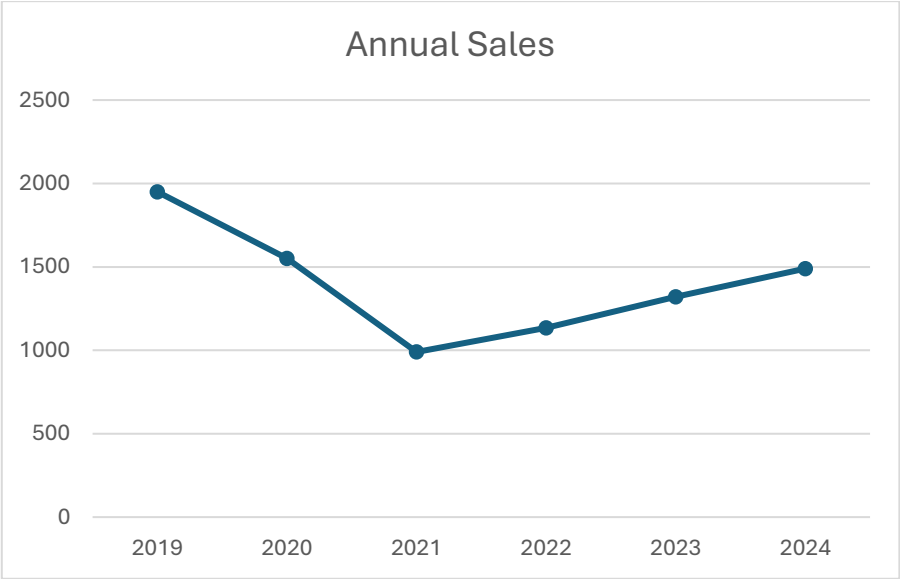


Figure I. 3 CV BAS Annual Fertilizer Sales Ammount 2019 - 2024

Figure I.3 of the annual sales also shows a pattern very similar to the production trend. Sales fell from 1,950 tons in 2019 to 990 tons in 2021, which is the lowest point. Then there was a consistent increase: 1,135 tons in 2022, 1,320 tons in 2023, and reached 1,490 tons in 2024. This recovery reflects an increase in demand or distribution effectiveness, which follows an upward trend in production over the same period.

Table I.1 illustrates the distribution of products for the year 2024, totaling 1,490 tons. The distribution is categorized into four segments: Kiosks/Shops, Gardens/Farmers, Provincial Governments, and Regency Governments. The most substantial distributions were in March and November, each totaling 440 tons, primarily attributed to the Provincial Government (350 and 300 tons) and

the Regency Government (90 tons in November). The distribution was notably high in July (240 tons), primarily facilitated by the Provincial and District Governments. Conversely, May and June exhibited the minimal distribution, with only 10 tons and 20 tons respectively, confined to kiosks and stores. The Kiosk/Shop category experiences monthly distribution, peaking at 70 tonnes in September and 60 tonnes in October, indicating consistent retail distribution. This data illustrates distribution patterns characterized by heightened intensity during the year's commencement and conclusion, alongside the pivotal function of government agencies in facilitating substantial volume distribution.

Table I. 1 Number of Sales Each Month 2024

Month (Ton)	Scope of Distribution				Total
	Kiosk/Shop	Garden/Farmers	Prov. Gov	Dist. Gov	
January	20				20
February	50				50
March	40	50	350		440
April	20				20
May	10				10
June	20				20
July	10	30	200		240
Agust	30			40	70
September	70				70
October	60	30			90
November	30	20	300	90	440
December	20				20
Total					1490

Therefore, further research is needed to identify the factors affecting CV BAS's production capabilities as well as strategies that can be implemented to improve and maintain production stability in the future.

Based on the known root of the problem and identifying the existing problem, come up with an alternative solution that can solve the problem experienced by CV BAS. The following is an explanation of the alternative solutions in table 1.2

Table I. 2 Alternative Solution

No	Problem	Alternative Solutions
1	The company is having difficulty in expanding its reach to new market segments that have never been touched before.	As a solution to the problem of market reach, it is proposed to design a good marketing strategy. The goal is for the company to reach new target markets and expand its overall marketing scope
2	CV BAS's production capabilities are inconsistent and insufficient to meet the growing market opportunities. This is also exacerbated by the use of technology that is still simple, which has an impact on product quality and consistency.	To overcome production limitations, the main solution analyzed in this study is to build new production facilities. This step aims to increase the company's capacity to meet current market demand and capture future growth opportunities.
3	One of the main challenges is competition with inorganic fertilizers that still dominate the market, in part because they are more affordable due to government subsidies.	

I.2 Problem Formulation

Based on the background of the above problems, CV BAS will build a new fertilizer processing facility. Therefore, there are several formulations of the problem that will be reviewed through this study, namely:

1. What is the total demand for CV BAS fertilizer products in production capacity during 2025-2029?
2. How is the feasibility review of the construction of the new CV BAS facility measured in terms of financial aspects?
3. How is the financial review of the construction of the new CV BAS facility measured in terms of financial aspects?

I.3 Research Objectives

The purpose of this study is to:

1. Measure how much fertilizer demand there is at CV BAS's new production facility during the 2025-2029 period.
2. Design good technical and operational aspects for new facilities at CV BAS.
3. Calculate the financial feasibility aspect for the design of new facilities on CV BAS.

I.4 Benefit

The expected benefits of this study include:

1. For MSME CV BAS, the results of this research are expected to help improve production efficiency.
2. For the government and related institutions, this study provides important information related to challenges and opportunities in the organic fertilizer production sector, which can be used as a basis for policy-making to support MSMEs in the agricultural sector.
3. For the academic world, this research is expected to add to the scientific literature related to production management and MSME business development in the agricultural sector, especially in the application of innovative solutions to increase productivity.

I.5 Writing Systematics

This research is written with the following writing systematics:

CHAPTER 1 INTRODUCTION

This section explains the background of the research, the reasons for conducting this research, the identification of the problem, the objectives and benefits of the research, the scope, the methodology applied in the analysis and design of the problem, and the systematics of the writing.

CHAPTER 2 THEORETICAL FOUNDATION

This chapter reviews the literature relevant to the research, covering theories, methods, and tools that have been discussed in previous research. This information will be used to solve problems in this study.

CHAPTER 3 RESEARCH METHODOLOGY

This chapter describes the steps taken to solve research problems and achieve the goals that have been set. In addition, this chapter also includes an explanation of the approaches, techniques, and tools used in the research to ensure valid and accountable results.

CHAPTER IV DATA COLLECTION AND PROCESSING

This chapter describes the stages involved in the process of data collection and processing, as well as the design of the systems used to solve research problems.

CHAPTER V ANALYSIS AND DISCUSSION

This chapter explains the analysis and discussion related to the results of data processing that has been carried out in the previous chapter. In this chapter, the data obtained will be analyzed in depth to identify the main findings, which will then be discussed to provide a more comprehensive understanding of the research problem and the implications of the findings.

CHAPTER VI CONCLUSIONS AND SUGGESTIONS

This chapter is the final part of the research which presents conclusions based on all the stages and processes that have been carried out. In addition, this chapter also provides suggestions for further improvement and development in future research, in order to improve the quality and relevance of future research.