



Proceedings of the Resilient Cities 2013 congress

Session:

B2 Building resilience for the urban poor in Asia: Spotlight on ACCCRN

Presentation: City Case Study: Multi-stakeholders Processes of Vulnerability Assessment and Resilience Strategies in Bandar Lampung, Indonesia

Nugraha, Erwin

Abstract:

The city of Bandar Lampung in Indonesia has taken a leadership role in adaptation to climate change by joining Asian Cities Climate Change Resilience Network (ACCCRN). This initiative includes undertaking a multi-stakeholders vulnerability assessment, planning for a city resilience strategy and implementing specific adaptation projects. This process was defined by Anguelovski and Carmin (2011) as an exogenous forces for adaptation to climate change, which motivation and actions come from outside the city. In general, this paper conclude that mostly a multi-stakeholders processes which motivated by an exogenous force is an effective way for building urban resilience at city level. This because that the initiative provide an active participation from different stakeholders and ensure implementation of adaptation projects. But challenges still remain during the process. This include the lack of development fund, weak climate change policies and no specific governmental department and dedicated staffs responsible for climate change tasks.

Keywords:

Adaptation, vulnerability assessment, city resilience strategy

1. Introduction

The city of Bandar Lampung in Indonesia has taken a leadership role for adapting to climate change by joining Asian Cities Climate Change Resilience Network (ACCCRN). As a coastal city in a developing country, the city faces harmful climatic hazards from climate change, including flooding, landslide and drought (ACCCRN, 2010). Since 2009, the process for building urban resilience in Bandar Lampung implement through a multi-stakeholders vulnerability assessment, planning for a city resilience strategy and implementing adaptation projects. This initiative define by Anguelovski and Carmin (2011) as an exogenous force in adaptation to climate change, which motivation and actions for adaptation to climate change come from outside the city and gain external supports from international organizations.

Building urban resilience from climate change impacts is a new and challenging process. Does a multi-stakeholders processes which by an motivated exogenous force in Bandar Lampung is an effective ways for responding to climate change? The initiative in Bandar Lampung different from other cities initiatives because it was motivated by an exogenous force from ACCCRN. ACCCRN project is supported by The Rockefeller Foundation by providing external resources for the city. This paper will discuss and provide analysis on how did the vulnerability assessment and city resilience strategy lead to change in the city development plan, how were multiple stakeholders work together in different sectors, and what were the challenges on sustainability and institutionalization. This paper use data and information collected from ACCCRN project in Bandar Lampung from 2009 – 2013.

2. Translating Resilience into Practice and Urban Climate Governance

Resilience is an obvious way to cope with climate change. This concept simply mean a specific system or institution to withstand and survive from major disruptions. IPCC (2007, p.86) define resilience as “the ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.” But this definition is conceptual and has different interpretations when translated into practice. Looking for applicable definition with relevance to cities, ACCCRN define resilience as “the capacity of an individual, community or institution to dynamically and effectively respond to shifting climate circumstances while continuing to function at an acceptable level” (Brown et al, 2012, p.534).

Cities around the world has started to response to climate change. Some cities have strong internal motivation and allocate sufficient resources, while others cities need a stimulant to initiate their actions. Anguelovski and Carmin (2011) and Carmin et al (2012) divide adaptation actions to climate change into

two groups: an exogenous force and an endogenous force. An exogenous force mean that motivation and efforts for planning climate adaptation come from outside the city, whether through national regulations or tools and knowledge from international organizations (Anguelovski and Carmin, 2011). Some cities that initiate adaptation because of an exogenous force are including Bandar Lampung, Surat, Can Tho and Hat Yai under ACCCRN project. Whereas an endogenous force mean that city plan and implement adaptation actions because of internal motivations and response to local problems. Cities that has this strong motivation are including New York, London and Durban.

Building resilience should involve different city stakeholders in the process to obtain an inclusive participatory process. But as participation can have layers of definition, this process has to avoid “the empty ritual of participation” as introduce by Arnstein (1969, p.216). In order to achieve those outcomes, Few et al (2012, p.57) suggest “a forum for proactive deliberation” in adaptation to climate change. ACCCRN translate this process in Bandar Lampung by involving different stakeholders, including governmental agencies, non-government organizations, university and vulnerable groups. This is important that each of stakeholder can attain, what Arnstein described as, for “having the real power to affect outcomes” (1969, p.216).

3. Urban Resilience and Multi-Stakeholders Processes in Bandar Lampung

ACCCRN project is an Asian regional initiative in second-tier cities in four countries in South Asia and Southeast Asia, including India, Thailand, Vietnam, and Indonesia. This project aims to “catalyze attention, funding, and action to building climate change resilience for poor and vulnerable people” (The Rockefeller Foundation, 2010). Anguelovski and Carmin (2011) describe ACCCRN as an exogenous force for testing adaptation protocols, while Evans (2011) describe it as an experimentation of adaptation. This project is a young and one of few innovations for building urban resilience to climate change.

The process for building resilience should undertake concurrently by assessing city vulnerability and implementing resilience actions. This process in Bandar Lampung follows a typical cycle from conducting a vulnerability assessment, planning for a resilience strategy and implementing adaptation projects. This process is not a stagnant, but an iterative process to understand city vulnerability and build resilience (Tyler and Moench, 2012). The process also emphasize on the key elements for urban resilience as define by Tyler and Moench (2012). This key elements include decision making which is governance and participation from vulnerable groups (Tyler and Moench, 2012) and resourcefulness which is “capacity to mobilize various assets and resources in order to take action” (Tyler and Moench, 2012, p.316).

Vulnerability assessment is an instrument for identifying vulnerable groups, areas and sectors to climate change. The participation of vulnerable groups during vulnerability assessment is an inclusive process, so that their voice being recognized into the planning. The vulnerability assessment scientifically observed shifting in seasonal patterns and projected that “probability to have rainfall more than Q3 (which is threshold for flood occurrence) in wet season in area located in coastal area might increase slightly in the future” (ACCCRN, 2010, p.43). Poor people in Bandar Lampung are living in riverbank, landslide-prone and coastal areas, thus make them the most vulnerable groups to climate change. In Bandar Lampung, this vulnerable groups involved in focus group discussions and shared learning dialogues where their voice was recognized by other city stakeholders. They can express their problems to climate change impacts and include their suggestion for adaptation actions.

A city resilience strategy (CRS) is city-level strategy for local government to adapt to climate change and build urban resilience. This document was produced in 2011 and adopted the National Action Plan in Facing Climate Change (RAN PI). The strategy entails 17 prioritized strategies in 6 sectors (clean water, environment, infrastructure, coastal, human resource and institutional capacity). The top five prioritized strategies are: community empowerment in adapting to climate change, implementation of an artificial recharge of biopore and infiltration well, maintenance and construction of an integrated drainage, forest and degraded land rehabilitation and integrated waste management development. The strategy has been integrated into the City Medium Term Development Plan (RPJMD) 2010-2015 to acquire an opportunity to ensure its implementation and show resourcefulness by local stakeholders for building urban resilience.

Since 2010, ACCCRN is focusing to implement adaptation projects. The project endeavor to “work with local and international partners to implement replicable interventions identified in the urban climate change resilience strategy and action plan” (ACCCRN, 2009, p.7). Different stakeholders are now working together for building resilience, such as in water and education sectors. Mitra Bentala is making 100,000 artificial groundwater recharge of biopore throughout the city and collaboratively working with City Environmental Agency. University of Lampung is implementing an integrated climate change education materials for local students and working with Education Agency. All of this collaborative work was result from the leadership of local government and integration of resilience strategies into RPJMD.

4. Challenges from Multi-Stakeholders Processes in Adaptation

A multi-stakeholders processes which motivated by an exogenous force in Bandar Lampung has effective to build resilience at city level. But will this be a sustainable? In Indonesia, city government is not required to produce a city resilience strategy (CRS) document. But as ACCCRN project closely working with local

government, Bandar Lampung City Government has produced and integrated 17 prioritized strategies from CRS into the City Medium Term Development Plan 2010-2015. This is a five year plan from the mayor and legalized by city legislative. The commitment for adaptation measures shown by Mayor of Bandar Lampung by providing local budget for groundwater conservation of biopore in 2012 and 2013, with total 410,539 USD (Bandar Lampung City Government, 2013). Anguelovski and Carmin (2011) mentioned that “central to institutionalization of urban climate action is the development of regulations, policies, codes and support programs” and Bandar Lampung has successfully initiated this process.

The challenges regarding sustainability are on funding and national regulations. Even though there is a high commitment from local government, the city has to provide themselves for funding all adaptation projects. Cities in Indonesia has suffer from lack of development fund. Furthermore, there are also weaknesses on national climate change policies. National government has produced several climate change policies, including: Indonesia Climate Change Sectoral Roadmap (ICCSR), National Action Plan in Facing Climate Change (RAN PI), National Action Plan to Reducing Green House Gas (RAN GRK) and National Action Plan on Adaptation (RAN API). But this national regulations is only mandatory at provincial level and no direct fund available for city level government to implement adaptation actions.

Roberts (2008, p.536) emphasize “capacitation”, which mean “a capacity building of key local government personnel”, as the main catalyst for change in adaptation. This lesson was drawn from her experience for institutionalizing climate change in Durban, South Africa. This approach is similar in ACCCRN and capacitation has enable the initial process for building urban resilience. Bandar Lampung city government established a coordination team on climate change resilience that responsible to plan, manage and supervise the implementation of local adaptation projects. This team was legalized by Mayor Regulation No. 154/23/HK/2011. Furthermore, two members of this team become a member of national working group for climate change from Indonesian Municipality Association and resource persons to replication cities. Anguelovski and Carmin (2011) mentioned that dedicated team is important for formalization of urban climate governance. The city team of Bandar Lampung is a significant entity for institutionalizing urban resilience process, planning for adaptation projects and networking with national stakeholders.

The challenges for building resilience at city level is that an effective adaptation require permanent local institutionalization and coordination with national institutions. While city team has been effective for coordinating adaptation projects in Bandar Lampung, but questions remain regarding the sustainability of the city team. Currently, Local Development Planning Board (BAPPEDA) is the coordinator for city team coordination and meeting. But this is uncertain whether coordination for adaptation planning and implementation should remain sits in BAPPEDA or City Environmental Agency or Disaster Management

Agency. Furthermore, national government had established National Council on Climate Change (DNPI), but no clear coordination from this council to city departments has been made.

5. Conclusions

This paper begin by questioning does a multi-stakeholders processes which motivated by an exogenous force in Bandar Lampung is an effective ways for responding to climate change? At some extent, it is able to provide a mechanism for participatory process and make effort on adaptation to climate change at city level attainable. This is summarize into these findings: vulnerability assessment and city resilience strategy processes provide a channel for an active participation from different stakeholders, including government agency, non-government organization and university but also the poor and vulnerable groups; and in a city without prior national regulations and appropriate funding for adaptation, integrated city resilience strategy into city development plan ensure implementation of adaptation projects at city level.

Successful outcomes for building urban resilience in Bandar Lampung does not mean that there are no challenges. Some challenges are still remain in term of sustainability and city team institutionalization. This challenges are including: weak national climate change policies, lack of development fund from city government and no permanent specific governmental department and dedicated staffs responsible for climate change tasks. An adaptation initiative from local government to respond to global environmental change is a new and challenging process. In general, multi-stakeholders processes is able to initially make adaptation efforts to climate change at city level feasible.

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Acknowledgements:

The author of this paper benefited from 2013 Summer School Program organized by the Open Society Foundation (which held in Istanbul, Turkey, 29 July – 21 August 2013). This paper is based on The Rockefeller Foundation funded project of Asian Cities Climate Change Resilience Network (ACCCRN), but represent only the author's view and does not represent the project neither MercyCorps Indonesia. The author also thanks to Diane Archer, Anna McMurray and Marianna Poberezhskaya for their insightful comments for the draft of this paper. The author retain full responsibility of the paper.

The author(s):

ST

Erwin, Nugraha

Function/Title: Project Officer

Department: Asian Cities Climate Change
Resilience Network (ACCCRN)

Organization: MercyCorps Indonesia

Email: enugraha@id.mercycorps.org or
erwinnug@gmail.com

Www: www.mercycorps.org

Bio:

Erwin Nugraha is a project officer for Asian Cities Climate Change Resilience Network (ACCCRN) from MercyCorps Indonesia and based in Bandar Lampung city, Indonesia. He is appointed to be the main contact for local partners including government officials, university academics, local NGO staff and project partners. Mr. Nugraha is the key facilitator for ACCCRN in Bandar Lampung since 2009 and responsible for managing and supervising the assessment, planning and implementation of adaptation projects.

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