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Poster Session:

Multi-level governance: Vertical and horizontal integration

Presentation: The different realm of adaptation planning: A Jakarta case study

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Abstract:

The local institutions should be set up properly to have an effective planning mechanism in addressing adaptation to climate change. Bridging the concerns of vulnerable people to city level actors is the key process. Although planning scholars may see participatory planning as a tool to have legitimation, its utility for climate change adaptation is still arguable. By using the case study of Jakarta, the divergent world of adaptation planning was found. The locally embedded adaptation planning which produced by vulnerable people did not congruent to the urban adaptation planning policy. This different realm would remain develop ineffective adaptation to climate change. This paper suggests that the lifeworld of vulnerable people should be constructed at the first time before connecting them to the adaptation planning processes at the city level.

Keywords:

adaptation, urban, planning, flood, Jakarta

1 Introduction

The local institutions should be set up properly to have an effective planning mechanism in addressing adaptation to climate change. Bridging vulnerable people concerns to city planning process is the essential step in making urban adaptation planning more institutionalized. Although planning scholars may see participatory planning as an useful tool, its utility for climate change adaptation is still arguable since the climate proofing point of view might not be congruent with the vulnerable people's perception on the status or level of vulnerability which were experienced by them. This paper uses the case study of Jakarta to examine the making-process of adaptation planning which conducted by the urban stakeholders.

Jakarta, the capital and largest city of Indonesia, has reached more than 10 millions people in 2011 (Pemerintah Provinsi DKI Jakarta, 2012) whom resides in only 661 km² area. Located on the northwest coast of Java islands, Jakarta is the country's economic, cultural and political center, which listed as a global city (GaWC, 2008). However, Jakarta also perceived as a conglomeration of villages (Malo and Nas, 1996:100) where '60 percent of Jakarta residents lived in kampongs' (Silver, 2008:147) with an additional 4 to 5 percent of kampong squatting illegally along riverbanks, empty lots and floodplains (UN Habitat, 2003: 196). Therefore, the dualism global and local process of urbanization has shaped the institutions of Jakarta in dealing with numerous urbanization challenges.

One of the main challenges today is the climate change, which exacerbates the disaster risk of Jakarta. Jakarta is vulnerable to climate change, especially to floods, rising seawater and other natural disasters as well as manmade calamity such as pollution and excessive extraction of groundwater (Firman et al., 2011) and assessed as one of the most cities at risks in Southeast Asia due to climate change (Fuchs, 2010; Yusuf and Fransisco, 2009). The Center for Development of Coastal and Marine Areas, PPKPL-ITB (2007) projected that the sea level on the waterfront of Jakarta will increase to 0.57 centimeters/year within this scenario and most of North Jakarta area will be submerged by 2050 (Firman et al., 2009). How vulnerable communities and city government plan their adaptation to this flood phenomenon and the connectedness of both plan are the main foci of this paper.

This paper uses the literature study to examine the government planning for north coastal Jakarta and Community-based adaptation planning in several kampongs, especially Kampung Kamal Muara (KKM) and ethnography fieldwork from April 2012 to March 2013 in Kampung Muara Baru (KMB) to disclose the various adaptation planning processes to flood in Jakarta. It conducts qualitative data collection, including in-depth interview, participant observation, and group discussions. The data is analyzed by framing analysis to know more about the different realm of adaptation planning.

2 The different realm of adaptation planning constitutes in Jakarta

The government of DKI Jakarta used rationale comprehensive approach and participatory planning in mainstreaming climate change adaptation and mitigation into spatial planning (RTRW) and mid/long-term development planning (RPJM/P). At the city level, at least there are 4 (four) planning activities that have considered adaptation to climate change, first, the Detailed Spatial Planning of Sub-District and the Re-planning North Coastal Jakarta by Spatial Planning agency in 2011/2012, second, the Jakarta Climate Adaptation Tools and Jakarta Coastal Development Strategy in 2011 by the Royal Haskoning MSC, which granted by Government of Netherland (Elings, 2011), and third, the Jakarta Emergency Dredging Initiative (JEDI) in 2010 and Alliance of Green Delta City Defense Planning through major storm, water drainage, and canal system by World Bank in 2009 (Prasad et al. 2009). Those planning mainly suggested that Jakarta should build flood infrastructures to protect the city and reduce the vulnerability of north Jakarta, which covers inter alia sea wall, canal, river dredging, water ponds, and island of reclamation. They did not mention and count on the social adaptation yet.

At the community level, several Non-Governmental Organizations (NGOs), such as Mercy Corps and *Action Contre la Faim* (ACF) used participatory planning to conduct adaptation planning to climate change. There are two planning initiatives, first, community based disaster risk management, which conducted by ACF in 2007, and second, the LRAP (local resilience action program) by Mercy Corps Indonesia funded by World Bank in 2010. Both planning practices applied the combination of climate modeling and participatory planning approach to identify the adaptation needs for flood events (ACF, 2007; Mercy Corps, 2010). In this level, the 'climate proofing' conducted by the experts might not have convincing data and reliable climate projection and did not consider people's experiences in adapting climate change. Thus, the adaptation plans experienced difficulties to be institutionalized by community if did not apply the participatory methods. According to Sagala and Damayanti (2010), most adaptation initiatives at community level were not yet communicated through the planning process. The need of how the adaptation planning process is emerged.

In 2012, the Indonesian Association of Planners (IAP) has conducted the community based planning through qualitative approaches in Kampung Kamal Muara (KKM). IAP used the critical cause analysis to reveal the lived experiences of KKM people to flood. They facilitated the participatory planning through series of forum group discussion to have the selected adaptation plan for the community. This program has demonstrated that people of KKM has their own plan to adapt to flood based on their lived experiences during floods. In the other location, at Kampung Muara Baru (KMB), based on one-year field research, the author also found that people of KMB, who had lived in the north coastal Jakarta for decades, have their own habitualized actions in order to adapt to the frequent floods caused by high tide, extreme

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rainfall, and increased sea level rise. People of KMB used self-reflection to flood events to conduct their own planning process through informal forum rather than the formal institutions, which facilitated by government. They preferred to use their own resources to survive from the regular flood and move up to roof when big flood came rather than followed the evacuation plan from government version.

Based on the planning initiatives and practices in Jakarta, the different realms, which framing and functioning as a domain of the planning process, has constituted. The first type placed the realm of vulnerable people as the main source of planning, the second emphasized on the interaction of experts and community as the basis of planning process, and the third counted on the realm of experts in assessing the vulnerability and selecting adaptation options (see table 1). This different of realm has resulted the different plan to adapt to flood events, which then need to be connected. The way of connecting those worlds is the key process to have the institutionalized adaptation planning.

Table 1 the different types of Adaptation Planning in Jakarta

Elements of planning	Type 1 Locally-embedded	Type 2 Community based	Type 3 Climate Proofing
Drivers	Vulnerable people who experienced by the floods	Civil Society Organization (NGO/CSO) who related to sustainable development	City planners who had trainings/courses on the adaptation to climate change
Goals	Living with the floods	Increasing coping capacity to flood	Reducing vulnerability of floods
Data	Local knowledge which gained through habitualized adaptation actions by vulnerable groups	Climatic and non climatic data and information which taken from the community	Climatic and non-climatic data, and Experts' justification as well
Methods/ Approaches	Self-reflective Action Planning (theory-in-use)	Participatory planning	Procedural and/or action planning (espoused theory)
Types	Problem-solving	Prioritized actions	Systematic responses
Level	Individual to community level	Community to district level	District to City level

Source: author

3 The emergence of planning connection

The urban adaptation planning needs the collaboration of all stakeholders to ensure that the future plan is belonged and then implemented. It cannot be institutionalized if only precede single process of adaptation planning and just involve the experts and governments parties. Based on the literature review and example from several planning documents of Jakarta, the climate-adaptation planning has faced several limitations to be directly used by numerous development actors, such as inadequacy of good data, limited climate modeling, unproven planning process, and inexperience planners. Those limitations derived from the high dependency of climate-proof paradigm, which perhaps at the community level are not primarily needed. The adaptation planning does not always have to depend on climatic proofing from the scientists because in practices, there is lack of data in terms of types and depth of scale related to climate change data, which makes it difficult to conduct any meaningful assessment of the climatic condition and the climate modeling is still weak in providing the accuracy of future scenario (Firman et al. 2011).

The experiences of local people who are vulnerable to the impact of climate change can be considered as key information sources for planning process. In KKM and KMB cases, they even had their own plan to survive and to adapt to the flood events. Hence, the mechanism of sharing information among individual's planned adaptation practices should be socially constructed in order to provide lesson learnt. Laukkonen et al. (2009) has recommended that development of a methodology and a tool to help individuals and communities in the planning process is required, not only for getting their participation, but also embedding their knowledge and actions into adaptation planning.

Theoretically, the ideas of transmission of adaptation planning refer to the ways in which knowledge alters local behavior (Carmin, 2009). The external factors such as professional network and associations, NGOs, and consultants often transmit ideas and knowledge to the local actors in the cities. But it is not easily transferred to the individuals at the community level because the content of technocratic languages needs a translation into their daily language and should be communicated in their social world. Based on the Jakarta cases, the method to meet the community based adaptation plan up to the urban development plan faces difficulties in the mainstreaming process (See figure 1). The certain codes and sectoral approach of government bureaucracy are the dimensions that need to be synchronized by the adaptation plan which belong to the kampong's people.

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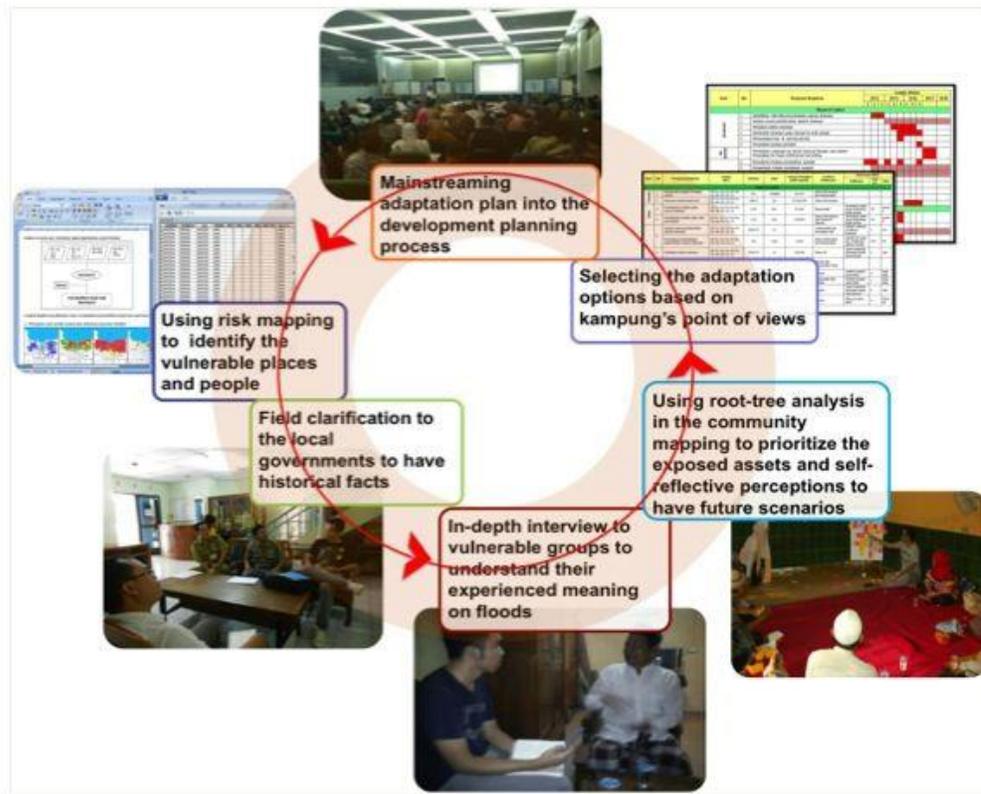


Figure 1. The mainstreaming process of adaptation planning from community to city level

Therefore, the adaptation to flood between community and government of Jakarta has different pathways and sources. People of kampung still use their traditional knowledge and actions, which should locally implant those processes. According to Rabe (2011), 'Indonesia needs to harness its long tradition of community participation and self-help to come up with innovative local solutions to integrate poverty reduction with climate change actions' (p.37). He suggested that engaging community in an early stage, providing relevant information and knowledge, and building up the capacity of the vulnerable group are the keys for adaptation planning to climate change. But, without the disclosure of locally embedded adaptation planning that belonged to the community, there will be no connected world of planning. In the other hand, Government has also understood the differences and then translates the community plan to the city plan in order to have harmonious plan. It would make the institutionalization process easier.

4 Conclusion

Based on several cases of adaptation planning which conducted in Jakarta, the divergent world of adaptation planning was found and it makes the tardiness of institutionalization process. The climate proofing could not peruse the problems at the community level and the other side; the locally embedded planning was not well attached to the city level. The NGO's involvement through participatory planning also did not meet the different realm of experts and vulnerable groups. It constitutes the existence of them at different level, but not structurally connected frames. This different realm would remain develop ineffective adaptation if the local institutions are not being arranged properly to bridge the knowledge gap among the actors. The lived experiences of vulnerable groups should be taken into account in and attached to the city development planning, not only scenario planning which based on climate proofing. The bridging processes would make the institutionalization of adaptation planning easier and faster; and later build strong institutions of adaptation to climate change.

This paper suggested that the further research should examine whether the collaborative planning has taken place to connect the different world of urban adaptation planning. Who the actors are involved, what kind of communication tools that properly used, what the hurdles are, etc., are the further questions that need to be addressed in the context of urban governance in adapting to climate change.

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