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The Direction of Papua Development: Is A New Autonomous Region the Answer?

Abstract

This study aims to show what kind of problems and challenges occur in the middle of Papua Province development, as well as the extent of complexity of these development problems and the challenges of the New Autonomous Region to answer it. We use the systematic literature review method by showing a collection of literature from the Scopus database that discusses the development of Papua and analyzing the literature collection into several clusters. Bibliometric analysis is used to generate statistical models that show the relationship between each study. 151 literature sources were used in this study and produced three clusters namely development process, environment, and communication. From these aspects, several development efforts have been carried out by the government such as collaboration with the private sector, community capacity building through local value development, and the involvement of indigenous peoples. Moreover, there are several things that need to be considered such as land acquisition issues, the difficulty of access, planning and control functions, political intervention and interests, along with the communication system that has not been integrated. The New Autonomous Region can have a narrow span of control so it will optimize supervision and monitoring functions, but there are several things that need to be considered when implementing it such as planning, existing human resources capacity, and financial aspects. There are some limitations in this paper, where we cannot reach some highland areas to directly observe the challenges that occur there. Future research can develop discussions about Papua development through direct observations in those areas.

Keywords:

Papua development; bibliometric analysis; local value; new autonomous region

Administration on July 19, 2011, then became Assistant Director for Academic Affairs on March 27, 2013. On January 1, 2015, he was appointed as Assistant Director for General Administration and inaugurated to serve as Director of the IPDN Papua Campus from June 9, 2017, until now.

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Introduction

The development gap between regions is a challenge that has yet to be resolved properly in Indonesia (Asra, 2000; Mesak Iek & Blesia, 2019; Muhtar, 2021; D. Wahyuningsih et al., 2020). Gaps in various fields such as health, education, and the economy in fact present quite complex problems in each region (Rusim et al., 2019; Suparmi et al., 2018). The presence of the Covid-19 pandemic is an example of how the impact of the development gap has resulted in complex problems, where underdeveloped regions have experienced difficulties starting from the time of facing the pandemic to the recovery process (Kusumasari et al., 2022; Larkins et al., 2020; Owen et al., 2020; UNDP, 2020). Most of the underdeveloped regions in Indonesia face interconnected problems such as the lack of health facilities, high mortality rates, and weak education when facing a pandemic which then causes the region to experience difficulties in recovering (UNDP, 2020). Then, development is something that needs to be considered and accelerated to eliminate gaps in disadvantaged areas and prepare them to face various challenges in the future (Chaudhary, 2020; Yulia Indrawati Sari & Rahman, 2021). Acceleration of development in underdeveloped areas is believed to reduce inequality in other regions, both in terms of education, economy, health, and knowledge (Fauzi et al., 2019; Fernández-Serrano et al., 2018; Fauzi & Kusumasari, 2020).

Papua is one of the outermost provinces in Indonesia which actually has a wide variety of resources in it (Krystof Obidzinski et al., 2012; Shirley et al., 2018; Achmad Sofian et al., 2021). Unfortunately, these various potentials and resources have not been fully utilized. Problems like the Covid-19 pandemic are also affecting Papua and give an overview of how their potential and resources can be utilized to solve some problems, especially when facing a crisis like a pandemic. In the Highlands area, the availability of resources can be used to fulfill people's food needs (Butler et al., 2021; Nerenberg, 2021). People in the highland areas can independently live in their territory and do not need to travel in order to meet their basic needs. However, problems in developing the potential and resources that exist in Papua still occur today, so the acceleration of development to support the development of these potentials and resources needs to be done (Rusim et al., 2019; Suparmi et al., 2018). Residents in coastal areas depend directly on food production from outside their territory, where these needs must be properly distributed in the midst of a crisis such as a pandemic. People in highland areas also have some difficulties in infrastructure development, where some areas have limited access to health or education infrastructure. It is undeniable, the acceleration of development in Papua is being pursued by the government (both central

and regional) and the results are visible (Fauzi et al., 2019). Recently, the Government of Indonesia has ratified the Law on New Autonomous Regions (DOB) to add three provinces in Papua, namely South Papua Province (Law Number 14 of 2022), Central Papua (Law Number 15 of 2022), and Highlands Papua (Law Number 16 of 2022). The establishment of the three New Autonomous Regions is expected to accelerate development in Papua and reduce the gaps that occur in the area. Unfortunately, this discourse reaped various reactions among experts and the public. There are various parties who support the plan, but there are also some who reject it, including several communities and students in Papua.

Research from Ruhyanto (2016) reveals that in 2001 Indonesian policies shifted from a focus on state security to a focus on prosperity, as reflected in the *Otonomi Khusus* (provinces like Papua and Aceh) or New Autonomous Region policies. Indeed, the policies are intended to strengthen public trust in the state by providing greater authority, more recognition and accommodation for Papuans' identity, and more resources to promote Papuans' self-determination in all sectors of the Republic of Indonesia's unitary state (Ruhyanto, 2016). This study then aims to show what problems and challenges occur in the midst of the development of Papua nowadays. Researchers also presented various points of view from previous studies, to show the extent of the complexity of these development problems. These various points of view are seen through previous studies and mapped according to the cluster or discussion of each study. After that, from the results of the analysis, the researcher shows whether the New Autonomous Region can be an effort and answer to all development problems in Papua or vice versa. There have not been many previous studies discussing the development of Papua and seeing the urgency of the expansion in the region. It is hoped that this research will provide an academic point of view on development problems that

occur in Papua as a region and how the impact of the New Autonomous Region plans in the future development of Papua.

Methods

This study uses a systematic literature review method by showing a collection of literature on Papuan development and analyzing the literature collection into several clusters. A successful review involves three major stages: planning the review, conducting the review, and reporting the review (Xiao & Watson, 2019). This study attempts to map the existing development of Papua discussion using Bibliometrics analysis. Bibliometric analysis is a method that uses research references as material for analysis and produces statistical models that show the relationship between each of these studies (Tsay & Shu, 2011; Sajida, 2022). The researcher uses a collection of literature in the form of scientific journals, books, and other items from the Scopus database that discuss the development of Papua. On the Scopus literature search page, keywords are then linked with Boolean operators (AND, OR) and the keywords produced by the researcher are: TITLE-ABS-KEY (development AND Papua AND Indonesia) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (PUBYEAR, 2022) OR LIMIT-TO (PUBYEAR, 2021) OR LIMIT-TO (PUBYEAR, 2020) OR LIMIT-TO (PUBYEAR, 2019) OR LIMIT-TO (PUBYEAR, 2018) OR LIMIT-TO (PUBYEAR, 2017) OR LIMIT-TO (PUBYEAR, 2016) OR LIMIT-TO (PUBYEAR, 2015) OR LIMIT-TO (PUBYEAR, 2014) OR LIMIT-TO (PUBYEAR, 2013) OR LIMIT-TO (PUBYEAR, 2012)). 163 literature sources on the development of Papua in 2012-2022 emerged as a result of searching the Scopus database and some of them were eliminated according to research needs. Bibliometric analysis was then carried out using VOS-Viewer version 1.6.18 to visualize the results of the literature mapping.

A bibliometric analysis was used in this study to plan, conduct and report the review (as three major stages of successful review). The results of the

literature mapping that the researchers present are clusters of themes and keywords that often appear in research on Papua development. This cluster of themes and keywords represents what subjects are often discussed in research on Papua development and the relationship between each of these subjects. The most frequently occurring clusters of themes and keywords will be discussed in more depth in this study. The use of Bibliometric analysis in this study is only to show themes and words that often appear in discussions of Papua development in previous studies, where this research will not focus on mapping or grouping sources from the literature in depth.

This research discusses the direction of Papua development, where the cluster of themes and keywords that have been collected previously becomes an analytical tool to see the directions and challenges of Papua development. The analysis and discussion in this study is strengthened through literature or other types of data, such as policies in the form of laws or regional regulations to opinions from experts (Abidin, 2021; Fauzi & Kusumasari, 2020; Rusim et al., 2019). In this research, experts are those who have a strong understanding of Papua development or plans for the expansion of Papua, such as heads of departments in local government, regent or vice-regent, and public officials. Interviews with these experts are primary data in this study and are supported by literature or previous research as secondary data. The arrangement of the discussion in this study is an analysis of the results of literature mapping using VOS-Viewer and a discussion of each cluster and keywords that often appear, then a discussion of the direction of Papua development and the relevance of the New Autonomous Region in responding to the Papua development challenges.

Results and Discussion

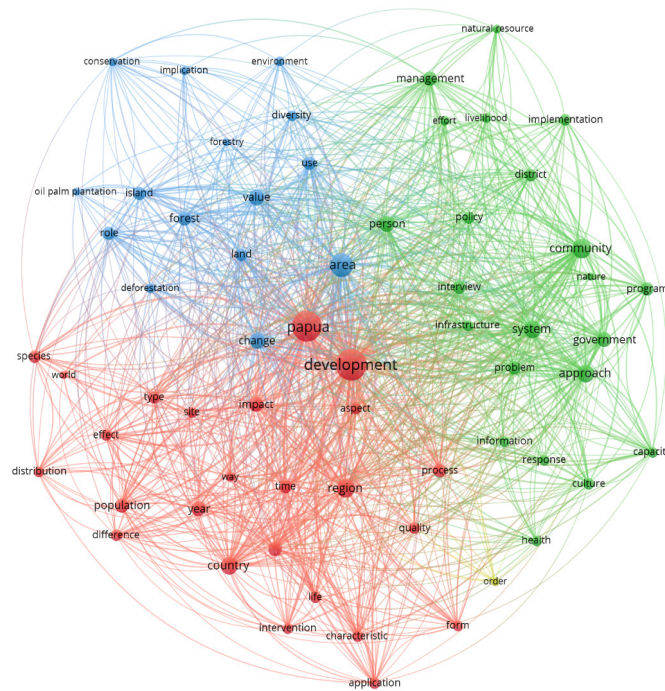
Literature mapping in the Topic of Papua Development

As explained in the previous section, literature mapping is used to show what

keywords often appear in research discussing Papua development. Before being mapped, the researcher read one by one the 163 literature sources that appeared on the Scopus search page and eliminated some of the literature that was considered less relevant to the topic of discussion. The results of the elimination then produced 151 literature sources used in this study, where some of the literature that was eliminated was off-topic literature, such as literature discussing Papua New Guinea (PNG) or comparisons of development between countries in general. The results of the mapping then show four clusters of keywords in the research that discusses the development of Papua, where of course the words “development” and “Papua” are the main keywords in the results of the mapping (Fig. 1). The first cluster consists of 25 items, then the second cluster consists of 22 items, the third cluster contains 15 items, and the fourth cluster contains one item.

Based on the results shown in the figure above, the first cluster keywords that often appear are the subject of the process of development (process, intervention, application, impact, aspect, region, quality, intervention). Meanwhile, in the second cluster, the keywords that appear are dominated by words related to the environment (forestry, forest, environment, oil palm plantation, conservation, deforestation). In the third cluster, the keywords that are produced are more targeted at targets and communication in development (response, culture, community, government, management, livelihood, and policy). While the fourth cluster contains only one keyword related to attitude (order). Several keywords that appear in each cluster become the highlight of the discussion in this study, to find development problems in Papua and provide recommendations for the direction of Papua's future development. In determining the keywords that will be discussed more deeply in this study, the researcher looks at the density (keywords that are often mentioned

Figure 1.
Network Visualization of Frequently Occurring Keywords
in the Topic of Papua Development



Source: Processed by author

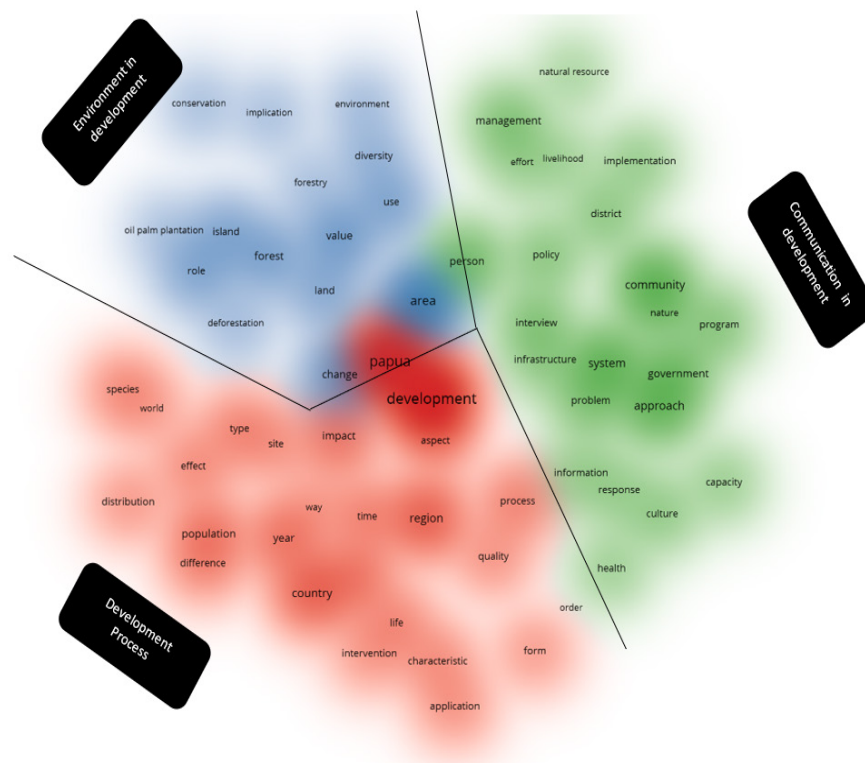
in various studies of each of these keywords which the researcher visualizes through the figure below.

Density visualization results are determined based on the occurrences and relevance of each keyword. In the density visualization above, it can be seen that in addition to development (occurrences: 110) and Papua (83), several keywords such as area (61), community (41), region (38), system (36), government, approach (34), change, person, value (28), impact (26), condition (23), infrastructure, population, and forest (22). In the cluster development process, several keywords such as region, impact, condition, and population often appear. Keywords such as quality, way, year, distribution, quality, and life also appear but not really often as the other keywords that were explained before in the development process. Meanwhile, in environmental clusters, keywords such as area, change, value, and forest are subjects that are often discussed. Forestry,

conservation, land, environment, and implication are keywords that also appear in environmental clusters. Other than that, the development communication cluster shows several keywords such as community, government, approach, system, person, and infrastructure. Capacity, livelihood, district, and policy are keywords that also appear in development communication.

While the last cluster that gives rise to keyword order does not have a strong enough density (10), therefore the researcher will not discuss this cluster in depth in this paper. Researchers will focus on the three previous clusters by highlighting some of the keywords that often appear above. Some keywords in other clusters also represent order keywords in the last clusters (especially in the communication development cluster). This research then will focus in three clusters namely the development process, environmental aspects, and development communication.

Figure 2.
Density Visualization of Frequently Occurring Keywords
in the Topic of Papua Development



Source: Processed by author

Development Process in Papua

It is undeniable that the current acceleration of development in Papua has been carried out by the Government of Indonesia and related stakeholders, both in terms of physical and human resources (Chan, 2017a; Pattiselanno & Krockenberger, 2021; Sitokdana et al., 2019). Road construction, for example, was carried out in several areas to facilitate public access and turn the wheels of the economy in every region in Papua (Fauzi et al., 2019; Pattiselanno & Krockenberger, 2021; Rusim et al., 2019; Y I Sari & Rahman, 2021). Development also involves various parties and schemes (such as public-private partnerships) to facilitate and accelerate each of these activities. However, in the process, there are various problems faced by each stakeholder, both in terms of the government, developers, and local communities. Research from Rusim et al. (2019) shows examples of development challenges in

Papua in terms of providers (contractors), where five main problems often arise, namely weather conditions, damage to materials in the shipping process, quality of materials, lack of skilled human resources in related fields, to the socio-political conditions that occur in the field.

In the results of the Bibliometric analysis, the condition becomes one of the keywords that often appears in the cluster of development processes in Papua. Based on previous studies, the conditions here have the connotation of problems, as Papua is located in the most remote area in Indonesia. The limitations of construction materials in Papua and the high cost of shipping accommodation are separate problems that must be considered by the provider (Heimerl et al., 2013). Not to mention other problems that may occur during the process of shipping the goods. In addition, “population” is also a keyword that often appears in this cluster and represents the

problems of limited human resources, especially human resources with certain skills that can support development in Papua (Abood et al., 2015; Shirley et al., 2018; Spencer et al., 2012). The uneven distribution of human development in the Papua region is also believed to cause limited superior resources in some areas (M Iek & Blesia, 2019; Jasper et al., 2022; Suparmi et al., 2018). Based on data from the Central Statistics Agency of Indonesia, some urban areas such as Jayapura have a population of up to 300,192 people, while other districts such as Supiori only have around 20,710 residents. Some regions in Papua are undeveloped and have limited education or health infrastructure, these problems then give a direct impact on human resources in that area.

In addition, the social and political conditions in several regions have indeed influenced the development process of Papua. The problem of land acquisition is a problem that often occurs in the development process in eastern Indonesia. Customary lands (known as *tanah ulayat*) in some regions often do not have clear legality, so in practice, there is a process of mutual claim between several tribes against the land when land acquisition is going to be carried out for development (Fauzi et al., 2019). This land acquisition process then takes a long time and often interferes with development work. Research from Fauzi et al. (2019) also show how in the end the land acquisition process claimed by several tribes then quite hindered the development of infrastructure, such as bridges and sports facilities, in the Jayapura Regency. The Head of West Papua Industry and Trade Department also said to researchers (28/06/2022) that land acquisition, especially *tanah ulayat*, has become one of the main reasons why development in several areas is hampered. Some providers have to face bankruptcy because of the land acquisition problems. In several cases, providers think the problem was solved when they paid some money to one of the ethnic groups before development

activities started, but on its way, some people come to the development area to claim it as their land and request payment to the provider. This then has an impact on the reduced interest of providers in carrying out development activities in Papua because it takes quite a high cost and takes a long time. The development process in Papua then faces various challenges in its implementation. Apart from that, some providers currently have a certain understanding to solve these problems, such as mediating with tribal chiefs in the development environment and collaborating with the government in solving problems (Fauzi et al., 2019; Heimerl et al., 2013; Wibawa et al., 2021).

The involvement of various parties or stakeholders (including traditional parties) in the development process is indeed an important aspect, especially in Papua. Traditional leaders, religious leaders, and the government (that is known as *tiga tungku*) must be involved in every development activity to minimize ethnic group conflicts in the development process (Chan, 2017b; Indrawan et al., 2017; Larkins et al., 2020). It is undeniable that physical development problems will of course have an impact on human development, due to limited access and opportunities for some communities in some regions that are difficult to reach. (Castro et al., 2016; Fulu et al., 2013; Tay et al., 2019). Human and physical development are interrelated things, so both aspects must be considered by the government. The strong relationship between physical and non-physical development can be seen from the impact of weak physical development on the even distribution of the population in Papua (Butler et al., 2021; Suparmi et al., 2018). There are some areas that are difficult to reach and have a lower population (in terms of number, capacity, to health) than areas that are more developed, this is due to the difficulty of accessing some of these areas (Apriliana et al., 2022; Pradana et al., 2019; Sulistiyowati et al., 2021; Wijayanto et al., 2019).

The development process plays an important role in Papua's development. Several problems that were mentioned before such as an acquisition of customary lands or territories, difficult access to goods and services, and the condition of knowledge of some people in the development process are the main problems in this section. The government as a policymaker needs to pay attention and find the solutions to solve these problems and make appropriate interventions in solving it, so that the development process can be carried out well and have a positive impact on the people in Papua. Collaboration of various parties in the development process in Papua is an important matter that must be considered and planned properly by the government and other stakeholders that are directly related to this case.

Environmental Aspects of Development in Papua

The environment is another aspect that must be considered in the development of Papua, where the land of Papua is known as a land that is rich in various types of resources and has a strong cultural environment (Muchtar & Yunus, 2019; Sinta et al., 2018; Tambaip et al., 2020). Currently, environmental problems are also a challenge for development in Papua, where deforestation and environmental destruction are still common in some areas (Abood et al., 2015; Brockhaus et al., 2014; Krystof Obidzinski et al., 2012; Suryatmojo et al., 2019). Research from Letsoin et al. (2020), for example, shows an example of a case in Merauke, where their findings show that 12 of the 20 districts there have lost natural habitat from sago palm, where from 1990 to 2019 only one district has not experienced the same change. The natural habitat is then turned into a place of production for companies, settlements, or other buildings. Even though the habitat is useful for supporting the lives of local people there, not a few local community groups experience economic and food difficulties. These problems certainly affect

human development in the Merauke area, where local communities have difficulty meeting their daily needs and increasing economic capacity (S. M. A. Letsoin et al., 2020). The shift in the use of the area which ultimately harms the local community then becomes a human development challenge that must be considered. Supervision of the deforestation problem in Papua is difficult because this authority is at the provincial level, while conservation forests are located in districts far from the center of the provincial capital in Jayapura.

Resource management for physical development in several areas in Papua still does not pay attention to environmental aspects, both carried out by developers and local communities (Butler et al., 2021; Castro et al., 2016; Fujisaki et al., 2016; Sheil et al., 2021). For example, several studies have shown that oil palm expansion in Papua eventually causes environmental damage in some areas and causes development difficulties in those areas (Indrawan et al., 2017; Letsoin et al., 2022; Parsch et al., 2022). Poor regional planning and the quick benefits offered by oil palm then cause several problems, ranging from environmental damage to human development difficulties (health problems, education, to hunger) in some areas (Carrasco et al., 2017; Lilleskov et al., 2019; Runtuboi et al., 2021). Runtuboi et al. also said that the role of local governments has not been maximized in controlling the development of the oil palm business. Good planning and spatial planning then need to be considered in every resource utilization and other development activity, so that later it does not cause problems such as threats to intact biodiversity-rich, especially in Papua's forested areas (Runtuboi et al., 2021; Sheil et al., 2021). The local government must take a greater role in paying attention to environmental problems that occur in Papua. District governments experience difficulties in managing forests or forest areas because this authority is at the provincial level.

The only role that can be taken by district governments is a coordinating role. Another thing to note in development planning is that local or district governments do not have environmental quality data, where the data is only available at the provincial level. This condition also affects the priorities for the preparation of environmental policies at the district level.

The knowledge of the local community about environmental conservation is also an important factor that influences, research by Boissière et al. (2013) explain that the knowledge of the local community in Mamberamo in environmental conservation also affects livelihoods and environmental damage in their area. Strengthening the capacity and understanding of the community towards the surrounding environment needs to be improved and strengthened through measurable human development programs. Apart from this, some areas in Papua are in fact currently able to take advantage of environmental conditions and potentials well. Starting from traditional environmentally friendly agriculture to resource utilization through tourism development. Traditional environmentally friendly agriculture is found in the Highlands of Papua, such as Mamberamo Tengah, Intan Jaya, and Puncak, while agriculture that has begun to use modern technology is found in Mappi and Jayapura. Research from Sonbait et al. (2021) shows that local tribes have succeeded in maintaining traditional knowledge in their area for generations and are able to develop this knowledge as a livelihood, to become ecotourism in the region. In fact, local values are still beneficial for environmental conservation, where several studies show that there are positive teachings held by local communities/tribes in preserving the environment. This value then needs to be maintained and strengthened by the government, such as through tourism development.

Development Communication in Papua

Communication is a very important aspect of development, especially development in areas that involve various stakeholders such as Papua (Daat et al., 2021; Heimerl et al., 2013; A Sofian et al., 2021). As discussed in the previous section, development problems often occur as a result of poor communication in solving some problems. Communication in the settlement of land acquisition which is customary land, for example, where in some cases the communication between stakeholders is still not optimal (Heimerl et al., 2013; Y I Sari & Rahman, 2021). There are several communities or local communities (tribes) that have problems with land ownership during the process of land acquisition for development and even after the development (Fauzi et al., 2019). This problem will later have an impact on the issue of illegal levies (crossbars) and even horizontal conflicts. In solving these problems, there is a lack of communication between various parties in several cases. Good communication of course must be built both in terms of Government to Government, Government to Business, Business to Business, Government to Public, and Business to Public (Lefaan et al., 2019; Rumbiak et al., 2021; Y I Sari & Rahman, 2021). However, in solving several cases in Papua, the providers then collaborated with traditional leaders or local communities to build communication in solving traditional problems, ranging from land acquisitions to other cultural issues (Fauzi et al., 2019).

However, other challenges still occur in some cases, where political interests still influence communication patterns in development. Tjilen et al. (2018) for example, show the problem of accountability in the implementation of Corporate Social Responsibility (CSR) by a company in Merauke. CSR which should be targeted for development and “reimbursement” to local communities and local economic development, in the case of this study, in fact, did not meet the target. The provision of CSR still considers the

political interests and needs of several individuals not to meet the needs of local communities or increase the economic capacity of the people in the area (Tjilen et al., 2018). The company then communicated with several individuals without seeing the real needs that existed in the community. Lack of communication is finally seen here, where the company's relationship with the community is not going well and the CSR program is not right on target. This should be a concern, where the communication of the three parties in this case (Government, Business, and Society) must be well coordinated. In fact, these problems do not only occur in physical development, but also in non-physical development. Government programs through community capacity-building activities are also still facing communication problems and challenges. Lack of communication then also presents vertical conflicts (between the community and the government) to horizontal conflicts (between fellow communities). Therefore, a good communication system in every development activity must be developed by the government. One way to build a good communication system in the development process is to involve the community in every development activity without compromising local wisdom in its implementation (Owen et al., 2020; B S Sulistyawan et al., 2018). The government and developers must communicate well with the community by involving them in every development activity (as communicators or workers) so that the community can understand each development process and the benefits of the development (Fauzi et al., 2019; Y I Sari & Rahman, 2021).

Problems such as the conflict in Papua appear because of the lack of communication between various stakeholders in development. Vertical communication between governments is also becoming a challenge that needs to be solved in Papua's development. According to the recognition of one of Papua Provincial office

heads (29/06/2022), there are communication problems that occur in times of development. Lack of vertical communication that happens in several development programs then causes some problems such as miscommunication in the distribution of funding, lack of responsibilities division, and overlapping authority. In several cases, there are priority differences between local government and central government, especially in development (Busch & Amarjargal, 2020; K Obidzinski et al., 2012; Ruwanpura et al., 2021). Good communication must be conducted by the government at any level (central and local government).

The provincial government as an extension or representative of the central government in the regions must be able to link the communication between the central government and local government (city or district), the provincial government then needs to build good communication with every level of government in any activities (Allen et al., 2018; Butler et al., 2021; M Iek & Blesia, 2019). Provincial governments play a key role in the development success of Papua because they have to maintain good vertical communication in development. The provincial government has to convey several development problems that occur in the city or district to the central government, and communicate with the local government about alternative problem-solving or central government decisions related to those problems. However, the challenge for Papuan Provincial Government was the span of control that is too wide in Papua (Carrasco et al., 2017; Letsoin et al., 2020; Pradana et al., 2019; Barano Siswa Sulistyawan et al., 2018). The provincial government has to build good communication with all of the city or districts, including small districts, such as Yalimo, Tolikara, Yahukimo and Waropen. Problems in vertical communication often occur because the provincial government is facing a difficult access to communicate with the local government in some districts (M Iek &

Blesia, 2019; Prasetyo et al., 2022). Governments at every level have to solve this problem together, so that communication between governments will be running clearly in every development program and give a positive impact on the public.

Direction of Papua Development

As previously discussed, Papua does experience various challenges in regional development. Apart from that, various development efforts have been carried out by the Government, both from the central and local governments. There are also several challenges from every aspect of development (process, environment, and communication) that must be overcome in order to optimize Papua's future development. In terms of the development process, there are several things, such as the acquisition of customary land (called *tanah ulayat*), the difficulty of accessing materials/goods and services, as well as the knowledge and education of the local community (especially on the development and its security). Meanwhile, in terms of the environment, several aspects such

as the capacity to manage natural resources and forests, government control and attention to environmental aspects, financial planning, and spatial planning, as well as the development of local values are some points that must be considered. Finally, in the communication section, the challenges that need to be considered are political intervention and interests, government and cultural approaches, the involvement of local communities in development programs, vertical communication among governments, and integrated communication systems between each stakeholder in infrastructure development.

New Autonomous Region in Papua Development

In the table above, it can be seen that physical and non-physical development efforts in Papua are currently being carried out as much as possible, although it cannot be denied that there are several challenges in their implementation. The Deputy Minister of Home Affairs during his visit to the Regional Campus of Government Institute of Home Affairs in Papua (15/07/2022)

Table 1.
Papua Development Effort and Challenges

Cluster	Development Effort	Development Challenge
Development Process	<ul style="list-style-type: none"> Equitable distribution of population through accelerated development of physical infrastructure such as roads, schools and health facilities Cooperation with various parties (private/ NGO) in accelerating development 	<ul style="list-style-type: none"> Acquisition of customary lands (called <i>tanah ulayat</i>) or territories Difficult access to goods and services The condition of knowledge of some people in the development process
Environment	<ul style="list-style-type: none"> Community capacity building through ecotourism Local value in environmental preservation Eco-friendly agriculture 	<ul style="list-style-type: none"> Control and attention of some local governments to environmental aspects in development Community capacity building in the management of natural resources and forests Spatial planning and layout Weak human resource development due to environmental damage (seen from health, livelihood/economic aspects, to education)
Communication	<ul style="list-style-type: none"> Involvement of traditional leaders or local communities in the development mediation process Involvement of traditional leaders or local communities in the development mediation process 	<ul style="list-style-type: none"> Political intervention and interest in communication patterns Vertical Communication The government's approach when communicating with the community An integrated communication system between every stakeholder in infrastructure development

Source: Authors, 2022

said that the New Autonomous Region which presents three new provinces, namely South Papua Province, Central Papua, and Highlands Papua aims to narrow the span of government control by accelerating the implementation of development and strengthening control and monitoring functions in each region. As we can see from previous studies, the function of control and monitoring is indeed one of the challenges in every aspect of Papua's development. Weak government control in several areas is believed to be an obstacle to the acceleration of Papua development (Fauzi et al., 2019; Mesak Iek & Blesia, 2019; Suparmi et al., 2018). The presence of the New Autonomous Region is expected to strengthen the control and monitoring functions that were previously weak in some areas, particularly on environmental and sociocultural impacts in the region. The success of regional expansion at the provincial level can indeed be seen if we look at the province of West Papua which is currently starting to develop, but the expansion must be supported by strengthening security and equitable human resources. Government employee discipline is one factor that deserves attention so that the formation of new autonomous regions can be useful for improving control and monitoring functions.

In addition, if the three provinces are indeed presented with the aim of accelerating development in underdeveloped areas in Papua, this will have a positive impact on the provision of goods and services in these areas. Prices of goods and services will decrease due to an increase in production sites and ease of access in delivery so that the gap in prices for goods (such as food, building materials, or others) and services between regions can be reduced (M Iek & Blesia, 2019; Suherman et al., 2021). The increasing focus on the span of control can also answer the previous development challenges of Papua, such as increasing the capacity of local communities which were previously difficult to

reach by the Provincial Government. The new provincial government as a representative of the central government in three provinces can focus on several districts, especially the outermost districts that have faced some difficulties and lack of attention from the provincial government before. It is also hoped that communication between various parties in development will improve due to the presence of the provincial government which is closer to some of these areas. With the strengthening of the control and monitoring functions, it is also expected to reduce political intervention and the interests of each person involved in the development process, so that later every physical and non-physical development activity in Papua can run optimally and not be carried out by political interests. Nevertheless, in its implementation, there are several things that need to be considered by the Government of Indonesia.

The Indonesian government has updated the Papua Special Autonomy regulations through Law Number 2 of 2021. There is a change in article 76 of the Law where paragraph one explains that the division of a province or regency/city area can be carried out with the approval of the legislative after paying close attention to its socio-cultural unity, readiness of human resources, economic capacity and development in the future. Based on these provisions, the Government must reconsider several aspects such as socio-cultural unity, the readiness of human resources, and economic capacity as well as the times. The presence of the three new provinces has at least represented the sociocultural unity in each region, which is great to empower the ethnic group in that area. However, the readiness of human resources also needs to be considered. If the Government of Indonesia presents three new provinces in Papua, of course, sufficient resources to fill the needs of the government in the three provinces need to be considered.

Control and monitoring schemes certainly cannot run properly if they are not supported

by qualified human resources. Therefore, the government must pay attention to and prepare human resources that are in accordance with the needs to fill certain positions or positions within the government structure of the three new provinces. The allocation and recruitment of employees need to be considered carefully by the government in meeting the needs of the New Autonomous Region. In addition, to prepare superior human resources for the future, the government must also strengthen the education sector in each region. If the education sector in these areas already has a strong foundation, the government structures in these 3 provinces can later be filled by local people who do have good capacity in accordance with the fields assigned to them. According to the confession of Keerom Vice Regent (06/06/22), the education sector in Papua still has become the main challenge that needs to be resolved properly. Some districts in Papua do not really have a good quality of education, specifically in fulfilling the needs of teacher and student learning desire. Hopefully, the three new provinces can fulfill educational needs in the future when this becomes the main problem in developing Papua's human resource quality. Furthermore, in the environmental aspect, every level of government has to collaborate in managing forests or forest areas. Strengthening the environmental quality data is also important to support each of Papua's development activities, including spatial data.

Moreover, financial and spatial planning for the development of three provinces is also a matter that must be considered. Government cannot let development and expansion occur without good planning because it will lead to the emergence of new problems (Brockhaus et al., 2014; Butler et al., 2020; Sitorus, 2017; Widodo, 2021). In addition, aspects that must also be considered are the financing and its target. The expansion of new provinces will certainly require high costs because they have to prepare

supporting infrastructure for its implementation (Suherman et al., 2021; Widodo, 2021). Therefore, good and careful planning in the implementation of the New Autonomous Region must be carried out. Financing for each activity related to the expansion or autonomous regions needs to be considered properly and on target. The New Autonomous Region is expected to improve welfare and develop the capacity of the Papuan people, so every activity in it must pay attention to these aspects. Financial and spatial planning must be conducted well by the government, in order to answer development challenges that researchers explained before. Strengthening financial and spatial planning will also help the new provincial government to do its job efficiently and improve the effectiveness of development in the future.

This study discusses the complexity of Papua's development problems as a whole, whereas previous studies only discussed some of the problems that existed in one of the clusters in this study. This research then fills the previous gap by describing all the development challenges that occur in Papua and showing the urgency of the formation of a new autonomous region in the region, including the considerations that must be considered in the implementation of these activities.

Conclusion

The Government of Indonesia has made efforts to accelerate physical and non-physical development in Papua and had a positive impact on the Papuan people. This study found three aspects that must be considered in Papua's development namely development process, environment and communication. From these three aspects, there are several development efforts that have been carried out by the government such as accelerating infrastructure development, collaboration with the private sector or other stakeholders, building community capacity through the development of local values, and the involvement of indigenous

peoples in every development process. Even so, there are several things that need to be considered by the Government in the implementation of future development such as land acquisition issues, difficulty of access, community knowledge and capacity, planning and control functions in the implementation of development, political intervention, and interests, to the communication system that has not yet been integrated.

The expansion plan for the New Autonomous Region is an effort that can answer several development challenges, where the New Autonomous Region can narrow the span of control so it will optimize control and monitoring functions. New Autonomous Regions can bring about accelerated development that will facilitate access, strengthen regional planning and control its implementation, as well as reduce political intervention and interests in the development of underdeveloped areas. Nevertheless, several things need to be considered to support the readiness for the implementation of the new autonomous regions. If the formation of a new autonomous region is carried out without being followed by an increase in security conduciveness and government activation (especially in the highlands), then the formation of a new autonomous region will not have a direct impact on the optimization of control and monitoring functions which in the future will be able to improve the welfare of the Papuan people. Considerations ranging from planning, the strength of existing human resources, and financial aspects are important things that must be considered. If some of these things have been considered properly, the implementation of the New Autonomous Region can be one of the answers to the challenges of Papua's current development.

Researchers realize that there are some limitations in this paper, where the researcher cannot reach some highland areas to directly observe the challenges that occur there. This research was conducted by interviewing several

experts and strengthened by a collection of pre-existing literature. Future research can develop discussions about Papua development through direct observations in areas that were previously difficult to reach such as highland areas and see the views of local society or environment about the expansion plan that will be implemented. Researchers hope that this paper can encourage research that discusses the development of Papua so that more research can contribute directly to the progress of Papua development in the future.

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