Relationship of Participative planning, Planning Alignment and Regional Development Performance:
Evidence from Special Region of Yogyakarta

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Abstract. Participatory planning is a necessity. Unfortunately, participatory planning has various problems that make it ineffective. Human resource capacity as an input factor for participatory planning is still inadequate. The participatory planning process has not optimized the best way of producing the outputs that are needed by the community. Spatial aspects of planning, activities in the space, and budgeting must be aligned. However, empirical facts show the inconsistency of development planning. The purpose of this study is to analyze the relationship between community participation in planning and regional development performance through spatial planning, development, and budget planning alignment, as the mediating variable. This study explore measurement of all three variables using quantitative indicators. The results of this study, using SEM PLS, indicate that the direct relationship of community participation and the performance of infrastructure development is significant if it does not include the mediation variable. Process, results of participatory planning, alignment of spatial and development plans, and alignment of strategic plans with work plans are significant variables. Therefore, local governments need to make efforts to improve participation processes in spatial planning and development so as to improve the regional development planning alignment and performance.

Keywords: online teaching and learning, COVID19.

1 Introduction

Planning reform requires the participation of stakeholders and local communities to be actively involved in local economic growth. The voices of stakeholders must be taken into account since it is a key phase in planning theory, particularly in planning and involvement in the regional development decision-making stage [1]. The added value of participatory planning is increasing the efficiency and effectiveness of development management, enriching partnerships and increasing the capacity of development actors, expanding the scope of development activities, and encouraging the sustainability of development activities [2] and ensuring greater assurance. ease of implementation and control of what has been planned [3].

Participatory planning is a necessity. Unfortunately, participatory planning has various problems that make it ineffective. Research related to the relationship between planning participation and performance does not produce full and varied consensus [4,5,6,7]. Human resource capacity as an input factor for participatory planning is still inadequate [8] as well as participatory planning process in producing proposals as outputs that are needed by the community [9,10,11,12,13].

In order to provide the best results for development, spatial aspects of planning, activities in the space, and budgeting must be aligned and have high relevance among these three planning
policies. Spatial planning leads to the setting of development targets, integration with budgeting and performance management systems [14,15,16,17,18]. However, empirical facts show the inconsistency of development planning [19,20].

Objective of this study is to analyse the relationship between community participation in regional development planning and performance through the mediating variables of the alignment of spatial planning, development, and budget planning. The research was conducted in the Special Region of Yogyakarta Province considering that this province was awarded as the province with the best planning and was given the 2017 Pangripta Nusantara Award by the Ministry of National Development Planning / Bappenas. By examining this province, it is hoped that conclusions will be obtained about integrated planning that will improve regional performance.

The research gap that is filled in this research, as well as a novelty, is related to the expansion of measuring community participation at the individual level with qualitative indicators to community participation at the institutional level, in this case the sub-district, with quantitative indicators. In addition, the measurement of plan alignment is expanded more holistically, namely the alignment of spatial plans, development activity plans / programs, and budgeting.

2 Method

In this study, primary data and secondary data were used for the 2018 fiscal year. Primary data was information from key informants obtained through questionnaires for the Spatial and the sub-district development Planning Forum using a purposive method. The purposive criteria used are people, both government officials and the community who know best about the development planning process in the local sub-district or district / city. Secondary data comes from data from the Regional Development Planning Agency of the DIY Province in the form of Regional Spatial Planning Regulations, Detailed Spatial Plans, and Regional Government Work Plans. Data related to regional development performance is represented by the performance of infrastructure and settlements from related technical agencies, namely in the form of Performance Plans and Budget Work Plans. The unit of analysis is at the sub-district level in DIY Province, with totals 78 sub-districts.

Participatory planning variables are measured by indicators of community participation in planning, which consists of three categories, referring to the logic model theory [21], namely input, process, and output. The use of this indicator refers to the research of Broddy et al [22] and Low [23]. Indicators of Community Participation Input are the existence of a planning forum term of reference, planning staff, accompanying consultants, education level for sub-district officials, and community education level. Indicators of the Community Participation Process are the number of objectives for the planning forum, when the community was first involved to participate, the number of community groups involved, the number of techniques to obtained input, the amount of information provided to the community, and the number of participants with an opinion. The output / outcome of community participation is measured by the percentage indicator of approved proposals.

Alignment of planning is defined as the linkage of the contents of various planning documents by looking at the suitability of the objectives, targets and priority programs set. In this study, the program planning alignment variables in spatial planning, development, and budgeting documents. The substance of the content analyzed is the indicative program listed in the attachment to the three planning documents, for 2018. There are 4 indicators of alignment, namely the percentage of program alignment in the spatial planning against the local
government medium term plan, the percentage of program alignment in the local government medium term plan against the Public Work Office Strategic Plan, the percentage of program alignment in the Strategic Plan against annual work plan, and the percentage of program alignment in the annual work plan against the annual budget plan. Considering that the research analysis unit is at the sub-district level, the measurement of the integration and suitability of spatial planning, programs and budgets is carried out at the sub-district level. All programs made at all levels located in the sub-district will be measured for their suitability between spatial planning, programs and budgets.

Of the three groups of ways to determine and measure development performance, namely based on: development objectives, resource capacity, and the development process [24], this study uses indicators with a development process approach. The category of indicators used is to describe output as performance according to the definition according to Government Regulation 6 of 2006. By referring to the output indicators used by various institutions and the results of research and applicable regulations, this study uses indicators that are associated with mandatory functions of the Public work and Housing sector. These indicators are the percentage of good road length, percentage of good bridges, percentage of Drinking Water Supply System against the target, percentage of Wastewater Disposal Installation towards the target, and % of Habitable Houses against the target. To analyze the relationship between the dependent variable (Regional Development Performance) and the independent variable in the form of the degree of participation with the mediating variable in the form of planning alignment, the Structural Equation Model Partial Least Square (SEM PLS) approach was used. The consideration of using this model is because it is able to analyze variables that cannot be measured directly and takes measurement error into account. This model can also be used for exploratory multivariate analysis in order to expand existing measurement theory [25] and when looking for latent patterns in data because there was little previous research on the relationship between the two latent variables and the mediating variable [26]. This analysis model used for the purposes of this study is presented in Figure 1.
3 Results and Discussions

The results of the analysis of the second-order measurement model show that the Community Participation Process and Results indicator is significant at the 10%, that is, the absolute value of the t-count is greater than 1.64. For the formative model, the examination is carried out by calculating the VIF (Variance Inflation Factor) value and the significance of the weight value. A good VIF value is if it is below 5 [27].

The Community Participation (PM) measurement model has a form of measurement model is a formative model. The results of the analysis conclude that the significant indicators of community participation are the processes and results of community participation. This significant community participation process implies that the more goals to be achieved from the planning forum (not just informing what activities the government will undertake), the better community participation will be. Likewise, at an early age of community involvement, the large number of community groups involved, the number of techniques for obtaining input and the number of media information provided to the community will increase community participation. These results are conform with study of Joris de Vente et al [7] which conclude the importance of public participation process.

For the analysis of the measurement of indicators from latent variables that are reflective, from tables 2 and 3, based on the Standardized Loading (SL) and t values, indicators that meet the SL requirements, which are greater than 0.7 (or 0.5, if adjustment is needed) can be considered good [27] and significant variables for the performance of residential infrastructure development are the percentage of good bridges and% of Wastewater Disposal Installation against the target. All indicators for the plan alignment variable are significant, but only indicators of the alignment of the regional medium-term development plan with the district /
city spatial plan and the alignment of the strategic plan of the technical service with its work plan that meets the SL value limit. Thus, only the last two indicators are included in the analysis for the structural model to determine the relationship between latent variables.

The results of the validity and reliability analysis of the reflective latent variables indicate that all variables have met the validity and reliability requirements. It is concluded that it is valid if the Average Variance Extracted (AVE) value is > 0.50 and it is said to be reliable if the Composite Reliability (CR) value is > 0.70 [27]. The AVE and CR values for the infrastructure and residential development performance variables are 0.60 and 0.75. For the plan alignment variables are 0.88 and 0.93. This indicates that all indicators for the two latent variables can be said to be good.

The results of structural model analysis in order to determine the relationship between latent variables show that two of the three relationships are significantly negative, namely the relationship between Community Participation and Plan Alignment and between Plan Alignment and Housing Infrastructure Development Performance, as presented in Table 1.

| Relationship                      | Path Coefficient | T-value | Significance |
|-----------------------------------|------------------|---------|--------------|
| PM → KPIP                         | 0.13             | 0.73    |              |
| PM → KR                           | -0.42            | -3.08   | *            |
| KR → KPIP                         | -0.30            | -2.10   | *            |

Source: Data processed, 2018

The results of the significance requirements testing regarding planning alignment as mediating variables are presented in table 2 (10% significance level).

| Relationship                      | T-value | Significance | Fulfilment of requirement |
|-----------------------------------|---------|--------------|----------------------------|
| PM → KPIP (without KR)           | 1.75    | *            | Fulfilled                  |
| PM → KPIP through KR:            |         |              |                            |
| - PM → KR                        | -3.08   | *            | Fulfilled                  |
| - KR → KPIP                      | -2.10   | *            | Fulfilled                  |

Source: Data processed, 2018

Analysis of the mediation effect of planning alignment on the relationship between participatory planning and the performance of infrastructure development shows a significant mediation effect (t-count of 1.81). The type of mediation effect is determined by calculating the Variance Accounted For (VAF) value. The VAF value is 28% with the direct effect is 0.34 and the indirect effect is 0.13. However, because the direct relationship between participatory planning and the performance of infrastructure development was significant (from the first test of mediation requirements) becomes insignificant when the mediation variable is included in the model, it can be concluded that the effect of mediation is full (because it changes the significance of direct relationship). In this case a suppressor effect occurs, namely the effect of mediation that changes the significance of the relationship between variables [27].
According to the path coefficient value table for the structural model (table 1), the relationship between community participation and infrastructure performance show an insignificant relationship. The results can be explained by 3 factors. First factor regarding number of ways in gathering input from public and provide information to them. Majority of the techniques used are manual methods and are limited to certain groups of people. For DIY Province, on average, less than 60% of sub-districts utilize information technology.

Secondly, as concluded by Clinton and Hunton [4], related to the effect of participation on organizational performance. The relationship was not only determined by the level of actual participation, but also depended on the compatibility of the actual level of participation with the expected level of participation. The relationship between the level of real participation and performance was not significant. This can be caused by the low level of real participation with the expected level of participation. In sub district planning forum, in average for special region of Yogyakarta, less than 30% participants gave comments or questions. Further interview showed that they reluctant to do so since the comments would be useless.

This is also in line with the level of community involvement that occurs in the development and spatial planning forums. The process of community involvement in development planning forums and spatial planning at the sub-district level in all districts/cities in DIY Province only to the level of listening to the public, not yet to community empowerment which places decision making in the hands of the community, in the context of the Public Participation Process, according to Tripplet [5].

From the path coefficient analysis, it can be concluded that there is a negative effect of the results of community participation with the harmony of planning. This can be caused by at least three things, namely 1) spatial aspects have not become a concern in development planning, which is indicated by not yet that all sub-district musrenbang have involved competent parties in spatial planning issues and vice versa, the community is not involved in spatial planning forums, 2) not all community proposals in musrenbang meet the criteria for priority programs determined by the regional government, and 3) the majority of the public work office budget comes from Special Allocation Fund and does not come from proposals.

The spatial aspect has not become a concern in development planning, as indicated by the fact that not all sub-district planning forum have involved competent parties with spatial issues. Based on the percentage of sub-districts, according to those involving groups who understand spatial planning, except for sub-districts in Yogyakarta City (92.31%), the figure is below 50%. More parties who understand spatial planning and territorial data are involved in spatial planning public consultancy forums than in development planning activities. In the spatial planning forum, as many as 63.19% of sub-districts throughout Yogyakarta Province involved spatial data surveyors. This figure is higher than their involvement in the development planning forum which was only 41.30%.

Not all community proposals meet the criteria for priority programs determined by the local government. Activities proposed by the community are dominated by activities that do not meet the criteria for priority programs. Of the 5 City and Districts in Yogyakarta Province, only Yogyakarta City Development Planning Agency provides clear guidance regarding the activities that can be proposed according to the criteria set by referring to existing development themes. This is in line with the research of Enserink and Albertson [7], related to public participation research in China which concluded that the existing regulations need to be more clarified and detailed and include the key elements needed. The community participation needs to know a list of the types of activities that are included in priority programs and according to the development theme for the planned year.
Majority of the public work office budget for the housing sector comes from Special Allocation Fund. Except for Kulon Progo and Gunung Kidul Districts, the proportion of the fund budget for the other three districts regions is more than 50% of the total budget stated in their annual budget. Further analysis, show that these funds did not derived from proposals from sub district development plan forum. Not a single sub-district has proposed Special Allocation Fund activities for the housing sector, however, they have received the funds.

4 Conclusions

The direct relationship between community participation and settlement infrastructure development performance is significant if it does not include planning alignment. However, the relationship between the two becomes insignificant when planning alignment is included in the model. The process and results of community participation are two significant participation variables. Therefore, the local government, particularly the sub-districts, should use information technology-based input gathering and dissemination techniques so as to broaden the scope of community involvement. The process of community involvement needs to be improved from the stage of sharing information/listening to the public, to community empowerment that places decision making in the hands of the community. The negative effect of planning harmony can be eliminated by 1) involving competent parties in spatial planning issues and vice versa involving the community in regional spatial planning forums, 2) making detailed guidelines for the community so that all community proposals in development planning forum meet the priority program criteria determined by upper local government, and 3) The regular Special Allocation Fund mechanism, particularly in the housing sector, must be based on a proposal from the sub-districts planning forum as a form of participatory planning.

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