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Disaster Capitalism? Examining the Politicisation of Land Subsidence Crisis in Pushing Jakarta's Seawall Megaproject

Thanti Octavianti

School of Geography and the Environment, Oxford, United Kingdom; thanti.octavianti@ouce.ox.ac.uk

Katrina Charles

School of Geography and the Environment, Oxford, United Kingdom; katrina.charles@ouce.ox.ac.uk

ABSTRACT: This paper offers an analysis of 'disaster capitalism', in which fear of disaster is exploited to facilitate the entry of a capitalist project, with regard to Jakarta's flood policy. After a major flood hit the city in 2013, the Indonesian government launched a flagship megaproject, the National Capital Integrated Coastal Development (NCICD), as the solution for the city's sinking problem. The plan involves closing Jakarta Bay by means of a 32-kilometre offshore sea wall and reclaiming 5100 hectares (ha) of land. Following a corruption scandal in a related reclamation project (for 17 artificial islands), the NCICD plan was evaluated for six months in 2016. Although many criticisms of the plan surfaced during the evaluation period, they were not able to bring about radical change, i.e. cancellation of the project. Informed by the concept of 'critical juncture' (an analytical approach focusing on a short period of time in which actors' decisions have a higher probability of affecting a particular outcome), we analyse the extent to which the framing of the sinking crisis by political actors can explain such a 'near-miss' critical juncture, where change is both possible and plausible but not achieved. Drawing data from newspaper discourse, interviews, and policy documents, we find that the project's proponents have eloquently framed the sinking crisis in order to ensure preference for the seawall policy, including the project concerning the 17 islands that was claimed by the critics as the capitalist part of the project. It can be concluded that the 'disaster capitalism' notion helps understand this 'near-miss' outcome.

KEYWORDS: Seawall, land subsidence crisis, critical juncture, disaster capitalism, Jakarta, Indonesia

INTRODUCTION

The way in which society perceives natural disasters has significantly changed over time. In the past, the general public accepted disasters as an act of God thus defying explanation and redress (Rosenthal, 1998). However, in today's risk society, disasters are no longer understood as unfortunate incidents, and people demand that governments act in the aftermath or during an ongoing crisis. A crisis can be perceived not only as a threat but also as an opportunity; in this sense, while it disrupts social routines, it also opens up political space to redefine problems and propose policy innovations. Further, a crisis generates what Boin et al. (2009: 81) refer to as a "framing contest", in which actors can "interpret events, their causes and the responsibilities and lessons involved in ways that suit their political purposes and visions of future policy directions". The ability of a crisis to delegitimise power and authoritative relationships increases the likelihood of policy change particularly in comparison to

¹ In this work, we use the term 'crisis' and 'disaster' interchangeably. Crisis can lead to disaster if the event is neglected or mismanaged (Shaluf et al., 2003). However, both disaster and crisis share many features (e.g. sudden nature of the event and damage caused) and, therefore, they can be used interchangeably up to a certain extent (Al-Dahash et al., 2016)

regular conditions (cf. Klein, 2007). Comparing 16 cases of water policy transitions worldwide, Meijerink and Huitema (2010: 2) observe that reforms "tend to occur only after the existing paradigm (...) has been put to the test by disastrous events".

However, the nexus of crisis, disaster, and policy change does not necessarily transpire, even in the case of repeated disasters whose frequent occurrences help to reinforce lessons learned. For instance, Meijerink (2005), who studied flood policy transition in the Netherlands, found that none of the shock events were able to alter the state's core dominant policy on hard structures. Droughts also provide an opportunity for water reforms, but their existence does not guarantee success (Grafton and Horne, 2014); for example, the market-oriented reforms achieved during Australia's Millennium Drought were reversed once the drought had ended (Crase et al., 2009; Grafton and Horne, 2014). Dynamics and outcomes of crisis episodes are hard to predict (Boin et al., 2005) because they are influenced by many factors, such as the political context, the particular crisis faced and the availability of resources to enable an appropriate response. Hence, the occurrence of a shock event or the prevalence of a crisis discourse does not guarantee a radical policy change.

Building on this scholarship, this paper seeks to investigate the process of unmaterialised policy change in the wake of a crisis. We further discuss how this outcome can be linked to, or perhaps explained by, the 'disaster capitalism' notion, in which fear of disaster are exploited to facilitate entry for a capitalist project. To this end, the case of the sinking crisis in Jakarta, Indonesia, is analysed in this paper.

Jakarta is one of the fastest sinking cities in the world (Deltares, 2015), together with California's San Joaquin Valley, Mexico City and a few others (Ruggeri, 2017). While flooding is a notorious feature of the city, land subsidence has only recently been recognised in the public sphere. Parts of north Jakarta are subsiding at an average rate of 15 cm per year (Abidin et al., 2011); with the greatest total subsidence of 4.1 m between 1974 and 2010 being observed in Muara Baru (The Ministry of Public Works, 2011). In the academic literature, subsidence was recognised as early as 1926 (Schepers, 1926; Suharto, 1971), but its impacts were only apparent in 1978 via the cracking of permanent constructions (Abidin et al., 2008). Since then, academics have associated intensified flooding (Brinkman and Hartman, 2009) and increased inland seawater intrusion (Onodera et al., 2009; Soekardi et al., 1986) with land subsidence. Unlike flooding, subsidence on its own, due to its unnoticeable nature, was not able to attract policymakers' attention sufficiently for them to act.

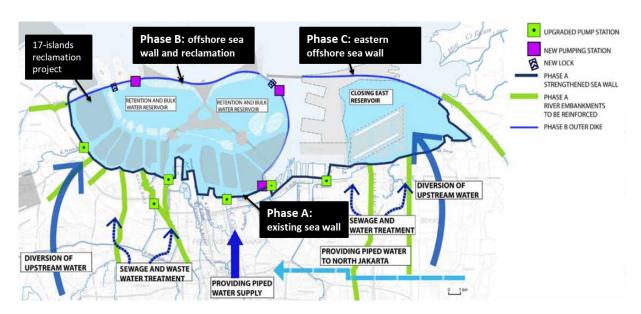
However, the land subsidence issue reached policy circles only after a major flood hit Jakarta in 2007. The flood was one of the worst in the city's history as it inundated 60% (400 km²) of the city within just 24 hours, killed 79 people, displaced 500,000 people and caused almost USD690 million in losses (Bappenas, 2007). As a response, a study called Jakarta Coastal Defence Study (JCDS) was conducted to find the cause of the flood and to formulate a flood alleviation programme accordingly. The study found that land subsidence was one of the main factors in worsening the flood (The Ministry of Public Works, 2011; NL Agency, 2012). Subsidence then reached a wider audience as the study became a wake-up call for the people and national elites.

The significance of Jakarta as the economic and political capital of Indonesia has made protecting the city from sinking a necessity. After another major flood hit the city in 2013, the Government of Indonesia in collaboration with the Government of the Netherlands launched the National Capital Integrated Coastal Development (NCICD) plan. This USD40 billion project, designed by a consortium of Dutch firms, consists of a 32-km offshore sea wall, 1250-ha land reclamation, and a 7500-ha water retention basin (see Figure 1). The main focus of the NCICD is the offshore seawall, whereas the land reclamation (and a separate toll road project that will be built on the seawall) is justified because it brings private funding for the seawall. The NCICD project is divided into three phases: (i) phase A (originally planned for 2014-2018) focuses on strengthening existing dikes in the coastal line of Jakarta, (ii) phase B (2018-2040) involves building the main offshore seawall and land reclamation, and (iii)

phase C (2030 onwards) involves building the eastern part of the offshore seawall (NCICD, 2013). As the seawall will close Jakarta Bay, the NCICD, unsurprisingly, has received a great deal of criticism, especially with regard to its social and environmental aspects. For example, the poor water quality of the retention lake may lead to environmental degradation and pose health risks to coastal communities.

Connections between sinking, land subsidence and flooding threats should not be confused. In this paper, we refer to sinking as a result of an increased risk of flooding due to land subsidence and sealevel rise. The NCICD masterplan (NCICD, 2013) has clearly explained the rationale of the seawall. It is predicted that many rivers in Jakarta will not be able to flow under gravity due to subsidence. The offshore seawall will contain the river water and a pumping system – predicted to be the largest in the world with 730 m³/s – that will pump the water out to the sea. However, a *direct* relationship between the solution of the seawall and land subsidence, or simply sinking, has been portrayed in the media. In a later section, we will analyse the development, and simplification, of the land subsidence issue to understand how it has been linked to the sinking crisis and the seawall in a particular period of time.

Figure 1. A map showing the NCICD plan in Jakarta Bay with phases A, B, C and the 17 islands' reclamation project (Source: The Coordinating Ministry for Economic Affairs, 2014).



Ever since its launch, there has been little, if any, contention about the NCICD. Its safety narratives dominated the public discourses and, thus, silenced the nuanced voices criticising the project (Octavianti and Charles, submitted-a). It is only after a corruption scandal related to the 17 artificial islands reclamation project that surfaced in March 2016, that the criticism surrounding the NCICD plan did become intense. Both the 17 islands and the NCICD plan are located in Jakarta Bay (see Figure 1), but they have different policy routes. The islands are merely for urban development purpose legitimised by a presidential decree in 1995, whereas the NCICD is a disaster preparedness plan launched in 2013. Following the corruption scandal, President Widodo ordered the NCICD plan to be evaluated for six months along with integrating the 17 islands' reclamation project to the NCICD plan — making the total reclamation area of 5100 ha. This integration was a painful addition to the seawall plan because, at times, the islands are more disputed than the NCICD.

The six-month evaluation period was extremely important in determining the fate of this megastructure. The outcome of the evaluation was the government pledging their commitment to the project's phase A, which most stakeholders including the critics have agreed upon, and delayed

decisions on phase B and C until further studies are completed. ² On the one hand, this decision seems rational – conducting thorough studies before making an important decision. On the other, it can be seen as a political manoeuvre to stall time before making a highly controversial decision in relation to the upcoming political year in 2019. Opponents expressed their concern about the 'indecisive' outcome, or what we label as a 'near-miss' outcome. They initially hoped that this critical period could provide a momentum to cancel the offshore seawall and the reclamation plans (Phases B and C), but such a policy change unfortunately did not materialise. Informed by the concept of 'critical juncture', this paper seeks to investigate why such a rare opportunity was not able to generate policy change, i.e. cancelling phases B and C, despite the many criticisms the project received. Furthermore, we attempt to understand to what extent the disaster capitalism notion can offer an answer to such an indecisive outcome: how did actors frame the sinking crisis to justify the ambitious project? Our argument is that the problematisation of land subsidence to the sinking crisis was used to maintain policy preference on the seawall and the reclamation project embedded in it. The disaster capitalism notion is, therefore, evident in explaining the near-miss outcome.

This paper proceeds as follow. The next section reviews the literature surrounding policy change, particularly, in the field of crisis-related policymaking process, and critical juncture. After describing our methods of data collection, we proceed with an analysis of the development of the critical juncture and the respective role of land subsidence and political agencies in the NCICD policymaking process. Thereafter, we discuss the politics of idea on how the actors framed the sinking crisis, and analyse policy alternatives other than the seawall. We then discuss the potential causes and broader impacts of the near-miss event in the penultimate section, before presenting our concluding remarks.

LITERATURE REVIEW

This section will review literature in two areas: (i) crisis-related policymaking process, including a brief description of the disaster capitalism notion, and (ii) factors constituting a critical juncture.

Crisis-induced policy change – to adopt Sabatier's (1999) oft-used taxonomy – has taken an ample portion in policy literature. Main public policy theories, namely Advocated Coalition (Sabatier and Jenkins-Smith, 1999) and Punctuated Equilibrium (Baumgartner and Jones, 1993; True et al., 1999), share a focus on a major policy change (Schlager, 1999), and crisis plays a vital role in inducing this change. Most public policies are characterised by continuity or incremental changes (Thelen and Steinmo, 1992). In the wake of a crisis, the possibility to fundamentally alter policies is higher as players or policy entrepreneurs exploit the 'fluid' moment (Kingdon, 2014). A range of action is possible, from defending and strengthening their authority to sowing the seeds of new policies (Keeler, 1993). Boin et al. (2009: 83) postulate a theory of crisis exploitation to understand "the purposeful utilisation of crisistype rhetoric to significantly alter levels of political support for public office-holders and public policies". In exploiting this crisis-induced opportunity space (cf. Alink et al., 2001), policy entrepreneurs are involved in a framing contest (Boin et al., 2009), in which they offer a frame and manipulate, or even fight, to have their frame accepted as the dominant narrative (Stone, 2001; Brändström and Kuipers, 2003; De Vries, 2004).

Here, we will focus on policy change, which "occurs when there is ability to overcome dominant perception (frame) and to substitute an alternative construction of the reality being confronted with policy" (Peters et al., 2005: 1284). Change to core belief is important to be emphasised here and this radical change has not always materialised in the face of a crisis, like most public policy theories suggest. After a major flood, for example, awareness of flood protection usually dramatically climbs

² At the time of writing, the studies had been completed with minor alteration on design and are now being reviewed by the relevant government's agencies. Unfortunately, they are not publicly available.

onto the government's agenda. As a consequence, additional financial resources are often allocated for related-agencies to mitigate flood hazards. Without alteration on the basic principles and preferences in managing flood risk, this policy response cannot be considered as a policy change, as in the case of the establishment of the Delta Committee following the devastating 1953 storm surge in the Netherlands. The institution's approach remained the same with the country's previous measures on using hard infrastructure to fight water (Meijerink, 2005). This is also the case for Jakarta's seawall. Albeit its unprecedented scale, the seawall is in line with the city's consistent infrastructural measures to deal with the perennial flooding problem (Octavianti and Charles, submitted-b). What makes NCICD different from the previous measures is that this project brings an element of (what critics call) capitalism through the land reclamation project. The privately led reclamation is justified to fund the significant portion of the seawall.

The disaster capitalism terminology is used by Klein (2007) in her book *The shock doctrine: The rise of disaster capitalism*, where she explored how capitalism came to dominate the world with the help of violent shock tactics in times of natural disaster or other calamities. For example, Klein argue that the 2004 tsunami paved the way for the Government of Sri Lanka to force the fishermen off beachfront property, so it could be sold to hotel developers. Another example is how the destruction of New Orleans by Hurricane Katrina allowed most of the city's public schools to be replaced by privately run charter schools. She paints a disturbing portrait on the use of terror, including deliberately creating a crisis, to achieve a capitalist system, for example, the use of torture in Chile and Argentina's military dictatorship to break down resistance to a free market. Whilst we are not fully convinced by her arguments, we see the value of her main argument that "countries are shocked – by wars, terror attacks, coups d'état and natural disasters. And then they are shocked again – by corporations and politicians who exploit the fear and disorientation of this first shock to push through economic shock therapy" (Klein, 2007: 25).

We observe two factors that make the notion of disaster capitalism different from other crisis-related policy theory, particularly Boin et al'.s (2009) crisis exploitation theory. First, the outcome of a crisis in the former approach is focused on establishing a capitalist system or pursuing a capitalist project, while the latter does not specify the outcome of a crisis. Second, the theory of crisis exploitation focuses on the use of discourse as an exploitation strategy, but disaster capitalism uses both discourse and action on the ground to achieve the so-called 'shock therapy'. To our understanding, if discourse on the threat of dike failure is sufficient for the government to set the agenda, as crisis exploitation theory would have it, disaster capitalism may seek to give it an extra push by, for example, intentionally creating a rupture in the dike which in turn would cause its failure, so that a capitalist project can proceed. This may sound extreme and, therefore, in this paper we carefully employ insights from disaster capitalism to understand the extent to which players exploit the fear of the sinking crisis to push reclamation as a capitalist project and whether this idea can offer an answer to the near-miss critical juncture to cancel the whole project.

We then move to review literature in critical juncture scholarship as this concept provides the analytical framework for this study. According to Capoccia and Kelemen (2007), critical junctures are "the *relatively* short periods of time during which there is a *substantially* heightened probability that *agents*' choices will affect the outcome of interest" (Capoccia and Kelemen, 2007: 348, italics in original). Critical juncture has been widely used in many disciplines and has been imported to political science in the area of historical institutionalism to answer critics on the incapability of historical institutionalism to explain institutional change (Peters et al., 2005). Critical juncture interrupts a stable

³ This book has unsurprisingly sparked debates. Some prominent actors, such as the Columbia University's Centre for Sustainable Development Earth director Jeffrey Sachs, did not agree to most of the account of himself portrayed in the book (Pilkington, 2008).

institution's path; during the juncture, a new objective in the policy was assigned and political resources evolve to sustain those new policies (North, 1990; Steinmo et al., 1992). In water policy, the approach has been used, for example, to explain water reforms in Australia's Murray-Darling Basin (Marshall and Alexandra, 2016). Analysing the environmental water recovery in the basin, they found that crisis-induced opportunity to introduce policy innovation is limited without the presence of active policy entrepreneurs.

Literature on critical juncture can be broadly grouped based on two dominant factors contributing to the outcome: antecedent conditions (Lipset and Rokkan, 1967; Slater and Simmons, 2010) and political agencies (Ertman, 2010; Nichols and Myers, 2010). Antecedent conditions are an important backdrop during a critical juncture (Mahoney, 2001). They define a range of institutional alternatives available to policymakers and at the same time limit the alternative options (Capoccia, 2016). Scholars of critical juncture use antecedent condition to build a discussion on 'divergence': "a 'common exogenous shock' affects a set of cases (typically countries), causing them to 'diverge''' (Capoccia, 2016: 93). Multiple case studies were employed in this sense to analyse the extent to which their different antecedent conditions cause them to diverge after a shock. This study scrutinises critical juncture development of a single case study and therefore it provides different empirical insights.

We focus on land subsidence as an antecedent condition and examine the development of the discourse through mass media. The exploitation of this issue is principally acted out in two areas: the mass media and official inquiries (Boin et al., 2009). We emphasise the utilisation of mass media in this research but have also consulted official reports and other documentations. Mass media has agenda setting power for which it prompts policymakers to take action and satisfy the public's interest and demand for answers (Birkland, 1997). Authors have suggested that media do not reflect reality but rather shape it (Miles and Morse, 2007). Furthermore, their focus on a few issues leads the public to perceive those issues as more important than others (McCombs et al., 2005). Therefore, media constitutes a prime arena where framing contest takes place. Both status quo players and change advocates have to attract and convince newsmakers of their particular crisis frame. Therefore, crisis communication skill that is supported by scientific evidence (see Parkhurst, 2017) is indispensable. The rival interpretation of the role of media in the wake of a crisis is that they pursue their own agenda in crisis reporting (see Streitmatter, 1997). This means that the actors' performances are less important than the degree to which their frames fit the pre-existing biases of the main media outlets.

The second determinant of critical juncture is the interaction of political agencies during the juncture. The role of key actors and their political interactions prior to deciding a path of institutional development are crucial. Like other scholars employing critical juncture (Barke and Jenkin-Smith, 1993), we emphasise analyses on political agencies and their actors rather than on institutions. This is also different from typical historical institutionalism analysis that overemphasises the role of bureaucrats and belittles politicians as creative actors (Peters et al., 2005). Agencies consist of political actors and they become creative when seeking political consensus and forming coalitions as they must compete to occupy limited 'political space' (Pierson, 2000). The importance of agencies and choices vary at every critical juncture (Collier and Collier, 1991).

Some authors have compared the concept of critical juncture with other policy frameworks. Richards and Smith (1997: 66, emphasis added), for example, demonstrate that critical junctures are not interchangeable with other terms, such as window of opportunity, because they work in different stages of the policy process. They argue that critical juncture is "a distinct (...) and lasting (...) change (...), brought about by exogenous and endogenous pressure", while windows of opportunity are "spaces for change created by exogenous and endogenous pressures". In other words, critical juncture is the outcome of the utilisation of windows of opportunity. Therefore, according to them, critical juncture is not interchangeable with terms such as crisis, turning points, unsettled times, window of opportunity (Kingdon, 2014), formatting moments, and punctuated equilibrium (Sabatier and Jenkins-Smith, 1993).

This relates to the temporality of a critical juncture, whether it is just a point or moment in a path-dependent process or whether the juncture itself is a process and thus may be better referred to as a time period. We follow explanation by Capoccia and Kelemen (2007: 361) to determine the criticality of a juncture and solve this temporality issue. They argue that "the briefer a critical juncture is relative to the duration of the path-dependent causal process that it instigates, the more critical it is". We adopt this operationalisation to analyse critical juncture in this work that powerful actors took decisions during a narrowly circumscribed period rather than in a moment of choice.

However, contrary to Richards and Smith's (1997) argument that change is the key element of a critical juncture, Capoccia and Kelemen (2007) argue that change is not a necessary element of a critical juncture. Other outcomes include, among others, re-equilibration and near-miss. Re-equilibration refers to a condition where institutional change resulted from a critical juncture is not permanent and can therefore lead to the re-equilibration to the old path-dependent institutions. Whilst near-miss refers to a condition where change is possible and sought after, it narrowly fails to occur (Capoccia, 2015). One example of this negative case is Nichols and Myers's (2010) on the theory of 'reconstructive presidency' in the United States. They argue that not all presidents have seized the opportunity to transform political order in a vulnerable regime.

After reviewing key literature in the field of crisis-related policy change and critical juncture, we hope to contribute to them in two ways. First, this paper offers a view on crisis-related policymaking process and examines the potential role of disaster capitalism in that process. Our focus on land subsidence crisis gives a certain nuance to most policy work as its unnoticeable nature is less likely to push for immediate policy action, as opposed to flooding, for example. Second, we hope this paper can enrich empirical insights for critical juncture literature by the examination of a negative case. This nearmiss phenomenon that has not been much investigated will be a fruitful contribution to this field. Moreover, our experimentation of the application of critical juncture concept in a contemporary event is hoped to bring new insights for critical juncture analysis.

METHODS

Data collection for this study includes semi-structured interviews and newspaper analysis. Fieldwork was conducted in Jakarta from May to September 2016 and July 2017. Forty-five informants were interviewed using a snowball sampling approach; informants included government officials from central government (CG= 8) and local government (LG = 8), non-government organisation activists (NG=8), academics (AC=12), and other experts (KI= 9) (see Appendix 1 for the list of interviewees). We use the code of interviews (e.g. AC for academics) to refer to evidence coming from a particular interview. The expertise of the informants spans across urban development policy, conservation and environmental policy, water and wastewater policy, engineering and community engagement. The questions in the interviews were regarding the informants' views on the land subsidence problem, flood alleviation measures, and the NCICD plan. Interviews were audio-recorded with consent from the informants.

Newspaper articles were analysed to examine public discourse around land subsidence, flooding and NCICD. Knowledge on how the media gather and distribute the news is important in understanding public policy priorities for natural disasters (McCombs et al., 1997; Tierney et al., 2006). We undertook an extensive article search in Google News using the keyword 'land subsidence Jakarta' and 'penurunan muka tanah Jakarta' with a time span from 1 January 2007 to 31 July 2017. We screened articles both in English and Bahasa Indonesia published by local and international media. After the elimination of irrelevant articles, 405 articles remained. Such articles appear frequently in the following media: Kompas (65 articles), The Jakarta Post (26 articles) and Liputan 6 (20 articles). Subsidence was put as the core issue, and topics associated with it were then analysed. Newspapers constituting the primary media source provide insights into the dynamics of public discourse and capture interactions in the political area by accommodating contested views from various stakeholders (Protess and McCombs,

1991; Chan and Lee, 2014). It is anticipated that newspapers may only cover mainstream news (Newman, 2011). We expect marginalised views to be covered in the interviews by our attempt to interview informants with a variety of backgrounds. Lastly, data from publicly available information directly attributable to key governmental actors and institution were also collected, such as policy documents.

Before we proceed, a methodological caveat is in order. While attempts were made to accommodate views from a range of actors — both proponents and opponents of the project — it is recognised that there may be subjectivity in presenting those views in this paper. In addition, there may also be other antecedent conditions, such as the structure of the administration or the national political context, that contribute to the development of the juncture and the outcomes.

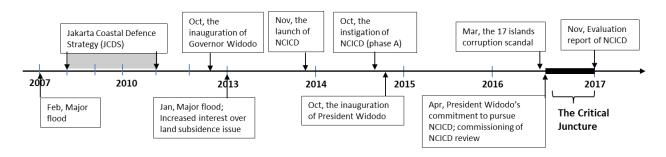
CRITICAL JUNCTURE ANALYSIS

We begin this section by analysing the criticality of a juncture in the NCICD policymaking process before focusing on two areas of the juncture: antecedent conditions and political agencies.

Development of the critical juncture

Figure 2 shows the NCICD's policy process in chronological order. As most of the process has been discussed in the introductory section, this section only picks up some important milestones relevant for the analysis of the critical juncture. Prior to NCICD, the government published the Jakarta Coastal Defence Strategy (JCDS) plan in 2011 as a response to the 2007 flood. The JCDS was similar to the current NCICD plan, but without the Garuda-bird shaped reclamation element. Compared with the 2007 flood, the damage caused by the 2013 flood was less severe but the latter was able to push the seawall proposal. This is because the flood occurred at a crucial time and place. It happened just three months after Governor Widodo was sworn in October 2012 and the area flooded was also significant: the centre of government and business activities in central Jakarta. This flood exposed the deficiency of the current flood policy and provided a major opportunity to introduce a policy (Alink et al., 2001).

Figure 2. A timeline showing key events (i.e. flooding, administration change) related to the policy development of NCICD. The critical juncture that occurred during the evaluation period of the project is from April to November 2016.



The strengthening of the 4.5 km of the existing dikes (Phase A) was done in 2013 in a rush, just ten days before President Yudhoyono stepped down from the presidency (Elyda and Dewi, 2014). The ability to

⁴ Other than the seawall, some important policies were implemented, such as the World Bank's dredging project known as JEDI (Jakarta Emerging Dredging Initiative) (The World Bank, 2015).

⁵ The 2013 flood inundated 14% of the city with 20 people killed and 50,000 evacuees (BNPB, 2013), while the 2007 flood inundated 60% of the city with 79 people killed and 500,000 evacuees (Bappenas, 2007).

launch such massive infrastructure was a feat for the outgoing government. Following this, no significant policy progress for NCICD was made until a corruption case of the 17 islands project received wide press coverage in March 2016. A chairman of Jakarta's leading private developer bribed a Jakarta councillor who had a key role in passing the reclamation project's draft bylaw. The bribe was intended to lower the developer's 15% contribution clause in the bylaw to only 5% (Artharini, 2016). We see that political pressure towards NCICD was an unintended consequence (Pierson, 2000) of the 17 islands' corruption case. This ripple effect caused NCICD to be evaluated as the public questioned the benefit of this multibillion-dollar project.

Following the political chaos after the corruption case, President Widodo (former Governor of Jakarta) restated the importance of NCICD plan and decided to proceed with the plan:

It is estimated that all of North Jakarta will sink below sea level by 2030. As a result, 13 rivers passing through Jakarta cannot flow into Jakarta Bay. Therefore, management of Jakarta's water and environment must be integrated from upstream to downstream. Coastal development in North Jakarta, NCICD (...) a project that has been developed for long enough becomes an answer for Jakarta [President Widodo, 27 April 2016, in Kuwado (2016a)].

He further ordered the NCICD plan to be evaluated for six months (from April to November 2016), and the 17 islands reclamation project to be integrated with the NCICD plan. We consider that this evaluation period is the critical juncture for the NCICD policy. In mid-November 2016, the President requested the Ministry of Planning to focus on Phase A (strengthening the existing sea walls along Jakarta's coastlines) (Pitoko, 2016). Decisions on the other two phases (phase B – main offshore sea wall, land reclamation and retention basin, and phase C – eastern offshore sea wall) were delayed until further studies were completed.

The criticality of the above juncture can be analysed against the critical juncture criteria: duration of the juncture or 'temporal leverage' and probability of impactful decision or 'probability jump' (Capoccia and Kelemen, 2007). First, the duration of the juncture (6 months) is briefer that the NCICD policy process, from its inception since after the 2007 flood to just prior to the juncture. Conflict over ideas and underlying assumptions of NCICD was only evident during this evaluation period. This finding is aligned with Thelen and Conran (2016) who maintain that not all 'collisions' occurred were consequential. Collisions that occurred during the evaluation period were desirable to evaluate the plan.

The second aspect is the probability jump; it refers to the choices made during the juncture having a higher probability to affect the outcome of interest compared with the probability *before and after* the juncture (Capoccia and Kelemen, 2007). Before the juncture that was initiated by a corruption case in March 2016, NCICD had not shown significant progress since its launch in November 2014. During the critical juncture, a variety of responses, mainly critics from non-state actors, surfaced. Policymakers accommodated these critics by focusing on Phase A, the least controversial phase. After the juncture, no substantial decisions have been made and political tension on this issue has relaxed.

Land subsidence as an antecedent condition

The development of land subsidence discourse in the media worked as a powerful antecedent condition and became incredibly important in further policy chain. The land subsidence issue was used

⁶ The developer tried to influence the outcome of deliberations on two draft bylaws concerning North Jakarta Coastal Zoning plan. Based on the bylaw, the developer is required to hand over 15% of the reclaimed land to the city administration. The developer had promised the councillor that he could deliver IDR 2.5 billion (approximately USD 180,000) if he could pass the reclamation project's draft bylaw and lower the developer's contribution to only 5%. This request was accepted by the councillor (Heriyanto, 2016).

as a discursive tool to problematise the sinking threat as a definite crisis and helped justify NCICD as the solution. Subsidence has been construed by the public to lead to sinking, and therefore to the worsening of flooding when combined with sea level rise as illustrated in Figure 3. Sinking is a larger disaster than flooding and thus a sinking threat posed a greater demand for relief that was answered by the NCICD proposal.

Interest over land subsidence increased substantially after the 2013 flood or precisely after the launch of the NCICD, although findings from the JCDS report confirming the subsidence threat were disseminated in 2011. Historical analysis of newspaper articles on land subsidence suggests that the issue was present infrequently prior to 2013 (Figure 4). Subsidence gained the highest interest during 2016 when the critical juncture was taking place. Further analysis of these subsidence-related articles reveals a strong association between land subsidence and the sinking threat followed by NCICD and reclamation topics.

The media played a crucial role in fostering a sense of vulnerability in Jakarta. Perceptions of crisis are likely to vary in a society reflecting different values and positions; therefore, the supporter of the project recognised a need to shape the perception of the public of the crisis through the media. Provocative titles, such as *Jakarta Bisa Tenggelam* (Jakarta could sink) (Kompas, 2010) and *Benarkah 14 tahun lagi Jakarta Utara akan tenggelam*? (Will North Jakarta sink in 14 years?) (Harap, 2016) aimed to make people question their safety in the city. The use of such emotive labels (Wagner-Pacifici, 1994; Howarth et al., 2000) was meant to facilitate the introduction of NCICD as a megaproject that was likely to ignite dispute. With regard to the argument of Boin et al. (2009) on the role of political actors vs. media, we observe that within the subsidence discourse, the preexisting biases of the media (e.g. the media's political stance in news coverage) was not evident. Rather, the political actors and their crisis frames played an important role in shaping the discourse. It is worth noting, however, that media bias may be more prevailing in the case of the reclamation scandal, which is a different issue.

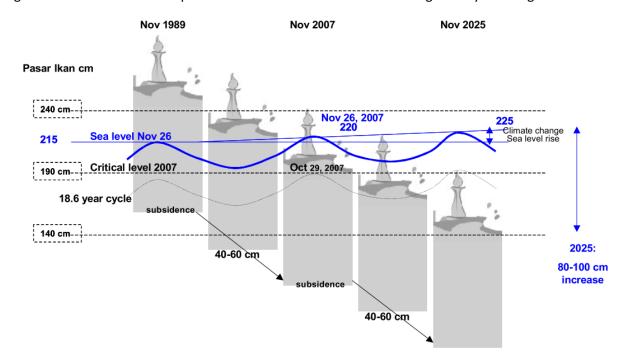


Figure 3. Illustration of the impact of tides and subsidence on increasing the city's sinking risk.

Note: The combination of land subsidence at a rate of 40-60 cm/18 years and rise of sea level at a rate of 5 cm/18 years has caused Pasar Ikan, the reference point, to sink. The use of the National Monument (Monas), the symbol of Jakarta, to represent its sinking demonstrates the significance of the sinking threat to Jakarta as the capital city of Indonesia (Source: Brinkman and Hartman, 2009).

Figure 4. Number of newspaper articles containing land subsidence increased substantially after the 2013 major flood (it reached its peak in 2016 when the critical juncture was taking place).

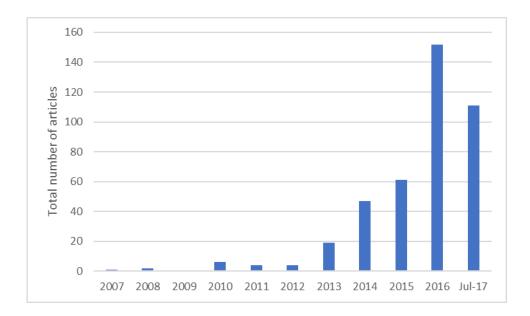
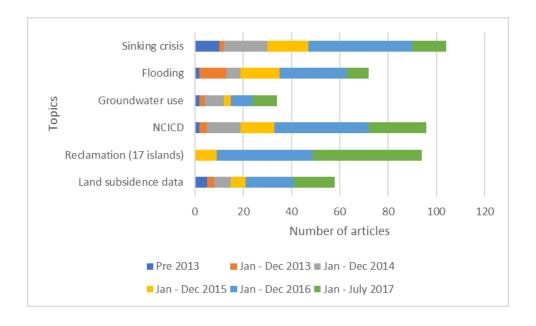


Figure 5. Distribution of topics associated with land subsidence per year (2007-July 2017). Problematisation of subsidence as a crisis is the highest followed by the NCICD and reclamation topics.



Our previous analysis (Octavianti and Charles, submitted-a) shows that there are four dominant discourses on NCICD: safety, socio-environment, economic and political discourses. The safety discourse has been used by the proponents of NCICD (government, consultants, developers and some academics) to push the megaproject. A power play emerged from the struggle of different actors to establish the dominant discourse or storyline:

If no measures are taken, a large part of the coastal zone is under threat of permanent inundation. In this area, the lives of 4.5 million people are at stake. Material damage due to permanent inundation is

calculated at USD103 billion for loss of land and buildings only. The damage to the economy will be even greater (The Coordinating Ministry of Economic Affairs, 2014: 23).

The characteristic of a disaster affects the policy response it triggers. For instance, Birkland (2006) shows that the scientific, social and political responses to earthquakes are more well-ordered than are the responses to hurricanes in the US political context. More attention paid to earthquake mitigation than those to hurricanes may be caused by the difficulty in creating an insurance programme for earthquakes (Birkland, 2006). In Jakarta, both flooding and land subsidence are important exogenous drivers, but they have different characteristics in terms of policy impact. Unlike the immediate threat of a flood, land subsidence is a gradual phenomenon that does not create the urgency of actions and therefore is not an efficient focusing event. This temporal characteristic of the land subsidence crisis is similar to that of drought and climate change. The boiling frog analogy describes the inability or unwillingness (Birkland, 2006) to respond to threats that arise gradually (Gore and O'Connor, 2007). Policy responses to such crises are usually limited to incremental changes. Without the flood, land subsidence may never receive such significant attention.

This section has discussed the process of land subsidence problematisation and the landscape of the crisis discourse that works as a powerful antecedent condition. The discourse has been eloquently used by influential actors to push a particular solution, which we now turn to.

The role of political agencies

While exogenous factors, like crises, can provide powerful catalysts for policy change, active and disruptive policy entrepreneurs are required to reinforce institutional innovation (Marshall and Alexandra, 2016). Here we discuss the extent to which political agencies play this role in providing, and pushing, answers for the land subsidence crisis. His decision on NCICD is one of President Widodo's important moves in his presidency. His action to meet critics' concern by commissioning a review demonstrates his political manoeuvre to prevent a potential collapse in public confidence. Analysing it from a broader political context, President Widodo's aim to distribute economic growth in the eastern part of Indonesia (PresidenRI, 2016) might also affect his stance towards the NCICD project. This should be analysed within the context of the next presidential election in 2019. The question is whether his decision on NCICD as a politically difficult project will help or hinder his re-election. He must compromise long-term plans like NCICD to shorter policy objectives, particularly concerning the election. Although pursuing phase A is considered as a sensible decision, the impression left is that he is stalling for time.

Various political agencies were involved in the policy development of NCICD. At least five stakeholders play an important role in this policy-making process: the Indonesian government, foreign experts, private sectors, NGO activists, and academics. Unlike the JCDS project that was under the authority of the Jakarta Province, NCICD is a national-level project and therefore the local government tends not to intervene in the policymaking process (LG1). The Coordinating Ministry of Economic Affairs was the lead agency in this process prior to the corruption scandal. They coordinated meetings among central government, local government, other governmental agencies, and consultants (KI6). Their authority was then transferred to the Ministry of Planning (*Bappenas*) whose primary task was to conduct an evaluation study. Bappenas has been playing a critical role since the 2007 flood by seeking Dutch assistance in the JCDS study and by creating seminars to disseminate findings from JCDS and promoting NCICD (Bappenas, 2016).

The role of private (Kurniawan, 2016) and foreign interests (Alexander, 2015) was prominent in this policymaking process. Private contributions are needed to fund the sea wall through the issuance of land reclamation permits, while foreign involvement is required for technology transfer. Both private and foreign actors do not have the power to translate their innovations or contribution into legitimised policy and therefore they need to build a close relationship with policymakers. Critics charge that they

have gone far by taking a leading role in driving the policymaking process (Bakker et al., 2017; AC4; NG3). NGO activists, primarily from Rujak Centre and Ciliwung Institute, and some academics have argued that the NCICD will only benefit particular stakeholders at the expense of marginal communities, especially fishing communities (NG3). There is no consensus among academics regarding their stance towards the project. Most of them share similar thoughts to those of NGO activists, while some, particularly those who have a role in the bureaucracy, strongly support the project. The rest are rather neutral and thus neither give staunch support nor reject the project. The central role of experts and their lack of consensus is partly the reason why this project seems to be locked in the 'for or against' binary, given the highly technical nature of the project.

There are two types of interaction worth highlighting here; the first one is between policymakers and the Dutch firms. A Memorandum of Understanding in the field of water between the Government of Indonesia and the Netherlands has existed since 2001, with a recent update in 2015. The memorandum "lays the framework for intensive cooperation", such as "staff training, educational programmes, and exchanging experts" (Colven, 2017: 259). For example, the provincial government of Jakarta sending its staff to the Netherlands to do a range of internships, workshops and conferences in order to learn the "best water management practices" adopted by Dutch engineers and policymakers (Dutch Water Sector, 2014 cited in Colven, 2017: 259).

A high-level partnership around NCICD has been established between the Governments of Indonesia and the Netherlands since the 2013 flood. Leaders of the two countries often visited each other. The most remarkable visit was when the Dutch Prime Minister, Mark Rutte, led a large trade delegation to Indonesia in 2016. The delegation included two Dutch ministers, one Dutch vice minister, and about 110 Dutch businesses – almost half of them were companies in the water sector (Government of the Netherlands, 2016). This demonstrates the concept of economic diplomacy that the Dutch government officially promotes through its Netherlands Water Partnership (NWP) institution (Bakker et al., 2017). The Dutch government has committed to provide a total budget of €8 million for general consultancy and the Knowledge Management unit of the NCICD organisation. They financed the NCICD Master Plan through overseas development assistance (ODA). This aid relationship is expected to transform gradually into trade relations ('from aid to trade'). This ODA money will be used to develop a financial strategy to attract public and private investors to participate in the prestigious project (Bakker et al., 2017). According to a survey by Aidenenvironment (2015), Indonesia is the most important client for the Dutch water business as it made up more than 30% of its business turnover as per December 2015.

Another political interaction observed is between policymakers, especially former Governor of Jakarta, Basuki Tjahja Purnama, and private property developers. This interaction is specifically concerning the disputed permit of the reclamation project of the 17 islands. Governor Purnama strongly supported the reclamation of Jakarta Bay. He was even allegedly involved in the corruption (Carina, 2016), but later proven innocent. Purnama asserted that his administration could not cancel the 17 islands reclamation because the plan was based on a legally binding regulation, the 1995 Presidential Decree. He further argued that if the current government cancelled the developers' permits, it would be required to pay high levels of compensation to developers. Therefore, Purnama attempted to gain as much benefit from the project by increasing the additional contribution from 5 to 15%. From this contribution alone, Jakarta could earn up to IDR 179 trillion (approximately USD13 billion) (Belarminus, 2016) to build infrastructure, such as road and low-cost apartments (rumah susun). Due to his strong support to the reclamation project and his policy of forcibly evicting people living on 'illegal' land, he has been labelled by some groups as the 'governor for developer' (NG5; Kuwado, 2016b). Reclamation was a contested topic for a recent gubernatorial election held in February 2017, in which Anies Baswedan, a new candidate, beat Purnama, the incumbent. In his campaign, Baswedan pledged to cancel the reclamation; a stark difference with Purnama's position to keep the reclamation going (Wardi, 2017).

At the national-level politics, a cabinet reshuffle replacing the Coordinating Minister of Maritime Affairs in July 2016 was allegedly related to this reclamation dispute (Jamil, 2016). According to the opponent of the project (NG2; AC10), Rizal Ramli was replaced by Luhut Pandjaitan because Ramli was brave enough to cancel the reclamation permit of one of the 17 islands (Island G) one month before the reshuffle. Pandjaitan, the successor, regranted the permit to the developer in September 2017. He suggested that land reclamation is a solution to subsidence and warned Baswedan regarding his intention to cancel the reclamation project. The quote below demonstrates how Pandjaitan conflated the 17 islands reclamation and the seawall projects:

If you want to stop it [reclamation], do it. If Jakarta is sinking or subsiding further, you [new governor who is opposed to the reclamation] must take the responsibility [Minister Pandjaitan, 8 May 2017, in Ihsanuddin (2017)].

The framing contest during this juncture took place in a number of forums, such as focus group discussions with experts, organised both by status quo players (primarily government, consultants and developers) and by change advocates (a coalition of NGOs activists, concerned academics). The purpose of such discussions was not only to collect diverse perspectives on the plan but also to exploit multiple venues to promote each coalition's ideas or 'venue shopping', following True et al. (1999).

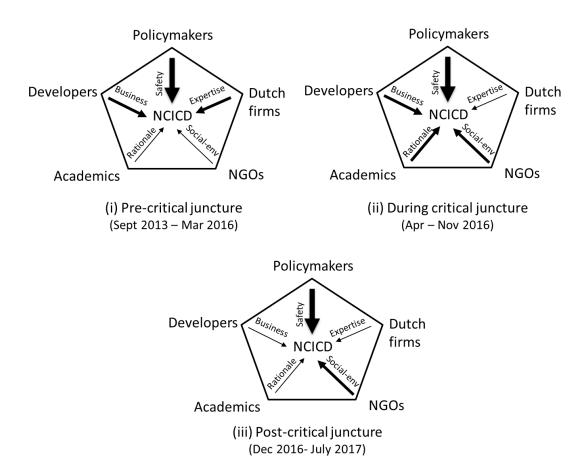
The interaction of stakeholders involved and their main narratives about NCICD, measured by the frequency of newspaper articles, can be divided into three stages: pre-, during, and post-critical juncture (Figure 6). Policymakers have been constantly promoting NCICD to solve the sinking crisis in the three stages. The promotion of Dutch expertise in the project was notable in the pre-critical juncture. However, the social and environmental impacts of NCICD voiced by NGOs and some concerned academics gained more space during and after the juncture, weakening the discourse on the excellence of the Dutch. This shows that the constrained environment was relaxed during the evaluation period thus creating an opportunity for the critics to actively voice their concerns, challenging the advocates' narratives and swaying public opinion. Developers' narratives were quite dominant before the critical juncture to promote the aspiration of a world-class city. However, during the juncture, their main narrative changed to emphasizing the difficulty to cancel the project due to its legal status. The narrative shift indicates that developers were negotiating the fate of the reclamation with policymakers.

THE POLITICS OF IDEAS

This section presents an analysis (i) of the extent to which the notion of disaster capitalism is relevant to describe Jakarta's sinking crisis and (ii) of the policy options other than the NCICD plan.

Some authors (e.g. Hogan and Doyle, 2007) maintain that decisions taken at the critical juncture are ultimately shaped by the interests of political agencies, and to a lesser extent by antecedent conditions. Ertman (2010: 1008), for example, argues that personal choices made by influential actors were the main factor in the critical juncture, rather than a "long and continuous build-up pressure". In Jakarta, the decisions of influential actors dominate in the selection of a future path (on whether or not to proceed with NCICD), but the problematisation of land subsidence as a sinking crisis has played a significant role in legitimising this ambitious idea. Land subsidence is not just an antecedent condition but, using Slater and Simmons' (2010) term, it is a 'critical antecedent'. As an exogenous shock, it opens the door for institutional innovation in the form of NCICD. The role of agency to push the NCICD idea is extremely important as argued by Peters et al. (2005: 1296): "ideas without agency cannot be effective but agencies without ideas cannot provide any direction to change". In the process of institutionalising

Figure 3. Three stages (pre, during, and post-critical juncture) of political interaction in the NCICD policymaking process.



Note: Each stakeholder promoted one main narrative as shown inside the pentagon. The changing of dominance of the narratives in the three stages is depicted with the weighs of arrows: light, medium, and bold.

NCICD ideas, we argue that land subsidence as an antecedent condition was constructed to empower certain political forces for change. Both exogenous (crisis) and endogenous (inherent characteristics of the agency) factors have combined in creating and using the current junctures.

Analysing deeper the use of crisis to win the framing contest, we observe that the proponents of NCICD (government, consultants, developers and some academics) did not blame the responsible authorities for subsidence. Conversely, the opponents (NGOs and concerned academics) framed the sinking crisis as a government's failure to manage groundwater usage. They did so because the alternative solutions they offered were related to this groundwater issue, which will be discussed further below. The blame was diffused – not focused on any particular individuals or the policies they embody. The preference for the NCICD plan by national elites may be partly attributed to a no-blame strategy (Bovens, 1998) that serves to get policymakers 'off the hook' and leave existing policies intact.

Revisiting the disaster capitalism notion, we ask to what extent the notion is prevalent in Jakarta's sinking crisis. We analyse it in two steps: the sinking crisis utilisation and the addition of the reclamation project. First, our previous discussion has demonstrated how actors have skilfully capitalised on the sinking crisis to push for the NCICD project. Here, we emphasise how this crisis framing could survive during the juncture. The continued power of the framing can be explained by Molle's (2008) analogy of the snowballing effect. He describes a new concept as a snowball that needs a big initial push to

maintain its momentum once launched downhill. The key in this process is to make the concept self-sustained. The corruption scandal creating the juncture initiated the sunshine (or rainy) period to melt the ball. But the intensive problematisation of the sinking crisis (see Figure 4 – how the government maintains a safety discourse in the pre-, during and post-critical juncture phases) enabled the ball to maintain its shape, and its discursive power.

We see that the crisis framing has been supported by the political use of uncertainty. Policymakers took advantage of the unknown sinking threats to create their storyline. Actors intensely promoted NCICD as the infrastructural saviour from sinking, such as the former Governor Purnama (also known as Ahok): Ahok sebut tanggul raksasa bisa hindari Jakarta tenggelam (Ahok said Giant Sea Wall [NCICD] can prevent Jakarta from sinking) (Juniman, 2016). Because of this uncertainty embedded in how sinking may materialise in the future, people were convinced of the only solution floating on the agenda. Furthermore, national elites believed in the expertise of Dutch engineers as the world's water experts. Such policy lessons from foreign experts are often put forward as politically neutral truths, but this may, and is often, not the case (Robertson, 1991). The Dutch have a strong historic relationship with Jakarta as they governed the first three centuries of water management in the city (Octavianti and Charles, submitted-b). Thus, their involvement is justified and fits well to answer the future sinking threat.

Second, the addition of the 17 islands reclamation project to the NCICD plan reduced the safety elements (protection from sinking) that this project originally aimed at (NG1; KI4). The central government changed the concept of *coastal defence* (JCDS) to *coastal development* (NCICD) with a current tagline of "changing threat into opportunity" (The Coordinating Ministry of Economic Affairs, 2014). Although the new concept contains the same seawall proposal, it is much more attractive for private funding because of the reclamation element. This suggests that NCICD facilitates the approval of this highly disputed reclamation project.

Although we do not fully endorse Klein's notion of disaster capitalism, we argue that this notion prevails to a considerable extent in the NCICD case. The narrative in the media supported by the seemingly self-evident facts about the sinking crisis justified the reclamation project embedded in the NCICD. Based on our evidence here, we cannot say definitely that the NCICD plan was *deliberately* created to facilitate a broader capitalism agenda, but we can conclude that the sinking crisis has been politicised to pave the way for the NCICD project.

We now discuss the policy alternatives available other than the NCICD plan. The NCICD master plan only offered two responses to the sinking problem: (i) doing nothing which means abandoning north Jakarta and losing USD103 billion, or (ii) pursuing NCICD. Of course, doing nothing is not an option anyone would pursue, although there is an idea to move the capital city from Jakarta.⁷

During a critical juncture, a broader than normal range of feasible options surfaces (Pierson, 2000). This can be seen in Jakarta where some alternatives, mainly proposed by academics, to the sinking problem surfaced in the public sphere. One alternative is to invest in several smaller projects to stop subsidence in the first place. These demands were far from new as they had been voiced many times in different 'venues' but only made it to political centre stage during the critical juncture. Critics argue that NCICD does not contain a plan to solve subsidence itself, although the subsidence problem and its link to groundwater extraction were recognised in the plan. The disconnection between the problem (subsidence) and the solution pursued (seawall) was highlighted by an informant:

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⁷ This idea came up because of the overcrowding problem in the city of 10 million and regular traffic congestion. The National Ministry of Planning (Bappenas) confirmed that only presidential and ministerial offices would be moved, and Jakarta would remain a business centre. Two candidate areas are Palangkaraya, Kalimantan and Jonggol, West Java. The first president of Indonesia, Soekarno, had actually planned to base the central government in Kalimantan in 1957, but this never happened (Chan, 2017).

NCICD is a severe logical fallacy (...) If we succeed in stopping subsidence, why do we need phase B and C [creating an outer sea wall]? It is like treating cancer with cold medicine, doesn't make any sense (NG7).

Land subsidence is purported to be caused by overexploitation of deep groundwater due to insufficient water services. Abidin et al. (2008) report a correlation between the lowering of groundwater levels and the occurrence of land subsidence. They further argue that there is a strong correlation between land subsidence and urban development activities in the city (Abidin et al., 2011). However, the relative contribution of other factors, namely natural consolidation of alluvial soil and tectonic activities (Murdohardono and Sudarsono, 1998; Rismianto and Mak, 1993), are not yet known. Most people in Jakarta use a mix of water sources (Kooy et al., 2016) to complement the unreliable piped water services that serve 60% of the population (PAM Jaya, 2016). Progress in drinking water services has been limited, with only a 12% increase in coverage in 17 years (PAM Jaya, 2016). This is due to several causes, such as shortages of raw water, illegal water use and lack of integration among stakeholders under the public-private partnership scheme (Bakker et al., 2008). To complicate things, some people who have water connections opt out from the system because of the unreliable quality and quantity of water, and thus prefer to use other water alternatives, primarily groundwater (Furlong and Kooy, 2017). The sanitation service is even worse, serving only 7% of the population (PAL Jaya, 2016). This results in river water that is highly polluted and costly to treat. These poor water supply and sanitation services contribute to subsidence.

The consultant who designed the project also highlights the importance of dealing with the subsidence issue: "Unless subsidence stops, NCICD won't work" (KI5). This contrasts with the public discourse that portrays NCICD as a direct solution to land subsidence, as illustrated by the headline: "NCICD expedited to prevent land subsidence" (Oktara, 2017). Policy entrepreneurs who simplified this complex story of NCICD (see Octavianti and Charles, submitted-a) have left an impression in the public realm that NCICD is an all-encompassing solution for all water problems, including land subsidence (e.g. Ihsanuddin, 2017).

While the amplification of the land subsidence issue in public discourse has made the society aware of the problem, no significant efforts to stop subsidence have been made. A firm conclusion regarding the cause of subsidence has not yet been reached, but providing 100% piped water supply is a noregret policy in Jakarta and should slow down subsidence. Providing water connection, however, does not suffice on its own as it should be accompanied with good and reliable services (Furlong and Kooy, 2017). Some cities, such as Tokyo (Nakajima et al., 2010) and Taipei (Liu et al., 2010), have been successful in stopping subsidence by implementing effective groundwater management and timely development of water supply facilities from surface water sources. A local regulation in Jakarta (*Perda* 10/1998) has already been in place since 1998 to regulate groundwater usage by pricing; however, law enforcement of this regulation is still weak. Informants hypothesised that the government has exploited the unclear cause of subsidence to stall a decision to take a serious action towards water supply provision (AC10). We argue that it is important to investigate the cause of subsidence and simultaneously provide piped water supply to the people.

⁸ In March 2018, the current Governor Baswedan formed a team to monitor the use of groundwater, absorption wells and sewage treatment in high-rise buildings in central Jakarta (Hasyim, 2018). This was a response to the city's excessive groundwater use that was exposed in international media (e.g. Kimmelman, 2017).

⁹ No-regret policy is a common term used in decision-making process, particularly in climate-related policy. It has "no hard trade-offs with other policy objectives" (Martin, 2012). The benefits of pursuing this option should equal or exceed its costs to society.

THE 'NEAR-MISS' CRITICAL JUNCTURE

In this section, we discuss factors that caused the near-miss outcome and broader impacts of the juncture. While the corruption scandal enabled the voice of critics to be heard in the public sphere, it was unable to change the adoption of the seawall project. We see that delaying the decision as the outcome of the juncture was just a way to meet the concerns of the public about the project after the corruption scandal was exposed. The intensely politicised process of crisis appears only to perfect the existing frames so that the idea can be self-sustained.

The opponents managed to use *political crisis* – the type of crisis that the proponent chose to avoid – to dismantle the well-entrenched NCICD idea. However, this strategy was not sufficient to trigger policy change as it was defeated by the more powerful utilisation of the *sinking crisis* by the proponents. An informant told us how difficult it is to defeat the powerful narratives built by the proponent:

I wanted to make a counterargument [for NCICD through my NGO]. But my boss said, 'Are you sure? That's a big narrative that is supported by huge funds. Are you sure you want to fight that narrative? (...) Because if you discuss this with the capital we have, we definitely are defeated. This is very big politics and involves so many interests'. (...) But we will continue to fight (NG8).

The inertia of the infrastructural approach in Jakarta's flood policy (Octavianti and Charles, submitted-b) has also contributed to this near-miss event. Jakarta's floods are political in nature, but they have been depoliticised by treating them as acts of nature that require technical responses (Padawangi and Douglass, 2015). Since the colonial era in the 16th century, Jakarta has consistently pursued infrastructural approach to deal with the flood problem. The infrastructural belief inspired some contemporary projects, such as an ongoing river canalisation project, although some authors (e.g. Gunawan, 2010) have cast doubt on the efficacy of such an approach. Continued reliance on infrastructure has created a path dependence and barriers to future changes (Schön and Rein, 1994). The giant seawall was able to survive during the critical juncture because it fits with the dominant values of infrastructure for safety reason – although in terms of technical and financial feasibility, the seawall is subject of much debate.

Another potential cause of this near-miss outcome is that the government and the critics were addressing different sets of problems. The former viewed the need to deal with the *flooding threat* by building the outer seawall, while the latter emphasized the need to deal with the root cause of sinking, which is *subsidence*. These different perceptions and problem definitions have led to unclear policy proposals from the critics. It implies that policy alternatives were not ready to be proposed on time, which is extremely important given the limited period of a critical juncture (Olsson et al., 2006).

Although the current critical juncture did not result in policy change, it had an immediate impact on the broader political environment, as it successfully put the water policy issue on the government's agenda. The triggered impacts did not necessarily align with the timeline of the juncture. Investments in drinking water and sanitation are not only complicated and expensive but also, more importantly, invisible in terms of physical structures. This invisibility is a problem in the 'politics of visibility' prevailing in the Indonesian political context where local leaders usually use their first five-year administration to do actions that are visible, such as creating parks and canals (Shore and Wright, 2011). The push from NCICD was able to motivate local government to take substantial decisions in the water sector.

The former Governor Purnama has used the opportunity to merge two municipally owned companies dealing with water and wastewater (Nastitie, 2015). The implications of this new institutional setting are substantial especially for the wastewater sector, since a portion of wastewater charge will also be included in the water tariff (LG7). The integration of groundwater management has been discussed as well but not yet agreed upon by the stakeholders involved (LG5). Intense water policy

debates during the juncture have also contributed directly and indirectly to spur action for both the drinking water and wastewater sectors. Regarding sanitation, two zones (Pluit and Duri Kosambi), out of 14 zones of wastewater areas in Jakarta, are planned to be constructed within the next five years (Kaban, 2016). This resurrection from investment dormancy was primarily pushed by the government's vision, but also the technical need, to have cleaner rivers flowing to the future NCICD's retention basin.

Meanwhile, in the drinking-water sector, the subsidence issue has helped increase the urgency of having a 100% supply of piped water to stop groundwater extraction. Drinking water services in Jakarta are operated under a Public-Private Partnership (PPP) scheme. There is very little political support to invest in the sector, both in infrastructure (e.g. raw water, distribution network), and in institutions (e.g. water tariff). The contract is now being renegotiated between the private companies and the government to provide universal access to Jakarta citizens (Viva News, 2016).

Land subsidence will continue to be a latent problem because of its silent nature. Prolonged politicisation of this problem, as observed throughout 2017, did not and is less likely to occur unless a major flood hits Jakarta again. In the long run, other critical junctures may increase policy learning and add more incremental changes leading to 'partial transition' (Meijerink and Huitema, 2010). This accumulation of small changes may also completely deflect the current policy path. The worst possibility is that these future junctures are not able to accumulate learning and thus existing governance will never be enhanced. Meijerink and Huitema (2010) observed that policy entrepreneurs are more interested in institutionalising their policy ideas rather than in preparing the ground prior to the critical moment. Therefore, while waiting for another juncture to occur, change advocates can start creating spaces for social learning to diversify the 'ways of knowing' the sinking crisis and unlock the fixation on particular meanings.

CONCLUSION

A crisis can create the need for and the opportunity to push 'a wholesale overturning' in the intellectual underpinning of a policy (Hall, 1993). However, for Jakarta's flood policy, a political crisis (triggered by a corruption scandal) was not sufficient to introduce a radical change to scrap the city's ambitious seawall plan (NCICD). We refer to this result as a 'near-miss' outcome as change was possible and sought after but narrowly failed to materialise. Having examined the public discourse around the land subsidence issue and analysed political interactions during the project's evaluation period, or the critical juncture, we find that the project's proponents have convincingly used the sinking crisis to justify the seawall plan. Therefore, the notion of 'disaster capitalism', whereby actors exploit the fear of disaster to justify a capitalist project, prevailed to a large extent to sustain the preference for the NCICD plan, and thus offer an explanation for the near-miss outcome. The disputed 17 islands reclamation project, claimed by the critics as the capitalist element of the project, has also benefited from this use of crisis framing. Our analysis of the "policy game of crisis exploitation" (Boin et al., 2009: 100) suggests that even in the wake of threatening crisis episodes radical change does not necessarily occur. In addition to the powerful discourse built by the proponents of the NCICD, the near-miss outcome was attributable to other factors such as the project's fit with the city's infrastructural approach in the management of flood risks, and the lack of policy alternatives offered by the critics.

This study examined the beginning of the NCICD policymaking process that is still ongoing and may continue during the next decade. The National Ministry of Planning (Bappenas) even stated that the fate of the offshore sea wall may only be decided in 2025 (Syarizka, 2017). It seems that the NCICD project is here to stay until a crisis, be it political or natural, generates another critical juncture. Future junctures, if unable to introduce a policy change, will at least accumulate learning and contribute to shaping a new policy context for the management of flood risk in Jakarta.

We hope our attempt to unpack the politicisation of the land subsidence issue illuminates how actors work to channel particular interests. Much of the attention given to the NCICD, however, should

not undermine the urgency of stopping the subsidence problem in the first place. Without serious policy instruments to stop subsidence immediately, it may be too costly or worse, too late, to fix the problem.

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APPENDIX

Table 1. List of interviewees (Note: CG: central government official, LG: local government official, AC: academic, NG: NGO activist, KI: individual expert)

No	Code	Description and position	Field of expertise or institution
			(in double quotation mark)
1	CG1	Central Government official (minister's staff)	Water policy
2	CG2	Central Government official (director)	Conservation
3	CG3	Central Government official (director)	Catchment protection
4	CG4	Central Government official (director)	Inland water management
5	CG5	Central Government official (director)	Coastal water management
6	CG6	Central Government official (director)	Sanitation
7	CG7	Central Government official (head)	"Catchment Management Agency"
8	CG8	Central Government official (staff)	"River Basin Organisation"
9	LG1	Local Government official (deputy)	Environment and spatial planning
10	LG2	Local Government official (head)	"Water Management Agency"
11	LG3	Local Government official (staff)	"Jakarta Water Regulatory Body"
12	LG4	Local Government official (head)	"Local Development Planning Board"
13	LG5	Local Government official (director)	"Jakarta's Water Supply Company"
14	LG6	Local Government official (head)	"Housing Agency"
15	LG7	Local Government official (director)	"Jakarta's Wastewater Company"
16	LG8	Local Government official (Mayor)	Impact of Jakarta's development in surrounding areas
17	AC1	Academician (local university)	Social and environmental science
18	AC2	Academician (local university)	History of Jakarta
19	AC3	Academician	Water policy

20	AC4	Academician (local university)	Urban development
21	AC5	Academician (local university)	Urban development
22	AC6	Academician (local university)	Urban development
23	AC7	Academician (local university)	NCICD – technical challenges
24	AC8	Academician (local university)	Water supply
25	AC9	Academician (local university)	Urban development
26	AC10	Academician (local university)	NCICD – policy making process
27	AC11	Academician (foreign university)	Social movement
28	AC12	Academician (foreign university)	NCICD – technical challenges
29	NG1	NGO activist (head)	Biodiversity and community engagement
30	NG2	NGO activist	Biodiversity and community engagement
31	NG3	NGO activist (head)	Flood measures and community engagement
32	NG4	NGO activist	Adaptation and urban development
33	NG5	NGO activist	Urban development
34	NG6	NGO activist (head)	Normalisation and community engagement
35	NG7	NGO activist (head)	Urban development
36	NG8	NGO activist (head)	Urban development
37	KI1	Individual expert	History of Jakarta
38	KI2	Individual expert (director)	Urban development
39	KI3	Individual expert	Development assistance
40	KI4	Individual expert	Urban development
41	KI5	Consultant (head)	NCICD – policy making process
42	KI6	Consultant, former Central Government official (vice deputy)	NCICD – policy making process
43	KI7	Industry representatives	Private water supply company
44	KI8	Consultant	Jakarta's political economy
45	KI9	Industry representatives	Private water supply company

REFERENCES

Abidin, H.Z. andreas, H.; Djaja, R.; Darmawan, D. and Gamal, M. 2008. Land subsidence characteristics of Jakarta between 1997 and 2005, as estimated using GPS surveys. *GPS Solutions* 12(1): 23-32.

Abidin, H.Z. andreas, H.; Gumilar, I.; Fukuda, Y.; Pohan, Y.E. and Deguchi, T. 2011. Land subsidence of Jakarta (Indonesia) and its relation with urban development. *Natural Hazards* 59(3): 1753-1771.

Aidenenvironment. 2015. Positioning survey for the Dutch water sector. Amsterdam, the Netherlands: Aidenenvironment, 2015.

Al-Dahash, H.; Thayaparan, M. and Kulatunga, U. 2016. Understanding the terminologies: Disaster, crisis and emergency. In *The 32nd Annual ARCOM Conference*, pp. 1191-1200. Manchester, UK: Association of Researchers in Construction Management.

Alexander, H.B. 2015. Investasi Belanda untuk kawasan terpadu pesisir dianggap hanya "akal-akalan" (Dutch investment in coastal integrated areas is considered only a "trick"). *Kompas*. 7 June 2015, http://properti.kompas.com/read/2015/06/17/154121721/Investasi.Belanda.untuk.Kawasan.Terpadu.Pesisir. Dianggap.Hanya.Akal-akalan

Alink, F.; Boin, A. and T'Hart, P. 2001. Institutional crises and reforms in policy sector: The case of asylum policy in Europe. *Journal of European Public Policy* 8(2): 286-306.

- Artharini, I. 2016. KPK turun tangan, proyek reklamasi Teluk Jakarta terancam? (KPK gets involved, Jakarta Bay's reclamation project is threatened?). BBC Indonesia. 4 April 2016, www.bbc.com/indonesia/berita indonesia/2016/04/160403 indonesia kpk reklamasi
- Bakker, K.; Kooy, M.; Shofiani, N.E. and Martijn, E.J. 2008. Governance failure: Rethinking the institutional dimensions of urban water supply to poor households. *World Development* 36(10): 1891-1915,.
- Bakker, M.; Kishimoto, S. and Nooy, C. 2017. *Social justice at bay: The Dutch role in Jakarta's coastal defence*. Amsterdam, Netherlands.
- Bappenas. 2007. Hasil penilaian kerusakan dan kerugian pascabencana banjir awal februari 2007 di wilayah Jabodetabek (Damage and loss assessment report in Jabodetabek area caused by the early 2007 flood). Jakarta.
- Bappenas. 2016. Hasil kajian NCICD Bappenas akan rampung Oktober ini (Bappenas will finish the NCICD Review this October).
- Barke, R.P. and Jenkin-Smith, H.C. 1993. Politics and scientific expertise: Scientists, risk perception, and nuclear waste policy. *Risk Analysis* 13(4): 425-439.
- Baumgartner, F.R. and Jones, B.D. 1993. *Agendas and instability in American politics*. Chicago, USA: University of Chicago Press.
- Belarminus, R. 2016. Ahok: DKI bisa dapat Rp 179 Triliun dari kontribusi tambahan reklamasi (Ahok: DKI/ Jakarta can get IDR 179 Trillion from the reclamation's additional contribution Scheme). *Kompas*. 22 June 2016, http://megapolitan.kompas.com/read/2016/06/22/14455851/ahok.dki.bisa.dapat.rp.179.triliun.dari.kontribusi.tambahan.reklamasi
- Birkland, T.A. 1997. *After disaster: Agenda-setting, public policy and focusing events*. Washington, DC: Georgetown University Press.
- Birkland, T.A. 2006. *Lessons of disaster: Policy change after catastrophic events*. Washington, D.C: Georgetown University Press.
- BNPB. 2013. Jakarta flood information, 18th January 2013, www.google.org/crisismap/2013-jakarta-flood-en (accessed 1 May 2015)
- Boin, A.; 't Hart, P.; Stern, E. and Sundelius, B. 2005. *The politics of crisis management: Public leadership under pressure*. Cambridge, UK: Cambridge University Press.
- Boin, A.; T'Hart, P. and Mcconnell, A. 2009. Crisis exploitation: Political and policy impacts of framing contests. *Journal of European Public Policy* 16(1): 81-106.
- Bovens, M. 1998. *The quest for responsibility: Accountability and citizenship in complex organizations*. Cambridge, UK: Cambridge University Press.
- Brändström, A. and Kuipers, S. 2003. From "normal incidents" to political crises: Understanding the selective politicization of policy failures. In Government and Opposition, pp. 279-305. Oxford, UK: Blackwell Publishing Ltd.
- Brinkman, J.J. and Hartman, M. 2009. Jakarta flood hazard mapping framework 1-9.
- Capoccia, G. 2015. Critical junctures and institutional change. In Mahoney, J. and Thelen, K. (Eds), *Advances in comparative-historical analysis*, pp. 147-179. Cambridge, UK: Cambridge University Press.
- Capoccia, G. 2016. Critical junctures. In Fioretos, O.; Falleti, T.G. and Sheingate, A. (Eds), *The Oxford handbook of historical institutionalism*, pp. 89-112. Oxford, UK: Oxford University Press.
- Capoccia, G. and Kelemen, R.D. 2007. The study of critical junctures: Theory, narrative and counterfactuals in historical institutionalism. *World Politics* 59(3): 341-369.
- Carina, J. 2016. Ahok: Reklamasi jadi mainan baru buat yang fitnah saya (Ahok: Reclamation is a new way for Slander). *Kompas.* 19 May 2016,
 - http://megapolitan.kompas.com/read/2016/05/19/14352351/ahok.reklamasi.jadi.mainan.baru.buat.yang.fitnah.saya

Chan, F. 2017. Indonesia's plan to move capital from Jakarta revives debate. *The Straits Times*. 10 July 2017, www.straitstimes.com/asia/se-asia/indonesia-studying-plan-to-relocate-capital

- Chan, M. and Lee, F.L.F. 2014. Selective exposure and agenda setting: Exploring the impact of partisan media exposure on agenda diversity and political participation. *Asian Journal of Communication* 24(4): 301-314.
- Collier, R.B. and Collier, D. 1991. Shaping the political arena: Critical junctures, the labor movement, and regime dynamics in Latin America. Princeton, NJ: Princeton University Press.
- Colven, E. 2017. Understanding the allure of big infrastructure: Jakarta's Great Garuda Sea Wall project. *Water Alternatives* 10(2): 250-264.
- Crase, L.R.; Keefe, S.M.O. and Dollery, B.E. 2009. The fluctuating political appeal of water egineering in Australia. *Water Alternatives* 2(3): 440-447.
- Deltares. 2015. Sinking cities: An intergtrated approach towards solutions. Deltares18 3. Delft/ Utrecht, The Netherlands.
- De Vries, M.S. 2004. Framing crises: Response patterns to explosions in fireworks factories. *Administration & Society* 36(5): 594-614.
- Elyda, C. and Dewi, S.W. 2014. Outgoing government launches controversial sea wall project. *The Jakarta Post*. 10 October 2014, www.thejakartapost.com/news/2014/10/10/outgoing-government-launches-controversial-sea-wall-project.html
- Ertman, T. 2010. The Great Reform Act of 1832 and British democratization. *Comparative Political Studies* 43(8-9): 1000-1022.
- Furlong, K. and Kooy, M. 2017. Worlding water supply: Thinking beyond the network in Jakarta. *International Journal of Urban and Regional Research* 888-903.
- Gore, A. and O'Connor, J. 2007. An inconvenient truth: The crisis of global warming. London, UK: Bloomsbury.
- Government of the Netherlands. 2016. The Netherlands to assist Indonesia in coastal reinforcement and port development.
 - <u>www.government.nl/latest/news/2016/11/23/the-netherlands-to-assist-indonesia-in-coastal-reinforcement-and-port-development</u> (accessed 2 October 2017)
- Grafton, R.Q. and Horne, J. 2014. Water markets in the Murray-Darling Basin. *Agricultural Water Management* 145: 61-71.
- Gunawan, R. 2010. *Gagalnya sistem kanal: Pengendalian banjir Jakarta dari masa ke masa*. Jakarta, Indonesia: Kompas.
- Hall, P.A. 1993. Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative Politics* 25(3): 275-296.
- Harap, L. 2016. Benarkah 14 tahun lagi Jakarta Utara akan tenggelam? (Will North Jakarta sink in 14 years). *Merdeka*. 20 April 2016.
- Hasyim, I. 2018. Anies Baswedan cracks down on buildings for groundwater misuse. *Tempo*. 12 March 2018, https://en.tempo.co/read/news/2018/03/12/057916549/Anies-Baswedan-Cracks-Down-on-Buildings-for-Groundwater-Misuse
- Heriyanto, D. 2016. Q&A: The problem with Jakarta's land reclamation. *The Jakarta Post*. 7 April 2016, www.thejakartapost.com/academia/2016/04/07/ga-the-problem-with-jakartas-land-reclamation.html
- Hogan, J. and Doyle, D. 2007. The Importance of ideas: An a priori critical juncture framework. *Canadian Journal of Political Science/Revue canadienne de science politique* 40(4): 883-910.
- Howarth, D.; Norval, A.J. and Stavrakakis, Y. 2000. *Discourse theory and political analysis: Identities, hegemonies and social Change*. Manchester, UK: Manchester University Press.
- Ihsanuddin. 2017. Luhut minta Anies-Sandi tanggung jawab jika Jakarta tenggelam karena stop reklamasi (Luhut asked Anies-Sandi to bear the responsibility if Jakarta is sinking (further) because reclamation is stopped). Kompas. 8 May 2017, http://nasional.kompas.com/read/2017/05/08/17405281/luhut.minta.anies-sandi.tanggung.jawab.jika.jakarta.tenggelam.karena.stop.reklamasi
- Jamil, A.I. 2016. Pencopotan Rizal Ramli dinilai untuk muluskan proyek reklamasi (The dismissal of Rizal Ramli is suspected to prune the reclamation project). *Republika*. 2016,

http://nasional.republika.co.id/berita/nasional/umum/16/07/27/oaz2y5361-pencopotan-rizal-ramli-dinilai-untuk-muluskan-proyek-reklamasi

- Juniman, P.T. 2016. Ahok sebut tanggul raksasa bisa hindari Jakarta tenggelam (Ahok said giant sea wall can prevent Jakarta from sinking). *CNN Indonesia*. 29 April 2016,
 - $\underline{www.cnnindonesia.com/nasional/20160429125752-20-127535/ahok-sebut-tanggul-raksasa-bisa-hindari-jakarta-tenggelam/$
- Kaban, J.S.P. 2016. City targets to complete 15 IPAL construction in 2022. *Berita Jakarta*. 9 June 2016, www.beritajakarta.com/en/read/15223/City-Targets-to-Complete-15-IPAL-Construction-in-2022#.WHzUKo XIaE
- Keeler, J.T.S. 1993. Opening the window for reform: Mandates, crises, and extraordinary policy-making. *Comparative Political Studies* 25(4): 433-486.
- Kimmelman, M. 2017. Jakarta is sinking so fast, it could end up underwater. *The New York Times*. 21 December 2017, https://www.nytimes.com/interactive/2017/12/21/world/asia/jakarta-sinking-climate.html
- Kingdon, J.W. 2014. Agendas, alternatives, and public policies. Harlow: Pearson Education Limited.
- Klein, N. 2007. The shock doctrine: The rise of disaster capitalism. New York, USA: Penguin Books.
- Kompas. 2010. Jakarta bisa tenggelam (Jakarta could sink). *Kompas*. http://lipsus.kompas.com/topikpilihanlist/981/2/regional.kompas.com (accessed 16 January 2017)
- Kooy, M.; Walter, C.T. and Prabaharyaka, I. 2016. Inclusive development of urban water services in Jakarta: The role of groundwater. *Habitat International* 73: 109-118.
- Kurniawan, D. 2016. Pemerintah harapkan peran swasta dalam pembangunan infrastruktur (Government expects the role of private sector in developing infrastructure). *Gatra*. 27 October 2016,
 - https://www.gatra.com/ekonomi/industri/224139-dukungan-dan-partisipasi-swasta-krusial-bagi-pembangunan-infrastruktur-di-indonesia
- Kuwado, F.J. 2016a. Jokowi: NCICD, Jawaban untuk Jakarta (Jokowi: NCICD, the answer for Jakarta). *Kompas*. 26 April 2016, http://nasional.kompas.com/read/2016/04/27/14290491/Jokowi.NCICD.Jawaban.untuk.Jakarta
- Kuwado, F.J. 2016b. Rizal Ramli: Ahok itu Gubernur DKI atau karyawan pengembang? (Rizal Ramli: Is Ahok Jakarta's Governor or employee of the developer?). *Kompas*. 19 July 2016, http://nasional.kompas.com/read/2016/07/19/15020861/rizal.ramli.ahok.itu.gubernur.dki.atau.karyawan.pen
 - $\frac{http://nasional.kompas.com/read/2016/07/19/15020861/rizal.ramli.ahok.itu.gubernur.dki.atau.karyawan.pengembang$
- Lipset, S.M. and Rokkan, S. 1967. Cleavage structures, party systems, and voter alignments: An introduction. In *Party systems and voter alignments*, pp. 1-64. New York, USA: Free Press.
- Liu, C.W.; Chou, Y.L.; Lin, S.T.; Lin, G.J. and Jang, C.S. 2010. Management of high groundwater level aquifer in the Taipei Basin. *Water Resources Management* 24(13): 3513-3525.
- Mahoney, J. 2001. *Legacies of liberalism: Path dependence and political regimes in Central America*. Baltimore, MD: Johns Hopkins University Press.
- Marshall, G.R. and Alexandra, J. 2016. Institutional path dependence and environmental water recovery in Australia's Murray -Darling Basin. *Water Alternatives* 9(3): 679-703.
- Martin, S. 2012. Examples of "no-regret", "low-regret" and "win-win" adaptation actions. Scotland.
- McCombs, M.; Overholser, G. and Jamieson, K.H. 2005. The agenda setting function of the press. In Overholser, G. and Jamieson, K.H. (Eds), *The Press,* pp. 156-168. Oxford, UK: Oxford University Press.
- McCombs, M.; Shaw, D.L. and Weaver, D.L. 1997. *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Meijerink, S. 2005. Understanding policy stability and change. The interplay of advocacy coalitions and epistemic communities, windows of opportunity, and Dutch coastal flooding policy 1945-2003. *Journal of European Public Policy* 12(6): 1060-1077.
- Meijerink, S. and Huitema, D. 2010. Policy entrepreneurs and change strategies: Lessons from sixteen case studies of water transitions around the globe. *Ecology and Society* 15(2): 17.
- Miles, B. and Morse, S. 2007. The role of news media in natural disaster risk and recovery. *Ecological Economics* 63: 365-373.

Molle, F. 2008. Nirvana concepts, narratives and policy models: Insights from the water sector. *Water Alternatives* 1(1): 131-156.

- Murdohardono, D. and Sudarsono, U. 1998. Land subsidence monitoring system in Jakarta. In *Symposium on Japan Indonesia IDNDR project: volcanology, tectonics, flood and sediment hazards*, pp. 243-256. Bandung, Indonesia.
- Nakajima, H.; Kaneko, H. and Tsuchida, M. 2010. The management of land subsidence and groundwater conservation in Tokyo. *Journal of Groundwater Hydrology* 52(1): 35-47.
- Nastitie, D.P. 2015. Operator air bersih dukung penggabungan PAM Jaya dan PAL Jaya (Clean water operators support the merger of PAM Jaya and PAL Jaya). *Kompas*. 12 November 2015, http://print.kompas.com/baca/2015/11/12/Operator-Air-Bersih-Dukung-Penggabungan-PAM-Jaya-d
- NCICD (National Capital Integrated Coastal Development). 2013. *Pengembangan Terpadu Pesisir Ibukota Negara. November.* Jakarta, http://en.ncicd.com/ncicd/downloads/
- Newman, N. 2011. Mainstream media and the distribution of news in the age of social discovery. September. Oxford, UK: University of Oxford.
- Nichols, C. and Myers, A.S. 2010. Exploiting the opportunity for reconstructive leadership: Presidential responses to enervated political regimes. *American Politics Research* 38(5): 806-841.
- NL Agency. 2012. Jakarta Coastal Development Strategy, End-of-project review final mission report. April. The Netherlands.
- North, D.C. 1990. *Institutions, institutional change and economic performance*. New York, USA: Cambridge University Press.
- Octavianti, T. and Charles, K. Submitted-a. Public discourses of Jakarta's sea wall megaproject: A power play. Journal of Environmental Policy and Planning.
- Octavianti, T. and Charles, K. Submitted-b. Evolution of Jakarta's flood policy from the past 400 years: The lock-in of infrastructurale solutions. *Environment and Planning C: Politics and Space*.
- Oktara, D. 2017. NCICD project expedited to prevent land subsidence. *Tempo*. 17 August 2017, https://en.tempo.co/read/news/2017/08/17/056900873/NCICD-Project-Expedited-to-Prevent-Land-Subsidence
- Olsson, P.; Gunderson, L.H.; Carpenter, S.R.; Ryan, P.; Lebel, L.; Folke, C. and Holling, C. S. 2006. Shooting the rapids: Navigating transitions to adaptive governance of social-ecological systems. *Ecology and Society* 11(1): 18
- Onodera, S.; Saito, M.; Sawano, M.; Hosono, T.; Taniguchi, M.; Shimada, J.; Umezawa, Y.; Lubis, R.F.; Buapeng, S. and Delinom, R. 2009. Erratum to "Effects of intensive urbanization on the intrusion of shallow groundwater into deep groundwater: Examples from Bangkok and Jakarta". *Science of The Total Environment* 407(9): 3209-3217
- Padawangi, R. and Douglass, M. 2015. Water, water everywhere: Toward participatory solutions to chronic urban flooding in Jakarta. *Pacific Affairs* 88(3): 517-550.
- PAL Jaya. 2016. Cakupan pelayanan air limbah (Coverage of wastewater service). Jakarta, Indonesia.
- PAM Jaya. 2016. Cakupan layanan air bersih (Coverage of clean water service). Jakarta, Indonesia
- Parkhurst, J. 2017. The politics of evidence: From evidence-based policy to the good governance of evidence. Abingdon, UK: Routledge.
- Peters, B.G.; Pierre, J. and King, D.S. 2005. The politics of path dependency: Political conflict in historical institutionalism. *The Journal of Politics* 67(4): 1275-1300.
- Pierson, P. 2000. Not just what, but when: Timing and sequence in political processes. *Studies in American Political Development* 14(1): 72-92,
- Pilkington, E. 2008. How to save the world. *The Guardian*. 5 April 2008, https://www.theguardian.com/theguardian/2008/apr/05/climatechange.usa
- Pitoko, R.A. 2016. Kajian Bappenas keluar, tanggul raksasa 4,5 kilometer tetap dibangun (Bappenas study is published, the gigantic 4.5 kilometre dikes would be built). *Kompas*. 15 November 2016,

- http://properti.kompas.com/read/2016/11/15/183000021/kajian.bappenas.keluar.tanggul.raksasa.4.5.kilome ter.tetap.dibangun
- PresidenRI. 2016. Mewujudkan pembangunan Indonesia-sentris (Realising the Indonesia-centric development). http://presidenri.go.id/pembangunan-infrastruktur-2/mewujudkan-pembangunan-indonesia-sentris.html (accessed 25 July 2017)
- Protess, D. and McCombs, M.E. 1991. *Agenda setting: Readings on media, public opinion, and policymaking*. Hillsdale, N.J.: Erlbaum.
- Richards, D. and Smith, M.J. 1997. How departments change: Windows of opportunity and critical junctures in three departments. *Public Policy and Administration* 12(2): 62-79.
- Rismianto, D. and Mak, W. 1993. Environmental aspects of groundwater extraction in DKI Jakarta: Changing views. In *The 22nd annual convention of the Indonesian association of geologists*, pp. 327-345. Bandung, Indonesia.
- Robertson, D.B. 1991. Political conflict and lesson-drawing author. Journal of Public Policy 11(1): 55-78.
- Rosenthal, U. 1998. Future disasters, future definitions. In Quarantelli, E.L. (Ed), What is a disaster? Perspectives on the question, pp. 146-160. London, UK: Routledge.
- Ruggeri, A. 2017. The ambitious plan to stop the ground from sinking. *BBC News*. 1 December 2017, www.bbc.com/future/story/20171130-the-ambitious-plan-to-stop-the-ground-from-sinking
- Sabatier, P.A. (Ed). 1999. Theories of the policy process. Boulder, CO: Westview Press.
- Sabatier, P.A. and Jenkins-Smith, H. 1999. The advocacy coalition framework: An assessment. In Sabatier, P. (Ed), *Theories of the policy process*, pp. 117-166. Boulder, CO: Westview Press.
- Sabatier, P.A. and Jenkins-Smith, H.C. 1993. *Policy change and learning: An advocacy coalition approach*. Boulder, CO: Westview Press.
- Schepers, J. 1926. De Primaire Kringen la En II, Benevens Het Stadsnet Van Batavia En Weltevreden. De Nauwkeurrig- heidswaterpassing Van Java. *Topografische Dienst In Neder-lansch-Indie. Weltevreden Reproductiebedrifj Top.Dienst* 1.
- Schlager, E. 1999. A comparison of frameworks, theories and models of policy processes. In Sabatier, P.A. (Ed), Theories of the policy process, pp. 233-260. Boulder, CO: Westview Press.
- Schön, D.A. and Rein, M. 1994. Frame reflection: Towards the resolution of intractable policy controversies. New York, USA: Basic Books.
- Shaluf, M.I.; Ahmadun, F. and Said, A.M. 2003. A review of disaster and crisis. *Disaster Prevention and Management* 12(1): 24.
- Shore, C. and Wright, S. 2011. Conceptualising policy: Technologies of governance and the politics of visibility. In Shore, C.; Wright, S. and Pero, D. (Eds), *Policy worlds: Anthropology and the analysis of contemporary power,* New York, USA: Berghahn Books.
- Slater, D. and Simmons, E. 2010. Informative regress: Critical antecedents in comparative olitics. *Comparative Political Studies* 43(7): 886-917.
- Soekardi, P.; Djaeni, A.; Soefner, H.; Hobler, M. and Schmidt, G. 1986. Geological aspect of the aquifer system and the groundwater situation of the Jakarta Artesian Basin. In *Seminar on geological mapping in the urban development, economic and social commission for Asia and the Pacific.* Bangkok: Thailand.
- Steinmo, S.; Thelen, K. and Longstreth, F. (Eds). 1992. *Structuring politics: Historical institutionalism in comparative analysis*. New York, USA: Cambridge University Press.
- Stone, D. 2001. *Policy paradox: The art of political decision making*. 2nd ed. New York, USA: W.W. Norton & Company.
- Streitmatter, R. 1997. *Mightier than the sword: How the news media have shaped American History*. Boulder, CO: Westview Press.
- Suharto, P. 1971. Precise leveling in Indonesia. Bandung: Institute of Technology.
- Syarizka, D. 2017. Bappenas: Pemerintah belum putuskan pembangunan tanggul laut raksasa (Bappenas: The government has not yet decided on the construction of giant sea wall). Bisnis. 11 January 2017, http://industri.bisnis.com/read/20170111/45/618323/bappenas-pemerintah-belum-putuskan-pembangunan-tanggul-laut-raksasa

The Coordinating Ministry of Economic Affairs. 2014. *Master Plan National Integrated Coastal Development*.

- The Ministry of Public Works. 2011. ATLAS pengamanan pantai Jakarta (ATLAS Securing Jakarta's coastal area). Jakarta, Indonesia.
- The World Bank. 2015. Jakarta Urgent Flood Mitigation Project.
- Thelen, K. and Conran, J. 2016. Institutional change. In Fioretos, O.; Falleti, T.G. and Sheingate, A. (Eds), *The Oxford handbook of historical institutionalism*, pp. 51-70. Oxford, UK: Oxford University Press.
- Thelen, K. and Steinmo, S. 1992. Historical institutionalism in comparative politics. In Steinmo, S.; Thelen, K. and Longstreth, F. (Eds), *Structuring politics: Historical institutionalism in comparative analysis*, pp. 1-32. New York, USA: Cambridge University Press.
- Tierney, K.; Bevc, C. and Kuligowski, E. 2006. Metaphors matter: Disaster myths, media frames, and their consequences in Hurricane Katrina. *The Annals of the American Academy* (March): 57-81.
- True, J.L.; Jones, B.D. and Baumgartner, F.R. 1999. Punctuated-equilibrium theory: Explaining stability and change in public policymaking. In Sabatier, P.A. (Ed), *Theories of the policy process*, pp. 155-187. Boulder, CO: Westview Press.
- Viva News. 2016. PAM Jaya restrukturisasi kontrak dengan operator (PAM Jaya restructure the contract with operators),
 - http://bisnis.news.viva.co.id/news/read/799563-pam-jaya-restrukturisasi-kontrak-dengan-operator
- Wagner-Pacifici, R. 1994. *Discourse and destruction: The city of Philadelphia versus MOVE*. Chicago, USA: University of Chicago Press.
- Wardi, R. 2017. Anies-Sandi akan hentikan proyek reklamasi (Anies-Sandi will stop the reclamation project). *Berita Satu*. 12 April 2017, www.beritasatu.com/aktualitas/424876-aniessandi-akan-hentikan-proyek-reklamasi.html

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