Unpacking The Act No 1 of 2011: Does Indonesia in the right pathways towards sustainable housing development?

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Abstract. The government intervention to fulfil housing demand cannot compensate the concomitant issue of urban sprawl, traffic, patchy infrastructure and physical environmental degradation. The government intervention to cope with challenges and problems are leading to a specific policy which the fact it is often confined to a single focal perspective: one intervention to cope with one specific problem at one moment. This limited vision in intervention tends to underestimate interdependencies and complexity of problems. There are many cases where government interventions have resulted in considerable negative consequences instead of promoting improvement or urban conditions. There is little knowledge on how governance and its policy instruments need to be improved to steer onto desirable pathways. Governments need guidance to improve its capacities to cope with intertwined interdependencies problem as opposed to responsive policy to cope with specific problems or targeted goals at a point in time. To better analyse the capacity of Indonesia governance system related to housing development, we used framework in which the structure of governance system can be portrayed by its policy instrument configuration. Using framework, the study aims to investigate the capacity of Indonesian Housing and Settlement Law, The Act No 1 of 2011 to achieve sustainable condition. The study indicates that that the tone of interaction among actors and their actions in dealing with resources (Rs) has been directed by government concerns through national to municipal or city plan (authority regimes). The capacity of policy instrument in in directing housing development in Indonesia is limited to cope with a specific problem and achieve specific targeted goal instead of manager of interactions among interdependent actions conducted by multiple actors in dealing with multiple resources related to housing and settlement. This is crucial to prevent the occurrence of intertwined problems and steer the development housing and settlement in Indonesia toward sustainable condition.

1. Introduction
Indonesian cities are facing a number challenges, including population growth, housing affordability crisis, environmental issues (such as floods), and shortfalls in transport and other urban infrastructure [1-4]. The government intervention to cope with challenges and problems are leading to a specific policy which the fact it is often confined to a single focal perspective: one intervention to cope with one specific problem at one moment. This limited vision in intervention tends to underestimate interdependencies and complexity of problems. A policy instrument used to cope with specific problem or be a tool to achieve specific target could affect the management of other resources, even if that instrument does not interact specifically with other policy instrument [5,6]. Moreover, the increasing scale and
interconnectedness of human interaction, understanding the efficacy or impact of an intervention cannot be done in isolation. Hence, the physical condition of urban areas is the product of the governance system in directing human behaviours and their interventions.

Urban sprawl and urban conurbation in Indonesian cities are likely to be modest pattern of urban morphology as the result of market responses to provide affordable land for housing [7]. There is a continuing drift of existing development to release more peripheral land for housing. Traffic congestion, pollution, decreasing number of productive land for agriculture has become high cost infrastructure have become acute issue and problem in many cities [4]. In addition, unsynchronised lifestyle between urban and periphery areas are leading to increasing social tensions and physical segregation [8-10]. Integrating the domino effect associated with multiple interventions is a wicked challenge. A question arises as to what extent and how sustainable the existing governance in directing housing development in urban areas.

Although there is considerable evidence of the relationship between urban conditions and its governance system, what enables the successful governance has been extensively investigated. There are many cases where government intervention has resulted in considerable negative consequences instead of promoting improvement conditions. As problem and condition is changing, government intervention is never fixed. However, knowledge of the actual state of governance system is scarce. Without capabilities to reflect the current condition, it is unlikely to steer the development onto desirable pathways.

Doing so requires a framework to analyse governance structure. Among the diversity of conceptual framework proposed to understand the linkage between governance system and its outcomes, a framework was designed by Werdiningtyas et al. [11], to provide template for examining the actual state of governance capacity through its policy instruments to manage dynamic interconnected actor and conditions. Using the Act, no 1 of 2011 enacted by Indonesia government to direct housing development, the article elucidates the capacities of governance system to achieve sustainable condition.

2. Material and methods
In Indonesia, the Act no 1 of 2011 serve as the main statutory instruments to direct the housing development in Indonesia. It has been enacted to replace the Act no 4 of 1992 to cope with a rapid population growth rate including urban areas. The Act has become the foundation in the formulation of subordinate legislation or (technical) regulations that should be followed by actors in their actions related to the development of housing and settlement in Indonesia. It provides the general rules to formulate the policy instrument that used to alter and affect the policy deliberations and the consideration and assessment of policy alternatives – later discussed as procedural policy instrument [12] and to alter or affect the delivery of goods and services – later discussed as substantive policy instrument [13]. The Act was chosen for analysis to illustrate the capabilities of the Act to govern the multiple and interconnected actors and conditions related to housing developments.

To analyze the Act no 1 of 2011, we used framework proposed by Werdiningtyas et al. [11]. In the framework (Figure 1), governance system is represented by accumulated policy instruments that manage the interaction among and between resources (Rs), resource users (RUs), and public infrastructure providers (PIPs). Articles within the Act governance were examined through a content analysis to identify substantive and procedural policy instruments used in managing housing development in Indonesia. All articles were manually read to identify the form government interventions and its capacity as manager of interaction among multiple, interconnected actors, actions and condition in Indonesia housing development.
3. Results

The question of to what extent and how sustainable the existing governance in directing housing development in urban areas comes from the exposure that housing development is more than fulfill housing demand [14]. The framework considers that the condition, in this case urban areas, is the product of accumulated procedural and substantive policy instruments used to managed the interaction among and between resources (Rs), resource users (RUs), and public infrastructure providers (PIPs). The capabilities of the Act no 1 year 2011 to cope with multiple interconnected actors and condition can be projected through the framework.

Through content analysis, five substantive policy instruments have been used to manage the interaction between resources, particularly land, and users, that are plan, permit, incentive/disincentive and sanction. In the Act no 1 year 2011, municipal or city plan has become the main tools to guide housing development. The artificialization of agricultural and natural land is recognized as one of the main drivers of leap frog housing and settlement and as an aggravating factor in sustainable urban development. The permit to convert agricultural and natural land into housing and settlement is granted if it suits the municipal or municipal or city plan. The fact that newcomers prefer low-cost land in urban periphery are trends exacerbate the urban expansion. However, there is no specific rules for new inhabitant to obtain or public infrastructure provider to build facilities or infrastructure such as electricity, telecommunication, water, transport, and other services or infrastructure. When demand is existed, infrastructure and facilities can be provided both by the government or private sectors. The mechanism which made legal corporations has right and capacity to develop housing and settlement lead to the leap frog development. In this case, market decides which agriculture and natural land will be converted in opening land for housing and settlement and it will be followed by built infrastructure and services. In additional, the government attempt to control housing development through incentive/disincentive and sanction mechanism has also made the plan as its main reference. Hence, the main goal of plan to provide and control housing and settlement cannot compensate the concomitant impact of urban leap frog and patchy infrastructure.

Land use control is a crucial issue. From the way, how government direct the trade-off between user (RUs) and this resource (R), the need of housing new inhabitants overweighs the need to secure
agriculture and natural land. Although the sustainable concept has been explicitly highlighted in the Act no 1 year 2011, instead of prescribing in the plan, environmental and social impact has not been compulsory considered in its implementation and monitoring, particularly in providing water and other infrastructure, facilities required. Synergizing only at the planning phase cause most of government interventions given lag behind the to cope with new problem or changing environmental and social conditions. The coordination among actions is required.

Unfortunately, no procedural policy instrument has been identified in the Act no 1 year 2011. The coordination among resource users (RUs) and public infrastructure providers (PIPs) in dealing with resources (Rs) is a major challenge in the process of the vocalization of implementation goals and means. For example, the competing interest of national food security program and one thousand house program by government. In this example, government need to support self-subsistent housing by providing facilities and infrastructure while there is need to prevent the artificialization of agricultural and natural land for national food security program [15]. It calls into question land use prioritization. According to The Act no 1 year 2011, housing and residential plan, its implementation and evaluation for housing development was the authority of one agencies which does not involve other agencies for other resource governance both in national to local level. It found that plan has become the only tool not only in directing resource user behavior in dealing with resources, but also the main tool to prevent the occurrence of overlapped, contra productive and gaps in government interventions. A key issue related to the top down planning as has been directed in the Act is the devolution of responsibility among actors as well as their coordination in the implementation and monitoring stages.

4. Discussion and conclusion

Structuring governance system directed by the Act no 1 year 2011 using the framework, the figure 2 indicates that the tone of interaction among actors (RUs and PIPs) in dealing with resources (Rs), particularly land has been directed by government concerns through national to municipal or city plan (authority regimes). There is no instrument assigned to manage the linkage among resource (Rs). As consequence, the use of one resource does not consider the condition of other resources (no linkages between resources) and directed by government concern to fulfil housing demands [14]. Plans formulated by the government become the only tools to balance the competitive use among resources including the negative impacts caused by the exploitation of a resource in biophysical system. Social conflict and physical segregation has been triggered because there is no instrument assigned to manage the interaction among resource users (RUs). In the same way, no instruments except plan has assigned to manage the interaction among public infrastructure provider/authorities (PIPs) both in the implementation and monitoring stages leads to unintegrated housing development including the patchy infrastructure.

![Figure 2. The structure of governance system in housing development in Indonesia.](image)

Steering the development onto desirable pathway requires understanding the causal relations and patterns of the interaction between involved actors in their action to deal with resources. Sustainability is the function of supply and demand. Sustainable condition can be achieved whenever the trade-off in the interaction does not exceed the tipping point [16], while maintaining pareto sets in the use of
resources among competitive actors and action [17]. The findings of our study identify that the capacity of policy instrument in directing housing development in Indonesia is limited to cope with a specific problem and achieve specific targeted goal instead of managing interactions among interdependent actions conducted by multiple actors in dealing with multiple resources related to housing and settlement. This is crucial to prevent the occurrence of intertwined problems related to housing and settlement in Indonesia.

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