

## Feasibility Study on the Development of Cabangbungin Regional General Hospital, Bekasi Regency, from Class D to Class C

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### Abstract

This study analyzes the feasibility of establishing RSUD Cabangbungin in Bekasi Regency, focusing on investment requirements, funding sources, financial projections, and cash flow analysis. The total investment needed amounts to IDR 108.78 billion, sourced from BLUD for the addition of 12 hospital beds and APBD for the construction of 38 hospital beds. The financial analysis indicates that RSUD Cabangbungin will initially operate at a deficit, with projected losses in the first three years. However, profitability is expected to begin in the fourth year, with a net profit of IDR 1.44 billion, increasing to IDR 4.03 billion by the fifth year. The cash flow analysis demonstrates a positive trend, with cumulative net cash increasing each year, reaching the break-even point within five years. These findings suggest that the RSUD Cabangbungin project is financially feasible and sustainable in the long run. Effective management strategies, pricing adjustments, and operational efficiency are essential to maximizing profitability and ensuring the hospital's role in providing quality healthcare services to the community.

### Keywords:

Investment  
Requirements,  
Financial  
Projections, Cash  
Flow Analysis,  
RSUD  
Cabangbungin,  
Public Hospital  
Funding,

## INTRODUCTION

Health is a fundamental human right, as stated in Law Number 17 of 2023 concerning Health. This law affirms that every individual has the same right to obtain optimal healthcare services. Therefore, the government, particularly local governments, is obliged to provide healthcare facilities that align with community needs and meet national and international standards.

According to the World Health Organization (WHO), the ideal hospital bed ratio in a population is 1 bed per 1,000 people. Meanwhile, based on the Sustainable Development Goals (SDGs) Indicator Metadata, a population of 10,000 should have 18 hospital beds (Bappenas, 2020). These data indicate the need to increase healthcare service capacity to meet the growing demands of the community.

Cabangbungin Regional General Hospital (RSUD Cabangbungin) is one of the healthcare facilities located in Jayalaksana Village, Cabangbungin District, Bekasi Regency. It is approximately 130.9 km from the capital city of West Java Province (Bandung) and about 35 km from the Bekasi Regency government center, with a travel time of around two hours. The hospital covers an area of 10,815 m<sup>2</sup> with a building area of 8,812.84 m<sup>2</sup>, and it borders the following areas: (1) North: Cabangbungin District, (2) South: Pebayuran District, (3) East: Karawang Regency, (4) West: Sukakarya District.

Currently, Bekasi Regency has a population of approximately 3.2 million people spread across 23 districts (BPS, 2024). With such a large population and increasing demand for healthcare services, RSUD Cabangbungin faces various challenges in meeting medical service demands. The high Bed Occupancy Rate (BOR) has led to prolonged patient waiting times in the Emergency Department (IGD), exceeding the standard of six hours.

In addition to bed capacity issues, the hospital must also adapt to changes in government policies, such as the implementation of the Standardized Inpatient Care Policy (KRIS), which requires improved service quality and facilities. Furthermore,

evolving epidemiological conditions and public health trends necessitate enhancements in service types, infrastructure, medical equipment, and overall hospital development.

In the context of hospital development, the Health Service Capacity Planning theory emphasizes that increasing healthcare facility capacity must consider several aspects, including population needs, service distribution, resource efficiency, and government policies (Green, 2012). Additionally, the Hospital Upgrading Framework states that transitioning a hospital from Class D to Class C requires a comprehensive evaluation of human resource capacity, infrastructure, and service standards that must be met (Smith & Walshe, 2018).

Based on this background, this study aims to analyze the feasibility of upgrading RSUD Cabangbungin from Class D to Class C by considering service needs, infrastructure capacity, and applicable health policies. It is expected that this study will provide data-driven recommendations to support the improvement of healthcare services in Bekasi Regency.

## METHOD

This study employs a qualitative research approach using a descriptive-analytical method, incorporating direct observation and participatory observation (participant observation) of the ongoing system, supplemented by in-depth interviews with RSUD Cabangbungin management. The research was conducted from December 2024 to January 2025 at RSUD Cabangbungin. To assess the feasibility of upgrading RSUD Cabangbungin from Class D to Class C, the data examined in this study includes (1) the external and internal conditions of the hospital, (2) an assessment of the hospital's existing capabilities and performance, (3) an in-depth analysis of the requirements for upgrading the classification from Class D to Class C, (4) regulatory requirements, (5) market fulfillment and management, (6) land and environmental suitability, (7) improvements in medical services, supporting facilities, and hospital technology, (8) human resources, organizational structure, and management, (9) infrastructure, facilities, and medical equipment requirements, (10) development costs for upgrading to Class C, and (11) financial performance required to meet Class C hospital criteria.

The data sources used in this study consist of primary and secondary data. Primary data was obtained through in-depth interviews with three key informant groups: the Bekasi Regency Government, the RSUD Cabangbungin team, and the local community. Secondary data was collected by reviewing relevant documents and conducting participatory observations of medical equipment maintenance activities. The research instruments included interview guidelines, checklists, observation guides, and document analysis. The collected data was analyzed using a qualitative approach, compared with existing literature, processed, and presented in narrative, tabular, and sectional formats for clarity. Data collection employed triangulation to enhance credibility by verifying information through multiple data collection techniques and sources. Triangulation methods included source triangulation and methodological triangulation (Prastowo, 2010), which involved cross-checking information obtained from different informants and verifying interview data with other relevant sources. The research findings are presented in narrative form with direct quotations from in-depth interviews, supported by participatory observations and secondary data analysis concerning the feasibility requirements for RSUD Cabangbungin's classification upgrade to Class C in 2023.

According to Stufflebeam (1985), the scope of data evaluation generally includes input, process, and output. Input evaluation examines various elements required for the implementation process to achieve the desired outcomes. It seeks to answer whether the inputs are sufficient, their quality, sources, costs, and the qualifications of those involved. Process evaluation analyzes the feasibility study procedures for upgrading RSUD Cabangbungin from Class D to Class C, ensuring all steps have been carried out and inputs effectively utilized. Output evaluation assesses the extent to which the objectives of the feasibility study have been achieved.

## RESULTS AND DISCUSSION

This study aims to analyze the feasibility of upgrading RSUD Cabangbungin from Class D to Class C. The qualitative research findings were obtained through interviews and research instruments involving various stakeholders, including the Health Department, Hospital Management, Committees, SPI, Casemix, and the community. The key findings of the study are as follows:

- All stakeholders understand the background, purpose, and objectives of upgrading RSUD Cabangbungin's classification.
- There is a strong understanding of the norms, standards, criteria, and procedures as the basis for analyzing the feasibility of hospital development.
- Stakeholders are aware of the technical requirements, including market studies, regulations, environmental aspects, services, technology, human resources (HR), and infrastructure.
- All parties accept and are ready to meet the technical requirements based on hospital development norms, standards, procedures, and criteria.
- Readiness to fulfill financial needs to meet the technical requirements of hospital development.
- Agreement on the investment needs plan for hospital development as a basis for financial feasibility analysis.

### 1. Situation Analysis

The situation analysis is based on external and internal aspects that affect the feasibility of RSUD Cabangbungin's development.

Table 1. External Aspect Situation Analysis

No	Aspect	Criteria	Research Findings	Hospital Feasibility
1	Licensing Policy	Class D Operational Permit	Acquired since 2017	Feasible
2	Hospital Classification Policy	Class C Hospital with 130 Beds	In accordance with available land	Feasible
3	Bed Distribution	ICU 6%, NICU/PICU 4%, Isolation 10%	Meets PP 47 Year 2021 regulations	Feasible
4	Accreditation Policy	Fully Accredited by KARS 2022	Capable of meeting Class C accreditation	Feasible
5	Location Suitability	In line with RTRW 2011-2031	Sustainable development since 2017	Feasible
6	Geography	Northern area far from city center	RSUD Cabangbungin is the only hospital within a 25 km radius	Feasible
7	Demographics	WHO ratio 1:1000 (requires 349 beds)	Currently only 50 beds available	Feasible
8	Socio-Economy	Majority middle to lower income, 100% JKN-covered	Requires a nearby referral hospital	Feasible
9	Human Resources	Medical staff shortage based on Ministry of Health ratio	Hospital contributes to HR development	Feasible

No	Aspect	Criteria	Research Findings	Hospital Feasibility
10	Epidemiology	Dominant diseases: Hypertension, ISPA, Dyspepsia	Hospital is needed for better treatment	Feasible
11	Health Indicators	MMR: 23 deaths, IMR: 22 deaths	Hospital as a key service to reduce mortality rates	Feasible

Table 2. Internal Aspect Situation Analysis

No	Aspect	Criteria	Research Findings	Hospital Feasibility
1	Hospital Profile	Maternal-child services, priority diseases	Aligns with Ministry of Health transformation priorities	Feasible
2	Management System	Hospital & Medical By-Laws	Already implemented	Feasible
3	Tariff System	Unit Cost, INA-CBGs Regional	Local government regulation on tariffs exists	Feasible
4	Performance & Financial Planning	Hospital Business and Strategic Plan	BLUD status since 2019	Feasible

## 2. Demand Analysis

A demand analysis was conducted to measure the need and potential for RSUD Cabangbungin's development based on land, capacity, and services.

Table 3. Demand Analysis

No	Aspect	Criteria	Research Findings	Hospital Feasibility
1	Land & Location	Existing location, future expansion planned	Remote area, high need for healthcare services	Feasible
2	Bed Capacity	62 beds (initial), 100 beds (Class C), 250 beds (Class B)	Development planned in stages	Feasible
3	Types of Services	Outpatient, inpatient, emergency, surgery, ICU	Basic services are met	Feasible

The findings indicate that upgrading RSUD Cabangbungin from Class D to Class C is generally feasible based on the analyzed aspects. Support from stakeholders and readiness to meet technical and financial requirements are crucial factors for the sustainability of this program.

## Discussion

### 1. Investment Needs Plan and Funding Sources

The feasibility analysis of the RSUD Cabangbungin development in Bekasi Regency includes the calculation of investment requirements, covering physical construction, land acquisition, equipment procurement, and initial operational funds. Additionally, this analysis considers production projections, revenue projections, cost projections, and assumptions used in these calculations.

The funding sources for the RSUD Cabangbungin investment come from two main sources:

- Regional Public Service Agency (BLUD)** for the addition of 12 hospital beds.
- Regional Revenue and Expenditure Budget (APBD)** through the Public Works and Spatial Planning Agency (Dinas Cipta Karya) for the construction of 38 hospital beds.

After determining the total investment needs and funding sources, a financial analysis is conducted to evaluate the potential return on investment, serving as the basis for decision-making regarding the financial feasibility of the project.

### 2. Investment Needs

The following table presents a detailed breakdown of the RSUD Cabangbungin investment needs.

Table 1. RSUD Cabangbungin Investment Needs

No	Cost Type	Percentage	Total Cost (IDR)
<b>Consultancy Services Costs</b>			
1	Master Plan Development	-	450,000,000
2	Building Construction Planning Cost (DED)	6.7%	4,674,045,127.68
3	Supervision Consultant Cost	4.2%	2,921,278,204.80
<b>Total Consultancy Costs</b>		-	8,045,323,332.48
<b>Construction Costs</b>			
4	New Medical Building (38 Beds) - Standard Cost	-	29,049,564,096
5	New Medical Building (38 Beds) - Non-Standard Cost	-	29,376,000,000
6	Interior, Furniture, and Furnishings	14.8%	10,281,600,000
7	Renovation of Existing Building (Addition of 12 Beds)	-	950,000,000
<b>Total Construction Costs</b>		-	69,657,164,096
<b>Medical Equipment Costs</b>			
8	Medical Equipment Costs	27%	18,669,537,970
<b>Total Furniture and Medical Equipment Costs</b>		-	18,669,537,970
<b>Additional Human Resources Costs</b>			
9	Healthcare and Non-Healthcare Personnel	-	2,410,860,000
<b>Total Additional Human Resources Costs</b>		-	2,410,860,000
<b>Hospital Operational Costs</b>			
10	Routine Operational Costs	-	10,000,000,000
<b>Total Operational Costs</b>		-	10,000,000,000
<b>Total Investment Needs</b>		-	108,782,885,398.48

### 3. Financial Analysis

The revenue projection for RSUD Cabangbungin is calculated based on revenue centers. Tariff adjustments are made annually based on hospital classification, purchasing power, and inflation factors. Based on these assumptions, hospital revenue, expenses, and profit projections are calculated from the first year to the 15th year.

In the first year, RSUD Cabangbungin is projected to generate revenue of IDR 76.71 billion with expenses amounting to IDR 80.48 billion, resulting in a loss of IDR 3.77 billion. However, from the fourth year onwards, the hospital is expected to start generating a profit of IDR 1.84 billion.

Table 2. Summary of Revenue, Expenses, and Profit

Year	Revenue (IDR)	Expenses (IDR)	Gross Profit (IDR)	Tax 22% (IDR)	Net Profit (IDR)
1	76,711,998,937	80,485,459,282	(3,773,460,345)	-	(3,773,460,345)
2	82,796,501,398	85,893,743,213	(3,097,241,815)	-	(3,097,241,815)
3	94,580,980,921	95,179,913,077	(598,932,156)	-	(598,932,156)
4	106,098,676,696	104,255,857,347	1,842,819,348	405,420,257	1,437,399,092
5	115,284,002,521	110,110,486,068	5,173,516,454	1,138,173,620	4,035,342,834

### 4. Cash Flow Projection

The cash flow projection is prepared using the direct method, which refers to receipts and expenditures over a given period. Revenue is calculated based on hospital receipts, while expenditures are categorized into three main components:

- Operational and Tax Costs
- Annual Investment Costs
- Dividends



The annual net cash flow is then accumulated for each period to evaluate investment feasibility.

Table 3. RSUD Cabangbungin Cash Flow Projection

Year	Revenue (IDR)	Operational & Tax (IDR)	Investment (IDR)	Dividend (IDR)	Net Cash Flow (IDR)	Accumulated Cash (IDR)
1	76,711,998,937	59,835,359,171	7,813,766,056	-	9,062,873,710	9,062,873,710
2	82,796,501,398	65,243,643,102	8,204,454,358	-	9,348,403,938	18,411,277,648
3	94,580,980,921	74,529,812,966	8,614,677,076	-	11,436,490,879	29,847,768,527
4	106,098,676,696	84,011,177,493	9,045,410,930	1,006,179,364	12,035,908,909	41,883,677,436

Based on this projection, the hospital is expected to reach its break-even point within five years through optimal resource utilization and effective management strategies.

## CONCLUSION

Based on the analysis conducted, the establishment of RSUD Cabangbungin in Bekasi Regency has promising long-term financial feasibility. The investment requirements cover various essential aspects, including physical construction costs, procurement of medical equipment, additional human resources, and initial operational expenses. The funding sources come from BLUD for the addition of 12 hospital beds and APBD through the Public Works Department for the construction of 38 hospital beds, with a total investment requirement of IDR 108.78 billion.

From a financial perspective, revenue projections indicate that RSUD Cabangbungin will experience a deficit in the first three years due to high operational costs exceeding generated revenue. However, starting in the fourth year, the hospital is projected to generate a net profit of IDR 1.44 billion, increasing to IDR 4.03 billion by the fifth year. This demonstrates long-term profitability potential with effective management strategies.

The cash flow analysis also shows positive results, with a continuously increasing net cash accumulation. The hospital is expected to reach its break-even point within five years, indicating that this investment can be sustained with proper financial management.

Overall, the RSUD Cabangbungin development project is financially feasible and has strong sustainability potential. With optimal management, appropriate pricing adjustments, and operational efficiency, this hospital can grow into a healthcare facility that provides significant benefits to the community of Bekasi Regency.

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