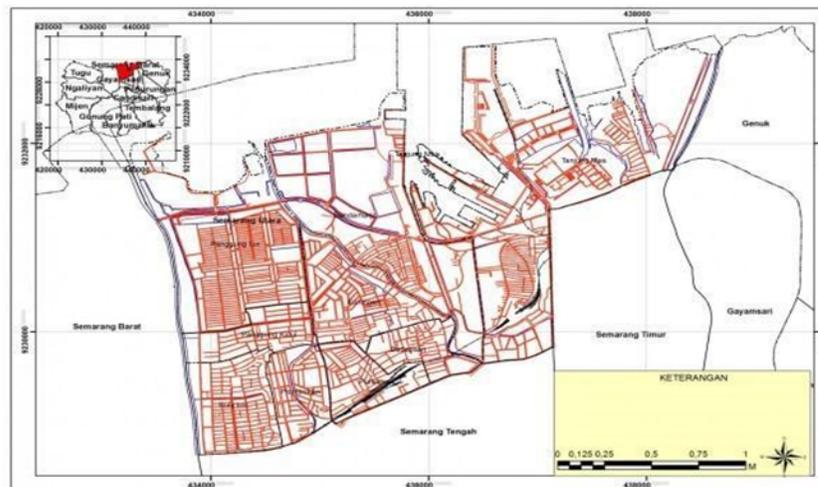


## CHAPTER II OVERVIEW OF THE SETTING RESEARCH

### 2.1 General Description of North Semarang District

#### 2.1.1 Geographical and Administrative Location



**Figure 2.1 Administrative Map of Kecamatan Semarang Utara**

*Source: Kecamatan Semarang Utara Website*

North Semarang District is one of the districts in Semarang City, Central Java. This district is situated in the northern region of Semarang City. It is bounded by the Java Sea to the north, East Semarang District to the east, South Semarang District to the south, and West Semarang District to the west. The North Semarang District encompasses nine administrative Sub-district (kelurahan): Bandarharjo, Bulu Lor, Plombokan, Purwosari, Panggung Kidul, Panggung Lor, Kuningan, Tanjung Mas, and Dadapsari. Its total area is 1,135.275 hectares. The relatively flat terrain of North Semarang renders it susceptible to tidal flooding or rob, a recurring issue that has a

substantial impact on the region, particularly in coastal and low-lying areas.

Industrial, commercial, and residential activities dominate the coastal zones, while inland regions combine residential neighborhoods with small-scale businesses and community spaces. The region's significance as a logistical and industrial hub is further enhanced by the presence of significant infrastructure, including railway networks and arterial roads that connect key areas in Semarang.

Nevertheless, the interaction of coastal dynamics and heavy urbanization presents obstacles to disaster management and environmental sustainability, particularly in the management of land subsidence and tidal floods. The complexity of urban development in North Semarang and the urgent need for adaptive measures to address environmental challenges are underscored by these geographic features and socio-economic conditions.

## 2.2 Areas of Districts in Kecamatan Semarang Utara

**Table 2.1 Areas of Districts in Kecamatan Semarang Utara**

<b>NO</b>	<b>Sub-District</b>	<b>Areas (ha)</b>
1.	Bandarharjo	342.675
2.	Bulu Lor	68.676
3.	Plombokan	34.900
4.	Purwosari	48.049
5.	Panggung Kidul	68.693

NO	Sub-District	Areas (ha)
6.	Panggung Lor	123.470
7.	Kuningan	41.541
8.	Tanjung Mas	323.782
9.	Dadapsari	83.250

*Source of Data: Kecamatan Semarang Utara Website*

The largest administrative village (kelurahan) in North Semarang District is Bandarharjo, with an area of 342.675 hectares, as indicated by the data in the table above. In contrast, Plombokan is the smallest administrative village, occupying a total area of 34.900 hectares.

### **2.2.1 Geographic Cobditions**

At present, the North Semarang District has a total population of 141,542 individuals, which is divided into 708 neighborhood units (RT) and 89 community units (RW). The district's population includes 60,357 females and 58,953 males, as per the 2023 data from the Semarang City Department of Population and Civil Registration. The same data indicates an average population density of 10,472.50 individuals per km<sup>2</sup>. In Bulu Lor Sub-district, the population density is the highest at 22,520.19 people per km<sup>2</sup>, while in Panggung Lor Sub-district, it is the lowest at 5,233.02 people per km<sup>2</sup>.

## 2.3 General Description Kelurahan Panggung Lor

### 2.3.1 Geographic Conditions of Panggung Lor Subdistrict

Figure 2.2 Panggung Lor Subdistrict



## 2.4 Panggung Lor Sub-District

Kelurahan Panggung Lor, which is situated in the northern region of Semarang City, was established in 1994. At first, this region was comprised of the Tanah Mas residential estate, a real estate development that opened in 1975. Total area of Kelurahan Panggung Lor is 123,470 square meters. To the north, it is bordered by the Java Sea, to the south by Kelurahan Panggung Kidul, to the west by the Banjir Kanal Barat River, and to the east by Kelurahan Kuningan. The town of Kelurahan Panggung Lor is bordered by the Java Sea to the north, the Kali Asin River to the east, the Brotojoyo River to the south, and the expansive Banjir Kanal Barat River. Floods in the region began to occur in the area of Tanah Mas after it was populated by newcomers at that time. Residents of the Tanah Mas region elected to relocate to other areas, while

others opted to remain in their homes. Panggung Lor subdistrict is situated at an elevation of 0.85 meters above sea level, which frequently results in tidal flooding as a result of high tides.

#### **2.4.1 Demographic conditions**

In Panggung Lor Sub-district, there are 124 Rukun Tetangga (RT) and 14 Rukun Warga (RW). As per the official website of Panggung Lor Sub-district, the current population is 13,233 individuals, residing in 5,000 households. Of these, 6,344 are male and 6,889 are female. Furthermore, the population of Panggung Lor Sub-district is primarily composed of individuals between the ages of 15 and 65, with a total of 10,204 individuals. The ethnic and religious backgrounds of the residents of Panggung Lor Sub-district are diverse. Additionally, the Sub-district is surrounded with numerous religious institutions, including mosques, churches, temples, and shrines. Furthermore, the Sub-district provides educational facilities, including elementary schools (SD), junior high schools (SMP), high schools (SMA), and early childhood education centers (PAUD).

The majority of residents in Panggung Lor have completed elementary education (Sekolah Dasar), specifically 1,783 individuals. Nevertheless, a significant proportion of the population has pursued higher education, with 3,672 individuals having completed junior high school (Sekolah Menengah Pertama) and 3,461 having completed high school (SMA). Furthermore, 1,612 residents have successfully completed vocational training (D1-D3), and 1,461 have obtained bachelor's degrees

(Sarjana).

## **2.5 P5L in Panggung Lor**

### **2.5.1 General Description of P5L**

Paguyuban Penanganan dan Pengendalian Air Pasang Panggung Lor (P5L) is a community organization situated in the Panggung Lor area. It is comprised of residents from Kelurahan Panggung Lor and residents of RW.05 in Panggung Kidul. The reason for the inclusion of RW.05 is that a portion of Kelurahan Panggung Kidul is also traversed by the Kaliasin River, which is responsible for the operation of the Pump House. In 1996, P5L was established and continues to operate to this day. The association was initially established by Panggung Lor residents, with the assistance of the local authorities or kelurahan, in order to establish a unified effort. P5L is a mechanism for community engagement and collaboration in the mitigation of tidal flooding (rob) in the region.

The establishment of P5L was independent of the city government, and it is based on self-help and volunteerism, with no salaries for its members. It is governed by a transparent organizational framework that comprises 20 members, including a chairperson, vice-chair, and other administrative positions. The committee members are all residents of Kelurahan Panggung Lor and a portion of Kelurahan Panggung Kidul. The selection process is conducted through mutual agreement, and the term of office is three years. The city government is grateful for the program's assistance in flood management. The Public Works Department will also provide support if P5L

requires heavy equipment infrastructure.

## 2 Vision and Mission of P5L

Penanggulangan dan Pengendalian Air Pasang Panggung Lor (P5L) is primarily responsible for the management of the pump house in Kelurahan Panggung Lor to reduce tidal flooding (rob) by ensuring the pump house is functioning efficiently. P5L is responsible for two primary responsibilities: administrative and technical. The administrative functions encompass the regulation of membership fees, the preparation of financial reports related to these fees, and the management of incoming and outgoing correspondence. The technical responsibilities entail direct fieldwork, which includes the management of pump operations, the maintenance of drainage systems, and the resolution of any other issues associated with the pump's operation. The Articles of Association and Bylaws are the existing regulations under which P5L operates. Furthermore, the P5L Association has established the following vision and mission:

### 1. Vision

“To create a flood- and rob-free (tidal flooding) environment in Panggung Lor that is clean, beautiful, and comfortable.”

### 2. Mission

“To address flooding caused by both rainfall and tidal flooding (air pasang), while raising awareness among all residents of Panggung Lor about the importance of P5L.”

### 3 Organisation Structure of P5L

P5L also has an organizational structure or leadership to manage the operation of the association. The organizational structure can be described as below:

**Figure 2.3 Organizational Structure of P5L**

Functional Organizational Structure of P5L



*(Source: Processed by the researcher)*

The roles of these stakeholders in the management of the pump house in Panggung Lor can be described as follows:

- a. Camat of Semarang Utara as the Supervisor (Pembina)
- b. Head of Subdistrict (Lurah) of Panggung Lor as the Advisor
- c. LPMK (Lembaga Pemberdayaan Masyarakat Kelurahan) as Person in Charge (Penanggung Jawab)

- d. The Head of Neighborhood and the Head of Community in Pangung Lor Subdistrict and Kelurahan Pangung Kidul as the Supervisors (Badan Pengawas)
- e. The Chairperson of P5L along with its board members and division heads