SETTLING CRITERIA IN SELECTION LOCATION OF NEW REGION CAPITAL

THESIS

A thesis submitted in partial fulfillment of the requirement for the master degree from the Institute Technology Bandung and the Master Degree from the University of Groningen

By:

INDRA SAPUTRA ITB: 25409056 RuG: s2018527

DOUBLE MASTER DEGREE PROGRAMME



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ABSTRACT

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Region Capital city holds important role in the regional development. Due to the decentralization process and trend of proliferation region for last a decade in Indonesia, some regional capital city should be relocated to the new location. However many of the relocation process still not finished yet and some find difficulties to relocate for still having resistance from the community that not agree for the location chosen. Inevitably this situation affects the regional development in that area. One aspect that will be addressed in the decision making process is the criteria used in choosing one alternative among various choice possibilities given. By conducting content analysis and case study analysis some international understanding toward capital city also taken into account and the new set of criteria will be generated and tested. Another aspect that will be assessed is the methods used by decision maker, and will be analyzed and compare between the case study and the operationalization of the new set of criteria. The outcomes of the research are the new set of criteria and the deep understanding of key aspect of capital city.

Keyword: regional capital city, criteria, decentralization, planning evaluation

GUIDELINE FOR USING THESIS

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1 Introduction

1.1 Background

A capital city, or can be called capital, obviously is an area of country, province, region, or state regarded as having primary status;. A capital is almost always a city physically, encompasses the offices and meeting places of the seat government and usually fixed by law and constitution. (Turner & Turner, 2011). Furthermore, the capital city is frequently the largest city of its constituent area. Some capital cities have big and agglomerated area otherwise others experience relative small area and have low population. In most countries the primate city coincides with the capital city , the possible interpretation of this correlation is that capital city are more attractive location than their respective political hinterland because of the capital city function. (Dascher, 2000) Yet, this situation depends on the nature of the nature of their constituent area politically (Claval, 2000).

In the regional development context, the seat of government in major sub-state jurisdiction is often called capital as well. Literally this term is typically most used in countries with some degree of federalism, wherein major sub-state legal jurisdiction have element of sovereignty. In unitary states, an administrative centre or other similar term is typically used for such location beside administrative capital city. For instance Indonesia, beside has Jakarta as the national capital city; also has enormous sub-state autonomous regions act as the regional capital city. In this situation, provincial and municipal/regency regions are autonomous sub-state region authorized to manage their own regions.

Historically, Indonesia has long note of how this country deals with its sovereignty. Both unitary and federal state; these systems have been tested in this country and end up with the unitary nation named unitary state of Republic Indonesia. On the later form, the level of centrality is being shifted from highly centralized in the early life of the republic up to now to the decentralization trend begin in the late of 20th century. This Indonesian's experimentation with democracy and regionalism has also resulted in interesting shift where change direction from highly centralized system to decentralized system was enabled by the reformation action in 1998, which become the starting point of the wane of centralistic government.

On this context, as what Salim and Kombaitan coined about the emergence of regional centers after reformation action that "trying to show their importance in the national urban constellation" (Salim & Kombaitan, 2009, p. 124). Furthermore, Therborn and Ho specifically argued that in Indonesian context "...new regional center have emerged contesting with the symbolic power of Jakarta through a search among traditional and regional motifs." (Therborn & Ho, 2009, p. 59). In addition the purpose of decentralization process obviously is to ameliorate the distortion and unbalancing condition of the nation , and let rest of region to develop.

In regional capital city context, due to decentralization process in the nation, there were major change in the sub-state jurisdiction where many consolidation on the provincial and regency/municipality power and authority. This consolidation in the decentralization process through region has created dynamic changes in number of autonomous region in this country. Commissioning new autonomous region which come apart from former region, was the trend that makes the number increased. On the other hand, the number could be reduced by unification or elimination of existing region. This is the effort by government for the sake of community aspiration. This phenomenon hopefully will headed to goals of decentralization itself; namely increasing of public service, democracy process, well being, security on each region, good governance and harmonic relation between central and local government. (DRSP, 2006)

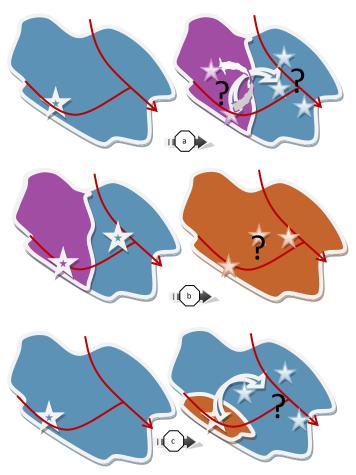


Figure 1. Three typology of regional capital relocation in Indonesia

The change of autonomous region number also has consequences in creating new capital city regard to new constituent area; or relocating the capital city to the more representative area. (Effendy, 2007). This creating or relocating new capital city can be traced from three typologies; which can be illustrated in the picture 1. The first typology, depicts possibility if a region turns to be two equal regions, for instance a regency split up into two new regencies due to vast area its controlled, or can be a part of provincial region which want to be a new provincial region due to different culture, (Priyono, 2007) for example Province of Banten which came apart from West Java Province. Subsequently, second typology came from the need of region to joint up other region perhaps due to lack of public service for instance. When each former

capital, none of them were willing to concede the honor being capital to one

another; then they should create new area become new capital for the joining region. (Sudjana, 2001) This type of creating capital city depicted in second diagram.

The last type was a case happens where urban which serving as administrative center of region can emerge as new autonomous city and take some part of the region became their own new municipality. For the new municipality it was not a problem in deciding capital due to it has built area being a capital, otherwise for former region they should relocate its capital to its own region, inside its territory. (Cahyadi, 2009)

Deciding a new location of capital city, is a public decision. However, this decision inherently sticks to the decision for the region proliferation (pemekaran wilayah). Sometimes the decision has to take briefly and without deliberate discussion. This is the rationale of some cases where regulation assign temporary and definitive capital for region affected by region proliferation, illustrating how the decision should be make quickly and in line with the region proliferation process itself. Therefore, with so many pressures in the working load some decision making some prioritizing what should be done urgently at the moment. The short time goal was the successful of the region proliferation, and the rest should be compromised later. In addition, there are no reference for the capital location neither from the regulation about the regional proliferation in the law or government act which can provide some guideline to ease the decision body deal with the time and inevitable need for the decision. This situation makes the decision to find suitable location for the new region capital was not deliberately discussed. Subsequently, after the proliferation process was succeeding, there was still unsatisfied condition about the location of the new capital.

Literally, there is limited discussion about the criteria should be bear by a region especially when one region decides to relocate its capital city regardless the rationale behind. For example the literature had given general list of criteria regardless the nature of the region it's served. On the other hand the different nature of nation or community composed the sovereign nationality make the different character of capital city they have. This unbalance knowledge was the basic problem of research; which want to bridge this thinking which want to elicit list of criteria for capital city regard to its characteristic and nature.

This thesis tried to find give input to the public institution which responsible for the making decision about selecting location of region capital city. The idea was quite simple; anyway, the chosen area should represent its constituent area, the characteristic of the area it serves. This idea literally has been discussed and some international understanding can be acquired about the important role of capital city and the characteristic which stick on the capital city; depend on the nature of the state whether centralized, federalized or other type of political formation of the state. Also the characteristic could be different if the region where the capital city controls more as the economic capital city. The role of capital city obviously has been clearly discuss in the international literature that promote some characteristic should be fulfill by capital city based on its function. International understanding about the city and capital city also their role in the global city has crystallized general role of capital city, namely functional, symbolic and economic role; and three type of capital city, two political capital and an economic metropolis capital. (Claval, 2000).

Decision for finding suitable location for capital city could have impact great impact to the development pattern and growth of the region entirely. So, the decision involves not only local planning board office but also include the stakeholder and community representative to discuss and what aspect should be taking into account. This thesis, start with the simple idea to reach compromise to all aspect that should be considered at the moment. Even each aspect has opposite value each others. So, the set criteria that will be emerge in the middle of discussion hopefully will help institution that have responsive for decision making, community member, and other stakeholder involved in decision making process to see clearly each case and use the criteria to guide their judgment to make good decision in finding suitable location for future capital city in their region.

For Indonesian context, relocating a capital city was one of problem emerge from the context of decentralization where the actions come for dissatisfaction about centralized system that cannot accommodate even distribution of development and imbalance of economic growth between central and local region. (Pratikno, 2008). The process was starting from the evaluation of feasibility a region become autonomous, followed by other problem such as boundary problem and capital relocation. In the case of capital city relocation, central government gave flexibility for each region to decide criteria for the capital city they want. But this flexibility has price to pay; some clash and public unrest took place in community due to the process of decision making for relocating capital city which was unsatisfied.

1.2 Research Objectives

The objective of this study is to reconcile criteria based on international understanding of capital city around the world. Actually general idea about the characteristic and aspect should stick on the capital city will be discussed to generate a set of criteria that will be used in deciding suitable location for the capital city. The awareness of not only functional aspect of the capital city and finding new aspect that never be taken into consideration is the aim of the research to generate a set of criteria needed in capital relocation. This consciousness will be used to compose list of criteria based on the nature of region its served. Furthermore this research will operationalize the new criteria to one of capital relocation case in Indonesia, inevitably assessing the previous decision making process in term of its methodology and technique being used.

1.3 Research Question

To accommodate the decision making process in relocation of the capital city, some international understanding should be take into account in order to compose list of plausible criteria for evaluate the location of capital city. To select one among many choice possibilities of cites potentially can be a capital city, the criteria should be clear, based on the nature and characteristic of the capital city needed.

On the other hand, the context of the local condition of the region that will be they served. Beside the context of the region, the methodology, techniques used in the evaluation should contribute to the flawless decision process. This conclusion can be drawn from existing decision making process at hand. In other words, the research question that want to be answered by this thesis area:

- 1. What are possible criteria based on international understanding of role of capital city, which can accommodate the nature of region they served in future?
 - This question is a theoretical inquiry about criteria need for being a capital city. The set of criteria will be elicited from the literature about the international understanding toward aspect of capital should became criteria should be consider in capital city relocation.
 - After drawing out set the criteria, determination of methods are, testing and operationalizing the new criteria, are the subsequent tasks. Some data collection will be needed, yet depend on the aspects that will be elaborated and the availability of the data themselves.
- 2. What context does criteria chosen, and what are criteria, methodology, and techniques used by planner in evaluation methods.
 - This empirical question will assess and criticize case study in term of the criteria, methods being used and make some reflections.

3. Does the criteria, methodology, they used is adequate enough to choose good capital city location.

This final question will criticize both methodology being used in practice and the criteria picked up for relocating capital city. This question obviously will find way to synthesize the question one and two from the case study chosen. In this part, the new set of criteria will be applied and tested, using literature and context of the case study, make use of process has been done by the case study and chose suitable and adequate methodology at hand, this will create new set of criteria and methodology than the case study. subsequently this new set of criteria and methodology can be compare to the case study.

1.4 Research methodology

The research would be primarily based on the literature review, content analysis, case study and multi criteria evaluation methods. Literature review is started by finding some key aspects on international literature about capital city, trying crystallized them into set of criteria which represent all aspect regard to condition being a capital city at the time. Furthermore Content analysis will be used so key aspects from literature which became the basis for criteria set will be tailored to generate a set of criteria that will be used in evaluation method for capital city selection. Afterward, the research will pick one of relocation case where the author has experience in the formulation of decision for new capital city; assess all aspect of decision from process to the methodology and technique being used. Furthermore the original set of criteria generated from the international literature evaluated and discussed.

The aim of **literature review** is to frame theoretical and knowledge basis for generating criteria for capital city. The task is to provide empirical thinking exploring the possible key aspect for a capital city. From these key aspects the set of criteria will be generated. In other word, brainstorming for generating ideal idea about the key aspects of capital city will be used to end up with proposing a set of aspect that should be a set of criteria of deciding location of a capital city.

Content analysis is the study of recorded human communications such as books, websites, paintings, and laws. (Babie, 2010, p. 333). The rationale for choosing content analysis became the method being used based on three advantages bears by content analysis. First is an efficient rationale, as long as researcher has access to the material to be coded, research can be undertaken. Secondly, if there is a need to update the data should be recoded; research can only recode a portion of data rather than a whole. Lastly, unconstructive measures, means that all communication stuff used in the study already printed and written, no effect to them at all. However some disadvantages should be taking considered properly. Validity and reliability issues became major weaknesses of this study.

Some document that could be involved in the content analysis methods are:

International discussion about the capital city. Any discussion which relate to capital city and
the aspect within. International literature plays role as source to elicit a set of criteria
needed in choosing from many choice possibilities for being a capital city elsewhere. Some
international key reference also being examined in this methodological aspect where the key
term, capital city, relocation and other term relate to the capital city will be drawn and be

- examined to reveal the meaning behind that term and relate it need of finding certain criteria needed in regional capital relocation.
- 2. Law and regulation. Two main source of regulation for was regulation which taking about the regional autonomy (*otonomi daerah*) law no. 32 2004, financial balance of central-regional , law no. 33 2004, government act no. 129 year 2000 about regional proliferation (*pemekaran wilayah*).
- 3. Policy regulation, which exclusively obtained from the one case that will discuss as a comparative study for compare the set criteria which will be proposed.
- 4. Other source, from media, internet and blog that discuss the capital city, some key word than will be decided to see the repetition of the words itself. This media will be used to pick similar value which used to judge suitability of one region become a region capital.

Case study, according to definition by Merriam Webster's Dictionary is an intensive analysis of an individual unit such as person, groups, events, stressing development factors in relation to the context. Close relate to the question study of how and why, the research should conduct broadly and define the contextual problem. The power of this study is can be used to describe phenomenon beyond quantitative, also this method can solve contextual problem due to case study can explain specific cases. However this method has weaknesses in making generalization of the conclusion (Yin, 2009). Yet the method itself has proved giving clear interpretation of a specific case which sometimes could be happen on the other case. Even though many researcher criticize the role of case study in giving satisfied result for science and knowledge, one should remember that this method has give big help in construct theory and preposition in the social science. (Flyvbjerg, 2011).

Among many regions in Indonesia that has experienced capital city either in provincial or regency region, the option fall to the Regency of Padang Pariaman in West Sumatera Province. The first rationale for choosing this case is the position of researcher as employee of Padang Pariaman regency government has witnessed the process of relocation in person. Also researcher in some degree has personal experience in the capital city relocation process and also has access to the document and important information relate to the discourse of capital city relocation.

Multi criteria evaluation method is used to operationalize the criteria so can be seen the difference between the case per se. Multi criteria evaluation is a useful tool in evaluation method for assessing and choosing one option among many choice possibilities and many criteria. This method has flexibility to accommodate various, contracted criteria and compromise the suitability and availability of the data needed. Moreover this methodology has various option of technique that can be chosen regard to the availability of the data.

The process that will be passed during the research describes from framework used and the outcome that should be reach as follow:

1. Framing theoretical and knowledge basis for settling new set of criteria

The goal of the research is generating set of criteria of capital relocation. However, before eliciting set of criteria that will be tested and operationalized, the theoretical and knowledge basis of the criteria should be clear. This will give theoretical perspective of the set of criteria that testable and plausible. Beside, the case of study will be enriched the understanding of the operationalization of the set of criteria, the method that should be pick up, and also the technique of operationalization itself.

2. Collecting and selecting data and information to elicit new set of criteria

Based on aspect mentioned by set of criteria elicited from the literature study, before testing and operationalizing the set criteria with the available data; the set of data and information should be collected and inventoried. This data comes from the case study, and some data that in fact need observation and elaboration will be compromise using the qualitative methods through rough judgments, since the point is not to the outcome of the evaluation but more focus on the criteria and methodology being applied.

3. Testing and Operationalization new set of criteria

As mention above, the operationalization of criteria definitely using the multi criteria evaluation methods, and what is the adventage of using this methodology will be discussed there are vast range of methodology in the Multicriteria evaluation methodology, one should pick based on the need and availability of the data.

4. Drawing conclusion and recommendation

Some finding and remark will emerge from the testing result, and by compare with the case study, the reliability of the set of criteria will be assessed and some conclusions and recommendation will be provided.

1.5 Report outline

Chapter 1 Introduction

The chapter will give rationale of conducting the research, the objectives and question that want to deliver, methodology will be used, the outline and theoretical frame work that will be applied. Introduction part will discuss about the urgency of this research in the Indonesia context specificly and in the add international understanding and discussion about the importance of capital city and the aspect and criteria should be taken into account for relocating the capital city itself. Furthermore this research also useful in give broader view about the role and existence of capital city in the global development.

Chapter 2 literature review

The exploration of literature about the capital city, creating theoretical basis that underlie the generating process of drawing set of criteria in capital city relocation. The chapter will focus on providing theoretical and empirical basis of capital city and assess all aspect that can be used to compose set of criteria that should be dug up by planner in decision making process in selecting many plausible choice possibility of capital city relocation. This chapter will end up with the list of criteria that will be tested and operationalized.

Chapter 3 Case Study

in this part, before discussing the relocation process of the case study, the context of democracy and decentralization in Indonesia generally and the context of the local tradition and aspect specifically will be elaborated a subsequently the case study will be explain briefly and attention and focus will be paid to the methodology and set of criteria being used during the decision making process.

Chapter 4 generating set of criteria and operationalisation

Start with the theoretical aspects and empirical evidence that will be drawn in the chapter 2, this chapter will discuss thoroughly methodology that will be used in testing and operationalizing the

new set of criteria. After conducting series of testing and operationalization of set of criteria, and comparing with the case study which discussed in literature review, some finding can be discuss and debate. Also in this chapter the operationalization of new set of criteria will be conducted and the data being used most of them came from the case study. Some data that did not exist in the case study will be compromised as possible.

Chapter 5 conclusion

The conclusion is then drawn from the finding of the research and address the research question mention before. Some suggestion will be made for better future research.

1.6 Research framework

The diagram below illustrated the framework of this thesis. Depart from the international understanding about the capital city combine with three aspect of capital city (Douglass, 2005), this research will generate set of criteria needed in the capital relocation. Simultionously, the case study will provide useful information about the decision making process of capital city relocation in practice and drawing some rationale of the methods and criteria had been used. Subsequently the set of new criteria from international understanding will be tested and compared with the case study, the whole process then finally arrive at better understanding and better criteria for capital city relocation.

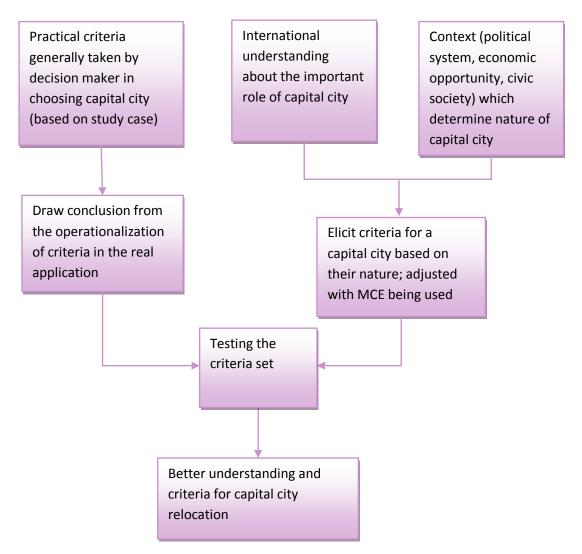


Figure 2. research framework

2 Theoretical Review

Interesting discussion about the capital city has been held internationally by many authors and scholars, from general definition about the supreme status of capital city to what aspects should be beared by a capital city under scrutiny. General understanding about the capital city as discussed in the introduction in chapter one perhaps could be helpful to give a brief view about the superiority position of capital city among other cities in its region in term of politic, economic, and social aspects.

At the beginning of the chapter, a sound discussion about the capital city in Europe by Claval would be a good starting point to assess aspect of a capital city should have. Moreover by taking other discussion and understanding from other authors from other part of the world would enrich this information and could be the basis for needed information that one should have when judging a region to be capital city.

In last part of the chapter all these understanding are trying to take into account and destilled to be a useful 'tool' that can be employed to assess the suitability of a region for being a capital city. This 'tool' would be a set of matrix that consist of important aspects of capital city. These aspect and its degree of importance among other aspect will be depend on the condition either political or economic situation of the jurisdiction area of the capital city.

2.1 Capital City and nature of country

"Discussing capital cities will discuss about a highly strong tradition and symbolic significant of places..." (Claval, 2000)

To refine, Claval argued that in the study of capital city at least there are three function reflected by capital cities at the same times, namely "political, symbolic and economic functions." (Claval, 2000, p. 73). The two first functions will explain the nature and organization of state which they control whether it was centralized or pillarized (*verzuiling* in dutch) society or country, and their function differ in term of characteristic constitute them.

Furthermore he mentioned two organizations for prevailing countries rooted from tradition of country in Europe. Centralized country or society; means that legitimacy and source of power and authority comes from the state. This concept explains that the source of power and legitimacy came from king which accepts delegation from God. The central position of King in the state around Europe until eighteen century placed the king as source of power and the site of king become superior compare with other region. Although the source of legitimacy shifted from the king to the people and government got power from the vote of citizen, still the unique source of power and sovereignty bears by the capital state, This is reflected by characteristic of old system that still prevail in country such as France and Spain. On the other hand, the completely different conception of state from the centralized system above is pillarized country. Legitimacy and power do not comes from divine concept. But It comes from different communities that agree to establish a state which

will serve their inner and outer security among them. So "the foundation of legitimacy, power and sovereignty always rest on the participating community" (Claval, 2000). Aside from two type of capital city above, the third type emerge from the situation where such political capital cities offer low profile economic making many function had to be accommodated in other environments, namely major economic metropolis. The characteristic of this capital city was the high role of economic role, active harbor or centers of manufacturers and trade. Social, intellectual and artistic activity then followed the development of economic cities making component of ruling class resided the city. (Claval, 2000, p. 76)

Subsequently, from the article mentioned above some feature derived. First the natures of state will define the symbolic status of the capital city, where in the centralized state this function more dominant than in pillarized state. In centralized state, the capital will growth as celebration of superior entities, either divines entity of monarch or the entity of democracy. On the other hand, in the country that originated from the contract among communities the capital city had limited symbolic status. Secondly the relation between local and central government could determine the size of capital cities. For example the autonomy given to local state by centralized system is minimal, so the activity will take place largely in capital city rather than in local city. But reversely, participatory state will give large portion of autonomy to the local city making the local city will bigger than its capital city. Furthermore the economic activity will chose its location proximity to the source of power, make the rationale why in centralized capital like Jakarta experience huge agglomeration and explain why New York larger in economic scale than the Federal Capital of US, Washington DC.

Horst Zimmermann illustrate that capital city can be distinguished in two different capital city in term of economic center of nation, respectively the capital city that experienced economic agglomeration and capital city that doesn't experience economic agglomeration. (Zimmermann, 2010). Beside the differentiation of capital city base on its agglomeration experience, Zimmermann divides two types of total effect of the presence of central government in capital city to private sector thus to the economic growth. The effect can be seen as directly and indirectly related to public sector. The first three effects related to the public sector are employment, importance of private function and innovation. At first, the existence of central government obviously has created huge need of employment in the capital city for public sector. Inevitably the large employment followed by increase of income for the city residents as a whole. In other words, the existence of central government in the capital city has create prosperity in the capital city relate to the function of public employment. Secondly, related to the public sector, the existence of government needs institution functions as lobbying agent. This function usually takes by private institutions which exist only when it has proximity to the power in this point the proximity to the government body in capital city. So the capital city became the breeding ground of this private function, which obviously plays public function. Finally, other private activities in the public sector create positive spillover to the capital city. (Zimmermann, 2010, pp. 762-63)

The last three aspect close related to the private sector, comprise impact of innovation, symbolic function and central government service. The ignition of innovation most times happens in the capital city where the private function effectively to answer the challenge in the capital city where the existence of central government will trigger the completion among the private institution. Also the symbolic function of capital city colored by the private sectors. Large scale and enormous

Business and trading activity, lobbying agent, will give symbol of capital city that could not be found in the other city in the country. Furthermore, the service provides by the central government also dominated by private sector that have sophisticated and advanced capacity than did in other city. However, this private institution role obviously is triggered by the existence of the central government in the capital city. To sum, in the Zimmermann point of view, both private and public sector accelerate each other making the unique of capital city from others. (Zimmermann, 2010, p. 764)

2.2 Capital city and the agent of growth

Some empirical research has conclude that there are ad hoc combination of explanatory factors that play role in determine the enormous growth of capital cities in the world. The main question is why a capital city being more attractive and invite more people to settle than living space in the political periphery. Ades and Glaeser (1004) in (Dascher, 2000)has pointed out that political instability and lack of democracy gives household in the capital city biggest political weight than others. Obviously riot in the capital city more threaten to government than elsewhere. So, government tries to appease household in the capital city by giving subsidies or levying lower tax rates.

Completely different with the case above, the enormous size of capital city also being found in relative stable democracy and government such as Britain, France and Belgium. There are three explanation of this namely production, consumption and contribution externalities. First the role of government demand for good and service is the explanation of production rationale. Reichart (1993) as mention in (Dascher, 2000, p. 375) coined that government demand for local inputs lead the expansion of the capital's private sector in condition there is excess capacity in local economy. If the marginal propensity to import is small, the expansion then largely restricted too. So, capital city household get benefits from this situation than household in periphery. Secondly, the capital city household enjoys individual consumption benefit from public good and it will decline in line with distance to the capital city. And the last contribution toward this public good distributed in capital city space evenly.

Beside the existence of the government and political power making capital city attract many household to live in; other factor that triggered development in urban area should be taken into account. This agent of growth consists of principal factor, namely specialization, Human Capital and Institution. Some principal and causal relationship could give rationale of why city growth in enormous size. For instance, some set of structural pre-condition for certain type of activity, characteristic of labor force, institution and accident (unique break through) event. obviously there are clear relationship between specialization and labor/human capital economically, however, the direction however still not clear and "could be reverse in complex recursive developmental feedback." (Storper, 2010).

In describing the growth of Capital City, what Zimmermann discuss is not only to scrutinize the unique features, but also to combine with ubiquitous features of urban growth. The assessment should not be limited to the quantitative aspect such as employment and income, moreover the unique of capital city is the qualitative aspect, for instance the feeling of being important of being part of it.

2.3 Decentralization and Capital City

Literally, decentralization means overturning the concentration of administration at single centre and conferring power of local government simultaneously. From the dictionary meaning, the idea behind the decentralization process is not only about administration, but also politics and culture. Concern of decentralization is to what extent the power and authority being dispersed via geographical hierarchy of state, and to what extent the institution and process through which such dispersal occurred.

Decentralization gives advantages not only in the opposite of centralization which can therapy the later effect, but also has some positive aspect to considers. In the economic point of view, decentralization can improve efficiency where the service provide by local institution is expressed and the public good is offered. Politically, decentralization will strengthen accountability, political skill and nation integration. By bringing government closer to community, decentralization will provide better service, promote liberty, equality and welfare (D.K Hart 1972, D.M Hill 1974, van Puten 71 in (Smith, 1985). Otherwise, decentralization also reaps critics. From the state itself, decentralization view as threat to the separatist, parochial and unity of general will. Decentralization views as anti-egalitarian by the supports of regional variation in the provision of public goods. (Smith, 1985, p. 5). In his discussion, smith address four main elements of the decentralization over the world namely re area, intergovernmental relation, finance and institution.

A capital city appears as particular type of city which combining the metropolitan centrality with the representation of a political entity and the civic society that shape the culture in capital city. This combines the conception of political presentation, nation symbols and metropolitan life.

Indonesia has advanced in the process democratic decentralization in last ten years, where the yield of these reforms already felt in these areas. It is well-acknowledged that Indonesia had made a bold breakthrough, leaving the highly centralized era, through the reform politics, free and direct elections in all regions; now getting ahead with local elections direct; devolution of public services fundamental to the Regency and City government. As describe in DRSP report that decentralization in this country has "transfer of two and a half million employee civil servants to local governments, and transfers large amounts of funds to the local government". (DRSP, 2006).

A number of these changes has been increasingly strengthen administration in the region, where now available powers and resources for public services and development better suited to the needs and desires regions. Investigations of this decentralization recognizes progress made to date, as well as propose measures and reforms is still needed in order to achieve objectives of decentralization that has been established in Indonesia.

Embodiment of this decentralization is a right of regional autonomy, authority, and obligation to regulate area and manage their own affairs in accordance with laws and regulations. At the lowest level, autonomy means refers to the embodiment of free will inherent in the human selves as one of the most precious gift from God (Piliang, 2003)

Regardless the political process behind the decision of splitting or merging regions on behalf of democratization and decentralization process in Indonesia, the issue that will be addressed in the following study is how to elicit criteria in relocating the capital itself. The three basic category of

European system of capital cities will be used in determining various criteria in selecting area to be candidate of capital city.

2.4 Eliciting Capital city aspects

Before talking about the aspects which capital city should have, one should put stand on which classification of capital city should he or she accept. In this thesis, the classification of types capital city used will based on the classification of European system as proposed by claval. Depart form ideal type of capital cities in Europe in beginning of 19th century, three type of capital city consist of "two types of political capital city and one type of economic capital city". (Claval, 2000, p. 76)

The basic assumption for taking this classification—as solely source for eliciting aspect which should be taken into account in the proposing a new set of criteria is that this discourse the origin of the nation state, one premise that will bring us to the early condition of the capital city which depict the nature of the "Europe political construction" which obviously being based of nationalism of entire world. This basic assumption is the base of eliciting capital city's aspects matrix which distilled in table 1. The rationale for eliciting the first table indeed comes from the idea about aspects in capital city in Europe before industrialization. However, after industrialization, aspect that dominate in the capital city then is economic center of the country. This situation inline with the transformation to welfare states which strengthen the economic role of capital.

Depart from the distinction of three possibities of nature of "modern state" as which considering as basic form of the capital cities nowadays, as what Claval concerned; some aspect then will be drawned from the discussion namely functional role, symbolic status, space of the symbolic itself, administrative function, social system, political and administrative, monetary system and tendention for location to the specific proximity.

As mention in the matrix, the aspect then will be relied on these three type of capital city, centralized political, pillarized political, and economic metropolis capital city respectively. Furthermore the aspect related to the type of capital city will be assessed its spectrum. So, some qualitative measures will be propose, for instance if the spectrum is literally mention by words 'high, 'huge', 'extremely' the n the aspect will be labeled as high adjascent to the type of capital city mentioned. Before put the measure of spectrum of each aspect, all possible aspect that discussed in this article should be write down and totally there are eight aspect should be taken into account from functional role to the location nature. Here the result of content analysis for the aspect and the spectrum of them:

Largely the aspects can be traced in paragraph 33, 34, 35 in the article respectively, namely functional role, symbolic status, space for symbolic structure, administrative function concentration, monetary system that explain the economic structure of the capital city., the other aspect also discussed in separated paragraph for instance in social aspect, in paragraph 26,27 and 28 respectively. The spectrum of each aspect on each type of capital also can be traced on the discussion on the paragraph. For instance, on paragraph 33 which explain the centralized political capital city the phrase "ultimate source of legitimacy", "huge concentration of monument" explain the functional role, symbolic status and monetary system respectively which means "high". Thus in paragraph 37 the phrase "collect levies from all over country..." indicates the monetary system of

respective capital city, which is depend on taxation, levies. This analysis tried to distill the meaning behind the phrase to be aspects and spectrum of aspect embedded on the each type of capital city.

Table 1 Aspect of considerations, base of criteria for capital city. Source: author

Aspect	Centralized system	Federal, Pillarized system	Economic Metropolis
Function role	high	low	high
Symbolic status	high	low	low
need of space of symbolic structures	Highly	Low	No
concentration of administrative	Unlimited	Limited	No
function			
Social system	Huge	low	Mediocre
Political and administrative control	high	mediocre	low
Monetary system	Depend on taxation and levy and production activity	Depend on tax and levy	Depend on trade and industry
Location nature	Proximity to legitimacy source	Near to Base of contract initiating the state	Proximity to Harbour, center of manufactures and trades

2.5 Eliciting Criteria embedded in Capital City's aspects

Criterion, in the planning evaluation methodology defined as a measurable aspect of judgments by which a dimension of the various choice possibilities under consideration can be characterized (Voogd, 1983, p. 57). Furthermore there are several ways of dealing with criteria in the multi criteria evaluation methodology. This depends on the evaluation problem at hand and the kind of question that are required to be answered. A much easier and less confusing approach is the derivation of criteria by means of an inventory of the issues which are involved. This inventory can be performed may depending on both the complexity of the problem and the creativity of subject who are doing the evaluation. For instance one can do screening the newspapers and other magazine, interviews, questionnaires, brainstorming and so forth.

As what have done in previous section, the overall aspect should be taken into account has been recognized and distilled in table 1. This preliminary step is important since by composed an inventory of aspect should be taken into account, the derivation of criteria will be much easier and not puzzling. The next task is to elicit criteria which related to the each aspect that can be conducted by doing inventory of the issue relating to the aspect which will be assessed. By using content analysis to examine the aspects which will be derived to be criteria should be possessed by capital city the process can be expressed in the explanation below.

By evaluating the aspect considered in the table 1, there are some aspects that could be grouped into one aspect which perhaps make clearer determination for one aspect to another. Furthermore, from eight aspects proposed in the table 1 could be shrinking into four general aspect namely functional, symbolic, social and monetary systems.

Starting with the first aspect about the functional role, many international discussions has dispute the functional role of capital city. First about centrality of location with logically embedded in functional role of capital city. Even this centrality trespass the limit functional role into symbolic role as argued by Claval, "La centralité n'est pas seulement fonctionnelle: elle explique le rôle symbolique que tiennent les villes (Centrality is not only functional, it explain the symbolic role that cities are)" (Claval, Réflexions sur la centralité, 2000) however, since the functional role is the dominant of centrality creating this criteria is the first criteria should be recognize in the location of capital city in term of functional role of capital city.

In the symbolic status aspect, it is clearly and explicitly declares in Claval that this aspect has important role in capital city. Some criteria that could be generated from the aspect are political symbol, whether democratic or monarch symbol, the adequate space for symbolic structures, potential for administrative function and spatial support as nation symbol of capital city.

In social aspect, the criteria is limited to the job diversification,

In monetary system, all criteria has discussed in Claval article clearly and some discussion in the article of (Douglass, 2005) (Zimmermann, 2010) (Dascher, 2000)

One intriguing aspect that have limited source is the location nature aspect. As recognize in (Dascher, 2000) that some capital city historically chosen, some deliberately decided and other choosen base on the economic position. Return to the nature of state of the jurisdiction region of the capital city, the origin of the state was the location where the political power has been hand in to the nations, so from political capital city, it depend on the location where the political agreement took place and the place politically full of historical meaning. Meanwhile for the economic metropolis the location was in near the economic center and no political meaning at all.

2.6 Set of criteria for operationalization; Theoretical Framework

After assessing the criteria should be taken into account for each aspect, some adjustment form the original matrix in table 1 had been made, generating modified matrix as put in table 2. So the information in table 2 contains set of criteria developed from the aspects in table 1; comes from the interpretation and content analysis conducted in the discussion about capital city over European countries. The List of criteria are taken from international understanding and literature review about capital city. From this developed set of criteria then the criteria will be tested.

To make the list of criteria in the table 2 could be operatinalized, some indicator should be put on each single criterion. Since this study has limitation in time and resource, some indicator being judge properly. By using several information of the importance of each aspects on each type of political and economic situation of the capital city, interesting discussion from literature, brainstorming some judgment of indicator of each criterion, the operatinalization of table 2 will be explained.

2.6.1 Functional role

a. Centrality on accessibility

This means that the area located in the central point of available accessibility for the whole region of its jurisdiction area. If the area located proximally in the centre area of the region meanwhile the center of access transport network not laid there, the area cannot be supposed have centrality on accessibility. Various indicators can be taken in term of accessibility. The condition of the transport network is a clear indicator for the accessibility of a location. Other such as distance to the nearest economic center, also give smart indicator for accessibility. However if there is more than one indicator that available and

should be taken into account, the criteria can be expanded into some sub criteria regard to the centrality of accessibility.

b. Number of political activity

Number of political activity is represented by the number of social political activities hold by political organization. One possible indicator is this criterion could be represented by number of representative member originated from the area. Another possible indicator could simply the number of population on the region, since the number of representative members in legislative itself fully represent the number of their constituents. Also some potential indicator can specifically being chosen depend on the characteristic of the region/state.

c. Potential for administrative control

Area with have high number of well-educated people will have more opportunity being a controller for administrative activity in future. These iterated people have big chance to fill strategic position in the bureaucrat which needs their skill to manage the course of government. However, many explicit indicators open to discuss in this criteria.

d. Economic center

This criterion can be measured by calculate the number of trading activity in the area. High number of economic activity will lead the area become economic center for region. Many indicator can be taken for example number of traditional market in the area, this will illustrated the capacity of region to deal with demand of goods and service emerged from the existence of government in the location.

e. Cultural center

Cultural center determined by high concentration on cultural activity, can be measured by number of cultural activity explicitly or implicitly. Explicitly can be represented by physical cultural heritage such as art, custom building; implicit mean the social activity that comes from culture heritage such as ceremonial activity, etc.

2.6.2 Symbolic status

a. Democratic/monarch symbol

Being a capital means represent the political power which rule the region. This symbolic status can be seen through symbol of democratic or monarch figure in form of statue, landmark, or any symbolic meaning that celebrate whether democratic or monarch role activity in the area. Each region around the world has their own history of political power from the past generation. Also they have some legacy related to the political history in the region and the symbol which used to represent the political power in the region. This symbol, both physical and non-physical symbol can be used to track the value of leadership and heroic character.

b. Space for symbolic status

The character which being symbolize by the country should have space to present and celebrate political symbol. The potential area can be designated for symbolic status is the condition for this criterion. This criterion represents high potential area available for building

statue, landmark, which celebrate the democratic or monarch symbol will be essential for the symbolic function of the area being a capital city.

c. Potential for administrative function

Administrative center, especially in the region which has centralistic government, should accommodate the need of vast area being designated as bureaucratic purposes. This administrative function can be indicated by choosing adequate land needed whether the capital city need more space. One indicator can be generated by divided built area by total area of region. More vast built area means more potential for administrative function as capital city in future.

d. Spatial support

This mean availability of area can be used to be developed as capital city. This symbolic status embedded in the area means the influence of the centralistic administrative so the region needs vast area for administrative purpose. As part of symbolic status, this criterion represents the reliability of the region being capital city than other. For nation or region which evenly prone to the disaster, condition of the area that have resilience from natural hazard could be

2.6.3 Social system

This criterion means the social activities which support the status of capital city. Number of work diversification can be a sub criteria that being chosen representing the maturity of social system in the area.

2.6.4 Monetary system

This monetary system's criterion can divided into three sub criterion, they are structure on tax and levy, organizations involve in productive activity, and trading activity.

a. Tax volume

Tax volume can represent the potential earning from tax that can be used for any purpose regard to the nature of region.

b. Number of economically productive organization

Many various form of productivity organization can be taken into account as indicator of this criteria. Co-operation, as the generic productivity organization active in community can be considered as a good indicator. However, not only in the number organization but also in the number of active ones, private business and other productive organization which rotate the economic activity.

c. Trading activity

Trading volume can represent the trade activity on an area. however, this criteria is quite tricky if applied in the case which have limited available data in economy of the region. Usually the data is aggregate situation of the region economy, but this criteria can be used by conducting survey in the field.

2.6.5 Contract initiating state

This last aspect of the capital city hopefully can be represent by the symbolic item mention in the symbolic status of capital city. This item could be place, historical site, specific

agreement in the past that still preserve nowadays, or other item that represent the initial decision for various community to join and delegate some authority to certain region to take care the existence of the nation. This last aspect perhaps cannot be fulfilled by modern nation or region because rarely this item still preserve in the community.

All these aspects originally recognized from the condition of capital cities in Europe before the industrialization and economic expansion in the nineteenth century. Literally, cities in Europe were combination of those models. So these ideal types just a means to stress structural features (Claval, 2000). Because in the late development of cities in Europe, capital cities transformed into industrial and commercial centers, making them being "replica of the same model, industrial and commercial trades". The shift toward welfare state strengthened the economic role of European capital cities. However some cities survived from these industrialization and modernization waves, for instance originality of pillarized society in the Netherlands.

Since no single (either national or county) government entity could adopt one of these ideal type of capital city, those government entity stand combination of each type of capital city, since the aim of the classification of the capital based on three type explain above to focus on the structural features of capital city. Claval give the example of London, Lisbon, Stochlom or Copenhagen as political capital and economic capital at the same time. However, the intensity of each type will be different, depend on the the cities themselves.

Table 2 Criteria of capital relocation drawn from International literature. The framework.

ASPECT AND CRITERIA	INDICATOR	Centralized system	Federal, Pillarized system	Economic Metro- polis
FUNCTIONAL ROLE		high	low	high
Centrality on Accessibility	Centrality on transport network	centre	n/a	center
Political activity	Number of political activities	many	few	many
Potential for Administrative control	Number of potential human resources available for public employment	many	few	n/a
Economic center	Volume of trading activity	high	low	Very high
Cultural center	Number of cultural heritage	many	few	n/a
SYMBOLIC STATUS		high	low	low
Democratic/monarch symbol	Number of statue/art/landmark	many	few	n/a
need of space of symbolic structures	symbolic purpose /total area	Highly	Low	n/a
potential of administrative function	Built area/total area	Unlimited	Limited	n/a

spatial support	Total area for possible development	big	small	n/a
SOCIAL SYSTEM		Huge	low	Mediocre
Job diversification	Number of different employment	many	few	few
MONETARY SYSTEM				
taxation and levy structure	Tax volume	high	low	Low
production activity organization	Employment in production sector	low	high	High
trade & industry activity	Trade volume	low	low	high
LOCATION NATURE				
Contract initiating the state	Symbolic item	high	high	low

This generic aspect of capital city should be translated to the criteria that can be used in proposing some alternative location for capital city relocation. as what mention in this table, the functional aspect of capital city only one among many aspect of capital city should considered. By having this set of determinant aspect of uniquely capital city; one can realized that so many criteria could be generated from one aspect. For example in the functional role of capital city, many discussion will elaborate any criteria should be related to the function of capital city aspects. This abundant information from the literature source can be used wisely depend on the availability and suitability of data has.

The aim of conducting content analysis in this research is to contain information based on key aspect chosen. Clear view throughout several document, international journal discussing, explicitly none discuss about the complete criteria that could be considered for choosing location suitable for a capital city. Yet the aspect itself scattered among many literature, scientific document, blog discussion in internet, chatting and so forth. On the other hand, many discussion in the other document such as internet discussion contain the rationale of process of relocation of some international capital city such as Germany Capital City from Bern to Berlin, Rio to Brazilia, even the proposed plan for relocating Jakarta actually they have specific issue to deliver. But in fact, all those reason is specific on each case and it was difficult to draw similar aspects that push the decision of such capital city relocation.

The advantages of the content analysis, this scattered information can be drawn and making some interpretation on each cases the meaning behind the case. By finding meaning behind the words, paragraph contains discussion about the capital city, can be drawn red line about some important key aspect that always being repeated in discussion the capital city characteristic. As what crystallized in the matrix of table 1, the aspect mention should be embedded to the capital city if one try to discuss about the capital city, for example finding new location for new capital city.

Deliberately, some rule has been applied when transforming such aspect into set of criteria. Criteria that will be generated from the aspect should not be redundant. Making list of criteria from the aspect mention above one also should consider the available indication for each aspect. The indicator should be clear, can be measured, specific, relevant and timely. Furthermore the choosing alternative indicator for each criterion could be relied on the methodology chosen. Many available

methodology of selecting various choice possibilities regard to the some list of criteria should be fulfill. This process of policy-making, however, has fascinated, puzzled and challenged generation of scientist from various discipline. In the field of urban and regional planning, attention of science in the past resulted mainly in consideration concerning the object of planning. However, a cursory literature review reveals strong evidence to suggest that planning procedures must at least three important characteristic namely flexibility, matching the characteristic of the political ring, and capacity to integrate research contribution. (Voogd, 1983) One methodology that suitable to address those important characteristic is the multi criteria evaluation methodology.

2.7 Operationalization of set of criteria

An essential component of multi criteria evaluation concerns the criteria by which an evaluation is performed. Criteria are defined as a measurable aspect of judgment by which a dimension of the various choice possibilities under consideration can be characterized. Before formulating criteria, one should know three questions should be delivered by an evaluation process of selection choice-possibilities. (Voogd, 1983)The questions are "are the choice-possibilities realistic, can be realized", "do the choice-possibilities fulfill the various minimum conditions?", and "Do the choice possibilities correspond to social desires, for instance to which degree do they fulfill what the various group and authorities wants?"

The first question then will be delivered by proposing criteria which will give insight into the realization chance of the alternatives choice-possibilities considered, which means a set of attainability will be proposed. Second question for example do they explicitly take account of those aspects which must be realized? Veto criteria are suitable to deliver the question. And the last question should be answered by the desirability criteria. The generation of criteria bears close resemblance to the generation of objectives. In this study, the set of criteria fall to the desirability criteria.

Dissagregation of criteria

There are four disaggregation of criteria namely disaggregation by time, space, angel of incidence and social group (Voogd, 1983, p. 61). In this research, to accommodate the features of each nature of nations will be served by a capital city; researcher saw the disaggregation of criteria similar with the disaggregation by angle of incidence. In this step, the matrix will be adjusted as what illustrated in table 5.

Table 3 dissagregation of criteria

Angle of incidence			Choice possibilities:
			ABCDE
Functional Role	1.	Centrality on transport network	
	2.	Political activity	
	3.	Potential of administrative control	
	4.	Economic centre	
	5.	Cultural center	

Symbolic status	1.	Democratic/monarch symbol	
	2.	Space for symbolic structure	
	3.	Administrative function	
	4.	Spatial support	
Social system	1.	Job diversification	
monetary	1.	Structure of taxation and levy	
	2.	Production activity organization	

Location nature as mention by the first table proposed from the key aspect of capital city does not formulated explicitly in order to avoid redundancy; and implicitly became part of symbolic status in the criteria of spatial support.

Scores, priorities (weight)

There are many ways to determine a set of criterion scores. It depend on the evaluation problem whether scores are based on in depth research or on just a quick and rough interpretation of evaluation at hand. (Voogd, 1983, p. 74)

Table 4 score, source: Voogd(1983) p. 75

		MEASUREMENT UNIT	ORIGIN	ORDER
quantitative	RATIO SCALE	known	known	known
	INTERVAL SCALE	known	unknown	known
qualitative	ORDINAL SCALE	unknown	unknown	known
	BINARY SCALE	unknown	unknown	can be partially known
	NOMINAL SCALE	unknown	unknown	unknown

The assignment each criteria score depend on the availability of the data. Some data which supposed can be obtained from case study can be used in this part. The unit of the case study data overall is the ordinal scale data so this trait will not be changed.

To differentiate the nature of nation, as mentioned in the table 1 and 2, the evaluation matrix could be consist of evaluation matrix from centralized point of view, federalized point of view, and economic metropolis point of view as mention in figure 5.

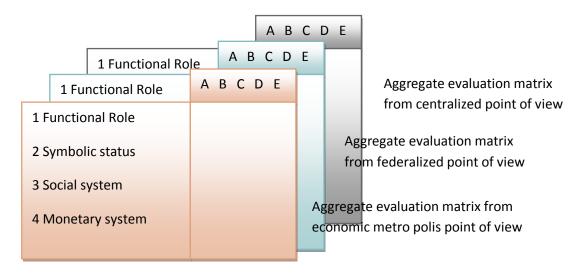


Figure 3 dissagregation of criteria

This analysis using to see the sensitiveness of each choice possibilities to the priorities or weight of criteria assign. When one different set of weight or priorities applied to effectiveness scores from choice possibilities, the response of the each possibility will be different. And this can be monitored by looking at the appraisal score when different set of priorities applied to the score.

Standardization

There are three type of standardization will be used in the evaluation, which will be applied both in the evaluation matrix and prioritization matrix. The equation from (Voogd, 1983, p. 77) as standardization score are:

$$standardization \, score \, i \, = \, \frac{raw \, score \, i}{\sum raw \, scores}$$

Equation 2-1. standardized 1

$$standardization score i = \frac{raw score i}{maximum'raw'score}$$

Equation 2-2. standardized 2

$$standardization score i = \frac{raw \ score \ i - minimum \ 'raw' score}{maximum \ 'raw' score - minimum \ 'raw' score}$$

Equation 2-3. standardized 3

All those equation will be applied on the suitable condition needed. For instance in standardizing weight, the equation 2.1 will be more suitable than equation 2.2 or 2.3.

3 Case Study

In this chapter, depart from the fact that decentralization process Indonesia in the beginning of millennium have bring enormous change in the nation politic both in the central and local level; the case study will be explained subsequently, from the process of evaluation, methods and the criteria for relocating capital city chosen. After that each criterion will be discussed so one can get the basic idea and image of the evaluation process completely.

In term of decentralization, the need of reformation in Indonesia also touches the political aspect of the state. From its independence declaration on 17 August 1945 Indonesia have dealt with dissent from its regions which do not satisfied with the centralistic system that just gave benefit some few area and let the rest area in poor situation instead. The result was some riots and coups which were the expression of dissatisfaction of centralistic government. In Soekarno era this situation addressed by doing military pressure to region who acted rebel. However in Soeharto era, he address this situation more gently by giving more incentive to potential conflict area. unfortunately these scheme cannot satisfying the main problem, and the momentum of decentralization finally should take place in reformation era in the end of 20th century. Region proliferation was the solution to accommodate this political change in Indonesia. However, some new problems arise from this solution, one of them is the problem for relocating capital city due to proliferation process.

Again, the problem for some regions can be opportunity to foster the development in the region. By choosing the new location for capital city; the impact perhaps not only in administrative aspects, but also in economic and social aspects. Then the development tried to establish in the region that supposed to be the future capital city. Anyway, this just develops any economic and business center rather than a capital city; so the traits of capital city that should be stick on the city will be blurred. So, can be realize that on the criteria of city by government act; absolutely not list of criteria especially to choose any region to be the capital city; but only the condition and rule for a region to be a new administrative area; which signed with the maturity of the development and economic condition in one area. So the criteria literally cannot be applied to choose any area to be a capital city.

3.1 Decentralization and regional proliferation in Indonesia

If the decentralization means the devolution of power and responsibility from national level to local level (De Vries, 2000), so the decentralization itself can be identified into political, administrative and financial decentralization. Prior to 1999, the position of governor, regent and major in this country appointed by central government since their function as channel of central government to control local government. Also this head region responsible administratively to central government through ministry of internal affair. (Pratikno, 2008). Many argument said that decentralization in Indonesia resulted from political, economic and monetary crisis in 1998. Obviously there was great protest conducted to push central government to cope the crisis which end with change of political regime, and giving vast autonomy to local government. Subsequently, the first law regulate the regional autonomy enacted and the regional proliferation became trend in Indonesia.

Regulations about regional autonomy and proliferation in Indonesia

Law no 22 year 1999 was the law that regulates how decentralization in Indonesia took place. Concern with the regional proliferation, autonomous region in fact should consider various aspects that support them and enable them to establish an autonomous region. If the region cannot have adequate capacity to do so, they can be eliminated or joined with other regions. Also this law enable a region to be proliferated become two regions where by doing this proliferation assumed that region will have much opportunity to develop and experience fast growth in economy compare with when they had been one region. For the proferation, a year later central government enact regulation about regional proliferation no 129 / 2000.

Due to the consequences of decentralization that elicit the emergence of new city and border change, Indonesian Government released this act that specify the condition and criteria as the tool to assess the feasibility for a region to be new administrative region. However since there was no other act or regulation wchich concen barely on the capital relocation this aspects also used as criteria for capital relocation. So the act and criteria within are mostly used as panacea of the problem that should be solved immediately in term of region proliferation. The Criteria summarized from Government act no. 129 year 2000 in table 3. So here I criticize the criteria in the government act. First the criteria just could be used in situation where the regin ploriferation take place and hardly applicable for the wider uses such as relocation of the capital city. Secondly, since there was no other regulation and policy regulate explicitly the case of capital relocation, the indicator in the act cannot be used directly, needed an interpretation about the criteria mentioned by the indicator.

Table 5. List of criteria from study of township in Pd. Pariaman 2003; which formulated from act 129/2000 (source bappeda 2008)

criteria	indicator		Sub-indicato	r
SPATIAL	1,	Space	1.	Average distance of candidate capital to each district centers
ASPECT		Capital candidate can cover public service for all new region she serves	2.	Ratio of built area to total area
		b. Area adequate supporting social, economic, culture and political activity	3.	Average distance of candidate capital to each district centers
		c. Have productive Interaction pattern with hinterland	4.	Distance to other region capital
		d. Physically not close to other region capital	5.	Distance of water resource to housing area
		e. Good access to water resource		
	2.	Area	6.	Total area
			7.	Effective area can be used
POPULATION	3.	Population	8.	Population
	4.	Most of population livability on non-agricultural sectors	9.	Ratio of livability on agricultural and natural resources to tota
				population
	5.	Population growth is not negative	10.	Growth level
			11.	Ratio of public servant to total population
	6.	workforce	12.	ratio of productive workforce to total population
			13.	workforce percentage
REGIONAL	7.	Transport infrastructure	14.	Number of airport; 15.Number of seaport; 16.Number of bus
CAPACITY				terminal; 17.Length of road; 18.Number of cars; 19.Number
				of motorcycle; 20.Number of ship; 21.Number of boat
	8.	Housing and settlement	22.	Number of housing for public servant
			23.	Number of private housing
	9.	Finance institutions	24.	Number of banks; 25.Number of non-bank finance institution
			26.	Number of Village unit Co-operation (KUD)
			27.	Number of non-KUD
	10.	Economic utility	28.	Number of modern market; 29.Number of traditional markets
			30.	Number of store; 31.Number of stall
	11.	Education utility	32.	Number of elementary School;
			33.	Number of junior high school
			34.	Number of senior high school
			35.	Number of university
	12.	Health utility	36.	Number of hospital; 37.Number of health center
			38.	Number of infirmary; 39.Number of pharmacy

		40.	Number of physician; 41.Number of paramedics
13.	Religious utility	42.	Number of mosque; 43.Number of church
		44.	Number of shrine; 45.Number of other religious center
14.	Tourism utility	46.	Number of hotel/other accommodations
		47.	Number of restaurant
		48.	Number of tourism destination
15.	Art and social institutions	49.	Number of art center
		50.	Number of social health center
16.	Sport utility	51.	Number of sport stadiums
17.	Communication infrastructure	52.	Number of phone custumer
		53.	Number of post office
		54.	Number of post office presentation
18.	Illumination	55.	Electrical infrastructure
		56.	Number of electricity costumer
19.	Basic utility	57.	Waste water installation
		58.	Garbage facility
		59.	Clean water costumer
20.	Community institutions	60.	Number of Community organizations
21.	Security and neatness	61.	Criminality ratio per 1000 population
		62.	Existing building
		63.	Land availability for administrative office

However, there are also some adventages when having a set of indicator in the act 129 2000. First the indicators are there in the act can be measured even quantitatively. For example in the spatial aspect, the indicator of covering public service to all region will be served has measurable indicator mnamely average of distance of candidate capital to each district. Secondly, one can draw back some criteria that suitable for the each indicator mention in the act. For example, the 'space' indicator in the spatial aspect, there are available sub-indicator can be used and can be measure such as average distance of alternative and the criterion of spatial aspect is barely general. So one can suggest acceccibility for such criteria.

To face the immediate need of set of criteria used for locating a place designated to be a capital city, some region has making pragmatic measures to deal with. For example in the relocation of padang pariaman's capital city that will be discussed and elaborated more detail and thorough in subsequent part, the process picked up some criteria suitable for study of township that should be embrio of the capital city. In some other regions such as rokan hilir regency, due to the need of proliferation, the new capital city was decided immediately without thourogh discussion, just based on emotional and historical data of region the decision that not priored by complete study for the decision making. This situation that made the relocation do not take place as what it should due to the unclear study of relocation.

This is alos the reason why padang Pariaman was chosen as case study. for padang pariaman, the relocation has been discussed for six years and various paradigm of planning theory literally has been applied. From rational planning using expert and the rational decision and combine with discussion and socialization of the decision in the society making the process rich of practical aspect that could be obtained to find the real problem of relocation capital city which prefail in the Indonesia.

3.2 Padang Pariaman Regency

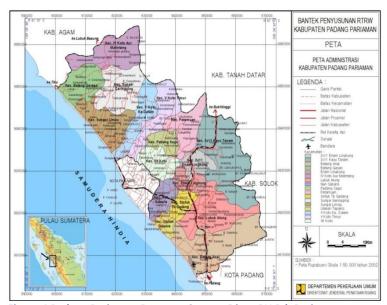


Figure 4 Padang Pariaman Regency. Source: Dinas PU Pd. Pariaman

Padang Pariaman regency located at north of Padang, capital city of West Sumatera Province, comprise of coastal on its western and hilly on its eastern. Exact position is 0°11′5- 3°30′ altitude and 98°36′ - 100°40′ latitude. With tropical seasons influenced by monsoon climate create wet month on September to February and dry month on March to august. Average precipitation is 442.80 mm/month and the range of temperature from 26 – 31 °C.

when the Pariaman city which

used to be the capital city emerge as new autonomy region, this regency should relocate its capital to other regency juridiscition, where the regency government should choose among 17 district it has with total area of 1,328.79 Km², 60.5 coastal line length. Overall, the regency contribute 3.15 % of West Sumatera Region. To the north, This regency boundary with Agam regency, to the south with Padang City, to the east with Solok regency, and to the west has boundary with newly established Pariaman City and Hindia Ocean.

Because the variation in morphological; the regency has wide range of landscape, from hilly to coastal area; making variation in the livability employment. In fact, the region compires 40% lowland in the coastal area. the rest is The hilly and highland area range from 100 to 1500 above sea level along Bukit Barisan hills.

As part of Indonesian archipelago which situated in the vicinity of natural hazard and part of a developing country, some aspects such as Hydrology, disaster hazard, and accessibility should not be disregarded. Those aspects should be regarded properly, and became integrated part of the regional development. Hydrology is the vital aspect to the region that mostly depend on agriculture this aspect also can be threat for the region due to could potentially act as the source of flood hazard. Disaster event could be happen when this hazard struck vulnerable area such as flood, and landslide, when this happened, the region should have capability restore the condition and minimize the impact directly and indirectly. Government and the institution it has should have capability to accommodate the sitatuaion fast and the accesibility to government is vital in this situation.

Apart from the physical condition which variety from coastal to aggriculutre area, the social and political condition of this region also has much variety. The structure of community in Padang Pariaman came from structure of *Mlnangkabau* community, which has unique rule and customs matriarchal structure of family. This structure has unique relationship among member of society, where the possession of communal property such as house (rumah gadang), paddy field, farm, land,

is from mother bloodline. meanwhile the function of men is as organizer of these property and also as the leader of tribal community. So there was no abousulte power of community leader in this system, the leader should consult to female elder for the usnign off communal property

Two or more tribal can joint become *nagari* (village) and point a leader to be the head of village (nagari). Specifically, the 'nagari'system in this region and in the west sumatera commonly, have some difference with village system in elsewhere. With capacity to organize the tribal resource, this system of community could manage themselves and create specific rule and regulation that only applied in their unique nagari. Even in the colonial period the system was allowed to exist because of the independent trait of the negari and do not need much support from government. Unfortunaltely, this system was changed when central government applied centralistic administrative and disarm the political power of nagari and break nagari into few village (desa) which did fully depend on the government support. However, when decentralization idea was prefail in the late 90's, the idea to establish system of nagari is propagated by people of west sumatera by the movement of back to nagari (kembali ke nagari) as the expression of disappointment toward centralistic system from most of west sumatera region.this situation also took place in Padang Pariaman and from many village as result of centralistic system, back to nagari also means giving the autonomy to the nagari.

Back to nagari system also give adventage in the development purpose. as mention above, most of the property in the region is communal property. In the centralistic system it hard to negotiate the land use by government to community because the head of village did not have access to the communal property. Since the system nagari is re-introduced, problem with land could not as tricky as before. Head of nagari as the leader of nagari and custom leader, can mediate the land use of their territory to the government. Also since 2006 the head of nagari directly elected and in some degree has support from government to run the office.

3.3 Criteria of capital city from the case study

The decision making process began with deciding four locations based on the study conducted in 2003 elicited four candidats of capital city; they were *Batang Anai, Lubuk Alung, 2x11 Enam Lingkung and VII Koto Sei. Sarik.* As depicted in the figure 5, the process namely 'study of township ' (*kota mandiri*) had been started a year after the commisioning Pariaman City became autonomous city. The study of townships had mission to find out and refine candidate of capital city from 17 district the regency has. This action then resulted four new townships that would be projected to be the alternatives for location of regency capital city. The indicator used in refining the township was literally came from government act 129/2000. However because the process has been conducted almost eight year and the program of study actually did not focus solely on the capital relocation but embedeed in the regional development program and finding strategic region of regency, the detail of methodology and analysis using in the study failed to obtain. However, in the subsequent document study in 2006 also mention the study and gave the 13 indicator used in the study 2003. The criteria used consist of criteria of acceccibility, contour, land use, typology, drainase, water and electricity, socio politic, social culture, socio economy, and resilience.



Figure 5. timeline of decision process

In 2006, the team conducted pre workshop and workshop for following up the study in 2003. Both pre workshop and workshop tried to collect opinion from people about candidates for new capital city and invited head of other region which experience capital relocation. Choice possibilities which being recommended by these workshops were similar with such from studied before.

Subsequently, to disseminate the result of workshop; on the same year, team went to whole region to discuss the relocation to community member; resulting addition in criteria and candidates. There were five additional candidates namely *Sintuk Toboh Gadang, Nan Sabaris, Sei. Limau, V Koto Kampung Dalam and V Lingkung*; so the total candidate became nine candidates. From the dissemination also being assessed the opinion about those nine candidates. VII Koto Sei. Sarik won the opinion of community for two reasons; first the location in the central of region and second the availability of land.

After dessimination, government established an intelectual team comprise of experts from universities and prominent figures to formulate the decision making process and the main task was to create academic manuscript for capital relocation as source of issuing bylaw of relocation. this team assess seven criteria or aspects; they were land availability, contour and hazard aspect, accecibility, community support, typoligy, land use and utility (water and electricity). These criteria then final criteria for scoring the candidates.

Definition of each criteria will be discussed in subsequent part of this chapter. Flash back from the processes; the quest for finding location of capital city has been passed several event, and when traced one by one there were some clumsiness. First about the continuity of the process. The follow up of the study 2003 should not let the discussion to consider other place as the addition for alternative location. The process should stay focus on the alternative which has been made before and not adding new alternatives of choice possibilities. It may said that the study of township did not continously related with the following process, and it seems the subsequent process take different path from the study in 2003.

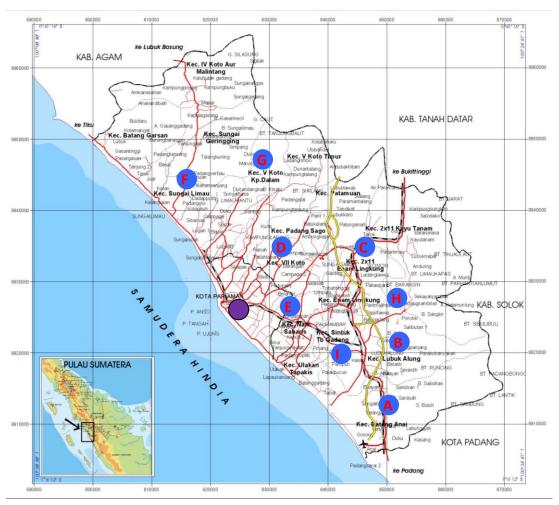


Figure 6 Nine choice possibilities of capital relocation. source: Bappeda Padang Pariaman

Weight and score of each criterion

1. Land availability, weight: 7

Land availability was chosen based on assumption that land is the very determine criteria for developing capital. Land availability means willingness of community to give their land for being develop as new capital city. This will be proved by the agreement among member community for giving some parcel of land which usually land belong to tribe to government which later on will be used to build office and administration center. Four level of mark will be scored for each capital alternative; they are:

- Score 4, if there is written agreement for land handover, designated area is quite enough for development, legal possession of land is available
- Score 3, no written agreement, area is not enough to facilitate development,
- Score 2, no written agreement, but land is available, and limited area for development
- Score 1, no willingness for land handover, no legal possession for land, area very limited

The rationale behind choosing land availability as the priority is the context of west sumatera land acquicition, where most of land possessed by tribe and it was hard to aquire, if possible with high price. Also the possession of land not only one single person but collectively by tribe member, so it explain why every case of land acquicition in west sumatera end up with the conflict about the land because some member did not agree to sell the land to government.

2. Contour and hazard aspects, weight: 6

Aspects of disaster is important in term of this area has contour area and have many potential hazard among other flood, landslide, earthquake and tsunami. So the consideration of natural hazard and condition of land itself become priority. The capital city should not close to the possible natural hazard so will reduce the possible loss from the disaster.

for this criteria area:

- Score 4 very good, if the location is not situated on potential hazard area (flood, landslide, earthquake, tsunami); sloping contour,
- Score 3 good, if the location is situated close to potential hazard area (flood, landslide, earthquake, tsunami); hilly and sloping contour,
- Score 2, if the location is not situated close to hazard area (flood, landslide, earthquake, tsunami); steep contour,
- Score 1, if the location is not situated potential hazard area (flood, landslide, earthquake, tsunami); very steep contour.

3. Accessibility, weight: 5

Accessibility mean that the capital city can be reach by other region; based on assumption that accessibility will determine the service to public and regional development. So the consideration is not only for the administrative purpose but also for the economic efficiency. Score for this criteria area:

- Score 4 very good, if the location is situated on strategic location, easy to accessed, close to national, provincial, or regency road, current transportation
- Score 3 good, if the location is situated on less strategic location, easy to accessed, close to national, provincial, or regency road, current transportation
- Score 2, if the location is situated on isolated location, merely close to regency road, not smooth transportation
- Score 1, if the location is situated on isolated location, just can be accessed by village road, no transportation access

4. Community support, weight: 4

Support from community is important criteria where the support not only come from the resident of candidate location, but also came from majority of region population. The assumption is the community support will guarantee the security and conducive situation for development. Obviously every resident rather support their own location for the capital city, anyway not all resident agree their location became capital city; so they put their support to other regions that they suggested better for capital location. Score for this criteria area:

- Score 4 very good, if the location is supported by whole district (came from prominent actor from workshop, pre-workshop), also there is written statement by community supporting certain locations
- Score 3 good, if the location is supported by more than half of districts (came from prominent actor from workshop, pre-workshop), also there is written statement by community supporting certain locations
- Score 2, if the location is supported by less than half of district number(came from prominent actor from workshop, pre-workshop
- Score 1, if the location is not supported by community

5. Typology, weight: 3

Typology means the characteristic of location, can be measured by looking at the intensity of development in the area, either more built or less built area. Also can be measured by change of its original function, physical structure, level of public service on the area, and how good the area being planned. Score for this criteria area:

- Score 4 area located on steady area; good in term condition above.
- Score 3 area located on toward steady area; less good in term condition above.
- Score 2 area located on dynamic;
- Score 1 area located on toward dynamic area

6. Land use, weight: 2

Land use in this case means productive area. Highest score regard to non-productive land, and lowest score on the other hand the productive land. Also the existence of irrigation lane and wildlife reserves determines the score.

- Score 4 for non-productive land, no irrigation and wildlife reserves
- Score 3 for less-productive land, no irrigation and wild reserves
- Score 2 for area with productive land yet no irrigation
- Score 1 for area with productive land, irrigation and wildlife reserves.

7. Drainage, clean water and electricity, weight: 1

This means the level of availability of drainage, clean water and electricity's infrastructure. The consideration behind this criterion is for the efficiency in developing the capital. Better utility better place because then government will put less budget on the development of utility for the capital resident.

- Score 4 when area close to primary drainage, water source, and there is electricity grid.
- Score 3 when the area have water source and there is electricity grid.
- Score 2 when only electricity grid is available
- Score 1 none of drainage, water source and electricity grids exist.

Table 6 Evaluation matrix of case study

To apply the criteria and put the valuation of each criteria is a delicate work. How to put score on each criteria will depend on the indicator chosen. Some argumentation for scoring the candidate did not match which the real condition. Also there were some process that did not conducted properly. For example the land metering for land availability whereas having highest weight in criteria; did not impelemented for all location of candidate. Here illustrated that there were interest that arise from the decision making process, that some process intentionally or not being elimanted. This expressed in the finding of legislative member to the locations (Cahyadi, 2009)

So, the lack of process needed in assessing each indicator of criteria creating dispute among representative members about the accuracy of the academic manuscrip which use result of scoring evaluation as basis of decision making. For not prolong the process, the government then legalized the recommendation from academic manuscrip and issued bylaw about the relocation of capital regarding the process that had been conducted had comsumed a lot of energy and time. (Cahyadi, 2009)

evaluation methodology

Another aspect of the evaluation can be reflected form the method chosen. The determination of scores from 1 to 4 however has constraint the methods only on the qualitative measures. Moreover to limit the qualitative value only on 1 to 4 marks is a questioned measure. As what implied by the scoring method in the evaluation, the addition of one positive feature than others (i.e the more advance accessibility of an alternative has than others) just appreciated by adding additional one score. Then the question should be does the score, weight, assign to the criteria has fairly used and implemented.

However, this limitation score as cardinal score from zero to four perhaps could give uniformity judgment the score itself. It means that the range of score is from 0 to 4 and in form of integer numbers. Before doing weighted summation, the score itself could describe the probability of a

region to take highest score. Literally when finding a region with the score consist of 3 and 4 it means the probability of the alternative is bigger that region that have wide range of score from 1 to 4. Even a region that do not have 3 and 4 and only consist of score bellow that could be sured that the region will get low score from others.

The last remark also can make suggestion about the wider aspect of capital city should be considered. However, capital city has aspect that make the capital city play significant role as the unifying element, symbol of democracy, central of political struggle. In this evaluation, this kind of symbolic and functional function did not taken into account in selection the capital city location.

Sensitivity analysis for case study

By assigning different set of weight to the evaluation matrix the sensitivity of each choice-possibilities to each priorities will be assessed. As what enlisted in the appendix II, various set of weight have been assigned to the evaluation matrix so the variation on the weight could make various change in the appraisal score. In this analysis I also use the weight set that consist of binary number (set no. 2 to 8) which literally could be see in the evaluation score. I did this in purpose to shows that before using certain set of weight, one can predict which alternative will get high score from the evaluation matrix. When the score almost consist of score of 3 and 4 as happen to alternative 4 and 8, they has big chance to gain high appraisal score. Also when a linear weight is assigned to the evaluation matrix, as shows in the weighted set 1, the premise above was approved. On the weight set of 9 to 12, different preference to the each criteria has been made, and roughtly consist of two preference, first preference to the functional of capital city and preference to the symbolic status of the capital city.

From the matrix of sensitity, there are some interested finding. First, there are stabil situation where when we assigned different set of weight the alternative shows the choice of possibilities not get extreme ranking every different set of weight applied. For instance the choice number 4 and 8 always have highest ranking than others. Also the lowest ranking was mostly held by choice number 7. As mention before, this is the logical explanation of the evaluation matrix of table 2 where the score which each choice has could be used to predict the winner of the evaluation. Choice-possibilities number 4 and 8 has score 3 and 4 and no score 1 or 2. On the other hand, the coice number 7 only has score of 1 and two and did not has score of 3 and 4.

4 Generating new set of criteria and operationalization

In this chapter, Continue form chapter 2, the list of criteria form the literature review will be elaborated and operationalized. Some data needed in this new set of criteria however picked up from rough estimation from the author and the avaiability of the data themselves. Moreover the the operationalization procedure describe in that chapter will be applied in this chapter in order to make comparison with the case study in chapter 3.

Furthermore, the comparison will be made between the facts in the case study and the finding in the operationalization in the new set of criteria. Some analisis then will emerge from the discussion nad comparison. The comparison of chapter 2 and 3 in term of the methods used in both case study and operationalization of new set of criteria.

4.1 Set of criteria

Aggregation in the criteria and the point of view of criteria

In chapter 2, there are there open possibilities for aggregation of the criteria. The flexibility in the multicriteria evaluation can enabling evaluation conducted based on one and more aggregation and also combine these aggragation as much as needed. Here, the aggragation of criteria can be separated from four agragatein, namely the aggregation in the functional role, symbolic status, monetary system and contract initiating state.

Furthermore, the nature of the state that being a core consideration for deciding location of capital city could be accommodated in the various point of view inline with the three possible nature of capital city. So, there are three point of view namely centralistic, pillarized/federalized, and the economic metropolis. For the case study, assumption of centralistic nature is could be a good start, however other options of pillarized/federalized system could be possible regarding to the degree of decentralization process take place in the region. Also the economic metropolis nature of capital is possible when the evaluation want to assess the possible structure of the capital city arise become economic center of the region.

Weigh and priorities

Priorities or weight in multicriteria evaluation play significant role. The adventages of weight is one can represent the degree of importance of one criteria among other with assign bigger value of weight or important priorities on the certain criteria. But this adventages also invite critic when the assigning of the weight have no logical explanation or no socialization for the weight, this could be a source of speculation and will make rejection among people who assess the evaluation process.

Other benefit from the weight and priorities is the possibilities of the assignming various set of weight based on point of view. Different point of view will elicit different value of set of weight. So the priorities can be adjusted based on the point of view that will be made.

Indicators of criteria and scoring

Since the description of the criteria in the chapter 2 is focus on the what should be have by a capital city, the expeliciet measure for judging what should and should not be in a capital city do not formulated yet. This 'indicator', the measure of the criteria will be discussed bellow. Some pragmatic measures should be taken when the criteria itself need deep information. And some qualitative measure could be an option.

Functional role

1. Centrality on accessibility

This indicator adopted the indicator in the case study, which has explained in the chapter 3 that ranged from 0 to 4 integer number of qualitative measure. To make it difference with the ratio scale of indicator, the symbol of number should be replace with the symbol of number of 'x' symbols, which mean xxxx refer to 4 score.

2. Number of political activity

Number of political activity is represented by the number of social political activity hold by political organization. Even though number of local representative member can indicate the political activity, other indicators are open to be measured. In this case, researchers use the data of number of head of kampong (wali nagari) who directly elected from community. Eventhough the member of representative also directly elected, but the existence of wali nagari became potential political power that can be compared with the local representatives members. Afterall the unit of this criteria is people and the type of data is ratio.

3. Potential for administrative control

Area with have high number of well-educated people will have more opportunity being a controller for administrative activity in future. So in this criterion, the indicator is the number of people who got the education at least in the senior high school. This ratio type of data can be acquired from secondary data from subdistrict office. Also the unit of indicator is number of people.

4. Economic center

This criterion can be measured by calculate the number of trading activity in the area. in this situation, the number of traditional market are there in the region could be good indicator. Then The unit of the criteria is number of market on the area, And the type of data could be a ratio number.

5. Cultural center

Cultural center determined by high concentration on cultural activity, can be measured by number of cultural activity explicitly or implicitly. In this calculation, total number of existing cultural tourism destination could be represent the cultural activity in the region.

Symbolic status

1. Democratic/ monarch symbol

Not all alternative such a symbol that represent the democratic life of community could exist on each choice possibilities. , so the binary unit is suitable for the criteria. Which represent the presence of symbolic features of democratic, are they are actually exist or not .

2. Space for symbolic status

This is the need of land for symbolic status. From the land use score of view, the diverse use of land use will make it is difficult to create enough space for symbolic status of the nation or region. So the land use criteria from case study can be use with condition the direction of the score should be changed.

3. Potential for administrative function

Administrative center, especially in the region which has centralistic government, should accommodate the need of vast area being designated as bureaucratic purposes. The availability of land as mention in the case study will be applied as ordinal score.

4. Spatial support

Padang pariaman literally prone to the disaster, condition of the area that have resilience from natural hazard could be the indicator that represent the criteria well. So the disaster aspect in the case study will be used in this criterion.

Social system

This criterion means the social activities which support the status of capital city. Number of work diversification can be a sub criteria that being chosen representing the maturity of social system in the area. since this data is hardly available, the valuation could use cardinal system that can be seen in the subdistrict statistic data.

Monetary system

1. Tax volume

Tax volume can represent the potential earning from tax that can be used for any purpose regard to the nature of region. The indicator is the portion (percentage) of tax payment in a certain year (available data is 2009).

Number of economically productive organization
 Number of registered business actor in the market. However this data contain some bias since not all productive organization in economic could be registered in the regency data.

Table 6 is evaluation matrix that obtains all criteria discussed above. The source of data can be seen in the appendix II

Table 7 Evaluation matrix of new set of criteria

Angle of	criterion		unit	1	2	3	4	5	6	7	8	9
incidence												
Functional	a.	Centrality on transport network	Ordinal (rank)	xxxx	xxxx	xxxx	xxx	xx	xx	х	XXXX	xx
Role	b.	Political activity	Ratio	3	1	3	4	5	2	3	5	2
	c.	Potential of administrative control	Ratio	175	324	294	210	252	451	133	192	0
	d.	Economic centre	Ratio	5	2	2	4	2	4	3	2	1
	e.	Cultural center	ratio	5	5	4	8	7	4	4	4	4
Symbolic	f.	Democratic/monarch symbol	binary	1	0	0	1	0	0	1	0	0
status	g.	Space for symbolic structure	Ratio	1	2	1	1	1	3	1	3	3
	h.	Administrative function	Ordinal (rank)	xx	xx	xx	xxxx	xxx	xx	xx	xxx	xx
	i.	Spatial support	Ordinal (rank)	xxx	х	х	xxxx	xxx	х	xx	xxxx	xxx
Social system	j.	Job diversification	Ordinal	2	2	2	2	1	1	0	2	1
monetary	k.	Structure of taxation and levy	Ratio (%)	35.12	34.13	22.64	39.01	26.64	36.11	16.22	39.82	42.10
	I.	Production activity organization	Ratio	52	40	6	10	16	18	3	8	5

- 1. Batang anai district
- 2. Lubuk aling district
- 3. 2x11 enam lingkung district
- 4. Sungai sarik district
- 5. Nan sabaris district
- 6. Sungai limau district
- 7. Koto timur district
- 8. Enam lingkung district
- 9. Sintuk toboh gadang district

4.2 Operationalization

From the evaluation matrix composed above, the next step for operationalizatin is then starting choosing suitable arithhmatic technique available in the literature, picking adequate measure for standardization, prioritizing and weightin'g until arrive in the appraisal score of each choice possibilities. Most of the work in this research base on the principle of multicriteria evaluaition in Henk Voogd's book.

Obviously, there are many arithmetic available to calculate the information in the evaluation matrix mention above. It is depend on the measurement scale on which information is expressed, either quantitative data, qualitative data or mixed quantitative-qualitative data. For quantitative data, cardinal technique available for instance weighted summation technique, the generalized concordance technique.

Weighted summation technique in fact is the hard core of goal-achievement This approach is the simpliest methods in the multicriteria evaluation and easy to understand by un-expert person. The Other subsequent process also chosen base on the suitability for the weighted summation (Voogd, 1983, p. 78). For instance in the conducting standardization of scores the equation chosen is the one equation among three possible standardization technique. On the other hand, to standardize the priorities or weight of each criteria, the equation which will be applied is different from quation using in score standardization.

After standardized the score, choosing priorities or weigh of each criteria is the critical process in the multicriteria evaluation. The flexibility, could accommodate the characteristic of political ring and ability to integrate research contribution. (Voogd, 1983). So in this step the basic technique that will be applied namely partial ranking instead of pair comparison. By using partial ranking, the nature of nation as basic characteristic could be taken into consideration. So different nature of characteristic would be give different set of criteria priorities (weight). Complete matrix of calculation can be seen in appendix III. For the appraisal score for standardized score can be seen in table 8 below.

Table 8 effectiveness score(standardized score) with standardized weight

criterion	weight	1	2	3	4	5	6	7	8	9
a. Centrality on transport network	0.92	1.00	1.00	1.00	0.75	0.50	0.50	0.25	1.00	0.75
b. Political activity	0.91	0.60	0.20	0.60	0.80	1.00	0.40	0.60	1.00	0.40
c. 3. Potential of administrative control	0.90	0.39	0.72	0.65	0.47	0.56	1.00	0.29	0.43	0.00
Economic centre	0.87	1.00	0.40	0.40	0.80	0.40	0.80	0.60	0.40	0.20
Cultural center	0.88	0.63	0.63	0.50	1.00	0.88	0.50	0.50	0.50	0.50
Democratic/monarch symbol	0.95	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Space for symbolic structure	0.96	0.33	0.67	0.33	0.33	0.33	1.00	0.33	1.00	1.00
Administrative function	0.99	0.50	0.50	0.50	1.00	0.75	0.50	0.50	0.75	0.50
Spatial support	0.97	0.75	0.25	0.25	1.00	0.75	0.25	0.50	1.00	0.75
d. 1. Job diversification	0.94	1.00	1.00	1.00	1.00	0.50	0.50	0.00	1.00	0.50
Structure of taxation and levy	0.85	0.83	0.81	0.54	0.93	0.63	0.86	0.39	0.95	1.00
Production activity organization	0.86	1.00	0.77	0.12	0.19	0.31	0.35	0.06	0.15	0.10

Appraisal score	8.24	6.31	5.39	8.54	6.06	6.05	4.63	7.55	5.26
rank	II	IV	VIII	_	v	VII	IX	Ш	VII

This table obtain weighted summation process where the score and weight being used has been standardized. This table resulted appraisal score which represent the rank of score for the weighted summation process. The appraisal score than being rank and the winner is the alternative i>i', different weight also possible to assign in different table for different point of view. This table represent the centralistic system's point of view. One can use different set of weight to represent the federalized and economic metropolis point of view. This table is already done in the appendix IV. Where the weight set of 1 on the appendix making similar (constant) weight for each criteria. Set number 2, 3 and 4 are the alternative for centralized, polarized and economic metropolis respectively. I means alternative here because there are a lot of possible set of weight which depend on the prioritizing each criteria among the others. How to express the criteria i is better than i' could by separated two group with different point of view. Furthermore on the same group of point of view, the prioritizing also conducted with applied the i>i' principle. Some possibility for various technique such as paired comparison also available to apply those principle.

4.3 Sensitivity analysis

The key determinant position of weight or priority of the criteria can be seen in the sensitivity analysis as mention below. In some case, one change in the priorities can affect severely to certain choice possibility either positively or negatively. This sensitivity analysis can be conducted by applying different set of weight so the effect of different can be seen in the appraisal score. Some various sensitivity tests had been conducted using certain set of criteria priorities as mention in the tables on appendix IV.

If compared with the sensitivity of case study, the sensitivity of the both share similiarity. First the stable alternative held by choice number 4 and 8. And the lowest score held by number 7. However there are interesting finding that could be found here. Choice number 4 and 8 always get highest score among the others, but different with the case study where number 8 dominating the rank1, in this new set of criteria most of rank 1 was dominated by the choice number 4.

This study is indirectly can provide rationale why there are some rejection from the community toward the result from the case study. the alternative of 4 and 8 roughly have equal stand in dominating the evaluation process. Since the result was not socialized and the methodology itself cannot give strong argument to convince of the side who support the each alternatives, the process that had consumed large amount of fund to conduct research and evaluation in this process just like wasted away when the researcher and evaluator could not convince the community for the reliability of the process due to lack of understanding in evaluation process itself.

5 Discussion and conclusion

By doing operationalization on the new set of criteria, and comparing with the case study itself, this chapter will provide the discussion and reflection from previous chapters and end up with some conclusion.

5.1 Discussion

After conducting analysis from several documents which discuss about the capital city from local perspective for instance the research on the different cases in Indonesia about society perception due to the decided location of the new capital city; many of the perception about the symbolic status of the capital city rather than functional status. For example in some region the historical status of one region as economic center in the past make the society tend to choose that location rather than the location that inevitably choose by the regulation that proposed by local government.

There are also quite though discourse between service to the public and the symbolic status of the capital city. Some people tend to choose the capital city solely on the behalf of the public service, administrative function which represent by accessibility, integration of the regional economy in the region itself rather than thinking about the unity of the society toward the location. In other words, the focus just paid only to functional status and monetary characteristic for the capital city. Unfortunately they fail to recognize the symbolic status of the capital city. Focus only on the economic growth and triggering neighborhood economic rate will blur the status of the area that unite the region, become symbol of the region itself. This situation is opposite to the former condition above.

Also in the term of the case study, the method being used obviously too simple even though the observation process for assigning the score of each criteria on each choice possibilities have some degree of reliability. So the lack of suitable methodology in the decision making process also making the final result of appraisal score become unreliable for some degree. Some sensitivity test should be conducted before fixing the priorities of criteria since this could give advantages in decision making process. By conducting sensitivity analysis can be seen the criteria that critical for certain choice possibilities. also by conducting this analysis can accommodate the angle of incident that want to be prioritize, either functional role, symbolic status or economic and social point of view.

When applying the sensitivity analysis, one can use different set of weight to test the behavior of choice possibilities toward different set of weight. Since the power of multicriteria analisis is on the weighted system also its weakness, the application of different weight should have strong argumentation. For instance when we see the region should be have feature of the pillarized society than centralized and economic metropolis, the set of weight then should represent the prioritization for the pillarized society, making some list of most important and less important of the each criteria and conducting available technique such as paired comparison to compose a set of weight that represent the aspect of pillarized society.

Also in the result of the evaluation process, obviously there are no single result new set of criteria because different set of weight could provide different rank of scores. But when look at the result for each set of criteria, some pattern could be assessed. Most of the result from new criteria is dominated by the alternative number 4 (sungai sarik) meanwhile the alternative number 8 (enam lingkung) as the second nominator. On the other hand, in the case study and sensitive analisis for the case study, the dominant alternative is 8 (enam lingkung) and the second nominator is sei.sarik (number 4). However, in the new set of criteria, the score should be more fair than the case study. because in the new criteria, the are room for quantitative score as well as qualitative score. Meanwhile in the case study, the possible quantitative measure should be transformed into qualitative measure by using scoring methods. The scoring method it self for case study should be a standardized scoring when appling value 0 to 4 for the range of score integerly. But the weighting method supposed have same standard with 0 to 4 as well, not a range of 1 to 7 that in this situation hardly accepted as standardized weight. That's way in the new criteria, the region which has closed proximity to the neighbor larger central of growth (padang city), namely the alternative 1 (batang anai) have highest score together with choice number 4 and 8 respectively.

In term of criteria and the aspect of consideration, the new set of criteria provide room for develop subcriteria under the criteria chosen. For instance when measure the accessibility, some subcritria could emerge, for instance the length of road, the existence of alternative transport mode, the qualitative measures of centrality of the accecibility itself. On the other hand, the criteria from study in the beginning has make limitation on the flexibility of criteria into four level of scoring, form 0 to 4. However the transititon for scoring when move from 2 to 3 from each choice possibilities hardly being linear. So it is better not to limit the scoring only on the four level of scoring but, to split each indicator of the transistion into different new subcriteria.

In composing the new set of criteria, since the basis of criteria come from international understanding of capital city, some criteria which hardly relevant with the specific case of the regional capital city should not be taken into account. For instance, the contract initiating state as one of criteria for the nation capital city is hardly applicable for the regional capital city, which became rationale this criterion was omitted.

However, having a new set of criteria that comes from understanding about capital city, under scrutiny on symbolic political, functional, and economic point of view from various international literature has enrich the understanding about the aspect should be considered in the deciding location for new capital city. As mention in the beginning, that the purpose of the thesis do not try to find justification why most of process relocation do not reliable in term of methodology and criteria, but trying to formulate the better understanding for the importance of capital city and taking into account all aspect that should a capital city has. However this

5.2 Conclusion

From the research, some conclusion can be drawn. First from the literature review and content analysis conducted to various document and internal publications, can be elicited set of criteria that can be applied in the decision making process of capital city relocation. However, since this set of criteria based on the international understanding of what characteristic and aspect the capital city has, this set of criteria can be used perhaps not only in the regional, also this set of criteria can be used to the nations which obviously has different of political nature.

This set of criteria supposed to need more elaboration in the deciding indicator that represent the mean of the criteria itself. However, the effort has succeed to provide wider understanding about the capital city and the aspect of being a capital city should be have by location that supposed to be the capital city in the future.

So, when planner at the beginning has realized the aspect of capital city should has, the need of space, land, regulation system, that will support the development the capital city in the future, this will give a blue print for the development of the capital city itself. And by having this understanding of capital city, the direction of development in the capital city, what features should be develop in the capital city and what features should not be develop in the capital city but in somewhere else then would be a clear and sound. When all the need of capital city available, all rule suggestion for development also present, then the capital city will be grow in a way that has been tracked before. so having a criteria for a relocation of capital city does not stop to the location, but the process of the capital city it self for being a good capital city that can serve its hinterland area according to the feature of the state/region it serve.

Other research problem also has been delivered by this thesis. As illustrated in the case study, the context of the decision making has, methodology being used, and the technique applied by the planner has significant role in creating reliability of the result. By comparison for each side of case study and new criteria, some limitation of the case study has been recognized as discuss above and some flexibility of new criteria has provide room for planner flexibility to assess as much as aspect that could be criteria for capital city. This flexibility is not only in the criteria itself, but for the methods used and possibility to apply different method suitable for the criteria. By doing segregation in the three major type of capital city, planner can apply suitable method for making combination among three type of capital city since literally there are no capital city that purely have feature of single type of capital city. For instance the planner could combine the centralistic system and economic metropolis type of capital city to represent the unique feature of capital city in modern time.

The final research question relate to the adequacy for the methods usually used in capital relocation. In some degree the methods has sophisticated trait and the result is satisfied meanwhile the technique using is lack of reliability so making distrust for the evaluation result from the public. So, this research could spot the shortcoming from the case study and from the various practical result and can make some suggestion on the methods in the future. However, the collaborative discourse conducted by the government in formulate the set of criteria should be appreciate well, and the process literally fair and can be account for.

This mean that, since the technical rational planning paradigm has been shifted to the collaborative planning paradigm, the need for rational planning in some degree still exist. And for some planner, the combination of those technical rational and collaborative has give room for improvisation in the solving planning problem. deciding a location for capital city off course cannot fully depend on the expert calculation, but should be socialized and need integrated approach from all stake holder involved. In this situation, planner should have good understanding about the problem and the suitable method adequate to solve the problem. so this thesis has succeed to give broad understanding for aspects should be considered in relocation of capital city, so the location could provide fertile ground for the growth of the capital city in future.

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Appendix I sensitivity for case study

Weight Set

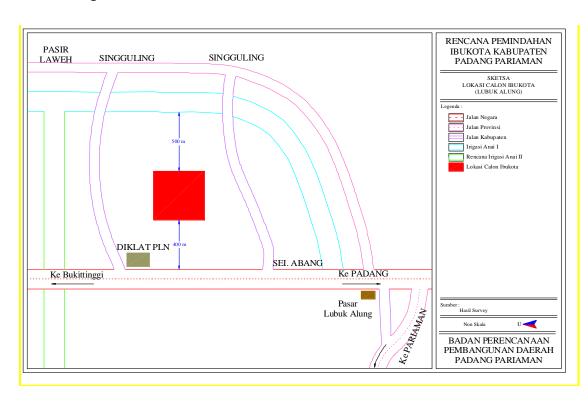
criteri	weigh	Choic			weigh			criteria	woight	Choico	ccoro	criteria v	voight Cl	hoico	ccord	
a	t	е	score	criteria	t C	hoice	score	a	weight 0	1	1	a	0 0	1	2	
a	1	1	16	а	1	1	3	b	1	2	3	b	0	2	2	
b	1	2	19	b	0	2	1		0	3	3	С	1	3	2	
С	1	3	17	С	0	3	1	C					0			
d	1	4	21	d	0	4	4	d	0	4	3	d		4	3	
е	1	5	14	е	0	5	3	e	0	5	1	e	0	5	2	
f	1	6	13	f	0	6	1	f	0	6	1	f	0	6	2	
g	1	7	9	g	0	7	2	g	0	7	1	g	0	7	1	
		8	23			8	4			8	3			8	4	
		9	18			9	3			9	3			9	3	}
	Weight				Neight s	set 2			Weight	set 3		,	Weight se	et 4		
criteri	weigh t		score	criteri a w	eight C	hoice	score	criteria	weight	Choice	score	criteria v	veight Cl	hoice	score	!
a	0	1	2	a	0	1	2	a	0	1	1	а	0	1	3	3
b	0	2	2	b	0	2	4	b	0	2	2	b	0	2	3	3
С	0	3	2	С	0	3	3	С	0	3	1	С	0	3	3	3
d	1	4	4	d	0	4	3	d	0	4	1	d	0	4	3	3
e	0	5	3	е	1	5	2	е	0	5	1	е	0	5	2	2
f	0	6	2	f	0	6	2	f	1	6	3	f	0	6	2	2
g	0	7	2	g	0	7	1	g	0	7	1	g	1	7	1	L
		8	3			8	3			8	3			8	3	3
		9	2			9	2			9	3			9	2	2
	Weight	set 5		\	Neight s	set 6			Weight	set 7		,	Weight se	et 8		
criteri a	weigh t		score	criteri	reight C	hoico	ccoro	criteria	weight	Choice	score	criteria	weight	Cho	ice	score
a	1	1		a w	0 0	1	8	a	2	1	. 24	a	1		1	24
b	1	2		a b	0	2	10	b	2	2	28	b	1		2	29
c	0	3		С	1	3	9	С	1	3	25	С	2		3	26
d	0	4		d	1	4	10	d	1	4	32	d	2		4	31
e		5		e	1	5		e	1	5	21	e	2		5	21
f		6		f	0	6	6	f	2	6	20	f	1		6	19
					0	7	4	g	2	7	14	g	1		7	13
g	1	8		g	U	8	10			8	36				8	33
		9				9	7			9	29				9	25
	Weight		11	1.4	Veight s		,		Weight	set 11			Weight	set 12	2	
	weignt	ડારા 9		V	veignt S	et 10										

Appendix II data Choice possibilities

A. Batang Anai District

aspect		description
Functional Role	Centrality on transport network	xxxx
	2. Political activity	3
	3. Potential of administrative control	175
	4. Economic centre	5
	5. Cultural center	5
Symbolic status	1. Democratic/monarch symbol	1
	2. Space for symbolic structure	1
	3. Administrative function	xx
	4. Spatial support	xxx
Social system	1. Job diversification	2
monetary	1. Structure of taxation and levy	35.12
	2. Production activity organization	52

B. Lubuk ALung District



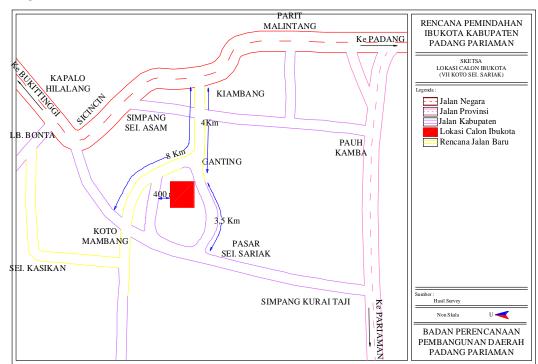
aspect		description
Functional Role	1. Centrality on transport network	xxxx
	2. Political activity	1
	3. Potential of administrative control	324
	4. Economic centre	2
	5. Cultural center	5

Symbolic status	1.	Democratic/monarch symbol	0
	2.	Space for symbolic structure	2
	3.	Administrative function	xx
	4.	Spatial support	х
Social system	1.	Job diversification	2
monetary	1.	Structure of taxation and levy	34.13
	2.	Production activity organization	40

C. 2 x 11 Enam Lingkung District

aspect		description
Functional Role	6. Centrality on transport network	3
	7. Political activity	294
	8. Potential of administrative control	2
	9. Economic centre	4
	10. Cultural center	0
Symbolic status	5. Democratic/monarch symbol	1
	6. Space for symbolic structure	xx
	7. Administrative function	х
	8. Spatial support	2
Social system	2. Job diversification	22.64
monetary	Structure of taxation and levy	6
	4. Production activity organization	3

D. Sungai Sarik District



aspect		description
Functional Role	1. Centrality on transport network	xxx
	2. Political activity	4
	3. Potential of administrative control	210
	4. Economic centre	4
	5. Cultural center	8
Symbolic status	1. Democratic/monarch symbol	1
	2. Space for symbolic structure	1
	3. Administrative function	xxxx
	4. Spatial support	xxxx
Social system	1. Job diversification	2
monetary	Structure of taxation and levy	39.01
	Production activity organization	

E. Nan Sabaris District

aspect		description
Functional Role	11. Centrality on transport network	xx
	12. Political activity	5
	13. Potential of administrative control	252
	14. Economic centre	2
	15. Cultural center	7
Symbolic status	9. Democratic/monarch symbol	0
	10. Space for symbolic structure	1
	11. Administrative function	xxx
	12. Spatial support	xxx
Social system	3. Job diversification	1
monetary	5. Structure of taxation and levy	26.64
	6. Production activity organization	16

F. Sungai Limau District

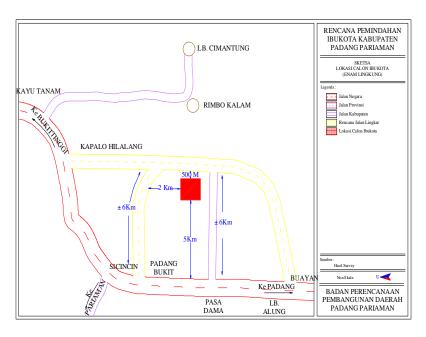
aspect		description
Functional Role	16. Centrality on transport network	xx
	17. Political activity	2
	18. Potential of administrative control	451
	19. Economic centre	4
	20. Cultural center	4
Symbolic status	13. Democratic/monarch symbol	0
	14. Space for symbolic structure	3
	15. Administrative function	xx
	16. Spatial support	х

Social system	4.	Job diversification	1
monetary	7.	Structure of taxation and levy	36.11
	8.	Production activity organization	18

G. Koto Timur District

aspect		description
Functional Role	21. Centrality on transport network	х
	22. Political activity	3
	23. Potential of administrative control	133
	24. Economic centre	3
	25. Cultural center	4
Symbolic status	17. Democratic/monarch symbol	1
	18. Space for symbolic structure	1
	19. Administrative function	xx
	20. Spatial support	xx
Social system	5. Job diversification	0
monetary	9. Structure of taxation and levy	16.22
	10. Production activity organization	3

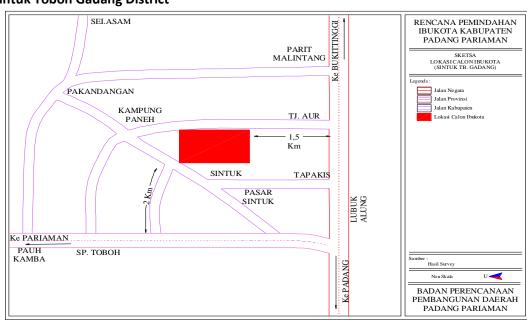
H. Enam Lingkung District



aspect		description
Functional Role	26. Centrality on transport network	xxxx

	27. Political activity	5
	28. Potential of administrative control	192
	29. Economic centre	2
	30. Cultural center	4
Symbolic status	21. Democratic/monarch symbol	0
	22. Space for symbolic structure	3
	23. Administrative function	xxx
	24. Spatial support	xxxx
Social system	6. Job diversification	2
monetary	11. Structure of taxation and levy	39.82
	12. Production activity organization	8

I. Sintuk Toboh Gadang District



aspect		description
Functional Role	Centrality on transport network	xx
	2. Political activity	2
	3. Potential of administrative control	0
	4. Economic centre	1
	5. Cultural center	4
Symbolic status	1. Democratic/monarch symbol	0
	2. Space for symbolic structure	3
	3. Administrative function	xx
	4. Spatial support	xxx
Social system	1. Job diversification	1
monetary	Structure of taxation and levy	42.10
	2. Production activity organization	5

Appendix III weighted summation tables

Effectiveness matrix

					Choic	e possib	ilities			
		Α	В	С	D	E	F	G	Н	1
	1	1.00	1.00	1.00	0.75	0.50	0.50	0.25	1.00	0.75
	2	0.60	0.20	0.60	0.80	1.00	0.40	0.60	1.00	0.40
	3	0.39	0.72	0.65	0.47	0.56	1.00	0.29	0.43	0.00
	4	1.00	0.40	0.40	0.80	0.40	0.80	0.60	0.40	0.20
	5	0.63	0.63	0.50	1.00	0.88	0.50	0.50	0.50	0.50
criteria	6	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
crit	7	0.33	0.67	0.33	0.33	0.33	1.00	0.33	1.00	1.00
	8	0.50	0.50	0.50	1.00	0.75	0.50	0.50	0.75	0.50
	9	0.75	0.25	0.25	1.00	0.75	0.25	0.50	1.00	0.75
	10	1.00	1.00	1.00	1.00	0.50	0.50	0.00	1.00	0.50
	11	0.83	0.81	0.54	0.93	0.63	0.86	0.39	0.95	1.00
	12	1.00	0.77	0.12	0.19	0.31	0.35	0.06	0.15	0.10

Partial complete Weighting (for centralized system)

Important (symbolic & social criteria)

criteria	rank
1. Democratic/monarch symbol	4
2. Space for symbolic structure	3
3. Administrative function	1
4. Spatial support	2
5. Job diversification	5

Less important (function and economic criteria)

cri	teria	rank
1.	Centrality on transport network	1(6)
2.	Political activity	2(7)
3.	Potential of administrative contol	3(8)
4.	Economic center	5(10)
5.	Cultural center	4(9)
6.	Structure of taxation	7(12)
7.	Production activity organization	6(11)

Standardized Weight

criteria	Weight (base on partial ranking)	Standardized weight	Directed standardized weight
Centrality on transport network	6	0.08	0.92
2. Political activity	7	0.09	0.91
3. Potential of administrative control	8	0.10	0.90
4. Economic centre	10	0.13	0.87
5. Cultural center	9	0.12	0.88
6. Democratic/monarch symbol	4	0.05	0.95
7. Space for symbolic structure	3	0.04	0.96
8. Administrative function	1	0.01	0.99
9. Spatial support	2	0.03	0.97
10.Job diversification	5	0.06	0.94
11.Structure of taxation and levy	12	0.15	0.85
12.Production activity organization	11	0.14	0.86

Appendix IV sensitivity analysis for new criteria

Weight s	et 1			Weight s	et 2		
criteria	weight	choice-p	score	criteria	weight	choice-p	score
a	1.00	1	8.41	a	1.00	1	6.32
b	1.00	2	6.31	b	1.00	2	4.94
С	1.00	3	5.39	С	1.00	3	4.52
d	1.00	4	8.27	d	1.00	4	6.54
е	0.00	5	5.73	е	1.00	5	4.97
f	1.00	6	6.15	f	0.50	6	4.93
g	1.00	7	4.52	g	0.50	7	3.63
h	1.00	8	7.68	h	0.50	8	5.75
i	1.00	9	5.20	i	0.50	9	3.77
j	1.00			j	0.50		
k	1.00			k	0.50		
1	1.00			I	0.50		
Weight s	et 3			Weight s	et 4		
Weight s	et 3 weight	choice-p	score	Weight so	et 4 weight	choice-p	score
_		choice-p	score 5.81	_		choice-p	score 5.93
criteria	weight	•		criteria	weight	•	
criteria a	weight 0.50	1	5.81	criteria a	weight 0.50	1	5.93
criteria a b	weight 0.50 0.50	1 2	5.81 4.18	criteria a b	weight 0.50 0.50	1 2	5.93 4.76
criteria a b c	weight 0.50 0.50 0.50	1 2 3	5.81 4.18 3.49	criteria a b c	weight 0.50 0.50 0.50	1 2 3	5.93 4.76 3.77
criteria a b c d	weight 0.50 0.50 0.50 0.50	1 2 3 4	5.81 4.18 3.49 6.30	criteria a b c d	weight 0.50 0.50 0.50 0.50	1 2 3 4	5.93 4.76 3.77 5.69
criteria a b c d e	weight 0.50 0.50 0.50 0.50 0.50	1 2 3 4 5	5.81 4.18 3.49 6.30 4.22	criteria a b c d e	weight 0.50 0.50 0.50 0.50 0.50	1 2 3 4 5	5.93 4.76 3.77 5.69 4.02
criteria a b c d e f	weight 0.50 0.50 0.50 0.50 0.50 1.00	1 2 3 4 5 6	5.81 4.18 3.49 6.30 4.22 4.20	criteria a b c d e f	weight 0.50 0.50 0.50 0.50 0.50 0.50	1 2 3 4 5	5.93 4.76 3.77 5.69 4.02 4.18
criteria a b c d e f	weight 0.50 0.50 0.50 0.50 0.50 1.00	1 2 3 4 5 6 7	5.81 4.18 3.49 6.30 4.22 4.20 3.68	criteria a b c d e f	weight 0.50 0.50 0.50 0.50 0.50 0.50 0.50	1 2 3 4 5 6 7	5.93 4.76 3.77 5.69 4.02 4.18 2.73
criteria a b c d e f g h	weight 0.50 0.50 0.50 0.50 1.00 1.00	1 2 3 4 5 6 7 8	5.81 4.18 3.49 6.30 4.22 4.20 3.68 5.46	criteria a b c d e f	weight 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	1 2 3 4 5 6 7 8	5.93 4.76 3.77 5.69 4.02 4.18 2.73 5.14
criteria a b c d e f g h i	weight 0.50 0.50 0.50 0.50 1.00 1.00 1.00	1 2 3 4 5 6 7 8	5.81 4.18 3.49 6.30 4.22 4.20 3.68 5.46	criteria a b c d e f g h	weight 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5	1 2 3 4 5 6 7 8	5.93 4.76 3.77 5.69 4.02 4.18 2.73 5.14