

CHAPTER II

GENERAL DESCRIPTION OF RESEARCH OBJECT

2.1 General Description of Tasikmalaya Regency

2.1.1 Vision and Mission of Tasikmalaya Regency Government

The vision of Tasikmalaya Regency Development in 2005-2025 is "Tasikmalaya District Religious / Islami, Advanced dan Prosperous 2025".

The mission of Tasikmalaya Regency Government is:

- 1) Creating a society that is faithful, devoted, qualified and independent
- 2) Achieve a tough economy based on agribusiness excellence
- 3) Achieve good governance
- 4) Realizing Infrastructure Territory More Equal With Attention to the Aspects of the Environment as Beautiful and Sustainable

2.1.2 Area and Administrative Boundaries of The Region

Tasikmalaya Regency is an agrarian area with a religious community life, located in the eastern region of West Java Province, located between 07°2' 00"- 07°48' 00" South Latitude and 107°54' 00"- 108°26' 00" East longitude, Tasikmalaya regency in the west, Garut regency in the east, Regency of Ciamis in the east, Tasikmalaya and Ciamis regency in the north and Samudera Indonesia in the south.

Tasikmalaya Regency has an area of 2,708,81 km² or 270,881 ha and administratively consists of 39 districts located in the lowlands. Tasikmalaya Regency is 914 years old experiencing a new chapter in the development of its history, that is by moving the capital to Singaparna. This move is in accordance with Government Regulation No. 30 of 2004 on Tasikmalaya Regency Capital Transfer from Tasikmalaya City to Singaparna located in Tasikmalaya Regency and has been inaugurated in August 2010.

2.1.3 Topographic Conditions

Tasikmalaya regency has an altitude ranging from 0-2.500 meters above sea level (asl). In general, the region can be distinguished by its height, namely: the northern part is a plateau region with an altitude ranging between 1,000-2,500 meters above sea level and the southern part is a lowland area with altitude ranges between 0-100 meters above sea level.

Viewed from its height, Leuwisari, Cigalontang, Sukaratu, Kadipaten, Pagerageung and Taraju districts are sub-districts with altitude 1,000 above sea level (dpl) and Cipatujah, Cikalong and Karangnunggal subdistricts are lowland areas with altitude ranging from 0-100 m above sea level (asl). While the slope slope in Tasikmalaya Regency ranges from 0%-8% to slope >40%, for the area of slope of each sub-district in Tasikmalaya Regency.

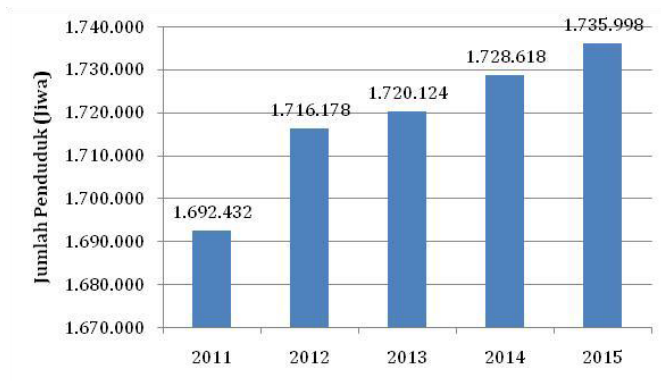
The slope of land in Tasikmalaya Regency is: Very Steep (> 40%) of 33.39% of Tasikmalaya Regency, Rough Steep (15% - 25%) by 24.54%, Steep (25% - 40%) of 20.54%, Sloping (8% - 15%) of 14.36%, and Flat (0%

- 8%) of 7.17% of Tasikmalaya Regency. From the data of the land slope, it is seen that most of Tasikmalaya Regency landscape is dominated by the steepest to steeper earth surface, which is 78.47%, the condition of the slope of the land is less favorable for the development of regional infrastructure and facilities. While the slope of land that is very supportive for the development of urban settlements only amounted to 21.53% of the total area of the district, the extent is generally distributed around the township district.

2.1.4 Demographic Conditions

Demographic conditions and developments play an important role in development planning. Population is the basic capital of development success. The magnitude, composition and distribution of the population affect the structure of space, social and economic activities of society. All aspects of development have correlations and interactions with existing population conditions, so that demographic information has a strategic position in determining the policy. The population of Tasikmalaya Regency viewed from the spatial aspect based on Central BPS projection in 2015 was recorded as 1,735,998 people.

As an overview of the rate of population development during the period of 5 years from 2011 to 2015 can be seen in the picture below:



Source: BPS Kabupaten Tasikmalaya

Figure 2.1

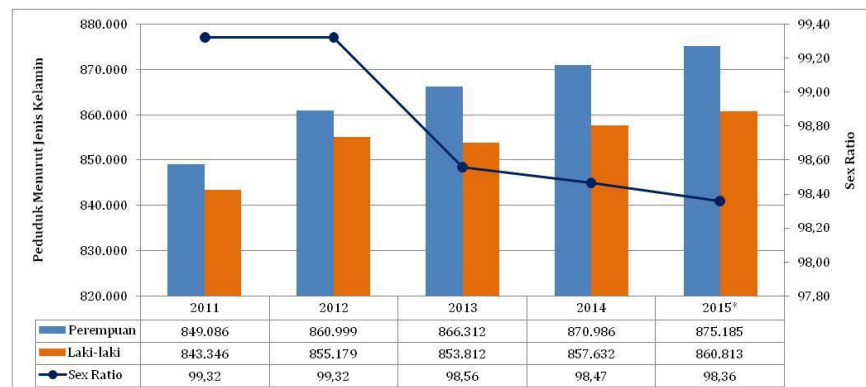
The Development of Number and Population Density of Tasikmalaya Regency Year 2011-2015

The population density of Tasikmalaya Regency in 2015 shows that Pancatengah sub-district only has a population density of 229 people per km², as the region with the lowest population density, otherwise Singaparna district has a population density of 2830 people per km², as the region with the highest population density.

Population density is the number of population that inhabits a certain region or region with units per square kilometer, the rapid population increase resulting in higher population density, along with the capital migration of Tasikmalaya Regency to Singaparna, the highest population density is compared to other districts in the Regency Tasikmalaya, this is caused Singaparna District as economic center of Tasikmalaya Regency and as center of capital of government. The problematic caused by the density of the population in a region will have a negative impact such as:

- a) Increased crime rate
- b) Unemployment
- c) Poverty
- d) Health problems
- e) Environmental problems

The population of Tasikmalaya Regency in terms of gender in 2015 consists of 860,813 men and 875,185 female residents. Sex ratio is below the number 100 that is equal to 98.36 percent. The development of sex ratio from 2011 to 2015 is presented in the following figure:



Source: BPS Kabupaten Tasikmalaya

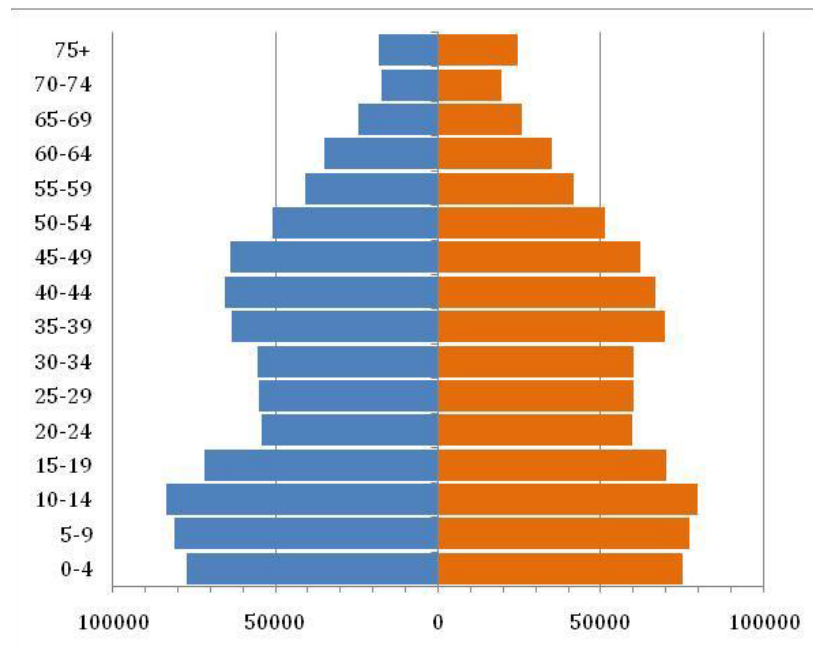
Figure 2.2
Population Development Based on Gender and Sex Ratio of Tasikmalaya Regency Year 2011-2015

The people of Tasikmalaya Regency can be analyzed according to their age structure as very important information because it deals with the risks and needs of different services in each group. Population

Census of BPS in 2010 showed that the median age of Tasikmalaya regency in 2010 was 28.62 years. This figure indicates that the population of Tasikmalaya Regency is middle category. Population of a region is categorized as young population if median <20 , middle population if median age 20-30, and old population if median age >30 years.

Estimation using BPS projection data of West Java Province shows that in 2013 the median population of Tasikmalaya Regency is 29.90 years, which means that the population of Tasikmalaya Regency is categorized as an intermediate population, ie transition from young population to old population. By 2015 the median age increases to 30.07 years and 30.16 years by 2020, meaning that the Tasikmalaya regency's population structure has entered the old age category, or is not classified as a young population structure but not yet fully structured in the old population.

Judging from the age structure, the population of Tasikmalaya Regency has already led to the old population, meaning that the proportion of young people aged 0-14 years has started to decline. If in 2011, the proportion of the young population is still 28.06%, then by 2020 this proportion decreases to 28%. In contrast in 2011 the proportion of the elderly population was 7.03% and increased to 7.21% by 2020. The increase in the elderly population reflects an increase in the average life expectancy.



Source: BPS Pusat

Figure 2.3

The Population Pyramid of Tasikmalaya Regency Year 2015

2.2 General Description of Cikalong Sub-District

2.2.1 Vision and Mission of Cikalong Sub-District Government

The vision of Cikalong Sub-district is “Making the Cikalong District Religious Religious, progressing in the field of Education and Competitive in Economy and Agriculture in Tasikmalaya Regency in 2015 for the achievement of Welfare and Community Independence”.

The mission of Cikalong Sub-district is:

- 1) Achieve education with 9 years compulsory education
- 2) Improve the quality of Education Infrastructure Facility

- 3) Improve Spiritual Education
- 4) Improving Self-Sufficiency of Food by Optimizing Infrastructure
- 5) Conducting Integrated Community capacity training
- 6) Improving the Infrastructure Facility of Village Road Transportation and Rural Development
- 7) Optimizing the Facility of Home Industry Industrial Sector
- 8) Provide Clean Water Infrastructure Facility

2.2.2 Area and Administrative Boundaries of The Region

Geographically Cikalong District is located between 107.00 - 107.30 East Longitude and 5.00 - 6.30 South Longitude, located in the southern part of Tasikmalaya City with distance of + 90 Km and trip reach 3 hours and 200 Km from West Java Province. Cikalong sub-district has 13,291.966 Ha consists of:

- a) Land : 9,111,566 Ha
- b) Wetland : 3,545,400 Ha
- c) Land of Forestry : 635,000 Ha

Cikalong Sub-district covers 13 villages, namely:

- 1) Cikalong Village
- 2) Kalapagenep Village
- 3) Cikanra Village

- 4) Singkir Village
- 5) Panyiaran Village
- 6) Cibeber Village
- 7) Cikadu Village
- 8) Mandalajaya Village
- 9) Cidadali Village
- 10) Cimanuk Village
- 11) Sindangjaya Village
- 12) Kubangsari Village
- 13) Tonjongsari Village

Cikalong Sub-district consists of 78 Hamlet, 89 Citizen Association (RW) and 315 Neighbourhood Association (RT). Geographically, Cikalong Sub-district consists of 4 villages representing Coastal Villages (Mandalajaya, Sindangjaya, Kalapagenep and Cimanuk) and 9 villages are Plains Villages (Cikalong, Tonjongsari, Cikanra, Cikadu, Kubangsari, Singkir, Panyiaran, Cibeber and Cidadali). With regional boundaries as follows:

- a) North side : Bordering with Cikatomas Sub-district
- b) East side : Bordering with Ciamis Regency
- c) South side : Bordering with the ocean of the Indonesian Ocean
- d) West side : Bordering with Karangnunggal sub-district

2.2.3 Topographic Conditions

The topography of Cikalong sub-district is generally lowland and hilly. Cikalong Sub-district is located at an altitude of 15 meters above sea level. Cikalong Sub-district is dominated by rather steep areas (slopes 15-25%) and steep (slopes 25-45%) so it is easy to move land and landslides.

Land uses in Cikalong Sub-district:

- 1) Housing and yard : 435,342 Ha
- 2) Rice Fields : 1.690.000 Ha
- 3) Rice ½ Technique and simple: 1,579,593 Ha
- 4) Plantation : 642,600 Ha
- 5) Farming field : 1,360,292 Ha
- 6) Productive forest : 635 Ha
- 7) Lake/Swamp : 132 Ha
- 8) Badlands : 32 Ha
- 9) Alang-alang (kind of grass) : 57 Ha
- 10) Pool/*Empang* : 472 Ha
- 11) Shepherded/*Pangangonan* : 586 Ha
- 12) Others : 5,471.485 Ha.

2.2.4 Demographic Conditions

The population distribution in the village is uneven because some are concentrated in Cilutung and Sindanghurip Hamlets. The number of population in Cikalong ± 60.000 inhabitants. People's livelihoods in general are tappers of coconuts, farmers, embroidery clothing, wood cutters, planting matches, and so forth.

The development is quite developed only in the center of the crowd around the village hall like Cilutung Hamlet because it borders the highway and economic activity centered in the area. While the area is located far away hamlet, less developed development and road conditions are still rocky (not paved yet).

As an overview of the rate of population development during the period of 5 years from 2011 to 2015 based on gender can be seen in the table below:

Table 2.1

Number of Population in Cikalong Sub-district based on Gender

No.	Gender	Population	Total Population
1	Male	31.379 people	62.855 people
2	Female	31.476 people	
The number of householder: 19.881 householder			

As an overview of the rate of population development during the period of 5 years from 2011 to 2015 based on age can be seen in the table below:

Table 2.2

Number of Population in Cikalong Sub-district based on Age

No.	Age	Population
1	00 – 05 y.o	7.025 people
2	06 – 15 y.o	11.889 people
3	16 – 60 y.o	38.529 people
4	61 and above	5.114 people
Total Population		62.855 people

The people of Cikalong sub-district have a variety of livelihoods, from the data of Tasikmalaya Regency, 70.42% of farmers, 1.24% miner, 11.09% breeders, 5.20% traders, 1.57% civil servants, ABRI / TNI / POLRI 0,06%, Laborer / Service 10,27%, Small Industry / Home Industry 0,06%, Tailor / Embroidery 0,09.%.

Most of the population of Cikalong Sub-district are Muslim. The number of worship facilities in Cikalong Sub-district around 18 mosques and there is no church. Religious facilities such as boarding school there are 3 pieces.

2.3 Iron Sand Mining Activity in South Coast Cikalong Sub-District

Administratively, Tasikmalaya Regency has coastal areas of Cipatujah, Karangnunggal and Cikalong sub-districts with 54.5 km² of coastline and 168,81Km² of coastal and marine areas (hilly conditions with relatively high seismesity, steep topography, deep waters, sand subtrates and coral, the current pattern influenced the flow of the Indian Ocean). Baltimetri beaches are generally steep and face to face with the Indian Ocean, resulting in large ocean waves, occasional storm surges, and relatively strong ocean currents, a constraint factor in regional development. In addition to the use of shipping lines require a high level of security.

These constraints resulted coastal areas in Tasikmalaya Regency haven't been optimally managed, where the management of its nature is still exploitative, sectoral and not yet integrated. Therefore, in the medium and long term, it is necessary to re-introduce the policy in the management and utilization of coastal resources, it is related to the potential in the coastal area economically saving the potential of capture fishery is very big as well as the potential of ecologically and socially potential coastal communities have a culture and knowledge system that is very valuable for fishing business activities and has a useful local wisdom for the efforts of conservation of natural resources.

The condition of the ecosystem in the coastal area of Tasikmalaya Regency, based on the latest report on the Regional Environment Status

(SLHD), Tasikmalaya District, illustrates the good environmental balance between the natural ecosystem environment and the ecosystem of man-made culture due to various factors such as excessive sand mining exploitation, it is necessary to have other efforts such as 'coastal zone' zoning is expected to eliminate the negative impact of natural ecosystem damage, this is in line with the mandate of Law Number 27 Year 2007, on the management of coastal areas and small islands.

The location of iron sand mining is closely related to the Geological Formation, by viewing the Geological Map that the iron sand mining is located in the South of Tasikmalaya Regency covering three sub-districts and spread from 10 villages. Cipatujah Sub-district iron sand mining is located in Ciheras Village, Ciandum Village, and Cikawungading Village. Karangunggal Sub-district is located in Cidadap Village. Cikalong Sub-district is located in Sindangjaya Village, Mandalajaya Village, Kalapagenep Village and Cimanuk Village.

Iron sand mining is done with a distance of less than 0 - 3 km from the coastline, namely on coastal areas, rice fields, plantations and even land residing in the settlement though. The need for land conservation is carried out, according to Government Regulation No. 47/1997 on National Spatial Planning Article 34 paragraph (1), is: the criterion of protected area for coastal border that is the land along the edge that is proportional to the shape and physical condition of the beach at least 100 meter from the highest tide

point towards the land. Referring to the regulation, the location used as iron sand mining has violated the existing rules.

Iron sand is a rock fraction measuring between gravel and silt, or 1/16 - 2 mm on a Wentworth-Udden scale (scale that distinguish sedimentary rocks by size). Generally, iron sand is composed of opaque minerals mixed with granules of nonmetallic minerals such as, quartz, calcite, feldspar, amphibol, pyroxene, biotite, and tourmaline. Such minerals consist of magnetite, titaniferous magnetite, ilmenite, limonite, and hematite. Titaniferous magnetite is an important part, a change of magnetite and ilmenite. Iron is mainly derived from basaltic and volcanic andesitic rocks.

The use of iron sand is in addition to the iron industry has also been widely used in the cement industry. In addition, the benefits and usefulness of iron sand are the basic materials for dry ink (toner) in photocopier and laser ink, the main material for cassette tapes, dyes and mixtures (filters) for paint, the base material for permanent magnet industry.

Iron mining area in Tasikmalaya Regency is located in Cipatujah, starting in 2009. Based on information from one of iron sand mining manager in this area, not all soils contain iron sand, only \pm 1 km from shoreline. Iron sand content in the region is about 30% -40%.

One of iron sand mining company in Cipatujah is PT. Multi Makmur Margos, which began operating in 2009. From the results of its production, PT. Multi Makmur Margos produces about 100 tons of raw material of 240

trucks. To achieve such a production process is done for 24 hours mining process with 3 shifts work, the first shift from 07:00 to 13:00 pm, the second shift from 15:00 to 23:00 pm and the third shift from 23:00 to 07:00 pm. For mining equipment such as beko is rented by the company with rental price Rp. 200,000 / hour (excluding fuel and carrier).

Iron sand mining process begins with mined sand using beko, then the sand is transported by truck from the mine site to the sand washing location. This is where raw material of iron sand material is separated with other materials. After washing, the iron sand material is ready to be shipped, while the waste is made for reclamation / closing the ex-mining holes.

In the process of mining the iron sand dredging depth is usually maximum up to 4 meters, because if more than that have to use the pump to remove ground water seepage. For marketing of iron sand mining from Cipatujah area itself is sent to Cilacap at Rp. 240.000, - / ton and then exported to China through Tanjung Intan Cilacap port. Iron sand exported abroad is usually used as a mixture of cement by cement companies outside the country. In addition to exported overseas iron ore sand is supplied to domestic cement companies, one of which is the cement company PT. Holcim Tbk.