CHAPTER 2
JUSTIFICATION FOR THE RESEARCH

2.1 General field of study

In developed countries, there have been a number and diverse examples of implemented projects on utilizing of vacant land mostly providing technical information, physical design and assigning multi-layer land use plan which is the new trend management, but only a few literatures have given adequate attention to organizations and institutions framework and policy decision-making process. The management approaches and policy decision-making of the under-utilized space have been discussed only in the last decade, they have sought out new ways of addressing the issue of urban vacant land with the involvement of public and private stakeholders and community.

On the case of Bangkok, in July 1992, when the Minister of the Interior issued the Bangkok Metropolitan General Plan as the first official plan to guide the development and use of land across the city. The ministerial regulation authorizing this plan expired on the 7 July 1999, and the Minister then issued the revised plan as prepared by the City Planning Department of the Bangkok Metropolitan Administration, to replace the first plan which had been prepared by the Department of Town and Country Planning in the mid-eighties, the new plan is based on the more up-to-date development data. But it is important for these plans to present the integrated and systematic approach to the responsible organizations in urban development strategy.

The Bangkok Comprehensive Plan had indicated the target for developing adequate and standard social services, public utility, and infrastructure. Regarding to land transportation projects, only the attempt to find the consensus on the network especially the mass transit system had been in the government agenda. The conclusions mostly go to the large capital allocation on construction, technical consultation, construction management, investment and tenure. But unfortunately there is no evidence that the plans had been linked to each other. Initiation of a project mostly concerns on the only purpose of transportation, the land has not been utilized properly. Most of the abandoned lands become waste dumping sites, garages, parking, storages, uncultivated lots, etc.

2.1.1. Urban space and land management policy and its relationship to under-utilized space

Santiago (1994) gave the examples of activities of government land management using the case study of Philippines, the activities cover a whole range of activities which include land use allocation; land conversion or reclassification, acquisition and disposition; and land conservation or development undertaken by government or by authorization of private individuals or groups, and land taxation and regulation. On the utilization part relates to land development and its regulation, which are governed by both national laws and local ordinances. Policy and standard setting and resolution of land use conflicts are vested in a national agency. The preparation of local development plans, land use plans and zoning ordinances, on the other hand, are vested in the cities and municipalities. Another activity is conservation of lands, land conservation is a part of land development and its regulation. Conservation of lands is effected through the declaration of parks and open spaces, green belts and buffer zones, including the historical and cultural landmarks preservation, with or without improvements.
The analysis of the city planning in most cases, have found the public spaces are used only for recreation. The activities make the more complete urban living, which since the beginning of time, have been evidence of mankind’s desire to socialize (Cerver,1994). Therefore, there have been the diversity of the solutions to re-organize and re-new of the public space and the urban surrounding to serve the inhabitants. The modern concepts of town planning such as revitalization, rehabilitation, re-inhabitation, renovation and renewal of the urban environment are the ingredient of the same aims as this study as for utilizing the urban built environment for the more lively and attractive place for all citizens.

In the case of neighbor country; Kuala Lumpur, Malaysia; Ghee (1995) presented in the Urban Green Project to resolve the urbanization, which accelerate existing urban environment problems. It required concerted and purposeful action by a wide array of organizations, governmental agencies, pressure groups and concerned citizens to give way to various forms of development. Especially, the objectives to encourage policy-makers, professionals, government departments, interest groups, and school children to make more concerted efforts to safeguard and protect urban green areas, and to assist the relevant authorities in the development, management and conservation of all types of urban green space.

In another view, a study from MIT Consultants Team (1994) gave a statement regarding to the vacant land that Bangkok should not indiscriminately convert all vacant land into parks. They pointed out the unpredictable effects of this strategy. ‘An amenity such as green space is very difficult to convert into other uses, once communities become attached to it’. (M.I.T. Consultants Team, 1994). So the strategic planning on land management and especially the alternatives of utilization should concern on this consideration.

2.1.2. Approaches to decision-making

Decision-making is a dynamic process: a complex search for information, full of detours, enriched by feedback from casting about in all directions, gathering and discarding information, fueled by fluctuating uncertainty, indistinct and conflicting concepts. The process is an organic unity of both pre-decision and post-decision stages overlapping within the region of partial decision-making. There are 2 basic approaches to modeling human decision-making: the outcome-oriented approach and the process-oriented approach (Zeleny, M., 1982, :85-97). Harrison, E.F. (1995) also pointed out the levels of decision-making that decision-making occurs at several levels. The first most basic level is started from individual acting to satisfy his or her psychological needs. Beyond that there are levels of group, organizational, and even global decision-making. What this study will aims to focus is the decision-making in organization level.

According to Harrison, E.F (1995), the basic characteristics of decision-making at the level of organization are as following:

1) Organizations make extensive use of programmed decisions that involve reasonably well-structured patterns of search. Naturally the more complex and significant the decision, the more extensive the search process will be.

2) Organizations often use rather simple rules of thumb to make decisions as well as the complex analytical frameworks that are often attributed to organizational decision-making.

3) The complexity, uniqueness, and significance of decision are determining factors. Obviously some decisions don’t permit rule-of-thumb treatment.

4) Organizations make decisions that are bound and biased by the local
rationality of decision unit. That is organizations are likely to make decisions that are optimal in their spheres but sub-optimal when reviewed in the larger totality.

5) Organizations engage in a directed search for relevant alternatives. The choice of decision rules and strategies is constrained by the desire to minimize the uncertainties.

6) Organizations learn. To the extent that they are part of open systems, there is little doubt that they learn from and adapt to their environment.

‘The Meta-organizational Decision-Making’ was discussed by Harrison (1995) that this level of decision-making is made at the level of total society. When the primary social objectives stress on the good life, culture, civilization, order, and justice, which is not an economic nature, as the level of the system of enterprise.

2.1.3. Multiple perspectives in decision-making

Linstone, H (1984) stated described the T(chnical)+O rganizational)+P ersonal influence in decision-making that the T perspective avoids involvement with moral concerns. It searches for cause and effect, for solvable problems while the O and P perspectives sweep in human beings, their emotions and ethics. The difference between O and P is exemplified ethically as that between organizational and individual dominance, between subservience to the society and personal freedom (Von Foerster, 1977). Especially in democratic society, P perspectives are important; each individual is responsible for his or her own actions.

Multiple Criteria Decision Making (MCDM) in management science (MS) and operation research (OR) concept had established in the end of 1970s. It is one of the most dynamic and widely applied areas. MCDM deals with the difficult task of balancing the conflicting objectives in middle and top management. The major trends have been represented in descriptive decision models, economic policy making, applications to strategic management, interfaces with decision support system and judgmental psychology, and interactive programming (Zeleny, M., 1982).

Although decision-making can be viewed as a process divided into three (or five) distinct phases as cited by Murray M. (1986), he also cited Steinbruner (1974) about the complicate nature of the process involves the circumstances as ‘complex situations’ (Steinbruner, J.D., 1974). They are as following characteristics: 1) Two or more values are affected by decision and there are a trade-off relationship between the value, 2) Uncertainty or imperfect correspondence between information and environment, and 3) The power to make the decision is dispersed over a multitude of individual actors and/or organizational units.

2.1.4. Policy analysis

This study will try to examine policy options targeted on a particular problem of under-utilized spaces and systematically document and defend a policy strategy on the utilization of those spaces. The methodology using in this study is ‘Policy analysis’, it is not only the examination of a policy by decomposition into its components but also the design and synthesis of new alternatives (Quade, 1982). The processes involve extensive data gathering from many responsive stakeholders, elaborate calculations using empirical and quantitative data. The analysis is aimed to improve decision-making in policy level.
To apply policy analysis effectively, policy analysts must carefully analyze information needs. Putt and Springer (1989) categorize information into five major types:

1. **An Exploration Problem** – a ‘needs assessment’ is the lack of prior knowledge concerning the issue. To do this policy analysis, researcher needs to clarify the nature of the problem, estimate the scope and importance of the problem, and recommend appropriate policy responses.

2. **A Description Problem** – analysts need to collect and present an accurate description of the problem. The focus is on the quantitative description. To do this policy analysis, researcher needs to accurately fulfill specific information requirements about an existing concern.

3. **A Causation Problem** – a introducing of the problem of causation, a more complex information need than description. To do this policy analysis involves evaluating the effects of policy or program.

4. **An Estimation Problem** – there are two types of estimation problems in policy analysis; information concerning future needs or opportunities or trends that require future action., concerning the desired outcomes and effects of policy actions to meet its intended objectives. To do this policy analysis needs to develop procedures to forecast future needs or to predict the effects of policy actions.

5. **A Choice Problem** – to analyze the alternatives and make a recommendation to the organization body. It focuses on decisions about whether to undertake specified courses of action or not. To do this policy analysis needs to clarify the alternative courses of action, identify criteria/standard for deciding which alternative(s) to choose, compare the alternatives according to the criteria, and then recommend a choice.

### 2.2 Specific focus

The major issues of the study are the policy analysis of administrative decision-making in the responsible organizations, the issue of existing situation of public own under-utilized space, and the issue of utilization of appropriated public activities on those voids by concerning multiple perspectives involvement.

The study will aim to assess the administrative decision-making process of utilization of the under-utilized space, and offer the systematically and holistically approaches for urban land management especially for the project owner agencies and BMA and all other involved actors; affecting various aspects of city environment and communities. The integrated approaches would make it necessary to perhaps accommodate the alternative societal public activities into the space and to formulate organizations strategies and practical urban renewal public policy scheme. The factors respond to past, present and future of this urban environment study are the legal issue, demographic variations and district inhabitants needs, economic development of the city, national development plan and the real needs of the population which will be taken in account and be iterated in the
study. At the quantitative end of the continuum, the research will choose policy-related problem of how-to utilize the space and set empirical hypothesis and test them using statistical methods. At the qualitative end of the continuum, the research will focus on systematically outputting policy strategy for the utilization.

2.3 Development of a rationale
The research will be expected to result more than a solution for decision-making in utilizing by integration of several approaches in urban land management. Once the result from descriptive policy analysis of the past policies, the multivariate analysis results the possible public activities, then the study will provide the prospective policy analysis techniques with management model for all actors in development. The proposal will be required to achieve sustainability for future generation within the urban environment oriented policy framework. The study is possible to prove that the public land utilization policy will be able to delight the urban built environment and infrastructure network with another layer of lively public activities and make the city more livable and financial affordable.

Special Studies, which had been done during the year 2001 course-work term, are aimed to provide the inventories and experimental study related to the dissertation. Sep 2001 Special Study was the study on spatial analysis show the potential areas for the feasible urban development, the multivariate analysis (May Term, 2001 Special Study) resulted the forecast of urban characteristic of each district, and Jan 2001 Special Study involved policy study of the National and local level plan and policies, thus finally the research will emphasize on policy analysis on several possible choices and provide the more feasible urban re-development alternatives. The proposal will be required to achieve sustainability for future generation within the environment, social, and economic oriented policy framework.

A systematic and integrated approach is required, to ensure that resources (both physical and human) are used most effectively, be concerned and shift from traditional by-sector approaches to an emphasis on integration.

2.4 Study objectives
It is aimed to cover the problems inventory, the integrated policy analysis and offer the strategies to deal with the urban re-development of the under-utilized spaces in Bangkok Metropolitan area. The project is based on the analysis on decision-making process with a combination of the knowledge and attention in integrated approach and multiplism in urban management. The study is expected:

2.4.1. To understand the existing urban land management policy in public agencies.
2.4.2. To identify and categorize existing public own under-utilized spaces.
2.4.3. To describe the factors, criteria, and motivation on the use of public space.
2.4.4. To explore, describe, and evaluate the alternatives of the utilization and the possibilities of conflicts and constraints by applying to the case of Bangkok.
2.4.5. To recommend, formulate, and generalize public land management policy guideline for under-utilized space.
2.5 Preliminary literature reviews

2.5.1 The land utilization

A Report on Vacant Land Management and Neighborhood Restructuring by Philadelphia City Planning Commission (Vacant Land in Philadelphia, June 1995)\textsuperscript{7} listed the principles for restructuring their neighborhood dealing with the vacant land as the followings;

- Stabilize, preserve, and reinforce physically intact blocks.

- Encourage the redevelopment of sites that support and strengthen existing community anchors.

- Assemble and market strategic sites having long-term redevelopment potential; encourage low-maintenance interim uses for these sites until they are ready for new development.

- Increase residential open space in existing and redeveloping neighborhoods.

- Reestablish the importance of the streetscape as a key neighborhood design principle.

- Modernize the Zoning Code to reflect neighborhood restructuring principles.

- Bring Nature back into the City.

- Change attitudes and expectations about vacant land reuse possibilities, both within City government and in the neighborhoods.

- Create mechanisms for the better management and maintenance of vacant land.

The examples of physical utilization of vacant lands have been given in only few literatures. Graham A. (Mossop and Walton, 2001 : 78-87) gave some cases in her articles titled ‘Soft Architecture and Invisible Mending’ on Walla Mulla Parks, Sidney, Australia. It is a small patch of wastelands dissected by the South Sidney overpass in the glue-sniffers, hypodermic a narcotic, and homeless hostel area. This space was dropped dead and no-one would even notice, competing with street action, Graham; an public artist; had been challenged and created her art pieces of urban life (see Figure 6).

Marston described the work of Wallace, Roberts & Todd in ‘Overtown Pedestrian Mall’ (Cerver, 1997: 164-173) that there is a project located in Overtown, an American district in Miami, where the construction of two major highways and a rail road line cut the community of African-American district in half. The Overtown pedestrian mall project is part of a cultural and economic revitalization plan that aims to stimulate private investment and increase community pride in this historical district. The project involved public agencies, neighborhood associations, landscape planners, civil engineers, and even a local artist; Gary Moore. The area undertracts, once decaying, has been transformed into urban space (see Figure 7)
Figure 7: Examples of utilization of vacant land under elevated structures as an urban space: Overtown project in Miami
(excerpted from Redesigning City Squares and Plazas)

There are some utilization examples of vacant land under elevated structure such as Viaduc des Art in Paris and Promenade Plante (Paris 12e)\(^8\). Completed in 1995, this 4.5 km pedestrian walk follows the old Bastille-Banlieue Est railway tracks and is located on top of an abandoned viaduct; another multi-layer landuse example. Beginning at the Opéra Bastille, it runs the length of the avenue Daumesnil, passes near the Gare de Lyon, the Reuilly garden and the Porte Dorée, ending at park Bois de Vincennes. Parts of it are open to bicycles and roller-skates/blades. The path runs its unique course through viaducts, embankments, railway tracks and small tunnels, giving remarkable views of the 11th and 12th district's most modern areas. The arches of the avenue Daumesnil viaduct were

remodeled into arts & crafts boutiques, art galleries and craftsman workshops located on the ground floor accessible from street pedestrian (see Figure 8).

Figure 8: Examples of utilization of vacant land under elevated structures as an commercial space : Paris Viaduct

2.5.2. Under-utilized spaces created by urban development and urbanization

As being described in report done by M.I.T. Consultants Team (1994), there are varieties of convertible vacant lands. It will be clarified and analyzed to find out the characteristic of the voids, their locations, the physical characteristic and the relationship to the uses in the study.

In the broader description at this stage, this type of vacant space has its own characteristics, relate to physical condition, spatial / visual quality, contribute significantly to social and cultural value, environmental value, and economical value. As the Keller, (1994) described in Lower Manhattan NYC expressway re-development project article:

“They have identified seven provisional urban typologies qualifying the notion of the urban void. These categories, **surrounding, field, extending, surrounded, edge, under, and cutoff**, each take on a particular operative nature in relation to infrastructure, dwelling zones, the time use manifestations of the life of the city. The typology that the Lower Manhattan expressway falls into is for the most part ‘Under’. A definition of this field follows:

Program erasure - Raised highway through industrial, dwelling or void zones creates a field of potential underneath that varies according to the proximity to highway entrances.

One of the theses of the ‘Operative Voids’ project is that the void space in the city is formally empty but often programmatically activated, based on the overlapping fields of influence of disparate programs which cross over each other in the ‘void’. Derelict zones thus become sites of performance, based on fragments of architecture and infrastructure, and their proximity to urban transport, dwelling areas, and the like.

In the case of the ‘under’ category, there is a confluence of highly local forces, such as the immediately proximate dwelling zones, or industry, or sanitation, etc., with the regional fields of influence that the highway itself brings to bear on the site.

The ‘under’ (one of the typology; surrounding, field, extending, surrounded, edge, under, and cutoff) characteristic of this type of voids created by elevated structure has provide the high possibility for development as Keller called ‘operative voids’.

2.5.3. Causes of under-utilized spaces

A Report on Vacant Land Management and Neighborhood Restructuring by Philadelphia City Planning Commission (Vacant Land in Philadelphia, June 1995) discussed about the causes of the vacant lands. Some of the reasons are common in other urbanized cities. Hence, in this study will analyze the causes one-by-one as the following:

- Economic Obsolescence
- Locational Obsolescence
- Physical Obsolescence

2.5.4. Decision-making models

Gass S.I.(1985) classified models into three basic types; the ‘iconic model’ looks like what it is supposed to represent, the ‘analogue model’ relates the properties of the entity being modeled with other properties that are both descriptive and meaningful, the ‘symbolic model’ or the mathematical/logical model represents a symbolic description of the process or problem under investigation. Models can also be both ‘predictive’ for the purpose of forecasting the future and ‘normative’ in that it can be used as an aid in identifying solutions and shows what can be done to accomplish objectives or norms of operation. The models can also be ‘descriptive or procedural’ as they describe the basic elements and interrelationships of a system, to help us to understand the physical and behavior aspects of the reference system. Finally, a model can be ‘prescriptive’, it can be used to prescribe a solution. A prescriptive model of this decision problem would compare the choices of solutions in term of locations, service, cost, and other measure.

Gass also cited that many decision makers rely on their mental models and their intuition to make decisions. A mathematical model should try to encompass, explain, and extend intuitive concepts.

Murray M. (1986) categorized decision-making into three models; *Rational*, *Political*, and *Legal model*. The rational model is based primarily upon quantitative methods and mathematical skills that assume a non-ideological, non-intuitive approach to decision-making. Usually, this model has guided the decision makers in private sector. Oppositely, in public sector, while some deference is paid to quantitative technique, the prevailing mode is still political. The political model refers not to electoral politics or to overt lobbying methods but covert process of decision-making based on self-interest, careerism, personal preference, or ideology. The legal model is based upon, and derives from, a set of fixed principles and precedents. These are expressed in the form of positivistic statutes, codes, and regulations, which theoretically from the basis for legal decision-making. Each of these approaches – or ‘truth-seeking’ methods – usually operates as a separate and discrete intellectual model. Each is based on separate and distinct assumptions. Murray also stressed that in reality, there is a great deal of interplay between the three selected models, which create an integrated approach to decision-making.

2.5.5. Integrated approach management models

To do the integrated approach of land utilization model – the research first defines and describes the situation of land management strategies and approaches implemented in the cities worldwide. Second, the focus of research will be 1) physical characteristic information of the spaces in the study areas 2) other dimensions of the factors related to quality of the spaces which are included; accessibility, health impacts, visual quality, security/safety, community needs, etc. 3) finally the focus of the research will synthesize and identify the key indicators of utilization models for the future plans or re-organization of the existing voids. In addition to this key actors analysis, the approach called “A Tripartite Approach” will be integrated in the management model. This approach had been suggested in BEIP\textsuperscript{11}-Study as one of the considerations in planning from the reason that

“only technical solutions are sometimes not effective and rather likely to produce another problems. Planning of the urban environment is a task to depict a blueprint of total urban system itself. Because all urban activities are part of the environment and elements of the environment dynamic system, the task calls for a sophisticated discipline to incorporate all factors into the total urban system which assures people’s quality of living.”

A Tripartite Approach is one of the five ideas; (a.) Pursuance of Sound Urban Environment, (b.) Sustainable Growth with Economy and Environment, (c.) Functioning Urban Metabolism System, (d.) Urban Growth Management, and (e.) A Tripartite Approach for implementation of Environmental Programs) with the main concept of integrated the 3 parts of the government, economic, and social sectors together (see figure 9.) The public benefit-oriented society should lie on the ground of reciprocal relations among these 3 parties where roles, duties, and right be performed.

\textsuperscript{11} The Study on Urban Environmental Improvement Program in Bangkok Metropolitan Area (1997), JICA, BMA, The Government of Thailand
In social sector, the movement of social responsibility and community consciousness have been another important issue worldwide. Community participation will have more impact on the planning process, participation in design has come to be constructed as an acceptable concept and within the realm of implementation (Sanoff, Adams, et. al, 1978).

In the proposal stage, the land management approaches on urban voids utilization, which have been planned and implemented recently are listed below;

1) **Standard-based approach** – It has been used as a traditional tool to determine the acreage needs for parks in planning. It is different from city to city and there is no best formula applied for calculation. The terms using in planning are included park ratio, park acreage.

2) **The demand-based approach**\(^\text{12}\) – It relies on a combination of the utilization of park facilities to determine the unique needs of each individual park and input from citizens and park users regarding their desires for parks and recreation areas and facilities.

3) **Value-driven approach** – Reviewed from the Town of Amherst Bicentennial Comprehensive Plan (1818-2018)\(^\text{13}\), this approach emphasizes the issues and values expressed by citizens as the basis for developing goals, policies, and implementation strategies for the plan. The basic attributes of a values-driven approach include:

1. A structured program of citizen and stakeholder involvement designed to identify community issues and values and to build consensus.

2. Articulation of an overarching concept or vision for the future of the community based upon citizens’ values.

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\(^{12}\) Website - [http://lufkinparks.com/6needsAssess.htm](http://lufkinparks.com/6needsAssess.htm) [Park and Rec - March, 2002]

\(^{13}\) Website - [http://www.amherst.ny.us/govt/planning/comp_plan/intro/comp_plan.htm](http://www.amherst.ny.us/govt/planning/comp_plan/intro/comp_plan.htm) [Comprehensive Plan Home - March, 2002]
3. Translation of the overarching vision into specific policy directives and actions.

From Summary of the Vacant Land Management Forum - Dec. 15, 2000 (Summary of the Vacant Land Management Forum - Dec. 15, 2000)\textsuperscript{14} which is the land management strategy of vacant lands in the community areas in Philadelphia, Baltimore, USA. There is a role to look for opportunities to create community gardens, art, nurseries, and economic development projects only where there are people or entities that want to initiate and maintain such projects. The forum mentioned about these 3 approaches; 1) Neighborhood approach, 2) Clean & Green approach and 3) Community-based approach – It is used in Project for Public Spaces (PPS).\textsuperscript{15} This approach involves “looking at, listening to and asking questions of the people in a community about their needs and aspirations. PPS works with them to create a vision around the places they view as important to community life and to their daily experience; and PPS helps them implement their ideas beginning with small scale, doable improvements that can be phased in quickly and immediately begin to benefit a community.” This process is carried out with the tools such as systematic on-site observations, time-lapse filming, customized interviews and user surveys. It emphasizes to the information from people in the places where they live, work and congregate. The process also includes facilitated public forums, workshops, meetings and committees that give people an opportunity from the effort’s outset to identify issues, contribute ideas and make decisions about improvements that can holistically address their manifold concerns and enhance the places where they live and work. Using this approach, communities will be able to be rebuilt both in spirit and as places.

4) Neighborhood approach\textsuperscript{11} – It was noted by some that while the City’s Neighborhood Planning Program is a good first step, there is a need for an overall City strategy for vacant land and open space management. There is also a need to raise community capacity to manage vacant land for community use. A question was raised in the neighborhood and how effect they have been in terms of vacant land management.

5) Clean & Green approach\textsuperscript{11} – It plans to focus first on the major corridors running through their communities and to first “clean and green” every site before moving on to more involved designs or projects on that land. An easy-to-maintain treatment to improve the appearance of the site.

6) Community-based approaches to vacant land management . (Pennsylvania Horticultural Society Program)\textsuperscript{12} The goal has been to improve the overall appearance and “curb appeal” of the community, thereby helping to stem population loss, attract new residents, and encourage reinvestment. This effort employs a number of treatment options for abandoned land. For the majority of lots, the emphasis is on low-maintenance, low-cost solutions as a housekeeping

\textsuperscript{14} Online document - \url{http://www.ndc-md.org/ndc/VLMForum.PDF} [March,2002]
\textsuperscript{15} Website - \url{http://pps.org/about_pps.htm} [About PPS - March, 2002]
\textsuperscript{16} Website - \url{http://www.pennsylvaniahorticulturalsociety.org/pg/} [Philadelphia Green – March, 2002]
\textsuperscript{17} Website - \url{http://www.pennsylvaniahorticulturalsociety.org/pg/impact0301.htm}
approach to the problem. In addition to foundation support and federal money from the Philadelphia Urban Resources Partnership, the pilot of New Kensington project has succeeded because of the significant investment by City government. This initiative illustrates that the City's active participation is absolutely critical to the success of such endeavors.

7) Benefits-based approach – (Forest, 1999) Benefits-based Management, or BBM, involves the integration of a benefits-based approach to all operations of an agency. This includes not only marketing and programming but also the administrative function and philosophy of an agency. Everything from the mission statement, agency goals and work plan to budget procedures, personnel training, planning and public relations can integrate the Benefits-based management approach.

Over the past few years, a benefits-based management (BBM) paradigm has developed as a new way of thinking about and managing recreation areas and programs. The general idea is to more clearly focus programs on the desired benefits, to consciously design programs to provide these benefits, and to use more direct benefit measures in evaluating and promoting the programs. Considerable attention has also been given to using these benefits to garner public support for the programs and attract customers. Also it is another related idea of the new approach as benefits-based marketing.

8) Interdisciplinary approach - (New Hampshire Division of Forests and Lands)18 - to ensure long-range, comprehensive and balanced consideration of multiple uses and resource values on public lands since no single scientific discipline is sufficient to adequately identify opportunities and resolve issues and problems.

Regarding to the concept of utilization of the under-utilized spaces, Manuel Gausa, architect, chief editor of Quaderns magazine, Barcelona, Spain had addresses in the EUROPAN 4 (Theme: Constructing the Town upon the Town Transformation of Contemporary Urban Sites) about the definition of 'urbanoterritorial system' which usually be the circulation infrastructures such as major transport arteries. These ideas define the basic solution of the future organization of the land and appear at the same time as the basis for new activities, not only along their length, but also upon them. Land, previously functionally separated, is now starting to support more complex program defined not only from the basis of the appropriation of interstitial spaces but also from the complex stratification in terms of uses if one views them in section, but also from the basis of actual re-conversion of large obsolete areas: spaces that were previously mono-functional, and whose efficient restructuring seems to enable the appearance of new mixed "residence-service-facilities-transport" vocations according to new metropolitan demands.

Various aspects of urban infrastructure network especially the elevated expressway, affect the city reorganizing. This study is to accommodate the alternative social activities into the public owned vacant spaces and to formulate organizations strategies and practical urban renewal policy scheme. The factors respond to past, present and future of

this urban environment study are the policy decision-making process which involves legal issue, organization framework and the responsibility, demographic variations, district inhabitants needs, economic development of the city, national development plan and the real needs of the population which will be taken in account and be iterated in the study. The dissertation will be expected to result a solution for utilizing those lands by integration of several urban land management especially concerning ‘the voices of all stakeholders’.

2.5.6. Methodology

Policy analysis

Patton, C.V. and Sawicki, David S. (1993) stated that policy analysis can be done either before or after the policy has been implemented. The term ex-post, post hoc, retrospective or descriptive policy analysis is the ‘after-the-fact’ analysis which has been divided into 2 types; retrospective (what happened in the past policy?) and evaluative (were the proposed of the policy met in the new program?). In the opposite, policy analysis that focuses on the possible alternatives of proposed policy has been called ex ante, pre hoc, anticipatory, prospective, predictive or prescriptive policy analysis. It is also divided into 2 types; predictive (projection of future states resulting from adopting particular alternatives) and prescriptive (analysis of the tolerable recommended actions). The policy analysis usually combines both descriptive and prospective together in order to design and evaluate new policies at the same as understanding the impact of the past policies.

The conflicts always occur when two or more goals or objectives have been set. It is necessary to concern with dealing with conflicts, called ‘conflict management’ (Zeleny, M. 1982). To resolve a conflict involves the consideration of multiple objectives. Ackoff (1978) was cited by Zeleny (1982) that there are three ways of dealing with conflict and with problems in general: solution, resolution, and dissolution. Zeleny added neglect, containment, control, and denial as additional strategies in conflict management.

Dunn, W. N. (1994) explained about the ‘Multiplism’ in policy analysis that more than 40 years ago, the recognition of complexity in social problems is growing. It has combined the use of multiple perspectives, the multiple policy stakeholders in the process of creating, critically assessing, and communicating policy-relevant knowledge. The core methodology can be identified as a form of critical Multiplism. The applications of multiple perspectives, methods, measures, data sources, and communication medias will be gathered in the broad range of research and analysis. Usually, the methodology will represent general guidelines for policy inquiry and span several important areas of policy analysis include; multiple-operationism, multiple-method research, multiple analytic synthesis, multivariate analysis, multiple stakeholder analysis, multiple perspective analysis, and multimedia communications.

Thus, the study will also apply both types of the policy analysis. The descriptive analysis will be used on the assessment of the impact of the existing policy in order to examine the consequences, which will probably occur in the new proposed policies. The predictive analysis will suggest the choices of alternative for further prospective analysis. The prospective policy analysis will include the identification of the problems, both quantitative and qualitative comparison of recommended alternatives. Finally, the policy-makers will be able the use these
information for future decision-making. The study will apply the multiplism concept into the analysis methodology to verify the possibility of the guidelines in all involved aspects.

Decision analysis

Lawrence D. Phillips introduced in ‘Decision Analysis for Management Judgment’ (Goodwin P. and Wright G, 1998) that problems with multiple objectives are frequent source of difficulty in both public and private sectors: one course of action is better in some respects, but another is better on other criteria, thus decision analysis works best on real problems, and it is most useful when you get a result you did not expect. It is a willingness to express the judgments in numerical form, and a step-by-step procedure. In addition, it helps to deal with complex issues more effectively, when the problem is to evaluate options, when objectives conflict, to make a choice, to assess the uncertainty associated with some future event, to decide on seeking new information before making a choice, to obtain better information from group of colleagues, to re-allocate limited resources for more effectiveness, or to negotiate with another party. Goodwin and Wright (1998) also added Phillips’ statement that the problem always involve ‘multiple objectives’, ‘uncertainly’, ‘attitude to risk’, ‘complex structure’, ‘sequential in nature’, and finally ‘multiple stakeholders’. The decision analysis refers to the process of breaking something down into its constituent parts, therefore involves the decomposition of a decision problem into a set of smaller and easier to handle problems. The analysis provides a formal mechanism for integrating the results so that a course of action can be provisionally selected. While decision analysis may not produce an optimal solution to a problem, the results of an analysis can regarded as being ‘conditionally prescriptive’, that the analysis will show the decision maker what he or she should do, given the judgments which have been elicited from him or her during the course of analysis. Alternatively, the analysis may enable the decision maker to develop a greater comprehension of problem so that his or her preference changes towards that prescribed by the analysis.

The methodologies have been used in the present day include SMART (Simple Multiattribute Rating Techniques), which enables groups of people from a wide variety of backgrounds in decision conferences, to meet together to structure the decision problem and be able to clarify and elucidate the key issues associated with the strategies, Decision Trees and Utility Functions allow managers to clarify the sequences of decisions, to rank opportunities consistently and identify participation levels that conform with the organization’s willingness to take on risk, Decision Conference that is the group to develop a shared understanding of key issues and to resolve conflicting opinions within the committee, Expert System that is to capture and deliver the expertise of responsible advisers/actors, Scenario Planning that is an alternative way of dealing with uncertainty, etc.

Beach L.R. (1993) concluded that there are many techniques for creating pictures of decisions. The decisions were divided into four types; 1) influence analysis by using diagrams, matrices, and trees (see Figure 10) – clarify forecasts that they indicate what leads to what and what causes what, 2) value trees – clarify understanding about the standards that are applicable to the decision, 3) compatibility matrices – in order to screen out the unacceptable options, and 4) decision matrices and decision trees – in order to choose the best options.
Multiple Regression Analysis is a method to explain independent variable from dependent variables. It is a tool providing prediction, estimation, evaluation and influence of explanatory (independent) variables against criterion (dependent) variables and the weight /importance of explanatory variables. Research methodology for the Land Utilization especially on Quantitative Analysis will apply SPSS for Windows for more rational systematic tools. Data structure needs to be careful emphasize on research questions, hypotheses/assumption, and setting up the models which compose by relevant variables (dependent/independent ones).

The conclusion for further study on Land Utilization, case study of Bangkok Metropolitan is to construct the Multivariate Analysis models using ; Multiple Regression, Principal Component Analysis and Discriminant Analysis. Conjoint Analysis maybe also useful especially on the behavioral analysis but it needs more experiences on providing alternative activities due to psychological reasons. The linkage between each hypotheses and assumptions have to be concerned, scale of each variable has to develop from the origin of state of problems. In this study, there is some difficulties in reaching to some areas of data, but perhaps in the dissertation the researcher has to collect the more reliable data in the scale of city than country (even though someone may claim that in case of Bangkok, “Bangkok is Thailand”).

Figure 10: Three kinds of influence / causality (Beach L. R., 1993)