

Network Governance in the Implementation of the Green Growth Program in Sambas Regency

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ABSTRACT: Institutions, actors, or parties directly or indirectly involved in formulating and implementing policies related to the Green Growth program show unsatisfactory synergy and collaboration. The purpose of this study is to further examine the network or modeling of the relationship between one institution or actor and another. The results show that inter-institutional relations in the implementation of the Green Growth program reveal a complementary pattern of collaboration, in which influential institutions such as Bappeda, DUKPP, and Dishub act as policy directors, while Disdikbud and Setda function as implementers and administrative coordinators. On the other hand, Kominfo, PUPR, and Diaspora serve as strategic connectors that maintain a balance between influence and dependence. This pattern confirms that the success of Green Growth implementation is not only determined by the strength of influence, but also by the ability of each OPD to build effective synergy, communication, and coordination to realize sustainable development at the regional level. The relationship between institutions in the implementation of the Green Growth program shows a complementary pattern of collaboration, in which institutions with significant influence such as Bappeda, DUKPP, and Dishub act as policy directors, while Disdikbud and Setda function as implementers and administrative coordination enforcers. On the other hand, Kominfo, PUPR, and Diaspora become strategic links that maintain a balance between influence and dependence. This pattern confirms that the success of Green Growth implementation is not only determined by the strength of influence, but also by the ability of each OPD to build synergy, communication, and effective coordination to realize sustainable development at the regional level.

KEYWORDS: Community, Network Governance, Green Growth Program, Collaborative Actors

INTRODUCTION

The vision and mission of Sambas Regency have been translated into various programs implemented by all subdistricts in Sambas Regency. The programs implemented in each subdistrict not only involve village government elements but also the smallest elements of society that have a direct and indirect influence. Therefore, in implementing the programs that have been announced, it is necessary to deepen the network between actors to support the maximum achievement of the programs. The more networks that are formed, and the stronger and more cohesive those networks are, the more effective the programs will be in achieving their goals.

One of the missions of Sambas Regency, as outlined in various flagship programs, is the Green Growth program, which is a program to increase economic growth by utilizing natural resources in a sustainable and environmentally friendly manner. Despite initiatives such as development in line with the green growth vision, various challenges in the agriculture, forestry, tourism, and spatial planning sectors indicate that the implementation of the green growth program in Sambas Regency still faces significant obstacles. Improvements are needed in program planning, implementation, and monitoring to achieve inclusive and effective sustainable development goals. Actors or stakeholders in formulating and implementing policies related to the Green Growth program need to synergize with one another. Therefore, modeling in the established policy network needs to be deepened so that a good model can be designed and applied to solve problems.

Research on policy network modeling in the form of government networks related to Green Growth programs in general needs to be conducted to offer a government network model that can be applied in overcoming complex regional issues. Complex regional issues involving various influencing units require research using a systems approach, which views the research objects as units that are interrelated with one another. From this, the researcher aims to describe the network that is formed in detail. Research related to the role of actors or policy networks has been conducted extensively by other researchers. Research that looks at actor networks or program implementation networks looks at the main actors of the program (Nopriani et al., 2022; Salaputa et al., 2013; Subqi & Albab, 2019). This research examines the central role of actors directly involved in the program. Other research also examines actor networks from the perspective of policy formulation. This also examines the various impacts of implemented program policies, but

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also focuses on the role of core actors (Fauzi & Sri Rahayu, 2019; Sandy, 2020; Ulum et al., 2011). In addition, other research also looks at the role of actors by examining the strategies used and the direct authority of the actors. (Nopriani et al., 2022; Widiartana, 2021). A striking difference between this study and others is that it examines the indirect role of actors or institutions in a program. Other studies rarely examine the indirect role of actors or institutions, even though this aspect is also crucial to the successful implementation of a program (Firianti, 2019; Hayati, 2020; Said, 2015; Salamun, 2021).

The implications of this research for the implementation of the Green Growth program not only encourage sustainable economic growth but also strengthen regional social and ecological resilience. Cross-sector collaboration helps streamline resources, accelerate knowledge transfer, and build local institutional capacity to manage the environment productively and sustainably. The effectiveness of the network depends on consistent inter-institutional coordination and strong regulatory support at the regional level. Therefore, strengthening governance and communication between regional government agencies (OPDs) is a crucial factor in maintaining the sustainability of Green Growth in Sambas Regency.

METHOD

The type of research used in this study is a mixed method with a quantitative and qualitative approach. The research is related to the actor network or policy network, both related to the formulation and implementation of policies. In this study, the researcher not only explains and summarizes various conditions, situations, or variables that arise in the community that is the object of the research based on what happened, but also previously explained further quantitatively the relationship between one unit and another to help find a model. The qualitative approach used is a case study that is adjusted to the research objectives. The type of case study used is a descriptive case study, namely instrumental with a single case interwoven. (Tohardi, 2020; Yin, 2014)..

The collected questionnaire results were analyzed using Prospective Analysis. The method used is the Mactor method, which is used to examine each stakeholder's preferences and level of support for the identified objectives.

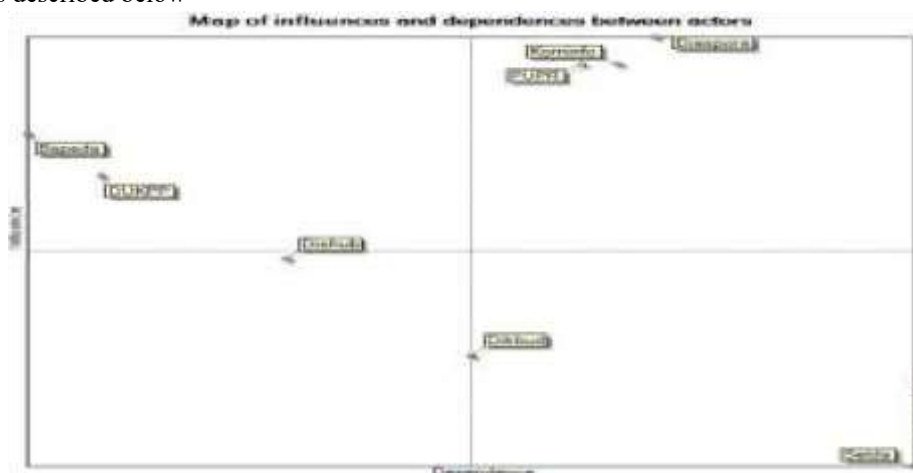
Structural analysis involves several procedures: 1. Compiling a list or inventory of variables; 2. Building an interrelationship network; and 3. Identifying key factors. The actors involved in the Prospective Structural Analysis (PSA), both directly and indirectly, are as follows: Regional Development Planning Agency, Regional Research and Innovation Agency, Education and Culture Agency, Transportation Agency, Public Works and Spatial Planning Agency, Cooperatives, Small and Medium Enterprises, Industry and Trade Agency, Tourism, Youth and Sports Agency, Communication and Information Agency, and the Legal Section of the Regional Secretariat.

The Green Growth Program has the following: Regional Development Planning, Research and Innovation Agency (Bappeda), Education and Culture Agency (Dikbud), Transportation Agency (Dishub), Public Works and Spatial Planning Agency (Dinas PUPR), Cooperative, Small and Medium Enterprises, Industry and Trade Agency (DKUPP), Tourism, Youth and Sports Agency (Diaspora), Communication and Information Agency (Kominfo), Legal Division of the Regional Secretariat (Sekda).

Data analysis was carried out in two stages, the first stage of Data Analysis was carried out using data from Questionnaires, Interviews and Document Studies, then the second stage of data analysis was carried out through Focus Group Discussions (FGD).

RESULT AND DISCUSSION

Based on the results obtained from the MACTOR calculation ((Conflict Alliance Matrix: Tactics, Goals, and Recommendations) is as described below



Data source: data source: researcher-processed data

The analysis of inter-institutional relationships in the implementation of the Green Growth program, as shown in the figure above, reveals an interesting configuration when viewed through the quadrants of influence and inter-actor dependency. The data

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shows that the Education and Culture Office (Disdikbud) and the Regional Secretariat (Setda) are in a position of high dependency, but relatively low influence. This indicates that these two institutions primarily adapt to the policy direction established by other institutions with strategic power. Their role tends to be supportive of policy implementation and dissemination, rather than as primary decision-makers in the Green Growth program. The Regional Development Planning Agency (Bappeda), the Environment and Settlement Agency (DUKPP), and the Transportation Agency (Dishub) are in the quadrant of high influence but low dependency. This situation demonstrates that these three institutions hold strategic positions as key policy drivers, formulating planning directions, and providing technical recommendations that serve as the basis for other institutions in implementing the program. These institutions act as initiators, policy designers, and inter-institutional liaisons in cross-sectoral coordination. Their position is relatively independent because they are not overly dependent on the decisions of other institutions to carry out their duties.

The Department of Communication and Informatics (Kominfo), the Department of Public Works and Spatial Planning (PUPR), and the Department of Manpower (Diaspora) are in a balanced position of influence and dependence. This reflects a collaborative relationship, where they have the capacity to influence policy implementation, but simultaneously require the support of other institutions to ensure successful implementation. This balance makes these three institutions crucial nodes in the intersectoral coordination network.

Specifically, for the Department of Education and Culture and the Regional Secretariat, their position of high dependence and low influence means that the success of their contributions is largely determined by the clarity of policy direction provided by planning and technical institutions. Nevertheless, their role remains crucial as they serve as liaisons in outreach, community capacity building, and alignment of regional government administration to ensure the equitable and effective implementation of green growth programs.

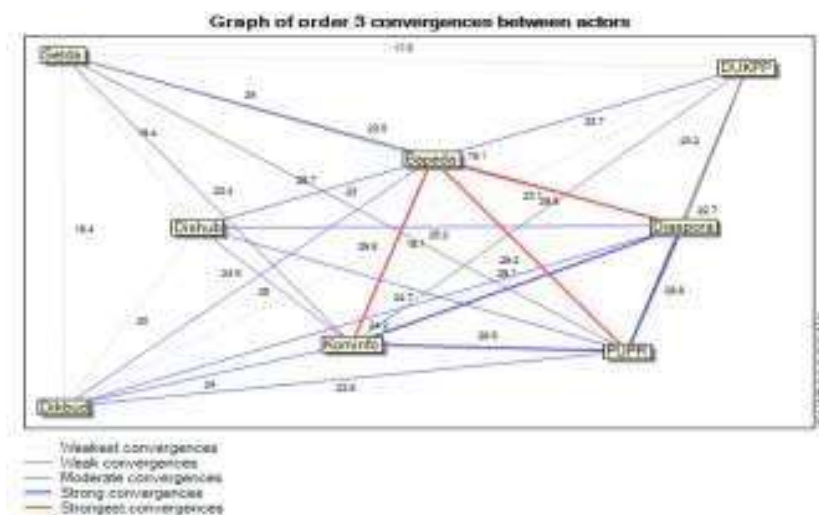
Meanwhile, the influential Bappeda, DUKPP, and Dishub demonstrate dominance at the conceptual and strategic levels. Bappeda leads planning, DUKPP coordinates environmental and spatial planning aspects, and Dishub ensures environmentally friendly infrastructure connectivity. With this significant position of influence, they are responsible for maintaining synergy between other actors to prevent fragmentation of green policies.

Institutions such as the Ministry of Communication and Informatics (Kominfo), the Ministry of Public Works and Public Housing (PUPR), and the Diaspora (Diaspora) serve as synergists, as their balance of influence and interdependence makes them bridges between planning agencies and technical implementing agencies. Kominfo strengthens public communication, the Ministry of Public Works and Public Housing implements the physical aspects of sustainable development, while the Diaspora expands workforce networks and community participation. The synergy between these three institutions helps strengthen interinstitutional cohesion, ensuring that the green growth program in Sambas Regency is integrated, participatory, and sustainable.

Based on the above, the relationship pattern between Regional Apparatus Organizations (OPD) in implementing the green growth program in Sambas Regency shows an unbalanced but complementary division of roles (Rohmani et al., 2015). Regional government agencies (OPDs) such as the Education and Culture Office (Disdikbud) and the Regional Secretariat (Sekretariat Daerah) are highly dependent on the direction of planning institutions, indicating their position as policy implementers and social facilitators. While their influence is limited, their role remains vital in ensuring the sustainability and acceptance of programs at the community level, as well as internal government coordination. Conversely, the Regional Development Planning Agency (Bappeda), the Regional Development Planning Agency (DUKPP), and the Transportation Agency (Dishub) occupy dominant positions with significant influence, as they hold strategic control over policy direction and technical implementation. This demonstrates a layered power structure, where institutions with planning and technical functions hold a stronger position than administrative and educational institutions.

Another aspect demonstrates the balanced role played by the Ministry of Communication and Information, the Ministry of Public Works and Public Housing (PUPR), and the Diaspora, which serve as liaisons and stabilizers between dominant and dependent institutions. This balance between influence and dependence demonstrates a high adaptive capacity in building crosssector collaboration, as well as the ability to maintain communication and policy integration on the ground. (Bruno, 2014; Steiner & Teasdale, 2019). This pattern illustrates that the effectiveness of green growth program implementation is highly dependent on the quality of coordination between OPDs (Hilman, 2017; Sarwar et al., 2021). Thus, program success is determined not only by the most influential institution, but also by the ability of institutions with equal influence to bridge communication and strengthen institutional synergy on an ongoing basis. The network formed between institutions implementing the program, albeit indirectly, can be seen in the figure below. .

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Data Source: Data source: data source: researcher-processed data

The graph of the interconnectedness and coordination of the Green Growth program implementation in Sambas Regency shows that Bappeda is at the center of the inter-institutional network. The strongest relationships are seen between Bappeda and the Communication and Informatics Agency (Kominfo), the Public Works and Spatial Planning Agency (PUPR), and the Manpower and Diaspora Agency (Diaspora). This strong connection reflects intensive coordination in the planning process, strategy development, and policy implementation that support the principles of sustainable development. Bappeda plays a key role in integrating various sectors to synergistically achieve the objectives of the green growth program. The very strong relationship between Kominfo and Bappeda demonstrates the importance of public communication and information management in supporting policy coordination. Kominfo plays a role not only in disseminating information but also in building a digital communication system that strengthens the program's transparency and accountability. This close collaboration indicates that the success of Green Growth depends heavily on the ability of both agencies to create information transparency and strengthen public participation through effective communication channels.

Meanwhile, the strong relationship between the Ministry of Public Works and Housing (PUPR) and the Regional Development Planning Agency (Bappeda) underscores the importance of integrating development planning and the technical implementation of green infrastructure. Bappeda, as the planning agency, ensures that development aligns with sustainable environmental principles, while PUPR is the primary implementer in realizing environmentally friendly infrastructure. This close relationship demonstrates that the success of green development is determined not only by thorough planning but also by the alignment of implementation on the ground through inter-agency synergy. The strong connection between the Diaspora and Bappeda also demonstrates the crucial role of employment and transmigration agencies in supporting green growth programs. The Diaspora helps mobilize community participation and local labor to engage in sustainable development programs designed by Bappeda. This relationship is key to ensuring that green development is not only structural but also provides socio-economic benefits for local communities, particularly in improving the quality of human resources.

Moderate relationships are seen between the Ministry of Communication and Informatics and the Diaspora, the Ministry of Public Works and Public Housing (PUPR) and the Ministry of Communication and Informatics, and the Regional Development Planning Agency (Bappeda) and the Regional Secretariat. These moderate relationships indicate good but not yet intensive cooperation. These relationships are typically functional and limited to cross-sectoral coordination, such as administrative support, dissemination of activity information, or coordination of specific policies. Nevertheless, moderate relationships contribute to the stability of overall coordination, as they serve as a bridge between institutions with dominant roles and those with supporting roles. Meanwhile, relatively weak relationships are seen between Bappeda and the Ministry of Public Works and Public Housing (DUKPP), the Transportation Agency (Dishub), and the Education and Culture Agency (Dikbud), as well as between the Ministry of Communication and Informatics and the Education and Culture Agency, the Transportation Agency and the Regional Secretariat, and the Transportation Agency and the Education and Culture Agency. These weak relationships indicate that communication and coordination between these institutions are still limited and need to be strengthened. Weak connections can be caused by differences in policy focus, limited roles in the green growth program, or a lack of cross-sectoral collaboration forums. Therefore, strategies are needed to improve coordination through joint forums, data integration between regional government agencies (OPDs), and regular communication mechanisms so that all institutions can contribute more optimally to realizing the green growth program in Sambas Regency.

The Regional Development Planning Agency (Bappeda) serves as the primary coordination center for implementing green growth programs in Sambas Regency. This position demonstrates Bappeda's strength as an institution with a strategic role in planning

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and synchronizing cross-sectoral policies. The strong relationship with the Ministry of Communication and Information, the Ministry of Public Works and Public Housing (PUPR), and the Diaspora reflects structural trust in Bappeda's role in integrating information, technical planning, and community engagement. This pattern of interconnectedness emphasizes Bappeda's role as a network leader (Arief & Rahayu, 2021; Khairani et al., 2021; Muryanti, 2020), namely, actors who serve as the hub in maintaining the direction and continuity of sustainable development policies. Furthermore, the strong relationship between the Ministry of Communication and Information, the Ministry of Public Works and Public Housing (PUPR), and the Diaspora with the Regional Development Planning Agency (Bappeda) demonstrates a complementary division of roles. The Ministry of Communication and Information supports public communications and information technology, the Ministry of Public Works and Public Housing (PUPR) is responsible for implementing green infrastructure, while the Diaspora acts as a social driver through community and workforce empowerment. All three serve as operational pillars supporting Bappeda's vision in implementing green development concepts at the regional level. This analysis demonstrates that cross-sector coordination is not merely an institutional formality but also a crucial element in ensuring that policy planning, implementation, and communication are aligned and mutually reinforcing.

The moderate relationships identified, such as those between the Ministry of Communication and Informatics and the Diaspora, the Ministry of Public Works and Public Housing (PUPR) and the Ministry of Communication and Informatics, and the Regional Development Planning Agency (Bappeda) and the Regional Secretariat (Secretary), indicate that coordination remains functional. In this context, interactions between regional government agencies (OPDs) are driven more by administrative needs and the implementation of specific activities, rather than by a systematically structured coordination mechanism. This indicates that although inter-agency coordination has been established, its intensity and sustainability still need to be strengthened. Strengthening this coordination mechanism is crucial to avoid overlapping roles and ensure ongoing synergy in the implementation of the Green Growth program. Meanwhile, the weak relationship between Bappeda and the Regional Development Planning Agency (DUKPP), the Transportation Agency (Dishub), the Education and Culture Agency (Dikbud), and several other institutions indicates that there are still gaps in communication and policy integration between these sectors. This weakness may reflect their low priority or involvement in the green growth program, despite the significant potential of the environment, transportation, and education sectors to support its success. Therefore, this analysis emphasizes the need for a more inclusive, collaborative approach, in which all regional government agencies are proportionally involved through regular coordination forums, data exchange, and joint planning to ensure comprehensive and sustainable implementation of green development policies in Sambas Regency.

CONCLUSIONS

Inter-institutional relationships in the implementation of the Green Growth program demonstrate a pattern of complementary collaboration, where influential institutions such as Bappeda, DUKPP, and Dishub act as policy makers, while Disdikbud and the Regional Secretariat serve as implementers and strengthen administrative coordination. Meanwhile, Kominfo, PUPR, and the Diaspora act as strategic liaisons, maintaining a balance between influence and interdependence. This pattern emphasizes that the success of Green Growth implementation is determined not only by the strength of influence, but also by the ability of each OPD to build synergy, communication, and effective coordination to realize sustainable development at the regional level.

The pattern of inter-regional government agencies (OPDs) in implementing the Green Growth program in Sambas Regency demonstrates that Bappeda serves as the primary coordination center, forging strong relationships with the Ministry of Communication and Information, the Ministry of Public Works and Public Housing (PUPR), and the Diaspora in planning, communication, and program implementation. Moderate and weak relationships still evident in several sectors indicate the need to increase the intensity of cross-agency coordination to prevent gaps in implementation. By strengthening the collaborative network between OPDs in a more inclusive and structured manner, the effectiveness of the Green Growth program can be enhanced to achieve more sustainable and integrated regional development. Implementing the program to strengthen cross-OPD coordination mechanisms systematically and sustainably is essential. A collaborative strategy is needed that not only positions Bappeda as the primary driver but also encourages increased capacity and active participation from other OPDs with weak coordination relationships. Strengthening inter-agency communication, aligning planning, and establishing regular coordination forums are crucial steps to ensure all sectors can contribute optimally. Thus, the green growth program will not only become a sectoral agenda but will develop into a joint movement toward inclusive, adaptive, and sustainable regional development.

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