INTERNATIONAL JOURNAL ON ADVANCED TECHNOLOGY, ENGINEERING, AND INFORMATION SYSTEM (IJATEIS)

ANALYSIS OF MAINTENANCE COSTS AND PUBLIC SATISFACTION LEVELS TOWARD SOOKO GREEN OPEN SPACE DEVELOPMENT

Rendra Pramana Putera [1*], Wateno Oetomo[2], Sajiyo[3]
[1-3]Master of Civil Engineering Study Program, Faculty of Engineering,
Universitas 17 Agustus 1945 Surabaya
E-mail: [1)] rendrapramanaputera@gmail.com

Abstract

Electronic media information obtained by the author states that the Mojokerto Regent ordered the Mojokerto District Environment Office to create a Green Open Space that is planned to be built in each sub-district. In 2022, the Mojokerto District Environment Office planned the Sooko Green Open Space by making a DED and continued to carry out its construction and ended at the end of 2023. The research method used is using the method: Net Present Value (NPV) to determine the value of profit or loss, Benefit Cost Ratio (BCR) to determine the comparison of the value of profit and loss, Payback Period (PbP) to determine how long it takes to return the capital that has been spent, and Likert scale calculations to determine how much the level of community satisfaction on the existence of Sooko Green Open Space. The results showed that the Sooko green space development investment is feasible. This can be seen from the NPV> 0 value of Rp 3,213,731,030, the IRR value exceeds the expected interest rate of 22.7%, the Payback Period of returning the investment value of slum housing improvement development occurs in the 4th year 6 months, precisely in 2028. The amount of maintenance costs for the development of Sooko with all facilities and infrastructure is Rp315,291,605, - every year. Based on Excel calculations of the level of community satisfaction from questionnaires that have been obtained, the average value is 90% so that it meets the criteria of Very Satisfied with a standard deviation of 49%.

Keywords: *Feasibility Evaluation, Maintenance Cost, Community Satisfaction*

1. INTRODUCTION

According to Law No. 26 of 2007 concerning Spatial Planning, the definition of green open space (RTH) is an elongated / striped and / or grouped area, the use of which is more open, where plants grow, both naturally growing and deliberately planted. Article 29 Paragraph (1) Public green open space is green open space owned and managed by the city government which is used for the benefit of the community in general. Included in public green open spaces are, among others, city parks, public cemeteries, and green lanes along roads, rivers, and beaches (Angestiwi & Wahyuniati, 2022). (2) The proportion of 30 (thirty) percent is a minimum size to ensure the balance of the city ecosystem, both the balance of the hydrological system and microclimate system, as well as other ecological systems, which will further increase the availability of clean air needed by the community, and at the same time can increase the aesthetic value of the city (Hartabela & Masito, 2019).

To further improve the function and proportion of green open space in the city, the government, the community, and the private sector are encouraged to plant plants on top

of their buildings (Akbar et al., 2014). Paragraph (3) The proportion of public green open space of at least 20 (twenty) percent provided by the municipal government is intended so that the minimum proportion of green open space can be more guaranteed to be achieved so as to enable its wide utilization by the community (Valensia & Pramuditha, 2023; Wahyudi et al., 2023; Yandra et al., 2022). According to the Regulation of the Minister of Agrarian Affairs and Spatial Planning Number 14 of 2022 concerning the Provision and Utilization of Green Open Space, in Chapter 1 general provisions Article 1 paragraph (15) Green Open Space, hereinafter abbreviated as RTH, is an elongated area / lanes and / or groups whose use is more open, where plants grow, both those that grow naturally and those that are deliberately planted, taking into account aspects of ecological, water absorption, economic, socio-cultural and aesthetic functions.

Paragraph (16) Public Green Open Space, hereinafter referred to as Public Green Open Space, is green open space that is owned, www.peraturan.go.id 2022, No.679 -5- managed, and/or obtained by the regency/municipality Regional Government or the Special Capital Region Government through cooperation with the government and/or the community and used for the public interest. Chapter 2 Typology of Green Open Spaces Article 3 (1) Green Open Spaces consist of Public Green Open Spaces and Private Green Open Spaces. (2) RTH as referred to in paragraph (1) shall be at least 30% (thirty percent) of the area of the City or Urban Area. (3) RTH as referred to in paragraph (2) consists of: a. Public RTH of at least 20% (twenty percent); and b. Private RTH of at least 10% (ten percent).

According to the Regulation of the Minister of Public Works Number 05/PRT/M/2008 concerning Guidelines for the Provision and Utilization of Green Open Space in Urban Areas. Considering that the quantity and quality of public open space, especially Green Open Space (RTH), is currently experiencing a very significant decline and has resulted in a decrease in the quality of the urban environment which has an impact on various aspects of urban life, including frequent flooding, increased air pollution, and decreased community productivity due to the limited space available for social interaction (Suciyani & Oktavia, 2020; Supriyantony, 2023). Mojokerto Regent Regulation No. 9/2012, Mojokerto regency spatial plan 2012-2023. It explains more about the percentage of Green Open Space zoning for housing, industry, and strategic areas (Sari & Sudirman, 2023).

Sooko sub-district of Mojokerto district is located at the coordinates 7°29'46.6 "S 112°25'23.2 "E. Sooko is the area with the largest population in Sooko sub-district at 11,742 people, with the highest density in Sooko sub-district. Sooko has the highest female population of 5,920 and the highest male population of 5,822. Sooko also has the highest number of marriages, with 553. With the passage of time, the increase in population and the reduction of vacant land due to the conversion of land from vacant land containing plants or trees to concrete and asphalt buildings. The increase in population in the region will reduce air quality because it impacts on the increase in transportation equipment and the growth of small and medium industries to large industries, especially fuel-based industries that can affect air quality.

At this time the Mojokerto District Environmental Service has a target to maintain water and air quality to remain in a condition that meets the quality standards for all living things, especially humans. As we know that most of the creation of new RTH is

considered unprofitable, because RTH cannot generate PAD with the argument that DLH is not allowed to collect regional retribution for the construction of RTH but RTH can only be enjoyed by the community but cannot be enjoyed by the value of investment by the government directly. from here the opinion arises why RTH there is no significant innovation.

On the other hand, green open space is needed to improve the quality of air and water in Mojokerto district, it can be seen from the data that Mojokerto district has poor air quality, so Mojokerto district built a green open space located in the former Sooko field (Hermawan, 2015; Ilyas & Wagey, 2020). This analysis is very necessary because in an existing development should always take into account the value of investment, because it is the right of the community to get good air quality and at the same time get a place to relax from urban saturation, because the community has carried out its obligation to pay local taxes.

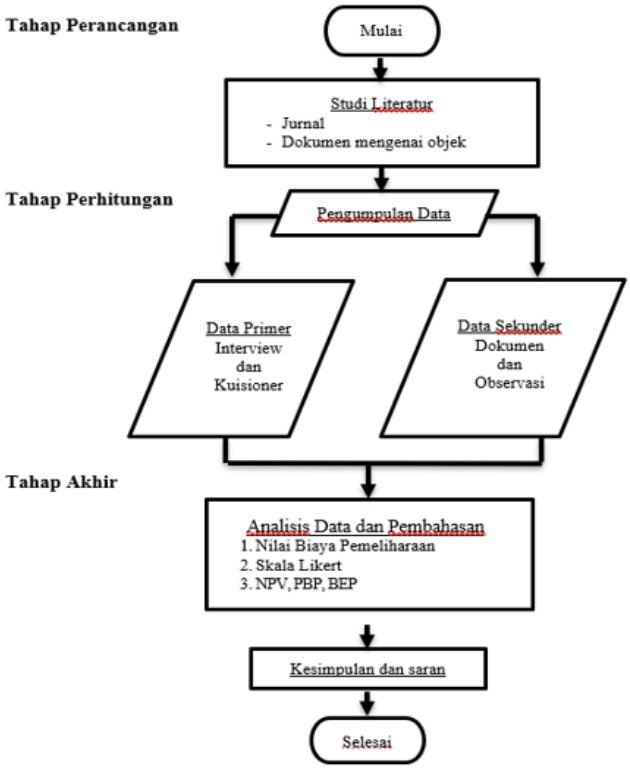
Although in the results of the analysis later the calculations carried out are considered not feasible within the specified time period, but the information from the community satisfaction survey is of good value, the construction of RTH Sooko is still worth it even though it is not in material form (Sani et al., 2022). In previous research, there has never been research on the evaluation of RTH analysis, this is because in the Regulation of the Minister of PUPR Number 5 of 2008 and Regulation of the Minister of ATR KBPN Number 14 of 2022, regarding RTH is not discussed regarding the withdrawal of regional retribution, because the purpose of RTH is built is to provide facilities for free, for the community, so that there is space to refresh the boredom felt by the community because of their busy work. And at the same time RTH also functions as an area that can provide clean air because there are many plants and trees.

However, at this time the government has set a revenue target for each year, which is stated in Regional Regulation No. 3 of 2023 concerning Regional Taxes and Levies so that the newly built green space is expected to have a positive impact on the community, as well as provide financial value for the Regional Government (Hidayat et al., 2021; Hiswandi et al., 2023). Considering the background above, the purpose of this study is to determine the amount of maintenance costs for the construction of RTH Sooko each year and to determine the level of community satisfaction with the construction of RTH Sooko.

2. RESEARCH METHODS

2.1. Research Design

In the research design, 3 stages are carried out, namely: Design, Calculation, and Final Stage as in Figure 1 which has been presented as follows:



Source: Processed by Researchers

Figure 1. Flowchart of Research Design

Research Subject Sooko Green Open Space in Japanan Village, Sooko District, Mojokerto RegencyWhile the research object is the topic of the problem studied in the research and the problems that exist in it (Alifia & Purnomo, 2016). The object of research is something that is in line with the formulation of problems in a study, so that in determining the object of research it is necessary to pay attention to the formulation of problems that have been set in the previous chapter (Waruwu, 2023). As the formulation of the problems that have been determined, then in this case the object of research is various kinds of costs that can affect the feasibility of investment, including investment costs, operational / management costs and income from RTH Sooko (Firaldi et al., 2023). The research location is located on Jalan R.A. Basoeni, Japanan Village, Sooko District, Mojokerto Regency at coordinates 7°29'45.8 "S 112°25'23.2 "E (Utari & Abduh, 2023).

2.2. Data Collection Technique

In this study, data collection was obtained from interviews with parties involved in the construction of RTH Sooko, then documented as data that could be used in the research implementation process later. The observation method is also carried out in data collection with the aim of getting an overview of the implementation of the activities carried out, and making a community satisfaction questionnaire in the form of a QR Code scan connected to Google Form, which can be seen in realtime accumulation and automatic assessment of community satisfaction can be seen at that time (Darmawan et al., 2018).

a. Primary data is conducted interviews related to the financing of RTH Sooko which includes the components that make up operational costs, service rates and revenues. And also Interviews with the power of budget users, namely the Environmental Agency related to investment costs incurred. Observations were made at the location of the RTH plan, namely on Jalan RA. Basoeni, Japan Village, Sooko District, Mojokerto Regency (Utari & Abduh, 2023). And for Mojosari City Park and Pungging Traffic Park which have been operating as comparison materials (Anggun et al., 2021).
b. Secondary Data is taken from Data and data collection techniques using secondary data collection techniques obtained from data contained in planning documents, development documents, and Sooko RTH supervision documents.

2.3. Data Analysis Technique

Data analysis is the process of systematically searching and compiling data obtained from interviews, field observations, information documentation and literature studies, then sorting according to what the research will do. The purpose of this data analysis is to interpret the data so that it is easy to carry out further calculations in accordance with the predetermined theoretical basis, so that it can be used as a basis for preparing research conclusions. Investment Cost Analysis is carried out to identify data related to investment costs which include: Pre-construction costs, construction costs, supervision costs. Expenditure Analysis is carried out to identify and analyze data related to expenditures during the investment period, namely hospital management costs which include: Operational costs, Maintenance costs, Maintenance costs, Employee expenditures (Rahayu & Nurghany, 2019).

Revenue Analysis is carried out identification and analysis of the data that has been obtained related to revenue which includes This analysis relates to the area management revenue plan. revenue consists of car parking revenue, motorcycle parking, camping, and rental income for sales containers, rental of places for certain events, and so on (Nugroho et al., 2022; Pertami & Etikasari, 2021). Tariffs are set based on Mojokerto Regent Regulation No. 58 of 2013, changes to parking service retribution rates on the edge of public roads in regional regulation No. 5 of 2011 concerning public service retribution and parking lot retribution rates in regional regulation No. 6 of 2011 concerning business service retribution (Fitriana & Sarmadi, 2019).

Investment Evaluation Analysis From the results of primary and secondary data collection related to investment feasibility factors for RTH Sooko, then the Net Present Value (NPV), Internal Rate of Return (IRR), Benefit Cost Ratio (BCR) and Payback Period (PP) analysis is carried out (Jonathan & Megawati, 2023; Ningrat & Kountur, 2023). Excel Data Analysis of Public Satisfaction After the investment evaluation is carried out with the method determined in the previous stage, then the public satisfaction analysis is carried out by taking the questionnaire data that has been made and automatically the results can also be seen realtime (Labonda et al., 2021). The results of the analysis shown in the table below are all derived from excel calculations that have been processed by the author which can be accessed by everyone whose link has been included, for ease of further calculations and if there is development in further research as well.

3. RESULTS AND DISCUSSION

3.1. Research Results

3.1.1. Amount of Depreciation Value

The amount of depreciation value is calculated using Mojokerto Regent Regulation number 76 of 2015 concerning technical guidelines for depreciation. In the table below is information on the value of depreciation in a span of ten years.

Table 1. Table of Depreciation of Asset Value in 10 Years

Type of Fixed Assets	Data Source Sooko RTH Development Document (Cost) and Perbup (Economic Age) "check thesis document"	Depreciation Rate	Depreciation Value per year	Year 1	Year 2
Calculation Formula	a	b	c = a x b	d = a - c	e = a - c
Agricultural/Livestock Equipment	5	20%			
Water pump	1,100,000		220,000	880,000	660,000
Workplace Building	50	2%			
Food court kiosk	204,023,723		4,080,474	199,943,249	195,862,774
Toilet	122,680,468		2,453,609	120,226,859	117,773,249
Other road complementary buildings		20%			
Archway	127,000,000		25,400,000	101,600,000	76,200,000
Fences	68,706,497		13,741,299	54,965,198	41,223,898
Paving and tiles	771,692,198		154,338,440	617,353,758	463,015,319
Majapahit iron lamp	178,286,886		35,657,377	142,629,509	106,972,132
Gazebo	57,000,000		11,400,000	45,600,000	34,200,000
Tirta amerta	182,968,809		36,593,762	146,375,047	109,781,285
Garden chairs	4,050,000		810,000	3,240,000	2,430,000
Medical Devices		20%			
Playground	200,000,000		40,000,000	160,000,000	120,000,000
Fitness equipment	120,000,000		24,000,000	96,000,000	72,000,000
Archery equipment	10,000,000		2,000,000	8,000,000	6,000,000

Source: Author's Process, 2024

Table 1 shows that the depreciation value of each item per year differs from 2% to 20%, with a residual value in year 10 there is only 1 rupiah because the effective period has expired.

3.1.2. Results of Analysis of Projected Income Value 4 on Alternatives

The analysis of the projected value of income carried out in the calculation and presented in the form of a table below the author adjusts to what is expressed by the section head of the landscaping section at the Mojokerto District Environmental Service.

Table 2. Analysis of Alternative 1 open Saturday and Sunday Rented Events 1 Time / Month

No.	Uraian Pendapatan	Proyeksi Buka	Dasar Aturan	Volume	Satuan	hari	bulan	tahun	Nilai	disetahunkan
Pendapatan Utama										
1	Kios Pujasera	Rp 8,160,000.00	Perbub 3 2023	3	Kios			1	Rp 2,720,000	Rp 8,160,000
2	Kios Mini / Container	Rp 48,960,000.00	Perbub 3 2023	12	Kios mini			1	Rp 4,080,000	Rp 48,960,000
3	Toilet	Rp 10,752,000.00		4	unit	112			Rp 2,000	Rp 10,752,000
4	Parkir (12 jm/hr)	Rp 126,336,000.00	Perbub 3 2023	80	mobil	112			Rp 3,000	Rp 32,256,000
5	Pendopo (gratis)		Perbub 3 2023	350	motor	112			Rp 2,000	Rp 94,080,000
6	Fitness (gratis)									
7	Playground (gratis)									
8	Panahan (gratis)									
9	Futsal (gratis)									
10	Panjat tebing (gratis)									
Pendapatan Lain-lain										
1	Tempat untuk acara pribadi	Rp 6,000,000.00	Perbub 3 2023	1	ls	1	12		Rp 500,000	Rp 6,000,000
2	Tenaga pengamanan	Rp 12,000,000.00		1	ls	1	12		Rp 1,000,000	Rp 12,000,000
3	Jasa Pengangkutan sampah + tenaga kebersihan	Rp 37,920,000.00	Perbub 3 2023	1	unit container	4	12		Rp 540,000	Rp 37,920,000
4	Mobile toilet (7jam/hr)	Rp 24,000,000.00		2	unit	1	12		Rp 1,000,000	Rp 24,000,000
Jumlah (Rp)		**Rp 274,128,000.00**								

Source: Author's Process, 2024

Table 3. Analysis of Alternative 2 Open Saturday and Sunday Rented Events 2 Times / Month

No.	Uraian Pendapatan	Proyeksi Buka	Dasar Aturan	Volume	Satuan	hari	bulan	tahun	Nilai	disetahunkan
Pendapatan Utama										
1	Kios Pujasera	Rp 8,160,000.00	Perbub 3 2023	3	Kios			1	Rp 2,720,000	Rp 8,160,000
2	Kios Mini / Container	Rp 48,960,000.00	Perbub 3 2023	12	Kios mini			1	Rp 4,080,000	Rp 48,960,000
3	Toilet	Rp 10,752,000.00		4	unit	112			Rp 2,000	Rp 10,752,000
4	Parkir (tiap hari 12 jm/hr)	Rp 126,336,000.00	Perbub 3 2023	80	mobil	112			Rp 3,000	Rp 32,256,000
5	Pendopo (gratis)		Perbub 3 2023	350	motor	112			Rp 2,000	Rp 94,080,000
6	Fitness (gratis)									
7	Playground (gratis)									
8	Panahan (gratis)									
9	Futsal (gratis)									
10	Panjat tebing (gratis)									
Pendapatan Lain-lain										
1	Tempat untuk acara pribadi	Rp 12,000,000.00	Perbub 3 2023	1	ls	2	12		Rp 500,000	Rp 12,000,000
2	Tenaga pengamanan	Rp 24,000,000.00		1	ls	2	12		Rp 1,000,000	Rp 24,000,000
3	Jasa Pengangkutan sampah + tenaga kebersihan	Rp 49,920,000.00	Perbub 3 2023	1	unit container	4	12		Rp 540,000	Rp 49,920,000
4	Mobile toilet (7jam/hr)	Rp 48,000,000.00		2	unit	2	12		Rp 1,000,000	Rp 48,000,000
Jumlah (Rp)		**Rp 328,128,000.00**								

Source: Author's Process, 2024

Table 4. Analysis of Alternative 3 open 5 Working Days Rented Event 1 Time in 1 Month

No.	Uraian Pendapatan	Proyeksi Buka	Dasar Aturan	Volume	Satuan	hari	bulan	tahun	Nilai	disetahunkan
Pendapatan Jasa Fasilitas										
1	Kios Pujasera	Rp 29,880,000.00	Perbub 3 2023	3	Kios				Rp 830,000	Rp 29,880,000
2	Kios Mini / Container	Rp 47,808,000.00	Perbub 3 2023	12	Kios mini				Rp 332,000	Rp 47,808,000
3	Toilet	Rp 35,040,000.00		4	unit	365			Rp 2,000	Rp 35,040,000
4	Parkir (tiap hari 12 jm/hr)	Rp 411,720,000.00	Perbub 3 2023	80	mobil	365			Rp 3,000	Rp 105,120,000
5	Pendopo (gratis)		Perbub 3 2023	350	motor	365			Rp 2,000	Rp 306,600,000
6	Fitness (gratis)									
7	Playground (gratis)									
8	Panahan (gratis)									
9	Futsal (gratis)									
10	Panjat tebing (gratis)									
Pendapatan Lain-lain										
1	Tempat untuk acara pribadi	Rp 12,000,000.00	Perbub 3 2023	1	ls	2	12		Rp 500,000	Rp 12,000,000
2	Tenaga pengamanan	Rp 24,000,000.00		1	ls	2	12		Rp 1,000,000	Rp 24,000,000
3	Jasa Pengangkutan sampah + tenaga kebersihan	Rp 49,920,000.00	Perbub 3 2023	1	unit container	4	12		Rp 540,000	Rp 49,920,000
4	Mobile toilet (7jam/hr)	Rp 48,000,000.00		2	unit	2	12		Rp 1,000,000	Rp 48,000,000
Jumlah (Rp)		**Rp 658,368,000.00**								

Source: Author's Process, 2024

Table 5. Analysis of Alternative 4 Open Every Day Rented Event 2 Times in 1 Month

No.	Uraian Pendapatan	Proyeksi Buka	Dasar Aturan	Volume	Satuan	hari	bulan	tahun	Nilai	disetahunkan
Pendapatan Jasa Fasilitas										
1	Kios Pujasera	Rp 29,880,000.00	Perbub 3 2023	3	Kios				Rp 830,000	Rp 29,880,000
2	Kios Mini / Container	Rp 47,808,000.00	Perbub 3 2023	12	Kios mini				Rp 332,000	Rp 47,808,000
3	Toilet	Rp 35,040,000.00		4	unit	365			Rp 2,000	Rp 35,040,000
4	Parkir (tiap hari 12 jm/hr)	Rp 411,720,000.00	Perbub 3 2023	80	mobil	365			Rp 3,000	Rp 105,120,000
5	Pendopo (gratis)		Perbub 3 2023	350	motor	365			Rp 2,000	Rp 306,600,000
6	Fitness (gratis)									
7	Playground (gratis)									
8	Panahan (gratis)									
9	Futsal (gratis)									
10	Panjat tebing (gratis)									
Pendapatan Lain-lain										
1	Tempat untuk acara pribadi	Rp 28,000,000.00	Perbub 3 2023	1	ls	56		1	Rp 500,000	Rp 28,000,000
2	Tenaga pengamanan	Rp 56,000,000.00		1	ls	56		1	Rp 1,000,000	Rp 56,000,000
3	Jasa Pengangkutan sampah + tenaga kebersihan	Rp 81,920,000.00	Perbub 3 2023	1	unit container	4	12		Rp 540,000	Rp 81,920,000
4	Mobile toilet (7jam/hr)	Rp 112,000,000.00		2	unit	56		1	Rp 1,000,000	Rp 112,000,000
Jumlah (Rp)		**Rp 802,368,000.00**								

Source: Author's Process, 2024

Table 4 to Table 5 shows the amount of income value divided into 4 alternatives with different working hours and rental intensity for monthly events.

3.1.3. Amount of Revenue Value

On the value of income that has been projected from any source, then in the table below the author projects the analysis of income for ten years.

Table 6. Revenue Analysis Table of Alternative 1 in 10 Years

No.	Uraian Pendapatan	Kenaikan Jumlah Pengunjung	Kenaikan Tarif	Total (Rp)									
				Tahun 1	Tahun 2	Tahun 3	Tahun 4	Tahun 5	Tahun 6	Tahun 7	Tahun 8	Tahun 9	Tahun 10
Pendapatan Utama													
1	Kios Pujasera	4.2%	6.3%	8,160,000.00	9,016,800.00	9,963,564.00	11,009,738.22	12,165,760.73	13,443,165.61	14,854,698.00	16,414,441.29	18,137,957.62	20,042,443.17
2	Kios Mini / Container	4.2%	6.3%	48,960,000.00	54,100,800.00	59,781,384.00	66,058,429.32	72,994,564.40	80,658,993.66	89,128,187.99	98,486,647.73	108,827,745.75	120,254,659.05
3	Toilet	4.2%	6.3%	10,752,000.00	11,880,960.00	13,128,460.80	14,506,949.18	16,030,178.85	17,713,347.63	19,573,249.13	21,628,440.29	23,899,426.52	26,408,866.30
4	Parkir (12 jm/hr)	4.2%	6.3%	126,336,000.00	139,601,280.00	154,259,414.40	170,456,652.91	188,354,601.47	208,131,834.62	229,985,677.26	254,134,173.37	280,818,261.57	310,304,179.04
5	Pendopo (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
6	Fitness (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
7	Playground (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
8	Panahan (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
9	Futsal (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
10	Panjat tebing (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
Pendapatan Lain-lain				-	-	-	-	-	-	-	-	-	-
1	Tempat untuk acara pribadi		6.3%	6,000,000.00	6,378,000.00	6,779,814.00	7,206,942.28	7,660,979.65	8,143,621.36	8,656,669.51	9,202,039.69	9,781,768.19	10,398,019.58
2	Tenaga pengamanan		6.3%	12,000,000.00	12,756,000.00	13,559,628.00	14,413,884.56	15,321,959.29	16,287,242.73	17,313,339.02	18,404,079.38	19,563,536.38	20,796,039.17
3	Jasa Pengangkutan sampah + tenaga kebersihan		6.3%	37,920,000.00	40,308,960.00	42,848,424.48	45,547,875.22	48,417,391.36	51,467,687.02	54,710,151.30	58,156,890.83	61,820,774.95	65,715,483.78
4	Mobile toilet (7jam/hr)		6.3%	24,000,000.00	25,512,000.00	27,119,256.00	28,827,769.13	30,643,918.58	32,574,485.45	34,626,678.04	36,808,158.75	39,127,072.76	41,592,078.34
	Jumlah (Rp)	**42%**	**50%**	**274,128,000.00**	**299,554,800.00**	**327,439,945.68**	**358,028,240.83**	**391,589,354.33**	**428,420,378.08**	**468,848,650.24**	**513,234,871.33**	**561,976,543.74**	**615,511,768.43**

Source: Author's Process, 2024

Table 7. Revenue Analysis Table of Alternative 2 in 10 Years

No.	Uraian Pendapatan	Kenaikan Jumlah Pengunjung	Kenaikan Tarif	Total (Rp)									
				Tahun 1	Tahun 2	Tahun 3	Tahun 4	Tahun 5	Tahun 6	Tahun 7	Tahun 8	Tahun 9	Tahun 10
Pendapatan Utama													
1	Kios Pujasera	4.2%	6%	8,160,000.00	9,016,800.00	9,963,564.00	11,009,738.22	12,165,760.73	13,443,165.61	14,854,698.00	16,414,441.29	18,137,957.62	20,042,443.17
2	Kios Mini / Container	4.2%	6%	48,960,000.00	54,100,800.00	59,781,384.00	66,058,429.32	72,994,564.40	80,658,993.66	89,128,187.99	98,486,647.73	108,827,745.75	120,254,659.05
3	Toilet	4.2%	6%	10,752,000.00	11,880,960.00	13,128,460.80	14,506,949.18	16,030,178.85	17,713,347.63	19,573,249.13	21,628,440.29	23,899,426.52	26,408,866.30
4	Parkir (12 jm/hr)	4.2%	6%	126,336,000.00	139,601,280.00	154,259,414.40	170,456,652.91	188,354,601.47	208,131,834.62	229,985,677.26	254,134,173.37	280,818,261.57	310,304,179.04
5	Pendopo (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
6	Fitness (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
7	Playground (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
8	Panahan (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
9	Futsal (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
10	Panjat tebing (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
Pendapatan Lain-lain				-	-	-	-	-	-	-	-	-	-
1	Tempat untuk acara pribadi		6%	12,000,000.00	12,756,000.00	13,559,628.00	14,413,884.56	15,321,959.29	16,287,242.73	17,313,339.02	18,404,079.38	19,563,536.38	20,796,039.17
2	Tenaga pengamanan		6%	24,000,000.00	25,512,000.00	27,119,256.00	28,827,769.13	30,643,918.58	32,574,485.45	34,626,678.04	36,808,158.75	39,127,072.76	41,592,078.34
3	Jasa Pengangkutan sampah + tenaga kebersihan		6%	49,920,000.00	53,064,960.00	56,408,052.48	59,961,759.79	63,739,350.65	67,754,929.74	72,023,490.32	76,560,970.21	81,384,311.33	86,511,522.94
4	Mobile toilet (7jam/hr)		6%	48,000,000.00	51,024,000.00	54,238,512.00	57,655,538.26	61,287,837.17	65,148,970.91	69,253,356.07	73,616,317.51	78,254,145.51	83,184,156.68
	Jumlah (Rp)			**328,128,000.00**	**356,956,800.00**	**388,458,271.68**	**422,890,721.37**	**460,538,171.14**	**501,712,970.35**	**546,788,675.83**	**596,053,228.53**	**650,012,457.43**	**709,093,944.69**

Source: Author's Process, 2024

Table 8. Revenue Analysis Table of Alternative 3 in 10 Years

No.	Uraian Pendapatan	Kenaikan Jumlah Pengunjung	Kenaikan Tarif	Total (Rp)									
				Tahun 1	Tahun 2	Tahun 3	Tahun 4	Tahun 5	Tahun 6	Tahun 7	Tahun 8	Tahun 9	Tahun 10
Pendapatan Utama													
1	Kios Pujasera	4.2%	6%	29,880,000.00	33,017,400.00	36,484,227.00	40,315,070.84	44,548,153.27	49,225,709.37	54,394,408.85	60,105,821.78	66,416,933.07	73,390,711.04
2	Kios Mini / Container	4.2%	6%	47,808,000.00	52,827,840.00	58,374,763.20	64,504,113.34	71,277,045.24	78,761,134.99	87,031,054.16	96,169,314.85	106,267,092.91	117,425,137.66
3	Toilet	4.2%	6%	35,040,000.00	38,719,200.00	42,784,716.00	47,277,111.18	52,241,207.85	57,726,334.68	63,787,820.82	70,485,542.01	77,886,523.92	86,064,608.93
4	Parkir (12 jm/hr)	4.2%	6%	411,720,000.00	454,950,600.00	502,720,413.00	555,506,056.37	613,834,192.28	678,286,782.47	749,506,894.63	828,205,118.57	915,166,656.02	1,011,259,154.90
5	Pendopo (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
6	Fitness (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
7	Playground (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
8	Panahan (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
9	Futsal (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
10	Panjat tebing (gratis)	4.2%		-	-	-	-	-	-	-	-	-	-
Pendapatan Lain-lain				-	-	-	-	-	-	-	-	-	-
1	Tempat untuk acara pribadi		6%	12,000,000.00	12,756,000.00	13,559,628.00	14,413,884.56	15,321,959.29	16,287,242.73	17,313,339.02	18,404,079.38	19,563,536.38	20,796,039.17
2	Tenaga pengamanan		6%	24,000,000.00	25,512,000.00	27,119,256.00	28,827,769.13	30,643,918.58	32,574,485.45	34,626,678.04	36,808,158.75	39,127,072.76	41,592,078.34
3	Jasa Pengangkutan sampah + tenaga kebersihan		6%	49,920,000.00	53,064,960.00	56,408,052.48	59,961,759.79	63,739,350.65	67,754,929.74	72,023,490.32	76,560,970.21	81,384,311.33	86,511,522.94
4	Mobile toilet (7jam/hr)		6%	48,000,000.00	51,024,000.00	54,238,512.00	57,655,538.26	61,287,837.17	65,148,970.91	69,253,356.07	73,616,317.51	78,254,145.51	83,184,156.68
	Jumlah (Rp)			**658,368,000.00**	**721,872,000.00**	**791,489,567.68**	**868,461,303.45**	**952,803,664.34**	**1,045,765,790.34**	**1,147,937,041.91**	**1,260,355,323.05**	**1,384,060,271.88**	**1,520,223,498.66**

Source: Author's Process, 2024

Table 9. Revenue Analysis Table of Alternative 4 in 10 Years

No.	Uraian Pendapatan	Kenaikan Jumlah Pengunjung	Kenaikan Tarif	Total (Rp)									
				Tahun 1	Tahun 2	Tahun 3	Tahun 4	Tahun 5	Tahun 6	Tahun 7	Tahun 8	Tahun 9	Tahun 10
Pendapatan Utama													
1	Kios Pujasera	4.25%	6%	29,880,000.00	33,017,400.00	36,484,227.00	40,315,070.84	44,548,153.27	49,225,709.37	54,394,408.85	60,105,821.78	66,416,933.07	73,390,711.04
2	Kios Mini / Container	4.25%	6%	47,808,000.00	52,827,840.00	58,374,763.20	64,504,113.34	71,277,045.24	78,761,134.99	87,031,054.16	96,169,314.85	106,267,092.91	117,425,137.66
3	Toilet	4.25%	6%	35,040,000.00	38,719,200.00	42,784,716.00	47,277,111.18	52,241,207.85	57,726,334.68	63,787,820.82	70,485,542.01	77,886,523.92	86,064,608.93
4	Parkir (12 jm/hr)	4.25%	6%	411,720,000.00	454,950,600.00	502,720,413.00	555,506,056.37	613,834,192.28	678,286,782.47	749,506,894.63	828,205,118.57	915,166,656.02	1,011,259,154.90
5	Pendopo (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
6	Fitness (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
7	Playground (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
8	Panahan (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
9	Futsal (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
10	Panjat tebing (gratis)	4.25%		-	-	-	-	-	-	-	-	-	-
Pendapatan Lain-lain				-	-	-	-	-	-	-	-	-	-
1	Tempat untuk acara pribadi		6%	28,000,000.00	29,764,000.00	31,639,132.00	33,632,397.32	35,751,238.35	38,003,566.36	40,397,791.04	42,942,851.88	45,648,251.55	48,524,091.40
2	Tenaga pengamanan		6%	56,000,000.00	59,528,000.00	63,278,264.00	67,264,794.63	71,502,476.69	76,007,132.73	80,795,582.09	85,885,703.76	91,296,503.10	97,048,182.79
3	Jasa Pengangkutan sampah + tenaga kebersihan		6%	81,920,000.00	87,080,960.00	92,567,060.48	98,398,785.29	104,597,908.76	111,187,577.02	118,193,394.37	125,638,515.21	133,553,741.67	141,967,627.40
4	Mobile toilet (7jam/hr)		6%	112,000,000.00	119,056,000.00	126,556,528.00	134,529,589.26	143,004,953.39	152,014,265.45	161,591,164.17	171,771,407.52	182,593,006.19	194,096,365.58
	Jumlah (Rp)			**802,368,000.00**	**874,944,000.00**	**954,405,103.68**	**1,041,427,918.22**	**1,136,757,175.84**	**1,241,212,703.06**	**1,355,697,110.13**	**1,481,204,275.57**	**1,618,828,708.41**	**1,769,775,879.69**

Source: Author's Process, 2024

Table 6 to Table 9 show the amount of income value from alternative 1 to alternative 4 projected in 10 years.

3.1.4. Cost of Expenditure

The cost values included in this evaluation are shown in Table 10 below, which has been adjusted from the interview results obtained.

Table 10. Expense Analysis Table

No.	Expenses	Total	Unit	Unit Price	Total Price
1	Salary expenditure for cleaning staff	12	Person/ Month	3,000,000	36,000,000
2	Cleaning operational expenditure - Costs of cleaning from garbage, tree trimming, unexpected repairs, and so on. 1 Lumsum	2	unit	5,000,000	10,000,000
	- Expenditure on Cleaning Tools Grass cutting machine 2 units Broom 100 pieces	100	unit	20,000	2,000,000
	50 bamboo waste containers	50	unit	40,000	2,000,000
3	Salary expenditure for Parks and electricity personnel - garden decorator - electrician	12	Person/ Month	3,000,000	36,000,000
4	Parks operational expenditure - Painting Cost Rp25,000/m² with the assumption that the total painting of all parts is carried out, which is equal to 1540m² x Rp25.000/m² = **Rp38.500.000**. 1. Fence length 510m fence height 1.7m area 867m² 2. Archway 244m² 3. Tirta Amerta area 115m² 4. Toilet 62m²	1,540	m²	25,000	38,500,000
	5. Food court 252m²	1	unit	100,000	100,000
	- The cost of replacing lighting with the assumption of replacing 30% of the total existing lights is as follows **Rp.19.910.000**	94	unit	50,000	4,700,000
		8	unit	750,000	6,000,000
		15	unit	150,000	2,250,000
	1. Emergency lamp 1 piece @ Rp100,000 = Rp100,000 2. Majapahit lamp 94 pieces @Rp50,000 = IDR 4,700,000 3. 500w spotlights 8 pieces @ Rp750,000 = Rp6,000,000 4. 18w spotlights 15 pieces @Rp150,000 = Rp2,250,000 4. 5. RGB pool lights 8 pieces @ Rp700,000 = Rp5,600,000 5.	8	unit	700,000	5,600,000
	6. LED lamp 18w 18 pieces @Rp70,000 = Rp1,260,000	18	unit	70,000	1,260,000
	- The cost of cleaning and replacing damaged paving in the parking zone, amounting to 5% of the total area of 2,070 m² is @Rp158,131.45 = Rp1,260,000. **Rp21.347.685**	104	m²	158,131	16,366,605
	Paving grass block thickness of 8cm	1	ls	17,760,000	17,760,000
	- Fuel Oil Expenditure **Rp17.760.000**	1	ls	15,000,000	15,000,000

No.	Expenses	Total	Unit	Unit Price	Total Price
	Bio Solar 40 liters/month x12 = Rp3,360,000 Pertamax 40 liters/month x12 = Rp7.200.000 Dexlite 40 liter/bohlam x12 = Rp7.200.000 - Landscaping Equipment Shopping **Rp15.000.000** Hoe, sickle, pruning shears, branch shears, picks, work clothes, PPE, etc =Rp15.000.000 - Power tools shopping **Rp10.000.000** Kabel Listrik, adaptor, etc	1	ls	10,000,000	10,000,000
5	Unexpected expenditure - Unexpected expenditure **Rp50.000.000** Nasi Kotak, Snack, Coffe Break, etc	1	ls	50,000,000	
6	Vehicle maintenance expenditure	1	ls	10,000,000	10,000,000
7	Utility maintenance expenditure - Sprinkler replacement cost of 30% of the total 49 sprinklers is 17 pieces @ Rp15,000 = Rp255,000	17	unit	15,000	255,000
	- Maintenance cost of 2 pumps Water jet pump @ 75 liters/minute	2	unit	500,000	
	- Maintenance costs Toilets amounted to 4 units of 30 m² in size. Each toilet has a toilet seat or squat, 2 sinks and 2 mirrors.	1	ls	7,500,000	7,500,000
	Large outdoor playground, tunnel playground, two swings & slide, bowl/swivel cup, regular slide, 3 row swing, 2 row swing, seesaw, monkey bar - Maintenance Cost of Tirta Amerta Zone 1 unit amounting to	1	ls	5,000,000	5,000,000
8	Expenditure on maintenance of park facilities (gazebo, etc.)				
	- Gazebo Maintenance Cost 6 units @ 9 m² amounting to Standard size wooden gazebo	6	unit	500,000	1.000.000
	- Maintenance Cost of Archery Zone 1985 m² arrow equipment 15 units amounting to	1	ls	2,000,000	2,000,000
		12	unit	500,000	6,000,000
	- Maintenance Cost Fitness Zone 296 m² fitness equipment 12 units Horse rider machine, Upright Exercise Bike, Elliptical Machine, Double Sit Up Machine, Rowing Machine, Air Walker, Back Massager, Warming Arm 4 Circle, Three Position Waist Twister, Chest Press 2 Seats, Lat Pull Down 2 Seats, Double Leg Press. - Maintenance Cost of Playground Zone (games for children) 197 m² children's game facility 8 units amounting to	1	ls	10,000,000	
9	Kiosk maintenance expenditure - The cost of maintaining 3 units of food court kiosks is as follows	1	ls	11,000,000	11,000,000

No.	Expenses	Total	Unit	Unit Price	Total Price
	Kiosk size @ 9m² complete with concrete table, sink, and steel table chairs and special dining area	12	unit	500,000	6,000,000
	- Maintenance cost of 12 container kiosks amounting to Container size 8m²				
10	Other Expenditures - license fee (pbb)	1	ls	-	-
	- electricity cost	1	ls	-	-
Total expenses in one year (Rp)				315,291,605	

Source: Author's Process, 2024

From the above table, we can read that the final result shows the total cost of expenditure in one year for RTH Sooko is Rp 315,291,605 from the value of these costs, we will look for expenses every year until year ten with a 4% increase.

3.1.5. Projected Expenses

The projected expenditure at the time of the author's interview was calculated over a ten-year period, and is shown in tabular form as follows:

Table 11. Table of Projected Expenses in 10 Years

No.	Biaya Pengeluaran	Total Biaya (Rp.)									
		Tahun 1	Tahun 2	Tahun 3	Tahun 4	Tahun 5	Tahun 6	Tahun 7	Tahun 8	Tahun 9	Tahun 10
1	Belanja gaji tenaga Kebersihan	36,000,000	37,440,000	38,937,600	40,495,104	42,114,908	43,799,504	45,551,485	47,373,544	49,268,486	51,239,225
2	Belanja operasional Kebersihan	14,000,000	14,560,000	15,142,400	15,748,096	16,378,020	17,033,141	17,714,466	18,423,045	19,159,967	19,926,365
3	Belanja gaji tenaga Pertamanan	36,000,000	37,440,000	38,937,600	40,495,104	42,114,908	43,799,504	45,551,485	47,373,544	49,268,486	51,239,225
	- tukang hias taman	-	-	-	-	-	-	-	-	-	-
	- tukang listrik	-	-	-	-	-	-	-	-	-	-
4	Belanja operasional tenaga kebersihan	117,536,605	122,238,069	127,127,592	132,212,696	137,501,204	143,001,252	148,721,302	154,670,154	160,856,960	167,291,238
5	Belanja tak terduga	50,000,000	52,000,000	54,080,000	56,243,200	58,492,928	60,832,645	63,265,951	65,796,589	68,428,453	71,165,591
6	Belanja pemeliharaan kendaraan	10,000,000	10,400,000	10,816,000	11,248,640	11,698,586	12,166,529	12,653,190	13,159,318	13,685,691	14,233,118
7	Belanja pemeliharaan container sampah	13,755,000	14,305,200	14,877,408	15,472,504	16,091,404	16,735,061	17,404,463	18,100,642	18,824,667	19,577,654
8	Belanja perawatan fasilitas taman	21,000,000	21,840,000	22,713,600	23,622,144	24,567,030	25,549,711	26,571,699	27,634,567	28,739,950	29,889,548
9	Belanja perawatan kios	17,000,000	17,680,000	18,387,200	19,122,688	19,887,596	20,683,099	21,510,423	22,370,840	23,265,674	24,196,301
10	Belanja lain-lain	-	-	-	-	-	-	-	-	-	-
	- beban pajak	-	-	-	-	-	-	-	-	-	-
	- biaya listrik	-	-	-	-	-	-	-	-	-	-
Total biaya pengeluaran (Rp)		**315,291,605**	327,903,269	341,019,400	354,660,176	368,846,583	383,600,446	398,944,464	414,902,243	431,498,333	448,758,266

Source: Author's Process, 2024

In table 11 above, it can be seen the value of expenditure or maintenance costs from year one to year ten.

3.1.6. Investment Feasibility Value

The investment feasibility value is calculated using the formula written in method section, all calculations by the author using the Excel program and displayed in tabular form (Jonathan & Megawati, 2023). To make it easier to understand.

Table 12. Alternative 1 Investment Feasibility Analysis Table

Tahun ke	Kas Masuk	Kas Keluar	Cashflow	Net Cashflow	NPV manual	NPV auto	IRR			PP		BCR	
0	0	-2,715,779,015	-27577901 5	-27577901 5		-2,461455,864	-	NPV positif	- 0.175568893631482	453307767	x_n	4,238,732,552.66	benefit
1	274,128,000	- 315,291,605	-41163605	-2756942620	- 38,833,590		- 0	NPV negatif	- 0.175568893631480	453307767	x_a	6,501203,800.50	cost
2	299,554,800	- 327,903,269	-28348469	-2785291089	- 25,230,037		- 17.557%	IRR		27577901 5	x_0	0.65	BCR
3	327,439,946	- 341019,400	-13579454	-2798870544	- 11,401572					# DIV/0!	PP (tahun)		
4	358,028,241	- 354,660,176	3368065	-2795502479	2,667,823								
5	391589,354	- 368,846,583	22742771	-2772759708	16,994,722								
6	428,420,378	- 383,600,446	44819932	-2727939776	31596,283								
7	468,848,650	- 398,944,464	69904186	-2658035590	46,490,276								
8	513,234,871	- 414,902,243	98332628	-2559702962	61695,108								
9	561976,544	- 431498,333	130478211	-2429224750	77,229,853								
10	615,511,768	- 448,758,266	166753503	-2262471248	93,114,285								
	4,238,732,553	- 6,501203,801			- 2,461455,864								

Source: Author's Process, 2024

Table 13. Alternative 2 Investment Feasibility Analysis Table

Tahun ke	Kas Masuk	Kas Keluar	Cashflow	Net Cashflow	NPV manual	NPV auto	IRR			PP		BCR	
0	0	-2,715,779,015	-2,715,779,015	-2715779015		-1945484618	0	NPV positif	-0.103325803368759	1755178456	x_n	4,960,603,24103	benefit
1	328,128,000	-315,291605	12,836,395	-2702942620	12,109,807		-0	NPV negatif	-0.103325803368758	1755178456	x_a	6,501203,800.50	cost
2	356,956,800	-327,903,269	29,053,531	-2673889089	25,857,539		-10.333%	IRR		2715779015	x_b	0.76	BCR
3	388,458,272	-341019,400	47,438,872	-2626450218	39,830,591					#DIV/0!	PP (tahun)		
4	422,890,721	-354,660,176	68,230,545	-2558219672	54,044,983								
5	460,538,171	-368,846,583	91,691588	-2466528084	68,517,289								
6	501712,970	-383,600,446	118,112,524	-2348415560	83,264,669								
7	546,758,676	-398,944,464	147,814,212	-2200601349	98,304,893								
8	596,053,229	-414,902,243	181,150,986	-2019450363	115,656,369								
9	650,012,457	-431,498,333	218,514,125	-1800936238	129,338,175								
10	709,093,945	-448,758,266	260,335,679	-1540600559	145,370,083								
	4,960,603,241	-6,501203,801			-1945,484,618								

Source: Author's Process, 2024

Table 14. Alternative 3 Investment Feasibility Analysis Table

Tahun ke	Kas Masuk	Kas Keluar	Cashflow	Net Cashflow	NPV manual	NPV auto	IRR			PP		BCR	
0	0	-2,715,779,015	-2,715,779,015	-2715779015		1837,807,706	-	NPV negatip	0.160912109750641	2285563502	x_n	10,351632,372.30	benefit
1	658,368,000	-315,291605	343,076,395	-2372702620	323,656,976		0	NPV positip	0.160912109750640	2947728846	x_a	6,501203,800.50	cost
2	721872,000	-327,903,269	393,968,731	-1978733889	350,630,768		16.09%	IRR		2715779015	x_b	1.59	BCR
3	791689,568	-341019,400	450,670,168	-1528063722	378,391363					5.649710102	PP (tahun)		
4	868,461303	-354,660,176	513,801127	-1014262594	406,978,617								
5	952,893,664	-368,846,583	584,047,081	-430215513	436,433,955								
6	1045,765,790	-383,600,446	662,165,344	231949831	466,800,439								
7	1,147,937,042	-398,944,464	748,992,578	980942408	498,122,842								
8	1260,355,323	-414,902,243	845,453,080	1826395489	530,447,722								
9	1384,066,272	-431,498,333	952,567,939	2778963428	563,823,500								
10	1520,223,410	-448,758,266	1071,465,144	3850428572	598,300,540								
	10,351632,372	-6,501203,801			1837,807,706								

Source: Author's Process, 2024

Table 15. Alternative 4 Investment Feasibility Analysis Table

Tahun ke	Kas Masuk	Kas Keluar	Cashflow	Net Cashflow	NPV manual	NPV auto	IRR			PP		BCR	
0	0	-2,715,779,015	-2,715,779,015	-2715779015		1837,807,706	-	NPV negatip	0.160912109750641	2285563502	x_n	10,351632,372.30	benefit
1	658,368,000	-315,291605	343,076,395	-2372702620	323,656,976		0	NPV positip	0.160912109750640	2947728846	x_a	6,501203,800.50	cost
2	721872,000	-327,903,269	393,968,731	-1978733889	350,630,768		16.09%	IRR		2715779015	x_b	1.59	BCR
3	791689,568	-341019,400	450,670,168	-1528063722	378,391363					5.649710102	PP (tahun)		
4	868,461303	-354,660,176	513,801127	-1014262594	406,978,617								
5	952,893,664	-368,846,583	584,047,081	-430215513	436,433,955								
6	1045,765,790	-383,600,446	662,165,344	231949831	466,800,439								
7	1,147,937,042	-398,944,464	748,992,578	980942408	498,122,842								
8	1260,355,323	-414,902,243	845,453,080	1826395489	530,447,722								
9	1384,066,272	-431,498,333	952,567,939	2778963428	563,823,500								
10	1520,223,410	-448,758,266	1071,465,144	3850428572	598,300,540								
	10,351632,372	-6,501203,801			1837,807,706								

Source: Author's Process, 2024

In table 11 to table 15 above, it can be seen that the value of investment feasibility analysis on alternative 1 to alternative 4 is manually calculated using excel.

3.1.7. Investment Cost Value

Below is table 16 which informs what capital expenditure has been spent on investment in RTH Sooko. In the table below it can be seen how much capital value has been spent.

Table 16. Investment Cost Analysis Table

No.	Rincian Biaya Investasi	Total Biaya (Rp.)
1	Biaya Pra Konstruksi	
	- Biaya perizinan dan SPPL (gratis)	0
	- Biaya perencanaan (DED)	70,929,000
2	Biaya Konstruksi	2,580,610,400
	- Biaya struktur, arsitektur, prasarana dan utilitas	
	- Biaya K3	
	- Biaya pembangunan lahan parkir	
3	Biaya pengawasan (manajemen konstruksi)	64,239,615
4	Biaya sistem informasi manajemen (belum diproyeksikan)	0
5	Biaya pengadaan alat keselamatan (belum diproyeksikan)	0
6	Biaya pengadaan kendaraan (belum diproyeksikan)	0
Total biaya investasi (Rp)		**2,715,779,015**

Source: Author's Process, 2024

4. CONCLUSION

With this explanation and looking at the formulation of the problem and the analysis that has been done, the author can conclude that the investment in the Sooko green space development is feasible. This can be seen from the NPV> 0 value of Rp 3,213,731,030, the IRR value exceeds the expected interest rate of 22.7%, the Payback Period of returning the investment value of slum housing improvement development occurs in the 4th year 6 months, precisely in 2028. The amount of maintenance costs for the development of RTH Sooko with all facilities and infrastructure is Rp315,291,605, - every year. Based on Excel calculations of the level of community satisfaction from questionnaires that have been obtained, the average value is 90% so that it meets the criteria of Very Satisfied with a standard deviation of 49%.

The suggestion that is expected by the author in further research to be developed is that in further scientific work not only calculates the feasibility analysis in the form of financial and community satisfaction, but can also calculate the analysis of health impacts that have increased with the existence of various types of plants that are empowered in an RTH, because of the oxygen levels produced, as well as sports equipment and the increase in urban tourism areas that can increase hormone levels that trigger a sense of happiness and reduce stress at work.

REFERENCES

Akbar, H., Sugiyarto, S., & Laksito, B. (2014). Analisis Investasi Bangunan Gedung (Studi Kasus Pada Proyek Pembangunan Gedung Rawat Inap RSUP Dr. Kariadi Semarang). *Matriks Teknik Sipil*, *2*(3).

Alifia, N., & Purnomo, Y. (2016). Identifikasi letak dan jenis green open space di kawasan permukiman perkotaan. *Langkau Betang: Jurnal Arsitektur*, *3*(2), 25–35.

Angestiwi, T., & Wahyuniati, F. (2022). Analisis Kualitas Ruang Terbuka Hijau Taman Monumen Perjuangan Rakyat Jawa Barat. *Jurnal Kajian Ruang*, *2*(2), 193–203.

Anggun, T., Priyatiningsih, K., & Oktavia, H. C. (2021). Evaluasi Kinerja Aset Fasilitas Pada Taman Kota Sumber Kabupaten Cirebon. *Prosiding Industrial Research Workshop and National Seminar*, *12*, 1580–1585.

Darmawan, A., Kustian, N., & Rahayu, W. (2018). Implementasi data mining menggunakan model svm untuk prediksi kepuasan pengunjung taman tabebuya. *STRING (Satuan Tulisan Riset Dan Inovasi Teknologi)*, *2*(3), 299–307.

Firaldi, F. R., Wibowo, R. S., & Anam, S. (2023). Studi Kelayakan Teknis dan Ekonomi Pemasangan PLTS Atap On-Grid pada Sistem Kelistrikan Gedung Perpustakaan ITS. *Jurnal Teknik ITS*, *12*(1), B56–B62.

Fitriana, R., & Sarmadi, K. A. (2019). Pengaruh Daya Tarik Taman Potret Terhadap Kepuasan Wisatawan. *IKRA-ITH HUMANIORA: Jurnal Sosial Dan Humaniora*, *3*(3), 155–162.

Hartabela, D., & Masito, Y. (2019). Identifikasi Respon Pengunjung mengenai Keberadaan Desa Wisata Taman Purbakala Pugungraharjo Lampung. *Jurnal Arsitektur*, *9*(2), 13–18.

Hermawan, A. (2015). Tingkat keberhasilan program peningkatan fasilitas Ruang Terbuka Hijau (RTH) terhadap pemanfaatan taman kota di Kecamatan Kota Kabupaten Kudus. *Jurnal Pembangunan WIlayah Dan Kota*, *11*(3), 261–271.

Hidayat, A. F., Kurniawan, H., & Widyasari, R. (2021). Analisis Kelayakan Finansial Agroindustri Kerupuk Kulit Menggunakan Mesin Peniris di Kecamatan Selong, Kabupaten Lombok Timur. *Agroteknika*, *4*(1), 11–19.

Hiswandi, M. F., Iswahyudi, F., & Soeroto, W. M. (2023). Analisis Kelayakan Investasi Pembangkit Listrik Tenaga Surya Atap dengan Sistem On-Grid di Pabrik Minuman Siap Saji. *Sebatik*, *27*(1), 22–29.

Ilyas, A., & Wagey, J. (2020). Evaluasi Kelayakan Investasi Proyek Pembangunan Perumahan Green Terrace Ditinjau Pada Aspek Keuangan. *Journal of Economics and Business UBS*, *9*(1), 9–17.

Jonathan, J. A., & Megawati, M. (2023). Analisis Kelayakan Perencanaan Pendirian Usaha Restoran Berkonsep Danau Mini. *MDP Student Conference*, *2*(2), 472–477.

Labonda, K. C., Wipranata, B. I., & Wirawati, S. (2021). Rencana Pengelolaan Danau Tambing Sebagai Kawasan Ekowisata. *Jurnal Sains, Teknologi, Urban, Perancangan, Arsitektur (Stupa)*, *3*(2), 3387–3400.

Ningrat, G. A., & Kountur, R. (2023). Analisis Kelayakan Proyek Investasi Layanan Spa: Studi pada Perusahaan PT. Bias Puspa Kreasi. *Journal of Emerging Business Management and Entrepreneurship Studies*, *3*(1), 1–15.

Nugroho, A., Susanto, D., & Nugroho, P. (2022). Kepuasan Dan Persepsi Wisatawan Terhadap Keberlanjutan Taman Nasional Gunung Ciremai. *Journal of Forest Science Avicennia*, *5*(1), 39–45.

Pertami, R. R. D., & Etikasari, B. (2021). Standardisasi Pekerjaan Pemeliharaan Pertamanan di Kabupaten Jember. *Jurnal Lanskap Indonesia*, *13*(2), 61–70.

Rahayu, G. H. N. N., & Nurghany, A. (2019). Analisis Kelayakan Investasi Proyek Properti Di Kota Depok. *Journal Industrial Servicess*, *4*(2).

Sani, M. E. A., Sakawi, Z., & Rose, R. A. C. (2022). Stage Of Satisfaction, Masalah Dan Cadangan Untuk Meningkatkan Kualiti Perkhidmatan Dan Kemudahan Taman:

Kajian Kes Di Taman Saujana Hijau Putrajaya. *E-Bangi*, *19*(1), 216–233.

Sari, J. N., & Sudirman, L. (2023). Peran Pemerintah Kota Parepare Dalam Pengelolaan Ruang Terbuka Hujau. *Jurnal Sultan: Riset Hukum Tata Negara*, *1*(2), 77–87.

Suciyani, W. O., & Oktavia, H. C. (2020). Evaluasi Taman RA Kartini Sebagai Fungsi Sosial Bagi Komunitas Kreatif di Kota Cimahi. *Jurnal Planologi*, *17*(1), 20–36.

Supriyantony, E. (2023). Analisis Kelayakan Investasi Pembangunan Pasar Ikan Modern "Muara Baru": Aspek Keuangan. *Jurnal Ekonomi Dan Bisnis*, *3*(2), 87–102.

Utari, R. P., & Abduh, M. (2023). Analisis Life Cycle Cost (LCC) dan Kelayakan Investasi Proyek Pembangunan Gedung Asrama Putra Politeknik di Bali. *Seminar Keinsinyuran Program Studi Program Profesi Insinyur*, *3*(1).

Valensia, F., & Pramuditha, C. A. (2023). Analisis Kelayakan Usaha Produk Kertas Menjadi Kertas Tanam. *MDP Student Conference*, *2*(2), 466–471.

Wahyudi, A., Dalilla, F., Syarif, F., & Sofwan, M. (2023). Pelatihan Pemeliharaan Taman di Kampung Bandar, Kecamatan Senapelan, Kota Pekanbaru. *Jurnal Abdi Masyarakat Indonesia*, *3*(1), 63–74.

Waruwu, M. (2023). Pendekatan penelitian pendidikan: metode penelitian kualitatif, metode penelitian kuantitatif dan metode penelitian kombinasi (Mixed Method). *Jurnal Pendidikan Tambusai*, *7*(1), 2896–2910.

Yandra, A., Hernimawati, H., Sudaryanto, S., Felga, S., & Arizal, A. (2022). Anomali Program Pot dan Bunga: Evaluasi Program Pengadaan dan Pemeliharaan oleh Dinas Pekerjaan Umum dan Penataan Ruang. *Sang Pencerah: Jurnal Ilmiah Universitas Muhammadiyah Buton*, *8*(4), 1138–1151.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).