



Development of the Banten Province Sport Center Area with Scheme KPBU (Cooperation Government and Business Entities)

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ABSTRACT: Infrastructure development modern sports in Banten Province, especially the Banten Sport Center and Banten International Stadium (BIS) in the Village Sindangsari, Regency Serang, 2020 with cost around 874.3 billion Rupiah from the APBD funds, is focus main For increase quality life society and advance sector sport Banten Province. For optimization development area the needed scheme cooperation between government and business entities (KPBU). With technique data collection in the form of interviews and observations participatory. Research done with approach qualitative with technique analysis risk and calculation eligibility financial. Research This find a total of 50 risks or uncertainties consisting of 11 risk categories. While from results method calculation of NPV, IRR, PP, and DSCR which refers to feasibility financial from project Sport Center development Banten Province with KPBU scheme is known that The development project has good financial feasibility, with a positive NPV value, high IRR results and an average DSCR calculation result of more than 1, then the project with the KPBU scheme can be said to be financially feasible because it has a positive return potential . Then from the results of this research calculation, the bargaining value is obtained which is less attractive to investors so that support is needed from the Government for sharing costs, especially construction costs, so as to increase investor interest in investing in this project.

KEYWORDS: Sport Center, KPBU, Analysis Risk and Feasibility Financial.

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I. INTRODUCTION

Infrastructure development modern sports in Banten Province, become focus main for increase quality life society and advance sector sports. Sport Center Banten, located in the village Sindangsari, Regency Serang, built in 2020 with cost around 874.3 Billion Rupiah from the APBD funds. For optimization development of the area, the KPBU scheme becomes alternative which is cooperation between government and business entities in infrastructure. The uniqueness of the KPBU scheme is its ability to utilize the resources and capabilities of both parties, so that the project can be implemented more effectively and efficiently.

The method of calculating profit sharing in the KPBU scheme is based on the contribution of each party and the potential income generated from the project. Profit sharing is carried out through a mechanism that has been agreed upon in the cooperation agreement , taking into account factors such as investment costs, risks borne, and income generated. Evaluation of the risk of costs borne by investors is also an important part of ensuring that the project remains feasible and profitable.

So that through study, writer can analyze risk dominant and mitigating possible risk happen as well as analyze eligibility financial in the development of the Banten Province Sport Center with KPBU scheme so that it can become consideration for investors to do cooperation.

II. RESEARCH METHODOLOGY

Method data collection in study Development of the Sports Center Area Banten Province with KPBU Scheme (Cooperation Government and Business Entities) are carried out with use primary data and secondary data methods;

1. Primary Data
Primary data sources were obtained in a way direct for gather information through interviews and observations participatory.
2. Secondary Data
Secondary data obtained from various type source like literature and journals, rules legislation, reference allocation PII risk in 2023, as well as the development master plan Sport center area Banten Province and eligibility financial done with analyze documents project like report finance, plan budget and study eligibility previously.

2.1 Method Data analysis

2.1.1 Method Management Data Analysis Risk

Analysis Management Risk done with use a number of method:

- a) Identification Risk is a process for determine possible risks happen in a project.
- b) Risk Level Assessment.
- c) Allocation Risk done for determine the most capable party bear possible risks happen.
- d) Mitigation Risk is analysis to a response on a risk.

2.1.2 Method Feasibility Data Analysis Financial

Method Feasibility Data Analysis Financial:

- (a) The Net Present Value (NPV) method calculates eligibility with convert all over mark cash flow in the present for reflects the total value Money Which obtained from project (Pujawan, 2009).
- (b) Internal Rate of Return (IRR) method is a method for count level flower Which can equalize between present value from all cash inflow with cash outflow from a investment project.
- (c) Payback Method Period (PP) is analysis financial related with time Which needed For return cost investment beginning with level return certain.
- (d) Weighted Acceleration) Method Average Cost of Capital) used to assume the overall cost of capital which is a combination of debt and equity, according to their proportions.
- (e) Method The calculation of the Debt Service Coverage Ratio (DSCR) is project cash flow capability for fulfil obligation his debt.
- (f) Project Sensitivity Analysis aiming for see What will happen with results analysis project If There is something error or change in the basics calculation cost or benefits (L. Grant, 1996).

III. RESULTS AND DISCUSSION

3.1 Overview General Project

Sport Center Banten is a sports center in Sindangsari Village, Pabuaran District, Serang Regency, Banten. Built in 2020 at a cost of around 874.3 billion Indonesian Rupiah, funded by the regional budget. The main facility is the Banten International Stadium (BIS) with FIFA standardization and a capacity of 30,000 spectators. Private sector support is needed for further development through cooperation schemes. The Provincial Government of Banten offers management of BIS to investors with the conditions of developing surrounding sports venues.

3.2 Risk Analysis

Identification risks in the project development area *Sports Center* Banten Province produces a total of 50 risks or uncertainty consisting of of 11 classifications or category risk.

No	Risk Category	Amount of Risk	Risk Classification					Risk Allocation		
			Very Low	Low	Currently	Tall	Very high	Public	BU	Together
1	Location Risk	3	0	0	2	1	0	1	1	1
2	Design, Construction and Operational Testing Risks	9	0	0	7	1	1	0	8	1
3	Sponsor Risk	3	0	0	3	0	0	0	3	0
4	Financial Risk	4	0	3	1	0	0	0	4	0
5	Operation Risks	7	0	1	5	1	0	0	6	1
6	Income Risk	6	0	0	0	4	2	0	1	5
7	Connectivity and Competitor Risks	2	0	0	1	1	0	0	1	1
8	Risiko <i>Interface</i>	3	0	0	2	0	0	0	1	2
9	Risiko Politik	7	0	1	3	3	0	6	0	1
10	Risiko <i>Force Majeure</i>	4	0	0	3	1	0	0	0	4
11	Asset Ownership Risk	2	0	0	1	1	0	0	2	0
TOTAL		50	0	5	28	13	3	7	27	16

A number of risk is uncertainty that can threaten smooth running of KPBU Sports Center Area Banten Province. Risk the is a major risk which is mainly relate with demand for area. Considering return This KPBU investment use form return others, then demand becomes very thing important to smooth running of KPBU.

Major Risk	MITIGATION		
	Pre-Construction Phase	Construction Phase	Operational Phase
Design, Construction and Operational Testing Risks : Delays in completion of construction work resulting in delays in return on investment.		Implementation of project management principles according to the latest PMBOK to avoid delays	
Revenue Risk : Risk in the early stages of operations. The project is financially feasible but has cash flow in the early stages of operations that burdens the BUP.			Prepare capital or other sources of funds as alternative funds / advances
Revenue Risk : Growth in demand and crowds at sports centers does not match projections.			Incorporating demand projection risks into BUPI guarantee points and government support through promotion of the Sports Center area and the creation of events that increase demand.

3.3 ANALYSIS ELIGIBILITY KPBU FINANCIAL

Service rates in the first year are assumed to increase according to inflation, then when the Sports Center starts operating it is assumed that service rates will increase every 2 years by 5% for sports facilities, 8% for sports venue rental, commercial areas , advertising and billboards, *naming. rights*, retail, hotel and parking.

3.3.1 Potential Income

Potential income is calculated based on predetermined rates, capacity, and occupancy levels at each facility.

3.3.2 Cost Investment Beginning

The calculated investment cost components are divided into two main components, namely Construction Costs and non-Construction Costs. Construction Costs calculate the costs incurred for the construction of the Building and its supporting infrastructure. Non-Construction Costs are described as costs outside of engineering and construction, such as commitment fee, Construction Management, insurance and Tax. Based on the analysis, the investment costs for the development of the sports area center is Rp. 530,320,441,023.

3.3.3 Cost Operation and Maintenance

The calculation of operational and maintenance costs consists of two major parts, namely annual operational and maintenance costs and 10-year operational and maintenance costs. The expenditure of 10-year operational and maintenance costs is the cost of strengthening the structure of certain buildings. Meanwhile, annual operational and maintenance costs are routine expenses for maintenance and operations that are definitely needed.

3.3.4 Structure Capitalization Project

In the calculation eligibility KPBU Sports Center project, used Debt Equity Ratio assumption of 70:30, where 70% of the value investment from project will financed using debt and 30% using equity.

Item	Nilai
Cost of Debt	10%
Proportion of Debt	73%
Tax Rate	22%
Cost of Equity	15%
Proportion of Equity	27%
WACC	9,75%

3.3.5 Method Calculation Eligibility Financial

Net Income

Tahun	2025	2026	2027	2028	2029	2030	2031	2032
Revenue	-	36.746.842.500	80.442.420.889	101.220.797.492	115.197.822.248	139.285.235.503	147.759.682.153	168.424.495.629
Operating Expense	-	9.929.916.957	55.232.633.203	56.816.394.082	58.445.925.651	60.122.550.683	61.847.630.177	63.622.564.469
Net Operating Income	-	26.816.925.543	25.209.787.687	44.404.403.410	56.751.896.597	79.162.684.820	85.912.051.975	104.801.931.159
Interest Expense	-	-	-	-	38.721.563.265	35.311.563.764	31.901.564.256	28.491.564.751
Earning Before Tax	-	26.816.925.543	25.209.787.687	44.404.403.410	18.030.333.332	43.851.121.059	54.010.487.719	76.310.366.408
Income Tax	-	5.899.723.619	5.546.153.291	9.768.968.750	3.966.673.333	9.647.246.633	11.882.307.298	16.788.280.610
Net Income	-	20.917.201.923	19.663.634.395	34.635.434.659	14.063.659.999	34.203.874.426	42.128.180.421	59.522.085.798

Tahun	2033	2034	2035	2036	2037	2038	2039	2040
Revenue	168.424.495.629	181.572.206.931	181.572.206.931	195.752.771.022	195.752.771.022	211.047.669.041	211.047.669.041	227.544.828.350
Operating Expense	65.448.794.363	112.598.141.952	69.261.113.566	71.250.297.538	73.296.988.907	75.402.789.088	77.569.467.473	79.367.544.177
Net Operating Income	102.975.701.266	68.974.064.979	112.311.093.365	124.502.473.484	122.455.802.115	135.644.879.953	133.478.201.568	148.177.284.173
Earning Before Interest & Tax	102.975.701.266	68.974.064.979	112.311.093.365	124.502.473.484	122.455.802.115	135.644.879.953	133.478.201.568	148.177.284.173
Interest Expense	25.081.565.246	21.671.565.742	18.261.566.237	14.851.566.732	11.441.567.227	8.031.567.723	4.621.568.218	1.211.568.713
Earning Before Tax	77.894.136.020	47.302.499.237	94.049.527.128	109.650.906.751	111.014.234.888	127.613.312.230	128.856.633.350	146.965.715.460
Income Tax	17.136.709.924	10.406.549.832	20.690.895.968	24.123.199.488	24.423.131.675	28.074.928.691	28.348.459.337	32.332.457.401
Net Income	60.757.426.095	36.895.949.405	73.358.631.160	85.527.707.274	86.591.103.212	99.538.383.540	100.508.174.013	114.633.258.059

Tahun	2041	2042	2043	2044	2045	2046	2047	2048	2049
Revenue	227.544.828.350	245.339.133.497	245.339.133.497	264.532.977.738	264.532.977.738	285.236.858.341	285.236.858.341	309.697.003.713	309.697.003.713
Operating Expense	81.661.266.204	84.021.276.797	86.449.491.697	149.140.803.861	91.518.475.797	94.163.359.747	96.884.680.844	99.684.648.120	102.565.534.451
Net Operating Income	145.883.562.146	161.317.856.700	158.889.641.800	115.392.173.877	173.014.501.941	191.073.498.594	188.352.177.497	210.012.355.593	207.131.469.262
Earning Before Interest & Tax	145.883.562.146	161.317.856.700	158.889.641.800	115.392.173.877	173.014.501.941	191.073.498.594	188.352.177.497	210.012.355.593	207.131.469.262
Interest Expense	-	-	-	-	-	-	-	-	-
Earning Before Tax	145.883.562.146	161.317.856.700	158.889.641.800	115.392.173.877	173.014.501.941	191.073.498.594	188.352.177.497	210.012.355.593	207.131.469.262
Income Tax	32.094.383.672	35.489.928.474	34.955.721.196	25.386.278.253	38.063.190.427	42.096.169.691	41.437.479.049	46.302.718.230	45.568.923.236
Net Income	113.789.178.474	125.827.928.226	123.933.920.604	90.005.895.624	134.951.311.514	149.037.328.903	146.914.698.448	163.809.637.363	161.562.546.025

Free Cash Flow

Tahun	2025	2026	2027	2028	2029	2030	2031	2032
CFO	-	20.917.201.923	19.663.634.395	34.635.434.659	52.785.223.264	69.515.438.187	74.029.744.677	88.013.650.549
Interest (1-Tax)	22.292.088.227	-	-	-	30.202.819.347	27.543.019.733	24.883.220.120	22.223.420.506
CFI	351.012.010.057	237.774.868.398	44.329.993.562	42.131.562.770	-	-	-	-
FCFF	328.719.921.830	216.857.666.474	24.666.359.166	7.496.128.111	82.988.042.611	97.058.457.920	98.912.964.797	110.237.071.055

Tahun	2031	2032	2033	2034	2035	2036	2037	2038
CFO	85.838.991.342	58.567.515.147	91.620.197.397	100.379.274.006	98.032.670.440	107.569.951.262	105.129.742.231	115.844.826.772
Interest (1-Tax)	19.563.620.892	16.903.821.278	14.244.021.665	11.584.222.051	8.924.422.437	6.264.622.824	3.604.823.210	945.023.596
CFI	-	-	-	-	-	-	-	-
FCFF	105.402.612.234	75.471.336.425	105.864.219.061	111.963.496.057	106.957.092.877	113.834.574.086	108.734.565.441	116.789.850.388

Tahun	2039	2040	2041	2042	2043	2044	2045	2046	2047
CFO	113.789.178.474	125.827.928.226	123.933.920.604	90.005.895.624	134.951.311.514	149.037.328.903	146.914.698.448	163.809.637.363	161.562.546.025
Interest (1-Tax)	-	-	-	-	-	-	-	-	-
CFI	-	-	-	-	-	-	-	-	-
FCFF	113.789.178.474	125.827.928.226	123.933.920.604	90.005.895.624	134.951.311.514	149.037.328.903	146.914.698.448	163.809.637.363	161.562.546.025

Summary Financial Feasibility

Indikator	Nilai	Benchmark	Keterangan
Project IRR	10,86%	9,75%	Layak
Project NPV	155.396.002.899	>0	Layak
DSCR	2,40	>1	Layak
Payback Period	10,00		

Based on the calculations that have been carried out in the table above, it can be concluded that the Banten Province Sports Center area project is financially feasible and is attractive to investors.

3.4 Analysis Sensitivity Project

Cost Overrun Analysis

Indikator	CAPEX -15%	Opsi Dasar	CAPEX +15%
Project IRR	10,27%	10,86%	11,58%
Project NPV	79.483.960.545	155.396.002.899,41	231.308.045.254
Average DSCR	2,09	2,4	2,83
Payback Period	10	10	9

Analysis Revenue

Sensitivity

Indikator	Revenue -15%	Opsi Dasar	Revenue +15%
Project IRR	9,69%	10,86%	12,16%
Project NPV	- 7.775.037.748	155.396.002.899,41	281.916.073.490
Average DSCR	1,92	2,4	3,204534701
Payback Period	11	10	8

Analysis Discount Rate Sensitivity

Indikator	WACC -15%	Opsi Dasar	WACC +15%
WACC	7,77%	9,75%	11,91%
Project IRR	9,80%	10,86%	12,06%
Project NPV	330.485.232.709	155.396.002.899,41	18.041.720.270

IV. CONCLUSION

1. Risk identification in the Banten Province Sport Center area development project resulted in 50 risks or uncertainties consisting of 11 classifications or risk categories. The summary of the allocation of all these items is that 7 risks are allocated to the public, 27 risks to BUP (54%) and 16 risks are a shared responsibility (32%).
2. Net Present Method Value (NPV) obtained a value of Rp. 155,396,002,899 with a positive value of more than zero so that in terms of NPV it is considered feasible, Internal Rate of Return Method Return (IRR) calculation obtained a value of 10.86% from the feasibility benchmark of 9.75% so that in terms of IRR it can be considered feasible. Then for the Payback method The period is within a period of 10 years (including the construction period). Besides that, it is necessary There is sharing costs, especially construction costs, so as to increase investor interest in investing in this project.

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