Education and Health Policy Analysis in Dealing with the Demographic Bonus in Tegal City

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ABSTRACT: As one of the valuable momentum and opportunities to accelerate growth and progress, it is only appropriate that the demographic bonus phenomenon be considered and followed up through a series of policy actions, so that the demographic bonus phenomenon can bring optimal benefits to the City of Tegal. The main actions (which are then translated into more specific actions), namely policies to improve the quality of education and improve the quality of health. The demographic bonus in the city of Tegal will occur in 2020 and 2021.

From the results of research in the demographic bonus year in the field of education, it was found that 28% of the elementary school age population, 13% of the junior high school age population and 2% of the high school/vocational school age population did not attend school and there was an increase in the school age population which required attention and anticipation by the Tegal City government by preparing facilities and adequate educational infrastructure.

In the health sector, there is an excess of patients handled at each existing community health centers (puskesmas), there is an excess of patients around 3 times the standard of service where 1 hospital in Tegal City is projected to treat 95837 people in 2020 and 95118 people in 2021 an increase of 35% . Besides that, there is also an excess of 2-3 times the number of the population aged 0-5 years or toddlers handled by 1 posyandu and a lack of midwifery staff to serve the population surge. The results of the analysis need to add health centers, integrated service post (posyandu) and at least 380 midwifery staff with the aim of achieving healthy families who have adequate nutrition and have productive value in the future, so health development policies and programs must rely on preventive and promotive approaches as the main pillars. accelerate community nutrition improvement and implementation of health protocols, immunization week as optimal as possible

KEYWORDS: analysis, policy, education, health, demographic bonus

A. INTRODUCTION

The country of Indonesia has indeed begun to enter a golden period in the form of a demographic bonus era and based on projections that the peak of Indonesia's demographic bonus era according to BPS projections will be reached between the years 2020-2030, or when the population of Indonesia's productive age is at least 70% of the total population. Each demographic bonus area can occur at different times so the City of Tegal as part of the territory of Indonesia is obliged to prepare its management so that it becomes a profitable potential. Based on data from the Population and Civil Registration Service for the City of Tegal, the population of Tegal City is always increasing, as can be seen from the development of the population in 2017 of 281,809 people, 2016 there were 280,117 people, 2015 there were 276,734 people.

Broadly speaking, the requirements that must be met, so that the population demographic bonus can benefit an area are the quality of the population and the availability of job vacancies. Therefore the City of Tegal needs to prepare for both of these things starting from improving public health services, increasing the quality and quantity of education, and controlling population numbers, to economic policies that support the creation of workforce flexibility to prevent problems with the low-quality workforce, the ratio of the number of workforces is not comparable (unbalanced) with the number of available job opportunities, the distribution of labor is not evenly distributed, limited job opportunities and high unemployment. In order to prepare policies and their implementation in dealing with the demographic bonus for the City of Tegal, it is necessary to study the Demographic Bonus Analysis for the City of Tegal to find out the population structure of the City of Tegal in terms of quantity and quality as well as the policies, strategies, programs, and activities that must be implemented so that the demographic bonus becomes a potentially profitable area.

The problems in this research are as follows

1. How is the analysis of the structure of the population quantity according to productive and non-productive age groups and the projection of the demographic bonus time in Tegal City
2. How is the policy analysis for handling Education and Health in the City of Tegal

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B. LITERATURE REVIEW

1. Demographic Bonus

Demographic Bonus is one of the changes in demographic dynamics that occur due to changes in the population structure according to age. The phenomenon of this demographic transition occurs due to reduced birth rates accompanied by high mortality rates in the long term. When there is a decline in birth rates in the long term, it will have an impact on reducing the number of young people (<15 years), but on the one hand, the number population of productive age (15-64 years) will increase drastically as a result of high birth rates in the past. On the other hand, the number of people aged over 64 years will increase slowly and then increase rapidly due to an increase in life expectancy. When the productive age population far exceeds the non-productive age population (less than 15 years and over 64 years) this is called the Demographic Bonus condition (Rusli, Toersilaningsih, Merida, Kurniawan, & Setiawan, 2015).

The parameter used in assessing the Demographic Bonus phenomenon is the Dependency Ratio, which is a ratio that describes the ratio between the non-productive age population (less than 15 years and above 64 years) and the productive age population (15 – 64 years). This dependency ratio figure shows the burden of dependents on the productive age population on the non-productive age population. When the dependency ratio is low, this condition shows that the productive age population only bears a small proportion of the non-productive age population. The condition of a country that gets a demographic bonus is actually a gift and blessing that brings benefits to the nation and state. However, the demographic bonus must be put to good use and managed professionally.

There are many experiences from other countries, they have a golden opportunity from the demographic bonus in the country. However, they failed to take full advantage of it, so the demographic bonus actually turned into a loss for the state. Adioetomo (2005) states that changes in demographic dynamics where high growth in the working-age population will affect a country's Gross Domestic Product per capita which will also have an impact on:

1. A high number of working age population that can be absorbed by the labor market will increase total output
2. Will increase public savings
3. Availability of human resources in the process of economic development

This condition will only occur so that the demographic bonus can really be utilized if a country fulfills several prerequisites, namely:

1. The increase in the working-age population is accompanied by an increase in the quality of human resources both in terms of health and education and skills as well as an increase in soft skills so that they have global competitiveness.
2. The working-age population can be absorbed by the available labor market.
3. Availability of sufficient employment opportunities to absorb the available workforce.

If the above prerequisites cannot be met, what will happen is the opposite of the demographic dividend, namely the demographic burden. Where the large productive population that cannot be absorbed by the labor market will become a burden on a country's economy. Under these conditions, the unemployment rate will be high so the working-age population who does not have a job will become a burden for the working population.

A low dependency ratio figure will have implications for the country's economy which can be used as an opportunity to increase the productivity of a country. This condition can be a source of economic growth through the utilization of productive human resources who will be able to generate income to meet consumption needs and increase their savings which can eventually be mobilized into investment (Maryati, 2015). So the Demographic Bonus theory is basically a theory that links population dynamics with the economy. The number of non-productive age people who have to be borne by the population of productive age will have an impact on better economic growth. Ideally, maximum economic growth will occur when the Dependency Ratio is below 50. This condition is also referred to as the window of opportunity.

Population projections and population forecasts are often used as two terms that are often used interchangeably. However, these two terms actually have very basic differences. Various kinds of literature state population projections as predictions or predictions based on certain rational assumptions built for future trends using statistical tools or mathematical calculations. On the other hand, population forecasting can be done with/without assumptions and/or calculations without certain conditions, terms, and approaches (Smith, et.al 2001). Therefore, it can be said that forecasting is a projection, but not all projections require forecasting. Population projection is a calculation of possible future conditions using several assumptions, such as if the current birth, death, and migration rates do not change. The benefits of population projections are as follows:

1. Know the current state of the population, which is related to the determination of population policy and comparison of the level of service received by the current population with the ideal level of service
2. Knowing the dynamics and characteristics of the population in the future, which is related to the provision of facilities and infrastructure
3. Knowing the effect of various events on the condition of the population in the past, present, and the future

There are various methods that can be used to project the population, where these methods have assumptions as well as their respective strengths and weaknesses. However, in choosing the method to be used for population projection, several things

need to be considered, including the scope of the study area and planning area, the projection timeframe, the dynamics of the study area development, the precision, and intended use, and the availability of data. There are several methods that can be used to project population. . According to Klosterman (1990), projections with a fixed growth rate can generally be applied to regions, where in the initial years of observation the absolute increase in population was small and became more and more in later years.

The geometric method in population projections can be calculated using the formula:

$$P_t = P_0 (1 + r)^t$$

Exponential Model

The exponential method assumes that the percentage of population growth is the same every day. The population projection results using the exponential method will be in the form of a steeper curved line than the curved line using the geometric method.

$$P_t = P_0 (2,7182818)^{r.t}$$

The advantages of the exponential method include the simple formula used, the required data being easy to fill, and easy to do, and the model used being close to non-linear dynamics. Meanwhile, the weakness of this method is that it ignores the details of the components of population dynamics

2. Public Policy

The policy is a series of concepts that serve as guidelines and a basis for planning the implementation of an activity. Dunn (2000: 109) states that the implementation of a policy or program is more or less related (including decisions to act) made by government agencies and officials formulated in the fields of both health and social welfare, economy, administration, and others. So the policy is a very important aspect in the entire policy process to achieve the goals that have been determined through the programs so that the implementation of the policy is fulfilled.

In the Big Indonesian Dictionary, the policy is defined as a series of concepts and principles that form the outline and basis for a plan in carrying out a job, leadership, and ways of acting (regarding government, organization, etc.); statement of ideals, goals, principles, and guidelines for management in an effort to achieve goals.

Public policy according to Carl J Frederic quoted by Leo Agustino (2008: 7) defines policy as a series of actions or activities proposed by a person, group, or government in a certain environment where there are obstacles (difficulties) and opportunities for implementation policy proposals in order to achieve certain goals. Woll (1996) in Hesel Noigi Tangkilisan (2003: 2) defines public policy as a number of government activities to solve problems in society, both directly and through various institutions that affect people's lives. In the implementation of public policy there are three levels of influence as the implications of government actions, namely;

a. There are policy choices or decisions made by politicians, employees, government, or others that aim to use public power to influence people's lives.

b. There is a policy output, where the policies applied at this level require the government to make arrangements, budget, form personnel, and make regulations in the form of programs that will affect people's lives.

c. There is a policy impact which is the effect of policy choices that affect people's lives.

According to Willy N. Dunn, (in Inu Kencana 1999: 107) public policy is a series of interconnected choices made by government agencies or officials in areas related to governmental tasks, such as defense, energy, health, and education. community welfare, crime, urban areas, and others.

From the above understanding, it can be explained that public policy is a decision made by the government to do or not to do and is implemented by authorized bodies to deal with real-world problems consisting of several choices of actions or strategies oriented towards the goals of the State.

Public policy is usually an action to solve social problems so as to achieve social welfare. The policies made are generally in the form of laws and regulations in the form of implementation of policy programs to regulate something that is considered to encourage the development process and community empowerment itself. The policy is a very important stage in the implementation of a policy that has been made by the government. Policies that have been implemented by the government are usually in the form of a program, which then the program can be felt and beneficial to the community. The stages of program policy can be interpreted as real and concrete actions carried out by the government as a result of the formulations that have been made in the formulation stages. In practice in the field, the process of a policy can affect the objects that are targeted in implementation. Policy analysis is an analysis to generate and transfer information relevant to policy so that it can be utilized at the political level in order to solve policy problems (William N. Dunn, 2000).

C. RESEARCH METHOD

This study uses a qualitative descriptive method, which examines policies to improve the quality of education and health. Informants were taken from the related service environment through FGD. Determination of research subjects selected based on purposive sampling. Data collection was carried out using in-depth interview techniques, observation, and documentation

D. RESULTS AND DISCUSSION

1. Population Structure and Population Projection

The city of Tegal has an area of 39.68 km2. The administrative area of Tegal City consists of 4 (four) Districts, namely South Tegal District; West Tegal District; East Tegal District, and Margadana District, which are divided into 27 sub-districts. The district with the largest area is Tegal Barat District (15.13 km2), while the district with the smallest area is Tegal Timur District (6.36 km2).

The population of Tegal City in 2018 was 284,919 people, consisting of 143,455 men (50.35%) and 141,464 women (49.65%). The sub-district that has the largest population is in Tegal Timur Sub-District, which is 84,297 people, while the smallest is in Margadana Sub-District with 61,744 inhabitants. The population density of Tegal City is 7,180 people/km2, the highest is in East Tegal District, namely 13,254 people/km2, while the lowest is in West Tegal District, namely 4,592 people/km2. The sex ratio in Tegal City is 101%, in other words, for every 100 women, there are 101 men. The sex ratio in each sub-district has different results. The total population, sex ratio, and population density in each sub-district can be seen in detail in the following figure:
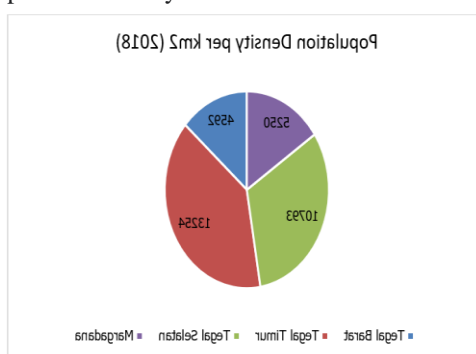

Image: Population Density of Tegal City

The population according to age group and sex in Tegal City in 2018, was the largest at the age of 35-39 years, namely 26,540 people of the type of male 13,632 and female 12,908.

Each region will only experience the demographic bonus once, which will only last for one or two decades. This is because over time, the productive age population will transform into a non-productive age population and the number will continue to grow. This will have implications for the dependency ratio which will increase rapidly. Regions that are able to maximize their demographic bonus will emerge as an economic power. Development planning needs to be supported by population data. The data needed is not only the present but also the future. Current data needs are met from the results of a census or population survey, and future data needs are met through population projections. By using Software Spectrum 5 from the 2018 population data, it is projected that the population of the city of Tegal in 2019-2025. The projection method uses a mathematical method using the entire population data. The population projection results for the City of Tegal obtained the following calculation results

Tabel :Total Population in 2018 and Projected Total Population for 2019 – 2025 by Gender

District	2018 Number of Population (people)		2019 Population Projection (Person)		2020		2021	
	Male	Female	Male	Female	Male	Female	Male	Female
Tegal Barat	34926	34553	43117	42609	47254	46673	47260	46666
Tegal Timur	42001	42296	50333	50485	54609	54679	54753	54802
Tegal Selatan	35206	34193	43422	42282	47582	46375	47606	46397
Margadana	31322	30422	39504	38473	43638	42537	40450	42538
Kota Tegal	143455	141464	176376	173849	193083	190264	190069	190403

District	2022 Population Projection (Person)		2023		2024		2025	
	Male	Female	Male	Female	Male	Female	Male	Female
Tegal Barat	43051	42508	36631	36171	30045	29671	23297	23010
Tegal Timur	50684	50774	44405	44569	37961	38200	31355	31671
Tegal Selatan	43414	42265	37008	35952	30433	29474	23693	22833
Margadana	39440	38389	33027	32063	26447	25574	19714	18924
Kota Tegal	176589	173936	151071	148755	124886	122919	98059	96438

Source: Disdukcapil of Tegal City and Analysis Result, 2019

The table shows projections from population data for 2018 that there will be an increase in population in 2019, 2020, 2021, and 2022 and will start to decline in 2023. This is taking into account future fertility, mortality, and migration that will occur in an area. From the results of the projected population, then the projected growth rate for 2019, 2020, 2021, and 2022 population is analyzed from the 2018 basic data. The population growth rate is calculated by the formula:

$$r = \frac{1}{t} \ln\left(\frac{P_t}{P_o}\right)$$

Information:

Pt = Population in year t

Po = Total population in the base year

t = timeframe

r = population growth rate

The results of the projected population growth rate for the city of Tegal are obtained by the calculation results as presented in the following table:

Table : Projected Population Growth Rate in 2019, 2020, 2021 and 2022
(With basic data of 2018 Population Growth)

District	Population Growth Rate (%)	Year Population Growth Rate Projection (%)			
	2018	2019	2020	2021	2022
Tegal Barat	8.32	21.01	15.07	10.05	9.47
Tegal Timur	6.99	17.90	12.98	8.74	0.41
Tegal Selatan	15.27	21.10	15.15	10.12	5.27
Margadana	29.47	23.34	16.67	9.86	5.79
Kota Tegal	**13.84**	**20.64**	**14.84**	**9.64**	**5.19**

Source: Analysis Results, 2019

The table shows the highest population growth rate in 2019 and 2020. This shows that population growth began to occur in 2019 and 2020. The table above shows the fastest rate of population growth (2018–2022) in the Margadana sub-district, then southern Tegal, West Tegal, and East Tegal. Therefore, it is necessary to take steps to reduce the rate of population growth, such as more socialization about family planning. In addition, the use of contraceptives by women of childbearing age and those who are married also needs to be increased.

The average population growth ratio from 2018 to 2022 in the West Tegal sub-district is 0.78. The average population growth ratio from 2018 to 2022 in the East Tegal sub-district is 0.80. The average population growth ratio from 2018 to 2022 in the South Tegal sub-district is 0.77. The average population growth ratio from 2018 to 2022 in the Margadana sub-district is 0.76. Meanwhile, the average population growth ratio from 2018 to 2022 in the city of Tegal is 0.78.

Furthermore, the population is analyzed by age group, namely 0-4; 5-14; 15-24; 25-49; 50-64; and >65. The purpose of this analysis is to determine the total population of productive and non-productive groups. In addition, to assist the analysis of the population of school age, working age, and the age of elderly. The analysis uses Spectrum 5 software with basic population data by age group in 2018.
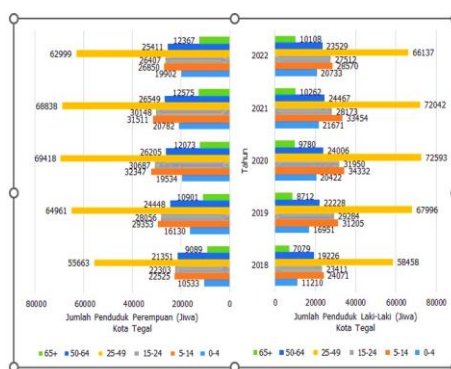

Figure : Total Population of Tegal City by Age Group 2018 to 2022

In general, the figure shows the projected population in the city of Tegal, where the highest increase in population occurred at the very productive ages 25-49 in 2019 and peaks in 2020 and 2021. Meanwhile, the population group with unproductive ages 5-14, is the second group that also experienced an increase. And the population group with productive ages 15-24, is the third group that has also experienced an increase. Regional government must pay close attention to the increase in the population in the age group 5-14 and 15-24 because this is a candidate for a very productive age group. The local government must prepare education for both soft and hard skills for the 5-14 and 15-24 age groups so that they don't become a burden (unemployment) in the future. In addition, the productive age group of 50-64 is the age group that is ready to enter retirement. The 50-64 age group must also be equipped with soft skills and knowledge of how to enter retirement and what things to do in retirement. This is to reduce dependence on the productive age group.

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Table above also illustrates the distribution of the female reproductive age group (15-49) from each sub-district, approximately 50-60% of the total female population in each sub-district. Therefore, attention is needed to handle it, for example, the introduction of family planning, contraceptives, posyandu. The distribution of the adolescent age group (5-14) from each sub-district is around 17-25% of the total population in each sub-district, so it is necessary to pay attention to the socialization of early sex education. Skills activities based on character education, creativity, and skills from the Service in charge of the youth sector. The distribution of the toddler age group (0-4) from each sub-district is around 9-15% of the total population in each sub-district, so it is necessary to pay attention to infrastructure, for example, the number of posyandu, education on nutritional needs from the health office so that they can produce a golden generation from the city of Tegal. The distribution of the elderly age group (> 65) from each sub-district is around 5-10% of the total population in each sub-district. This also needs attention with training to stay productive in old age and also socialization on how to maintain health in old age.

Furthermore, to find out the demographic bonus year, the age group was reduced to 3 categories, namely Groups 0-14, 15-64, and >65. A demographic bonus is a condition in which the composition of the productive age population is greater than the unproductive age population. The productive age population is the population in the age range of 15-64 years. The demographic bonus has a positive value and great benefits from a development standpoint if it is managed professionally because of the potential for the population dependency ratio to decrease. The dependency ratio is the ratio between the non-productive age population and the productive age population. But the demographic bonus also has a negative impact on development efforts. When a region does not prepare itself well in welcoming the demographic bonus period, the consequences that occur are negative impacts that must be borne by all parties. The results of the demographic bonus analysis can be seen in the following figure
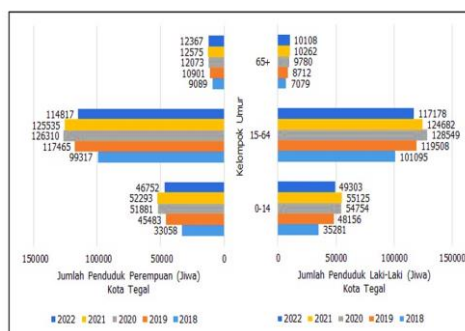

Image: Demographic Bonus Analysis for Tegal City

In general, the figure shows that demographic bonuses in the city of Tegal will occur in 2020 and 2021. In 2018 the population of the productive age group 15-64 is 200412 people, and it is projected that in 2019 there will be 236973 people, in 2020 there will be 254859 people, in 2021 there will be 250217 people, and in 2022 number is 231995 people. Meanwhile, the population in the non-productive age group (0-14 and >65) in 2018 is 84507 people, and it is projected that in 2019 there will be 113252 people, in 2020 there will be 128488 people, in 2021 there will be 130255 people, and in 2022 there will be 118530 people. In addition, Figure IV.3e also shows that the female population aged >65 is more than the male population.

The dependency ratio is the ratio between the productive age population and the non-productive age population. The dependency ratio is useful as an indicator to measure the economic level of a region. In this case, the dependency ratio is also able to determine an area as a developed area or a developing area. Because an area that has more ages classified as productive age will be more likely to produce a state of balance from the income of an area. Based on the age group of the population, the population can be divided into three major age groups, namely: the young age group (<14 years), the adult age group (15 - 64 years), and the old age group (> 65 years). From the classification of the three population age groups, those classified as productive population consist of the adult age group, while the non-productive population consists of the young age group and the old age group. The results of the dependency ratio analysis can be seen in Table IV.6. The dependency ratio is calculated using the formula:

Tabel : Dependency Ratio/Rasio Ketergantungan Kota Tegal Tahun 2018 , 2019, 2020, 2021 dan 2022

Districtn	Dependency Ratio (%)				
	2018	2019	2020	2021	2022
Tegal Barat	43.06	48.68	51.28	52.24	51.92
Tegal Timur	41.79	46.84	49.33	50.34	50.20
Tegal Selatan	42.47	48.20	50.87	51.87	51.55
Margadana	41.35	47.61	50.38	54.38	50.86
Kota Tegal	**42.17**	**47.79**	**50.42**	**52.06**	**51.09**

Source: Analysis Result, 2019

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The greater the dependency ratio means, the greater the burden of dependents for the productive age group. High or low dependency ratios can be distinguished into three groups, namely: low dependency ratio if less than 30, medium dependency ratio if 30 - 40, and high dependency ratio if more than 41. Table IV.6 shows the dependency ratio in 2018 of 42.17%. This indicates that for every 100 people of productive age in 2018, 42 people of non-productive age will have to support them. According to the 2019 population projection, the dependency ratio is 47.79%. This indicates that for every 100 people of productive age in 2019, 47 people of non-productive age will have to support them. Whereas in 2020, the dependency ratio is 50.42%. This indicates that for every 100 people of productive age in 2020, 50 people of non-productive age will have to support them. And in 2021, the dependency ratio will be 52.06%. This indicates that for every 100 people of productive age in 2021, they will have to support 52 people of non-productive age. In 2020 and 2021 the dependency ratio will increase because this year the population of Tegal City has increased. If not anticipated by the local government, this could result in a higher dependency ratio and could result in a lower level of welfare for the people of Tegal City.

Analysis of the structure of the quality of the population in the effort to manage and utilize the demographic bonus can be seen from the factors of education and health.

2. Education Policy

The city of Tegal has now entered the demographic bonus phenomenon, which is a phenomenon in which the city of Tegal has experienced a significant increase in the productive age population (15-64 years). Based on the results of the demographic bonus analysis, 2020 and 2021 are years where the productive age (15-64 years) reaches 50-60 percent. While the remaining 40-50 percent are residents of non-productive age (0-14 years and > 65 years). When viewed from the numbers, the projected population of productive age will reach around 254859 people in 2020 and 250217 in 2021. Meanwhile, the non-productive population will be 128488 people in 2020 and 130255 people in 2021

In addition, the analysis of the population dependency ratio for Tegal City will peak in 2020 and 2021, namely 50.42% and 52.06%. The dependency ratio will decrease after 2021. This means that for 10 years after 2021, Tegal City will have the smallest population dependency ratio. Thus, there will be a more productive age population that can be utilized for regional development. This demographic bonus does not come automatically. Therefore this can be a blessing and an opportunity for the City of Tegal. However, if Tegal City fails to optimize this demographic bonus, there will be enormous losses.

Efforts to optimize this demographic bonus require cooperation from all levels of society and related institutions. Also, the government as an agent of development produces a productive age population with superior quality. Where the productive age population has superior competence in their respective fields and is able to compete in the national and international arena. In order to produce a quality population of productive age, all elements of society and the government must immediately improve. Especially in the field of education. The school-age population must receive quality and equitable education in all sub-districts in Tegal City.

This quality education is not only to create productive young people with cognitive abilities. But also to create young people who have special skills according to their interests and talents. Also, it must train the younger generation to have high patterns of thinking, insight, and creativity. And also instilled awareness and social sensitivity. So, when they graduate from school they can immediately enter the world of work with appropriate wages. On the other hand, they can also open their own business according to their respective abilities and skills, create new jobs, to contribute to helping the government in reducing unemployment. In addition, new innovations and breakthroughs will emerge in various aspects of life to support the welfare of the people of Tegal City.

Currently, there are 135 elementary schools in Tegal City, 33 junior high schools, and 32 high schools/vocational schools, which are spread across 4 sub-districts. A number of existing schools served 20141 students at the elementary level, 11972 students at the junior high level, and 13397 students at the high school/vocational school level. The number of elementary school teachers is 1300, at the junior high school level there are 757 teachers, and at the high school/vocational school level are 1030 teachers. There are 928 students accommodated in classrooms at the elementary level, 485 at the junior high school level, and 561 classrooms at the SMA/SMK level. Registered students were formed into 923 study groups (groups) at the elementary level, 457 study groups at the junior high school level, and 548 study groups at the high school/vocational school level. This data was taken from http://dapo.dikdasmen.kemdikbud.go.id/guru/2/036500 on September 9, 2019. Data for 2018 shows the total population of school age 7-18 is 55456 people. While the student data for 2018 totaled 45510. This means that there are around 17% of the school-age population who are not in school. The results of the analysis of the ratio of the total population and the number of students in 2018 are presented in the table

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Table: Ratio of Total Population and Number of Students in 2018

Age group	Category	Total population	Number of Students	Ratio
7-12	SD	28080	20141	1.39
13-15	SMP	13733	11972	1.15
16-18	SMA/SMK	13643	13397	1.02
Jumlah		55456	45510	

Furthermore, from the ratios obtained from the table, it is possible to project the number of students attending school in the demographic bonus years, namely 2020 and 2021. The analysis uses the projected population in 2020 and 2021 according to age group. The results of the projected analysis of the number of people attending school in the demographic bonus year are presented in Table

Table: Projection of the Number of Schooled Population in the Demographic Bonus Year

Age Group	Category	Population Projection			Projection of Number of Students		
		2020	2021	2022	2020	2021	2022
7-12	SD	31138	30774	29118	22334	22073	20886
13-15	SMP	15222	15200	14654	13270	13251	12775
16-18	SMA/SMK	14996	14928	14353	14726	14659	14094
Jumlah		63376	62923	60147	52350	52004	49777

The table shows that there are a number of school-age residents, both SD, SMP, and SMA/SMK who do not attend school. About 28% of the elementary school-age population, 13% of the junior high school-age population, and 2% of the senior high school/vocational school-age population do not attend school. This must be the concern of the Tegal City government so that school-age residents who do not attend school do not become a burden on the residents/community of Tegal City in the future. The Tegal City government also needs to anticipate an increase in the school-age population by preparing existing educational facilities and infrastructure. Does it meet national education standards and meet minimum service standards according to Permendiknas No. 24 of 2007 concerning facilities and infrastructure standards and Permendikbud No. 23 of 2013 concerning minimum service standards for education in districts/cities. The results of the analysis include the number of schools, the number of classrooms, the number of teachers, and the number of study groups, both at the SD, SMP, and SMA/SMK levels. The results of the analysis of the needs for educational facilities and infrastructure in Tegal City based on the projected increase in population can be seen in the table for the elementary level, the table for the junior high school level, and the table for the high school/vocational school level.

Table: The Need for Educational Facilities and Infrastructure for Elementary Schools (SD) in Tegal City in the Demographic Bonus Year

Education Indicator	Education Standards	2018	Projection		
			2020	2021	2022
Jumlah SD/Mi		135	135	135	135
Jumlah Peserta Didik (PD)		20141	22334	22073	20886
Jumlah Ruang Kelas		928	928	928	928
Jumlah Rombongan Belajar (Rombel)		923	923	923	923
Jumlah Guru		1300	1300	1300	1300
Rasio Jumlah PD/Sekolah	1 Sekolah Maks. 2000 PD	149	165	164	155
Rasio Jumlah PD/Ruang Kelas	1 kelas 28 PD	22	24	24	23
Rasio Jumlah PD/Rombel	tidak lebih 32 PD	22	24	24	23
Rasio Jumlah PD/Guru	1 guru/32 PD	15	17	17	16
Rasio Guru/Sekolah	Min. 6 guru/sekolah dan 1 guru/32 siswa	10	10	10	10
Rasio Rombel/Sekolah	Min. 6 dan Maks. 24 Rombel/sekolah	7	7	7	7

Table: Need for Middle School Education Facilities and Infrastructure Tegal City in the Demographic Bonus Year

Education Indicator	Education Standards	2018	Projection		
			2020	2021	2022
Jumlah SMP/Mts		33	33	33	33
Jumlah Peserta Didik (PD)		11972	13270	13251	12775
Jumlah Ruang Kelas		485	485	485	485
Jumlah Rombongan Belajar (Rombel)		457	457	457	457
Jumlah Guru		757	757	757	757
Rasio Jumlah PD/Sekolah	1 Sekolah Maks. 2000 PD	363	402	402	387
Rasio Jumlah PD/Ruang Kelas	1 kelas 28 PD	25	27	27	26
Rasio Jumlah PD/Rombel	tidak lebih 36 PD	26	29	29	28
Rasio Jumlah PD/Guru	1 guru/32 PD	16	18	18	17
Rasio Guru/Sekolah	Min. 6 guru/sekolah dan 1 guru/32 siswa	23	23	23	23
Rasio Rombel/Sekolah	Min. 6 dan Maks. 24 Rombel/sekolah	14	14	14	14

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Table : The Need for Educational Facilities and Infrastructure for High School/Vocational Schools (SMA/SMK) in Tegal City in the Demographic Bonus Year

Education Indicator	Education Standards	2018	Projection		
			2020	2021	2022
Jumlah SMA/SMK/MA		32	32	32	32
Jumlah Peserta Didik (PD)		13397	14726	14659	14094
Jumlah Ruang Kelas		561	561	561	561
Jumlah Rombongan Belajar (Rombel)		548	548	548	548
Jumlah Guru		1030	1030	1030	1030
Rasio Jumlah PD/Sekolah	1 Sekolah Maks. 2000 PD	419	460	458	440
Rasio Jumlah PD/Ruang Kelas	1 kelas 28 PD	24	26	26	25
Rasio Jumlah PD/Rombel	tidak lebih 36 PD	24	27	27	26
Rasio Jumlah PD/Guru	1 guru/32 PD	13	14	14	14
Rasio Guru/Sekolah	Min. 6 guru/sekolah dan 1 guru/32 siswa	32	32	32	32
Rasio Rombel/Sekolah	Min. 6 dan Maks. 24 Rombel/sekolah	17	17	17	17

The table above shows that the condition of educational facilities and infrastructure at the elementary, junior high, and high school/vocational school levels still meets national education standards and minimum service standards. Even though the total population of school-aged 7-18 years experienced an increase in the demographic bonus year, there was no need to increase either the number of schools, the number of classrooms, the number of teachers, or the number of study groups at the SD, SMP and SMA/SMK levels. Next, the projection of the population based on education is analyzed based on the population growth ratio from the 2018 population data. The results of the analysis of the population growth ratio for Tegal City in the 2020 and 2021 demographic bonus years from the 2018 population data are 0.74 and 0.75. Then from this ratio, the population is analyzed based on education in 2018.

In general, it is possible to project the number of people based on education in the demographic bonus years, namely 2020 and 2021. The purpose of this analysis is to prepare steps to deal with the educated population, especially high school/vocational high school graduates, diplomas, and undergraduates. In addition, facilities and infrastructure can be prepared for residents who are not/not yet in school, have not graduated from elementary school/equivalent, have completed elementary school/equivalent, and junior high school/equivalent. The results of the analysis of population projections based on education in the demographic bonus year are presented in Table

Table: Projection of Population Based on Education inDemographic Bonus Year 2020 and 2021 (From 2018 Disdukcapil Education Based Population Data)

Group	2018	2020	2021
Tidak/Belum Sekolah	66194	89451	88259
Belum Tamat SD/Sederajat	21133	28558	28177
Tamat SD/Sederajat	76975	104020	102633
SMP/Sederajat	42660	57649	56880
SMA/Sederajat	59396	80265	79195
Diploma I/II	777	1050	1036
Akademi/Diploma III/Sarjana Muda	4807	6496	6409
Diploma IV/Strata I	12259	16566	16345
Strata II	705	953	940
Strata III	13	18	17

The table above shows the projected population in the demographic bonus year for high school graduates/equivalent and diploma IV/stratum I graduate. Of course, empowerment steps must be prepared, so as not to become unemployed and burden the community. These steps include cooperating with labor users and regularly holding job fairs. In addition, related agencies need to conduct MSME training, so that the entrepreneurial spirit can be motivated. The city government in collaboration with existing banks, held training on how to access micro-finance so that high school graduates/equivalent and diploma IV/stratum I can become entrepreneurs. The aim of this activity is that educated graduates, especially diploma IV/strata I graduates, can become pioneering agents for job openings in the regions.

Residents of strata II and III graduates who are generally already working, local governments can use these resources, to analyze social problems that exist in their environment. Meanwhile, for junior high school graduates/equivalent and below those who have not yet attended school, the government is more active in socializing the 12-year compulsory education and facilitating access to school. In addition, for residents who cannot afford it, the government has prepared educational assistance such as Smart Indonesia Cards and School Operational Assistance. With these steps, it is hoped that educated residents can be properly empowered so that they become productive residents who can bring prosperity to the City of Tegal Health

3. Health Policy
A demographic bonus is understood as a condition in which the composition or structure of the population is very advantageous from a development standpoint because the productive age population is very large, while the proportion of the unproductive population (aged <14 years and above >65 years) is getting smaller and not many.

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Judging from the analysis of the current demographic structure of Tegal City, in 2020 and 2021, Tegal City has the opportunity to experience a demographic bonus, in which this area will have around 250 thousand people of productive age, while those who are not productive will decrease to 130 thousand people. This means that 100 people of productive age bear 50 people of non-productive age. The impact on economic growth and regional development is an increase in public savings and national savings, which will lead to a better level of community welfare.

However, this demographic bonus does not automatically have a positive impact on regional development goals. Like a double-edged sword, the demographic bonuses can have a positive but also a negative impact on the development efforts of a region. When the regions do not prepare themselves well in welcoming the demographic bonus period, the consequences that occur are negative impacts that must be borne by all parties. Without being equipped with adequate quality human resources, such a large proportion of the productive age population at that time would only create an adverse impact on regional development. One of the negative impacts that can be predicted is the number of uncontrolled unemployment because it is not absorbed into existing employment due to qualifications and quality that do not meet the standards of available work.

Such conditions will have a chain effect on various areas of human life. Reduced income levels due to imbalances between the required qualification standards and inadequate quality of human resources, can trigger a spike in the poverty rate, which has a negative impact on people's economic life, education, and health. In other words, all development stakeholders are unprepared in welcoming the period This demographic bonus through good human development will make the region fail to take advantage of this rare window of opportunity. The extent to which the region is preparing for human development today will determine the extent to which the region will succeed in taking advantage of this demographic bonus opportunity.

From a human development perspective, it is no doubt that the demographic bonus period of 2020 and 2021 is the most appropriate period to prepare a solid foundation for this demographic bonus period. The most basic question is whether the regions have really prepared themselves from various aspects to be able to make optimal use of this demographic bonus period. From a human development perspective, it is no doubt that the demographic bonus period of 2020 and 2021 is the most appropriate period to prepare a solid foundation for this demographic bonus period. The most basic question is whether the regions have really prepared themselves from various aspects to be able to make optimal use of this demographic bonus period.

The success of developing health facilities and infrastructure in the regions will greatly determine the success of the regions in optimally utilizing the demographic bonus. Various health development programs initiated and implemented by the local health officials are expected to make a positive contribution to efforts to optimize the upcoming demographic bonus period. Therefore, in order to take advantage of the demographic bonus period, it is necessary to identify the number of health facilities and personnel in Tegal City. The following tables contain data on health facilities and personnel in Tegal City (data taken from the Tegal Book in Figures for 2018).

Table : Health Facilities in Tegal City (Data for 2017 from the Tegal Book in Figures for 2018)

District	Hospital	Maternity Hospital	Public health center	Integrated Service Post
Tegal Barat	1	0	2	58
Tegal Timur	0	0	2	58
Tegal Selatan	3	1	2	47
Margadana	0	0	2	39
Kota Tegal	**4**	**1**	**8**	**202**

Table: Health Workers in Tegal City (Data for 2015 from the Tegal Book in Figures for 2018)

District	Medical personnel	Nursing Staff	Midwifery	Pharmaceutical Staff	Other Health Workers
Tegal Barat	63	130	53	25	16
Tegal Timur	5	25	32	2	17
Tegal Selatan	126	749	149	130	110
Margadana	5	24	13	5	13
Kota Tegal	**199**	**928**	**247**	**162**	**156**

The realization of a healthy family supported by adequate nutrition will provide a solid foundation for the realization of quality human resources that can respond to challenges in this rare demographic period. A healthy family with good nutrition plays a fundamental role because it serves as the foundation for achieving other regional development goals.

In this sense, investment in nutrition in regional development plays a very crucial role. The importance of investing in nutrition for human development is reflected in research conducted by a panel of experts consisting of the world's leading economists, and set forth in The Copenhagen Consensus 2012. These economists found that the smartest way to allocate money to face the world's 10 main challenges is to invest in improving the nutritional status of the population. Furthermore, the expert panel

identified that nutrition can help break the cycle of poverty and increase the GDP of a region. Investing in nutrition can pay off in the form of improved health, education, and economic productivity.

It is self-evident that without healthy individuals with adequate nutrition it is impossible for the population of an area to attain a high level of education. A healthy family with adequate nutrition is a pre-condition for achieving other development goals because it is impossible for residents of an area to realize competitive resources without these basics.

Given the urgency of health development in determining the success of utilizing the demographic bonus, all relevant stakeholders must not lose momentum at this time to accelerate the improvement of people's nutrition as optimally as possible. The loss of momentum to accelerate achievements in the field of nutrition at this time will result in the inability of regions to optimally utilize the demographic bonus at the right time. In order to take advantage of the existing momentum, it is necessary to be supported by adequate health facilities. If health facilities, in this case, hospitals and puskesmas are not added (according to the number of hospitals and puskesmas in Table V.5a, the results of the analysis show that there is an excess number of patients and does not meet the existing standards. Unfulfilled health standards essentially violate human rights, because health is a basic right for every citizen. In accordance with Permenkumham No. 34 of 2016 concerning the criteria for a city/district that cares about human rights, 1 health center can only serve a maximum of 16,000 residents. The results of the analysis of the ratio of the number of residents to the number of puskesmas (if the number of puskesmas follows Table V.5a) can be seen in the following table

Table: Projection of the Ratio of Total Population to Number of Community Health Centers (if the number of puskesmas follows Table V.5a)

District	Ratio Projection		
	2020	2021	2022
Tegal Barat	46964	46963	42780
Tegal Timur	54644	54778	50729
Tegal Selatan	46979	47002	42840
Margadana	43088	43091	38914
Kota Tegal	**47919**	**47958**	**43816**

The table shows that there is an excess of patients handled by each puskesmas in Tegal City. The excess of patients is about 3 times the standard of service according to human rights. While the results of the analysis of the ratio of population to the number of hospitals (if the number of hospitals follows Table above) can be seen in the following table:

Table: Projected Population Ratio for 4 Hospitals (if the number of hospitals follows Table above)

Year	Population Projection	Ratio of Population to 4 Hospitals
2017	248094	62024
2018	284919	71230
2019	350225	87556
2020	383347	95837
2021	380472	95118
2022	350525	87631

The table shows that in the demographic bonus year 1, hospitals in Tegal City are projected to handle 95837 people in 2020 and 95118 people in 2021. This has increased by 35% when compared to conditions in 2017. This makes hospital services for patients are decreasing and it is feared that it will reduce the quality of public health. Therefore, it is necessary to increase the number of puskesmas as level 1 health facilities in the community. The results of the analysis of the number of health centers needed, adjusted for the projected population in the demographic bonus year, can be seen in the following table

Table: Number of Community Health Centers Required, adjusted accordingly Population Projection in the Demographic Bonus Year (Service standard 1 health center serves 16000 population)

Subdistrict	2018		2020		2021	
	Number of Health Centers	Raio	Number of Health Centers	Raio	Number of Health Centers	Raio
Tegal Barat	4	17370	6	15655	6	15654
Tegal Timur	5	16859	7	15613	7	15651
Tegal Selatan	4	17350	6	15660	6	15667
Margadana	4	15436	6	14363	6	13831
Kota Tegal	**17**	**16760**	**25**	**15334**	**25**	**15219**

The table shows that increasing the number of puskesmas as level I health facilities in each sub-district, it will make the ratio of the population to the puskesmas following the minimum service standards in accordance with human rights. The addition of these puskesmas aims to achieve healthy families and have adequate nutrition and have productive value in the future, so health development policies and programs must rely on preventive and promotive approaches as the main pillars. Successfully implementing preventive and promotive approaches appropriately will save enormous financial resources, so that these resources can be diverted to more productive goals.

GERMAS is characterized, among other things, by a strong emphasis on multisectoral cooperation, the social balance between families and individuals, and community empowerment. To achieve the goals to be targeted, this movement is focused on

three main activities, namely: 1) increasing physical activity; 2) consumption of vegetables and fruit, and 3) early detection of non-communicable diseases (PTM). The efforts to achieve this Healthy Living Community Movement must be built on the foundation of developing nutrition for all levels of society. Successful nutrition development relies on food availability and security, as well as access to these food sources in a sustainable manner by the community.

The role of a strong partnership involving multi-sectoral stakeholders is crucial to the success of investment in nutrition development. Due to the cross-sectoral nature of nutrition development and covering various economic, social, and cultural aspects in society, a holistic approach is needed to tackle the problem of malnutrition. Therefore, an adequate number of posyandu are needed to be able to serve toddlers (five-year-old babies), so that nutritional problems can be anticipated. The number of posyandu in Tegal City is 202 and spread over 4 sub-districts (Table V.5a). The results of the analysis show that there is an excess number of children under five handled per 1 posyandu. The service standard states that each Posyandu serves a maximum of 50 toddlers. The results of the identification of the number of children under five aged 0-5 years and the ratio of the number of children under five to posyandu (if the number of posyandu is the same as Table above) can be seen in the following table:

Table: Projection of Total Population 0-5 Years and Ratio of Total Population 0-5 Years to Number of Posyandu in Demographic Bonus Year (if the number of Posyandu follows the table above)

District	2018		2020		2021	
	Total Population 0-5	Ratio to Number of Posyandu	Total Population 0-5	Ratio to Number of Posyandu	Total Population 0-5	Ratio to Number of Posyandu
Tegal Barat	6419	111	11328	195	11825	204
Tegal Timur	7501	129	12841	221	13549	234
Tegal Selatan	6718	143	11597	247	12066	257
Margadana	5755	148	10787	277	11328	290
Kota Tegal	26393	131	46553	230	48768	241

The table shows that there is an excess of 2-3 times the number of population aged 0-5 years or toddlers handled by 1 posyandu. This exceeds the service standard where 1 Posyandu only serves 50 toddlers. This is feared to have long-term adverse effects from problems of malnutrition and unhealthy lifestyles. Because the role of posyandu as a service facility for toddlers is not working optimally to serve families and the community. Services that are not optimal will cause huge losses which will be borne due to malnutrition and unhealthy lifestyles. Posyandu plays a role in encouraging the community to adopt a healthy lifestyle and implement guidelines for optimally balanced nutrition, especially for toddlers. Therefore, it is necessary to increase the number of posyandu so that service to the community becomes optimal. The results of the analysis of the number of posyandu needed, adjusted for the projected population in the demographic bonus year can be seen in the table

Table: Number of Posyandu Required, adjusted to Population Projection in the Demographic Bonus Year (Service standard 1 posyandu serves 50 residents aged 0-5 years)

District	2018		2020		2021	
	Number of Posyandu	Ratio	Number of Posyandu	Ratio	Number of Posyandu	Ratio
Tegal Barat	58	111	225	50.35	235	50.32
Tegal Timur	58	129	260	49.39	270	50.18
Tegal Selatan	47	143	230	50.42	240	50.28
Margadana	39	148	215	50.17	225	50.35
Kota Tegal	202	131	930	50.06	970	50.28

The table shows that increasing the number of posyandu as health facilities serving the community and toddlers in terms of nutrition guidelines and healthy lifestyles in each sub-district, it will make the ratio of population to posyandu in accordance with minimum service standards in accordance with human rights. In addition, education plays a central role in efforts to improve community nutrition. The introduction and awareness of healthy consumption patterns need to be increased among the local community. This is the central role of Posyandu as a facility that can monitor healthy lifestyles in the community, both at the grassroots level and among those who are more economically affluent, to know what a healthy lifestyle and balanced nutrition guidelines are. In addition to adding health facilities, of course, an adequate number of health workers must be followed. The number of health workers according to the data in the 2018 Tegal Book in Figures can be seen in the table

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Table: Health Workers in Tegal City (Data for 2015 from the Tegal Book in Figures for 2018)

District	Medical personnel	Nursing Staff	Midwifery	Pharmaceutical Staff	Other Health Workers
Tegal Barat	63	130	53	25	16
Tegal Timur	5	25	32	2	17
Tegal Selatan	126	749	149	130	110
Margadana	5	24	13	5	13
Tegal City	**199**	**928**	**247**	**162**	**156**

If the number of health workers is the same as the data in Table 1, the service to the community will not be optimal. Services that are not optimal can result in a decrease in the quality of public health. The results of the analysis of the ratio of the number of population to the number of health workers (if the number of health workers follows Table V.5b) can be seen in Table

Table: Projection of the Ratio of Total Population to Number of Health Workers in the Demographic Bonus Year(if the number of health workers follows the table above)

Tahun	Population Projection	Medical Personnel Ratio	Nursing Personnel Ratio	Midwifery Ratio	Pharmaceutical Workforce Ratio	Ratio of Other Health Workers
2018	284919	1432	307	1154	1759	1826
2020	383347	1926	413	1552	2366	2457
2021	380472	1912	410	1540	2349	2439
2022	350525	1761	378	1419	2164	2247
Service standard		2500	855	1000		

The service standards set for the number of health workers are only medical staff, nursing staff, and midwifery staff. Where the standard of service according to human rights states that 1 medical staff serves 2500 people, 1 nursing staff serves 855 people, and 1 midwife serves 1000 people. Therefore, Table V.12 shows that the City of Tegal has a shortage of midwives to serve the population surge in the demographic bonus year. Meanwhile, media staff and nursing staff still meet service standards. The results of the analysis show that a minimum of 380 midwives are needed to serve the projected population in the demographic bonus years, namely 2020 and 2021 so that 1 midwife serves only 1,000 residents.

The challenges ahead in the framework of community nutrition development, especially in efforts to make optimal use of the demographic bonus period, are still quite tough. It is the joint task of the Tegal City government, civil society, the private sector, and the people themselves to work hard at this time to ensure that the demographic bonus period does not pass by, let alone create a negative impact on all levels of society.
towards the area.

4. Manage advantage of The Demographic Bonus
In taking advantage of the demographic bonus, the effort to improve that can be done through quality education in all components, both government and elements of society, especially the younger generation.Given the importance of the role of the younger generation in running the wheel of life of an area in the future, quality education provides a good innovation to form a generation that is beneficial to the surrounding environment, especially contributing by being the main actor in gaining benefits from demographic bonuses. Quality education in question is not only limited to formal learning, such as the paradigm of society in general. But also related to policies, programs, and implementation in everyday life, including:
1. Related to the Field of Education
Skills education is one way to improve the quality of human resources and to produce people who are ready to work. There are three routes that the local government should prepare through the vocational route. Starting from strengthening the vocational education pathway (SMK), and also training/courses.
The city government needs to organize an educational program that prioritizes competence, not just a diploma. This investment in skills education will cost quite a lot because vocational schools must be equipped with adequate facilities and infrastructure, but this is a long-term investment.
Skills education is directed at the tourism, conductor, electricity, agricultural (including fisheries and marine) sectors, the food and beverage, electronics, digital technology and automotive sectors. These fields can become good skills capital for the younger generation of Tegal City. The related education office is sharpening and rearranging the curriculum, and the curriculum will always be updated. So that there is no mismatch between what we produce and work requests.
Good education in industry 5.0 is a very big challenge, especially now that there is Artificial Intelligence (AI) or artificial intelligence. But on the other hand, jobs that require high levels of reasoning skills are emerging. For example, data analysis,

information science, and programming. Therefore, in addition to vocational education, the curriculum in general education (such as high school), also needs to be updated in both the curriculum and learning methods so that it prioritizes analytical and problem-solving skills.

For this reason, the policy direction of the relevant education office must focus on improving the learning culture. The learning culture that is developed must be based on the character, mind, and physical education of students, with fun methods but still learning. Learning methods like this will produce students with high competence. Thus, this can be a foundation for high-level skill resilience, both in general and vocational education, but forms students with a learner character

2. Related to the health sector

In facing the demographic bonus, the relevant health office needs to improve the Healthy Community Movement program, which aims to 1) increase physical activity; 2) consumption of vegetables and fruit, and 3) early detection of non-communicable diseases (PTM). Imunition dan health protocol. The efforts to achieve the Healthy Living Community Movement must be built on the foundation of developing nutrition and antibody for all levels of society.

E. CONCLUSION

From the results of research in the field of education, it was found that 28% of the elementary school age population, 13% of the junior high school age population and 2% of the high school/vocational school age population did not attend school which had to be brought to the attention of the Tegal City government so that the school age population who did not attend school would not become a burden on the city's population/community. Tegal at a later date. The increase in the school-age population also needs to be anticipated by the Tegal City government, by preparing adequate educational support facilities and infrastructure.

In the health sector, in the demographic bonus year there was an excess of patients handled by each community health center. The excess of patients is about 3 times the standard of service according to human rights. Where is 1 hospital in Tegal City, it is projected to handle 95837 people in 2020 and 95118 people in 2021 an increase of 35%. Besides that, there is an excess of 2-3 times the number of the population aged 0-5 years or toddlers who are handled by 1 integrated service post and a lack of midwifery staff to serve the population surge. The results of the analysis need to add more health centers, posyandu and at least 380 midwives with the aim of achieving healthy families who have adequate nutrition and have productive value in the future. Health development policies and programs must rely on preventive and promotive approaches as the main pillars. Therefore, it is necessary to accelerate the improvement of community nutrition and the application of health protocols, immunization week as optimal as possible

there is an excess of 2-3 times the number of population aged 0-5 years or toddlers handled by 1 posyandu. This exceeds the service standard where 1 Posyandu only serves 50 toddlers. Therefore, it is necessary to increase the number of posyandu so that service to the community becomes optimal.

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