

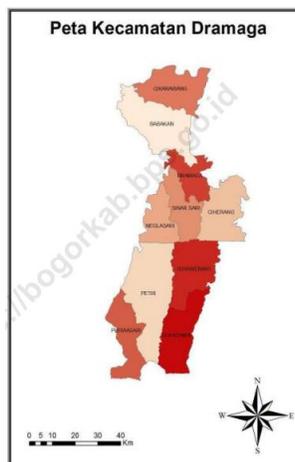
## CHAPTER II

### GENERAL OVERVIEW

#### 2.1 Profile of Dramaga Subdistrict

##### 2.1.1 Geographical location and boundaries

Dramaga Subdistrict is located approximately 20 kilometers southwest of the administrative center of Bogor Regency, West Java Province. Administratively, the establishment of Dramaga was the result of a territorial division from Ciomas Subdistrict and is now officially part of Bogor Regency. The geographical coordinates of the subdistrict are  $6^{\circ}37'37''$  South Latitude and  $106^{\circ}43'25''$  East Longitude. Historically, this area was also affiliated with Tamansari Subdistrict during its administrative integration with Ciomas.



**Picture 2.1 Map of Dramaga Subdistrict**

Source: BPS (2023)

The current administrative borders of Dramaga Subdistrict are as follows:

To the east: bordered by Ciomas Subdistrict and Bogor City (specifically, West Bogor Subdistrict

To the west: bordered by Ciampea and Tenjolaya Subdistricts,

To the north: bordered by Rancabungur Subdistrict,

To the south: bordered by Tamansari Subdistrict

This strategic geographical position grants Dramaga convenient access to various public facilities and transportation infrastructure. Consequently, it becomes an area with significant development potential, particularly in the context of digital governance transformation.

### **2.1.2 Area size and demographic conditions**

The total land area of Dramaga Subdistrict is approximately 25 square kilometers. According to data from the Bogor Regency Central Bureau of Statistics in 2024, the subdistrict has a population of around 113,736 residents. The topography of the area is diverse, ranging from relatively flat terrain to hilly regions, with elevations between 190 and 1,350 meters above sea level. This geographical variation is complemented by a tropical climate, where the average temperature ranges from 25°C to 35°C. The high rainfall in the region contributes to the area's fertility, making it suitable for various agricultural activities.

Administratively, Dramaga Subdistrict is comprised of 10 villages: Dramaga, Neglasari, Cikarawang, Sinarsari, Petir, Purwasari, Sukadamai,

Sukawening, Babakan, and Ciherang. Each village presents distinct demographic characteristics, ranging from densely populated settlements to those with semi-urban features.

The population composition of Dramaga Subdistrict is relatively heterogeneous, with a majority belonging to the productive age group. The educational attainment among residents varies; most individuals have a lower to middle level of formal education. However, a segment of the population possesses higher educational backgrounds, particularly those employed in the formal sector and within the higher education institutions located in the area.

### **2.1.3 Structure of subdistrict governance**

The governmental structure of Dramaga Subdistrict adheres to the standard administrative model of subdistrict governance as regulated by applicable government provisions. The official office of the Dramaga Subdistrict is located at Jalan Pasar Dramaga No. 74, Bogor Regency, West Java.

The organizational structure of the subdistrict is headed by a Camat (subdistrict chief), who is directly accountable to the Regent of Bogor. The Camat is supported by a Subdistrict Secretary, a single sub-division for Program and Finance, and five administrative sections, each tasked with duties according to specific sectors: Economy and Development, Security

and Public Order, Education and Health, Community Empowerment, and Governance.

#### **2.1.4 Background of E-Government Adoption in Dramaga Subdistrict**

The implementation of e-government in Dramaga Subdistrict is framed within the national policy direction established by Presidential Regulation No. 95 of 2018 on Electronic-Based Government System (SPBE), which mandates the integration of information and communication technology into governance to create accountable, efficient, and citizen-oriented public services. At the regional level, this policy is further operationalized through the agenda of digital transformation of Bogor Regency that has been formulated into Regent Regulation No. 77 of 2020 on the Masterplan for Smart City Bogor Regency. This law requires the promotion of ICT in the government at all levels to improve the quality of public services, develop transparency and streamline the functioning of institutions. This new legislation defines the strategic vision of a "Smart City" and it consists of six vectors under which Smart Governance is directly understood and it references the role of e-governance in local governance. The rollout of this smart city blueprint reflects a major transformation from conventional bureaucratic administration to digitally mediated governance mechanisms for citizen-focused service delivery. The goal is to implement an integrated data visualization and monitoring system for real-time coordination and decision support, which will shift the way local government

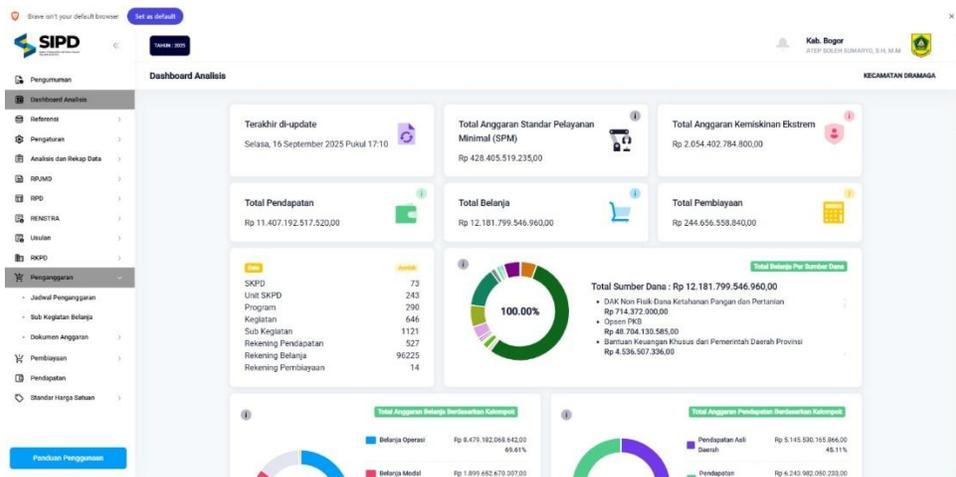
executes and interacts with its citizens. It means that all the subdistricts, including Dramaga, were under a mandate regime to go to digitisation through the fulfillment of the regency's goals for digitisation in government operation.

As an implementation of the vision, the Department of Communication and Informatics (Diskominfo) of Bogor Regency is positioned as the coordinating institution in managing and supervising digital government development. The subdistricts—including Dramaga—function as field-level implementers, operating under the technical and infrastructural support of Diskominfo. This structure is formalized through Bupati Decrees and SK (Surat Keputusan), which clearly define the division of roles and responsibilities.

The initial application of digital services in Dramaga began with foundational administrative platforms such as the Sistem Informasi Administrasi Kependudukan (SIAK) for population administration and SIPD for budgeting and finance. These systems are aligned with national initiatives like the Gerakan Menuju 100 Smart City Indonesia supported by the Ministry of Communication and Informatics, where Bogor Regency was selected in 2017 as one of the assisted regions.

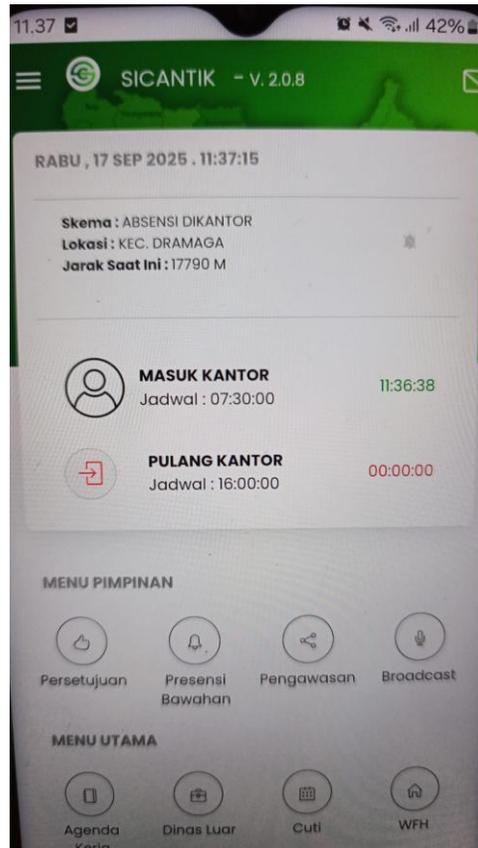
Digital transformation also affects internal governance processes, where the adoption of platforms like SIPD (Sistem Informasi Pemerintahan Daerah) and SiCantik for HR and attendance management has significantly

increased administrative efficiency and accountability. SIPD functions as an integrated system for planning, budgeting, and financial management, enabling program proposals and fund disbursement processes to be submitted and approved electronically by the regency level, thus reducing manual procedures and accelerating service delivery.



**Picture 2.2 Screenshot of SIPD Application**

Source: Researcher Documentation



**Picture 2.3 Screenshot of SiCantik Application**

Source: Researcher Documentation

The subdistrict has initiated the digitalization of administrative correspondence and introduced an official website to disseminate public information. Although the platform's features are still relatively limited, it represents a concrete step toward building digital public communication and promoting openness. The screenshot below displays the current layout of the Dramaga Subdistrict website, which serves as the main access point for residents seeking service-related information.

This website complements other digital services by offering downloadable forms, procedural guidelines, and updates on local programs. While it does not yet offer interactive functions, its presence significantly reduces barriers to information access and reinforces efforts to enhance administrative transparency at the subdistrict level.



**Picture 2.4 Homepage of the official website of Dramaga Subdistrict**

Source: <https://kecamatan.dramaga.bogorkab.co.id> (Accessed: June 8, 2025)

Despite these advancements, the digital transition remains uneven and highly dependent on staff initiative, external support, and infrastructure availability. The role of the subdistrict remains largely as the executor of programs initiated and standardized at the regency level, with limited autonomy in system development or innovation.

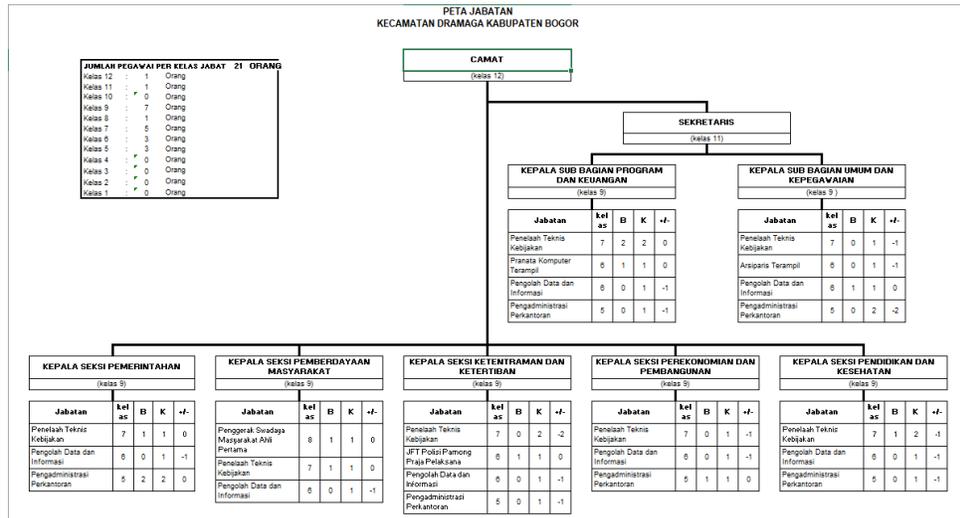
These early efforts in adopting e-government in Dramaga Subdistrict demonstrate a growing institutional willingness to modernize, even as they

operate within clear limitations. It can be seen, while digital tools have improved efficiency, service reach, and internal coordination, the transition remains partial and heavily reliant on individual initiative and informal workarounds.

### **2.1.5 Existing Conditions of Human Resource in Dramaga Subdistrict**

The effectiveness of e-government implementation in Dramaga Subdistrict is closely tied to the characteristics and capacity of its human resources. The subdistrict office currently employs a total of 57 personnel, comprising 28 civil servants (Aparatur Sipil Negara/ASN) and 29 non-permanent or contract-based staff. They are embedded in administration, service, and technical organisational units serving external public purpose as well as internal controlling.

In terms of the age of the respondents, the staffs' ages range from approximately 23 to 55 years old, an adult age spread of over 30 years. That includes workers born as early as 1969 and as recently as 2001. Younger staff contract workers and honorary staff in particular - have helped out when using digital tools and new systems. Older staff, on the other hand, may need added assistance or transition time when using digital platforms. This eclectic mix of generations can also lead to varying degrees of digital literacy and openness to change.



**Picture 2.5 Organizational Structure of Human Resources in Dramaga Subdistrict**

Source: Kecamatan Dramaga (Documentation)

The level of education of staff members also differs considerably. While most of their employees have bachelor (S1), there are also those with diploma (D3), senior high school/secondary school education (SLTA/ sederajat), and equivalent (Paket C) levels of education. Very few officials have graduate level degrees (stage S2 in general) which are predominantly in management or strategic positions. These educational differences are significantly associated with the distribution of roles and digital skills in the office.

**Table 2.1****List of Civil Servants in Dramaga Subdistrict Government. Source: Personnel****Records of Kecamatan Dramaga (2025)**

<b>NO</b>	<b>NAMA</b>	<b>PANGKAT</b>	<b>GOLONGAN</b>	<b>JABATAN</b>
1	ATEP SOLEH SUMARYO, SH, MM	Pembina Tingkat I	IV/b	CAMAT Dramaga
2	INE HANDAYANI, S.Pd	Pembina	IV/a	SEKCAM Dramaga
3	YUDI PRAYUDI, S.H, M.H	Pembina	IV/a	Kasie EKBANG
4	MUHAMAD DODOY HUDAYA, M.Pd	Pembina	IV/a	Kasie Trantib
5	MULYANINGSIH, SE	Penata Tingkat I	III/ d	Kasie PK
6	RADEN MILKA YULIANTI SYABANDIAH, SE, MM	Penata Tingkat I	III/ d	Kasie PM
7	ROUDI HIDAYAT, S.S	Penata	III/c	Kasie PEM
8	MADI, S.AP	Penata	III/c	Kasubag Progkeu
9	WILDAN SUJALI, S.IP	Penata	III/c	Pelaksana
10	ARI SUSIANTO, S.IP	Penata Muda Tingkat I	III/b	Pelaksana

<b>NO</b>	<b>NAMA</b>	<b>PANGKAT</b>	<b>GOLONGAN</b>	<b>JABATAN</b>
11	EDI SUPARDI, S.E	Penata Muda Tingkat I	III/b	Pelaksana
12	RIMA WINDA, S.E	Penata Muda Tingkat I	III/b	Pelaksana
13	DEWI MUSTIKAWATI, S.E	Penata Muda Tingkat I	III/b	Pelaksana
14	DODI ARISMAYADI, S.E	Penata Muda Tingkat I	III/b	Pelaksana
15	MUHAMMAD DZAKIR FIQI, S.E.	Penata Muda	III/a	Pelaksana
16	MOCHAMAD SOLEH	Penata Muda	III/a	Pelaksana
17	IDA WIDIASTUTI	Pengatur Tingkat I	II/d	Pelaksana
18	INKA SYAIFA FAUZIA, A.md	Pengatur	II/c	Pelaksana
19	ASEP SADELI GUNAWAN	Pengatur Muda Tingkat I	II/b	Pelaksana
20	MELINDA MYRA FAZRIAHA, A.Md.A.P.	Pengatur	II/c	
21	ROSA PUTRI UTAMI, S.Kom	Penata Muda	III/a	
22	HAERUDIN		V	
23	UNTUNG PURNAMA		V	
24	DELA APRILIA SOPIYANTI		V	

<b>NO</b>	<b>NAMA</b>	<b>PANGKAT</b>	<b>GOLONGAN</b>	<b>JABATAN</b>
25	BARRY IBNU SINA, S.Kom		IX	
26	NINA NAFISAH, S.PI		IX	
27	HILDA MUTIA LESTARI		V	
28	OTO SUBRATA, Amd		VII	
29	M. SUNANDAR			
30	ADE MULYANA			
31	YUSUF SETIAWAN, S.Kom			
32	DITRIAWATI ADE PUTRI			
33	RIDA HIDAYANTI			
34	JAKA SAPUTRA			
35	ADRIAN ARYANDI, S.IP			
36	ANNISA NURUL AULIA			
37	MUHAMAD RIZA AKBAR			
38	TRIA ZULFA AZIZAH ADAWIYAH			
39	HEPRIZAL			
40	MUHAMAD SYARIPUDIN			
41	FEBRI NUR HAKIM			

<b>NO</b>	<b>NAMA</b>	<b>PANGKAT</b>	<b>GOLONGAN</b>	<b>JABATAN</b>
42	DENDI ARISTA			
43	YANTI SUSILAWATI			
44	SOPIAN HADI			
45	SUSAN RAHAYU NINGTYAS, Amd			
46	BOBBY MARDIYANSAH			
47	M. RANGGA MAHARDIKA			
48	SUYITNO			
49	AANG KURNIAWAN			
50	TRI HARI PURNOMO			
51	AJI ARROSYID			
52	YUDI NURFIKI			
53	RIZKY FIRMANSYAH			
54	M. RIDHO SAEPUKIN			
55	SEPTIAN			
56	WINDIA CITRA RIYADHOTUL JANNAH			
57	ODIH			

This inequality of educational development, in turn, leads to inequality in digital confidence. Individuals with higher levels of education are more likely to be comfortable with ICT systems, while others might have

difficulties with tasks that require availability of their own desktop access, email, or access to specific applications. This has implications for task delegation and the speed at which digital reforms can be enacted consistently across units.

The number of ASN in the total staff was also associated to consistency within the organisation. With less than half of all staff on ASN status, the sub-district relies heavily on non permanent staff who may not always have equal access to capacity building opportunities or long-term development options. The content of this paper raises structural issues with sustainability and standardisation of digital governance deployment.

As a result, Dramaga Subdistrict's human resources compose of generations with different backgrounds, levels of education, and stages of organizational culture changes. Taken together, such circumstances condition the dynamics in which local bureaucracy meets digital systems and conforms to overall e-government strategies on the regional level.

## **2.2 Social and Economic Conditions**

### **2.2.1 Population density and community characteristics**

The population density across villages in Dramaga Subdistrict varies significantly. Areas located closer to the subdistrict center and along major roadways tend to exhibit higher population densities compared to those situated in hilly regions or agricultural zones.

**Table 2.2**

**List of Population, Annual Population Growth Rate, and Population Density in Dramaga Subdistrict 2020-2024**

<b>Year</b>	<b>Population (Thousands)</b>	<b>Annual Population Growth Rate</b>	<b>Population Density per km<sup>2</sup></b>
2020	110,4	0,10	4.364
2021	111,1	0,92	4.394
2022	112,3	0,89	4.441
2023	113,1	0,87	4.422
2024	113,7	0,58	4.447

Source: (BPS, 2024)

The social characteristics of the Dramaga community are notably diverse, reflecting a complex sociocultural dynamic. Although most of the populace is still adhering to the traditional Sundanese values, the society has always been open to change and modernization.

The population of Dramaga Subdistrict is dominantly consists of productive age group (15-64 years), allowing ample room for both economic development and the implementation of innovative government programs such as e-government initiatives. However, it still leaves a considerable amount of aged people in need of special attention when it comes to technology adoption.

### **2.2.2 Main sources of livelihood and dominant economic sectors**

Dramaga Subdistrict has several main economic sectors that are based on its semi-urban nature. The mainstay of the local economy is still Agriculture, the main source of which originates from locally made produce. Fertile land alongside with sufficient irrigation has been a great factor to keep this sector vibrant.

Trade and services have developed rapidly along major roads leading to Bogor City, in addition to agriculture. Handicraft utilizing local fruits and agricultural materials enable small scale economy in the area, there are now small-scale businesses including convenience stores, workshops and service establishments which increases due to the economic activities.

It is also supported by small and medium industries, craftsmen, food scale industries and home industries producing handicraft and food stuff. The influence of institutions of higher learning in the area has also helped foster other economic activities in the community, such as boarding houses, eateries and businesses that cater to students' needs.

The formal job sector is also significantly linked with the subdistrict economy, with some of the residents being employed as civil active members, private workers, or professionals in several institutions and companies in Bogor and its surroundings.

### 2.2.3 Access to education and healthcare

Accessibility of education in Dramaga Subdistrict should be sufficient, although disparities among certain locations still exist. These are elementary schools (SD), junior high schools (SMP), senior high schools (SMA) as well as vocational high schools (SMK) — spread evenly in various villages, so that the children when they can go to school do be able to go to school without having to travel a kilometers long distance.

Most of the students have to go to the subdistrict areas and even to Bogor City for the senior high school. Proximity with the surrounding campus of IPB University gives higher education facilities with good quality. However, not all residents are able to take advantage of this opportunity due to economic constraints.

In terms of healthcare services, Dramaga Subdistrict is served by a *Puskesmas* (community health center) as its main public health facility. Additionally, several auxiliary health posts (*Puskesmas Pembantu*) and integrated service posts (*Posyandu*) are available in villages, offering basic healthcare services to the local population.

Access to referral hospitals is generally directed toward Bogor City, which can be reached with relative ease due to the manageable distance and the availability of public transportation. Nonetheless, in emergency situations, travel time to more comprehensive healthcare facilities remain a considerable challenge.

## **2.3 Infrastructure and Technology**

### **2.3.1 Availability of physical infrastructure**

The road infrastructure in Dramaga Subdistrict presents varied conditions. The main roads connecting the subdistrict to Bogor City and neighboring areas are generally in good condition and paved with asphalt. However, many village roads and inter-hamlet connectors remain unpaved or in need of repair, particularly during the rainy season when accessibility becomes more difficult.

Electricity access in the subdistrict has reached a relatively high level. Most areas are covered by the PLN electricity network, although a few remote locations occasionally experience power supply disruptions. The reliability and continuity of electricity provision play a crucial role in supporting the implementation of information technology and e-government initiatives.

For clean water supply, residents in Dramaga rely on a combination of sources, including the Regional Water Company (PDAM), deep wells, dug wells, and natural springs. The PDAM distribution network does not yet cover the entire subdistrict, leading many residents in underserved areas to depend on independent water sources. While the general quality of water is acceptable, some areas experience shortages during the dry season, posing additional difficulties in accessing clean water.

### **2.3.2 Access to internet networks and information technology**

Internet penetration in Dramaga Subdistrict has experienced a significant increase in recent years. Most small cellular providers have coverage in most of the subdistrict, but signal quality continues to be dependent upon the physical geography and building density of any given area.

Fiber optic and wireless broadband internet are now offered at centers of subdistricts and along key routes. A few of the Internet service providers have started providing customized packages for homes and small and medium businesses at relatively cheaper prices.

The digital literacy of the people is increasing, especially younger generations. Smart phones and social media apps are common. Whereas the use of internet access for productivity-enhancing activities such as e-commerce, online government services is still low and calls for greater stimulus.

The construction of digital facilities in Dramaga Subdistrict is also hindered by several basic constraints. Limited road and hilly area are restricting the communication network because of diverse type of terrains. The large service level discrepancies among the different zones and within the zones of the subdistrict due to these factors.