SCALAR POLITICS IN PHILIPPINE URBAN DISASTER MANAGEMENT: REFRAMING METROPOLITAN GOVERNANCE FOR LOCAL RESILIENCE AND SUSTAINABILITY

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With 5 figures and 2 tables
Received 1 October 2018 · Accepted 8 December 2018

Summary: Globally, cities are fast becoming the locus of initiatives for building urban resilience and local sustainability. However, imperatives for integration in disaster risk management amid boundary-transcending disasters in urban agglomerations and metropolitan regions, spur new contentions with regards to what constitutes as a responsive construction of the geographic scale and functional scope of the local, particularly in decentralized regimes. This paper assesses the relevance of the Philippines' current framing of the local jurisdictions, as well as prevailing metropolitan governance arrangements and reform agenda, whether these are responsive to managing disaster variability and their required scales for integrated interventions. Specifically examining the case of urban flooding and management in the country's major metropolitan regions - Metro Manila, Metro Cebu and Metro Davao – the study identifies the pitfalls of current frameworks of metropolitan disaster governance across the three conurbations, using the lens of scalar politics. It takes off from the different flood risk analyses and integrated flood management master plans proposed for these metropolises, which illustrate the growing salience of the metropolitan region as a crucial scale for positioning urban governance capacity. The paper argues that the Philippines' construction of local political boundaries does not respond to the needed integration and scale for urban disaster management in metropolitan regions, which remain hijacked in the contestations for political control between and among central and local structures of power. The country's decentralization system embeds metropolitan governance within the regional administrative governance coordinated by the central government. This creates an ironic capitulation of integrated urban disaster management mandates to central agencies; however, absent political authority, central government-led metropolitan institutions are constrained by prevailing socio-spatial fragmentation. Integrated flood management reforms therefore rely on ad hoc inter-local collaborations that are vulnerable to impasse in inter-jurisdictional negotiations. The study suggests that the Philippines is in a critical juncture to seriously consider reconfiguring its intergovernmental/decentralization system, and adopt a more appropriate scale reference towards institutionalizing political mandates for metropolitan structures. It concludes that responsive reframing of local and metropolitan regulatory authorities, in accordance with required scales and functional scopes of integrated disaster interventions, is a key reform agenda for governments to consider, if they are to seriously promote local capacity for urban resilience and sustainability.

Zusammenfassung: Weltweit werden Städte in zunehmenden Maße zu Orten von Initiativen zur Entwicklung städtischer Resilienz und lokaler Nachhaltigkeit. Angesichts der Auswirkungen von Naturkatastrophen in städtischen Agglomerationen besteht die grundlegende Herausforderung darin, auf entsprechender räumlichen Skala, geeignete lokale Handlungsstrukturen zu entwickeln – dies gilt in besonderem Maße für dezentral organisierte Regierungs- und Verwaltungssysteme. In dem vorliegenden Beitrag wird am Beispiel der drei Metropolregionen Metro Manila, Metro Cebu und Metro Davao auf den Philippinen analysiert, ob die derzeitigen Verwaltungsstrukturen und Rechtsordnungen einen geeigneten Rahmen für die Bewältigung insbesondere der räumlichen Wirksamkeit von Naturkatastrophen bieten. Anhand von Hochwasserereignissen und Hochwasserrisikoanalysen und der Betrachtung regionaler Masterpläne für das Hochwassermanagement wird aufgezeigt, dass die komplizierten Verwaltungsstrukturen und räumlichen Zuständigkeiten, ein effizientes und integratives Risiko- und Katastrophenmanagement erschweren. Während die Metropolregionen zunehmend an Bedeutung gewinnen und das Bewusstsein wächst, dass politische Strukturen und Verwaltungsorgane auf dieser Ebene u.a. auch im Hinblick auf Risiko- und Katastrophenmanagement handlungsfähig sein müssen, zeigt der Beitrag auf, dass bei der räumlichen Planung und Abgrenzung, die räumlichen Dimensionen von Katastrophen nicht hinreichend Berücksichtigung finden. Die komplexen politischen Strukturen und Verwaltungseinheiten auf den Philippinen erschweren zudem handlungsfähige Hierarchien und notwendige integrative Konzepte. Da es den Metropolregionen an eigener politscher Autorität fehlt, bleiben integrative Entscheidungen in den Auseinandersetzungen zwischen divergierenden lokalen Interessen und der Zentralverwaltung oftmals auf der Strecke. Integratives Risiko- und Katastrophenmanagement bleibt in der Folge auf lokale Initiativen beschränkt, denen es aber an rechtlicher Verankerung fehlt. In der Schlussfolgerung legt die Studie eine stärkere Verankerung der Metropolregionen in den politischen Strukturen und den Verwaltungseinheiten der Philippinen nahe, damit u.a. auch unter Gesichtspunkten des Risiko- und Katastrophenmanagements handlungsfähige Institutionen auf angemessener Maßstabsebene geschaffen werden.

Keywords: scalar politics, metropolitan governance, decentralization, local sustainability, urban resilience, integrated flood management

1 Introduction

In the context of widespread disaster risks concurrent with rapid urbanization, cities are fast becoming the locus of initiatives for building urban resilience and local sustainability. Cities are considered to be the predominant context of modern human settlement. The 2018 Revision of the World Urbanization Prospects notes that 4.2 billion or about 55 % of the world's population are living in urban areas as of 2018, and projected to reach about 68 % by 2050 (UN 2018). The same document projected that by 2030, the world will have 43 megacities with more than 10 million inhabitants, most of them in developing regions. The concentration of populations and development in cities increase their vulnerability to disasters making them geo-hazard zones (Tanner and Mitchell 2008; Birkmann et al. 2010; Laframboise and Loko 2012). Among various hazards, cities are acutely susceptible to flood disasters. The Global Risks Report 2016 noted that, "[m]any of the world's cities lie on the coasts or on river banks, with poor neighborhoods most likely to be in low-lying areas vulnerable to flooding" (WEF 2016, 14).

Therefore, a prevailing agenda dominating sustainable development and climate change discourse involves urban disaster risk management and building resilience of cities. In 2010, the United Nations Office for Disaster Risk Reduction (UNISDR) launched the 'Making Cities Resilient' campaign in line with the five priorities of the Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters (UNISDR 2005, 2013). The Sendai Framework for Disaster Risk Reduction 2015-2030 pursued these initiatives (UNISDR 2015a). Moreover, Goal 11 of the UN 2030 Agenda for Sustainable Development aims to "[...] make cities and human settlements inclusive, safe, resilient and sustainable" (UN 2015, 24). This paved the way for the New Urban Agenda adopted at the UN Conference on Housing and Sustainable Urban Development (UN HABITAT III 2017), which served as a vision for cities and municipalities toward sustainable urbanization. Most recently, ICLEI-Local Governments for Sustainability, a leading global network of cities, towns and regions released the ICLEI Montreal Commitment and Strategic Vision 2018-2024 toward urban transformation (ICLEI 2018). It highlights the role of cities as a driving force for global climate change and sustainable development, within the framework of multilevel governance (Betsill and Bulkeley 2006).

Amid all these initiatives, however, questions have been raised with regards to the emphasis of cities or the local as a key scale for sustainability action. Brown and Purcell (2005, 607) argued the need for an explicit theoretical approach to scale in political ecology as a way out of the 'local trap' – automatic assumptions "[...] that organization, policies, and action at the local scale are inherently more likely to have desired social and ecological effects than activities organized at other scales". Similarly, Lawhon and Patel (2013, 1049) noted that:

"[…] part of the prevailing illusiveness of sustainable development […] lies not simply in the failings of the governance arrangements, tools, or technologies, but in the acceptance of the merits of a particular framing of the local: local action for local sustainability (which is) limited, in part because it evades questions of responsibility and justice at various scales."

Particularly in decentralized regimes, issues of scale, geographic shifts, and corresponding cross-institutional linkages and socio-spatial configurations have been identified as key areas for sustainability interventions. As emphasized by Görg (2007), critical in multilevel decision-making in environmental governance are considerations on the constitution of various spatial levels (or socially constructed spaces) and their relationships. Elmqvist (2013) added that, "[...] individual cities cannot be considered 'sustainable' without acknowledging and accounting for their teleconnections […] To become meaningful, urban sustainability therefore has to address appropriate scales, which always would be larger than an individual city."

These contentions are particularly evoked amid the growing phenomena of large-scale disasters, such as massive urban flooding, cutting across city jurisdictions in mega-urban regions. The transboundary and externality dimensions of such 'disasters of scale', and their imperatives for integrated management in urban networks (McGee 2012; Miller et al. 2012) are challenging prevailing institutions and structures for urban disaster governance. Cities are complex and dynamic systems that are continuously changing under various factors and pressures such as urbanization and disasters. As emphasized by Lebel and Lebel (2018, 616), "urbanization alters flood regimes." Consequent to this is the need to design appropriate institutional and political arrangements that could effectively respond to not only managing integrated urban economies, but also managing integrated urban

disaster risks and their variability. Young (2002) argued the need to develop mechanisms that can increase fit and enable scale-matching between the problems of disasters and the institutions managing the disaster risks.

This challenge would spur the debate with regards to what constitutes as a responsive and appropriate construction of the geographic scale and functional scope of local political boundaries in decentralized regimes, toward strengthening local capacity for integrated urban disaster management. This study contributes to the discourse by assessing the relevance of the Philippines' current framing of the local jurisdictions and metropolitan governance arrangements, in managing transboundary disasters in urban agglomerations. It examines the case of urban flooding and management in the country's major metropolitan regions - Metro Manila, Metro Cebu and Metro Davao. Taking off from the different flood risk analyses and integrated flood management master plans proposed for these metropolises, the study examines the systems of co-responsibility in metropolitan disaster management among levels of government. Using the lens of scalar politics, it then analyses the pitfalls of existing configurations of metropolitan institutions and prevailing institutional reform agenda for metropolitan governance. It ultimately contributes insights to responsive reframing of metropolitan governance in decentralized regimes, as a key reform agenda in promoting urban resilience and local sustainability.

The Philippines is a critical case in terms of its rapid urbanization and acute vulnerability to extreme environmental disasters. In terms of urbanization, a World Bank study (WB 2017) noted that about 45 % of Filipinos live in urban areas, expected to more than double by 2050. In terms of disaster vulnerability, the country is among the top 10 countries with highest absolute number of people affected by weather-related disasters (1995-2015) (UNISDR and CRED 2016; Andriesse 2017). It has also been ranked within the top three countries with highest risk and exposure to natural hazards in the annual World Risk Reports based on the World Risk Index mean value calculation for 2012-2016 (BEH 2017, 17). In particular, Philippine cities and urban agglomerations are highly susceptible to massive floods often brought by tropical storms.

These hazards cost the country severe financing gaps. UNISDR's 2015 Global Assessment Report on Disaster Risk Reduction noted that the average annual losses from earthquakes, tsunamis, tropical cyclones and river flooding represents nearly 69 % of social expenditure in the Philippines. The same report indicated that in many cities in low and middle-income countries, "[...] weak and under-resourced local governments do not have the capacity to manage the processes that are generating and accumulating disaster risk, nor to provide social protection" (UNISDR 2015b, 187). Noting that Philippine cities generate more than 70 % of the country's gross domestic product (GDP), the World Bank's office for Urban and Disaster Risk Management for East Asia and the Pacific argued that for the Philippines, "a good starting point for policy conversation […] can be a comprehensive national urban policy that establishes a lead agency for urban development […] and clearly defines the roles of national and local governments" (WB 2017, n.p.). Such assessments highlight the continuing gap in strengthening local government capacity vis-à-vis central government for urban disaster management, which signify the needed stocktaking of the country's intergovernmental system.

2 Metropolitan governance: the politics of scale and joined-up government

Amid increasing connectivity of networked political geographies and translocalities in facilitating urban development and resilience, the metropolitan region is gaining salience as a crucial scale for positioning urban disaster governance capacity. Andersson (2015, 11) notes of metropolitan regions as critical governance systems and drivers for sustainable development, suggesting the need particularly in developing regions for "[…] established governance arrangements or mechanisms/instruments for planning, coordination and financing at that scale". Metropolitan regions are characterized by a 'multiplicity of political jurisdictions' (Ostrom et al. 1961) with many centers of decision-making (McGinnis 1999) that are formally independent of each other at different governance scales. Metropolitan governance therefore is predominantly seen as a context that centers and operates on inter-jurisdictional collaboration and coordination, which requires negotiations and agreements for allocation and sharing of resources and responsibilities, toward collective action among neighboring cities vis-à-vis central structures. A CIDOB policy paper argued that, "the ability to act in coordination will be essential if (metropolitan areas) are to influence state policies and contribute to shaping the international agenda" (CIDOB 2016, 4).

Sellers and Hoffman-Martinot (2009, 262) would however argue that collective action within many metropolitan regions "[…] must overcome institutional fragmentation due to the lack of a central, encompassing regulatory authority". It involves contentions on how to build and maintain political incentives for horizontal initiatives, particularly in a shared or joint programs where there is no single ministry or political/administrative unit who will get the credit for the results of the collective action (Phillips 2004, 15). Jha et al. (2013, 14) noted that enforcing the accountability of city and municipal governments to effectively manage risk can be challenging as it requires a perspective that stretches beyond elected terms and jurisdictions: "Some decisions and resources also are beyond local control, at regional or national levels, or beyond their jurisdiction."

Without regulatory institutions, it also becomes a question of how partnerships and participation among neighboring localities can be sustained over an extended period of time (Phillips 2004). Fragmentation in metropolitan governance is often triggered by contentions on leadership in the collaboration among supposed equals. Measham et al. (2011) found that leadership and competing planning agendas could constrain horizontal cooperation. Mercado and Manasan (1998, 18) earlier posed the caveat of leadership issues in coming up with an acceptable metropolitan structure, particularly "the determination of an agreeable mode of metro leadership." Who mediates, who represents and who decides for the metropolitan region, particularly when in gridlock, without an overarching political mandate, is central to the debates on transborder urban governance.

2.1 The politics of scale

The foregoing discourse on the dilemmas in metropolitan governance points to a rethinking of intergovernmental political systems and the corresponding rescaling of power structures – what is known as scalar politics. The politics of scale refers to "all the different ways actors contest scale choices" (Marks and Lebel 2016, 58). Delaney and Leitner (1997, 94) drew attention to how the construction of scale is utilized for political transformations, and how "the differences that scale makes were bound up with and expressed different conceptions of localness …" Brown and Purcell (2005, 608) argued that "scalar configurations are not an independent variable that can cause outcomes, rather they are a strategy used by political groups to pursue a particular agenda." It involves a process of 'territorialization' – a socio-spatial reconfiguration typically achieved "by establishing new laws, regulation and authorities that alter human-environmental relationships" affecting resource access, control and management (Bassett and Gautier 2014, 2).

Scalar politics is essentially a contested process of socio-spatial reconfiguration where boundaries of governance are contingent upon shifting power relations vis-à-vis geographic conditions. Metropolitan governance highlights the power dimensions of scale, particularly power relations and hierarchies in translocal space. As Porst and Sakdaporlak (2017, 118) would argue: "Scale serves as one means to apprehend power in socio-spatial relations […] translocal concepts draw on scale to address disparate magnitudes of power and unequal relationships between actors, neighborhoods, and nation-states […]"

2.2 Joined-up government and other cleavages in metropolitan governance debate

Debates on viable rescaling of governance structures for management and coordination of urban networks abound. There is a reassertion on the imperatives to 'manage' metropolitan regions. The central framework for this argument is based on the notion of governance as about 'managing' networks embodying a variety of collaborative arrangements (Rhodes 2000; Ansell 2000; Salamon 2001; Phillips 2004). Within the paradigm of 'joined-up government', Pollitt (2003, 4) earlier asserted that one of the key elements for regulation in networked governance is "[...] the ability to manage the issue horizontally across government by giving importance to a top level steering and coordinating body that has political clout and action levers."

Different proposals were also put forward with respect to the geographic scale and functional scope of emerging institutions of metropolitan governance. Blatter (2006) noted of new dichotomies emerging in the discourse about the architecture of metropolitan governance, shifting from small- versus large-scale government toward few versus many scales of governance, as well as a question of broad versus narrow functional scope of governance institutions. A prevailing dichotomy centers around 'reterritorialization' versus 'deterritorialization' in rescaling political regulation.

Anchored on a territorial logic for governments, 'reterritorialization' argues that geographic expansion of socio economic activities should be accompanied by a similar scalar expansion of political regulation and governance. It includes arguments for regionalization or the emergence of a new or strengthened layer of governance between city and state (Batten 1995; Calthorpe and Fulton 2001; Ohmae 1993; Storper 1997). It could be through 'jumping of scales' from the local to the regional and from the national to the continental level (Brenner 1999; Scott 2001; Taylor 2000). Or it can also be pursued through a 'relativation of scales' which involves the proliferation of governing capacities across a variety of spatial scales - neighborhood, municipality, metropolitan, regional, national, supranational, continental, and global (Brenner 1998, 1999, 2002; Collinge 1996). In this case, the city and the nation-state do not dissolve but are only being complemented by further scales of regulation and governance.

On the other hand, 'deterritorialization' which is mainly based on public choice theory stresses that there exist various optimal scales for different public services, and that one large-scale government responsible for all services is not an efficient solution for metropolitan areas (Castells 1989; Ostrom et al. 1961; Ostrom 1972). It proposes for functional specialization and multiple specialized/single-purpose governments (Frey and Eichenberger 2001; McGinnis 1999). It argues for the reduction of functional scope for governance institutions and for separate government units for each service to capture economies of scale. It seeks to put in place a functionally differentiated system of specialized units of governance and is characterized by jurisdictions, which concentrate on particular policy problems/public goods, fluid over time and can proliferate in number. Blatter (2004) added that many diverse 'spaces of flows' challenge the logic of 'spaces of place' in characterizing territorial and functional governance in cross border regions.

This study anchors its assessment of the Philippines' metropolitan governance within its decentralization framework based on: 1) the appropriateness of the current framing of local jurisdictions and metropolitan governance arrangements for integrated urban disaster interventions; 2) the viability of institutional reform agenda vis-à-vis entrenched intergovernmental political context; and 3) the country's ability and responsiveness to reconfigure geographic boundaries and power structures for metropolitan regions in accordance with appropriate scales and functional scopes of integrated urban disaster management.

3 Scalar politics in Philippine metropolitan disaster governance: case studies

The Philippines has three metropolitan regions as officially recognized by the National Economic Development Authority (NEDA) in the Philippine Development Plan 2017-2022 (NEDA 2017a) namely Metro Manila, Metro Cebu and Metro Davao (see Fig. 1). These metropolitan regions were defined in response to the need to sustain the growing urban population and to provide an integrated approach to interlinking urban concerns. These regions are also major economic hubs in the country where leading commercial, industrial and financial centers are concentrated.

Metro Manila, the largest and most populous metropolis in the country constitutes the National Capital Region. It is recognized as a special development and administrative region, supervised by the Office of the President. It has a population of about 12.9 million (as of 2015) comprising about 13 % of the national population (NEDA 2017a). This figure rises to about 14.5 million during daytime due to student or labor in-migration from neighboring provinces. Highly congested, it has a population density of 21,000 persons per square kilometer (PSA 2016). The region accounts for the largest share of the country's economy at 36.4 % of GDP as of 2017 (PSA 2018a).

Metro Cebu, located in the Central Visayas Region, is the country's second largest urban center and economic hub with extensive domestic and international links. It has a combined population of 2.8 million as of 2015 and a population density of 2,700 persons per square kilometer (NEDA 2017a). Based on a 2015 study by JICA (Japan International Cooperation Agency) - the 'Roadmap Study for Sustainable Urban Development in Metro Cebu', Metro Cebu's GDP is projected to rise by 7.8 % annually between 2020 to 2030.

Metro Davao is Mindanao's premier commercial hub, driving the region's economic expansion. Davao Region, which stands as the fifth biggest economy in the Philippines, grew by 10.9 % in 2017 registering as the second fastest growing region in the country (PSA 2018a). The urban agglomeration's population is estimated at about 2.5 million as of 2015 and a population density of 630 persons per square kilometer (NEDA 2017a).

Fig. 1: Major metropolitan regions of the Philippines

3.1 Uneven and fragmented institutional frameworks for metropolitan governance

Characterized mainly as a conurbation or agglomeration of contiguous urbanized cities and municipalities, the country's metropolitan regions are not local political jurisdictions, and thus there are no metropolitan governments. Metropolitan governance is embedded within the regional administrative governance[1)] coordinated by the central government and under direct supervision by the President. Local governance in the Philippines as defined in the 1991 Local Government Code (RA 7160) is structured along a three-tier political system of local government units (hereafter LGUs): province, city/municipality, and the *barangay* (village) in a vertical structure of political and administrative accountability and regulation (see Fig. 2).

The Code classifies cities into three categories: 1) Highly urbanized cities are those with a minimum population of 200,000 inhabitants and an annual income of at least P 50 million (approximately € 833,000) based on 1991 constant prices; 2) Independent component cities have charters that prohibit residents to vote for provincial officials, unless explicitly stated otherwise; 3) Component cities are those which do not meet the preceding requirements and are deemed part of the province where they are geographically located. Section 29 of the Code states that while provinces exercise jurisdiction over component cities and municipalities, they do not have administrative supervision over highly urbanized cities and independent component cities, which are directly supervised by the Office of the President. As of 30 September 2018, there are 145 cities in the country, 38 of which are independent from a province - 33 highly urbanized cities and five independent component cities. There are 107 component cities and 1,489 municipalities under the jurisdiction of provinces. Under all of them are 42,045 *barangays* (PSA 2018b).

A mix of highly urbanized and independent cities, component cities and municipalities constitutes a metropolitan region. This means, the power configurations and lines of accountability among member LGUs in a metropolitan region are not parallel. Absent formal political jurisdictions, the official boundaries of metropolitan regions tend to overlap with the provincial jurisdiction. Thus, in a metropol-

[1)] The regions in the country are mainly sub-national administrative units coordinated by the NEDA, except the Autonomous Region in Muslim Mindanao (ARMM) which is mandated with political governing powers.

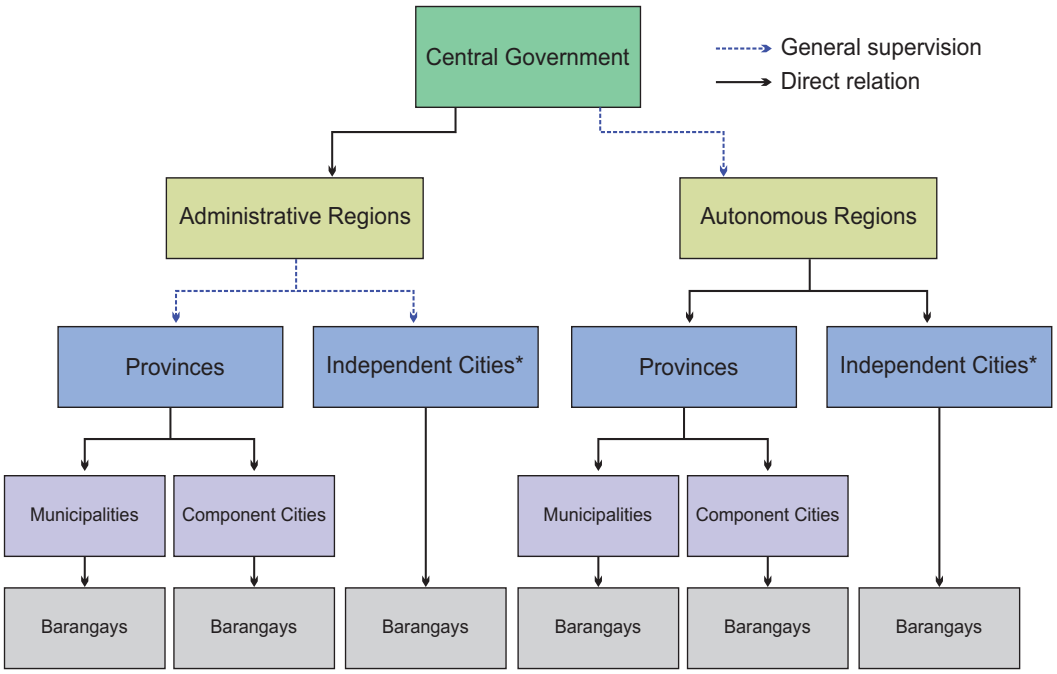

Fig. 2: Philippine local government structure. Source: Modified after Howard the Duck (2009).
***Cities that are independent from a province include highly urbanized cities and independent component cities. As of 2018, there are no cities independent from a province in the sole autonomous region in the country.**

itan region (except Metro Manila), some of its members, which are urbanized component cities and municipalities belong under the provincial jurisdiction, while member independent cities are not. This fragments and complicates the metropolitan governing structure, particularly when the province comes in. Consequently, it can be noted below that the three metropolitan regions in the country have differing administrative arrangements.

3.1.1 Case 1: Metro Manila

Metro Manila as the seat of the country's capital, is a special development and administrative region. It was initially established in 1975 through Presidential Decree No. 824 creating the Metropolitan Manila Area comprising 17 LGUs. The governance of the metropolis under Martial law was given to the Metropolitan Manila Commission, which exercised both executive and legislative powers. The chairman of the commission also served as governor of Metro Manila. In 1990, the Metro Manila Authority was created as an interim body due to the institutional drift of Metropolitan Manila Commission (Mercado and Manasan 1998; Manasan and Mercado 1999). Its current structure, the Metro Manila Development Authority (MMDA) was created in 1995 through Republic Act (RA) 7924, providing it a juridical identity with a mandate as the central planning agency of the National Capital Region. The MMDA, with its chairperson appointed by the President, has legal and institutional powers, along with fiscal resources. Its tasks include planning, monitoring, coordinating and implementing functions and to exercise regulatory and supervisory authority over delivery of metro-wide services.

The governing board and policy making body of the MMDA is the Metro Manila Council, composed of voting and non-voting members. Voting members are the mayors of the localities in Metro Manila, as well as the presidents of the Metro Manila Vice Mayors League and the Metro Manila Councilors League. Non-voting members include heads of six different national government agencies. The Council issues rules, regulations and resolutions for metro-wide application governing the delivery of basic services and approves metro-wide plans, programs and projects, as well as imposes penalties.

Currently, Metro Manila is composed of 17 LGUs: 16 highly urbanized cities (Manila, Caloocan, Las Pinas, Makati, Malabon, Mandaluyong, Marikina, Muntinlupa, Navotas, Paranaque, Pasay, Pasig, Quezon City, San Juan, Taguig, Valenzuela);

and one municipality (Pateros). Notably, as a special administrative region, its sole municipality was made independent from the province when it became part of the Metropolitan Manila Area.

3.1.2 Case 2: Metro Cebu

Based on parallel pressure to respond to interlinking urban concerns and create a platform for integrating development in the metropolitan area, Metro Cebu was loosely created by government planners in the 1970s. The composition of the metropolis has evolved across different plans and projects in the 1980s including the Central Visayas Regional Project in 1983 and its reconstituted project, the Metro Cebu Development Project (1989-1997). It was in 1997 that the Central Visayas Regional Development Council[2] (RDC VII) created the Metropolitan Cebu Development Council (MCDC) through Resolution No. 117 – as a metropolitan body mandated to formulate development plans, prepare programs and projects, coordinate and monitor their implementation. MCDC was composed of 10 LGUs: the cities of Cebu, Mandaue, Lapu-lapu, Talisay and Naga; and municipalities of Compostela, Liloan, Consolacion, Cordova and Minglanilla. In 2005, the Central Visayas RDC redefined the composition of MCDC through Resolution No. 58, adding the Provincial Governor of Cebu as a member. In 2011, it issued Resolution No. 10, dissolving the MCDC and recognizing the Metro Cebu Development and Coordinating Board (MCDCB) as the coordinating body for the development of Metro Cebu. MCDCB was formalized as a consortium with the signing of a memorandum of agreement among the local chief executives of LGU members, regional heads of national government agencies, and leaders of the private sector/civil society organizations recognized by the Central Visayas RDC.

A 38-member board leads the MCDCB with Cebu provincial governor as Chair, with select local chief executives and private sector/civil society leaders as co-chairs. The NEDA serves as the Secretariat and the Ramon Aboitiz Foundation, Inc. facilitates the Mega Cebu program, anchors the research, program and organizational development, and serves as coordinating and operations unit and process facilitator of the various functions, plans and programs of MCDCB. It is considered unique in its explicit engagement with, and leadership from, private sector and civil society as a means to institutionalize innovation and transparency (OECD 2017). However, without juridical and legal identity, MCDCB does not have the same administrative authority as that of MMDA in Metro Manila, nor can it exercise direct regulatory authority over member LGUs. There are 17 different regional line agencies of the national government involved along with seven select representatives from the private/civil society sector.

Currently, there are 14 LGU members including: one province (Cebu); four component cities (Carcar, Danao, Naga and Talisay); six municipalities (Compostela, Consolacion, Cordova, Liloan, Minglanilla and San Fernando); and three independent highly urbanized cities (Cebu, Lapu-lapu and Mandaue).

3.1.3 Case 3: Metro Davao

Metro Davao on the other hand continues to be in search of a formal definition. It was initiated in 1993 by Davao City political leadership toward the creation of a Metro Davao Integrated Development Project Master Plan and Feasibility Study. The study, which was prepared by a group of Japanese consultants, mainly covered Davao City. Taking off from this project, the Davao Region RDC (RDC XI) formally adopted the concept of Metro Davao however with a larger scale to include the three provinces in the Davao Region. This led to the creation of the Davao Integrated Development Program (DIDP) Board, which served as Metro Davao's development council. The consolidation was formalized in 1994, with a memorandum of agreement signed by Davao City Mayor and governors of Davao del Norte, Davao del Sur and Davao Oriental provinces. The DIDP is based on an integrated development strategy anchored on the concerted effort of member LGUs jointly undertaking various social, infrastructure and economic development projects.

The DIDP Board is composed of the local chief executives of member LGUs along with regional heads of four national government agencies, and the executive director of the Project Management Office (PMO), and chaired by the governor of Davao del Norte. The PMO provides technical support, administrative assistance, and coordinates various

[2] The Regional Development Council (RDC) coordinates all administrative regions outside the National Capital Region. The RDC is the highest policy-making body in the regions and serves as the counterpart of the National Economic Development Authority (NEDA) Board at the subnational level.

planning and program implementation activities. A technical advisory group from national line agencies and the private sector also provides technical recommendations to the PMO. Like Metro Cebu, it has no formal juridical identity except being administered by the Davao Region RDC.

Currently, there are two competing definitions in terms of its geographic scope: 1) DIDP's scope of supervision encompassing 10 LGUs from Davao Region: including the provinces of Compostela Valley, Davao Oriental, Davao del Norte, and Davao del Sur, the highly urbanized City of Davao; and five component cities (Tagum, Panabo, Digos, Samal and Mati); 2) seven urbanized LGUs along the urban corridor of the Davao Gulf: including the highly urbanized City of Davao, four component cities (Tagum, Panabo, Digos, Samal); and two municipalities (Carmen and Sta. Cruz) under two different provinces, Davao del Norte and Davao del Sur.

Essentially, the three major metropolitan regions in the Philippines are organized differently along separate institutional frameworks, with varying criteria of scale and functional scopes, as well as governing structures. Unlike Metro Manila, which is designated as a special development and administrative region, Metro Cebu and Metro Davao remain part of Central Visayas and Davao administrative regions coordinated by their respective RDCs. They remain loose aggrupation based mainly on voluntary agreement among member LGUs and partner agencies and sectors, not sanctioned by law. They also involve LGUs with different lines of political accountability particularly highly urbanized cities and provinces exercising jurisdictions over component cities and municipalities. Table 1 illustrates the fragmentation of metropolitan governance structures across the three metropolises.

Tab. 1: Philippine metropolitan arrangements

Metro	LGU Membership	Existing Metropolitan Institutions	Basis	Composition of Governing Structure
Manila	17 LGUs: 16 highly urbanized cities; and 1 independent municipality	Metro Manila Development Authority (MMDA) - 1995	Republic Act 7924	Metro Manila Council: composed of voting (the mayors of the cities and municipality) and non-voting (select national government agencies) members, chaired by the MMDA Chairman
Cebu	14 LGUs: 3 highly urbanized cities; 4 component cities; 6 municipalities; and 1 province	Metro Cebu Development and Coordinating Board (MCDCB) - 2011	Memorandum of agreement	MCDCB: composed of LGU members, select national government agencies, private sector/civil society organizations, chaired by the Governor of Cebu, with select local chief executives and leaders of civil society and private sector organizations as co-chairs. Co-regulation with Central Visayas RDC NEDA serves as Secretariat Ramon Aboitiz Foundation, Inc. facilitates the Mega Cebu program; anchors the Research, Program and Organizational Development; and serves as coordinating and operations unit and process facilitator of the various functions, plans and programs.
Davao	7 LGUs: 1 highly urbanized city; 4 component cities; and 2 municipalities 10 LGUs: 1 highly urbanized city; 5 component cities; and 4 provinces	Davao Integrated Development Program (DIDP) - 1994	Memorandum of agreement (1994) (Latest amendment 2007)	DIDP Board: composed of local chief executives of LGU members along with heads of select national agencies, PMO executive director, chaired by the Governor of Davao del Norte Co-regulation with Davao RDC/NEDA A Project Management Office (PMO) provides technical, administrative, coordination and operation support Technical Advisory Group from national line agencies and private sector provides technical recommendations

3.2 Scalar politics and institutional reform agenda in metropolitan flood disaster governance

Massive urban flooding in the Philippines from recent years have highlighted the acute vulnerability of metropolitan regions. In 2009 typhoon Ondoy (Ketsana), Metro Manila acquired a month's worth of rainfall in six hours, which submerged 80 % of the metropolis, with a recorded death toll of 464 and almost 500,000 people affected. Combined with the damages of typhoon Pepeng (Parma) a month later, these cost the country USD 4.4 Billion worth of damages equivalent to 2.7 % of the country's GDP (WB 2009). In the case of Metro Cebu, while it is generally not directly hit by strong typhoons, it suffers heavily from massive inundation and landslides even with a few hours of rain. Thus, during storms and heavy rainfall, Metro Cebu continuously grapples with knee to waist-deep flooding (Macasero 2016). In 2012, Mindanao was severely hit by typhoon Pablo (Bopha) causing massive flooding in Metro Davao particularly the cities of Tagum and Samal along with several towns, and displaced 127 families and caused 1,901 fatalities (de la Cruz 2014).

Due to increasing disaster risks, the Philippine Disaster Risk Reduction and Management (DRRM) Act of 2010 (RA 10121) or DRRM Law was enacted requiring all LGUs to have DRRM Councils and DRRM plans that integrate DRRM-informed land use, zoning, building codes and no-build zones, and contingency protocols. Responding specifically to the increasing severity of transboundary urban flooding, the law mandates for the integration of metropolitan disaster management in the existing structures of metropolitan governance. However, due to the lack of special administrative authority for the respective metropolitan bodies of Metro Cebu and Metro Davao, only Metro Manila has the Metro Manila DRRM Council. The Central Visayas and Davao Region Regional DRRM Councils oversee the DRRM for Metro Cebu and Metro Davao respectively. Unlike Metro Manila DRRM Council that is chaired by the MMDA, the Regional DRRM Councils are chaired by the Regional Director of the Office of Civil Defense and composed of executives of regional offices of national line agencies that are members of the National DRRM Council (see Tab. 2). This complication in disaster governance structures creates overlaps with the functions of the metropolitan bodies tasked to deal with integrated development and disaster management strategies for the metropolis. Moreover, the lack of clear political mandates for metropolitan institutions severely limits their governing capacity to regulate local affairs, including disaster management vis-à-vis the legitimate exercise of local autonomy among member LGUs.

Tab. 2: Fragmentation in metropolitan disaster management

Metro	Metropolitan DRRMCs	Basis	Governing Structure
Manila	Metro Manila DRRM Council 2010	Section 6, Rule 4 of the Implementing Rules and Regulations of the DRRM Law (RA 10121)	MMDA sits as Chair of Metro Manila DRRM Council, with members including executives of regional offices of national agencies operating in the National Capital Region
Cebu	Central Visayas Regional DRRM Council	Sections 1 and 2, Rule 4 of the Implementing Rules and Regulations of the DRRM Law (RA 10121)	Regional DRRM Councils are chaired by the Regional Director of the Office of Civil Defense, and composed of executives of regional offices of national agencies that are members of the National DRRM Council
Davao	Davao Region Regional DRRM Council	Sections 1 and 2, Rule 4 of the Implementing Rules and Regulations of the DRRM Law (RA 10121)	Regional DRRM Councils are chaired by the Regional Director of the Office of Civil Defense, and composed of executives of regional offices of national agencies that are members of the National DRRM Council

3.2.1 Case 1: Metro Manila

Officials and technical experts of MMDA would note that despite its regulatory and supervisory authority for metro-wide services, it is mainly 'a coordinating body' (Remetio 2017), which could not fully regulate critical policies such as land use controls and solid waste management that are within local government jurisdiction. Housing and settlement are political issues that local officials had to carefully negotiate with urban poor communities, or risk losing electoral support. This purportedly result to large-scale illegal settlements located in flood prone areas and danger zones, as well as along rivers and waterways, with trash causing the creeks to clog. In a presentation, von Einsiedel (2009), former Commissioner for Planning of the Metro Manila Commission, noted that the MMDA chairman has difficulties convening a quorum for the meetings of the mayors' council with some local authorities not implementing or enforcing the policies of the MMDA. He further noted that the primary and full-time concern of local authorities is their constituency, whereas their contribution in the affairs of the mayors' council becomes secondary and part-time.

On the other hand, the MMDA and the Metro Manila DRRM Council are also seen by LGUs as a recentralization mechanism, reduced to promoting national government projects implemented at the local level, rather than consolidating local concerns. MMDA is often crowded out by the 25 national agencies involved in metropolitan disaster governance with overlapping mandates, paradoxically compromising the principles of local autonomy. It has been reported that the overlapping functions and mandates of many national government agencies over the management of water is the main cause of the water crisis that hit Metro Manila (Echeminada 2010). This report cited the case of the National Water Resources Board that has to compete for its mandate of overseeing water resource management with more than 30 other government offices and corporations dealing with water-related concerns. Due to a complicated and fragmented institutional and regulatory structure, agencies are at times working at cross purposes and are not able to get their act together in managing water resources.

The fragmentation and ambiguities in the functions of central agencies pose implications on enforcing standards and lines of accountability among LGUs. It amplifies the prevailing intergovernmental struggle for political control resulting to defiance and conflict among independent LGUs, and to political fragmentation within the metropolitan region. Essentially, the MMDA is often pit in the middle - where LGUs on one hand can formally restrict its regulatory authority (the MMDA's actions are subject to review and approval of the mayors through the Metro Manila Council), while national government agencies on the other hand can well impose their projects and regulations upon it.

The limitations of the MMDA became evident in a report by the Commission on Audit (COA) on June 2017, which called out the agency over its failure to complete or implement 53 flood control and sewerage projects. Such projects were part of the MMDA's P 800.927 million metro-wide program launched in 2014 and were supposed to be completed by 2016. The report highlighted the MMDA's lack of proper coordination with other national government agencies and LGUs as a key factor, stating:

"Various projects totaling P178,882,627.24 were either not implemented or not completed within the specific contract time due to inadequate planning and absence of coordination mechanism with the Department of Public Works and Highways, concerned LGUs, communities and other agencies which hindered the Authority in attaining its objective to mitigate flooding in the metropolis" (COA 2017).

In 2011, an ad hoc, project-based inter-local collaboration called the Marikina Watershed Environs Integrated Resource Development Alliance or the Alliance of Seven (A7-Resilience) – was organized by cities and municipalities most prone to urban flooding and worst affected by the strong typhoon Ondoy in 2009. In partnership with environmental groups, La Liga Policy Institute and RESILIENCE, the cities of Marikina, Pasig, and Quezon (which are part of Metro Manila) cooperated with Antipolo City and the municipalities of Cainta, Rodriguez and San Mateo of Rizal province to boost disaster resilience through the rehabilitation of the Marikina watershed. The Marikina watershed is in critical condition because of the rapid rate of deforestation with only 22 % (of the 33,000 hectares) forest cover and the failure to initiate an effective reforestation program. This was deemed as the cause of the siltation of the Marikina River resulting to its fast overflow, and causing severe flooding in low-lying areas in Rizal and Metro Manila. Aiming to enhance the individual and collective capacities of member LGUs, the A7-Resilience 2011-2013 Integrated Disaster Risk Reduction and Management Program was launched with a budget of P 35 billion (€ 589 million) (Benaning 2011).

However, a study by Tuano and Sescon (2012/2013) indicated that while the program is a good institutional innovation which has responded to the geographic definition of the watershed, there were constraints in sustaining the coalition, particularly in coming up with a common land use policy for the watershed, given the term limits of LGU officials and their meager resources to resolve conflicting interests. What this signified was the institutional design failure coming from the misfit of the scale of resource and governance arrangements. It highlighted that the prevailing framework of interventions within MMDA do not respond to the required and appropriate scale of disaster management interventions. Figure 3 illustrates that the flood risk affecting some of its members required disaster management interventions beyond MMDA's scope of administrative jurisdiction.

Essentially, the scale of Metro Manila does not correspond with the scale of flood risk and the functional scope needed for integrated urban disaster and flood management. Thus in March 2012, the MMDA with the assistance of the World Bank, AusAID and Cities Alliance launched a strategic plan dubbed as 'Metro Manila Greenprint 2030: Building a Vision' (Zhang et al. 2014). It is a development plan aimed to leverage the metropolitan region toward a competitive sustainable future. As a strategic roadmap within the framework of the Extended/Greater Manila Region or Mega Manila, the Greenprint's spatial strategy

Fig. 3: Cross-border flood risk in Metro Manila and required integration in flood management. Source: Modified after Zhang et al. (2014)

transcends beyond Metro Manila's official geographic borders to cover neighboring areas in the Southern Tagalog Mainland and Central Luzon regions (i.e. Bulacan, Rizal, Laguna and Cavite). Integral to this plan is the 'Master Plan for Flood Management in Metro Manila and Surrounding Areas' implemented by the Department of Public Works and Highways (DPWH). This flood master plan is based on a river basin strategy that extends to the Greater Manila Region. It is composed of various projects, which include structural and non-structural measures for rivers, waterways, urban drainage system, flood information and warning system, solid waste management, reforestation, and watershed management around the Laguna de Bay (GOVPH 2012). This signals the needed geographic rescaling of the metropolis and restructuring of institutional framework for metropolitan governance.

Highlighting the same limitations in inter-LGU coordination within MMDA and delays in DPWH implementation, latest reports on a hearing by the Senate Committee on Public Works would note that as of August 2018, none of the projects under the Master Plan has been completed since 2012 (Arcangel 2018). Having recognized the prevailing limitations of the MMDA as a coordinating body, House Bill 4758 was filed in January 2017 seeking to transform the MMDA into a local government unit - as Metro Manila Government with an elected governor, vice governor and Metropolitan Manila Council- that can effectively exercise political authority. Currently pending in the House Committee on Local Government, the bill proposed that the elected governor will have the same duties as the Chairman of MMDA, except it will have direct accountability for the implementation of policies and programs in the metropolis. This bill, however, does not include proposals on appropriate geographic rescaling that would be done to correspond with institutional reforms toward integrated disaster risk interventions.

3.2.2 Case 2: Metro Cebu

The various metropolitan bodies organized in Metro Cebu since the 1970's endured a pattern of political feuds and clashes on the development priorities and agenda-setting among sitting local government officials. These have resulted to standoffs in metropolitan development planning, as well as in coordination and monitoring of project implementation of metropolitan development initiatives. A previous study by Mercado (1998a, 2) noted that the former Metropolitan Cebu Planning Advisory Council was beset by "[...] weak authority to implement the decisions as city and municipal governments may elect not to adhere to the recommendations". Similarly, the Metropolitan Cebu Development Project Management Office saw such constraints of political clashes among local government leaders in the implementation of the JICA-funded Metro Cebu Development Projects (MCDP), focused on infrastructure provisions to improve traffic networks. Interviews with officials of the Technical Working Group noted that certain LGU members complained of the monopoly by highly urbanized cities of project allocations, which were predominating in decisions. The MCDC saw the withdrawal of Cebu City from membership, upon the entry of Cebu province (Lao 2008). The reason primarily was that the then Cebu City Mayor was conflicting with the Cebu Provincial Governor.

This challenge remains the same with the case of MCDCB. In 2013, MCDCB adopted the 'Mega Cebu Vision 2050' – an urban development vision outlining priority areas for cooperation among members of Metro Cebu (JICA 2013). However, the same mayor of Cebu City who previously withdrew from MCDC, announced unilaterally on May 2017 that Cebu City is no longer part of MCDCB (Fernandez 2017). It can be noted that another sitting mayor of Cebu City approved its membership in MCDCB in 2011. With the return and take-over of this mayor, he questioned the legitimacy of MCDCB leadership composed of the provincial governor and a board constituted by different sectors. He argued that unless members of the public are the ones to choose the officers of the Board, the city will not be involved in the discussions on the Mega Cebu program. This is widely seen as a political defiance by an independent highly urbanized city with a sitting mayor who has political feuds with the former governor of Cebu province- perceived to have initiated the Mega Cebu Vision 2050 as her political project. The non-cooperation of Cebu City, located right at the heart of Metro Cebu compromises the integrated sustainable urban development and flood and drainage system master plans.

Absent a political jurisdiction, the MCDCB as well as the Regional Development Council (RDC), which endorses the plans, could not compel Cebu City to cooperate. This signifies that MCDCB becomes heavily contingent upon shifts of political alliances and bickering within and among local officials. Issues on leadership, sharing of resources and implications on local autonomy remain issues thrown against MCDCB. Without real political mandate, metropolitan and regional administrative bodies are often not taken

seriously by local officials and could not enforce accountability and cooperation. They would argue that without a legal personality, the MCDCB remains reliant on national government agencies in securing and allocating the funds for flood management projects and implementing them (e.g. DPWH). The MCDCB/RDC/Regional DRRM Council are thus reduced to becoming nominal talking houses and venues for political bargaining- wherein local political officials negotiate directly with national line agencies to have their development projects aligned to such agencies' investment programming. Nonetheless, the RDC can still block LGU proposals by not endorsing their projects. This could then result to intergovernmental standoff that compromises integrated DRRM interventions for the metropolis.

In 2017, MCDCB and the DPWH released the Metro Cebu Integrated Flood and Drainage System Master Plan (DPWH 2017). This is based on a 'Roadmap Study for Sustainable Urban Development in Metro Cebu', which JICA (2015) conducted. Based on flood analysis looking into the mechanism of flood occurrence and concentration of inundation, the study points to the need to divide the metropolis into three clusters for integrated approach to flood control - north, central and south. The clusters are identified according to shared conditions of the areas, which determine the intervention (e.g. density of urbanization determines the shape of revetment). Proposed interventions involving channel improvement, construction of new channel, drainage systems, pressure conduit and lagoon/detention pond for every cluster are planned around catchment areas and river systems. It can be noted however that while catchments in the north and central clusters are within the boundaries of Metro Cebu, the catchments in the south cluster goes beyond the metropolitan boundary. The city of Toledo, which also hosts the Pangdan catchment, the towns of Barili and Aloguinsan hosting Carcar catchment, and Pinamungajan hosting Valladolid catchment, are not part of Metro Cebu. As in the case of Mega Manila, required disaster management interventions for Mega Cebu go beyond the current geographic scale of the metropolitan area (see Fig. 4).

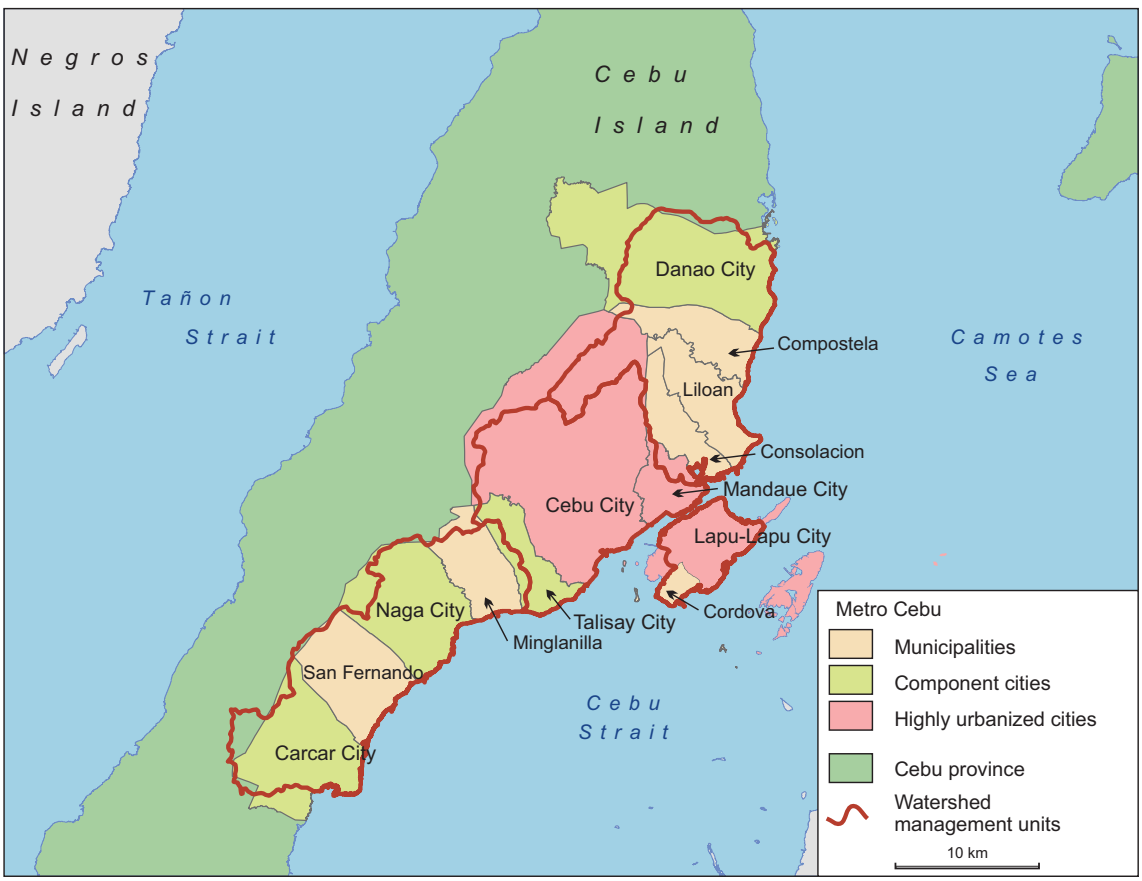

Fig. 4. Metro Cebu LGUs and watershed management clusters. Source: Modified after DPWH (2017)

Amid political bickering issues, there is a resurgence of an old proposal to create a legally-mandated Mega Cebu Development Authority (MCDA) – Metro Cebu's counterpart to Metro Manila's MMDA - to coordinate flood control, solid waste disposal and traffic management, among other services with metro-wide impact. This was based on the view that a body created by legislative decree gives it permanence as it can't be abolished or amended unless another law is passed. Earlier proposals to establish a metropolitan authority for Cebu were confronted with financial barriers such as huge expenditures involved that are not viable for individual LGUs to undertake.

However, House Bill 6227 filed in 2015 to create the MCDA has already passed the House Committee on Rules, and continues to be deliberated for enactment. Based on the framework of Metro Manila's MMDA, the MCDA is envisioned to uphold the local autonomy of LGU members. Its proposed functions include the formulation, coordination, regulation, and monitoring of short, medium, and long-term plans, policies, and programs for the sustainable development and integration of the Metropolitan Cebu area. The geographic scope of MCDCB is also maintained.

3.2.3 Case 3: Metro Davao

Unlike Metro Manila and Metro Cebu, the establishment of the metropolitan region in Davao under the two prevailing geographic definitions was not based on required integrated development and disaster management. Mercado (1998b, 4) earlier noted that there is no real need for the area to undertake joint or integrated metropolitan services among member LGUs, and that the inclusion of municipalities and provinces may be considered "[...] only a geographic expansion than an inter-local cooperation characteristic of most metropolises or metropolitan arrangements." It can be noted that the original proposal for a Metro Davao Integrated Development Project Master Plan and Feasibility Study in 1993 primarily covered Davao City (Mercado 1998b). The beginnings of the establishment of DIDP was mainly based on agreements among local officials mainly from Davao City and the previous Davao Province to pursue joint undertakings for various social, infrastructure and economic development projects. The Davao RDC eventually adopted the concept of Metro Davao to formally establish the DIDP, which included other provinces in the Davao Region.

The extensive political boundaries and relatively lesser urbanization of LGUs do not compel for integration. Davao Region has a land area of 19,721 square kilometers about 6.6 % of the total land area of the Philippines (NEDA 2017b). Davao City alone has a land area of 2,444 square kilometers, almost four times the size of Metro Manila, with only about 8 % used for city development (Doquila 2018). Thus, current flood management initiatives are pursued independently in coordination with the Davao Regional DRRM Council to relevant national agencies. In 2014, NEDA produced the Davao Region Physical Framework Plan (2015-2045). This plan included a spatial strategy for the region that identifies areas highly prone to flooding, along with building and settlement regulation in these risk areas, and protection of the region's key production areas and other environmentally-constrained or disaster-prone areas. However, the plan does not include a regional integrated flood control master plan, rather indicates separate watershed/river basin management programs for each province and for Davao City. In Davao City, an agreement by the DPWH and JICA was signed on 23 April 2018 to jointly craft a Master Plan and Feasibility Study on Flood Control and Drainage Project, following the Integrated Watershed Resources Management approach (DPWH 2018).

Figure 5 illustrates key components of the regional spatial strategy of Davao Region including identified flood prone areas; the CORE (Connectivity, Outward-looking, Rural-urban integration, and Environmental sustainability) Growth Triangle, which is expected to host the expansion of Metro Davao encompassing agri-industrial centers; and the urban corridor linking urban coastal cities and municipalities along the Pan-Philippine Highway.

The DIDP, which serves as Metro Davao's development council mainly facilitates the mainstreaming of the integrated concerns of disaster risk reductions and climate change adaptation into the Provincial Development and Physical Framework Plans of its members. It also participates in the Technical Report Team of NEDA in the preparation of the regional plans. Mercado (1998b) has argued that it may not be appropriate to refer to the DIDP as a metropolitan governing institution, rather a conventional integrated area development undertaking, inasmuch as its entire scope is more rural than urban, and its concerns are not primarily urban-related. Its current program scope remains fundamentally as such - integrated food security, local governance and rural empowerment, along with technical assistance provision for geographic information system and geo-resistivity surveys.

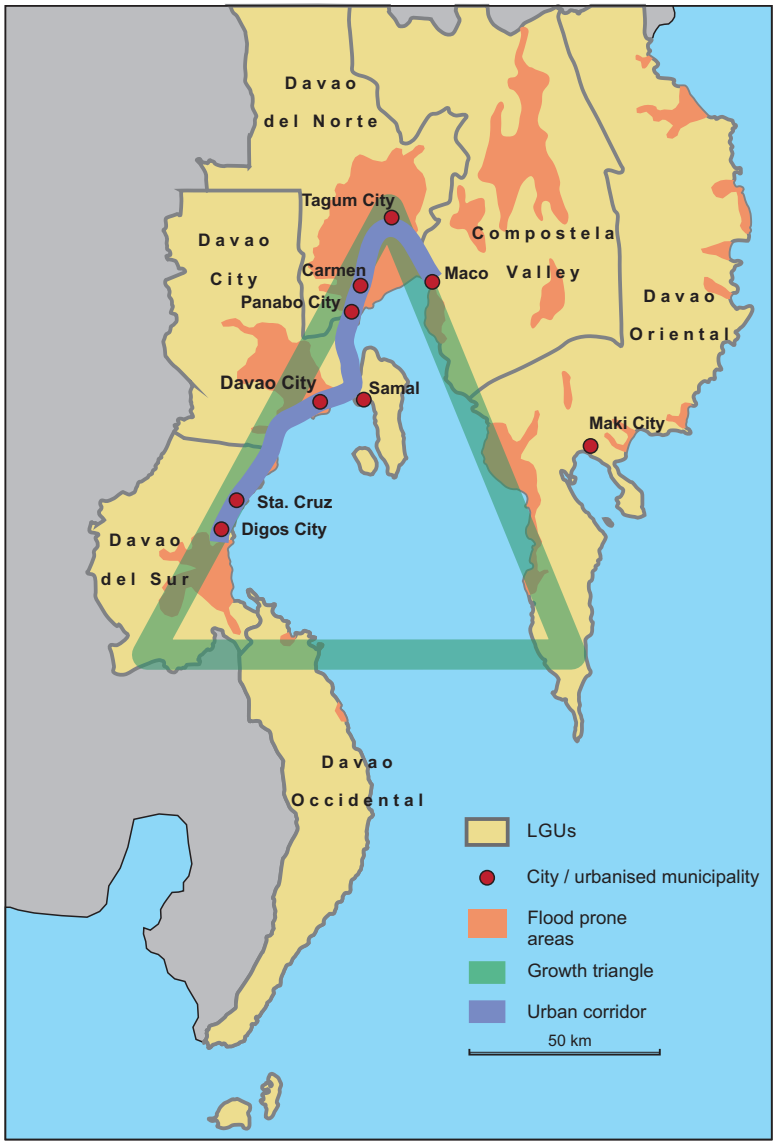

Fig. 5. Davao Region spatial strategy. Source: Modified after NEDA (2014, 2017b)

As the government continues to grapple with defining the scale and composition of Davao's metropolitan region, different entities are initiating projects, beyond the coordination of DIDP. The Mindanao Development Authority (MINDA), which serves as Mindanao's lead agency in coordinating and integrating development efforts - is spearheading the Metro Davao Urban Master Plan Project to cope with the rapid urbanization in Davao City and neighboring cities and prepare it for future developments in light of new investments expected. Seeking to integrate the previous plans of the Davao Region CORE Growth Triangle and the DIDP, the urban master plan is aimed to focus on the urban corridor along the transport backbone Pan-Philippine Highway. It covers eight coastal cities and towns along the Davao Gulf starting from Digos City in Davao del Sur to Maco in Compostela Valley. It traverses through Sta. Cruz in Davao del Sur, Davao City, Island Garden City of Samal, Panabo City, Municipality of Carmen, and Tagum City. The whole stretch is envisaged to form as Metro Davao (see Fig. 5). The master plan is aligned with the vision of the Mindanao 2020 Peace and Development Framework Plan and the strategies of the Mindanao Development Corridors program (MINDA 2011, n.d.). The urban master plan is aimed to:

"[…] identify the comparative strengths and functional roles of the different areas within Metro Davao with the end-goal of complementation and alignment of policies, programs and projects; identify solutions to shared challenges including transport efficiency, provision of urban services, among others; […] serve as a guide for Local Government Units in updating their respective Comprehensive Land Use Plans (CLUPs) taking into account the land use and socio-economic dynamics not only within their political boundaries but the impact and influence of adjacent areas as well" (Lumawag 2017).

Notably, the scale of metropolitan integration defined in the project is primarily guided by projected economic growth and urbanization, with the current president's 'pivot to Davao' that has brought new investments in the region. However, taking into account how urbanization could alter flood regimes, it is strategic for integrated urban flood management master plan to be designed in parallel with such growth and urbanization trajectory. Moreover, scalar calibrations for integrated urban flood management might also need to factor in the expected urban expansion and development along the growth triangle, beyond the current urban corridor demarcated in the project. These scalar considerations, along with corresponding political configurations for the new metropolitan region, will have to be addressed, if Metro Davao is to avoid the pitfalls of Metro Manila and Metro Cebu.

Meanwhile, there are ongoing discussions in Congress of a pending House Bill 6339 to create Davao Gulf Metropolitan Development Authority (DGMDA). The proposed bill however intends to cover the whole Davao Region and reclassify land use to allow commercial, industrial and residential areas within five kilometers from the coastline, contrary to existing situation where most coastal lands up to five kilometers inland are classified as agriculture. Amid the co-regulation of Davao RDC/Regional DRRM Council, the DIDP, and the Mindanao Development Authority, Metro Davao is essentially caught in a quandary in terms of the appropriate scale and functional scope for the metropolitan region.

4 Discussion

Using the lens of scalar politics, the disparate arrangements of the Philippines' major metropolitan regions reveal a common framework in their spatial constitution – that is, predominantly contested constructions without real regard to geographic conditions and their required disaster (i.e. flood) management regimes. Görg (2007) made a case on the need in multilevel environmental governance to consider the constitution of spatial levels and their interconnections with the 'natural' conditions of places. The country's construction of the metropolis is a departure from such paradigm and remains formally loose and apolitical configuration of boundaries that are mainly based on contiguity of uneven political jurisdictions prompted by an urban sprawl.

Such arrangements prove limited in managing transboundary disasters and in generating full accountability among member LGUs and concerned national agencies. As evidenced by the experiences of Metro Manila and Metro Cebu, metropolitan disaster governance creates an ironic capitulation of integrated urban disaster management mandates to central agencies. Yet, absent political authority, central government-led metropolitan institutions are also constrained by prevailing local political fragmentation. The lack of political mandates for metropolitan institutions severely limit their governing capacity to regulate coordination among local autonomies. Integrated flood management reforms therefore rely on ad hoc inter-local collaborations that are vulnerable to shifts in political alliances and to an impasse in inter-jurisdictional negotiations. In the case of Metro Davao, the geographic expanse of local political jurisdictions present an opportunity for the region to calibrate the scale in circumscribing its metropolitan boundary according to what is required for integrated urban development and disaster preparedness vis-à-vis projected concentration and increase in urbanization.

What is evident in the prevailing constraints in Philippine metropolitan governance across the three cases, is that they emanate from the limitations of the country's local governance (i.e. decentralization) framework. Such framework, which has remained static since 1991, could not adapt to new pressures of urbanization and disasters. This paper points to scalar politics beyond translocal spaces – that is the prevailing contestation for socio-spatial control between and among central and local structures of power – that render the metropolitan institutions hijacked. Such intergovernmental political contradictions create a dual resistance against political reconfiguration - from above in an apparent refusal to expand local authorities; and from below in the refusal to amalgamate boundaries and jurisdictions. This leaves the country wanting in its ability to restructure metropolitan governance in accordance with appropriate scales and functional scopes of integrated urban development and disaster management. This echoes the study of Marks

and Lebel (2016) on their argument that incomplete decentralization reforms in Thailand and its associated scalar politics undermined and fragmented flood disaster governance. It also corresponds with the critique of Parthasarathy (2016, 33) of decentralization initiatives in India to carry "the risk of balkanization - a splintering of urban governance, planning and disaster mitigation functions between and among institutions at diverse scales" as shown in the case of Mumbai region.

4.1 Rethinking Philippine decentralization framework

The Philippine Constitution provides the basis for metropolitan arrangements in the country with Article X Section 13: "Local government units may group themselves, consolidate or coordinate their efforts, services and resources for purposes commonly beneficial to them in accordance with law." The 1991 Local Government Code Chapter 3 Section 33 upheld such provision. However, the vertical and horizontal political-bureaucratic fragmentation in Philippine metropolitan governance is deeply entrenched in an intergovernmental political system characterized by "contradictions/a tug-of-war between the oligarchies from central and local political structures" (Gera 2008, 31). On one hand, Sidel's assertion of 'local bosses' in the Philippines relying on intergovernmental alliances "to monopolize public sector resources" (1999, 145) proved a critical constraint that undermines the needed integrated approaches in metropolitan governance. Nonetheless, while realities of local bossism and dynasties endure, the central structures of power maintain effective hold over major development projects affecting localities. National expenditure allocations would show that the central government captures a huge share of the national budget. It is in this context that the existing framework of Philippine decentralization becomes a constraint to metropolitan governance. It is seen to have only reinforced local political turfing and jurisdictional disputes over responsibility for service delivery, without institutionalizing corresponding substantial fiscal authorities.

Embedded within the regional administrative governance coordinated by the central government, rather than institutionalized as a local political structure with juridical identity, the study illustrates that Philippine metropolitan governance is continually challenged by horizontal and vertical political and bureaucratic fragmentation. Horizontally, the cases show that amid inter-local conflicts, metropolitan governance requires a politically legitimate regulatory authority to reconcile issues and put LGUs into account. Notably, if political leaderships of neighboring localities are at odds with each other, strong institutional mechanisms are required that could compel them for cooperation. However, metropolitan institutions in the country lack the legitimate political mandate and formal powers/jurisdiction, and thus, lack an encompassing enforcement capacity, resulting to political fragmentation.

Vertically, national government agencies implementing projects at the local jurisdictions are mandated to coordinate with the LGUs particularly in ensuring their participation in the planning and implementation of the projects. LGUs are also mandated to prepare multi-sectoral and comprehensive land use plans where national agencies integrate their requirements so as to ensure that local plans are within the framework of national priorities. However, as noted in the case of Metro Manila and Metro Cebu, the national line agencies devise, formulate and implement programs without fully coordinating with local authorities. Investment programs submitted by MMDA or RDCs for national funding were practically conceived by central agencies. Various LGUs would assert that local development plans are often not integrated in the regional and metropolitan plans, with the MMDA, MCDCB or DPWH commissioning their own consultants to conduct separate urban master plans.

Outside Metro Manila, the integration of local plans prepared by municipalities and component cities into provincial plans, and provincial plans into a regional plan, proved to be a very long and tedious process. The highly urbanized and independent component cities also have their own plans separate from the provincial plans that need to be integrated into the regional plan. This involves issues of reconciling disjointed, locally-specific and targeted municipal, city and provincial plans, which have been prepared independently and mostly with the help of different consultants and organizations. RDC meetings are fraught with standoffs in finalizing plans often due to assertions of independent issues by cities from that of the province, as in the case of Metro Cebu.

This long-standing problem of integration of local development plans at the regional and metropolitan level is translated to the same fragmentation in DRRM planning. The whole bottom-up planning process end up inconsequential amid a simultaneous central government planning by different

national agencies involved in the national DRRM Councils. Many of the integrated development plans of LGUs, including local DRRM planning and investment programming also often tend to be mayor/governor-centric, with ad hoc prioritization of projects designed to be co-terminus to their 3-year term of office. LGUs then tend to disregard the mandated long-term based local development and DRRM plans that don't offer direct incentives for local officials.

This is largely owing to the concentration of budgetary sources in the hands of the national government, including many other sources of funds for local development. While highly urbanized and independent component cities generate relatively higher revenues and receive higher Internal Revenue Allotments (IRA)[3], IRA appropriations to LGUs remained minimal relative to the total national budget, accounting to only about 15 % average (Gera 2008). As of 2018, out of the P 3.767 trillion (€ 63.45 billion) national budget for the year, the IRA share of LGUs is P 522.75 billion (€ 8.8 billion), or 13.87 % allocation (DBM 2018). With limited devolution of relevant fiscal authorities, many LGUs remain reliant for funds for their projects from the national government, which treats the grant of funds as favor to the local executives. These compel local officials to focus on establishing alliances with central officials and political district representatives who can give them funds, rather than on cooperating with their local counterparts in the metropolitan region. This dependence becomes another source of political fragmentation, beyond the coordination capacity of metropolitan institutions in the country.

Having lodged metropolitan institutions in regional administrative governance controlled by the central government, the current decentralization framework could not expand the capacity of local governments, rather perpetuate their dependence on central agencies, which are themselves fragmented. Inter-local collaborations in metropolitan regions become strongly contingent upon political alliances and informal networks of friendships, rather than grounded on effective regulatory enforcement by a politically legitimate metropolitan government.

[3] Internal Revenue Allotment (IRA) is the legally mandated LGU share of the national internal revenue tax collections, regarded by LGUs as the most important intergovernmental transfer. While not intended to cover the cost of devolution, the IRA constitutes around 99 % of all LGU shares in national revenues and is the major source of local revenues.

4.2 Institutionalizing metropolitan disaster governance: towards responsive scales, functional scope, and governing structures

The power dimensions of scale bring to the fore the agenda for designing appropriate political reconfiguration that can accordingly respond to the spatial and political fragmentation inherent in metropolitan regions. These include recalibration of power structures within the country's intergovernmental political systems, and a corresponding (re)construction of the scale and functional scope of the metropolitan regions. This agenda, however, is nothing new. Mercado and Manasan (1998, 34) long argued that,

"[…] the metropolis is a distinct human settlement requiring a different local government system and structure. It is neither a province nor a municipality nor a city. It is rather a collection of all these and therefore require unique planning models and distinct laws."

In the case of Metro Manila, von Einsiedel (n.d., 3) also argued that "perhaps the solution lies in establishing a system of a special province where the Metro Manila governor is popularly elected, similar to the system in Bangkok, with appropriate powers to override individual mayors on matters affecting the metropolis as a whole." This resonates with what Pollitt (2003, 4) underscored as the imperative for "a top level steering […] that has political clout and action levers" in the context of networked systems. These proposals, however, proved to be unpopular particularly among LGUs who see political amalgamation as a loss of local political turf and identity. Mercado and Manasan (1998, 34) noted that the creation of a metropolitan structure is "feared by some as a form of recentralization or, at the very least, a threat to the autonomy of local government units". Twenty years later, the Local Government Code remains unchanged demonstrating the prevailing resistance against political reconfiguration. With its intergovernmental political context, the country continues to struggle in its capacity to restructure local governance and establish metropolitan governments with actual political mandates. Institutional reform agenda, as in the case of MCDA for Metro Cebu and DGMDA for Metro Davao, are limited to creating metropolitan development authorities to replicate the MMDA framework disregarding its limitations. Lacking a political mandate, these metropolitan bodies could only be easily undermined by intergovernmental fragmentation as it

is with the case of MMDA. Precisely why there is already a proposal, albeit remains to be shelved, to transform the MMDA to become a political unit, in recognition of the prevailing failure of the current design of the sole metropolitan authority in the country. Given the very limits of the MMDA arrangement, the two metropolises in the south may need to revisit their metropolitan institutional and political trajectories.

Amid expanding scales of urbanization and disasters, the Philippines is being compelled to seriously consider reconfiguring its intergovernmental political system, beyond administrative amalgamation of contiguous political units within an urban sprawl. Urban disaster management after all is a political issue. As Wilson (2013) suggested, we need to look at resilience within the corridors of power relations, politics and culture. Yet, existing urban and flood disaster management for the regions are centered around technocratic planning approach to integration that proved to remain overwhelmed by the same traps of scalar politics. Urban master plans such as the Metro Manila Greenprint 2030 and the Mega Cebu 2050 Vision, as well as the upcoming Metro Davao Urban Master Plan, and their corresponding integrated flood management master plans, could only make an impact on development and flood disaster resilience, in as far as there is sustained funding and enforcement structure directly accountable for their implementation. Currently, integrated flood disaster management for the metropolitan regions is under the direct responsibility of the DPWH, a central government agency. As Lebel and Lebel (2018, 624) would argue,

"Treating floods as an apolitical issue of integration, and the public administration system as an apolitical machine for planning, does not encourage the time and effort in deliberation and negotiation needed to work through the inter-ministerial and inter-factional differences in interests and responsibilities with respect to flood management, let alone working more closely with the public."

A compelling basis for such scalar and power reconfiguration for the metropolitan region is the scale requirement for integrated urban development and disaster interventions firmly grounded on resilience (i.e. resilience-based approach). There is much to be gained from technological advances in flood analysis and disaster risk mapping that can crucially inform policy decisions over rescaling of metropolitan boundaries and corresponding redesign of appropriate governing institutions and power restructuring. This is in line with the argument of Jameson and Baud (2016) in the case of Chennai in India, that interconnections among varieties of technical knowledge on urban flood management should be embedded within governance configurations and primary government networks.

A common observation being highlighted in the different integrated flood management master plans, is that required scales for integrated disaster management interventions do not correspond with existing scales of metropolitan regions. Gleaning from these plans, a useful scale reference for circumscribing metropolitan boundaries are the river basins. Notably, the critical collaboration required to manage urban flooding are of those contiguous LGUs, which share common watershed and catchments. The case of the Alliance of Seven in Metro Manila and neighboring jurisdictions best illustrates such dilemma. Both the Master Plan for Flood Management for Extended Manila Region and Metro Cebu's Integrated Flood and Drainage System Master Plan, highlighted such river basin strategy. Mercado (1998b, 3) also previously asserted that the metropolitan boundary covering Davao City and neighboring municipalities of Sta. Cruz and Panabo is more "prospective and finds basis basically on the fact these municipalities are the nearest catchment areas for Davao City's eventual sprawl."

If the Philippines is serious about pursuing the urban resilience agenda, it can take a cue from Porst and Sakdaporlak (2017) to maximize the critical capacity of scale as a means to apprehend power in socio-spatial relations, and reconfigure metropolitan governance arrangements within a broader decentralization reform. Scales are never static and decentralization as a scalar struggle should not be static. The refusal to rescale and reconfigure represents what Lawhon and Patel (2013) refer to as the acceptance of the merits of particular framing of the local, which evades questions of responsibility at various scales; or what Lebel and Lebel (2018, 618) refer to as "institutional traps (which) remain important barriers to improving governance and increasing resilience". The Philippines' decentralization framework (and the resistance to amend it) has what trapped the country's urban disaster and flood management. This has rendered the country's incapacity for 'adaptive urban governance' - a framework proposed by Birkmann et al. (2010) as one able to move from the dominant focus on the adjustment of physical structures toward the improvement of governance processes and structures themselves.

5 Conclusion

The study concludes that responsive (re)framing or (re)structuring of metropolitan governance in decentralized regimes – one that is in accordance with required scales and functional scopes of disaster interventions, within the principle of subsidiarity – is a key institutional reform agenda for governments to consider, if they are to seriously promote local capacity for sustainability and urban resilience. The scalar politics in the Philippines' metropolitan regions signify the imperatives of consolidating metropolitan governance structures and rethinking the relevance of institutional configurations in decentralization. Amid changing administrations, inter-local collaborations in metropolitan regions can only be sustained through enabling metropolitan institutions with substantial political mandate that cannot be undermined by intergovernmental political contradictions and shifting political alliances.

The Philippines needs a consolidated metropolitan structure with inherent local/regional political jurisdictions autonomous from the central government, which can effectively regulate structures of accountability. Such requires a holistic governance framework that embeds regulatory structures capable of seamlessly integrating metropolitan development and disaster policy. Yet, it can be gleaned that the institutional reform trajectory for metropolitan governance in the country is uneven for the three metropolitan regions, and falls short of the required comprehensive restructuring of its decentralization system.

What the country needs are bold decentralization reforms that legislate political mandates for metropolitan structures that can effectively regulate cooperative arrangements and enforce accountabilities in networks. Without concrete regulatory authority and institutionalized vertical structures of coordination and accountability for the metropolitan body, inter-city collaboration becomes dependent upon informal networks anchored mainly on personal political connections and alliances. Without strong political regulation, there are no compelling incentives for parties to commit to engagements, especially if these are not the core of their mandates, or if projects are not most politically strategic and without potential for political returns.

Overall, it can be argued that amid the transboundary dimensions of urban disasters and urban crisis management, metropolitan governance is emerging as a critical battleground for expanded decentralization in the Philippines. Strengthening local autonomy through political consolidation is an agenda that needs to be seriously considered in the country, notorious for breaking up different political jurisdictions to create new turfs for local elites. Integration for urban disaster management requires the construction of new scales of local governance that respond to the current spatial and sectoral fragmentation in metropolitan regions. A consolidated metropolitan government could more likely establish coherence, coordination and regulation in service delivery and in disaster management for the metropolitan regions. Moreover, it could more likely constitute as a viable counterpart vis-à-vis the national government. Ultimately, transboundary crisis management brings to the fore the old paradox - of the need to integrate in order to effectively decentralize.

Beyond the creation of new disaster management agencies, the Philippines is in a critical juncture to 'jump scale' or 'reterritorialize' its metropolitan regions geographically and politically. Policy framers for local governance need to rethink the structure of the state's intergovernmental system to institutionalize the needed integration of co-responsibilities among city jurisdictions and to strengthen local autonomy and capacity. Whether and how the country proceeds with amending the 1991 Local Government Code, could represent its commitment to urban resilience and sustainability action.

Acknowledgements

This article is based on a research funded by the Japan Society for the Promotion of Science through the JSPS-UNU Postdoctoral Fellowship Programme.

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