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Policy Implementation: Expedition of Development Potential and Inequality in the Southern Region of West Java, Indonesia

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ABSTRACT

This paper is a summary of the expedition in Southern West Java (SWJ) during our tenure as expert staff of the Senator - a member of the Regional Representative Council of the Republic of Indonesia (DPD RI) in 2009-2014 - and when we served in the Southern West Java Regional Development Agency (BPW Jabsel) 2014-2019. The aim is to find out the implementation of government policies in developing the potential of SWJ's natural resources, especially in the fields of tourism, agriculture, plantations, and livestock as well as the potential of water resources for electrical energy. Based on observations during the expedition, the potential of these natural resources has not been managed optimally, and infrastructure disparities are still experienced in SWJ, far behind when compared to the Western West Java (WWJ), Central West Java (CJW), Northern West Java (NWJ) Regions. To minimize this inequality – conceptually – we offer three frameworks for developing three regional growth centers (PPW) in SWJ, namely PPW Palabuhanratu, PPW Rancabuaya, and PPW Pangandaran to make the three areas agropolitan and minapolitan (marine). The photo shows some of the potentials, disparities, disaster threats, and the framework for developing potential SWJs.

Keywords: policy implementation, regional potential, regional inequality, SWJ framework

1. INTRODUCTION

Indonesia has 37 provinces, one of which is West Java Province. West Java Province has 27 regencies and cities consisting of 18 regencies and 9 cities. The Regency areas include Bandung Regency, Bekasi Regency, Bogor Regency, Ciamis Regency, Cianjur Regency, Cirebon Regency, Garut Regency, Indramayu Regency, Karawang Regency, Kuningan Regency, Majalengka Regency, Purwakarta Regency, Subang Regency, Sukabumi Regency, Sumedang Regency, Tasikmalaya Regency, West Bandung Regency, and Pangandaran Regency. While the city area consists of Bandung City, Bogor City, Cirebon City, Sukabumi City, Bekasi City, Depok City, Tasikmalaya City, Cimahi City, and Banjar City.

Geographically, the 27 regencies and cities are divided into four regions, namely Western West Java (WWJ), Central West Java (CJW), Northern West Java (NWJ), and Southern West Java (SWJ). WWJ, CWJ, and NWJ generally have urban characteristics, while SWJ is generally still rural. The division of the area is shown in **Photo 1**.

The boundaries of West Java are (1) in the north with the Java Sea, (2) in the east with the province of East Java, (3) in the west with the province of Banten, and with the Province of the Special Capital Region (DKI) Jakarta (State Capital), and (4) to the south by the Indian Ocean. The number of villages and sub-districts in each provincial border includes (1) 46 villages bordering Banten Province; (2) 25 villages bordering the DKI Jakarta Province; (3) 58 villages bordering Central Java Province; so, the number of inter-provincial border villages in 129 villages.

Geographically, the area of West Java is 35,377.76 square km, or about 1.85 percent of Indonesia's land area. West Java is the second largest province on the island of Java after East Java (47,921 km²). The population of West Java (2020) reaches 49.94 million people and is the largest in Indonesia. Much of the population of West Java Province is Sundanese, except for

the northern part of West Java, which is generally of Javanese-Cirebon ethnicity. The projected population of West Java until 2035 is 52.7 million people.



Figure 1. West Java Province

West Java Province has several development policies for the development of the SWJ area, such as Regional Regulation Number 28 of 2010 and Presidential Regulation Number 87 of 2021. However, in the implementation of the policy, there are still several problems, especially the social inequality of development between urban areas (WWJ, CWJ, and NWJ) and rural areas (SWJ). The regional inequalities include economic problems, education, health, infrastructure, and other social inequalities. Whereas the SWJ area has several potentials that are generally still neglected, such as the potential for agribusiness, agro-industry, marine industry, tourism, and so on. However, in general, these areas are still lagging. The government as a policy maker and implementer is required to fulfill the expectations of the policy [1], and the direction of regional development policies - especially SWJ - is as an agropolitan and minapolitan (marine) area [2]. The implementation of the policy aims to improve the welfare of the very large West Java community, which in 2035 is projected to be 52.7 million people [3].

To evaluate some of these policies – particularly in the SWJ area – we conducted several expeditions. We did not carry out this expedition at one time but at several different times, especially when we were carrying out our duties as expert staff of the Senator, namely the Regional Representatives Council of the Republic of Indonesia (DPD RI). The fields that we explored in the expedition included *first*, the potential of SWJ's natural resources, especially the potential for tourism, agriculture, plantations, and livestock as well as the potential for water resources for electrical energy. *The second*, the infrastructure gap. *Third*, is the threat of landslides due to the natural contours and steep slopes of the land as well as illegal logging and illegal iron sand mining activities. These three things are expected to be reflected in the framework that we offer for regional development at the Regional Growth Center (PPW) in SWJ, namely PPW Palabuanratu (South Sukabumi, Sukabumi Regency), PPW Rancabuaya (South Garut, Garut Regency), and PPW Pangandaran (Regency Pangandaran). Some of the framework concepts we use as attachments, in addition to photos of our original documents.

Some of the results of this expedition are expected to be evaluation material for stakeholders in implementing development policies, especially for the central government, provincial governments, and district/city governments in West Java Province.

2. POLICY THEORY

The public policy process includes “policy formulation”, “policy implementation”, and “policy evaluation” [4]. The “policy formulation” stage includes problem formulation, policy agenda, selection of policy alternatives to solve problems, and policy determination [5]. Public policy formulation can be used in all areas of policy science. Several studies and theories on policy formulation can overcome all policy problems faced by government and private institutions and agencies [6]. The policy implementation process is seen as a tension-generating force in society, including ideal policies, implementing organizations, target groups, and environmental factors. Policy implementation can be in the form of feedback to policymakers and policy implementers. Policymakers and policy implementers can support or reject further policy implementation. In applying the model, policymakers can try to minimize disturbing tensions that can fail policy outcomes to meet policy expectations [1]. Policy implementation requires cooperation between the center and the regions [7]. Public policy evaluation is a sine qua nonactivity and cannot be avoided for every nation state in the world, namely evaluation during formulation, implementation, and post-implementation or impact assessment (evaluation) [8].

Meanwhile, policy analysis is very dependent on the causes and effects of the policy; to judge 'what ought to be, not 'what is. In terms of efficiency and equity, policy analysis refers to normative economics and decision analysis, as well as ethics and other branches of social and political philosophy, namely about what ought to be. Desired consequences (objectives) and desired actions (means) are an important part of policy analysis. The competitive values of efficiency, equality, security, freedom, democracy, and enlightenment become one of the choices for sustainable policy analysis. To quote Robert C. Wood (1968), normative reasoning in policy analysis is “our problem is not doing what is right but knowing what is right.” [9].

Regarding environmental management policies, it is very important to involve government actors, environmental managers, and non-governmental organizations [10]. Conservation management is very important as the mainstream environmental management

policy. Legal policy support that is still based on traditional approaches needs to be focused on human welfare [11]. If you want to be successful, the practice of environmental conservation policies in the global world in recent decades must involve local communities [12].

3. METHOD

The method is an orderly (systematic) way to facilitate the implementation of a job in achieving the expected goals. While research is a process of investigating a problem by using the scientific method to find solutions to problems or answers to questions to add new knowledge that can be applied. Research activities are carried out through the process of determining and formulating problems, formulating hypotheses, collecting, and analyzing data or facts, and making conclusions according to hypotheses. Therefore, the research method is a systematic and logical way of conducting the research process using the scientific method [13]. The research method is an activity to find data in a systematic and organized manner and then critically analyzed it to obtain conclusions that generate new knowledge [14]. The social research method is the application of the scientific method to study social problems [13].

Although it is still debated, research experts generally argue that, *first*, based on the type, research methods can be in the form of social science and natural science research. *Second*, based on the method, it can be in the form of qualitative methods, quantitative methods, and mixed methods (hybrid qualitative and quantitative methods). The three types of research methods depend on the object and subject aspects, problems, objectives, characteristics, data collection and analysis systems, and the expected research results. Thus, distinguishing between qualitative methods, quantitative methods, and mixed methods is very dependent on these aspects. Viewed from the aspect of the object and subject of research – for example – qualitative methods are mostly used for research in the social sciences, while quantitative methods are generally used for the natural sciences. Similarly, aspects of the data collection and analysis system and the expected research results – for example – there are differences between qualitative and quantitative methods. Qualitative data collection instruments usually use interview guidelines, in-depth interviews, participatory, research, or focus group discussions (FGD) [15], while quantitative data generally use questionnaires or questionnaires. While mixed methods can be implemented in a hybrid between qualitative and quantitative methods [16-19].

Third, based on the type, qualitative research can be in the form of biographical research and ethnographic research [20], historical research, and experimentation (natural science). *Fourth*, based on its objectives, it can be in the form of exploratory research (developing basic ideas), phenomenology (a complete picture of a phenomenon), and explanatory (testing theories/hypotheses). *Fifth*, based on its form, it can be in the form of case studies (certain environments), surveys (many research objects/extensive collections), and experiments (looking for influence between research subjects). *Sixth*, based on the data analysis model, the qualitative method can be in the form of content analysis (grounded theory), while quantitatively it can be a statistical data analysis model of multiple linear regression, partial test (T-Test), and F Test to determine the effect between the independent variables (X1, X2) to the dependent variable (Y). *Seventh*, the technique of discussing qualitative data can use a deductive model (a model for discussing data from general to specific or "theory-data") or inductive (a model for discussing data from specific to general or "data-theory"). Quantitative

research generally uses an inductive model. And *eighth*, based on the technique of preparing the script (editorial) can use descriptive techniques.

To produce a theory, the deductive method (general-specific) begins with the theory, derives it into a hypothesis, tests the hypothesis, and revises the theory. While the inductive method (specifically general) begins with empirical observations (data), tests hypotheses, and develops valid theories [21]. Based on Barner Glaser & Anselm Strauss (1967), the grounded theory requires the validity the of content and analysis, the discovery of inductive theory is based on data that is analyzed systematically to generate deductive hypotheses in testing and building social science theory [15-16]; [22-24]; [25-26]; [27]. Grounded theory is to approach developing a paradigm based on the perspective of epistemology, ontology, and methodology. Grounded theory is not a theory at all. It is a method, an approach, and a strategy. Grounded theory is best defined as a research strategy whose goal is to generate theory from data. The purpose of collecting and analyzing research data is to generate theory. What is important in grounded theory is that the theory will be developed inductively from the data. While the paradigm according to (Neuman, 1991) is a framework or set of assumptions that explain how the world is perceived in which a scientific paradigm includes its basic assumptions, important questions to be answered or puzzles to be solved, research techniques used, and what kind of research examples. According to Kuhn (1970), a paradigm is a set of values and techniques shared by members of the scientific community, which acts as a guide or map, determining the types of problems scientists should tackle and the types of explanations acceptable to them. This paradigm is based on three perspectives: epistemology, ontology, and methodology [28].

Based on these theories, this expedition belongs to the type of qualitative research with a grounded theory approach, which aims to analyze empirical data to produce a new paradigm [28] to develop social science theory (hypothesis-deductive) [15-16]; [22-24]; [25-26]; [27] as listed in the Appendix (**Photos 135-158**). In the dialectical cycle theory of science (thesis-antithesis-synthesis-new thesis), the deductive hypothesis that we formulated in this study can be redeveloped by the next researcher to produce new deductive hypotheses. And so, on so that theoretically social science continues to develop. Besides that - for practical purposes - in the conclusion, the impact factor is also formulated as a follow-up consideration by the government or relevant stakeholders in overcoming development problems in the SWJ area.

4. DEVELOPMENT POLICY IN WEST JAVA PROVINCE

4. 1. Development Policy

Several development policies in West Java include (1) Government Regulation of the Republic of Indonesia Number 13 of 2017 concerning Amendments to Government Regulation Number 26 of 2008 concerning National Spatial Planning; (2) Presidential Regulation of the Republic of Indonesia Number 87 of 2021 concerning Acceleration of Development of the Rebana Area and Southern West Java; (3) Regional Regulation of West Java Province Number 22 of 2010, concerning Spatial Planning of West Java Province of 2009-2029; (4) West Java Provincial Regulation Number 28 of 2010 concerning Development of the Southern West Java Region in 2009-2029 and (5) West Java Provincial Regulation Number 12 of 2014 concerning Management of Metropolitan Development and Development and Growth Centers in West Java. Even in the tourism sector, several regencies and cities have set regulations. Garut Regency – for example – has enacted Garut Regency Regional Regulation No. 2 of 2019

concerning the Regional Tourism Development Master Plan. The area has ten leading natural tourism spots [29]. This study focuses on the implementation of the policies of the Presidential Regulation of the Republic of Indonesia Number 87 of 2021, the Regional Regulation of the Province of West Java Number 28 of 2010, and the Regional Regulation of the Province of West Java Number 12 of 2014, especially in regional development in PPW Palabuanratu, PPW Rancabuaya, and PPW Pangandaran in the fields of tourism, agriculture, plantations, and animal husbandry, development of electrical energy potential as well as regional infrastructure imbalances in the SWJ area.

In essence, some of these policies regulate spatial patterns for the development of protected areas and the development of cultivation areas as well as control of urban areas and encourage socio-economic growth in underdeveloped (rural) areas. In addition, the policy aims to minimize the development gap between urban areas (WWJ, CWJ, and NWJ) with rural areas (SWJ).

The spatial pattern development policy in West Java Province is directed at: (a) the development of protected areas and (b) the development of cultivation areas. Some of the most important things that must be adhered to in implementing protected area development policies include achieving a protected area of at least 45% and the quality of the protected area must be maintained. As for the development of cultivation areas, several important things that must be implemented include (a) rice fields, agriculture, plantations, forestry, animal husbandry, and fisheries; (b) integrated and sustainable coastal area management; (c) development of cultivated land and natural resources in undeveloped (rural) areas; (d) urban vertical housing; and (e) national defense and security [30-31]. However, many productive rice fields in urban areas have been eroded by housing and other urban facilities. This condition requires policies and planning for mapping built-up areas, especially in urban areas. Specifically, in the SWJ area, the focus is on developing the potential of natural and regional resources in PPW Palabuanratu, PPW Rancabuaya, and PPW Pangandaran.

4. 2. Area Coverage and Development Direction

Of the four regions in West Java Province (WWJ, CWJ, NWJ, and SWJ), in the process of implementing development, it is further divided into 6 Development Areas (WP), namely first, WP Bodebekpunjur (urban area), covering Bogor City, Bogor Regency, City Bekasi, Bekasi Regency, Depok City, and several areas in Cianjur Regency. WP Bodebekpunjur Center is domiciled in Bogor City (WWJ). In this city, there is the Presidential Palace of the Republic of Indonesia and the Bogor Botanical Gardens. Bogor Botanical Gardens is the center for germplasm conservation of Indonesia's plant biodiversity. This park can be designated as a UNESCO World Heritage Site.

Second, WP Purwasuka, covering Purwakarta Regency, Subang Regency, and Karawang Regency. Purwakarta Regency is the center of WP Purwasuka.

Third, WP Ciayumajakuning, covering Cirebon Regency, Cirebon City, Indramayu Regency, Majalengka Regency, Kuningan Regency, and several areas in Sumedang Regency. WP Purwasuka and WP Ciayumajakuning are mostly located in the NWJ area. WP Ciayumajakuning is domiciled in Cirebon City. This city is an old city, rich in the history of the kingdoms and civilizations of the Sundanese and West Javanese people, especially Islamic civilization, and culture.

Fourth, WP Bandung Basin Special Area (WP KK Cekungan Bandung - Capital of West Java Province), covering Bandung City, Bandung Regency, West Bandung Regency, Cimahi City, and some areas in Sumedang Regency. This WP center is in Bandung City (CWJ).

Fifth, WP Priangan Timur (Priatim)-Pangandaran, covering Garut Regency, Tasikmalaya Regency, Tasikmalaya City, Ciamis Regency, and Banjar City. The WP center is in located Garut Regency.

Sixth, WP Sukabumi and its surroundings, covering Sukabumi Regency, Sukabumi City, and several areas in Cianjur Regency. Sukabumi City is the center of this WP development activity. WP Priatim-Pangandaran and WP Sukabumi are generally located in rural areas (SWJ); except Sukabumi City.

The hierarchy of the Regional Spatial Plan for the development of West Java Province includes three National Activity Centers (PKN), three Regional Activity Centers (PKW), one Promotion Area Activity Center (PKWp), and two Local Activity Centers (PKL). PKN includes PKN Metro Bodebek, PKN Metro Bandung, and PKN Metro Cirebon. Specifically in the development of SWJ, two PKWp and one PKWp were formed, namely the Pelabuhanratu PKW (in the west), Pangadaran PKW (in the east), and the Rancabuaya PKWp (in the center). Meanwhile, PKL includes PKL Sindangbarang and PKL Pameungpeuk.

Urban development in West Java is faced with several problems, including the problem of land conversion, the narrowing of productive agricultural land by residential areas, and environmental damage. This is in accordance with the opinion of Hardy, et al. (2022) that urban communities are faced with problems of land use, competition for housing, security, transportation, and protection of environmental functions [32]. Positive land use change can result in many ecosystem services and community livelihoods [33], but policy defections and illegal land use activities often hinder conservation goals, leading to serious conflicts. Conservation policies should ensure compliance and maximize conservation success, impacting food security and/or farmers' incomes [34]. The Indonesian government's policy to limit the development of built-up area use in metropolitan areas and big cities aims to maintain a balance of urban-rural development [31]. Similarly, the policy in West Java Province, the development of aquaculture conservation areas is directed at the development of environmentally friendly areas. The SWJ area is a mainstay area in the development of environmentally sound regional development. The Priatim-Pangandaran Development Area and the Sukabumi Development Area and its surroundings are the two main areas in SWJ. Meanwhile, the Bodebekpunjur Development Area, Purwasuka Development Area, Ciayumajakuning Development Area, and Bandung Basin (Cekungan Bandung) Development Area are characterized by urban areas are empirically directed at developing metropolitan areas, such as Jakarta. Meanwhile, SWJ is directed to become an agropolitan and minapolitan area. Agropolitan focuses on the development of land natural resources (agriculture, plantations, livestock, freshwater fisheries, tourism, development of electrical energy, etc.). Meanwhile, Minapolitan focuses on the development of marine resources (marine industry, capture fisheries, marine tourism, development of ocean wave electrical energy, etc.).

Metropolitan Development and Regional Growth Centers (PPW) in West Java Province refers to West Java Provincial Regulation Number 12 of 2014 concerning the Management of Metropolitan Development and Growth Centers in West Java. Metropolitan coverage includes Bodebekkarpur Metropolitan, Greater Bandung Metropolitan, and Greater Cirebon Metropolitan. Meanwhile, PPW developed in the SWJ area includes PPW Palabuhanratu, PPW Rancabuaya, and PPW Pangandaran.

PPW Palabuhanratu covers five sub-districts (out of a total of 47 sub-districts) in Sukabumi District, namely Cisolok District, Cikakak District, Palabuhanratu District, Simpenan District, and Ciemas District. PPW Rancabuaya covers five sub-districts, namely four sub-districts (out of 42 sub-districts) in Garut Regency, namely Caringin District, Cisewu District, Bungbulang District, and Mekatmukti District, and one sub-district (out of 32 sub-districts) in Cianjur Regency, namely Cidaun District. While PPW Pangandaran covers five sub-districts (out of 10 sub-districts) in Pangandaran Regency, namely Cijulang District, Parigi District, Sidamulih District, Pangandaran District, and Kalipucang District.

The three PPWs have regional potentials and advantages such as marine tourism, mountainous nature tourism, tourist attractions, traditional arts tourism, etc. The potential and advantages of the PPW Palabuhanratu area can be seen in **Photos 2-10**; PPW Rancabuaya in **Photos 11-24**; PPW Pangandaran is shown in **photos 25-32**.

First, the direction of potential development of PPW Palabuhanratu is described in the following table [35]:

Table 1. Potential Development Directions for PPW Palabuhanratu

No.	Districts	The Potential and Direction of the Development of PPW Palabuhanratu
1.	Cisolok	Tourism: Ciptagelar Indigenous People, paragliding and hang gliding at Habibie Peak Agro: smallholder rubber, cloves, and durian Marine: capture fisheries
2.	Cikakak	Tours: surfing Agro: smallholder rubber, cloves, and durian Marine: capture fisheries, land fish farming
3.	Palabuhanratu	Government: The administrative center of Sukabumi Regency and urban areas Tours: Citarik River rafting Energy: Steam power plant (PLTU) Jabarsel II (3x350 MW) Marine: Ocean/Nusantara ports, marine industry
4.	Simpenan	Tourism: natural forest “Pakidulan” Agro: rubber, timber Mining: gold mine Marine: capture fisheries
5.	Ciemas	Tours: Ciletuh Geopark, Animal Sanctuary, Panenjoan Paragliding Agro: coconut, timber Mining: gold mine Air transportation: Citarate Airport (Ciracap) Marine: capture fisheries

Source: [35]

The PPW Palabuanratu development model is supported by one of the leading 'archaeological stone tourism', namely the Ciletuh Geopark which has been confirmed as a Global Geopark Network by UNESCO (2018). Since being inaugurated by UNESCO, this geopark has experienced a high number of tourists (14,723,559 visitors) in 2019-2020. However, the implementation of this regional development policy has not run optimally, marked by the difficulty of accessibility and inadequate facilities and infrastructure [36]. 'Ancient Stone Tourism' such as Geopark Ciletuh is also owned by several countries, such as Arizona, and the USA [37]. The PPW Palabuanratu development model is shown in **Photos/images 135-136**.

Second, the direction of potential development of Rancabuaya PPW is described in the following table [38].

Table 2. Potential Development Directions for PPW Rancabuaya

No.	Districts	The Potential and Direction of the Development of PPW Rancabuaya
1.	Caringin	<p>Tourism: Beach tourism, agro-tourism, special interest tourism, technology tourism (LAPAN/BRIN)</p> <p>Agro: timber, coconut, palm sugar, cayenne pepper, cassava, peanuts, corn, livestock</p> <p>Energy: mix energy for electricity (hydropower, wind, solar, ocean waves)</p> <p>Marine: capture fisheries, lobster</p> <p>Mining: agate</p> <p>Airport: Gunung Datar Pioneer Airport (Rancabuaya)</p>
2.	Cisewu	<p>Tourism: nature tourism, agro-tourism</p> <p>Agro: timber, pepper, palm sugar, cayenne pepper, cassava, peanuts, corn, livestock</p> <p>Energy: mix energy for electricity (hydropower, wind, solar, ocean waves)</p> <p>Fisheries: freshwater fish farming</p>
3.	Bungbulang	<p>Tours: rafting the Cikandang River</p> <p>Agro: timber, coconut, palm sugar, cayenne pepper, cassava, peanuts, corn, livestock</p> <p>Energy: mix energy for electricity (hydropower, wind, solar, ocean waves)</p> <p>Processed food: "opak bungbulang"; "wajit bungbulang"</p> <p>Fisheries: freshwater fish farming</p> <p>Mining: agate</p>
4.	Mekarmukti	<p>Government: candidate for the new autonomous regional capital (DOB) of South Garut</p> <p>Tours: beach tours; Cikandang River rafting</p> <p>Agro: timber, cayenne pepper, cassava, peanuts, corn, livestock</p>

		Energy: mix energy for electricity (hydropower, wind, solar, ocean waves) Marine: capture fisheries
5.	Cidaun	Tours: beach tours Agro: timber, coconut, palm sugar, cayenne pepper, cassava, peanuts, corn, livestock Energy: mix energy for electricity (hydropower, wind, solar, ocean waves) Marine: capture fisheries

Source: [38]

The PPW Rancabuaya development model is shown in the **Photos/images 137-140**. Tourists who will visit Rancabuaya through the Bandung-Pangalengan-Cisewu-Rancabuaya vertical corridor will enjoy the beautiful natural scenery at the Cukul Tea Plantation and the Cileunca Hydroelectric Power (PLTA), Pangalengan District, Bandung Regency. The beautiful panorama of the legendary plantation area has existed since the Dutch era as shown in **Photos 33-42**.

Third, the direction of potential development of PPW Pangandaran is described in the following table [39]:

Table 3. Potential Development Directions for PPW Pangandaran

No.	District	The Potential and Direction of the Development of PPW Pangandaran
1.	Pangandaran	Tours: Water Park, Pantai Indah (Beautiful Beach), Nature Park Agro: coconut, clove plantations Livestock: horses, cows, native chickens Fisheries: marine fishery production (1,147 tons), pond fisheries (14 ha) freshwater/pond fishery (9.5 ha), capture fishery
2.	Kalipucang	Tours: Karang Nini Tourism Area, Karapyak Beach, Wilhelmina Tunnel Agro: coconut plantations Livestock: duck farm Fisheries: capture fisheries
3.	Sidamulih	Tourism: 'hajat laut' (sea party) Agro: cloves, coffee Livestock: horse breeding, native chickens Fisheries: freshwater fish farming, capture fisheries
4.	Parigi	Government: Pangandaran Regency government service center Tours: Wana Wisata Citumang, Batu Hiu Beach Agro: head, coffee, peanuts Livestock: cows, horses, goats, ducks

		<p>Fisheries: marine fisheries production (348 tons), pond fisheries (22 ha), freshwater/pond fisheries (42 ha), capture fisheries</p> <p>Transportation: Nusawiru Airport</p>
5.	Cujulang	<p>Tour: Batu Karas Beach, Green Canyon, Cukang Taneuh</p> <p>Agro: coconut</p> <p>Livestock: broilers, cows, goats</p> <p>Fisheries: marine fishery production (651.69 tons), pond fishery (35 ha), freshwater/pond fishery (31 ha); capture fisheries</p>

Source: [39]

In addition to having superior marine tourism and beautiful river tourism, PPW Pangandaran has an annual tourism agenda, namely 'sea party' (sea party). This kind of 'attraction tour' is also found in other countries such as Sri Lanka [40]. The PPW Pangandaran development model is shown in **Photos 142-148**.

Besides having some potential in the fields of tourism, agriculture, plantations, livestock, etc., PPW Palabuanratu, PPW Rancabuaya, and PPW Pangandaran also have water resources for electrical energy. The company Schneider Electric Francis conducted a series of surveys to develop this potential, namely the energy mix (integrating hydropower, wind, solar, and ocean waves) in the Rancabuaya area and its surroundings (South Garut). We conducted an expedition to survey the water potential as shown in **Photos 43-62**.

The SWJ area has a very large land area and undeveloped marine potential (Indian Ocean). The land is very suitable if it is developed into an agropolitan area and the sea as a minapolitan area. Some potential natural resources in agriculture, plantation, animal husbandry, etc. are strongly supported by its fertile natural conditions. Various kinds of vegetables thrive there, as well as corn and peanuts. In the plantation sector - apart from patchouli, cloves, tea, pine, and cocoa - the SWJ region is known for producing high-quality palm sugar and coconut sugar. A characteristic of livestock development is that in the SWJ area there are many livestock that is grazed, such as cows, sheep, and goats. We can see cattle herders and sheep or goats roaming along the horizontal road along the corridor of Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran. This potential can be seen in **photos 63-82**. However, the potential of these natural resources is still not fully developed – including the development of the potential of the marine industry – so it can lead to disparities in income and welfare between the SWJ community and urban communities in WWJ, CWJ, and NWJ areas. In this case, the government needs to seriously evaluate the implementation of various policies in the development of the SWJ area.

5. DEVELOPMENT INEQUALITY

Inequality in development is not only experienced by the provinces of West Java and Indonesia but also experienced by several developed countries. China experiences income inequality between urban and rural areas [41-43]. Germany experiences inequality in health care [44], fertility inequality in European countries [45], and inequality in internet services in the rural United States [46].

Even developing countries such as Africa experience inequality in living standards [47], urban-rural inequality in Vietnam [48], inequality in education services in Malaysia [49], and inequality in built-up areas in Vietnam, Laos, Cambodia, and Myanmar [50].

Indonesia experiences inequality between regions [51], including in West Papua [52], whereas this province has a lot of potential for Coastal Tourism such as in Teluk Wondama Regency [53]. Another inequality in Indonesia is the development of transportation corridors between big and small cities, such as the Serang-Jakarta-Karawang corridor, the Jakarta-Bandung corridor, the Cirebon-Semarang corridor, the Semarang-Yogyakarta corridor, and the Surabaya-Malang corridor [54], as well as the Kebumen-Purworejo corridor, Central Java Province [55].

Another factor that causes inequality between regions is the high expansion of the built-up area in urban areas such as in Aceh Province after the 2004 tsunami [56], in Bandung Basin (Cekungan Bandung) [57], in Bogor City [58], in Salatiga City [59], health inequality [60], employment inequality [61], inequality in entrepreneurship, tourism, and agricultural services [62], inequality in human development index [63]; infrastructure inequality [51], [64-65]; inequality between capital owners and small farmers [66-68]; inequality in village government services [69], as well as inequality in defense and security stability [70-71].

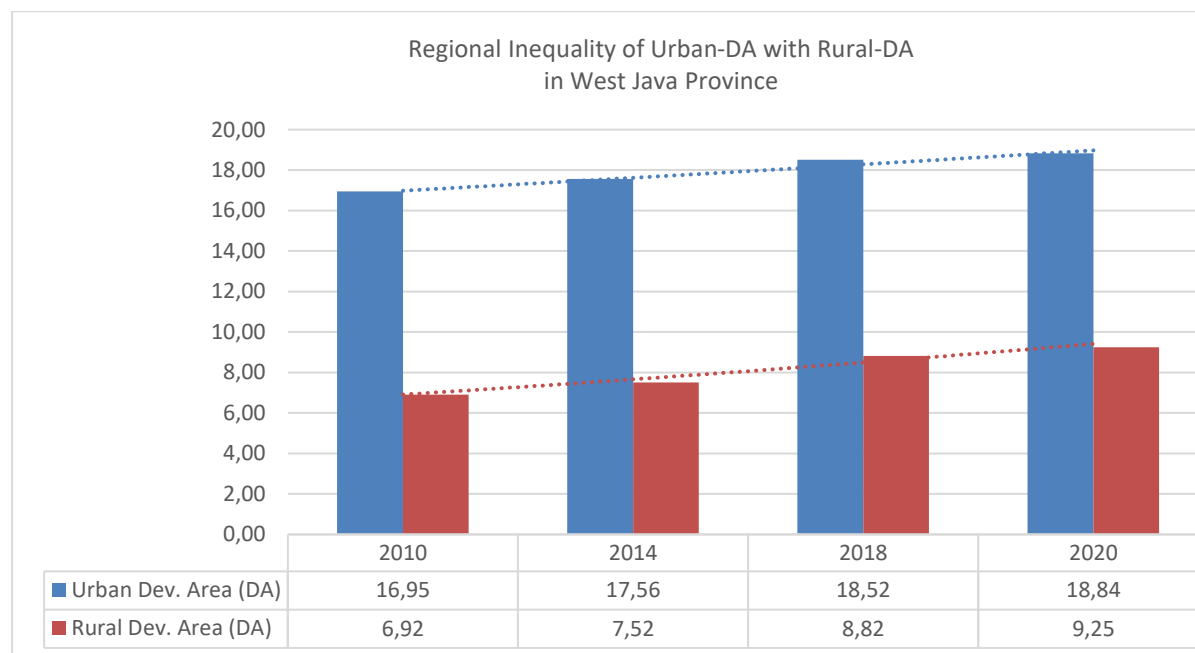
5. 1. Regional Inequality

West Java Province experiences relatively extreme regional inequality, such as income inequality [72]; disparities between regions such as between NWJ (0.0261) with SWJ (0.0085) [73]. In West Java, the 'relatively lagging' regions are 36.6%, 'fast developing' 32.6%, "developed and fast growing" 16.3%, and "developed but depressed" 14.5% [74]. If policy implementation in SWJ is hampered, "relatively lagging" regions have the potential to not develop as in South Garut [69]. The management of rural agricultural resources in SWJ is still dominated by the power of the rich [66]; the occurrence of exploitation of small farmers (tenants) by the party who rents out in SWJ [67]. Regional inequality in road and bridge connectivity is experienced by SWJ (only 28.24%), while NWJ (71.76%) [63]. In addition, the SWJ region experiences inequality in regional superior management in the fields of animal husbandry, fisheries, marine affairs, and tourism [75]. Whereas the area has several regional potentials such as agribusiness, agroindustry, marine industry, and integrated tourism. In addition, the SWJ area has the potential for very abundant fisheries resources [76]. Potential development in SWJ needs to be supported by adequate infrastructure and production tools, such as appropriate technology in processing agribusiness, fisheries, tourism facilities, and so on.

The stark contrast in the infrastructure sector between urban areas (WWJ, CWJ, and NWJ) with rural areas (SWJ) includes road and bridge facilities and infrastructure. The WWJ area has freeways such as the Jakarta-Bogor-Ciawi (Jagorawi) Toll Road; Jakarta-Cikampek toll road, and inner-city toll roads such as the Bogor-Serpong toll road. The WWJ area which borders the DKI Jakarta Province also benefits from the Jakarta Inner Ring Road. The NWJ area already has access to the Jakarta-Cikampek-Palimanan toll road, and access to the Cileunyi-Sumedang-Dawuan (Cisumdawu) toll road. Likewise, the CWJ area – apart from having a national road axis and a provincial scale road – this urban area enjoys the smooth running of the Cikampek-Purwakarta-Padalarang-Bandung Toll Road, toll roads that connect CWJ-NWJ, such as the Cisumdawu Toll Road. Meanwhile, transportation facilities in the SWJ

area are very lagging behind, there are even villages that do not yet have access to four-wheeled vehicles.

Based on the data on the growth of built space (physical area) that we obtained from the results of previous studies [77] and BPS data [78], the regional disparity between rural and urban areas (2010-2020) is shown in the following graph:



Graph 1. Regional Inequality in the Development of Developed Land between Urban and Rural in West Java Province (2010-2020)
Source: [77-78]

5. 2. Inequality of Rural Infrastructure

The most concerning disparity in the SWJ area is in the field of rural road vehicle infrastructure (which has the status of village roads and district roads). In daily activities such as the mobility of goods and services, many still use motorcycle taxi (*ojeg*) services on muddy dirt roads, and even people still must continue their journey on foot through the bushes because they cannot be accessed by two-wheeled vehicles. For example, when we and officials from Cikarang Village, Cisewu District (South Garut) went on an expedition (2011) in the area, the motorcycle taxi service helped us. This expedition was aimed at surveying the proposed construction of a new vertical road in the Pangalengan-Talun-Santosa-Tato-Puncak Hamerang-Tiwugenteng-Amlong-Pasir Batara-Cisasak-Rancabuaya corridor. Expedition conditions are shown in **Photos 83-94**. Conceptually, the proposed construction of the new corridor road is as stated in **Photo/image 141**.

5. 3. Community Participation and Aspirations in Overcoming Inequality

Ecological policies, institutions, and participation are shaped and constrained by historical legacies, dictatorships, and economic orthodoxy as opposed to sustainability [79].

Any intervention of 'community' aspirations should be combined with other programs to support schools and address inequalities between neighborhoods [80]. Both opinions indicate that community participation and aspirations need to be considered in social development, although in practice there are still several problems, including in the practice of implementing development policies in West Java.

Some people participate and channel their aspirations through the executive and legislative institutions (central and regional governments). Legislative institutions include the Regency Regional People's Representative Council (Regency/City DPRD), the Provincial Regional People's Representative Council (Provincial DPRD), the Indonesian People's Representative Council (DPR RI), and the Regional Representative Council (DPD RI/Senators). Several forms of aspiration – apart from the problem of disparity – are the proposals for the formation of new autonomous regions (DOB). For remote areas, this is considered important because of the wide range of control, effectiveness of public services, and equitable distribution of welfare in rural communities. In the SWJ region, the proposals for new autonomous regions include South Garut, South Tasikmalaya, and South Cianjur. Meanwhile, several new autonomous regions have been proposed in the WWJ, CWJ, and NWJ areas, including West Bogor, East Bogor, North Sukabumi, West Indramayu, East Bandung, North Garut, North Bekasi, North Subang, Cikampek City, Lembang City, Cipanas City, etc. However, since the fall of the New Order government (President Soeharto, 1998) there are still many who have not received approval from the central government, except for Pangandaran Regency (2012).

In addition, the people who are members of the SWJ Forum (Forum Jabar Selatan/Forjabsel), participate in expressing their aspirations for the problems of social inequality and development in the SWJ area. The effort was submitted to the governor and DPRD of West Java. The government then stipulates the West Java Provincial Regulation Number 28 of 2010, concerning the Development of the Southern West Java Region in 2009-2029. The realization of the regulation is the establishment of the Southern West Java Regional Development Agency (BPW Jabar Selatan), and the commencement of the construction of a vertical corridor for the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya road. The implementation of policies and absorption of public aspirations, among others, carried out working visits from members of the legislature (DPRD of West Java Province) and officials of the West Java Province Public Works (Dinas Pekerjaan Umum Provinsi) to conduct expeditions and evaluate the construction of vertical corridors. Activity documents are listed in **Photos 95-102**. The construction of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya vertical road can minimize the inequality of road infrastructure experienced by the people of the SWJ area. Since 2011, people have been able to enjoy smooth roads with hot mixes as shown in **Photos 103-106**.

To the central government, Forjabsel conveyed his aspirations through DPD RI member (Senator) Prof. Dr. H. Mochammad Surya (West Java Regional Representative). Senator Prof. Dr. Mochamad Surya followed up on the people's aspirations to the central government, namely to the coordinator minister for Economic Affairs of the Republic of Indonesia, Dr. Hatta Radjasa. As a result, the central government helped Rp 1 trillion for the construction of the SWJ trans road corridor in the Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran corridor, which was sourced from the 2013 State Budget (APBN). The documents are shown in **Photos 107-114**.

Another evaluation result from the implementation of the SWJ infrastructure development policy – especially the problem of road physical development and the threat of environmental damage – is the occurrence of landslides on the physical roads that have been built. This is due to the steep terrain, and environmental damage such as the vertical road in the Talegong-Cisewu-Rancabuaya corridor. Another factor is environmental damage and public awareness in protecting the biological environment. Excavation of building materials on steep terrain, logging of forests, etc. are the main factors that need to be evaluated, including the destruction of Mount Amlong, Cisewu District (South Garut), which has been converted into community agricultural fields (**Photos 115-128**). Similarly, the damage to the beach was due to iron sand excavation, as happened in South Cianjur and South Tasikmalaya (Cipatujah District). This is as shown in **Photos 129-134**.

6. REGIONAL DEVELOPMENT FRAMEWORK

Based on the results of the expedition to the potential of natural resources in the fields of tourism, energy, agriculture, plantations, and animal husbandry as well as development imbalances experienced by the SWJ area, in this paper we offer several frameworks:

First, the development model framework for each PPW (Growth Center Region), namely PPW Palabuanratu (listed in **Photos/pictures 135-136**); PPW Rancabuaya (listed in **Photo/picture 137-140**); and PPW Pangandaran (listed in **Photo/image 142-148**). In accordance with the wealth of natural resources they contain, the focus of the three PPW activities is the development of agropolitan and minapolitan.

Second, is the concept of "Jamparing" (Ringroad Infrastructure Network) SWJ or "Jamparing Jabsel". The concept offers a model for developing an infrastructure interconnection network "SWJ circle" to the WWJ and CWJ areas. Some of the most needed infrastructures are toll road network interconnection, railway network, airport, irrigation, electricity, tourism infrastructure, agropolitan and minapolitan area infrastructure, port infrastructure (trade and military), health and education infrastructure, etc. The concept of "Jamparing SWJ" is as shown in the **Photos/images 149-155**.

Third, Indonesia has the potential to become a "new maritime axis of the world". As an archipelagic country, geopolitically and geostrategically Indonesia is located at the "crossroads of the world", namely the Pacific Ocean with the Indian Ocean and the Asian Continent with the Australian Continent. The SWJ region is in the Indian Ocean region. From this strategic aspect, Indonesia has the potential to become the "new axis of the world's maritime". This can be seen in **Photos/images 156-157**.

In addition to these three concepts - based on published articles - to minimize regional inequality in the SWJ region, we also offer the ID-StM Framework (Ishikawa Diagram & Socio-technical Method) [2]. This model is the development of two combined theories, namely the Ishikawa Diagram [81-82] with the concept of the Sociotechnical Method [83-87].

According to Undang, Heri, et al. (2021), the ID-StM Framework was created to map the problems and potentials of the SWJ with the following steps: (1) conduct a 'problem mapping' of regional inequality; (2) the 'method' developed is a regional development model that is environmentally sound (not polluting the environment; oriented to the green economy and blue economy) such as agribusiness, agroindustry, marine industry, and ecotourism so that the area becomes an agropolitan area. The "agropolitan" model is different from the "metropolitan"

development model which results in the agglomeration of urban industries and tends to damage the urban biological environment; (3) maps out regional comparative advantages; and (4) set the ID-StM Framework as follows in **Photos/image 158**.

The focus of ID-StM analysis is oriented to 5 indicators, namely 'method', 'material', 'machine', and 'man'. *First*, the "method indicator" is an 'analysis knife' to identify problems and solve problems based on field phenomena which shows that the regional development model is still a top-down policy, does not involve community participation (bottom-up), government policies in the environmental sector are still conceptual so that it can have an impact on the threat of increasing environmental damage and inequality between regions. Starting from the ID-StM Framework, the approach models offered are agropolitan development, green economy, and blue economy (non-polluting environment). *Second*, from "material indicators" (local potential), natural resources in the marine sector (Indian Ocean coast), agriculture, plantations, fisheries, livestock, and tourism are still not managed optimally. *Third*, "machine indicators" (supporting technology and appropriate technology) such as land, sea, and air infrastructure, as well as social and public facilities, are still very minimal; supporting facilities are not adequate. *Fourth*, "manpower indicators" such as the Human Development Index (HDI), community competence, and apparatus capacity are still very limited [2].

This concept can be taken into consideration by the central and local governments in planning and implementing various development policies in West Java Province.

7. CONCLUSION

For development in West Java Province, the government has several policies. These policies – especially for the development of the SWJ area – include Presidential Regulation of the Republic of Indonesia Number 87 of 2021, Regional Regulation of West Java Province Number 28 of 2010, and Regional Regulation of West Java Province Number 12 of 2014. Based on our expedition activities – especially in PPW Palabuanratu, PPW Rancabuaya, and PPW Pangandaran – these areas have abundant natural resources such as tourism, agriculture, plantations, and livestock, as well as the potential for electrical energy. However, our evaluation results during the expedition showed that the SWJ area was still experiencing quite extreme development inequality, especially in rural infrastructure. If the WWJ, CWJ, and NWJ areas already enjoy smooth toll roads with other infrastructure facilities, the rural infrastructure we found still uses motorcycle taxis and even must walk (**Photos 83-94**). Thus, the abundance of SWJ's natural resource potential is "not directly proportional" to the level of infrastructure progress and the welfare of the local community. If viewed from the aspect of policy evaluation, the government needs to reformulate policies to minimize this inequality. This has been going on for twelve years if calculated since the stipulation of the West Java Provincial Regulation Number 28 of 2010.

To minimize this inequality – conceptually – we offer: *first*, from the aspect of developing natural resource potential, we offer three development frameworks for PPW Palabuanratu (**Photo/image 135-136**), PPW Rancabuaya (**Photo/image 137-140**), and infrastructure new for rural vertical roads (**Photo/image 141**) and PPW Pangandaran (**Photo/image 142-148**). The three PPWs have a future to be developed into agropolitan and minapolitan areas (green economy and blue economy). *Second*, from the aspect of infrastructure inequality, we offer the concept of "Jamparing SWJ" ("Jamparing Jabsel"). Some basic infrastructure priorities include

land roads (toll roads and trains), air infrastructure (airports), and supporting infrastructure for agropolitan and minapolitan areas. *Third*, from the geopolitical and geostrategic aspects, SWJ is located on the coast of the Indian Ocean, so it has the potential to be developed into a “new world maritime axis”. The three frameworks are equipped with a framework from previous research, namely ID-StM Framework (**Photo/image 158**).

The results of this study are expected to be useful for the government and stakeholders who are very concerned about developing the SWJ. This study is also expected to have an impact on increasing the competitiveness of local superior products, the income of poor rural communities, mobility of goods and services from rural to urban and from urban to rural, as well as increasing the rural infrastructure index.

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APPENDIX

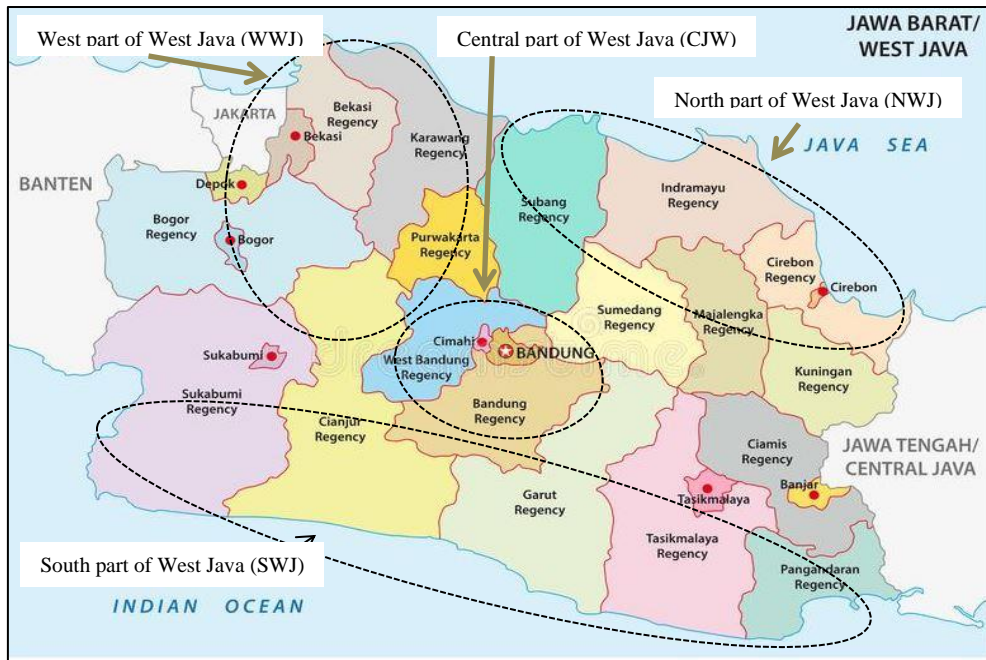


Photo 1. Four Growth Center Areas in West Java (WWJ, CWJ, NWJ, and SWJ).



Photo 2. Hotels on the coast of Palabuanratu Beach (South Sukabumi).



Photo 3. Palabuanratu Beach, behind a shady tree.



Photo 4. Surade Beach (South Sukabumi), rocky beach.



Photo 5. Surade Beach (South Sukabumi), still natural.



Photo 6. Surade Beach (South Sukabumi), clear.



Photo 7. Cimandiri River Bridge: an old bridge built by the Dutch (1923) across a river that empties into the Indian Ocean in (Surade District, South Sukabumi).



Photo 8. Cimandiri Bridge Construction (Surade District, South Sukabumi), stainless steel material.



Photo 9. Coconut potency, Surade District (South Sukabumi).



Photo 10. Surade beautiful dancer, Surade District.



Photo 11. Welcome to Rancabuaya Beach (South Garut).



Photo 12. Villa in the Rancabuaya Beach (South Garut), dominated by wood.



Photo 13. Sunset at Rancabuaya Beach (South Garut), very suitable for contemplation.



Photo 14. Sunset at Rancabuaya Beach (South Garut), beautiful and clear beach.



Photo 15. The sea water is still clear at Rancabuaya Beach (South Garut).



Photo 16. Cicalobak Beach is still natural (in the Rancabuaya area, South Garut).



Photo 17. Welcome to Sayangheulang Beach, Pameungpeuk District (South Garut).



Photo 18. Villa in the Pameungpeuk District (South Garut), comfortable and natural.



Photo 19. Sayangheulang Beach, Pameungpeuk District (South Garut), a lot of sargassum for medicinal ingredients.



Photo 20. The wealth of coastal trees in Cibalong District (South Garut): endemic to the “Kaboja” tree.



Photo 21. Endemic wood “Kaboa” in the Leuweung Sancang Protection Forest: Cibalong District (South Garut).



Photo 22. The wealth of marine life in the Leuweung Sancang Protected Forest Beach, Cibalong District (South Garut): sargassum and marine biota are still preserved.



Photo 23. The wealth of marine life in the Leuweung Sancang Protected Forest Beach, Cibalong District (South Garut): beautiful and colorful.



Photo 24. The wealth of marine life in the Leuweung Sancang Protected Forest Beach, Cibalong District (South Garut): many kinds of beautiful sea slugs.



Photo 25. Welcome to Pangandaran Beach, Pangandaran District (Pangandaran Regency).

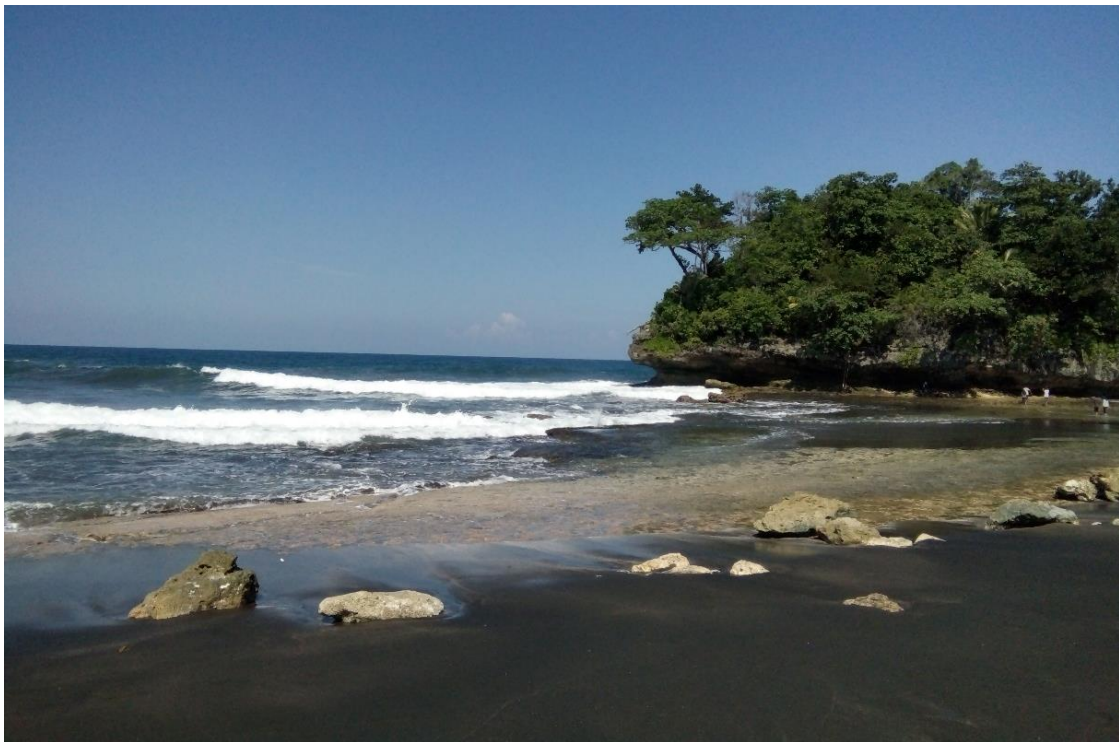


Photo 26. Pangandaran Beach, Pangandaran District (Pangandaran Regency), clear and natural seawater.



Photo 27. A family trip with family in Pangandaran Beach, Pangandaran District (Pangandaran Regency), is very suitable for a refreshing place.



Photo 28. Nusawiru Airport, Parigi District (Pangandaran Regency), tourist facilities to continue to be developed.



Photo 29. Pangandaran rafting, the river flows into the natural cave.



Photo 30. Pangandaran rafting, slippery rocks, always alert.



Photo 31. Rafting: adrenaline test...!



Photo 32. Rafting, through rocky rapids.



Photo 33. Welcome to Cukul Tea Plantation, Pangalengan District (Bandung Regency), a cool and fresh place.



Photo 34. Cukul Tea Plantation Factory, Pangalengan District, producing green tea since the Netherlands.



Photo 35. Villa in Cukul Tea Plantation, Pangalengan District, the garden administrator's resting place.



Photo 36. Cukul Tea Plantation, producer of green tea, Pangalengan District, green as far as the eye can see.



Photo 37. The water source at Cukul Tea Plantation, Pangalengan District, the water is clear and refreshing.



Photo 38. Situ Cileunca Hydroelectric Power Plant (PLTA), Pangalengan District, we are free to fish while refreshing.



Photo 39. Cukul Tea Plantation Tea Pickers, Pangalengan District, women who make a living for the family.



Photo 40. Cukul Tea Plantation Tea Pickers, Pangalengan District, weighing the harvest.



Photo 41. Morning sun at Cukul Tea Plantation, Pangalengan District, is very beautiful and calming.



Photo 42. Morning sun and drizzle at Cukul Tea Plantation, Pangalengan District, the atmosphere is getting colder.



Photo 43. Schneider Elektrik Francis expedition team for a survey of mix energy developers (water, solar, wind, and ocean wave mix energy) in South Garut (2013).



Photo 44. The Cirompang River is one of the potential rivers for the development of the mix energy in South Garut, with abundant water.



Photo 45. The Cilayu River is one of the potential rivers for the development of the mix energy in South Garut, clear water.



Photo 46. The Cilayu River is one of the potential rivers for the development of the mix energy in South Garut, clear water.



Photo 47. Mix energy development survey on the Cirompang River, South Garut, discussing in the field.



Photo 48. Mix energy development survey on the Cilayu River, South Garut, dominated by black stone.



Photo 49. Mix energy development survey on the Cilaki River (Rahong), South Garut, river flows between two hills, very suitable for dam construction sites.



Photo 50. Mix energy development survey on the Cilaki River (Rahong), South Garut, under this bamboo bridge is very steep.



Photo 51. Exploring the trail in the mix energy development survey on the Cilaki River (Rahong), South Garut, even though we are going down steep terrain, we are still enthusiastic.



Photo 52. Using the services of a motorcycle taxi driver in a survey on the development of the Energy mix in the Cilaki River (Rahong), South Garut, rural infrastructure inequality.



Photo 53. Mix energy survey team with children in South Garut, our generation.



Photo 54. Francis' mixed energy expedition team had dinner with a traditional menu at Rancabuaya, South Garut, and we really enjoyed it.



Photo 55. Discussing the results of the mixed energy survey in Rancabuaya, South Garut, we are very serious.



Photo 56. Discussing the results of the mix energy survey in Rancabuaya, South Garut, study potential map.



Photo 57. Discussing the results of the mix energy survey in Rancabuaya, South Garut, transmission network map in West Java.



Photo 58. Francis' mixed energy expedition team discussed the survey results with academic Dr. Brian Yulianto lecturer at the Bandung Institute of Technology (ITB) at the ITB campus, Bandung City.



Photo 59. Francis' mixed energy expedition team in an audience with Senator Prof. Dr. Mochammad Surya at the DPD RI office in Bandung.



Photo 60. Discussion and socialization of the mixed energy development plan with local communities in South Garut, very responsive people.



Photo 61. Discussion and socialization of the mix energy development plan with local communities in South Garut, discussing in a very simple building.



Photo 62. Exchanging souvenirs, mix energy survey expedition team from Schneider Electric Francis, preparing to return to their country, see you again.



Photo 63. The Southern West Java (SWJ) region has a very wide potential of agricultural and livestock land as well as a marine for the development of agropolitan and minapolitan.



Photo 64. The Southern West Java (SWJ) region has a very wide potential of agricultural and livestock land as well as a marine for the development of agropolitan and minapolitan.



Photo 65. The Southern West Java (SWJ) region has a very wide potential for rice fields for the development of agropolitan and minapolitan.



Photo 66. The Southern West Java (SWJ) region has a very wide potential for rice fields for the development of agropolitan and minapolitan.



Photo 67. Farmer "curly chili" in South Garut, very fertile.



Photo 68. Vegetable "watercress", grow in a cool place.



Photo 69. The SWJ area is very potential for peanut plants in SWJ (South Sukabumi, South Cianjur, South Garut).



Photo 70. “Honje”: vegetable mix ingredients: potential spread throughout the SWJ area.



Photo 71. Intercropping: patchouli plant with “curly chili”, South Garut, grow in a fertile place.



Photo 72. Dried patchouli ready to be refined, South Garut.



Photo 73. Palm sugar (aren) as raw material for brown sugar is very potential in SWJ.



Photo 74. Palm sugar tappers in South Garut, meet on the expedition trip.



Photos 75. Coconut potential is very abundant in SWJ, grows very well on the coast of the Indian Ocean.



Photo 76. Pine tapper in South Garut, getting ready to harvest the sap.



Photo 77. Corn is one of SWJ's superior products: South Java Forum (Forjabsel) corn seed assistance to local farmers, Rancabuaya (Caringin District).



Photo 78. Herding cows on the side of the trans-SWJ road in the South Garut-Pangandaran corridor (Miramre Rubber Plantation, South Garut), was one of the sights during the expedition.



Photo 79. Beef cattle, the potential of South Cianjur, SWJ, limousine lineage.



Photo 80. Besides cows, buffaloes also grow in SWJ, buffalo before maturity.



Photo 81. Sheep and goat grazing area in South Garut, from a distance you can see sheep and goats grazing in a wide field.



Photo 82. Sheep grazing on the side of the trans-SWJ road in the South Garut-Pangandaran corridor (Mekarmukti District, South Garut), was one of the sights during the expedition.



Photo 83. The Expeditionary Team for Surveying the Puncak Hamerang-Amlong-Pasir Batara-Cisasak Road (Cikarang Village, Cisewu District, South Garut): fight for the inequality of four-wheeled road infrastructure.



Photo 84. Puncak Hamerang-Tiwugenteng-Amlong three-way junction is very damaged and unfit.



Photo 85. Puncak Hamerang-Tiwugenteng-Amlong way is very damaged and unfit.



Photo 86. Inequality in infrastructure, motorcycle taxis (ojeg) are the main means of transportation because they do not have four-wheeled roads, and even people have to walk on muddy roads: when we go on an expedition.



Photo 87. Inequality in infrastructure, motorcycle taxis (ojeg) are the main means of transportation because they do not have four-wheeled roads, and even people have to walk on muddy roads.



Photo 88. Motorcycle taxis (ojeg) transport firewood, pathetic.



Photo 89. The muddy trail at the top of Mount Amlong, through the slippery red ground.



Photo 90. The muddy trail at the top of Mount Amlong, through the muddy red ground.



Photo 91. At the top of Mount Amlong: the mountain has turned into a garden, through the path in the wild grass.



Photo 92. Residents of Mount Amlong, very simple house, economic inequality.



Photo 93. Take a break and enjoy food brought from home, very delicious with a menu of lalab, salted fish, chili sauce, and free-range chicken.



Photos 94. Take a break and enjoy food brought from home, let's add more...



Photo 95. The vehicle group of DPRD members (DPRD West Java Province) made a working visit to carry out the function of supervising the construction of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya vertical road, location in the Talegong area.



Photo 96. The vehicle group of parliaments (DPRD West Java Province) made a working visit to carry out the function of supervising the construction of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya vertical road, location in the Talegong area.



Photo 97. West Java Provincial DPRD member (Memo Hermawan; center) and the expedition team rest for a while in the Cisewu District area (South Garut).



Photo 98. Members of the DPRD (West Java Provincial DPRD) accept the aspirations of the SWJ community, location in the Rancabuaya hotel.



Photo 99. The Construction Process of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya Corridor Vertical Road, is dominated by red clay.



Photo 100. The Construction Process of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya Corridor Vertical Road.



Photo 101. In the construction process of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya Corridor Vertical Road, heavy equipment is on a steep cliff.



Photo 102. In the construction process of the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya Corridor Vertical Road, dismantle the boulder.



Photo 103. Since 2011 people have enjoyed the hotmix road in the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya corridor.



Photo 104. Since 2011 people have enjoyed the hot mix road in the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya corridor.



Photo 105. Since 2011 people have enjoyed the hotmix road in the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya corridor.



Photo 106. Since 2011 people have enjoyed the hotmix road in the Bandung-Pangalengan-Talegong-Cisewu-Rancabuaya corridor.

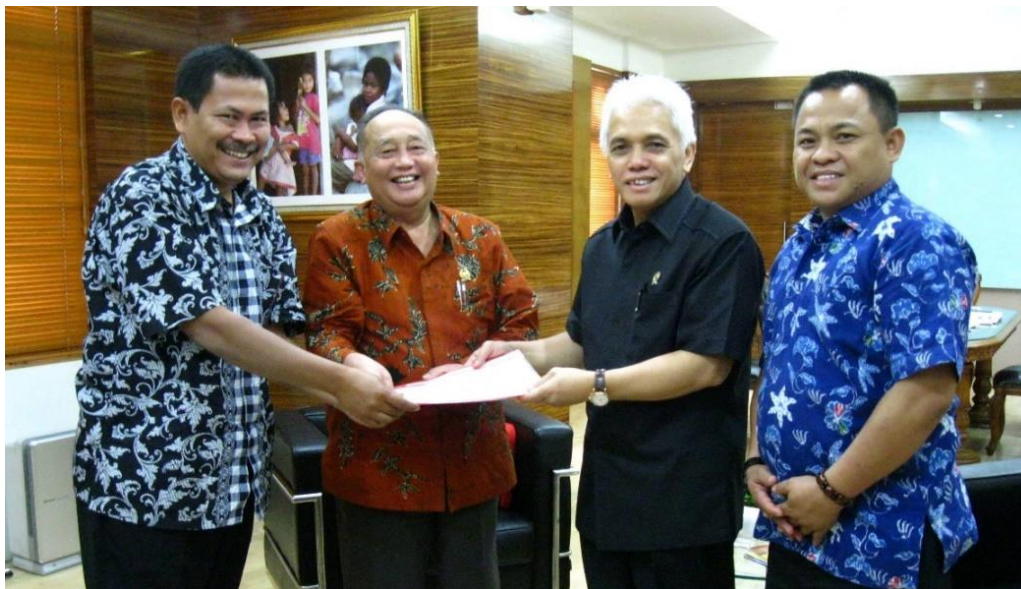


Photo 107. The submission of the *first* document on the proposed construction of the Trans SWJ horizontal road Corridor Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran from Member of the Regional Representative Council (DPD RI) Prof. Dr. H. Mochammad Surya & Expert Staff Senator Dr. H. Gunawan Undang, M.Si. to the Minister Coordinator for Economic Affairs Dr. H. M. Hatta Radjasa witnessed by Haerudin, S.Ag., M.H. (Member of Legislative/DPR RI).



Photo 108. Submission of the *second* document from Member of the Regional Representative Council (DPD RI) Prof. Dr. H. Mochammad Surya & Expert Staff Senator Dr. H. Gunawan Undang, M.Si. to the Minister Coordinator for Economic Affairs Dr. H. M. Hatta Radjasa.



Photo 109. Member of the Regional Representative Council (DPD RI) Prof. Dr. H. Mochammad Surya & Expert Staff Senator Dr. H. Gunawan Undang, M.Si. with the Minister Coordinator for Economic Affairs Dr. H. M. Hatta Radjasa witnessed by Haerudin, S.Ag., M.H. (Members of the Legislative/DPR RI). The construction of the Trans SWJ horizontal road received a APBN fund of Rp. 1 trillion for the Palabuhanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran corridor.



Photo 110. Supervision of the senator's expert staff (Dr. Gunawan Undang, M.Si.) for the repair of the Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran trans horizontal corridor: carry out supervisory functions as a Senator.

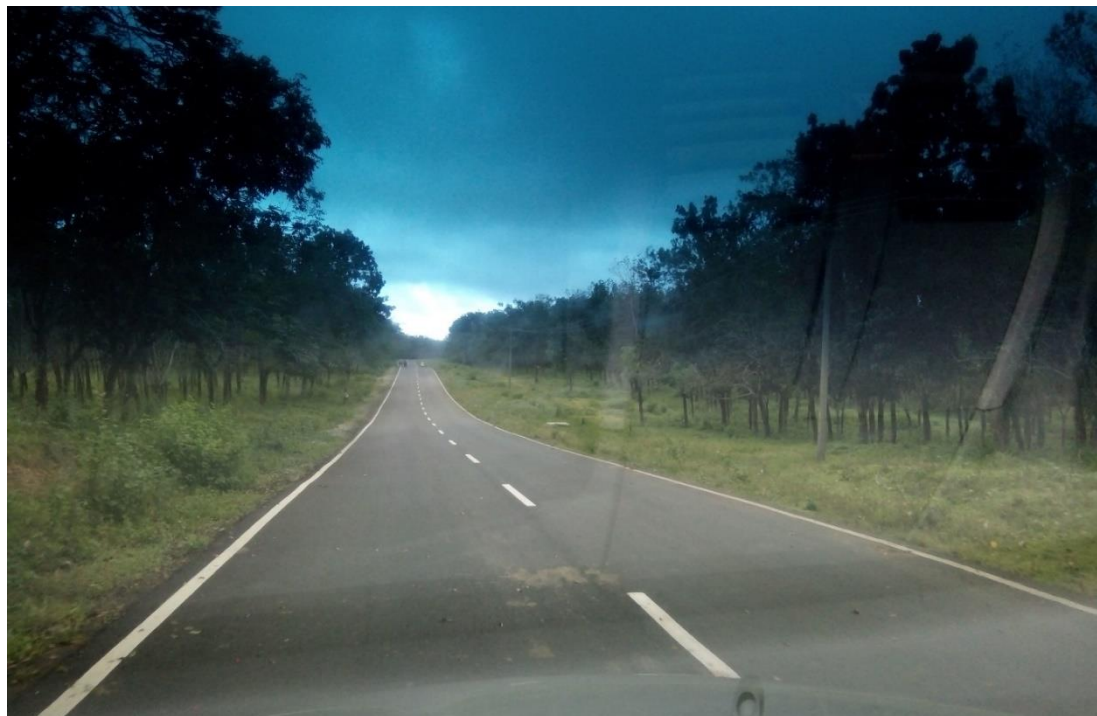


Photo 111. The horizontal trans SWJ road, the Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran corridor is wider and hot mix after receiving the state budget (APBN) of Rp 1 trillion.



Photo 112. Horizontal Corridor of Trans SWJ Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran.



Photo 113. Horizontal Corridor of Trans SWJ Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran, bridge with steel frame.



Photo 114. Before repairs were carried out, accidents often occurred on the horizontal Trans SWJ Road, the corridor of Palabuanratu-Tegalbuleud-Sindangbarang-Rancabuaya-Cipatujah-Pangandaran, Mekarmukti Distrik (South Garut).



Photo 115. Steep ground contours cause landslides (Genteng, Talegong District, South Garut), natural contours are hilly and steep.



Photo 116. Steep ground contours cause landslides, Talegong District, a very sharp slope without swale.



Photo 117. The threat of landslides on roads that have been built, Talegong District.



Photo 118. Landslides of rock and soil materials on roads that have been built, Talegong District.



Photo 119. Landslides of soil materials on roads that have been built, Talegong District, landslide threat in the rainy season.



Photo 120. Landslides of soil materials on roads that have been built, Talegong District, landslide threat in the rainy season.



Photo 121. The road that has been finished has been eroded by the river, Cisewu District, landslide threat in the rainy season.



Photo 122. Landslide due to environmental damage, Talegong District, the disaster had buried several houses in the rainy season.



Photo 123. Local people dig stone materials as building materials from cliffs by the roadside which can cause landslides, Talegong District.



Photo 124. Illegal logging in Amlong Mount, Cisewu District, left to rot.



Photo 125. Illegal logging in Amlong Mount, Cisewu District, left to rot.



Photo 126. Illegal logging in Amlong Mount, Cisewu District, who is responsible?



Photo 127. Environmental damage: forests become agricultural land, illegal logging in Amlong Mount, Cisewu District, use nature or destroy the environment?



Photo 128. Environmental damage: forests become agricultural land, illegal logging in Amlong Mount, Cisewu District.



Photo 129. Illegal iron sand mining in Cipatujah District (South Tasikmalaya): damaging the biological environment.



Photo 130. The threat of beach abrasion: illegal iron sand excavation in Cipatujah (South Tasikmalaya): up to the shoreline.



Photos 131. The threat of beach abrasion: illegal iron sand excavation in Cipatujah (South Tasikmalaya): up to the shoreline.



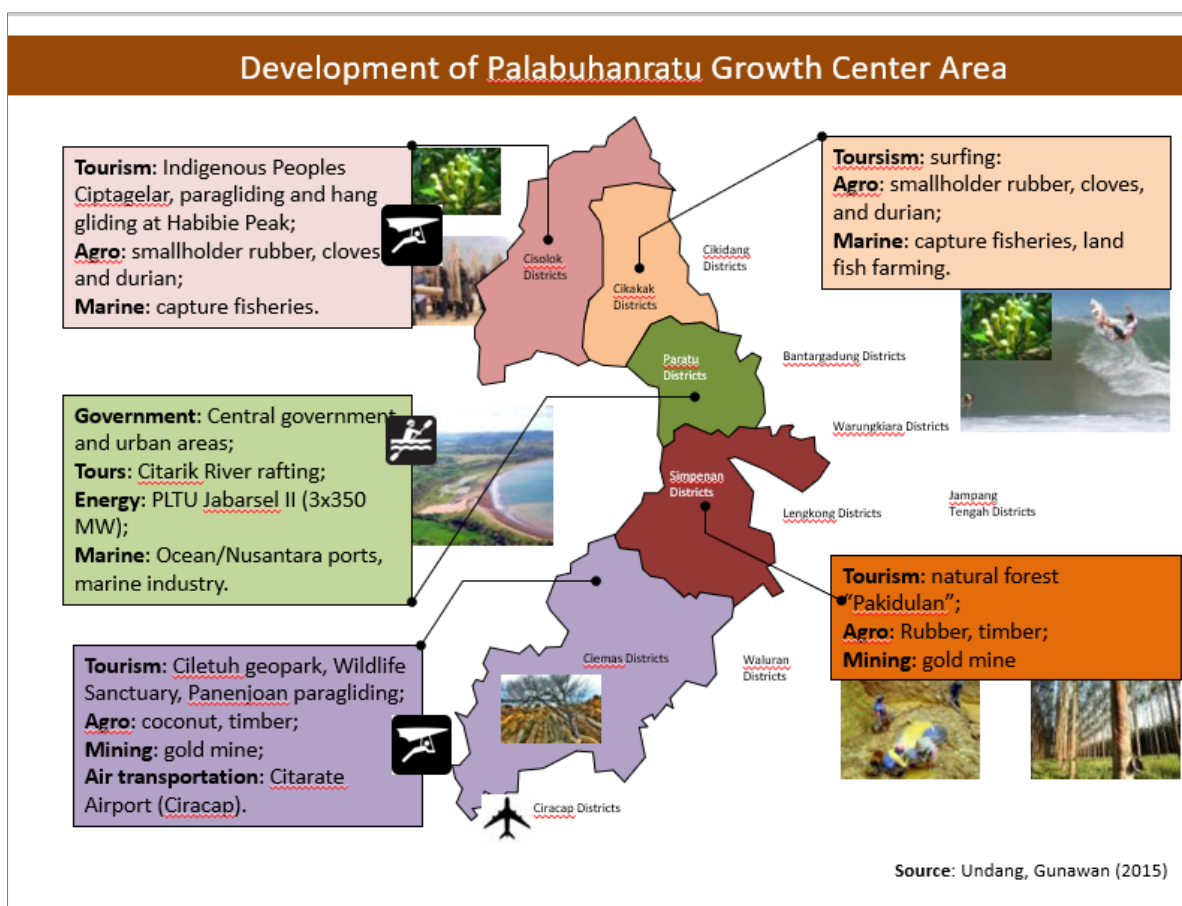
Photos 132. Illegal iron sand mining in Cipatujah (South Tasikmalaya): using heavy equipment.



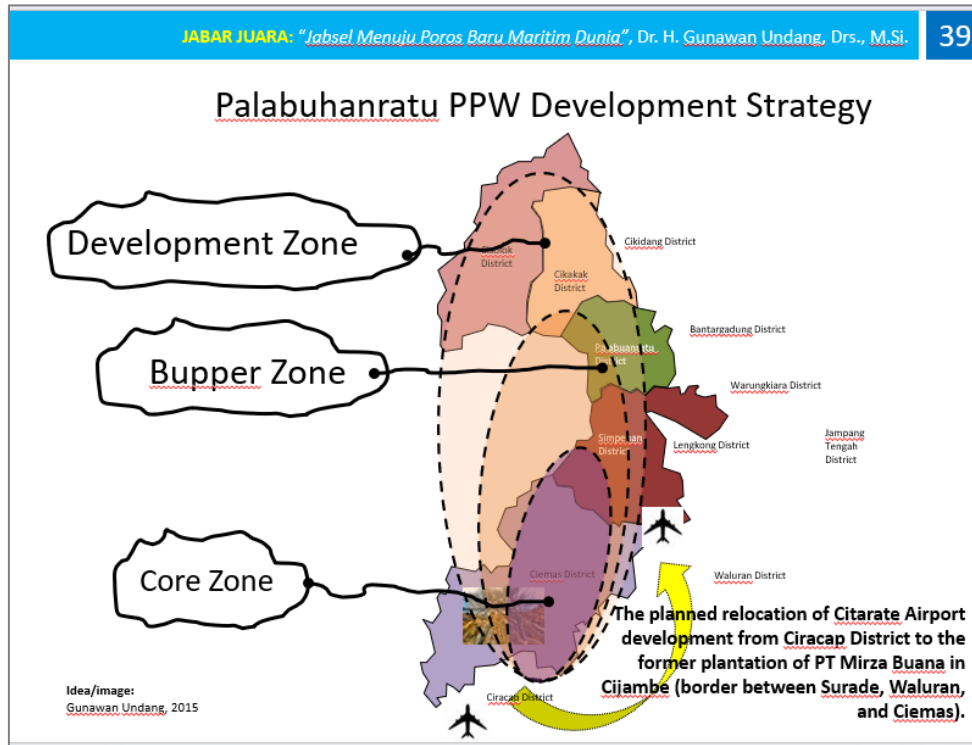
Photos 133. Illegal iron sand mining in Cipatujah (South Tasikmalaya): using heavy equipment.



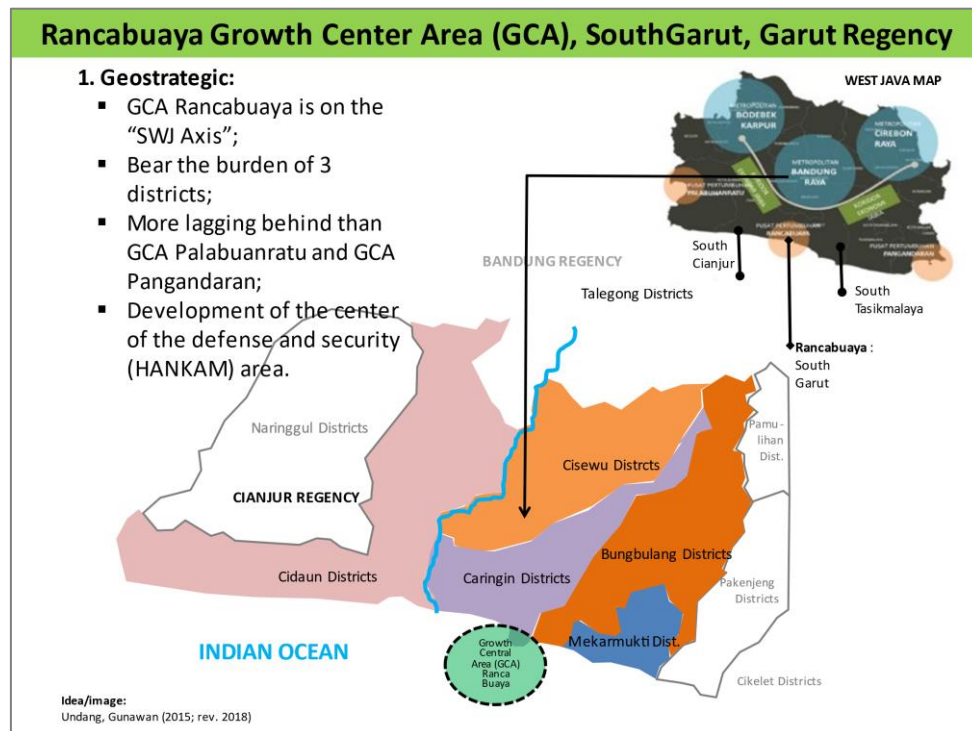
Photos 134. Illegal iron sand mining in Cipatujah (South Tasikmalaya): pros and cons in society.



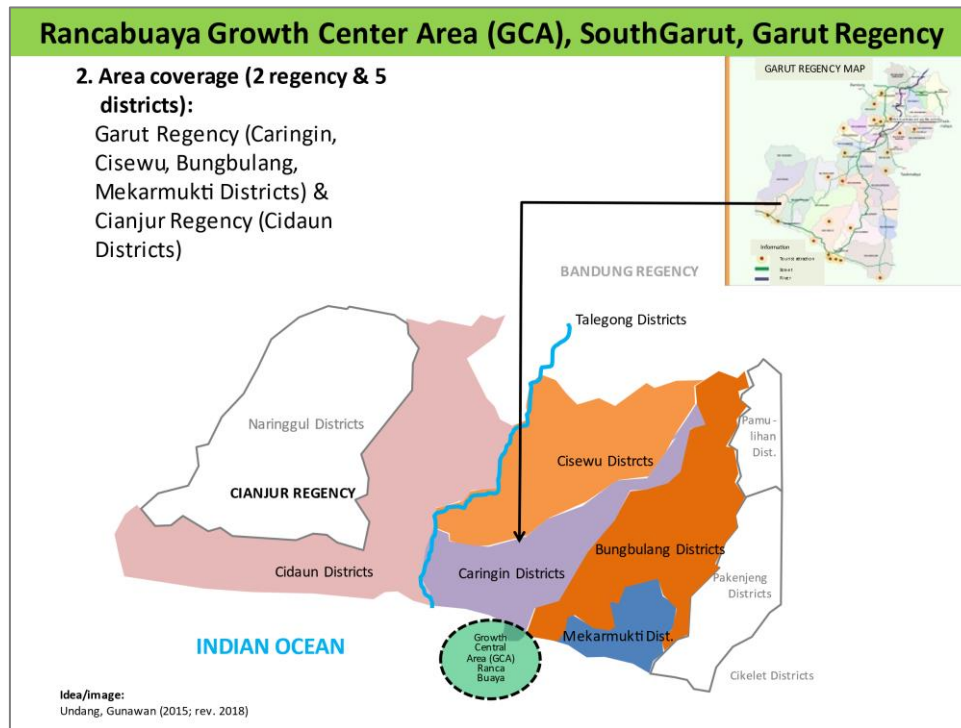
Photo/image 135. Development of the potential of the Palabuhanratu (Paratu) Growth Center Area, South Sukabumi (Gunawan Undang, 2015).



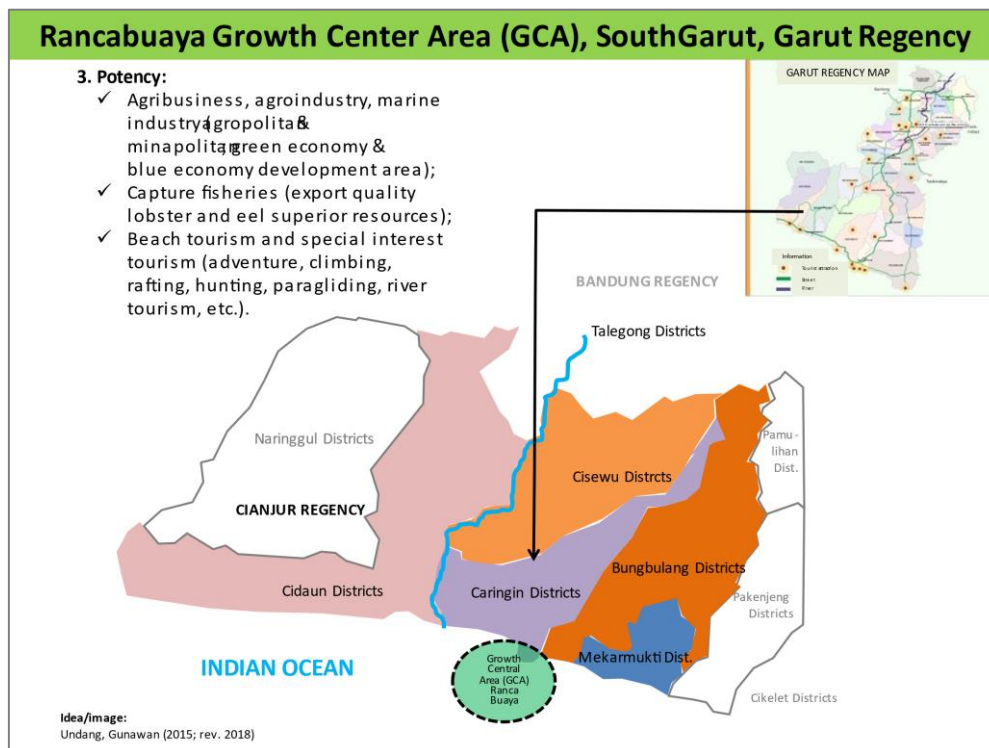
Photo/image 136. Palabuhanratu developing zone (Gunawan Undang, 2015).



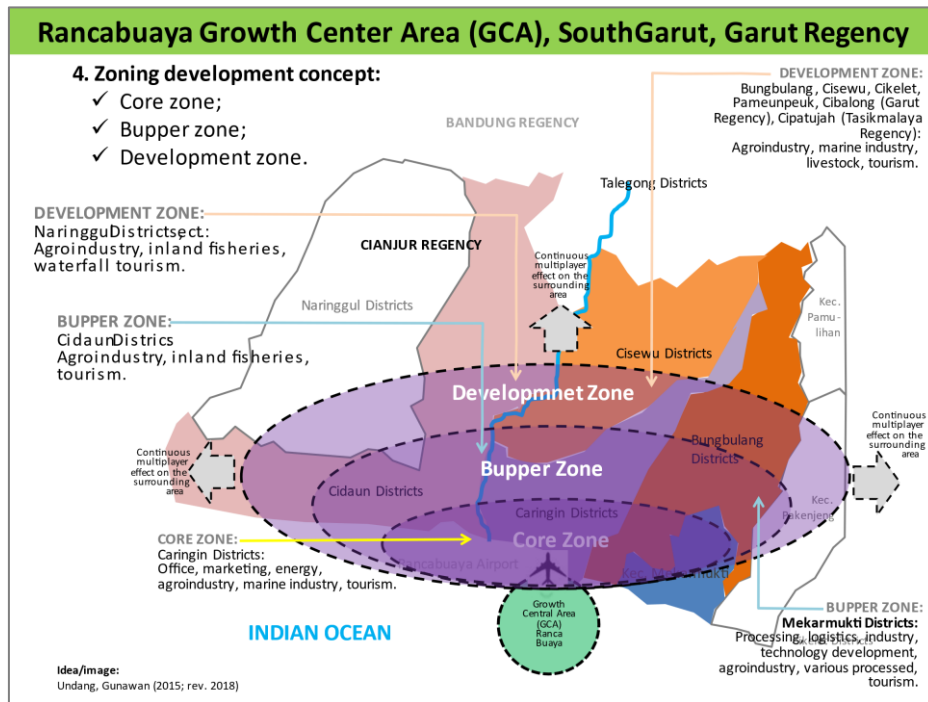
Photo/image 137 . GCA Rancabuaya: geostrategic (Gunawan Undang, 2015).



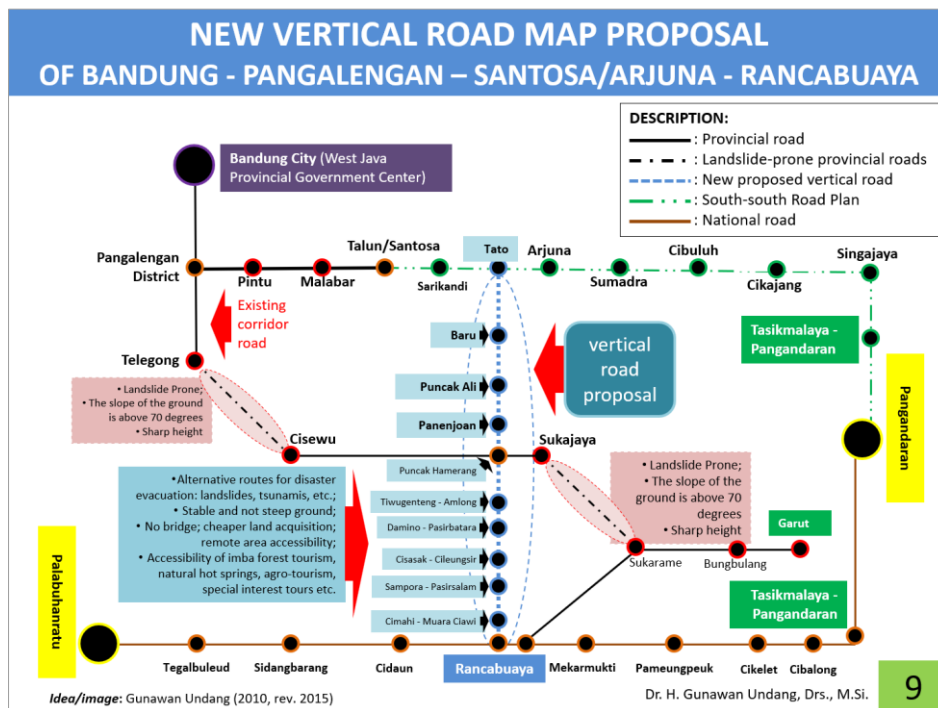
Photo/image 138. CGA Rancabuaya: area coverage (Gunawan Undang, 2015).



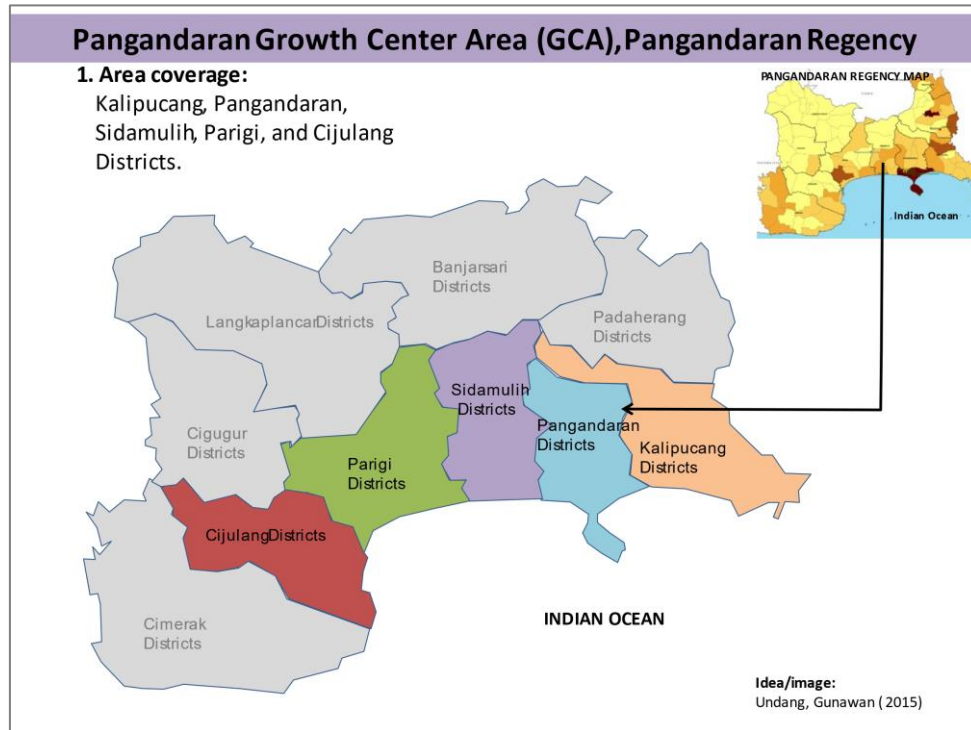
Photo/image 139. CGA Rancabuaya: potential (Gunawan Undang, 2015).



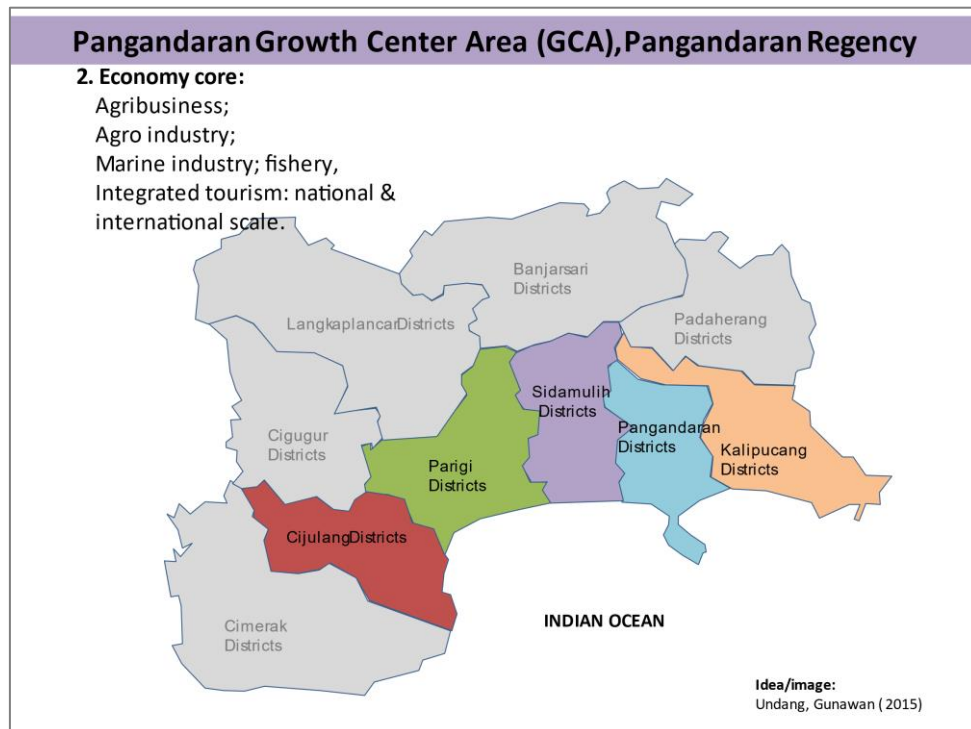
Photo/image 140. CGA Rancabuaya: zoning development concept (Gunawan Undang, 2015).



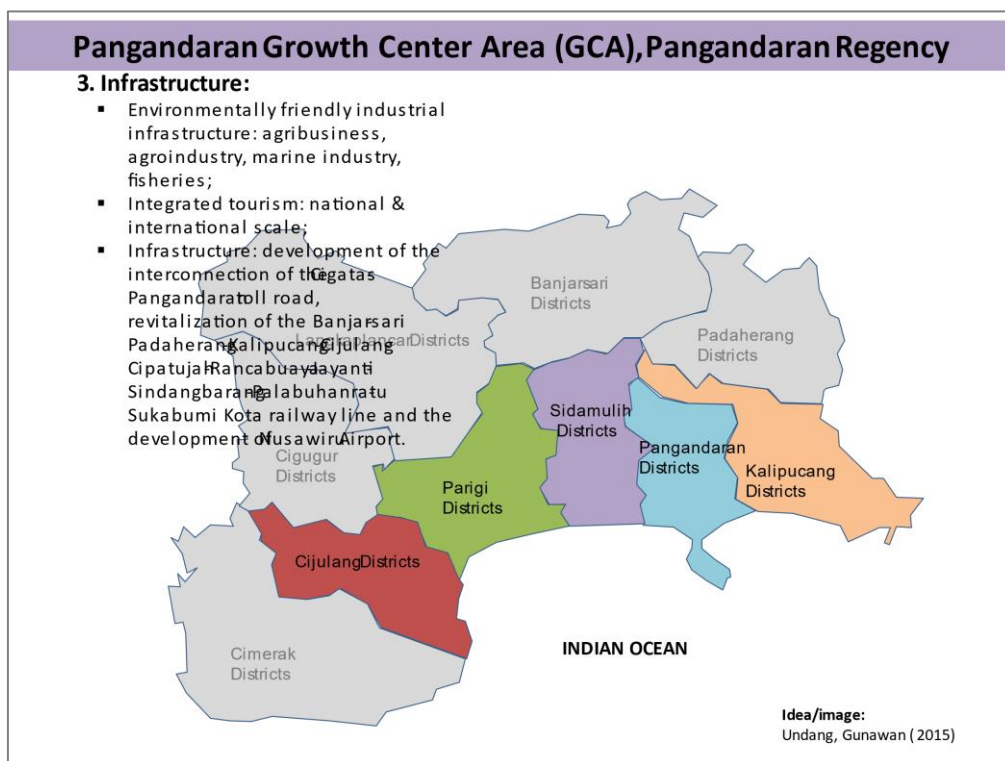
Photo/image 141. New vertical road map proposes Pangalengan (Bandung Regency)-Tato-Puncak Hamerang-Amlong-Cisasak-Rancabuaya (Garut Regency)



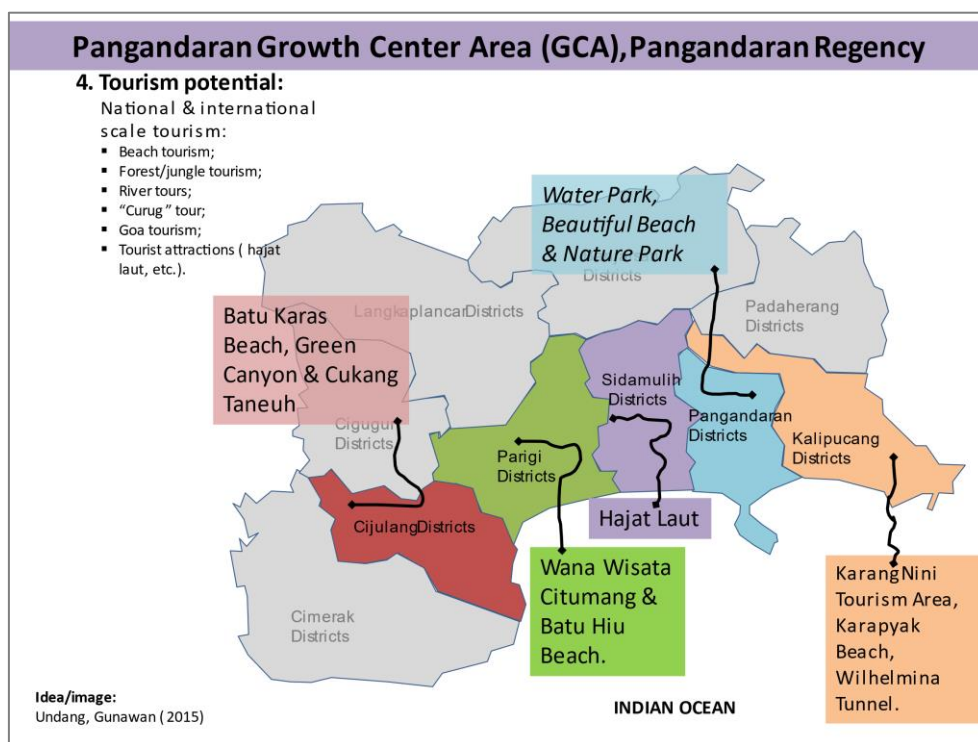
Photo/image 142. CGA Pangandaran: area coverage (Gunawan Undang, 2015).



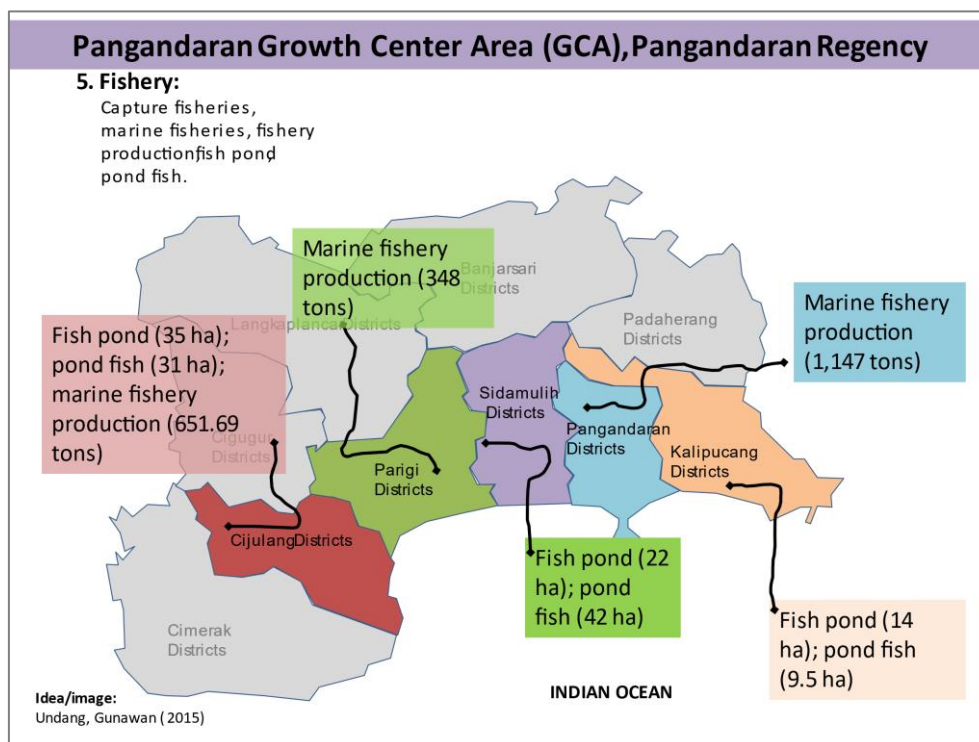
Photo/image 143. CGA Pangandaran: economy core (Gunawan Undang, 2015).



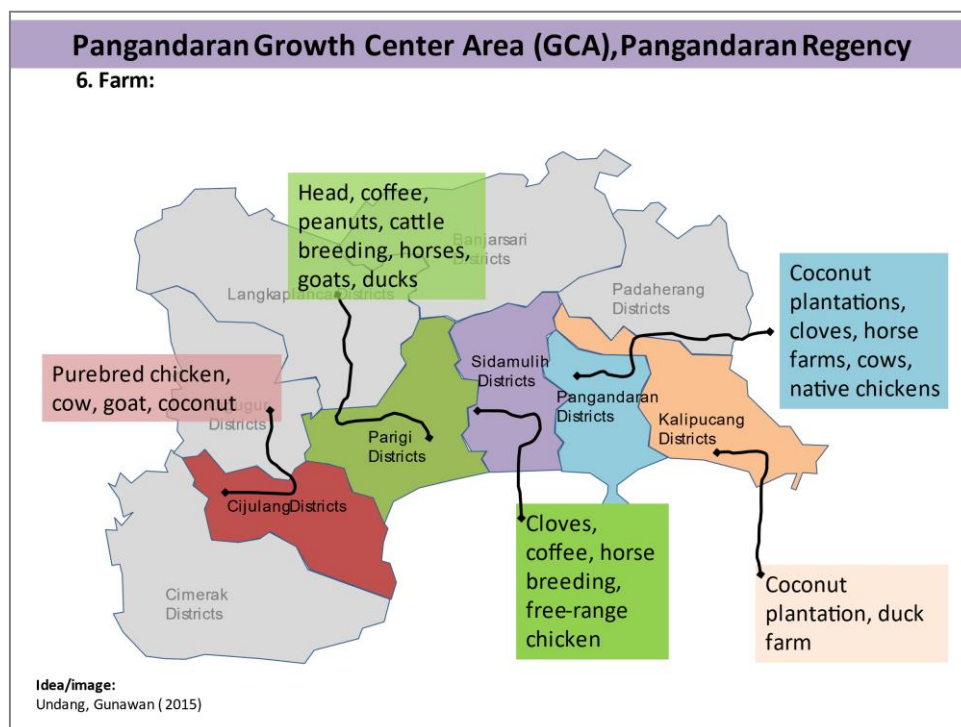
Photo/image 144. CGA Pangandaran: infrastructure (Gunawan Undang, 2015).



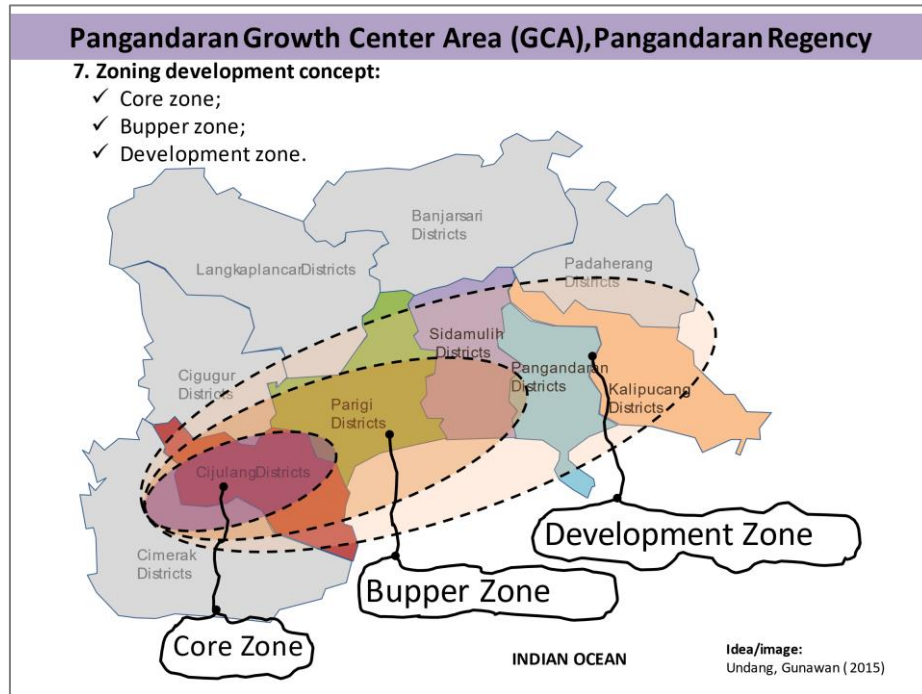
Photo/image 145. CGA Pangandaran: tourism potential (Gunawan Undang, 2015).



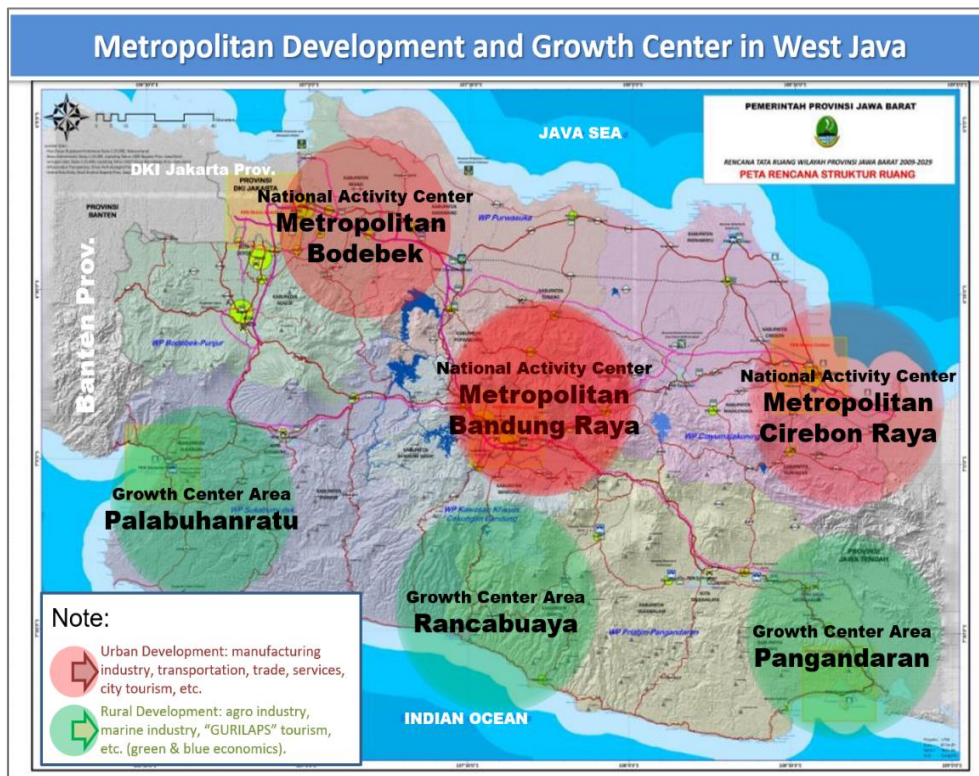
Photo/image 146. CGA Pangandaran: fishery potential (Gunawan Undang, 2015).



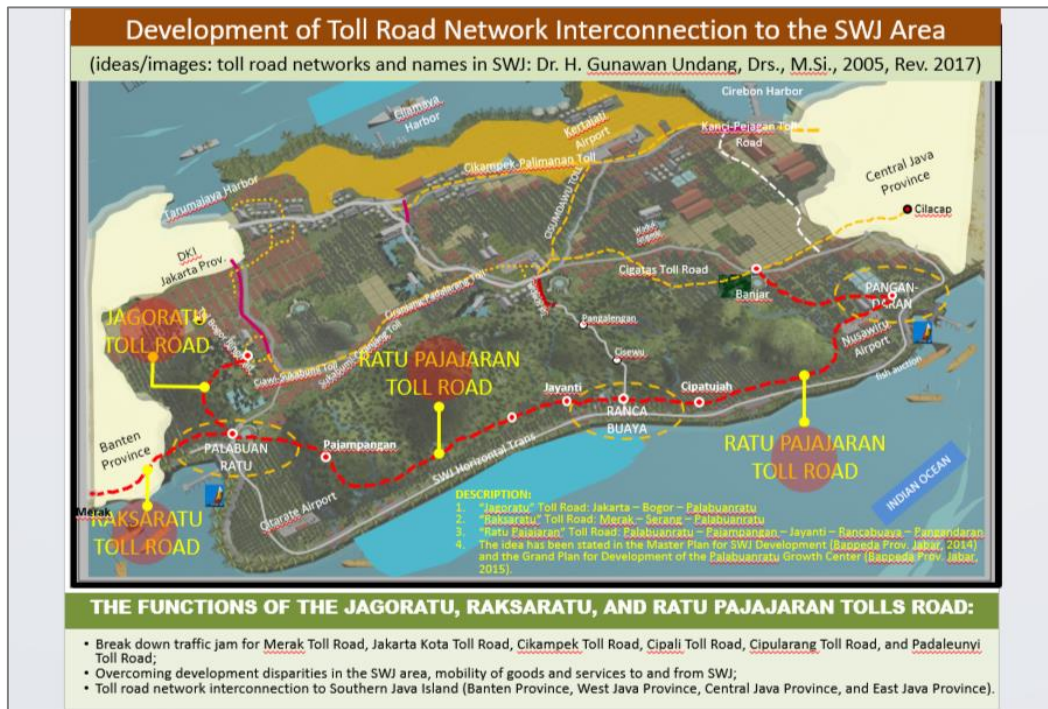
Photo/image 147. CGA Pangandaran: farm potential (Gunawan Undang, 2015).



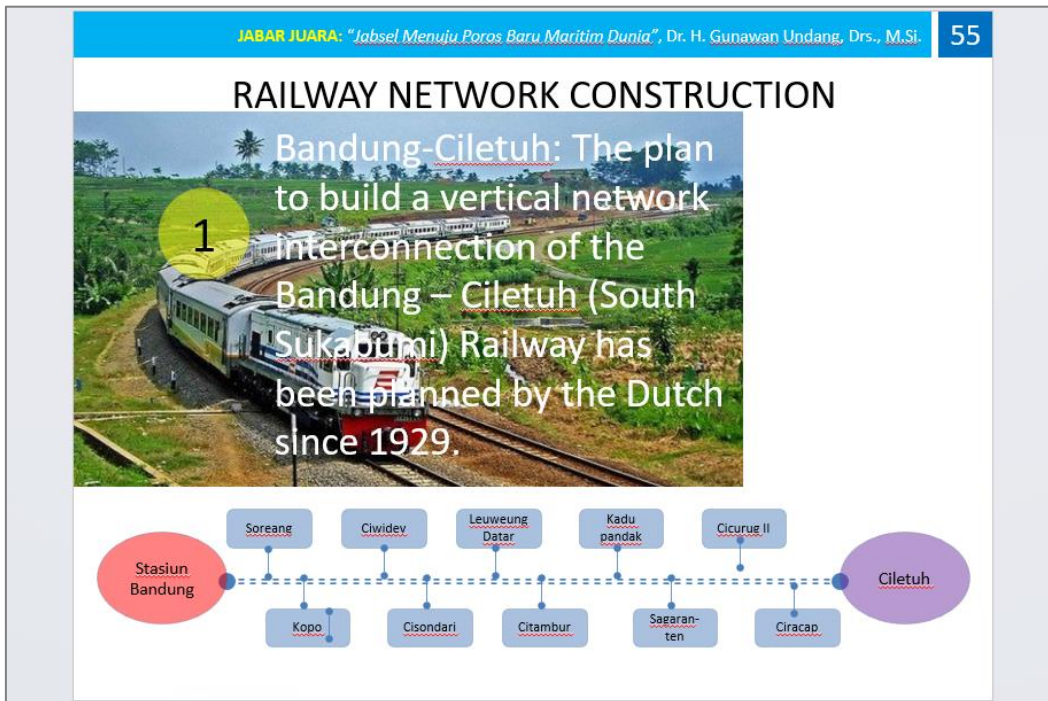
Photo/image 148. CGA Pangandaran: zoning development concept (Gunawan Undang, 2015).



Photo/image 149. Six growth centers in West Java.



Photo/image 152. Toll Road network interconnection from WWJ and CWJ to SWJ.



Photo/image 153. Interconnection of the Bandung Station-Ciletuh (South Sukabumi) train network.

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Banjarsari-Ciletuh: Construction of the horizontal interconnection of the Banjarsari – Pangandaran – Cijulang – Ciletuh railway.

Idea/image railway network: Gunawan Undang, 2004, Rev. 2018

Photo/image 154. Interconnection of the Banjarsari Station-Ciletuh (South Sukabumi) train network.

JABAR JUARA: "Jabsel Menuju Poros Baru Maritim Dunia", Dr. H. Gunawan Undang, Drs., M.Si. 57

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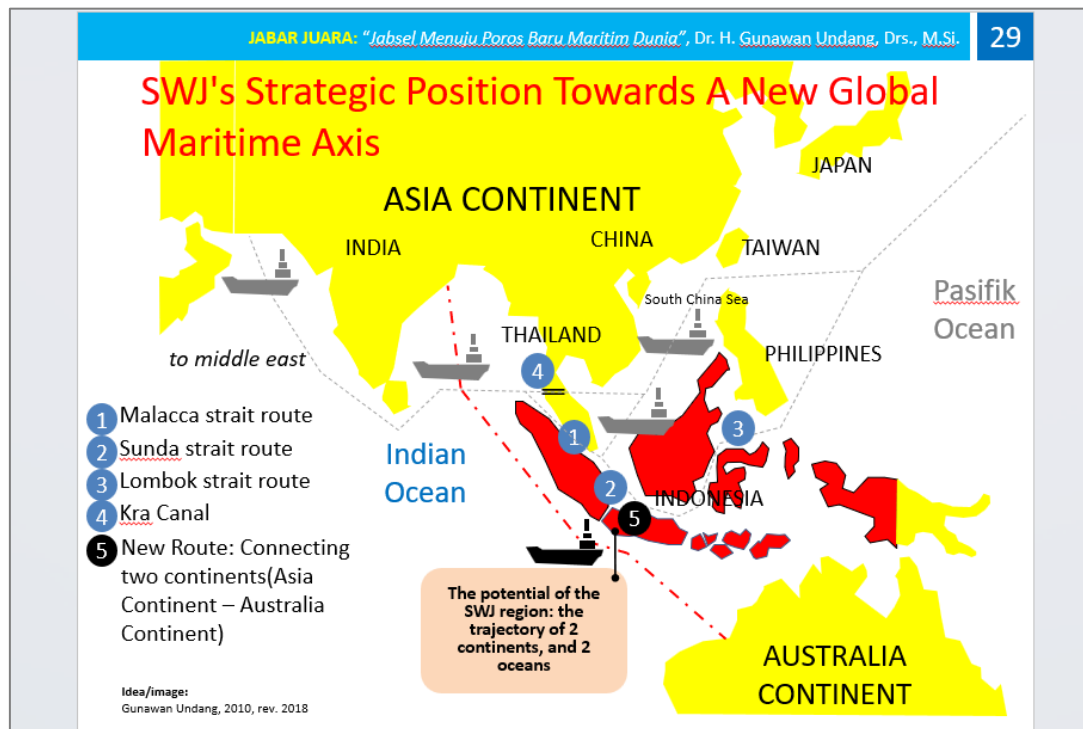
Ciletuh-Sukabuni City: Construction of a vertical railway network of Ciemas (Ciletuh) – Simpenan – Bagbagan – Palabuhanratu – Bantargadung – Warungkiara – Cikembar – Sukabumi City Station.

Idea/image railway network: Gunawan Undang, 2004, Rev. 2018

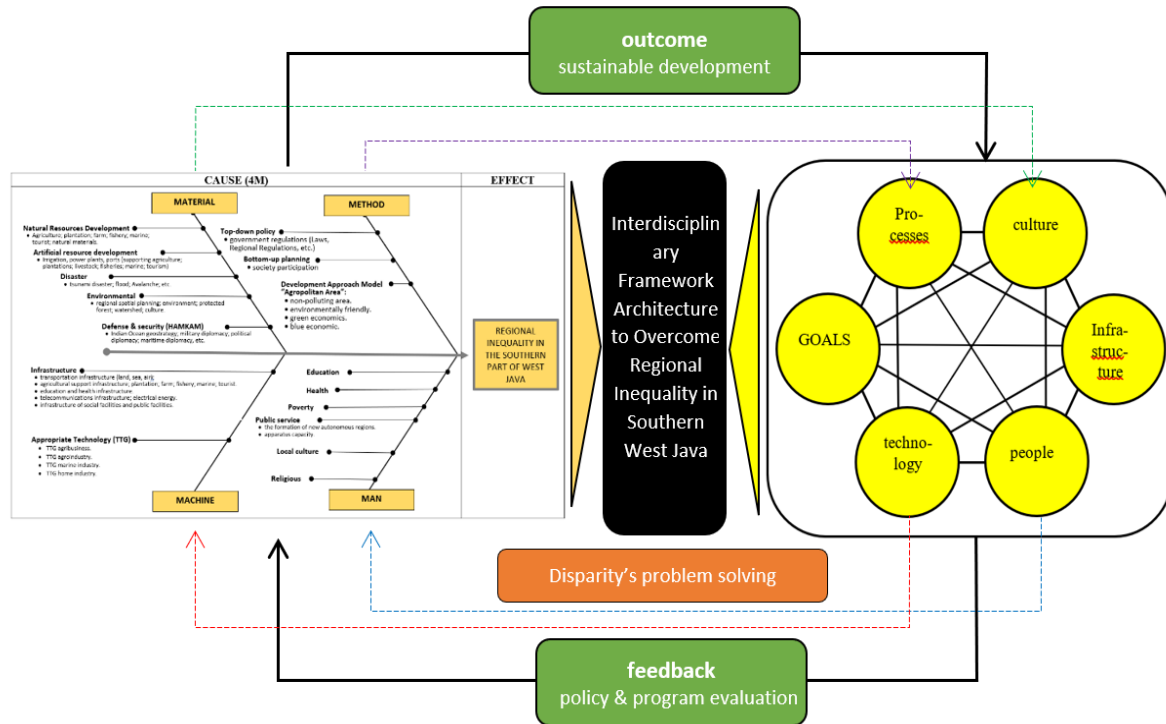
Photo/image 155. Interconnection of the Ciletuh (South Sukabumi)-Sukabumi City Station train network.



Photo/image 156. Indonesia has the potential to become the world's maritime “new axis”.



Photo/image 157. Indonesia has the potential to become the world's maritime “new axis”.



Photo/image 158. ID-StM Framework [2] is an analytical model that integrates two theories, namely the Ishikawa Diagram and the Sociotechnical Method. The framework can be used as an analytical model for solving the problem of social development disparity in the Southern part of West Java (SWJ).