

Original Research Article

Education Facility Needs Analysis in Abepura District Jayapura City

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Abstract: The existence of educational facilities in housing and settlements is the most important thing for the community. Basically, the government has issued regulations regarding the implementation for the provision of educational facilities, as referred to in terms of educational facilities for Kindergarten (TK), Elementary School (SD), Junior High School (SMP), High School (SMA) and Schools. Vocational High School (SMK) or its equivalent. This study aims to evaluate the need for educational facilities for the present and the future and to find problem points for the provision of supporting facilities and infrastructure in the provision of educational facility services. The method used in this research is descriptive analysis and trend analysis. From the results of scientific calculations obtained, the existing educational facilities in Abepura District for the present and the future are still adequate. However, from the results of the research, there are still many problems with the educational facilities in the Abepura District that must be considered. Problems that occur in educational facilities in the Abepura District are the lack of complementary supporting facilities and infrastructure that require improvement and maintenance for existing facilities and infrastructure in educational locations, as well as inadequate transportation services in 3 (three) villages, namely: Enggros Village, Nafri Village, and Koya Koso Village. From the problems that exist in educational facilities, it is hoped that the government will pay attention to the completeness of facilities and infrastructure which refers to the regulations that have been set in order to provide quality services to the community and improve transportation services in order to support the smooth running of people who want to access these facilities. and other desired infrastructure and facilities.

Keywords: Facilities, Education, Need analysis, Abepura Distrik.

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INTRODUCTION

The development of the population in urban areas accompanied by an increase in the flow of urbanization brings major changes to basic human needs, namely the need for clothing and food and their supporting facilities. These basic needs continue to increase naturally along with the complexity of the needs of social life, such as the need for social activities, economic activities, and public service activities. This phenomenon also demands the development of facilities in urban areas as the survival of people in urban areas in the context of a sustainable city.

The availability of facilities and infrastructure in the area is a factor that can support development and as an element of attracting investment in an area

(Ananda & Banurea, 2017). The more complete the existing facilities and infrastructure in an area and supported by the potential of natural resources, the opportunity to invest more broadly. This condition applies to less developed and underdeveloped areas (Kurniawan, 2020).

Education is an activity that is common to every human being on this earth. Education is inseparable from all human activities. Under any circumstances, humans cannot resist the effects of implementing education (Yusuf, 2014). According to the organization that organizes education, education can be divided into two, namely: formal education and informal education (Rama, 2017).

Basically every activity carried out will cause two kinds of conflicting impacts, these impacts are

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positive impacts and negative impacts. Positive impact is anything that is an expectation from the implementation of the activity, in other words, it can be called a goal, while a negative impact is anything that is not an expectation in the implementation of the activity, so it can be called an obstacle or problem caused. Planning an area and city requires good knowledge and understanding (Lawene *et al.*, 2017). So that it can create the desired state of the city area. Of course, by looking at the characteristics contained in it because each region and city has different potentials and constraints (Rustiadi, 2018).

However, efforts to fulfill the need for facilities and infrastructure in urban areas are not as easy as turning the palm of the hand. Constraints and a number of problems in terms of fulfillment and distribution require shared responsibility for the three components of development, namely the government (policy makers), the community (users) and the private sector (developers) (Kuncoro, 2018). In terms of meeting the needs for facilities and infrastructure, general phenomena that become the main obstacles are the higher land prices in urban areas, lack of land availability, lack of community participation in the form of self-help and maintenance of existing facilities and infrastructure, and so on, while in terms of distribution, namely the equal distribution of facilities and infrastructure that creates social disparities between the downtown area and the suburbs.

Based on the Jayapura City area development plan, the Abepura District is a development that functions as a trade and service center, offices, industry, and housing. While the supporting functions include education, offices, plantations, and tourism as well as conservation or protected forests. Abepura District is the second largest district after Muara Tami District in Jayapura City, Papua Province. From the regional development plan, Abepura District has 65 units of educational facilities consisting of 18 units for Kindergarten Education (TK), 27 units for Elementary School (SD), 12 units for Junior High School (SMP), and 4 units for Senior High Schools (SMA) and 4 units for Vocational High Schools (SMK). Along with the increasing number of residents from year to year, the condition of the existing facilities in the Abepura District is very worrying, especially in Enggros Village, where the supporting facilities have not been fulfilled properly. Therefore, careful planning is needed, in order to meet all the needs of the local community. The educational facilities in the Abepura District, Jayapura City are divided into 2 (two) types, namely public education facilities and private educational facilities.

MATERIALS AND METHODS

Types of research

The method used in this research is descriptive qualitative. Therefore, the general purpose of research is to solve problems, so the steps to be taken must be

relevant to the problems that have been formulated (Gunawan, 2013).

Research sites

The location of this research was carried out in the Abepura District, Jayapura City, Papua Province, especially in educational facilities in the Abepura District, Jayapura City. The selection of this research location was obtained after observing the existing condition of educational facilities in the Abepura District, Jayapura City, Papua Province and comparing it with the service standards used.

Materials and Equipment

Based on the research that will be carried out in this research location, the materials and equipment to be used include:

a. 1 camera

Serves to document the conditions that occur at the research site.

b. Data board and stationery

Serves to record the results of research that occurred at the location.

c. 1 pc laptop

Serves to summarize the results of the data that occurred at the research location and is ready to be processed in writing this final project, both from the presentation of the data and the analysis that will be used to solve the problems that occur.

Data Types and Sources

The data that will be used as material for analysis in this study are primary data and secondary data (Sugiyono, 2017). Primary data taken in this study can be in the form of existing conditions of land use as well as existing conditions of providing social facilities that are included with photos. Secondary data is obtained from literature study in the form of literature, written sources or documents that have relevance to this research. Secondary data were obtained from the Head of Abepura District and other agencies related to this research. Secondary data needed, including the number of residents according to education level, population based on age, and number of educational facilities (Martono, 2019).

Data collection technique

The data collection techniques that will be carried out in this study include: 1) observation is carried out by observing directly the object in the field and taking pictures in the form of photos that are considered to support this research activity. The object of observation at the research location includes the existing condition of the need for educational facilities in the Abepura District, Jayapura City, Papua Province, 2) the document has been carried out by collecting data which will encourage activities in this research and will be used to support the writing of this final project. The

data sources to be obtained are from the Education and Culture Office, the Central Statistics Agency, and the Abepura District Office which is located in Jayapura City, Papua Province.

Data Needs

Data is another important element in a plan (Yusuf, 2016). With the data obtained an initial

information as input which is then processed so that the initial information becomes information that can be used in further analysis. In the planning process, the first step is to create a data requirement table. The data requirement table is a list of the data that will be needed with detailed data descriptions such as the name of the data needed, data units, data types, data forms, data years, data sources, and data collection techniques.

Table 1: Data Needs for Analysis of Educational Facilities Provision

Name of Data	Unit of Data	Type of Data	Form of Data	Year	Source	Technical Collection Data
Population						
Total Population	Abepura District	Secondary	Table	2015	Bappeda	Document Review
Density Population	Abepura District	Secondary	Table	2015	Bappeda	Document Review
Population Growth Rate	Abepura District	Secondary	Table	2015	Bappeda	Document Review
Total population by education level	Abepura District	Secondary	Table	2015	Education Authorities	Document Review
EDUCATION FACILITIES						
Existing Educational Facilities	Abepura District	Primary and Secondary	Table Of Map	2015	Bappeda	Document Review
NATURAL PHYSICAL CONDITIONS						
Administration Limit	Abepura District	Secondary	Map	2015	Bappeda	Document Review
An Area	Abepura District	Secondary	Number	2015	Bappeda	Document Review

Source: Data Analysis

Data Processing Stage

Data that has been collected through primary and secondary data collection techniques, then processed through the stages of editing, data presentation and data analysis. Data analysis is carried out based on the data needed, then grouped according to the identification of the problem objectives, so that an analysis is obtained that functions to solve problems effectively. This analysis is done by looking at the existing condition of the number of existing educational facilities and comparing it with the service standards that have been set by SNI 03-1733-2004. Thus, the actual service standard will be obtained.

RESULTS AND DISCUSSION

Jayapura City Development

The development of Jayapura City refers to the RTRW of Jayapura City in 2006, the land use pattern that will be applied in the downtown area of Jayapura City is the pattern of land intensification. Existing land use in Jayapura City is directed at the use of trade and services. The trade and service areas are particularly directed at the Jayapura Selatan District and the Abepura District. Types of trade and service facilities planned in Jayapura City include stalls, shops, neighborhood shopping centers, regional shopping centers and lodging facilities. Meanwhile, education and office facilities do not follow a centralized pattern but rather a spread pattern in each kelurahan. However,

from this statement, it is hoped that the planning of educational facilities will be more integrated in an area by looking at the level of population density. The distribution of existing educational facilities in the Abepura District is more directed towards the villages with increasing population, including: Kelurahan Kota Baru, Kelurahan Wahno, Kelurahan VIM, and Kelurahan Wai Mhorock.

Existing Condition of Abepura District Education Facilities

The number of school buildings in the Abepura District is as many as 65 school buildings consisting of kindergarten, elementary, junior high, and high school and vocational schools. The school buildings are spread across all kelurahan and villages in the Abepura District. Almost all sub-districts or villages in the District have one to two elementary schools, except for Enggros Village. Meanwhile, Junior High School (SMP) educational facilities are located in 5 villages and villages, namely Koya Koso Village, Yobe Village, Abe Pantai Village, VIM Village, and Wai Mhorock Village. For high school (SMA) and vocational high school (SMK) educational facilities, they are located in Awiyo Village, Koya Koso Village, Yobe Village, Abe Pantai Village, Kota Baru Village, VIM Village, Wai Mhorock Village and Wahno Village.

Table 2: Number of Students and Education Facilities in Abepura District

NO	DESCRIPTION	NUMBER OF STUDENTS	NUMBER OF FACILITIES
1	TK	1.061	18
2	SD	7.134	27
3	SMP	3.014	12
4	SMA/SMK	3.026	8
Amount		14.235	65

In (Table 2) it is explained that the number of students in the Abepura District is more dominated by elementary school (SD) students compared to the

number of other students who are in the age group of 7-12 years.

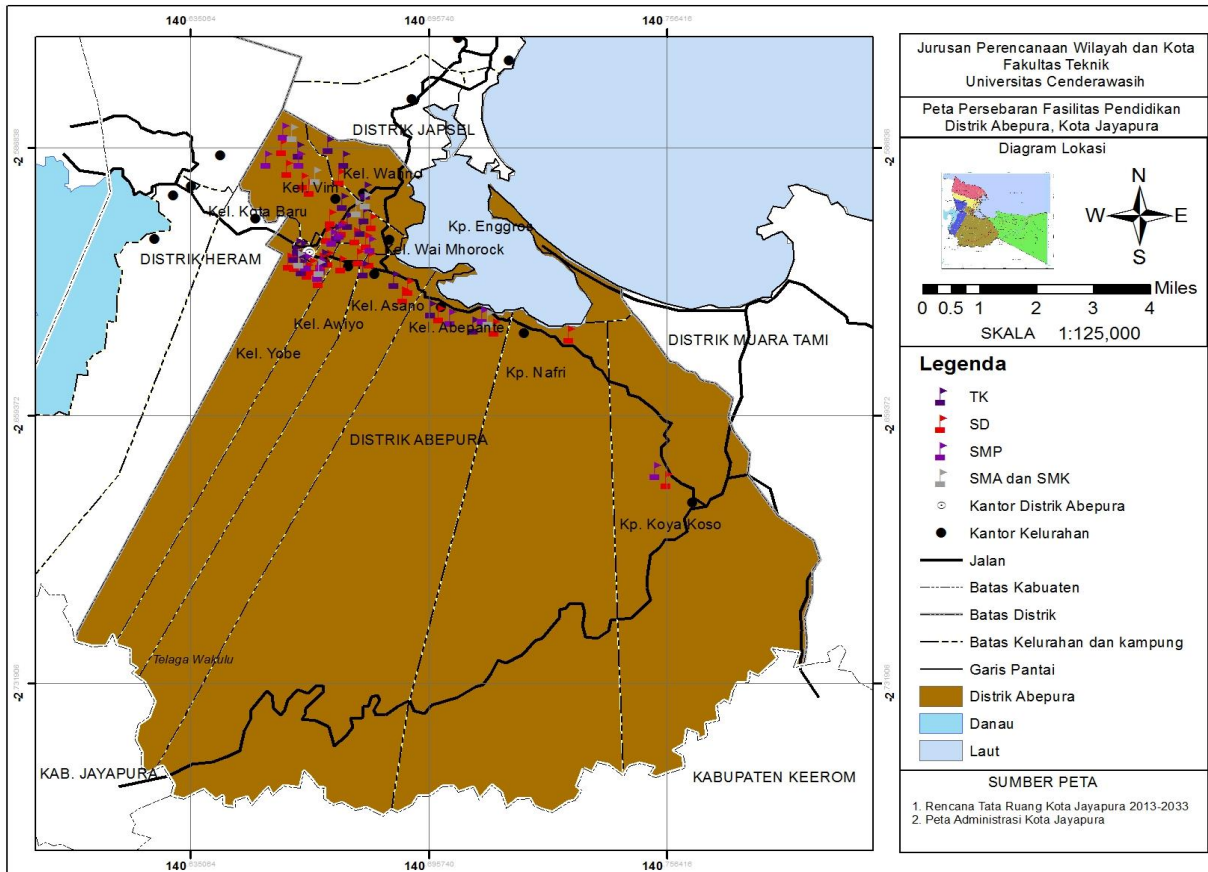


Figure 1: Distribution Map of Education Facilities in Abepura District

Kindergarten (TK) Level Education Facility Needs

From the explanation (Table 2) above, it can be seen that the number of educational facilities is

broken down by level of education and the sub-district or village in Abepura District, Jayapura City.

Table 3: Existing Condition of Kindergarten (TK) Education Facilities in Abepura District

NO	Education Facilities	Existing Condition (Unit)	Number of Students (Jiwa)	Service Standard (Jiwa)	Needs (Unit)	Description
1	TK	18	1.061	1.250	1	Good

From the calculation results obtained, it can be seen that the number of educational facilities for Kindergarten (TK) in Abepura District required is 1 unit of educational facilities to serve 1,061 students. So, for Kindergarten (TK) educational facilities in Abepura District, there are still sufficient.

Elementary School (SD) Education Facility Needs

Educational facilities are one of the efforts that need to be considered in the planning process in an area. With adequate educational facilities, the Human Resources (HR) obtained in the area can increase and can also affect the economy in the region.

Table 4: Existing Condition of Elementary School (SD) Education Facilities in Abepura District

NO	Education Facilities	Existing Condition (Unit)	Number of Students (Jiwa)	Service Standard (Jiwa)	Needs (Unit)	Description
1	SD	27	7.134	1.600	4	Good

The number of elementary school education facilities (SD) owned by the Abepura District have met the standard of service. The number of students for elementary school (SD) education levels in the Abepura district is 7,134 people so that the required educational facilities are 4 units while the existing condition of the existing educational facilities is 27 units of elementary school education facilities (SD).

Need for Education Facilities for Junior High School (SMP)

To improve Human Resources (HR) in an area, it is necessary to pay special attention to the educational facilities in it. Therefore, educational facilities are one of the most important parts of the needs of human life.

Table 5: Existing Condition of Junior High School (SMP) Education Facilities in Abepura District

NO	Education Facilities	Existing Condition (Unit)	Number of Students (Jiwa)	Service Standard (Jiwa)	Needs (Unit)	Description
1	SMP	12	3.014	4.800	1	Good

From the number of junior high school (SMP) students in Abepura District, it can be seen that the number of facilities needed is 1 unit, while the existing condition of educational facilities in Abepura District is 12 units. Based on the above statement, it can be seen that the condition of the existing educational facilities in Abepura District has met the requirements or service standards that refer to SNI 03-1733-2004.

High School (SMA) and Vocational High School (SMK) are one part of the level of education needed in determining one's future. Therefore, the existence of facilities for high school (SMA) and vocational high school (SMK) education levels is very much needed by the community in it to support activities to obtain the desired success and improve the Human Resources (HR) in it.

Need for Education Facilities at the High School (SMA) and Vocational High School (SMK) Levels.

Table 6: Existing Condition of High School (SMA) and Vocational High School (SMK) Education Facilities in Abepura District

NO	Education Facilities	Existing Condition (Unit)	Number of Students (Jiwa)	Service Standard (Jiwa)	Needs (Unit)	Description
1	SMA/SMK	8	3.026	4.800	1	Good

Based on the calculations obtained from the two data, namely the number of students and the number of facilities for High School (SMA) and Vocational High School (SMK) education, it can be seen that the number of facilities needed by the Abepura District to serve the number of students reaching 3,206 people is 1 unit. educational facilities. Looking at the comparison between the existing conditions of education facilities in Abepura District and the calculations obtained, currently the number of educational facilities for Senior High Schools (SMA) and Vocational High Schools (SMK) owned by Abepura District has met good service standards.

Abepura District Population Projection For The Next 20 Years

Population projection is a process that involves scientific calculations to find out the population in the

coming year. Population projections are carried out after obtaining population data in the last year obtained from the population census or related agencies in the data. The use of population projections in the field of Urban and Regional Planning (PWK) is one of the efforts made to plan an ideal urban development and refers to the planning requirements and standards that have been set in urban planning. In the area of Urban and Regional Planning (PWK), population projections serve as a guide or reference in planning the facilities and infrastructure as well as the supporting facilities contained therein. The following is the formula that will be used in the population projection of Abepura District for the next 20 years and will be used as a reference or guideline in the service of educational facilities in Abepura District.

$$P_n = P (r/100 + 1)^n$$

Table 7: Projected Population of Abepura District

NO	POPULATION PROJECTION				
	2015	2015 – 2020	2015 - 2025	2015 - 2030	2015 - 2035
1	80.618	80.699	80.779	80.860	80.941

From the calculation results obtained based on (Table 7) it can be seen that the population growth that occurs in Abepura District for the next 20 years will experience a fairly rapid increase, reaching 80,941 people so that it will affect the need for supporting facilities in it.

Evaluation of Availability of Educational Facilities

To evaluate the need for existing educational facilities in Abepura District, it is by comparing the number of available facilities with the applicable service standard provisions. By using these service standards, it can be observed the service needs of the facilities needed in the planned area, the calculations used are as follows:

$$\text{Number of Facilities} = \frac{\text{Number of Pupulation (Jiwa)}}{\text{Standart of Population Supporting (Jiwa)}} \dots\dots\dots (2)$$

Source: SNI 03-1733-2004

Number of Facilities= (Number of Residents (Souls))/(Standards of Supporting Populations (Souls))

Meanwhile, to evaluate the need for educational facilities needed in the future, this study uses a comparison of the population by age, namely the population aged 5-9 years with the assumption of 3/5, from the data, the population aged 5-7 years, the population aged 10 -14 years assuming 3/5 can be obtained the population aged 7-12 years, the population aged 15-19 years assuming 1/5 then obtained the total population aged 13-15 years, and the population aged 15-19 assuming 3/ 5, the total population aged 16-18 years is obtained. From the assumption of the population based on age used in this study, it can be projected the number of students for the next 20 years using the population growth rate based on age, namely for ages 5-19 years from 2015 to 2020 in Abepura District. The number of people based on age will be used in evaluating the need for educational facilities for the next 20 years in Abepura District. The number of people used in this evaluation is the age of 5-19 years.

Table 8: Population by Age Group in Abepura District in 2020

NO	Village/Kampung	Age (Jiwa)		
		5-9 years	10-14 years	15-19 years
1	Enggros	181	167	131
2	Nafri	182	167	130
3	Koya Koso	252	243	241
4	Asano	873	771	724
5	Awiyo	1337	1139	1266
6	Yobe	757	811	740
7	Abe Pantai	336	312	258
8	Kota Baru	731	694	1014
9	VIM	1465	1188	1277
10	Wai Mhorock	884	762	889
11	Wahno	884	796	866
Amount		7.882	7.050	7.536

Source: Abepura District in Figures 2020

From Table 8 it can be seen that the population growth rate based on age in Abepura District is increasing greatly, as shown in Awiyo Village and VIM Village so that it will experience population density and

will affect the need for educational facilities in it compared to other Villages and Villages in the Abepura District which is still in the process of regional growth and development.

Table 9: Student Growth Rate by Age in Abepura District

NO	Description	Age	Years		Population Growth Rate
			2012	2015	
1	TK	5-7	4.453	4.729	0,01
2	SD	7-12	7.200	7.383	0,01
3	SMP	13-15	4.200	4.327	0,01
4	SMA/SMK	16-18	4.133	4.521	0,02

The growth rate of students based on age from 2015 to 2020 in Abepura District can be seen that the

number of students in Abepura District is more dominated by elementary school (SD) students who are

aged 7-12 years. The age determination based on education level, as follows: Age 5-7 years for Kindergarten (TK), Age 7-12 years for Elementary School (SD), Age 13-15 years for Junior High School (SMP), and Age 16-18 years for High School (SMA) and Vocational High School (SMK).

Calculation of the assumed age of the population of Abepura District in 2020:

➤ Ages 5-9 years using the 3/5 assumptions for ages 5-7 years.

$$= \frac{7.882 (Jiwa)}{5} \times 3$$

= 4,729 Jiwa for ages 5-7 years (TK).

➤ Ages 5-9 years using the assumption of 2/5 for ages 8-9 years.

$$= \frac{7.882 (Jiwa)}{5} \times 2$$

= 3.153 Jiwa belong to the age group of 8 – 9 years.

➤ Ages 10-14 years using the 3/5 assumptions for ages 7-12 years.

$$= \frac{7.050 (Jiwa)}{5} \times 3$$

$$= 4.230 Jiwa + 3.153 Jiwa$$

$$= 7.383 Jiwa \text{ for age 7-7-12 years (SD).}$$

Usia 10-14 years using the 2/5 assumption for ages 13-14 years.

$$= \frac{7.050 (Jiwa)}{5} \times 2$$

= 2.820 Jiwa belong to age group of usia 13 – 14 years

➤ Usia 15-19 years using the 1/5 assumption for ages 13-15 years.

$$= \frac{7.536 (Jiwa)}{5} \times 1$$

$$= 1.507 Jiwa + 2.820$$

= 4.327 Jiwa for age 13 – 15 years(SMP).

➤ Usia 15-19 years using the 3/5 assumption for 16-18 year olds.

$$= \frac{7.536 (Jiwa)}{5} \times 3$$

= 4.521 Jiwa for age 16 – 18 years (SMA).

Table 10: Assumption of Abepura District's Total Age

NO	Description	Total Age and Assumptions Used (Jiwa)			OUTPUT (Age)			
		5-9	10-14	15-19	5-7	7-12	13-15	16-18
1	TK	7.882 (3/5)			4.729			
2	SD	7.882 (2/5)	7.050 (3/5)			7.383		
3	SMP		7.050 (2/5)	7.536 (1/5)			4.327	
4	SMA/SMK			7.536 (3/5)				4.521

Table 11: Projected Number of Students by Education Level by Age in Abepura District Years 2035

NO	Description	Age (Jiwa)	Years	
			2015	2035
1	TK	5 -7	4.729	4.738
2	SD	7 - 12	7.383	7.398
3	SMP	12 - 14	4.327	4.336
4	SMA/SMK	14 - 16	4521	4.539
Amount			20.960	21.001

Based on the statement in (Table 11) it can be seen that the number of students experienced by the Abepura District until 2035 will increase, which is around 21,001 people, therefore it is necessary to

provide adequate educational facilities to improve the existing Human Resources (HR) in the Abepura District.

Table 12: Projection of Education Facility Needs in Abepura District in 2035

NO	Education Facilities	Existing Condition (Unit)	Number of Students (Jiwa)	Service Standard (Jiwa)		Needs (Unit)	Description
1	TK	18	4.729	1.250	4.738	4	Memadai
2	SD	27	7.383	1.600	7.398	5	Memadai
3	SMP	12	4.327	4.800	4.336	1	Memadai
4	SMA/SMK	8	4.521	4.800	4.539	1	Memadai
JUMLAH		65	20.960	-	21.001	11	-

Based on the calculation of the service standards of educational facilities obtained, it can be observed that the need for educational facilities in the Abepura District in 2037 does not experience additional educational facilities but improves the quality of good services so that it does not require a lot of land in the construction of educational facilities. One of them is

building educational facilities in an integrated manner, in which educational facilities are available for Kindergarten (TK) to High School (SMA) and Vocational High School (SMK) equipped with facilities and infrastructure as well as teaching staff or educators in accordance with service academic standards

education to support quality educational services for the community.

Table 13: Analysis of Education Facilities Allocation Based on Community Accessibility in Abepura District

Kelurahan/Kampung	Road Classification		Road Condition			Condition Transportation Condition		
	Land	Sea	Good	Medium	Bad	Good	Medium	Bad
Nafri		-	-		-	-	-	
Enggros	-		-		-	-	-	
Koya Koso		-		-	-	-	-	
Asano		-		-	-		-	-
Awiyo		-		-	-		-	-
Yobe		-		-	-		-	-
Abe Pantai		-		-	-		-	-
Kota Baru		-		-	-		-	-
VIM		-		-	-		-	-
Wai Mhorock		-		-	-		-	-
Wahno		-		-	-		-	-

For the existing transportation system services in the Abepura District, it can be seen in table 13 which explains that there are 3 villages whose transportation services are not adequate, namely: Nafri Village, Enggros Village and Koya Koso Village. The transportation system services that occurred in Nafri Village and Koya Koso Village can be observed that the number of transportation facilities needed for the two villages is not sufficient to serve the existing population and will affect the activities of the local community. While the transportation system services that occur in Enggros Village are only in the form of sea transportation, so that people who want to access the needs of facilities and infrastructure as well as other facilities must leave the village.

From the survey results observed at the research location, it can be seen that most of the road conditions in the Abepura District have met the standards in transportation services, while the road conditions that occur in Nafri Village are one part that needs to be considered by the government in order to improve adequate transportation services. to support all community activities. The existing road conditions in Nafri Village where there is a problem point that will affect people who carry out an activity or a trip. This access point is the main road that is often traversed by students and students to be able to access educational facilities in Koya Koso Village, Nafri Village and Abepantai Village so that it will have an impact on the level of safety for them, therefore it is necessary to improve transportation access in order to reduce unwanted risk.

Enggros Village is one of the villages in the Abepura District which is located right on Youtefa Bay. The facilities and infrastructure in it can be said to be sufficient. Inadequate service and provision of educational facilities in Enggros Village is one of the problems that will have an impact on the quality of Human Resources (HR) in the region. In addition, the economic needs of the community will also increase due to inadequate transportation services, where the

existing transportation services can only be served by sea water transportation in the form of speed boats. The existing educational facilities in Enggros Village are only in the form of Kindergarten (TK) so that people who want to continue their education to Elementary School (SD), Junior High School (SMP), High School (SMA) and Vocational High School (SMK) and universities (PT) must leave the village by accessing sea transportation in the form of speed boats.

The minimal land area for educational facilities is one of the factors that causes the lack of supporting facilities and infrastructure in educational facilities. From the survey results obtained, the existing supporting facilities and infrastructure in educational facilities in the Abepura District are not sufficient so that a review is needed based on the applicable guidelines regarding the provision of facilities and infrastructure at every level of education.

Parking space at educational facilities is one of the supporting infrastructure provided by the government and the private sector to serve teachers, students and guests who need it, which functions as a parking lot for 4-wheeled and 2-wheeled vehicles. Insufficient parking space at educational facilities in Abepura District now it is common for users of the educational infrastructure.

By looking at the existing problems, it is hoped that the government and the relevant agencies will be able to provide a parking area which is equipped with building construction so as not to cause an impact on the vehicles used for the infrastructure users. From the results of the study, there is one educational facility which utilizes most of the residential land as a parking area which is right behind the educational facility so that sometimes it hinders the local community from doing activities. There is one educational facility in Abepura District whose supporting facilities and infrastructure need improvement and maintenance. The condition of the reading park in the educational

facilities is not properly considered so that the facilities and infrastructure in it are not functioning properly.

It can be seen that at the location of the reading garden, there is a trash can which functions as a tool to accommodate all the remnants of waste produced by humans and plants around it. However, from the existing statement, the garbage produced by humans and plants around it is now scattered on the location of the reading garden which pollutes one's view and will have an impact on the health of students and teachers who are in the educational facility caused by the seeds of disease that come from piles of scattered garbage. For the reading garden owned by the educational facility, it can be seen that the infrastructure in it has been damaged so that the benefits of the reading park are now not functioning properly and will have an impact on reducing facilities and infrastructure for students to gain knowledge. Reading garden is one of the facilities and infrastructure provided by educational facilities which serves as a place to study for students who are in it. From this statement, it is necessary to improve and maintain the existing facilities and infrastructure in reading gardens so that they can function again according to their respective benefits.

Based on observations at the research site, there is one educational facility where the latrine or toilet is no longer maintained. The current condition of the existing latrine or WC, the walls have been littered with graffiti and the condition of the latrine or WC in it can be said to be sufficient where the water reservoir in it is very dirty and is not equipped with lighting equipment so that it creates a sense of doubt for people to access it. , both in terms of view, cleanliness and completeness of the facilities and infrastructure in it. In addition, the impact of existing problems, namely the difficulty of students to get access to latrines or toilets, because temporarily the latrines or WC used by students are latrines or teachers' toilets.

Security and comfort is one of the dreams for the community for their survival, be it in housing, government or education. There is one educational facility in the Abepura District where the completeness of the educational facilities has been damaged so that it will have an impact on the security and physical and material comfort of the educational facilities. Therefore, in building educational facilities, it is necessary to pay attention to the existing facilities and infrastructure in order to support good educational services, one of which is to build guard posts for educational facilities that function as security and comfort in the teaching and learning process. With the existence of guard posts in educational facilities, security and physical and material comfort within the scope of education will be maintained.

Educational Facility Planning Form

Based on the results of the research obtained, the existing educational facilities in the Abepura

District until the year 2035 did not experience an increase. However, special attention is needed by the government in order to improve the service of adequate educational facilities, including:

a. Provision of land for educational facilities.

The position of Abepura District in Jayapura City can be seen that the main functions of the area include: trade and services, offices, industry and housing. From this statement, it is necessary to take special action from the government which has known that educational facilities are one of the social facilities that are needed by the community in order to improve the existing Human Resources (HR) in the region. By looking at this statement, it is hoped that the government will provide strategic land that will function as a location for educational facilities by looking at the level of density in the Abepura District.

b. Build one-stop educational facilities.

By looking at the existing conditions in the Abepura District, it can be seen that the educational facilities in the Abepura District are not concentrated in one location but spread to all villages and villages in the Abepura District. Kindergarten education facilities (TK) to high school (SMA) and vocational high school (SMK) education facilities to reduce land use for educational facilities and create strategic planning with integrated services.

c. Improving Transportation Services

Transportation is one of the supporting factors for the implementation of activities. For this reason, transportation facilities and infrastructure in an urban area need to be considered. Most of the existing transportation facilities and infrastructure in Abepura District have met service standards well. There are several villages in the Abepura District whose transportation service systems need to be considered, including: Nafri Village, Koya Koso Village and Enggros Village.

The existing transportation service system in Nafri Village and Koya Koso Village that needs to be considered is the transportation facilities and infrastructure in it, where it can be seen that the number of existing transportation facilities has not been fulfilled properly and for the existing transportation infrastructure it can be seen that there is one access roads that have been damaged and need improvement by the government or related agencies in this matter. These two factors are a barrier for the community to carry out an activity and will also affect the development of the local area and its surroundings.

For the existing transportation service system in Enggros Village, it can only be served by sea transportation which is in the form of a speed boat, so people who want to visit Enggros Village and people who want to do or carry out an activity outside of

Enggros Village must use sea water transportation that has been provided. provided.

Education is one of the most important parts of people's lives. In order to create good educational services, it is hoped that the government will pay attention to the problems of transportation facilities and infrastructure which are a barrier factor that will hinder the community from being able to access these educational services.

d. One-stop educational facilities and infrastructure.

Educational facilities can basically be grouped into four groups, namely: land, buildings, equipment, furniture. Educational facilities are all sets of tools, materials, and furniture that are directly used in the educational process, including: tables, chairs, blackboards, teaching aids, books, educational media. While educational infrastructure is all facilities that indirectly support the course of the education or teaching process, for example: parking lots, reading parks, school buildings, and sports fields.

The standard of educational facilities and infrastructure which has been regulated in PP No of 2013 says that educational facilities and infrastructure are supporting facilities for the course of an educational or teaching process. To create a good educational facility service, it is necessary to pay attention to the facilities and infrastructure in it. The facilities and infrastructure in question are: study rooms, places to exercise, places of worship, libraries, laboratories, workshops, latrines, playgrounds, reading parks, parking lots as well as providing student buses to make it easier for people who want to access these educational facilities. So, educational facilities and infrastructure are facilities that greatly affect success in an ongoing educational or teaching process.

e. Teaching staff in the educational process

Teaching staff in the educational process are people who are dedicated and appointed to support ongoing education. The education that will be provided by the teacher includes: guiding, teaching and training. Educational staff consist of educators, education unit managers, supervisors, researchers, experts in the field of teaching or technicians and examiners. Education is a professional staff tasked with planning and implementing the learning process, assessing learning outcomes, conducting guidance and research, as well as conducting research and community service. To create quality Human Resources (HR) it is necessary to improve the services of educators within the teaching staff or educators, as for the qualifications of the teaching staff or educators referred to at each level of education.

Teachers in PAUD/TK must have a minimum educational academic qualification of diploma four (D-IV) or Bachelor (S1) in early childhood education or psychology obtained from accredited studies. Teachers at SD/MI or other equivalent forms must have a minimum educational academic qualification of diploma four (D-IV) or Bachelor (S1) in the field of education in SD/MI (D-IV)/S1 PGSD/PGMI obtained from a study program that accredited. Teachers at SMP/MTs or other equivalent forms must have a minimum academic qualification of diploma four (D-IV) or Bachelor (S1) study program in accordance with the subjects taught/taught and obtained from an accredited study program. Teachers at SMA/MA or other equivalent forms must have a minimum academic qualification of diploma four (D-IV) or Bachelor (S1) study program in accordance with the subjects taught/taught and obtained from an accredited study program. Teachers at SMK/MAK or other equivalent forms must have a minimum academic qualification of diploma four (D-IV) or Bachelor (S1) study program in accordance with the subjects taught/taught and obtained from an accredited study program.

Table 14: Form of Education Facility Planning in Abepura District

Number	Facilities	The number of students	Location	Education Facility Needs	Total Land Area (M ²)	Description
1	TK	4.738	o Close to the location of green open space. o In the midst of society. o Can be reached by public transportation. o Away from emerging companies or small businesses. o Far from areas prone to natural disasters.	4	500	Equipped with other facilities and infrastructure, including: a. Study room b. playground c. Place to exercise d. Place of worship e. Libraries f. Laboratory g. workshop h. Toilet i. reading garden j. Parking lot k. guardhouse l. Lesson bus
2	SD	7.398		5	2.000	
3	SMP	4.336		1	9.000	
4	SMA/SMK	4.539		1	12.500	
Amount		21.001		11	24.000 M²	

CONCLUSION

Educational facilities are one of the efforts to provide government and private services for the community which are equipped with facilities and infrastructure which function as a place to gain knowledge and skills, be pious and as a place to develop themselves. The existing condition of educational facilities in Abepura District is 65 units to serve 14,235 people consisting of Kindergarten (TK), Elementary School (SD), Junior High School (SMP) and High School (SMA) and Vocational High School (SMK). However, the number of educational facilities in the Abepura District is now adequate. Based on the guidelines and calculations obtained from SNI 03-1733-2004, as for the need for educational facilities for the existing conditions of each level of education.

- a. Kindergarten (TK) as many as 1 (one) unit of educational facilities to serve 1,061 people.
- b. Elementary school (SD) as many as 4 (four) units of educational facilities to serve 7,134 people.
- c. Junior High School (SMP) as many as 1 (one) unit of educational facilities to serve 3,014 people.
- d. High School (SMA) and Vocational High School (SMK) as many as 1 (one) unit of educational facilities to serve 3,026 people.

With the projected number of students based on age for the next 20 years to reach 21,001 people consisting of Kindergarten (TK), Elementary School (SD), Junior High School (SMP), High School (SMA) and Vocational High School (SMK). . The need for educational facilities is obtained from calculations based on SNI 03-1733-2004 for the next 20 years.

- a. Kindergarten (TK) as many as 4 (four) units to serve 4,738 people.
- b. There are 5 (five) elementary schools (SD) to serve 7,398 people.
- c. 1 (one) unit of Junior High School (SMP) to serve 4,336 people.
- d. d.1 (one) high school (SMA) and vocational high school (SMK) to serve 4,539 people

The need for educational facilities in the existing conditions is now adequate, namely to serve the number of students as many as 14,235 people. However, from a different point of view, the provision of supporting facilities in it is inadequate, both in terms of the completeness of the provision of supporting facilities in it and the physical condition of the existing

supporting facilities. From the observations obtained, almost all educational facilities in the Abepura District providing complete supporting facilities do not meet service standards properly and there are 5 (five) educational facilities where the supporting facilities need improvement and maintenance so that they can function according to their respective benefits. -each.

From the results of research and calculations obtained based on SNI 03-1733-2004, the existing educational facilities in the Abepura District have met good service standards. However, it is necessary to develop integrated educational facilities in order to address the need for the regional economy and the need for land designated for educational facilities in the future.

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