INTRODUCTION

The first case of Covid-19 in Indonesia was identified on 2 March 2020. On 13 April, the Indonesian Government declared Covid-19 a national disaster and declared a national emergency. The year 2020 was therefore very challenging for electoral stakeholders and administrators; direct local elections were held simultaneously in all regions of the country amid the pandemic. Compounding this challenge, the 2020 direct local elections were held on 9 December, which coincides with the peak period of the rainy season in Indonesia.

The direct local election is held to elect the heads of local government at the provincial and lower (district or municipal) levels. The 2020 direct local election was held in 9 provinces, 224 districts and 37 municipalities with registered voters numbering 100.359.152 million.

During the rainy season, flooding is prone to occur in all areas. The increasing sea-surface temperature due to global warming contributes to an increase in tropical cyclone intensity during the rainy season; Indonesia is projected to have increased extreme river flood risk and sea-level rise, too, in the coming decades (World Bank/ADB 2021: 18). The country will thus be more exposed to hazards such as floods, droughts, hurricanes, tornadoes and landslides (Djalante, Jupesta and Aldrian 2021). Flooding is the most significant among these hazards because it happens most frequently and affects a larger population (Djalante et al. 2017: 3).

Despite this risk-prone context—and specific Covid-19 legislation aside—Indonesia’s election laws have yet to fully specify how to deal with natural disasters. For example, in organizing general elections the General Elections
Commission (Komisi Pemilihan Umum, KPU) instead refers to relevant articles of Law No. 7 (on Governing Elections) (Indonesia 2017). Article 431 regulates continuing elections when disasters disrupt some part of the election process; article 193 explains that election officials can discount particular electoral districts that have been destroyed by natural disasters; article 372 explains that voting can be repeated when disasters make voting impossible; and article 432 proposes repeating an election from its early stages when disasters make it difficult to implement all of the election processes. However, this law does not explain such responses in further detail or distinguish different types of natural disasters.

As such, no particular section in the 2017 law regulates how to run elections amid disasters. On the technical side, the KPU has not provided more detailed rules and procedures for implementing elections in locations with specific disaster characteristics (Liando 2019). Nor does it have a detailed risk management framework or crisis management procedure, at either national or local level. This was seen in the 2020 direct local election, where no specific regulations responded to flood hazards. Therefore, the discretion of the regional electoral commission (Komisi Pemilihan Umum Daerah, KPUD) in the crisis was crucial.

This case study elaborates experiences of local election officials and what they have prepared for the future, with a focus on two contrasting districts: Semarang City (capital of Central Java Province—which was not flooded on election day itself) and to its east Demak, one of Indonesia’s most severely flood-affected regions. What changes have they made to legal frameworks and operations, to mitigate the impact of flooding in elections? This study will also explore how flooding and Covid-19 interact and how election officials (alongside others such as meteorological agencies) dealt with these hazards simultaneously. Issues covered include the relocation of polling stations, existing mitigation plans, challenges for election officials in the field, the campaigning process, voter registration and voter education.

**Flood profile: Demak District**

Located to the east of Semarang City (the capital of Central Java Province), Demak District is one of Indonesia’s most severely flood-affected regions, experiencing land subsidence and sea-level rise. According to data from the Global Surface Water Explorer, flood trace has spread in all the Demak District’s coastal areas in the last 40 years (European Commission n.d.). The flood came from the river overflow and the sea (a tidal flood is referred to locally by the term *rob*).

Due to rising seas, some of the coastal areas in Demak have been sinking for some years, with areas predicted to flood also increasing yearly (Utami, Subardjo and Helmi 2017). The coastal area in Demak District experiences erosion and land subsidence of about 4 cm to 12 cm every year (Dinkominfo 2021). A researcher reported that coastal development and over-extraction of groundwater are among the causes of the flooding (Syambudi 2021).
Electoral law and administration
There are two types of election in Indonesia. First is the general election which contains the presidential and National Assembly elections. Second is the election to elect a governor and mayor/head of the district. The general election is governed by Law No. 7 of 2017 as already mentioned. Meanwhile, the governor and mayor/head of district election is governed by a series of laws: Law No. 1 of 2015, Law No. 8 of 2015, Law No. 10 of 2016, and the latest, Law 6 of 2020. The Indonesian Government enacted Law No. 6 of 2020 to implement local-level elections amid the Covid-19 pandemic (Indonesia 2020c).

The agency responsible for organizing all stages of the general elections nationwide is the General Elections Commission (Komisi Pemilihan Umum, KPU). Another parallel government institution involved in elections in Indonesia is the General Election Supervisory Agency (Bawaslu), whose task it is to monitor and supervise all stages of the election process organized by the KPU. The KPU has units at provincial and district/municipal levels called the Regional Elections Commissions (Komisi Pemilihan Umum Daerah, KPUD). The provincial level of KPU is responsible for organizing the election of the governor and their deputy, while the municipal and district level of KPU is responsible for organizing the election of the mayor and head of the district. Similarly to the KPU, Bawaslu exists at every election administration level for oversight of local elections.

In line with Law No. 1, 2015, the simultaneous direct local elections were originally to be held in September 2020. However, the National Assembly approved Law No. 2, 2020, proposed by the executive (President and his cabinet) to postpone the elections to December 2020 due to the Covid-19 pandemic. The postponement enjoyed the support of all political parties sitting in the National Assembly, including opposition parties. The government decided that the simultaneous direct local elections would be held on 9 December 2020. Previously, on 21 March 2020, the KPU had postponed pre-election processes such as the appointment of village-level election officers, administrative assessment for the candidates, and updating voters’ data. Meanwhile, the national Bawaslu decided to dismiss field supervisors temporarily and instruct its provincial and district/city branches to supervise the postponement decision at the local level.

Indonesia adopts an in-person voting mechanism at the polling station on voting day and the mobile ballot box. Special voting arrangements such as early voting, postal voting or proxy voting are not provided. However, there has been discussion about e-voting. In March 2022, the Minister of Communication and Information Technology proposed implementing an e-voting system in the 2024 election (Sari 2022), arguing that adopting digital technology would strengthen its legitimacy by making the electoral process more effective and efficient. This proposal has sparked a public debate because many areas in
Indonesia are still without Internet connection or a stable electricity supply (Sari 2022) and concerns about the security of voting data results remain.

Covid-19 coordination and protocols
To coordinate and supervise its pandemic response, the Indonesian Government formed a Covid-19 Response Acceleration Task Force (Gugus Tugas Percepatan Penanganan Covid-19). This task force was to accelerate synergy among government agencies at national, regional (provincial) and local government levels. Reporting to the National Disaster Management Agency, the task force involved the health authorities, national police and armed forces. Regarding the 2020 direct local election, the task force fully supported the KPU and Bawaslu in all stages of the election process. The task force also helped to develop health protocols that election officials and participants must obey. The KPU formalized its collaboration with the Covid-19 task force through decree 531 of 2020. Through this decree, the national KPU also ordered all regional KPUs to similarly cooperate with the task force in their respective areas.

The 2020 direct local election during the pandemic triggered heated debates in the preceding months. Controversy about conducting the election in December emerged in the public debate. At the time, a vaccine had not yet been found and the infection and mortality rates were increasing. There was much concern that the election would trigger an uncontrollable escalation in the epidemic. There were 71 days of campaigning and more than 300,000 polling stations on voting day, posing an apparent risk of virus transmission clusters. The Centre for Political Studies at the Indonesian Institute of Sciences (LIPI—a public body) argued for a further postponement, suggesting that an election in December contradicted the government’s agenda to limit public gatherings (Santoso 2020). However, the government held with its decision to conduct the direct local election as scheduled.

The KPU issued Regulation No. 6 of 2020, which specifically regulates the organization of elections during the pandemic (Indonesia 2020c). This regulation serves as a guideline for all KPUDs and contains health protocols that must be applied in all election processes: from voter registration and verification to candidate registration, campaigning and polling. Among the Covid mitigation measures (such as mandatory personal protective equipment, PPE), the maximum number of voters in each polling station was reduced from 800 to 500 people.

Regulation No. 6 of 2020 also mentioned that voters who are (or are suspecting of being) infected with coronavirus, hospitalized, or self-isolating due to Covid-19 still have the right to vote. Voters who are undergoing hospitalization, self-isolating or positively infected with Covid-19 (based on data from the Covid-19 Response Acceleration Task Force in the local area) can vote at a polling station adjacent to hospital. For voters undergoing self-isolation and unable to come to the polling station, the polling station official will visit them while prioritizing their confidentiality.
The KPU's Regulation No. 13 of 2020 limits face-to-face campaign activities and prioritizes social media or online campaigns. This regulation prohibits public meetings and similar activities that gather many people, imposing limits on the numbers of participants at public debates.

**Flood preparedness**
As a country with two seasons, high rainfall in Indonesia during the rainy season is normal. It makes some areas prone to flooding. The National Disaster Management Agency (Badan Nasional Penanggulangan Bencana, BNPB) noted that from 7 January 2020 to 7 December 2020, there were 2,745 disasters in Indonesia. Floods are the most frequent disaster, reaching 993 cases (Databoks 2020). The other disasters were landslides, tornados, drought, earthquakes, forest fires and volcano eruptions.

The 2020 simultaneous direct local elections occurred in December, which poses a high risk of flooding. On 10 November 2020, the Meteorology, Climatology and Geophysics Agency (Badan Meteorologi, Klimatologi, dan Geofisika, BMKG), in collaboration with the Ministry of Public Works and Housing and the Geospatial Information Agency (Badan Informasi Geospasial, BIG), released a map of flood-prone areas in Indonesia. The author connected the BMKG data of flood-prone areas with the local election locations. The result was that 84 per cent of local election locations had (high, medium or low) flood vulnerabilities, with only 16 per cent being safe from flooding. Most regions have a medium level of vulnerability, while 4 per cent have a high vulnerability to flooding.

Most election materials, such as ballots and other voting equipment, are easily damaged by water. The KPU, through Regulation No. 7 of 2020, has regulated the specifications of the 2020 election logistics materials. For example, article 8, paragraph 1 stipulates that the ballot box is made of a waterproof double-wall cardboard material that uses coating or laminating on the outside. Furthermore, the ballot box must be in the shape of a box, with sturdy sides. There is a hole on the top side to install a connecting cable padlock, cable ties, or other security devices. Plastic bags are provided in large and medium sizes to make equipment safe from water damage. Large plastic bags are used to store containers that contain ballot papers, administrative reports and certificates. Meanwhile, medium-sized plastic bags are used for polling station equipment such as ID cards for election officials, pens, glue and stickers.

As the authorities responsible for organizing the elections, the national and regional KPUs have thus taken several practical measures to mitigate the effects of flooding on elections. However, there was no formal cooperation between the KPU and BNPB to anticipate flooding in the 2020 direct local elections. Therefore, the discretion of the regional KPU was crucial. Four days before voting, the KPU of Medan City took anticipatory precautions by shifting some polling stations prone to flooding. They shifted the location of polling stations to a higher place but still within the same village (Muhardiansyah 2020). The Bandung District KPU also anticipated floods during the 2020 election and coordinated with the Local Agency for Disaster Response (Badan

---

**Most election materials, such as ballots and other voting equipment, are easily damaged by water.**
Penanggulangan Bencana Daerah, BPBD). They prepared to pick up voters using rubber boats in case of flooding. Given that there had been predictions of extreme weather in the region, the Bandung District KPU also mapped 203 polling stations prone to flooding and landslides. The KPU assessed that BPBD Bandung District is well trained in dealing with disasters during elections (Ripaldi 2020).

**FLOODING AND COVID-19 IN 2020: THE NATIONAL PICTURE**

Before the election, BMKG noticed a tropical cyclone seedling in the Indian Ocean, precisely south of West Java. This tropical cyclone impacted high waves in the waters west of Lampung and south of Java. In addition, tropical cyclone seeds also have the potential for heavy rain and strong winds (Banten Province 2020). BMKG’s prediction was proven by the high rainfall in several areas, causing floods such as those in Banten Province. Floods hit three regions that held simultaneous direct local elections. They are Serang District, Pandeglang District and Cilegon City.

Based on data from BNPB and news tracing from the media, the author assessed that 91 (or 41 per cent) of the regions where the 2020 simultaneous direct local elections were located had suffered flooding disasters. This assessment was taken from 13 August 2020 to 31 December 2020. During this period, there were stages of the direct local elections that required fieldwork from the election officials. These include voter registration (14 July–6 December), the campaign period (5–8 December), voting day (9 December), and the tabulation of vote results (11–26 December). Some of the locations flooded before voting day such as Berau, East Kalimantan, Medan, Pandeglang, Serang and Sidoarjo. In addition, several areas flooded on the voting day, such as Demak, Lima Puluh Kota, Pandeglang and Serang.

At the same time, Bawaslu faced significant challenges in supervising the 2020 direct local elections, being guided by various new health protocols: Regulations 6 and 14 already discussed, but also Regulations No. 16, No.17 and No. 181 (on voting, vote counting and results) (Indonesia 2020a, 2020d). Its task was to ensure that voter participation remained high while at the same time ensuring compliance with social distancing and other health protocols on the part of election staff, candidates, campaigners and voters (Asyilin 2021).

Some epidemiologists suspected the election contributed to new transmission clusters—which the government denied—complaining also that contact tracing was weak, so they could not determine the accuracy of the virus transmission rate (BBC News 2020). After the election, the KPU reported that several election officials and participants were indeed exposed to Covid-19 (Hutabarat

---

1 Regulation No. 18 provides that in force majeure situations election officials can stop some or all stages of voting and tabulation. The election officials at the sub-district and village levels will collect data on locations affected by the disaster. They then propose to the district/municipal KPU for a communication to the national KPU, which issues a directive for the district/municipal KPU to postpone voting if necessary, and to set the date for rescheduled polling.
2021). Seventy candidates who ran for the election were infected with Covid-19, three of whom died. Forty KPUD commissioners were infected, and two died, namely the heads of the KPU South Sumatra Province and the KPU South Tangerang Municipal. Three leaders were infected at the national KPU level, and more than 100 employees were also exposed to Covid-19.

THE TWIN HAZARDS IN DEMAK AND SEMARANG—OVERVIEW

To examine the dynamics of the 2020 direct local election in more depth, Demak District is the primary case study and Semarang is an additional insight for comparison. As a coastal region, Demak District is often subject to tidal flooding. At least four sub-districts in Demak are adjacent to the sea, namely Bonang, Karangtengah, Sayung and Wedung sub-districts. Sayung and Bonang sub-districts have been affected by tidal floods for decades (Figure 1).

There was a tidal flood in Demak during voting day on 9 December 2020. The high rainfall exacerbated the tidal flood (rob) because the river also overflowed. More than 800,000 registered voters attended more than 2,000 polling stations across Demak District. The Chairperson of the Demak KPU said that 51 polling stations in Demak were affected by flooding (Budi 2022). The flood-affected polling stations were spread across four coastal areas of Demak, namely Bonang (42 polling stations), Sayung (5), Karangtengah (3) and Wedung (1). Tidal floods inundated the access to the polling stations, and the water even flowed into the voters’ waiting room. The tidal water reached 15–20 cm (Budi 2022). Tidal flooding had also occurred during the 2019 national election in

Figure 1. Map of Indonesia, showing Demak and Semarang

Demak. Even though voters had to walk across the tidal flood to reach the polling station, voting day went ahead (Widodo 2019).

Regarding Covid-19, Abdul Latif, an election official at Demak KPU, reported that recruiting officials for the village level and polling stations was very energy-consuming (Latif 2022) because all of these officers had to take an antigen test first. Abdul Latif revealed that the 2020 direct local elections in Demak had 2,206 polling stations. There are 7 election officials per polling station, totalling 15,442 officers. Only officers who test negative for Covid-19 are allowed to serve, so it was inevitable that the KPU would have to replace some officers at the last minute.

A similar opinion was expressed by the head of the Demak Bawaslu, Khairul Saleh. The 2020 simultaneous direct local elections amid a pandemic obliged Bawaslu Demak to replace officers several times because they tested positive for Covid-19 (Saleh 2022), a necessary step to maintain public confidence that polling stations were safe to visit. Saleh (2022) also reported difficulty in recruiting volunteers to work in the field because the pandemic made many people afraid to apply. The 2020 elections saw increased responsibilities for Bawaslu; in addition to safeguarding against violations of electoral laws and rules, they also monitored and enforced implementation of health protocols during campaigning.

The head of the Sayung sub-district election official team, Aris Bimono, said that Covid-19 was a challenge (Bimono 2022). However, Aris reported that the Sayung sub-district was well prepared and that health protocols enjoyed the trust and support of local communities. The presence of special voting booths for people infected with Covid-19 or with body temperatures above 37.5 degrees Celsius was one solution in place. These special voting booths were subject to disinfectant cleaning and were placed at a distance from other booths. Meanwhile, a Bonang sub-district election official, Samsul Ma’arif, stated that organizing elections during the pandemic requires extra time and energy (Ma’arif 2022). He set an example by wearing gloves, a mask and other facial protection.

Voter registration
Bawaslu Demak emphasized that there were several problems during the finalization of voter registration. Directly verifying voter data in the field was difficult due to the tidal floods, which had submerged the access to voters’ houses. Tracking voters was also hampered because some people had evacuated or moved. Confirmation of registered voters must be conducted directly where the voter lives, based on their home address on the Indonesian ID card. Citizens vote in the polling station located nearest their home address. The Bawaslu officer in the field also must ensure that voter data updating officers from Demak KPU perform their duties according to the rules.

Regarding Covid-19, voter registration officers were provided with manual guidelines and PPE (hand sanitizers, masks, gloves and face shields). According to the manual, officers must use all PPE and follow the health
protocol for door-to-door voter registration. ‘It was quite difficult. When we went to the field, the tidal flood was about 30 cm on the road. We had to use bamboo sticks to pass through because the main road could not be travelled. So that residents’ houses were isolated’ (Saleh 2022).

Bawaslu Demak coordinated with KPU Demak to ensure that voter registration officers came to the location in response to the tidal floods. The village-level officers then took the personal initiative to adjust their work with the tidal time. Field officers accessed information on tidal times through the BMKG Demak website and Twitter posts. However, it needs to be underlined that this action was a personal initiative of the field officers, not stipulated by the official Standard Operation Procedure (SOP) of KPU Demak. Demak KPU itself does not have official cooperation arrangements between institutions in the context of implementing the elections. Therefore, one member of Bawaslu Demak, Amin Wahyudi, considered that tidal data from BMKG should inform every stage of the election process, including the voter data verification, as a formal guideline. In addition, he also admitted that Bawaslu had difficulty monitoring the voter registration process in the field because there was only one officer in each village. Therefore, the Bawaslu officers used a sampling technique to check the voters’ list registration and verification. This situation differs from the KPU officers, who can be found at each polling station (Wahyudi 2022b).

Tidal flooding commonly occurred in Sayung sub-district, so voter registration officers had to use boats and enter into the inlets of mangroves and round the sea to be able to visit people’s houses. Meanwhile, the voter data registration schedule coincided with rising Covid-19 cases in Semarang, so the implementation was finally postponed. However, KPU officers were helped by local people to verify voter data in coastal and other flood-prone areas. The local people actively provided suggestions and input regarding the closest potential polling station locations—those relatively safe from flooding (Gultom 2022).

In search of a flood mitigation plan
While Regulation 18 (Indonesia 2020b—which provides for postponing or repeating the voting) guided the Demak KPU in responding to tidal floods, Bambang Setya Budi (2022), the head of the Demak KPU, admitted that there is no detailed SOP for conducting elections under flood conditions. As mentioned, Regulation No. 7 of 2017 only regulates elections during disasters in broad terms, which the KPU must interpret at regional level. The head of the Demak KPU said that the most likely course of action during a tidal flood is to relocate polling stations or reschedule the voting day—as happened with polling stations in Morodemak, Margolinduk and Purwosari, which were moved to higher ground (Budi 2022). The mechanism for moving or shifting polling stations is regulated in the KPU regulation on voting. The principle, emphasized by the respondent, is that the new polling station should not be far from the community: ‘When you move it, the voters should be able to reach it easily’ (Budi 2022).
In addition, voters within a family should not have separate polling station locations because it will impact voter participation (Budi 2022). There was also an idea to create floating polling stations or polling stations located on boats. However, floating polling stations—to which voters would be taken by boat—could not be implemented due to budgetary rules.

Demak KPU gathered election officials at the sub-district level to map detailed flood-prone areas to anticipate floods. They conducted the mapping a week before voting, especially in areas with potential tidal flooding. When tidal floods occurred on voting day, election officials in the field already understood the needs regarding relocation of polling stations to safer places. Election officials at the polling stations marked the route of the newest location so that voters could read it. The voters also understood the new locations having generally been consulted beforehand. So, if the polling station was changed in the middle of the day, the voters knew where they should go to vote. Equally important, voting equipment had to be secured, including PPE and hand sanitizers. One strategy was that voting in the morning was carried out in outdoor areas because the tidal floods were not too high, and was moved to higher places when counting votes in the afternoon (tidal flooding gets higher after 13:00).

Bawaslu has also discussed the tidal flood with Bawaslu members at the sub-district level to come directly to inspect locations. The aim is to know actual conditions in the field. Based on the field survey, Bawaslu provides input to the KPU to maintain high voter participation. However, Amin Wahyudi (2022b) also admitted that several polling stations remained in their original places on voting day in 2020 because no alternative locations were available nearby.

Sayung sub-district implemented the elections relatively smoothly having taken anticipatory steps from the 2019 election experience, when it was the only sub-district to flood. In the 2020 elections, Bonang sub-district experienced flooding for the first time. The Demak KPU responded by ordering election officials in Bonang to check the conditions in polling station locations, and subsequently to move 30 of them. In addition, they ensured that all voting equipment and PPE was safe by wrapping it in plastic bags.

Demak Bawaslu has an election vulnerability index created by the national KPU containing information on potential natural and non-natural disasters. Demak Bawaslu took the initiative to create an SOP for its own operations in the event of flooding during elections, which emphasizes continuity of service, voter access and protection of election materials.

In Semarang, both Bawaslu and KPU Semarang referred to the election vulnerability index created by the national KPU. Thus, the Semarang KPU maps the tidal disaster-prone areas as the basis for determining the location of polling stations before the election. Mohammad Amin, Commissioner of Bawaslu Semarang, recounted the mitigation carried out by Bawaslu, especially before the election (Amin 2022). Semarang Bawaslu officers came to the field to map vulnerable areas by discussing with the sub-district and village-level
election officials the development of scenarios and routes for relocating polling stations if necessary.

Abdul Latif, an election official from Demak KPU, described the KPU’s own mapping of areas affected by tidal floods (Latif 2022), an activity still ongoing in respect of mapping the vulnerability of polling stations. However, he stated that the KPU is constrained in how far it can commit resources to this because tidal floods (rob)—unlike flooding due to heavy rain—are not defined as a disaster in the national law (National Disaster Law No. 24, Indonesia 2007; Gumilang 2018). Similarly, Bawaslu Demak has attempted to engage the district government on flood mitigation but the latter was unable to assist due to this particular legal gap. For example, floating polling stations could not be implemented (as mentioned earlier) because of this same constraint on local ‘disaster’ spending, as legally defined. The same was true of efforts to boost numbers of electoral staff in tidal flood areas. Yet the rob is in fact more disruptive, and destructive, than floods due to rainfall. In the meantime, the two electoral management bodies’ separate and limited efforts in flood mapping are valid exercises in downward accountability to communities.

Tidal floods (rob) - unlike flooding due to heavy rain - are not defined as a disaster in the national law.

Many of the election officials at the polling station were without adequate footwear and wore wet clothes.

Source: KPU Demak 2020, Voters went to the polling station amidst the flood and pandemic.
Many of the election officials at the polling stations were without adequate footwear and wore wet clothes. According to Demak Bawaslu’s Commissioner, ‘The honorarium for officers to supervise at the polling stations is used for motorcycle maintenance because they should go through the tidal water. The officers there, if you wear regular shoes, you cannot (move). There were even village-level officers who complained about asking for boots’ (Wahyudi 2022a).

The field officers responsible for polling said that the salary they received was not commensurate with the workload (Khamid 2022) because of the uncertain duration of their work. Before voting day, they worked until dawn to set up a polling station because of the tidal flood. On voting day itself, they then had to be ready for a full day’s duties at the polling stations.

**Voter turnout**

The head of the Demak KPU, Bambang Setya Budi, reported that public participation in Demak during the 2020 direct local elections was higher than in 2015 (Budi 2022), having increased from 67.5 per cent to 73 per cent (see Table 1). According to Budi (2022), high participation is due to voter education activities by various election stakeholders such as the Demak KPU, Demak Bawaslu, candidates’ campaigns and the media. Although indoor meetings were limited to 50 people, the Demak KPU mobilized its officers to publicize the elections door to door in the community. They also worked with volunteers from the villages to circulate information.

It is notable that even though Sayung sub-district is one of the areas most affected by tidal flooding, voter participation remained high and was third highest in the entire Demak District (Table 2). The head electoral official of Sayung, Aris Bimono, confirmed that election officials at the sub-district and village levels were active in publicizing the elections. One of the village-level field officers, Fakhur Razi (2022), said that various informal networks were used, for example regular community meetings, religious events and community group meetings, and that field officers also invited community leaders to be involved.

In line with KPU policy, Demak KPU and Demak Bawaslu made greater voter education efforts among people living in tidal flood-prone areas.

| Table 1. Voter turnout in Demak and Semarang: 2015 and 2020 |
|---------------------------------|-----------------|-----------------|-----------------|
| **District/Municipal**         | **2015 Direct local election** | **2020 Direct local election** | **2015 Direct local election** | **2020 Direct local election** |
| Demak                          | 67.52%           | 73.13%           | 67.52%           | 73.13%           |
| Semarang                       | 65.97%           | 68.62%           | 65.97%           | 68.62%           |

Source: KPU Demak, Political Participation in 2015 and 2020 Demak Direct Local Election, KPU Demak 2022.
Rough sea conditions on voting day prevented the people on the coast, most of whom are fishers, from going to sea. This contributed to fairly high turnout. The voters were also enthusiastic about the 2020 election because they hoped for change (Table 3).

Compared to other villages in the Sayung sub-district, the lowest voter turnout was in Sidogemah Village. Many residents of Sidogemah Village had moved to other places because their homes were affected by the construction of the Semarang–Demak sea toll road—while still being registered to vote there. Sayung election officials were able to track many of the voters at their new locations, not being far away. However, they were mostly unwilling to come to the polling station because of the tidal flood.

In Semarang Nanda Gultom, Commissioner of the Semarang KPU, stated that the Covid-19 pandemic did not reduce turnout there (Gultom 2022) given that it was higher than in 2015 (rising from 65.97 to 68.52 per cent, see Table 1). Voters came to the polling stations as scheduled (to avoid crowding each was given a time), and followed the other health protocols also. Nanda Gultom

<table>
<thead>
<tr>
<th>No.</th>
<th>Subdistrict</th>
<th>2015 Direct local election (%)</th>
<th>2020 Direct local election (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bonang</td>
<td>66.42</td>
<td>73.94</td>
</tr>
<tr>
<td>2</td>
<td>Sayung</td>
<td>74.03</td>
<td>78.08</td>
</tr>
<tr>
<td>3</td>
<td>Wedung</td>
<td>60.07</td>
<td>65.40</td>
</tr>
<tr>
<td>4</td>
<td>Mijen</td>
<td>58.11</td>
<td>63.43</td>
</tr>
<tr>
<td>5</td>
<td>Gajah</td>
<td>66.28</td>
<td>67.45</td>
</tr>
<tr>
<td>6</td>
<td>Guntur</td>
<td>69.76</td>
<td>80.82</td>
</tr>
<tr>
<td>7</td>
<td>Mranggen</td>
<td>73.47</td>
<td>75.10</td>
</tr>
<tr>
<td>8</td>
<td>Karangawen</td>
<td>72.00</td>
<td>77.20</td>
</tr>
<tr>
<td>9</td>
<td>Demak</td>
<td>64.93</td>
<td>72.12</td>
</tr>
<tr>
<td>10</td>
<td>Karanganyar</td>
<td>62.68</td>
<td>64.52</td>
</tr>
<tr>
<td>11</td>
<td>Kebonagung</td>
<td>64.49</td>
<td>72.19</td>
</tr>
<tr>
<td>12</td>
<td>Dempet</td>
<td>66.74</td>
<td>71.97</td>
</tr>
<tr>
<td>13</td>
<td>Wonosalam</td>
<td>68.46</td>
<td>73.82</td>
</tr>
<tr>
<td>14</td>
<td>Karangtengah</td>
<td>70.51</td>
<td>79.09</td>
</tr>
</tbody>
</table>

Source: KPU Demak, Political Participation in 2015 and 2020 Demak Direct Local Election, KPU Demak 2022.
explains the high level of public participation in the 2020 Semarang election as due to intensive voter education carried out by the KPU through online media (Gultom 2022). This was possible because Semarang is a large city: Internet access and IT literacy of its citizens is relatively higher than in Demak. The KPU’s public awareness campaign included a video to prevent hoaxes and misinformation about the election. According to the Semarang Bawaslu Commissioner, Muhammad Amin, the high participation was because only one candidate competed (Amin 2022).

**Campaigning**

The head of the Demak KPU, Bambang Setya Budi (2022), revealed that the campaign in tidal flood-prone areas was minimal. Volunteers nevertheless campaigned for their candidates in the field from house to house as best they could, inviting three to four people at a time to impromptu meetings at the side of the road or in the yard. The Demak Bawaslu Commissioner, Muhammad Amin, agreed that there was little campaigning in the coastal areas (Amin 2022). Apart from those at local level, campaign teams decided not to cover

---

**Table 3. 2020 direct local election timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 February</td>
<td>Sub-district election committees / officials appointed</td>
</tr>
<tr>
<td>21 March</td>
<td>Village-level election committees / officials appointed</td>
</tr>
<tr>
<td>14 July</td>
<td>Voter registration</td>
</tr>
<tr>
<td>16 October</td>
<td>Finalization of eligible voters’ list</td>
</tr>
<tr>
<td>3 September</td>
<td>Candidate registration opens</td>
</tr>
<tr>
<td>23 September</td>
<td>Official candidates declared</td>
</tr>
<tr>
<td>20 November</td>
<td>Preparation of voting logistics/equipment</td>
</tr>
<tr>
<td>23 November</td>
<td>Polling station officials appointed</td>
</tr>
<tr>
<td>5 December</td>
<td>Campaign period starts</td>
</tr>
<tr>
<td>8 December</td>
<td>Campaign period finishes</td>
</tr>
<tr>
<td>8 December</td>
<td>Distribution of voting equipment to each polling station</td>
</tr>
<tr>
<td>9 December</td>
<td>Voting day</td>
</tr>
<tr>
<td>9 December</td>
<td>Tidal floods occurred in several areas in Demak</td>
</tr>
<tr>
<td>15 December</td>
<td>Announcement of vote count results at polling stations</td>
</tr>
<tr>
<td>17 December</td>
<td>Official announcement of vote tabulation result at the district/municipal and provincial level</td>
</tr>
</tbody>
</table>

coastal areas in person despite their being densely populated—hence a significant source of votes—because by the same token, these areas posed risks of Covid-19 transmission (as well as some being flood-affected).

In the city of Semarang, the campaign was a little different in that volunteers and candidates also went to tidal flood-prone areas, while following social distancing and other health protocols. By the close of the campaign period, no increase in Covid-19 infections had been reported by the media.

The role of other government agencies
In disaster-prone areas, cooperation between the electoral management body (EMB) and the other government institutions in implementing elections is crucial. The cooperation of various stakeholders can anticipate things that become obstacles during the election. Regarding the tidal flood in Demak, the Commissioner of Bawaslu Demak, Amin Wahyudi, said there has been no formal cooperation between agencies within the Demak local government. The Demak local government’s KPU did not formally collaborate, for example, on mapping the polling stations with BMKG to have a special information channel that informs about the tides in various coastal areas of Demak in more detail, which would have given the KPU and Bawaslu more profound knowledge about the vulnerabilities of the polling station locations and their relocation scenarios.

In previous experiences, the coordination with other local government agencies has been limited to the police, the army and the public relations bureau of the Demak local government.

CONCLUSION

The multiple challenges faced by election authorities during the 2020 local elections provide several lessons for the conduct of future elections in Indonesia during emergencies. The Indonesian experience also provides some findings that may be relevant to other countries that have elections during rainy seasons and high tide months.

Unlike Covid-19, flooding resulting from sea level rise was not formally identified as a hazard that could impact the election and was therefore not adequately prepared for. Furthermore, the lack of formal cooperation with the Meteorology, Climatology and Geophysics Agency—which would have allowed for more accurate data—was a missed opportunity to better prepare. Such cooperation might even have allowed the KPU to change the timing of the elections so as to carry them out during a season of lower risk. First, therefore, Indonesian EMBs should consider adopting a risk management framework to minimize election disruption caused by natural hazards, including managing inter-agency cooperation with national and subnational state agencies (Asplund, Birch and Fischer 2022; International IDEA 2022).
Second, it is necessary to develop field officers’ skills by conducting additional training for those who work in flood-prone areas. Field officers need to be aware of the types of scenarios that can occur and the actions that need to be taken when a flood or other crisis occurs. They should also be provided with proper protective equipment for themselves and their materials, such as waterproof clothing and boots, to appropriately respond to a crisis. Under such conditions, each officer must be able to think independently to plan and carry out appropriate responses without having to wait for instructions from colleagues at distance.

Third, there is a need for a nationally coordinated framework that facilitates cooperation between national and subnational government agencies in implementing elections in times of disasters and during crisis. Such a framework would help to develop and maintain shared understanding about electoral risks, improve coordination and identify necessary election and governance reforms for strengthening resilience. For example, tidal flooding during election periods could be classified as disaster and thereby enable local election authorities to receive support from local government.

Fourth, related to the twin hazards, it is clear that the Indonesian Government (and legal framework) was better prepared to deal with Covid-19 during elections than with tidal floods. Therefore, regional KPUs facing the risk of tidal floods in future elections should consider contingency plans and crisis management procedures that can facilitate the delivery of elections by frontline staff in such areas.

REFERENCES
Amin, M., Chairperson of Bawaslu Semarang City, assistant researcher’s interview, Semarang, 12 July 2022


Bimono, A., head of the Sayung District Election Committee (PPK), author’s interview (online), Demak, 22 June 2022

Budi, B. S., head of Demak District KPU, author’s interview (online), Demak, 15 June 2022


Djalante, R., Garschagen, M., Thomalla, F. and Shaw, R., Disaster Risk Reduction in Indonesia: Progress, Challenges, and Issues (Berlin: Springer Cham, 2017), <https://doi.org/10.1007/978-3-319-54466-3>


Djalante, R., Jupesta, J. and Aldrian, E., Climate Change Research, Policy and Actions in Indonesia: Science, Adaptation and Mitigation (Switzerland: Springer Cham, 2021), <https://doi.org/10.1007/978-3-030-55536-8>


Gultom, H. C., Chairperson of KPU Semarang City, assistant researcher’s interview, Semarang, 15 July 2022


—, General Election Supervisory Board Regulation No. 16/2020a concerning Supervision of Voting and Vote Counting for the Election of Governor and Deputy Governor, Regent and Deputy Regent, and/or Mayor and Deputy Mayor, <https://www.mkri.id/public/content/djih/Peraturan%20Bawaslu/Perbawaslu%20Nomor%2016%20Tahun%202020.pdf>, accessed 18 October 2022

—, General Election Supervisory Board Regulation No. 17/2020b concerning Supervision of the Recapitulation of Vote Counting Results and Determination of Election Results for Governor and Deputy Governor, Regent and Deputy Regent, and Mayor...


Khamid, A., member of Tridonorejo Village Election Supervisory Committee, research assistant’s interview, Demak, 23 June 2022

Latif, A., Technical Division Staff of Demak District KPU, author’s interview (online), Demak, 22 June 2022

Liando, F. D., ‘Pengalaman Baik di Berbagai Daerah’ [Good Experiences in Different Regions] in Tata Kelola Pemilu di Indonesia [Election Governance in Indonesia], (Jakarta: Indonesian Election Commission, 2019)

Ma’arif, S., member of the Bonang District Election Committee (PPK), author’s interview (online), Demak, 22 June 2022


Razi, F., Chairperson of the Banjarsari Voting Committee (PPS), research assistant’s interview, Demak, 25 June 2022


Saleh, K., Chairperson of Bawaslu Demak District, author’s interview (online), Demak, 16 June 2022


Wahyudi, A., member of Bawaslu Demak, author’s interview (online), Demak, 16 June 2022a

—, member of Bawaslu Demak, research assistant’s interview, Demak, 22 June 2022b


ACKNOWLEDGEMENTS

The author would like to express his gratitude to his research assistant, Hawin Alaina, from PATTIRO—Semarang (an NGO focusing on public administration reform and good governance), who showed great dedication and commitment during the fieldwork.

ABOUT THE AUTHOR

Yogi Setya Permana is undertaking PhD research on the governance of climate change adaptation in Asia at the Royal Netherlands Institute of Southeast Asian and Caribbean Studies (KITLV), University of Leiden, where he focuses on the politics of flood governance in Indonesian cities. He is also a researcher at Indonesia’s Research Center for Politics, National Research and Innovation Agency (Badan Riset dan Inovasi Nasional, BRIN).

Contributors

Erik Asplund, Programme Officer, Electoral Processes Programme, International IDEA.

Sarah Birch, Professor of Political Science and Director of Research (Department of Political Economy), Kings College London.

Jeff Fischer currently serves as an independent consultant for election programming. He holds academic positions at Georgetown University and Sant’Anna School of Advanced Studies (Pisa).
ABOUT INTERNATIONAL IDEA

The International Institute for Democracy and Electoral Assistance (International IDEA) is an intergovernmental organization with the mission to advance democracy worldwide, as a universal human aspiration and enabler of sustainable development. We do this by supporting the building, strengthening and safeguarding of democratic political institutions and processes at all levels. Our vision is a world in which democratic processes, actors and institutions are inclusive and accountable and deliver sustainable development to all.

What we do
In our work we focus on three main impact areas: electoral processes; constitution-building processes; and political participation and representation. The themes of gender and inclusion, conflict sensitivity and sustainable development are mainstreamed across all our areas of work.

International IDEA provides analyses of global and regional democratic trends; produces comparative knowledge on democratic practices; offers technical assistance and capacity building on reform to actors engaged in democratic processes; and convenes dialogue on issues relevant to the public debate on democracy and democracy building.

Where we work
Our headquarters are located in Stockholm, and we have regional and country offices in Africa, Asia and the Pacific, Europe, and Latin America and the Caribbean. International IDEA is a Permanent Observer to the United Nations and is accredited to European Union institutions.

<https://www.idea.int>