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Optimization of Participatory and Collaborative Planning Methods for Accelerating the Preparation of Detailed Spatial Plans

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Abstract: The availability of Detailed Spatial Plans (RDTR) is crucial for supporting development implementation and ease of doing business. However, there are still problems in the preparation of RDTR, necessitating acceleration. Regarding this acceleration, it is necessary to analyze how participatory and collaborative planning methods can play a role. Participatory and collaborative approaches are important because public trust and stakeholder relationships in participatory and collaborative planning influence the implementation process and planning outcomes. This study aims to identify the relationships between implementing actors and stakeholders involved in the preparation of RDTR so that they can be optimized with a participatory and collaborative approach. The research methods used are Social Network Analysis (SNA), Organizational Network Analysis (ONA), and post-review surveys. The results show that the relationships between implementing actors and stakeholders related to RDTR preparation are not yet optimal, therefore requiring remapping and rearrangement within the legal framework. Participatory and collaborative approaches will elaborate the possibility of more effective and efficient relationships with changes in roles and media of interaction.

Keywords: Collaborative, Network Analysis, Participatory, RDTR, Spatial Planning

INTRODUCTION

Spatial planning is an effort to maintain balance in meeting current spatial needs while preserving and fulfilling future needs, particularly in three fundamental goals: economic, environmental, and social (Rustiadi et al., 2021). In practice, there are several challenges in spatial planning that cause high spatial demand, such as rapid population growth, intensive development processes in various regions, and a shift in development concentration from the traditional economic sector towards modern industry. These challenges are related to development, which drives an increase in land demand. This increased demand will cause several negative impacts on land use, which is also related to spatial planning. Regarding the negative impacts related to land use and spatial planning, sustainable development efforts need to be pursued as a solution. These efforts are based on the consideration that the use, management, planning, and conservation of space are closely related to the

achievement of the Sustainable Development Goals (SDGs) (Ma et al., 2023). To achieve sustainable development as the goal of land and space management, institutional support needs to be present to support the implementation of good land policies and governance (Enemark, 2006).

Spatial planning problems that can disrupt sustainable development come in various forms. According to Tarigan et al. (2021), there are at least four spatial planning problems that have the potential to increase the complexity of agrarian, land, and spatial management in Indonesia. These spatial planning problems include: (1) Spatial planning is considered not yet able to answer development issues and problems comprehensively; (2) Spatial planning has not been able to become a comprehensive program integration instrument in supporting development; (3) Control and law enforcement of spatial utilization violations are still weak and less than optimal; and (4) Institutional support that coordinates sectors for spatial planning is still not optimal. Regarding spatial planning as an instrument for program integration that is not yet optimal in supporting development, this is a very important issue, especially when linked to the need for inter-regional accessibility in relation to the presence of connecting infrastructure procurement. This really requires the existence of comprehensive spatial planning studies and analysis by involving cross-sectoral performance and considerations and presenting cooperation between all relevant stakeholders (Holden, 2008; Sari et al., 2022).

Then, in order to achieve sustainable development as the goal of land and space management, institutional support becomes one of the aspects that plays a very important role. However, in practice, arrangements related to institutions often change from time to time with the justification to be able to better support the implementation of good land policies and governance (Enemark, 2006). Regarding institutions, especially spatial planning institutions, (Hudalah, 2006) states that the spatial planning system is greatly influenced by the institutional and cultural forces that shape the planning system.

Based on the Dutch legacy that attempted to make planning a bridge to integrate many interests and comprehensive content, the spatial planning system in Indonesia is directed towards comprehensive/integrated planning. With the establishment of the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) as the institution authorized in the implementation of spatial planning and land affairs in Indonesia, integration is carried out both between sectors and between substances, both land and space. The policy direction of the Ministry of ATR/BPN for 2020-2024 implements the Land Management Paradigm (LMP) approach as the basis for achieving the mission and vision as stated in the Regulation of the Minister of ATR/BPN Number 27 of 2020 concerning the Strategic Plan of the Ministry of ATR/BPN 2020-2024 (Appendix page 42). Enemark (2007) states regarding land that the theoretical review that bridges land tenure and land use in one regulatory framework is the concept of land management or LMP. LMP is a paradigm or a framework of thinking that includes four components of land management

functions. The four components are: land tenure, land use, land value, and land development, plus support from cadastre and land infrastructure information. The implementation of spatial planning itself is part of the land use function. The relationship between functional components in LMP is very interconnected. An example is the Spatial Plan (RTR) which functions as Land Use. RTR supports the implementation of the land development function, especially in the field of spatial utilization and control of spatial utilization. The Spatial Plan also becomes a control instrument for the administration of land tenure in the context of determining rights and land registration. In addition, the Spatial Plan can also be a reference in the formation and control of land values, tariffs, duties, taxes, and commissions related to land and building transactions, which is the function of land value. A good Spatial Plan will also influence and be related to controls in preventing misuse of space utilization (Stephany, 2021). The strategic role of spatial planning makes the Spatial Plan the "Commander of Development". Regarding this important role and significance, the Spatial Plan becomes a reference in granting spatial utilization permits such as: location permits, business permits, land use permits, Building Permits (IMB), and also considerations in issuing other sectoral permits such as environmental permits, plantation business permits, mining business permits, and other business permits listed in the Online Single Submission (OSS) system.

Sustainable development demands directed, planned, and controlled utilization of space and land through spatial planning based on the spatial planning system, which refers to the main function of the area, administrative region, area activities, and strategic value of the area. Spatial planning in Indonesia is carried out through the instruments of the General Spatial Plan (RUTR) and the Detailed Spatial Plan (RDTR) starting from the Central Government, Provincial Government, and Regency/City Government in a hierarchical and complementary manner. The position of spatial plan products, especially the Detailed Spatial Plan (RDTR), is very vital as a control tool and the basis for development permits, so that aspects of sustainability, spatial justice, and increasing competitiveness and community welfare can be realized. The availability of spatial plan products is one effort to minimize negative impacts on development, economic growth, and ease of doing business, as well as to prepare a reference for the presence of new investments in regional development locations, while ensuring the positive impacts of development that can guarantee the interests of the general public, create equitable prosperity, and maintain environmental quality (Saptowalyono, 2022). Given the importance of the RDTR's role, this role needs to be accompanied by productivity, quality, and effectiveness of the RDTR, which are currently not yet optimal (Asri et al., 2023). The lack of availability of RDTR is also one of the obstacles to accelerating the business licensing and investment process using the OSS system. Based on Ease of Doing Business (EoDB) data from the World Bank, the dealing with construction permit component in Indonesia can be said to be quite complicated because it requires 18 (eighteen) procedures and an average of 200 days to obtain a permit (World Bank, 2020).

The Ministry of ATR/BPN's performance target in the field of spatial planning relates to the availability of RDTR in national strategic areas and development areas in regencies/cities, totaling 2,036 locations by 2024, spread throughout Indonesia. The evaluation of the Ministry of ATR/BPN's performance until the end of 2023 (aggregate) states that the number of RDTRs established as regional regulations is 399 perda/perkada regencies/cities (24.9% of the set target). The Ministry of ATR/BPN's RDTR preparation performance target until 2023, as stated in the DIPA document, is 1,600 RDTRs. However, the realization in achieving its performance only reached 399 RDTRs (24.9%) with a remaining backlog of 1,201 RDTRs (75.1% of the target), and this performance achievement will continue to affect until the end of the fifth year of the 2020-2024 Renstra. The backlog of RDTRs that have not been completed until their establishment until 2023 will greatly affect the targets and realization in the preparation of RDTRs in the following years.

As a pre-hypothesis, the performance problems related to the preparation of RDTR can be caused by problems that arise at each stage of RDTR preparation, from the preparation stage to the determination of RDTR, which needs to be analyzed further. Factors such as the resources used, both human resources and data availability, as well as actor coordination and cross-sectoral collaboration, can be the cause of these performance problems. The extent to which these factors can encourage or hinder the acceleration of RDTR preparation still needs to be further investigated.

Analysis of the preparation of RDTR can begin with an examination of the spatial planning system from a theoretical perspective in order to get a comprehensive picture of good planning from a theoretical point of view. The role of planning theory is very important as a basis for thinking that planning, for the most part, is an activity funded and led by the public sector, and therefore justification for its existence and intervention will always be needed (Allmendinger, 2002). Planning is a complex science because many disciplines are involved and it is a means to build the future (Byrne, 2003; Rustiadi et al., 2021). To be able to implement good planning, an understanding of existing planning theories is needed.

Rustiadi et al. (2021) divide planning into eight schools: (1) Rational System and Comprehensive, (2) Capitalism-New Right, (3) Socialism-Marxism, (4) Pragmatism, (5) Advocacy, (6) Postmodern, (7) Collaborative, and (8) Green Planning. The development of these schools, as conveyed by (Allmendinger, 2002), has progressed to collaborative planning. In the modern world, differences and diversity in society must be acknowledged (Holgersen & Haarstad, 2009). Healey (1997) recommends that in a pluralistic society that is politically, socially, and culturally fragmented, planning must be carried out collaboratively with the respective roles of formal and informal institutions as sources of local information/knowledge in the planning process. The collaboration process must pay attention to three things in its implementation: (1) identification of initiators who are able to mobilize networks and identify opportunities in formulating strategies, (2) the arena that will be the place for discussion, who will be involved as stakeholders and how to carry out

the discussion must be determined by the initiator, (3) stakeholder mapping must be carried out to identify all stakeholders involved, starting from local residents, the private sector, and other government agencies (Healey, 1997). Planning theory itself, in its application, is also influenced by other factors such as the institutional and legal framework that develops in a country, existing and implemented policy instruments, and land use activities. These things influence theory and will together form a distinctive spatial planning system (Acheampong, 2019). The spatial planning system is generally divided into four main traditions: (1) Urbanism; (2) Regional-economic; (3) Comprehensive; and (4) Land use planning (Reimer et al., 2014), where the four traditions will directly and indirectly influence spatial governance.

Based on the schools described above, planning in Indonesia is currently more directed towards collaborative planning. This justification is based on the involvement of various actors who have interests starting from the planning and preparation process. As in the RDTR preparation process, which involves various actors or interested parties starting from the planning process, preparation, data collection, preparation and analysis of RDTR materials and substances, cross-sectoral discussions, including public consultations. In its implementation so far, the roles and tasks of actors/stakeholders have been carried out separately, even though planning itself is a communicative process that requires collaboration between stakeholders (Fainstein, 2000; Healey, 1993; Legacy, 2012; Rustiadi et al., 2021; Villanueva et al., 2017). The roles and contributions of stakeholders will continue to change according to the challenges and demands of fulfilling the needs to be achieved. Stakeholder changes in participatory planning where there are indications that spatial planning, which was originally led by the government, will change where the community will become the leader in spatial planning while the government will act as a facilitator (Westerink et al., 2017).

Collaborative and participatory are similar but different approaches in their application, although both often go hand in hand. In some cases, when key stakeholders are involved in routine discussions, this approach can be considered collaborative. Conversely, participatory modeling encompasses a broader spectrum and can involve lower levels of participation (Basco-Carrera et al., 2017). In practice, the participatory concept is implemented through public consultation activities that involve the community in the preparation of spatial plan drafts. This involvement is important to avoid planners making priority mistakes and to prevent future conflicts based on local knowledge and wisdom (Rustiadi et al., 2021; Taufiq et al., 2021; Villanueva et al., 2017). The participatory approach aims to ensure that development planning can be in accordance with local needs, which in the process involves the people (both directly and indirectly) (Paselle, 2013).

Participatory and collaborative planning will empower actors so that the RDTR preparation process will be more optimal and its acceleration can be carried out. However, whether this concept has been implemented comprehensively and inclusively still needs to be evaluated. This research aims to determine whether the participatory and collaborative

methods that have been applied in the RDTR preparation process have been comprehensive.

METHODS

This research employs a mixed-methods approach. Data collection techniques include interviews and surveys with questionnaires. The survey was conducted by distributing post-review questionnaires online and offline to 213 Regional Apparatus Organizations (OPDs) for Spatial Planning in Cities/Regencies that have completed the RDTR preparation process and have been established as Regional Regulations or Regional Head Regulations. The survey lasted for 74 days or two months, from the beginning of July to the end of July 2023. Respondents assessed each component on the survey instrument using a Likert scale of 1-5. The collected questionnaires were then analyzed using IBM SPSS Statistics 23 software, employing validity tests, reliability tests, and descriptive statistical analysis.

The analysis was conducted using Social Network Analysis (SNA), Organizational Network Analysis (ONA), and post-review surveys. SNA and ONA were performed to understand the specific roles and tasks, forms of participation, attributive authority, and flow of data and information from each actor. Post-review surveys were conducted to evaluate existing policies and conditions in the realization of RDTR preparation. The questionnaire was distributed to personnel working in Regional Apparatus Organizations (OPDs) responsible for spatial planning, who have competence in RDTR preparation, and/or who are directly involved in RDTR preparation, both at the technical level and as decision-makers in the relevant organizational units.

The Influence Factor Survey questionnaire was distributed to experts who have competence and play a role in handling the RDTR preparation process. The respondent groups were divided into four: experts from the Ministry of ATR/BPN; academics from the Indonesian Association of Planning Schools (ASPI); practitioners from the Regional Apparatus Organizations (OPDs) for Spatial Planning; and consultant practitioners from the Indonesian Institute of Planners (IAP). Each group consisted of 20 respondents, resulting in a total of 80 experts. Survey processing was carried out using the Analytic Hierarchy Process method. The collected data was analyzed using IBM SPSS Statistics 23 software, employing validity tests, reliability tests, and descriptive statistical analysis.

Table 1. Respondent Classification

No.	Group	Respondent
1.	Policy Makers	Internal to Ministry of ATR/BPN: 1. Director General of Spatial Planning; 2. High-Ranking Officials and Administrators; 3. Spatial Planning Functional Group.
2.	Academics	1. Representatives from the Indonesian Association of Planning Schools; 2. Representatives from academics participating in the Spatial Planning Forum.
3.	Practitioners	1. Representatives from the Indonesian Institute of Planners; 2. Experts from planning consulting firms.
4.	Spatial Planning Implementers	Regional Apparatus Organizations for Spatial Planning in Regencies and Cities.

Data collected from the results of the influence factor survey were analyzed using Expert Choice 11 software to determine how much influence each key factor directly influenced the acceleration of RDTR preparation.

RESULT AND DISCUSSION

Stakeholder Roles in RDTR Preparation

In the preparation of RDTR, stakeholders have their respective roles and influence and contribute to the final RDTR product. This stakeholder analysis must be done in an open, dynamic, and revisable manner, considering that the roles and interests of stakeholders can change over time. Harris (2002) adds that the concept of "stakeholding" is a central element in the collaborative planning model. Given the various interests of the various actors involved, the collaborative planning framework is not only a means for stakeholders to argue and rationalize their interests but also a means of transformative learning for them so that the maturity of collaborative planning becomes an absolute thing so that the resulting outcome will be very optimal (Brand & Gaffikin, 2007). The concept of theory and practice of collaborative planning implementation requires planners to be advocates of various interests and stakeholders to achieve optimal planning formulations (Kitchen, 2006).

In the early stages of the planning process, it is necessary to establish planning goals, objectives, and targets that involve community aspirations (Rustiadi et al., 2021). This is in line with what Faludi (1973) conveyed about the ideal stages of planning, which start from the goal, explore ways to choose the goal before then implementing it. This is because in the past, the role of the community was not involved in planning even though this involvement was important to achieve legitimacy (Laurian, 2009; Legacy, 2012; Rustiadi et

al., 2021). Community participation will be meaningful if the community has the power to influence decision-making that occurs in government and has involved an effective and inclusive collaborative perspective (UN-Habitat, 2023). Habermas, as a figure of rationality, seeks alternatives with a theory of communicative rationality. This theory emphasizes that planners who have been working in the realm of rationality, due to the existence of pluralism and complex changes in society, need to take a communicative approach (Rustiadi et al., 2021). This statement emphasizes the importance of planning involving the public so that the rapid changes in society can be accommodated in planning.

The application of the collaborative planning model in Europe can be observed in its implementation in four countries that represent four planning traditions, namely: 1) the Netherlands with a comprehensive integrated planning tradition; 2) England with a dominant land-use planning system; 3) Italy with an urbanism planning system; and 4) France with a regional-economic planning system. Initially, the Netherlands adopted a comprehensive integrated planning system, but then this system shifted to a planning system that tended to rely on the principles of economic spatialization, which is a tradition of regional-economic planning. This shift was initially made as a response to bureaucratic reforms that occurred in the Netherlands as an effort by the government to bring planning closer to consumers and simplify planning service processes. The spatial planning system in the Netherlands is also inseparable from changes in the form of government that affect public policy administration in that country. The Dutch government is divided into three levels of government: national, provincial, and municipal. This law gives municipalities at the local level authority as truly independent or autonomous regions except for certain authorities that are the exercise of power at the national and provincial levels. This division of authority is different from what happens in England, where local governments are only given very limited authority/competencies. The government in the Netherlands can be said to be a hybrid government or more precisely called a decentralized state government. In its implementation, the Dutch government can be referred to as a co-government where the central government involves the provincial government and local government in formulating and implementing policies. The form of government in the Netherlands, which tends to focus on consensus-based democracy, has had a lot of influence on government policies, including in the field of spatial planning. The Spatial Planning Law, which was enacted in 1962, could only be implemented in 1965 as a result of a long process to reach a consensus on the roles and functions of the government at various levels and the roles of each sector in spatial planning. Nationally, national spatial planning is more of an inter-sectoral coordination with the national spatial plan tending to contain concepts, plans and visions as well as coordination lines between various levels of government or sectors. In the implementation of spatial planning, coercive instruments from the central government to local governments or lower governments are rarely used.

In contrast to England, if a unitary state in the form of a federation consists of a central government and a federal government with a proportional division of power and authority, then England has a government as the United Kingdom and different rules in each of its states. The powers and authorities of each state are not equal and are asymmetrical. The Town and Country Planning Act of 1947 was a turning point in achieving modern spatial planning arrangements, making England have a strong and very mature spatial planning system. This law nationalizes all rights for development/utilization of land. In the planning system in England, power centrally lies in the hands of the national government with several laws governing the delegation of authority to state governments. Planning authority is only divided into two, namely the national government and local authorities. The authority given to local authorities in planning is very limited, where local laws that are made can be abolished by the national government. Before 2011, there was a regional level that coordinated several local authorities, but it was later abolished because it was considered ineffective. In urban development, there is a very critical issue in the field of financing where local governments tend to depend on the central government. The implementation of development at the local level is also directly carried out by local authorities/governments but tends to be influenced by the national government where local governments regulate local-scale development regulations and formulate local policy instruments while the national government plays a supervisory and strategic role through planning law, withdrawing authority for certain planning cases, and facing appeal demands on planning decisions. The British central government plays an important and greater role in urban development through national agencies. The spatial planning system in England, in general, tends to be closer to the typology of the "land use management" planning tradition. This typology in principle tends to focus on the management and regulation of the physical development of urban space to fulfill general planning principles and social goals such as housing arrangements and the protection of cultural heritage.

Another European country that will be compared is Italy. The spatial planning system in Italy is more directed towards urbanism planning which focuses on the beauty of the city as the center of human civilization. The spatial planning system in Italy is one of the spatial planning systems with a very stable traditional urbanistic typology based on the centrality of the master plan for the local scale and a legislative framework that is also clearly defined through the Spatial Planning Law of 1942. In European spatial planning (European Commission, 1999), Italy prioritizes local governments as the most dominant actors in the spatial planning system in the country. Spatial planning in Italy is more dominated by debates in theory between architecture or urban design as the root of planning education and planning practice in the field of politics and policy. The intersection between theory and practice has had a significant impact on the development of spatial planning in Italy, one of which is the presence of participatory planning in the realm of planning in Italy.

The fourth country as a comparison is France, where the influence, role, and authority of the central government even reach the local level. In this case, the central government has the authority to intervene in licensing decisions that should be sufficient for local authority. However, the authority of the central government gradually began to be reduced in 1982 when land use and local development policies became the domain of local government authority. On the other hand, regional planning and economic development authority is given to newly formed regions, as in the Minister of Home Affairs Instruction No. 2 of 1982 concerning Land Management in Urban Areas Controlled by Legal Entities/Individuals that are Not Utilized/Abandoned. After 1982, the central government still has the authority to formulate regulations to achieve national interest goals. In addition, the central government is still responsible for sectoral policies at the national level such as health, education, and infrastructure. The shift in authority that occurred in the spatial planning system in France indirectly changed the characteristics of the planning system towards comprehensive-integrated planning where both vertical and horizontal coordination received special attention. Integration of regulations and strategic planning was then enhanced to achieve a high level of coherence. As a result, the involvement of various actors at various levels of cooperation has increased in public policy making and investment in the public sector.

Based on the presentation of the spatial planning system from the four countries as described above, the direction of the development of the spatial planning system in general can be seen. The Netherlands, which originally adhered to a comprehensive integrated planning system, became more flexible by allowing districts/cities to have more authority with economic considerations (Rustiadi et al., 2021). What the Netherlands did was similar to what Italy did by making the local government the main and most dominant actor in spatial planning. But on the contrary, when the Netherlands and Italy opened up flexibility at the local level, England and France acted otherwise. The national level government still plays a major role and can intervene at the lower level either through supervision or licensing. Changes in spatial planning carried out by these countries are driven by various factors which then lead the authority holders to be more realistic and pragmatic.

Implementation of the Collaborative Planning Model

The application of the collaborative planning model is not only carried out by pluralistic countries such as those in Europe as described above, or Australia and North America. In Indonesia, this model is one of the instruments that is developing in planning practice (Fahmi et al., 2015). In the literature, the implementation of this model in Indonesia is indeed rarely discussed explicitly. However, some researchers have succeeded in expressing the implementation of collaborative planning in their research results. One of the successful implementations in Indonesia is the spatial planning of street vendors in Surakarta, which was carried out when President Joko Widodo was the Mayor of Surakarta

in 2005/2006. Fahmi et al., (2015) stated that the collaborative planning process in Surakarta was one of the best practices in implementing a collaborative model in Indonesia. In a study conducted by Fahmi et al., (2015) it is underlined that the role of the mayor at that time was very important in creating an ideal discussion space in the implementation of collaborative planning. The informal communication style adopted by Joko Widodo as the Mayor of Surakarta was one of the factors that influenced the success of the arrangement of street vendors (PKL), where stakeholders could share roles according to their position in the planning process. In addition, the mayor at that time was able to translate problem-solving solutions into a technical concept and at the same time was able to bridge the rigid technical concept to the community so that the transformation of space for street vendors could be carried out well and quickly. When linked to the explanation (Rustiadi et al., 2021), the mayor's efforts are in line with Habermas' theory of communicative action which leads to the Collaborative School and Advocacy School. Planning involves the active role of the community with planners providing assistance and direction in the form of alternatives.

In the context of planning, the spatial planning system is a complex process that involves the entirety of social and political processes within it. The potential for conflict caused by social or economic interests, no matter how small, must be handled responsively and with solutions. Villanueva et al., (2017) argue that the challenge of providing a space with good quality and fulfilling the principles of collectivity requires a method where stakeholders and local political forces share roles and knowledge. Communication and collaboration with relevant Ministries/Agencies among government agencies need to be optimized in a more structured and directed forum so that cooperation between parties becomes more effective and efficient. One concept that can be used is to establish a base map that will be used as a Common Operational Map (COM) following the one map policy, so that all relevant stakeholders can work together and provide data in a standardized format on a collaborative platform for data collection, data analysis and design of RDTR maps using the RDTR Builder application.

From the results of stakeholder analysis using Social Network Analysis (SNA) and Organizational Network Analysis (ONA) as discussed in the findings, the relational relationship between stakeholders is known so that it can be concluded that the most influential stakeholders in the preparation of RDTR are the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency (ATR/BPN) and the relevant Regional Government, including BIG which provides validation of the base map used for designing RDTR maps, the Environmental Agency - Ministry of Environment and Forestry which provides validation of the Strategic Environmental Assessment (KLHS) document, and the local Regional Office of the Ministry of Law and Human Rights in the synchronization and harmonization of the Draft Regional Head Regulation. However, in practice, the collaboration of various actors can lead to various problems if not managed properly based on the capacity and role of each stakeholder or actor at each stage of RDTR preparation.

The relationship between stakeholders illustrates the interaction between actors that needs to be optimized. To be able to optimize, it is necessary to regulate how interactions occur, both explicitly or implicitly, in technical regulations or policies. Current policies and regulations focus more on processes and outputs rather than regulating the interactions of the actors. Therefore, proper time management for each stage of RDTR preparation needs to consider the roles and authorities of the stakeholders and actors involved. All parties involved need to sit together to formulate and organize the processes and stages of RDTR preparation activities, including agreeing on roles, authorities, and responsibilities.

Knowledge transfer between planners, communities, and other stakeholders will make the resulting policies better and more comprehensive (Holden, 2008; Şahin, 2019; Taufiq et al., 2021). Public trust in participatory and collaborative planning will also influence the implementation process and planning outcomes (Laurian, 2009). Obradovic and Vizcaino in UN-Habitat (2023) argue that to ensure meaningful implementation of the principle of community participation, existing regulations must have mechanisms to ensure that the people affected are not only heard, but their views are considered during policy formulation. The role of the general public, business actors, cultural figures, academics, and others who are potentially able to provide input or information for the preparation of a comprehensive and inclusive RDTR also needs to clarify their roles, the position of their involvement, and the timing in the RDTR preparation stages.

The planning process in the preparation of the RDTR draft has so far been attempted using collaborative planning, which involves various interests from actors from various different Ministries/Agencies in the implementation of public consultation activities. This is a manifestation of the implementation of the mandate of PP No. 68 of 2010 concerning Procedures for Community Participation in Spatial Planning and PP No. 45 of 2017 concerning Community Participation in Regional Government Administration, where the parties involved are communities directly affected by spatial planning activities, who have expertise in spatial planning, and/or who have main activities in the field of spatial planning. It needs to be further criticized, which components of the community are specifically involved, how many community representatives are involved, and how the participation methods used have not been explicitly determined by this government regulation. However, based on the results of the post-review survey, the implementation of public consultations is still "not good" because the differentiation of media used to provide channels that can be utilized by the community to provide input, criticism, and suggestions on the RDTR design is still very limited.

Soh & Yuen (2006) argue that one of the important factors in the success of public participation in urban planning is the availability of various easily accessible channels that can be used by the community to interact with the authorities involved in planning. The combination of the use of technology and conventional methods is very necessary to overcome the digital literacy gap that disproportionately affects priority groups (UN-

Habitat, 2023). Currently, the Directorate General of Spatial Planning has a special page for online public consultation, but its use is still not effective. Therefore, the implementation of public consultation needs to be carried out with a hybrid method. Thus, it is necessary to optimize existing public consultation channels and diversify methods in involving the community. Some examples of the implementation of hybrid participation methods in planning, one of which in Singapore, which can be used as a best practice reference, are: (1) socialization to the public through public exhibitions; (2) inviting suggestions and input through e-consultation managed by the Urban Redevelopment Authority; (3) formal public consultation through public forums, dialogue with public or private stakeholders, and ministerial-level dialogue sessions (Soh & Yuen, 2006).

Many experts at UN-Habitat (2023) argue that the community must be involved from the beginning of the planning process and the entire process of preparing spatial plans to obtain meaningful public participation. Uittenbroek et al., (2019) state that participatory practices should encourage a dialogue where people can share arguments, increase their knowledge base, reflect and look beyond their personal preferences. In this way, the participatory process can stimulate social learning, utilize local information and knowledge, include experimental knowledge and value-based knowledge, provide insights and the possibility of resolving conflicts, as well as gain consensus and increase the legitimacy of joint decisions to avoid cases of 'window dressing', simply fulfilling the formality of the decision maker. Therefore, the meaning of community participation in the preparation of the RDTR draft needs to be expanded so that it is not only focused on public consultation activities. But the community can express aspirations that are in accordance with their needs and local wisdom. In addition, the community can also help monitor the implementation of the preparation of the RDTR design, especially in their area. The forum for interaction also needs to be defined more clearly whether the existing public consultation represents the collaborative and participatory principles in the preparation of the RDTR? The definition in question is the extent to which the results of public consultations are implemented in the preparation of the RDTR draft so that community involvement does not only appear as a formality or mere fulfillment of obligations.

Changes in Authority in RDTR Preparation

Analysis using Social Network Analysis (SNA) shows a comparison between the old and new authorities and roles of each actor in the RDTR preparation process. Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 11 of 2021 also seeks to regulate the differences in authority in the preparation of RDTR, where certain authorities at each stage that are felt to hinder the preparation of RDTR will be reduced or eliminated. In addition, strategic authorities that will affect RDTR products are also added. In general, significant changes in authority are listed in Table 2.

Table 2. Changes in authority in RDTR preparation

Authority	Previous	New
Quality of Base Map	Base maps must be verified and validated by the Geospatial Information Agency (BIG) without a specified time frame for recommendations	BIG must provide map recommendations within 10 (ten) days of submission. If not provided within 10 (ten) days, BIG is considered to have given its recommendation
KLHS	KLHS is prepared separately with potentially different individuals. Before technical approval submission. KLHS must be validated by the Ministry of Environment and Forestry (KLHK). However, there is no timeframe for validation, potentially delaying the KLHS preparation process	KLHS preparation is integrated with the RDTR preparation stage until the formulation of the conception. The KLHS document is an output of the KLHS preparation, concluding with the end of the RDTR conception formulation stage
Submission of Cross-Sectoral Discussion	Draft RDTR requires the Governor's recommendation before cross-sectoral discussion, hindering the discussion process	Draft for cross-sectoral discussion is directly discussed without going through counter checks and without requiring the Governo's recommendation, streamlining discussion process
Forestry Area Delineation	Forestry area delineation is not mentioned in the cross-sectoral discussion	In the cross-sectoral discussion, forestry area delineation must obtain absolute approval from the Ministry of Environment and Forestry (KLHK)
Enacment of Regional Draft (Ranperda	Enacment of Ranperda into Perda must be determined one year after subtansial approval is issued through legislative mechanism, following Permendagri No 80 of 2015	Enacment of Ranperdaka into Perdaka must be done by the Regent/Mayor within one month substantial approval issuance. If the regional head fails to enact the regulation, it will be enacted by the Minister.

Source: Processed based on Permen ATR / Ka BPN 8/2017 and 16/2018 and Permen ATR / Ka BPN 11/2021

Through the network analysis conducted, differences in stakeholder interests in the preparation of RDTR were found based on Regulation of the Minister of ATR/BPN No. 8 of 2017 and Regulation of the Minister of ATR/BPN No. 16 of 2018, as well as Regulation of the Minister of ATR/BPN No. 11 of 2021, which are listed in Table 2. Comparison between old and new roles is carried out to find the level of importance of each role. In general, there are no major changes in the roles of the actors involved, changes in roles are only seen in vertical agencies above the district/city government such as the Ministry of Environment and Forestry (KLHK), the Geospatial Information Agency (BIG), and the Provincial Government. However, the arrangement of roles and authorities needs to be clearly regulated at each stage of preparation so as not to overlap, which will slow down the RDTR preparation process.

In addition to SNA, another analysis carried out related to stakeholder mapping is Organizational Network Analysis (ONA). ONA is carried out to find out the role of each agency/organization in the preparation of RDTR in Indonesia. In the preparation of RDTR, many stakeholders are involved with their own roles according to their duties. The relationship between stakeholders and the flow of data/information can be seen in Figure 1.

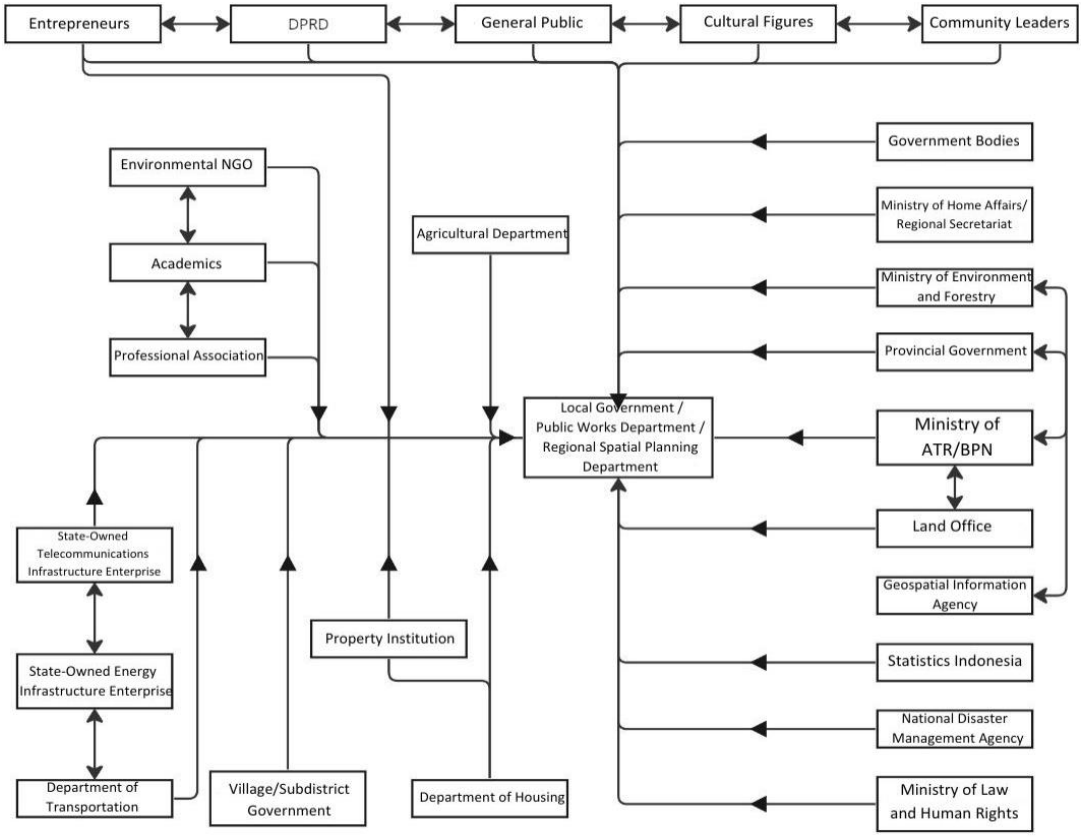

Figure 1. Stakeholder Relationships in RDTR Preparation

(Source Analysis Results, 2024)

In Figure 1, it can be seen that the stakeholders involved in the preparation of RDTR have a role to provide data and information related to space. Thus, the flow of data and information stops at the Regional Government/PU Agency/OPD for Spatial Planning of the Regency/City as the party that processes and analyzes data to compile RDTR. However, there are several vertical agencies above the regional government that have roles other than providing data and information, such as validation of base maps by BIG and KLHS documents by DLH/KLHK, as well as the Ministry of ATR/BPN, which has the authority to approve the substance of technical RDTR materials and can also take over the authority to establish RDTR if it has exceeded the time limit set in Government Regulation Number 21 of 2021. However, the authority of KLHK and BIG is not regulated in more detail in Regulation of the Minister of ATR/BPN Number 11 of 2021, so the stages of the process carried out cannot be monitored by the Ministry of ATR/BPN and the Regional Government.

The stakeholders have different roles in their contributions, so it is necessary to conduct a comprehensive mapping of how each stakeholder is involved. The results of the analysis show that the relational relationship between stakeholders is interrelated in the preparation of RDTR so that the most influential stakeholders in the preparation and determination of RDTR can be formulated. Changes in stakeholder roles occur along with regulatory changes based on Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 8 of 2017 concerning Guidelines for Granting Substantive Approval in the Context of Stipulating Regional Regulations on Provincial Spatial Plans and Regency/City Spatial Plans, Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency of the Republic of Indonesia Number 16 of 2018 concerning Guidelines for Preparing Detailed Spatial Plans and Zoning Regulations for Regencies/Cities (which are the old provisions), with Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 11 of 2021 concerning Guidelines for Preparation, Review, Revision and Issuance of Substantive Approval of Provincial, Regency, City Spatial Plans, and Detailed Spatial Plans (which are the new provisions). The comparison between old and new roles can be seen in Table 3.

Table 3. Changes in roles in RDTR preparation

Stage	Stakeholders	Role		Notes
		Previous	New	
Preparation: ToR, Methodology, and Determination of Area Planning	Related Local Government/ Departments responsible for RDTR preparation.	VI	VI	
	Related agencies within the local government.	I	I	
	Ministry of ATR/BPN	LI	LI	
	Provincial Government	I	I	
	Ministry of Environment and Forestry.	LI I	LI VI	1. Forestry Area 2. KLHS
	Public	I	VI	
	Academics	I	I	
	Other Stakeholders	LI	LI	
	DPRD	I	VI	
Data and Information Collection	Related Local Government/ Departments responsible for RDTR preparation.	VI	VI	
	Agencies within the local government related.	I	I	
	Ministry of ATR/BPN	VI	VI	
	Geospatial Information Agency	I	LI	
	Provincial Government	I	I	1. Data, carrying capacity, and capacity
	Ministry of Environment and Forestry.	I	VI	2. KLHS
	Statistics Indonesia	I	VI	
	Provincial Government	I	I	
	BNPB	VI	VI	
	Related Agencies/Institutions	I	I	
	Public	VI	VI	
	DPRD	I	VI	
Data Processing and Analysis	Related Local Government/ Departments responsible for RDTR preparation.	VI	VI	
	Ministry of Environment and Forestry.	VI I	VI VI	1. Data, carrying capacity, and capacity 2. KLHS
	Ministry of ATR/BPN	VI	VI	
	Provincial Government	LI	LI	
	Related Ministries/Agencies/ Departments	I	I	
	DPRD	LI	LI	
	Public	LI	LI	
Conception Formulation	Related Local Government/ Departments responsible for RDTR preparation.	VI	VI	

Source: analysis results, 2024

Notes:
VI : Very Important
I : Important
LI : Less Important
NI : Not Important
*) The role is not specifically regulated.
**) Important if within the period since the issuance of Substantive Approval, the regional government does not stipulate a Perkada. If so, then Not Important

In addition to changes in stakeholder roles, Regulation of the Minister of Agrarian Affairs and Spatial Planning/Head of the National Land Agency Number 11 of 2021 also attempts to regulate differences in authority in the preparation of RDTR. Certain authorities in several existing stages are suspected of being able to hinder the preparation of RDTR, therefore such authorities will be reduced or eliminated. In addition, strategic authorities that will positively affect RDTR products are then added. In general, significant changes in authority can be seen in Table 4.

Table 4. Changes in authority in RDTR preparation

Authority	Previous	New
Quality of Base Map	Base maps must be verified and validated by the Geospatial Information Agency (BIG) without a specified time frame for recommendations.	BIG must provide base map recommendations within 10 (ten) days of submission. If not provided within 10 (ten) days, BIG is considered to have given its recommendation.
KLHS	KLHS is prepared separately with potentially different individuals. Before technical approval submission, KLHS must be validated by the Ministry of Environment and Forestry (KLHK). However, there is no timeframe for validation, potentially delaying the KLHS preparation process.	KLHS preparation is integrated with the RDTR preparation process, starting from the preparation stage until the formulation of the conception. The KLHS document is an output of the KLHS preparation, concluding with the end of the RDTR conception formulation stage.
Submission of Cross-Sectoral Discussion	The draft of the Detailed Spatial Plan (RDTR) required the Governor's recommendation before cross-sectoral discussion, hindering the discussion process.	The draft for cross-sectoral discussion is directly discussed without going through counter-checks and without requiring the Governor's recommendation, streamlining the discussion process.
Forestry Area Delineation	Forestry area delineation was not mentioned in the cross-sectoral discussion.	In the cross-sectoral discussion, forestry area delineation must obtain absolute approval from the Ministry of Environment and Forestry (KLHK).
Enactment of Regional Regulation Draft (Ranperda)/ Regional Head Regulation Draft (Ranperdaka)	Enactment of Ranperda into Perda (Regional Regulation) must be determined one year after substantial approval is issued through legislative mechanisms, following Permendagri No. 80 of 2015.	Enactment of Ranperdaka into Perdaka (Regional Head Regulation) must be done by the Regent/Mayor within one month of substantial approval issuance. If the regional head fails to enact the regulation, it will be enacted by the Minister.

Source: Processed based on Permen ATR / Kepala BPN No. 8/2017 and 16/2018 and Permen ATR / Kepala BPN No. 11/2021

In the processing of the post-review questionnaire, the results of the validity and reliability tests on each part of the post-review questionnaire proved that the results of the analysis were valid and reliable. The analysis results show that the sig. value is in the range of 0.000 - 0.019 and the Cronbach's α value is in the range of 0.707 – 0.952.

In the preparation of RDTR before UUCK, public participation carried out through the official website of the relevant government agency received a "very bad" rating based on the assessment of 27.4% of the total respondents. In the period of RDTR preparation after UUCK, the evaluation of the implementation of public participation shows that the condition is getting worse with the addition of a "bad" predicate in several activities, namely, 1) public participation carried out through mass media (television, radio, newspapers, and magazines), with a value of 26.5% of the total respondents, while 2) public participation carried out through the official website of the relevant government agency received a value of 28.6% of the total respondents; and 3) Public participation is carried out through open letters in the mass media with a value of 28.6% of the total respondents. This shows that although there has been an increase, the participatory principle in the preparation of RDTR is still not optimal and this affects the RDTR preparation process both in terms of completion duration and quality produced. There are several obstacles that arise in involving the community, namely: 1) Lack of public understanding of spatial planning, its products, and its urgency so that the community is less involved; 2) Limited time in involving the community; 3) Limited interactive media in involving the community; 4) There are no specific guidelines regarding community involvement; 5) The implementation of public consultation activities in the RDTR preparation process has not been optimal.

CONCLUSION

The RDTR preparation process in practice has involved various parties, so the collaborative and participatory spatial planning approach is an important part that must be considered. However, the results of the survey conducted indicate that the current RDTR preparation process is not yet optimal. Based on the survey results, there are also several main challenges faced in the preparation of RDTR, which are mainly related to the implementing actors, namely the commitment of the local government. Optimizing the role of the main actors to be able to collaborate with other stakeholders and encourage public participation needs to be mapped out in a series of RDTR preparation implementations. Uncertainty in the division of roles, cooperation, and data flow in the process still occurs, so it is necessary to improve business processes as a solution for optimization. With this consideration, it is necessary to prepare a design for a public participation method related to organizing the participatory process in terms of who will participate, when it will start, and how this participation will be carried out, which refers to the scope of interest representation, opportunities to participate, and the level of influence of each. So that the

meaning of community participation and collaboration of all stakeholders can be optimally realized, and not just to fulfill the formality of the spatial planning process and decision-making.

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