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Metropolization Process for enhancing local and regional planning: an experience of cirebon metropolitan, West Java

E. Supriyadi Rustidja 1

¹ Research and Development Institute, Institut Manajemen Koperasi Indonesia (IKOPIN), Jl. Raya Jatinangor Km 20,5 Bandung, West Java, Indonesia

E-mail: erysupriyadi354@gmail.com

Abstract. Metropolitan develops in line with resource utilization, investment, and transactions of regional activities. Metropolization of an area gives emerge urban economy that changes the situation, form, and pattern of urban space interactions. On the other hand, metropolism concerns the strategy of changing variation of urban space, so that metropolitan invasion not only form of urban space but also the process of interaction among stakeholders in developing metropolitan area. Based on participatory research, this article explores metropolitan invasion process for enhancing local and regional planning, both indigenous and intrusive cataclysmic. The study find that the primeval, rural, and urban as elemental environment must be considered in developing metropolitan, not merely form the structure and pattern of urban space. The metropolization process also requires the strategic of rural urban linkage, context setting and local assessment, strategic community investment, and interculturalist approach. The other findings of the study show that metropolization in Cirebon Metropolitan, West Java emphasizing on promotion of competitiveness strategy, value chain urban activities, and networking of urban areas. Cirebon Metropolitan must promote the realization of growth centers and connect the interregional activities of metropolitan area for providing sustainable economic growth.

1. Introduction

The urban development areas can not be avoided, it link in line with increase population density of region and access of technology that facilitated by education, business, residence, and commercial activities. The rapid urbanization of the urban population explosion forced every country, including Indonesia to understand the phenomenon of urbanization in various forms through the handling of spatial structures and urban management. The rate of growth urban population in Indonesia reach 2.5% per year, and the influx of rural to urban populations grew from year to year, so the Indonesian government is aware to anticipate through measurable planning of emerging cities and economic corridors that tend to lead to metropolitan formation and metropolization. Many cities as a centers of economic growth link with other cities tend by the scale of urban, regional, national, and even global interaction. Urbanization in Indonesia is growing in line with the economic development of the region that is happening.

Several studies have shown that urban areas that are planned comprehensively obtained sustainability of the city's in its own internal order and accommodate some possibilities that occur due of urban invasion and penetration process. The key issue is how far metropolitan can identified based on urban profile and how metropolitan profile will determine of sector programs, spatial planning, and infrastructure development for metropolitan areas.

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City management involves municipalities around urban area and it become determinant factor in management of metropolitan areas. City management needs monitoring and evaluation of spatial urban developments and activities to anticipate development of city and should be happen. Other questions include which urban infrastructure needs consider environmental analysis, what kind of criteria that reflect benefits, space vitality, socio-economic conditions, transport modes, levels of policy adoption and prevailing policy levels, as well as achievement of participation for communities.

The third key issue is how far Cirebon moved into metropolitan and how Cirebon as a new city be characterized by Metropolitan. How far Cirebon require spatial and sectoral planning for future development. What is the awareness and interest of central and regional governments towards Cirebon be metropolitan area. How is argumentation, strategy, and effort done to realize Cirebon as metropolitan.

2. Method

In this study, metropolization is defined as a process of forming urban areas towards / leading to a metropolitan form. The process of forming urban areas become the focus and accentuation as metropolitan. Based on participatory research and literature study in metropolization process of Cirebon , West Java, Indonesia, this study explores metropolitan invasion process for enhancing local and regional planning, both indigenous and intrusive cataclysmic.

The metropolitan profile is performed by looking at population growth and strategy (Sommer, P, 2004) [16], population density, quality of live, and intensity of development (Kumar, A, 2004) [17]. In addition, the metropolitan profile can be seen, felt, and heard, and smelt, as part of public realm (Fushtey and Quayle, 2004) [11], and metropolitan as encompassing built-up and open areas within urban centers (Beunen, etal, 2004) [13]. The metropolitan development plan can be interpreted to extent that people get along the exercise in public sense of authority community (Beunen, etal, 2004) [13]. Metropolitan development plan process can be seen from strategy of community investment (IFC, 2010) [4] and metropolitan landscape seen from conservation, governance, deliberative process collaboration to build concensus, triagulate (Fushtey and Quayle, 2004) [11], so that it can know the values and principle adopted and manage issue and concerns of metropolitan development plan.

Underlying these concepts, the results of the study are compared with these indicators and are further described. Indicators are measured at each metropolitan Cirebon district location, using tabulation analysis, visualize the mapping of Cirebon's metropolitan by overlay technique on geographic information system.

The results of the study recognize metropolitan profile, describe the process of metropolitan formation, and find the accentuation of Metropolitan Cirebon. Secondary data, literature review on Metropolitan Cirebon, direct observation, and obstructive participation on Focus Group Dicussion which discussed the object of research deeply, further compiled meaningful findings about metropolization of Cirebon as subject.

3. Results and Discussions

The results will be discussed in 3 subsections, they are characteristic and profile of Metropolitan Cirebon, process of metropolitan formation, and find the accentuation of Metropolization. According Alizadeh, et.al (2011) [1] that metropolization include economic competiveness, infrastructure planning, and also urban structure and processes. Furthermore, metropolitan profile can describe on components of people, economy, environment, mobility, and living (Wilmoth, D, 2012) [2].

Urban planning of Metropolitan Cirebon is a participatory planning involves multi-stakeholder, urban governance conjunction, and collective urban management. This condition is inclusive planning scheme to build a metropolitan that is beneficial to Cirebon city and all urban areas included in the Metropolitan Cirebon such as, Cirebon City, Cirebon, Majalengka, Kuningan and Indramayu. The process of discussion involves all relevant stakeholders at provincial and local levels, academics, heritage of Cirebon, business community, and society. West Java call it Masagi, it means quart helix, is government, academic, industry, community.

Metropolitan development plan are encouraged together as inclusive interaction process among stakeholders, urban transformation process from decision making to implementation. Cirebon metropolitan planning adopts national and provincial legislation, such as reviews of urban planning strategy, national cities system, national spatial plan, and province spatial plan. In addition, planning is undertaken framework of strengthen institutional capacity through institutional review, capacity building, strategic partnership between urban planning actors, and it link with investment in around Cirebon Metropolitan

3.1. Metropolitan Cirebon Profile

Referring Alizadeh et.al (2011) [1] that metropolitan profile be formed by economic competiveness, infrastructure planning, and also urban structure and processes. Furthermore, metropolitan can be seen on components people, economy, environment, mobility, and living [2]. The demography, performance economy, transport accessibility, land use, cultural facilities, tourism attractiveness of Metropolitan Cirebon be presented in figure and Table 1. By forecasting, population growth and density of population in metropolitan Cirebon will increase. Demography profile Metropolitan Cirebon can be seen from population growth and population density as follows.

 Table 1. Number and Density of Population in Metropolitan Cirebon

Year	Population	Density (pop/km2)
2016	2.517.761	2.332
2020	2.880.375	2.668
2025	3.333.632	3.087
2030	3.786.910	3.507
2035	4.240.167	3.927
2040	4.693.445	4.347
2045	5.146.702	4.767
2050	5.599.980	5.186

Sources : Regional Development Planning Board of West Java Province, Year 2016, and processed

Economic performance of Metropoltan be exposed by Product of Gross Regional Domestic (PDRB), following below about the condition and development value of GRDP Metropolitan Cirebon based on the coverage area. Metropolitan Cirebon will achieve economic growth average 6 percent per year, with varying across urban areas.

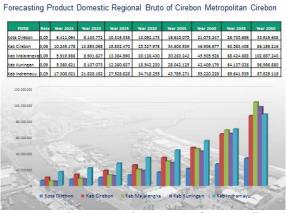


Figure 1. Forecasting Economic (PDRB) of Metropolitan Cirebon

In addition, Spiller, M (2012) [16] states that metropolitanes are closely related to the economy can be seen from the indicators of logistics, freight connections, journey to work savings, greenhouse gas and other externality savings, agglomeration economies / innovation potential, human capital enhancement, and livability / Investment attraction. The development of metropolitan is measured by several new economic indicators, namely the creation of knowledge-based employment, globalization, competitiveness and economic dynamics, the transformation towards the digital economy, and the capacity of technological innovation. These indicators will demonstrate the metropolitan capacity and capability in responding to urban economic needs both intra, inter, and extra metropolitan areas, as well as city service indices that it can do.

Cirebon's metropolitan dynamics exposed to the mobility of people and goods, both in the internal context of urban areas and their interconnection with other regions. The following describes land use and mobility on Metropolitan Cirebon. Land use profile, space structure, mobility of goods and people, transportation network of Metropolitan Cirebon are listed in the following figure below.



Figure 2. Land Use Planning of Metropolitan Cirebon

The function of land use in Metropolitan Cirebon is categorized as urban, suburban, and rural. Below are the urban, suburban, and rural conditions based on Metropolitan Cirebon master plan. The district pattern of metropolitan of Cirebon based on regulation of West Java Provincial Regulation number 12 year 2014 is presented on Figure 3.

Metropolitan Cirebon Area year 2010 to 2030,

Based on Regulation of West Java No. 12 year 2014. 2010 2010 2015 30 District 34 District 2050 45 District 45 District

Figure 3. Coverage Area of Metropolitan Cirebon

The development of metropolitan Cirebon can be seen from the shift of urban areas. Cirebon metropolitan area coverage consists of 1 city, 4 regencies and 45 districts, with distribution area as in **Table 2**. The shift of built area and urban area of Metropolitan Cirebon can be seen in Figure 3 and 4.

Table 2. Area, proportion, number district of Metropolitan Cirebon

Metropolitan Area	Area (Ha)	Proportion	Number of District
Cirebon City	37.37	3.5%	5
Cirebon Regency	750.26	69.5%	31
Kuningan Regency	161.19	14.9%	5
Majalengka Regency	96.95	9.0%	3
Indramayu Regency	33.97	3.1%	1

Sources: Regional Development Planning Board of West Java Province, Year 2016, and processed

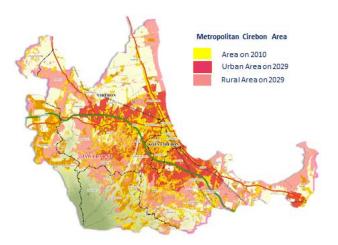


Figure 4. Urban Area of Metropolitan Cirebon, year 2010 to 2029

Furthermore, based on the proportion of urban, suburban, and rural areas in Metropolitan Cirebon are obtained analysis of the map as follows. Figure 3, 4, and 5 show that metropolitan Cirebon develops corridor (in line with Kumar, 2004)[...]. The metropolitan density of Cirebon increases with distance from the central area and continues to do so at the urban fringe.

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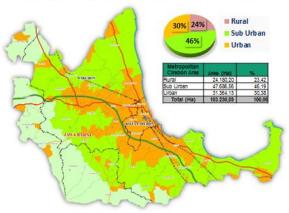


Figure 5. Urban, Suburan, Rural Area of Metropolitan Cirebon, year 2030



Figure 6. Urban Structure and Regional Infrastructure Metropolitan Cirebon

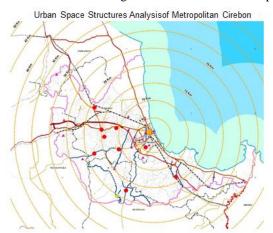


Figure 7. Urban Structure Analysis of Metropolitan Cirebon

It is urgent to link management of urban organizations to road infrastructure plan, transport mode, traffic management, and the regulation of transport generation, both locally, nationally and internationally. Like Harison and Growe (2014) [12] that metropolitan planning entails regional planning from places to flow, Cirebon's metropolitan development plan considers the interaction needs of people, goods, and interactions between regions to form conurbation and connectivity. Figure 5,6,

and 7 show phenomenon that Metropolitan Cirebon try to enhance local dan regional economy around urban and suburban area of metropolitan.

3.2. Metropolitan Cirebon is a participatory planning and community investment strategy

Stupar A (2007) [19] mentions cities in technology, technology towns, cities through technology, and city for technology, as well as the city's future is technologically. All that be connected to the city is a manifestation of the utilization and development of technology for the city and the development of the city itself. The city becomes a comfortable and safe place to work, residence and other activities. On the other hand, technological developments also generate urban spreading in the form of invassion and urban penetration in the form of urban sprawl and urban corridor. For better living we need technology, city through technology, city in technology, city featuring technology, city by technology, and city of technology is a prerequisite for the feasibility and development of a city in the long term. Metropolitan development plan need effort for better living, better doing, better work. The availability, function, and access of technology for city activities will determine the rate of development of urban space and the activity entity city itself.

One perspective of metropolitan economic needs fulfill is the achievement of better living, better doing, and better working goal. The availability and adequacy of infrastructure for supporting urban activity very crucial provide growth of economic into city and direction urban development. Another issue also concerns comprehensive plan of infrastructure needs, types, and levels of needs can be plan comprehensively. The question is, how far urban infrastructure plan be created by top down or downward or bottom-up, and how far involvement of public, private, and community involvement. It is too important to know how far stakeholder participation involve in formulating, implementing, and controlling of development plan of metropolitan.

These conditions require a sophisticated and sustainable metropolitan planning process, especially regarding the determination of the priorities of urban development in line with infrastructure needs and the vary forms of urban activity. Selection process, formulation, and implementation of type urban infrastructure relate closely with dynamics of urban activities. Urban infrastructure provision be related reciprocal with urban economy, because the municipality of urban infrastructure will cause the depression of urban economy, urban area internal interaction, mobility among city, and dynamics of its urban function.

West Java Provincial Government aware that there are areas in West Java have developed very rapid in terms of economic agglomeration, mobility of population, as well as increased intensity of built land and social activities of the community. The economic growth and urban activities require urgent efforts to provide infrastructure for comply of shelter, workplace, and comfort in the move. Strategic infrastructure development plans in Metropolitan Cirebon. The economic growth and urban activities are expected to provide significant value added and can drive sectors in the Metropolitan Cirebon. Increased economic activity is also likely to increase rapidly in line with the operation of Cikopo - Palimanan Toll Road (Cipali), and West Java International Airport (WJIA/BIJB) and Aerocity plan in Kertajati, Majalengka District. The activities in Metropolitan Cirebon emerge new hotels rapidly, industrial estates and large-scale settlements along toll roads (primary arteries) for providing urban activities.

Urban planning of Metropolitan Cirebon set in participatory planning. It involve various stakeholder, urban governance conjunction, urban management. The discussion process involves all relevant stakeholders at the provincial and local levels, academics, kraton relatives, business community, and society. The people of West Java call it by Masagi, quarthelix of governmen, academic, industry, community. Metropolitan development planning is generated together as an inclusive interaction process among stakeholders, supportive communication for complete of urban transformation from decision making to implementation. Metropolitan Cirebon planning also adopt national and provincial legislation, such as reviews of urban planning strategy, national cities system, national spatial plan, spatial pronvince. In addition, planning is undertaken within framework of

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strengthening institutional capacity through institutional review, capacity building, strategic partnership between urban planning actors, and better link with investment in around Cirebon Metropolitan.

The provision of infrastructure supports for living, doing, and working every people in Metropolitan becomes important and urgent, so development plan metropolitan Cirebon is integrated financing manner with the scheme of development financing authority as well as decentralization pattern. Decentralization policies and weak institutional environments will create the range of actors in local infrastructure development and outcomes (IFC, 2010) [4]. Although the metropolitan Cirebon has developed by infrastructure development strategy, however, metropolitan Cirebon needs to be aware of institutional component during infrastructure building, otherwise it will face obstacles and challenges, if there are weaknesses environment policy in metropolitan Cirebon development plan.

A few weaknesses of environment policy include the lack of clarity of main tasks and functions of urban management, no support from local government, confusion between locallu = based multistakeholders plans and corporate local government plans, financing resources limited to block grant facilities and social investment facilities, lack of appropriate local Government procurement rules and regulation, inadequate national policy for development of engineering and construction industry. To overcome problems, we need comprehensive policy of metropolitan cirebon. It means that central and regional government authority can cover policy areas, namely fiscal policy, fiscal decentralization, budgeting and fiscal management, and economy analysis and revenue forecasting. A few policy focus covers tax reforms, public expenditure reviews, tax administration reform, design of intergovernmental transfer system, urban government finance, local government budgeting, performance-based budgeting, capital budgeting, multi-year budgeting, micro-simulation analysis, and time series economy forecasting (Romeo, etal) [5].

The study find that the primeval, rural, and urban as elemental environtment must be considered in developing metropolitan, not merely form the structure and pattern of urban space. Like Mackaye and Mumford (1928) [9] refered that meropolitan plan must consider primaval, urban, and rural aspect [9]. Metropolitan Cirebon considers its physical condition as it is linked to coastal areas, sloping slopes, and mountains, forest park areas, earthquakes, and landslides. Similarly, in the archaeological, metropolitan has a history, historical heritage that is related to the period of kerajaanaan and the struggle of the Indonesian nation. In addition, metropolitan also associated with the space structure in the form of urban and rural.

There are areas in Metropolitan Cirebon that are urban, suburban and rural. Although in the context of delianiation of urban areas encompassing urban and suburban, but rutal around metropolitan Cirebon angat memnentukan performance and direction of metropolitan development of Cirebon, especially related to function of water supply, labor, climate change. Thus, the integration between urban, suburban, and rural areas in the Metropolitan region has good interconnected spatial, economic, and social. Therefore, the foresight, strategy, and quality of Cirebon metropolitan planning are seen using spatial planning interconnected among national, provincial and district / city levels, priority and superior sector planning, and social engineering that strengthen valuable connections among the stakeholders of development in metropolitan Cirebon both concerning environmental, economic, and social infrastructure.

As a planning process, development planning of community investment strategy from Metropolitan Cirebon can be seen from elements of activity such as flow, align and straighten, mobilize stakeholder, sustainability, and measurement (Frenchman, D, 2014) [8]. Based on this approaches and using Community Investment Strategy, element, description, and result of formulation on development plan of community investment strategy in Metropolitan Cirebon are as follows.

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Table 3. Element and Result of Formulation on Development Planning of Community Investment Strategy in Metropolitan Cirebon

Element	Description	Result of Formulation
Activity Flow	 Establish Cirebon's vision, mission, goals, policies, strategies, and development programs Setting performance criteria Establish principles used to achieve goals, targets 	 Urgency of area handling in metropolitan context of Cirebon Provide solutions for urban handling Ensure development implementation Multiplier effect on urban development Benefits of infrastructure development Economic growth Employment
Align and Straighten	 Aligning strategic issues with priority development of local communities, civil society, and government to create shared values Coordinate policies and practices that affect communities Develop cross-coordination and responsiveness that supports objectives among activities that are interacted with local stakeholders 	 Present a development approach based on strategic and market driven development areas Strengthening the role and function of urban areas in a local, tegional context through the development of integrated infrastructure with regional development Mutual coordination of settlement regulation Increase public awareness to implement environmental development The consistency of implementing regulations to overcome the overlapping regulations and bureaucracy Improve the ability to synchronize stakeholder resources
Mobilize stakeholders	 Recognition that reduces the range of corporate control with a stakeholder approach Support communities and local governments to define and develop goals and aspirations 	 Matching development approaches to development areas • Rural Urban Linkages supported by regulators that are consistent and useful for the public, private, and community The enactment of the same spatial rules for all development actors Multi-stakeholder involvement pro-actively in any public decision-making related to Metropolitan Cirebon Involvement of central, regional and district / municipal governments in the institutional budget work plan
Sustainability	 Investment in capacity building Reinforces appropriate institutional and process 	 Good governance of urban development Smart city development that is competitive and based on local technology and culture Participatory planning through development consultations at regional, city, provincial and national levels
Measurement	 Measure returns on community investments Use of output and impact indicators Changes level Proactive community level Monitoring evaluation uses participatory method 	 Masterplan of infrastructure and development plan Metropolitan Cirebon Feasibility Study & Pra-design Priority Area in Metropolitan Cirebon Minimum Service Standards Iniatives planning form community, The metropolitan (spatial and sectors) planning comes from various community/stakeholder initiatives Synchronize medium-term and long-term infrastructure development plans

As Hartz and Kostermann (2004) [20], the Metropolitan Cirebon development plan is approached with partneship planning considering the policy, resources, politic, and institutional environment. Cirebon's metropolitan development plan is done by integrating policy field components, problems, chance of cooperation, participants, actors / stakeholder constellation, organization, interest, motives, power, and influences. This is done through a series of set agendas, agency roles, and industry engagements, agency roles, and dialogue processes that discuss future-oriented strategies for the development of the Cirebon metropolitan area, in accordance with Schot, etal (2004) views [24]. The process of interaction between actors and inter-regional level of development of Cirebonn metropolitan development plan becomes a means of interaction and form of coordination of actors of planning, so as to overcome the lack of specific knowledge, upper-lower tier of government, lack of authority, lack of resources, and effective plan; Beunan, etal call as ecological corridors and habitat directive of natural planning [16].

3.3. Argumentation, Goal setting, and Effort to Realize Metropolitan Cirebon

There are argumentative aspects considered Cirebon areas becomes metropolitan. The arguments of Cirebon's metropolitan existence include social, economic, industrial, spatial, regional connectivity, and governance aspects. Some of the arguments are as follows:

- Geographical location of Metropolitan area of Cirebon is strategic because it is on the Nothern of Java line
- Based on the analysis of carrying capacity, dominance is the carrying capacity as a potential area of urban development
- Nearly all areas of Cirebon Metropolitan have been connected by infrastructure such as toll road between regions, between few province, and provide national level service.
- The planned development of Airport and aerocity of Majalengka will affect the activity activities in the Metropolitan Region
- Acceleration of Jatigede Reservoir construction will also serve as a source of raw water and irrigation in the Metropolitan Region
- Geographical location of Metropolitan area of Cirebon Raya is strategic because it is on the Pantura line
- The potential of natural resources in the Cirebon Raya region is quite abundant, in the form of agricultural products, fisheries, minerals, geothermal energy, oil and gas
- Distribution of tourism potential, good natural attractions, artificial tourism, historical / cultural tours, and culinary tours
- The existence of Cirebon port and local airport as the transport driving node
- Potential of industrial and craft development
- The presence of skilled labour to support the development of industrial activities
- The development of areas with urban functions tend to lead around the city of Cirebon, so the need to spread the area with urban functions in Metropolitan Cirebon

Mission of Metropolitan Cirebon

- Realizing Metropolitan Cirebon Area as a cultural and historical city as well as tourism development within the framework of local wisdom
- Strengthening and cultural and historical development that shapes the image of Metropolitan Cirebon areas
- Cultural and historical development of tourism in the framework of local wisdom
- Realizing the development of Metropolitan Cirebon area based on industry and craft that are qualified and competitive
- Increasing the productivity of industry and craft in various centers in an integrated and sustainable manner
- Development of education that supports the development of tourism, industry, and handicrafts in various areas of Metropolitan Cirebon

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Goal setting for Metropolitan Cirebon

- 1. Increasing the coverage of Metropolitan Cirebon area infrastructure services
 - Development of Metropolitan Cirebon area connectivity with other national growth centers and connectivity between centers of activity in the Metropolitan Cirebon area
 - Development and Development of Settlement Infrastructure in the Metropolitan Cirebon area
 - Development and development of energy and information & telecommunication networks
- 2. Increasing the production and distribution of food of Metropolitan Cirebon areas
 - Fulfil of food supply for urban areas, urban suburbs and rural Metropolitan Cirebon
 - Stability of industrial raw materials
- 3. Developing a quality and competitive community and enhancing institutional capacity
 - Multi-stakeholder institutional development in the Metropolitan Cirebon area
 - Integration of Spatial and Non Spatial Database Development of Metropolitan Cirebon
 - Implementation of integrated development plans, programs and financing in the Metropolitan Cirebon area

A few indicators be considered as metropolis process of Cirebon Metropolitan are

- The occurrence of congestion in some areas
- Lack of availability of housing for the community
- The extent of the technical irrigation areas in the Metropolitan Cirebon
- There are several areas that have potential for disaster-prone areas
- Occurrence of land conversion in rural area in Metropolitan Cirebon
- The Human Development Index of Metropolitan Cirebon is still lower than the Human Development Index of West Java Province
- Problems in waste management (Handling and management of water and waste water treatment; Need to anticipate the fulfillment of clean water needs in Metropolitan Cirebon in the future

4. Conclusions and Implications

Metropolitan is face with challenge of dynamics of regional agglomeration. The metropolitan area incorporates an agglomeration (an advanced residential area) with an urban circle zone, but it is close to commercial centers. Development plan of Metropolitan Cirebon accommodate for anticipate regional development and overcome challenges of spatial dynamics or development sectors.

Metropolitan delineation is made of informal agreements and volunteerism among various communities, community leaders, associations, academics, businesses, governments, working together as equal partners with mutual benefit. The metropolitan area is defined not merely the delineation of space alone, but functionally and transparently. Metropolitan effectively deals with traditional elements, but also administrative sustainability of planning and service levels. Urban planning Metropolitan Cirebon becomes complementary to the coordination and moderation of urban communities for providing of sustainable infrastructure for urban areas and challenges of urban management.

The metropolitan action program is direct towards achieving sustainable development, socio-economic, and cultural balance. Every activity and interest in the metropolitan area are carried out based on agreement of multi-stakeholders. Metropolitan cooperation concerns local culture, and education, climate change and energy efficiency, disaster, health, migrations and socio-cultural integration, business promotion and marketing area, accessibility and mobility, and city cultural landscape and urban landscaping.

In anticipation of dynamics of urban areas and activities, development plan Metropolitan Cirebon must be done revision and updating which tend to occur, at least every 5 (five) years annualy. Urban

dynamic give feedback. It is well-accommodated by actors both locally, regionally, nationally and even globally.

Metropolitan Cirebon should reevaluate trends of the urban economy. Economic aspects need to be revalued such as net domestic product, net investments, asset values, saving, consumption. While ecological aspects concerning climate change, water resistance, availability of raw water and clean water, abrasion handling, handling of puddles and floods, green open spaces, national parks, irrigation water availability, drainage arrangement, and REDD from all urban areas and around Metropolitan Cirebon .

Mobility of people and goods in Metropolitan Cirebon, both in internal context of urban areas and their interconnection with other regions. The management of urban organizations that handle transportation very urgent to link with road infrastructure, transport mode, traffic management, and regulation of transport, both locally, nationally and internationally. High accessibility for metropolitan urban area fulfill should be focus on comprehensive plan, such as land, air, and port transportation planning.

The inclusive spatial and sectoral planning of the Metropolitan Cirebon consistently maintained from the various interests that support development of urban activities. It is supported by strong commitment from all stakeholders, such as academic, business, government, community, and media communication. These conditions will build innovative markets, harmonized space, and reliable networks that support direction of regional development of metropolitan Cirebon, and target capabilities in accordance with urban dynamics in a controlled manner.

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References

- [1] Alizadeh ,T, Sipe, N, Dodson, J 2011 *Metropolitan Planning and NBN : A comparative Policy Analysis Sidney Vs Brisbanen*. Griffith University, Brisbane, QLD, Australia. World Planning Schools Congress 2011: Planning in an era of uncertainty and transformation https://research-repository.griffith.edu.au
- [2] Wilmoth, D 2012 *Urban Infrastructure and Metropolitan Planning : Connection and Disconnection*. Conference Proceedings 5th International Urban Design Conference 2012 Peer reviewed papers.
- [3] Kossowski, T, Hauke J, 2012 Analysis of The Labour Market in Metropolitan Areas: A Spatial Filtering Approach Questiones Geographicae. Institute of Socio-Economic Geography and Spatial Management, Adam Mickiewicz University, Poznań, Poland Manuscript received: March 29, 2011 Revised version: May 11, 2012
- [4] IFC 2010 Strategic Community Investment. A good Practice Handbook for Companies Doing Business in Emerging Markets. International Finance Corporation. Pensylvania, Washington. USA.
- [5] Romeo, L, and Smoke, P 2014 *The Political Economy of Local Infratsructure Planning*. International Center for Public Policy. Andrew Young School of Policy Studies. Georgia State University, Atlanta, Georgia, USA.
- [6] Polese, Mario. 2014. Why Do Cities in Poor Nations Not Create More Wealth? Three Simple Statements and a Windows of Opportunity. In The Buzz in Cities. New Economic Thinking Yusuf, Shahid (editor). 2014.. The Growth Dialogue. Washington, DC. USA
- [7] Kenney, M, 2014 *The Connected City. In The Buzz in Cities. New Economic Thinking* Yusuf, Shahid (editor). 2014. The Growth Dialogue. Washington, DC. USA

- [8] Frenchman, D, 2014 Designing Better Cities. In The Buzz in Cities. New Economic Thinking Yusuf, Shahid (editor). 2014. The Growth Dialogue. Washington, DC. USA
- [9] Mackaye, B, and Mumford, L, 1928. *A Philosophy of Regional Planning*. The Appalachian Trail Conference, Harper Ferry, East virginia and The University of Illinois Press, Urbana-Champaign. USA
- [10] Supriyadi Rustidja, E, 2012 Local Economic Development and Triple Helix: Lesson Learn from Role of Universities in Higher Education Town of Jatinangor, West Java, Indonesia. Social and Behaviour Science, Elsevier Journal. Vol.52, Oct 2012, page 299-306.
- [11] Fushtey,D, and Quayle, M, 2004 Leadership lietarcy: Public interest in land-use governance.
 Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 39-57. Delta
 Series 4. Wageningen University, Department of Environmental Sciences, Land Use
 Planning Group, Wageningen, The Netherlands.
- [12] Harrison, J, and Growe, A, 2014 From places to flows? Planning for new 'regional world' in Germany. European Urban and Regional Studies, 21 (1), pp.21.41.
- [13] Beunen,R., Ronald van Ark, Arnold van der Valk and Rinus Jaarsma. 2004. *Planning nature concervation in Ducth metropolitan landscape*. Gunther Tress (Eds.). Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 166-177. Delta Series 4. Wageningen University, Department of Environmental Sciences, Land Use Planning Group, Wageningen, The Netherlnds.
- [14] Wolfgang, K, and Peter, S, 2008. Discourses on 'Metropolitan Driving Forces' and 'Uneven Development': Germany and Rhineruhr Conurbation. Regional Studies, Taylor & Francis (Routledge), 2008, 42 (08), pp.1187-1204
- [15] Jan van de Borg and Antoni, P S, 2005. *The Impact of Culture on the Economic Development of Cities*. European Institute for Comparative Urban Research, Erasmus University Rotterdam.
- [16] Spiller, M 2012 Measuring and capturing the value from metropolitan planning; lessons from Melbourne and Dublin. SGS Economics and Planning Principal and Partner, SGS Economics & Planning Pty Ltd. Melbourne.
- [17] Kumar, A 2004 *Inverted compact city of New Delhi*. Gunther Tress (Eds.). Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 79-102. Delta Series 4. Wageningen University, Department of Environmental Sciences, Land Use Planning Group, Wageningen, The Netherlnds.
- [18] Sommer, P, 2004 Between to cities: *The ecological footprint of Vamvouver and Seattle in Northwest Washington*. Gunther Tress (Eds.). Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 62-78. Delta Series 4. Wageningen University, Department of Environmental Sciences, Land Use Planning Group, Wageningen, The Netherlands.
- [19] Stupar, A. 2007 Expressing the power of technology: Urban Challenge, Global Fashion or *Imperative of Sustainability?*". 6 th Annual IAS-STS Conference "Critical Issues in Science and Technology Studies". Graz: Institute for Anvanced studies
- [20] Hartz, A, and Kostermann, R, 2004 New planning concepts and regional cooperation: Responding to the challengers of new urban landscapes. Gunther Tress (Eds.). Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 178-198. Delta Series 4. Wageningen University, Department of Environmental Sciences, Land Use Planning Group, Wageningen, The Netherlands.
- [21] Bourdeau-Lepage, L, and Jean-Marie, H, 2014 *Metropolisation.in Warsaw economic change and urban growth.* LATEC, Canadian journal of regional science/revue XXV:3, autumn 2002, 423-446.
- [22] Zuzanka-zysko, E, 2015 Shaping of metropolization in Poland Theoritical aspect . Studia regionalia. Pp , 2015, pp 41-42
- [23] Glesson, B, Darbas, T, Johson, L, and Lawson, S 2004 *What is Metropolitan Planning*. Urban Policy Program, Griffith University. Brisbane

doi:10.1088/1755-1315/126/1/012175

[24] Schot, PP, Barendregt, A, Wassen M J, 2004 Modelling approaces for matropolitan landscapes. Gunther Tress (Eds.). Planning Metropolitan Landscapes. Concepts, Demands, Approaches. pp 147-163. Delta Series 4. Wageningen University, Department of Environmental Sciences, Land Use Planning Group, Wageningen, The Netherlands.