CHAPTER II

GENERAL DESCRIPTION

1.1 The profile of Bekasi City

Bekasi City is one of the cities located in Province of West Java which has an area of 210,49 square kilometres with regional borderline as follow (Badan Pusat Statistik, 2017):

o North Side : Bekasi Regency

o East Side : Bekasi Regency

South side : Bogor Regency and Depok City

West side : DKI Jakarta Province

Geographically, the area of Bekasi City is at the position of 106°48'28" up to 107°27'29" east longitude and 06°10'06" up to 06°30'06" south latitude (LS). Administratively, Bekasi City is divided into twelve sub-districts, involving; Pondok Gede Sub-district, Jatisampurna, Jatiasih, Bantar Gebang, Mustika Jaya, East Bekasi, Rawalumbu, South Bekasi, West Bekasi, Medan Satria, and Sub-district of North Bekasi.

1.1.1 Population

In 2016, the total population of Bekasi City is 2.803.283 residents, with the composition of 1.219.312 male and 1.183.153 females. The population spread through the entire districts listed in the table 2.1

Table 2. 1 The Population Data of Bekasi City in 2016

Sub-District	Male	Female	Total
Pondokgede	121.113	117.595	238.708
Jatisampurna	53.741	52.248	105.989
Pondok Melati	65.935	63.984	129.919
Jatiasih	112.507	109.252	221.759
Bantargebang	49.448	47.050	96.498
Mustika Jaya	87.612	85.162	172.774
Bekasi Timur	134.009	130.063	264.072
Rawalumbu	107.609	104.569	212.178
Bekasi Selatan	103.733	101.761	205.494
Bekasi Barat	140.308	135.999	276.307
Medansatria	79.874	77.097	156.971
Bekasi Utara	163.423	158.373	321.796
Total	1.219.312	1.183.153	2.402.465

source: BPS, Bekasi dalam Angka of 2017

The population density in 2016 is 1.230 residents/km2. Among the sub-districts in Bekasi City, the highest population density was in the East Bekasi sub-districts which was 19.575 residents/km2 followed by North Bekasi sub-districts with 16.376/km2, and the lowest was in Bantargebang Sub-districts with 5.663 residents/km2. For the complete population density data, it can be seen in Table 2.2.

Table 2. 2 The width of an Area, Population, Population Density, and Growth

Rate in the Bekasi City in 2017

Sub-district	Width of an Area (km2)	Population (Residents)	Population Density (Residents/k m2)	Growth Rate (%)
Pondokgede	16,29	238.708	14.653	2,61
Jatisampurna	14,49	105.989	7.314	4,65
Pondok Melati	18,57	129.919	6.996	2,53
Jatiasih	22,00	221.759	10.079	2,97
Bantargebang	17,04	96.498	5.663	3,04
Mustika Jaya	24,73	172.774	6.986	6,70
Bekasi Timur	13,49	264.072	19.575	0,24
Rawalumbu	15,67	212.178	13.540	2,96
Bekasi Selatan	14,96	205.494	13.736	1,23
Bekasi Barat	18,89	276.307	14.627	0,97
Medansatria	14,71	156.971	10.671	1,71
Bekasi Utara	19,65	321.796	16.376	2,68
Total	210,49	2.402.465	11.413	2,56

Source: BPS Bekasi in numbers of 2017

The average of population growth in Bekasi City is 2.56%, where the highest population growth is in Mustika Jaya District at 6.70%, followed by Jatisampurna District at 4.65% while the lowest population growth is in East Bekasi District at 0, 24%. High population growth can affect land pressure in the region. For growth rate data, it can be seen in Table 2.2.

1.1.2 Topographic condition of Bekasi City

The topographic conditions of Bekasi City are relatively flat with a slope between 0-2%. The Bekasi city is located in the altitude between 11-81 meters above sea level (dpl). Besides having 81 meters above sea level, there are several sub-districts having altitude less than 25 meters, namely, Medan Satria sub-district, Pondok Gede Sub-district, and also sub-district of North, South and East Bekasi. Meanwhile, the height between 25 up to 100 meters above sea level is located in

Bantargebang, Pondok Melati and Jatiasih. The areas that have low altitude and slope cause several areas having some problems in order to get rid of runoff water quickly. It also causes some sub-districts are known for its puddles, namely (Pemerintah Kota Bekasi, 2008):

- Jatiasih sub-district, covers: *Kelurahan* Jatirasa, Jatimekar dan

 Jatikeramat
- Sub-district of East Bekasi, covers: *Kelurahan* Duren Jaya dan Aren Jaya
- Rawalumbu sub-district, covers: *Kelurahan* Bojong Menteng dan Pengasinan
- Sub-district of South Bekasi, covers: *Kelurahan* Jakasetia, Pekayon Jaya, dan Marga Jaya
- Sub-district of West Bekasi, covers: *Kelurahan* Bintara Jaya dan Kota Baru
- Pondok Melati sub-district, covers: *Kelurahan* Jatirahayu.

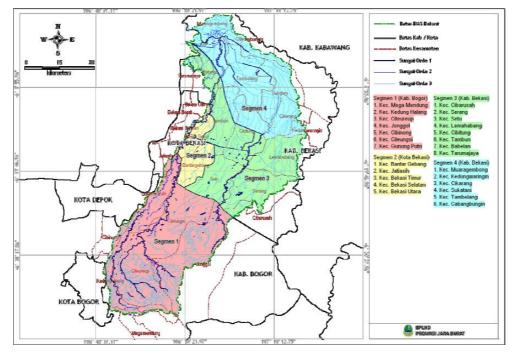
The topographic profile above, indirectly, affected the management of waste water that had been concentrated in several sub-districts, namely: *Kelurahan* Jatimakmur, *Kelurahan* Jatikramat, *Kelurahan* Jatimekar, dan *Kelurahan* Jatisari (Jatiasih sub-district), and also *Kelurahan* Mustika Jaya (Sub-district of East Bekasi).

1.1.3 Hydrology and Climatology

In terms of hydrology, Bekasi City is divided into two, surface water and ground water. The surface water concludes the rain water who runs in the rivers of Bekasi. Bekasi City is flowed by three main rivers; Cakung River, Bekasi River and

Sunter River and also the other creeks. The upstream of Bekasi River is the originated from Cikeas River with the altitude of 1.500 meters above sea level (dpl). The surface water provided in Bekasi City covers the River / Bekasi River and several small rivers / West Tarum Irrigation Channels which in addition, are used to irrigate rice fields and also are sources of raw water for drinking water needs in the Bekasi area (cities and regencies) and DKI Jakarta Province. The surface water condition of Bekasi River is currently polluted by industrial waste found in the southern part of the Bekasi City area (industry in the Bogor Regency region).

Bekasi River Basin consists of 3 segments, namely the Bogor City Watershed, Bekasi City Watershed, and Bekasi Regency Watershed. The watershed in Bekasi City consists of Bekasi River in the upstream part, which is a meeting of the Cileungsi River and Cikeas River. Bekasi River crosses Bantar Gebang District, Jatiasih District, East Bekasi District, South Bekasi District and North Bekasi District. Then the other Bekasi City watershed, namely Kali Sunter in the upstream part of it is originated from Jakarta and several times, as well as surface water channels consisting of sewers, West Tarum Main Canal, and irrigation channels. The segmentation map of the Bekasi watershed and the watershed map in Bekasi City can be seen in the following Picture.



Picture 2. 1 The Segmentation Map of Bekasi Watershed

Source: Status Mutu Lingkungan Jawa Barat Year 2008

The result of monitoring in water quality of Bekasi River in 2011 was compared to the water quality standards of *Keputusan Menteri Lingkungan Hidup No. 115* Year 2003 regarding the management of quality and management of water pollution and Pollution Index method in order to know the status of the water, and it was concluded in the table below:

Table 2. 3 The Status of Class and River Water Quality in Bekasi City Year 2011

No	Name of the Rivers	Status according to PP No. 82 Year 2001	Status according to Keputusan Menteri Lingkungan Hidup No. 115 Year 2003 (Pollution Index)
1	Cikeas River	II	Moderate Polluted
2	Cileungsi River	II	Moderate Polluted
3	Bekasi River	II	Heavily Polluted
4	Baru River	II	Heavily Polluted
5	Secondary Canal	II	Moderate Polluted

Source: Status Mutu Lingkungan Jawa Barat Year 2011

1.2 Profile of Bekasi Environmental Agency

1.2.1 Vision

"Bekasi Kota yang nyaman, hijau, bersih dan berbudaya lingkungan"

Translated as

"Bekasi City is comfortable, green, clean and cultured city"

1.2.2 Mission

There are the listed missions of Bekasi Environmental Agency. There are:

- Ensuring environmental sustainability, harmony in urban development, carrying capacity and environmental protection, and anticipating the effects of global climate change on a regional scale.
- Improving environmental management with supervision, control of environmental pollution and enforcement of environmental law.
- Increasing stakeholder participation in environmental management by paying attention to natural resources and energy.

- Organizational Structure

The organizational structure is listed below.