

CIÊNCIAS SOCIALMENTE APLICÁVEIS:

INTEGRANDO SABERES E
ABRINDO CAMINHOS

JORGE JOSÉ MARTINS RODRIGUES
MARIA AMÉLIA MARQUES
(Organizadores)

VOL VI



EDITORA
ARTEMIS

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APRESENTAÇÃO

Seguindo a lógica dos livros anteriores, o sexto volume desta coleção procura apresentar ao leitor uma coletânea de artigos sobre problemáticas que são transversais – intra e transdisciplinares – no campo das ciências sociais aplicadas.

Podendo ser discutível, na metodologia seguida na organização deste volume procurou-se privilegiar artigos que abordassem novas tendências e/ou problemáticas transversais relevantes, adotassem metodologias mais holísticas e/ou modelos de investigação aplicada, apresentassem estudos de caso nacionais e/ou internacionais e procurassem ser reflexivos, bem como os artigos sobre a razão do próprio ensino e aprendizagem. Nesse quadro, o presente volume está organizado em dois grandes eixos – o da Educação Ambiental e Sustentabilidade e o do Ensino e Aprendizagem.

Na construção da estrutura de cada eixo procurou-se seguir uma lógica em que cada artigo possa contribuir para uma melhor compreensão do artigo seguinte, gerando-se um fluxo de conhecimento acumulado que se pretende fluido e em espiral crescente.

Assim, o eixo Educação Ambiental e Sustentabilidade é constituído por um conjunto de dez artigos. Na sociedade esta temática constrói-se a partir de múltiplas práticas, nas famílias e nas empresas, sendo, quanto a estas últimas, um poderoso instrumento de incremento da competitividade. Assim, os artigos repartem-se pela inserção da temática em programas de ensino de nível superior, economia circular, cultura organizacional, cenários digitais, artefactos construídos com apoio de políticas de desenvolvimento regional que procuram também reduzir custos de produção e manutenção dos mesmos.

O eixo Ensino e Aprendizagem junta um conjunto de dez artigos que, em comum, contribuem para a construção da responsabilidade social e ambiental, através do melhor uso dos recursos da natureza. Assim, o conjunto dos artigos revela que a alfabetização e aprendizagem tem padrões de actuação e modelos que conduzem à alfabetização e motivam práticas docentes inclusivas, com impacto nas políticas de emprego na economia.

Com a disponibilização deste livro e seus artigos esperamos que os mesmos gerem inquietude intelectual e curiosidade científica, procurando a satisfação de novas necessidades e descobertas, motor de todas as fontes de inovação.

Jorge Rodrigues, ISCAL/IPL, Portugal
Maria Amélia Marques, ESCE/IPS, Portugal

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PARADIGM OF REGIONAL DEVELOPMENT IN THAILAND: A CASE STUDY OF THE NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT PLANS

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ABSTRACT: This charter aims at studying the main ideas and paradigm of regional development appeared in the National Economic and Social Development Plans (NESDP) through analysis and comparison with planning theory and related theories with regional planning. Based on the research, in the durations of regional development in accordance with NESDP, the adaptations of theories are different and it depends on the development environment and the context of country's development. The theories and ideas popularly applied are growth pole theory, location theory, and sustainable

development. Moreover, NESDP also gives importance to the implementation and evaluation, and public participation. On the other hand, the action deprives of full capacity. The suggestions to adjust the paradigm of the rational development of NESDP are 1) to promote the processes of implementation and evaluation; 2) to open the chance of every sector in arrangement and implementation; 3) to promote the connections; and 4) to use the academic theory and idea that are appropriate to location and local demands.

KEYWORDS: Regional Development. Regional Planning. Thailand's National Economic and Social Development Plans.

1 INTRODUCTION

The development and city expansion in the world have been progressed rapidly. In 2014, 54% of the world's population increases by 30%, from the year 1950, (United Nations, 2015). City expansion or urbanization, though resulting in economic development in term soft the growth of income and the diffusion of economic activities, it also brings up over urbanization which causes many problems: slum, environmental pollution, etc. The solution planning and dealing could not be operated specifically at the city level

but it requires regional and national development and solution (Freire, M., 2006, Haselsberger, B., 2008).

For Thailand, the planning of regional development appears in NESDP, the country's map, and the regional map since 1961. As the application of the growth pole theory in the fourth NESDP: main cities, less-visited cities, the development of eastern coastal area in the sixth NESDP, etc. Furthermore, the other state sectors also operate the regional development process, for example increasing educational opportunity, hospitals, development of infrastructural system, etc.

Nevertheless, despite the fact that Thailand's regional development has been progressed for a long time, there is none of research and survey indicating the paradigm of regional development from the main plans that if it conforms to the planning theories and ideas or not, how to manage principle and idea, and how the development affects. In consequence, this research article shall aim at searching the main idea, principles and ideas, and details of regional development of Thailand's NESDP to see if there is any difference of changing. The result will benefit the state sectors to revise the planning process and also students and those who are interested.

2 OBJECTIVES

- 2.1 To study the main idea of Thailand's regional development
- 2.2 To analyse the paradigm of Thailand's regional development
- 2.3 To suggest the paradigm of efficient regional development for Thailand

3 SCOPE OF THE RESEARCH

3.1 The study of Thailand's regional development means the study of spatial development at the regional level as appeared in Thailand's NESDP issue 1-12 of Office of National Economic and Social Development Board which is the major plan arranged by the unit whose main roles is to develop the nation.

3.2 The study of the main idea of regional development means to gather and study details of the plan which includes objective, the goal of the development, strategy, implementation, and evaluation.

3.3 The analysis of paradigm of regional development is the study and analysis of principles and ideas in making the plan, details of the plan, which lead to the comparison with theories and ideas relating to planning and regional planning.

4 LITERATURE REVIEW

4.1 PLANNING THEORIES AND IDEAS

“Planning” means the process of making a procedure in reaching the setting goal (Hall, Peter., 2002). The planning process according to Larz T. Anderson. (1995) is as follows:

- 1) Section 1 includes Identify Issues and Options, State of Goals, Objectives and Priorities, and Collect and Interpret Data
- 2) Section 2 includes Prepare Plans, Draft Program for Plan Implementation, and Evaluate Impacts of Plans and Implementation Programs
- 3) Section 3 includes Review and Adopt Plans, Review and Adopt Implementation Programs, and Administer Implementation Programs.

The development planning of all countries is different. In Thailand, the levels of the development planning consist of 4 major levels which are national planning, regional or particle planning, urban planning, and community planning (Doosadee Thaitakoo, 2013).

4.2 THEORIES AND IDEAS RELATING TO REGIONAL PANNING

1) Growth Pole Theory

The regional development is the development process of one specific area of the country which leads to the change of structures in economy, society, ideas, beliefs, land uses, settling down, administration, laws, etc. The target of the regional development contains 2 main ideas which are to promote welfare and economic growth. The regional growth has 2 characteristics which are growth from outside and growth from inside. Growth from outside could occur by spread effects which means the growth of on region affecting the other regions that are located around and by backward effects which mean the growth of one region but could affect the surrounding regions growing but absorb resources, raw materials, and labors from the other weak region, owing to the fact that the products and services could not beat the growing city (Doosadee Thaitakoo, 2013, Daranee Thavinpipatkul, (n.d.), Wannasin Phiraphan, 2013).

The idea is in accordance with the Growth Pole theory which the theory was invented by F. Perroux. It is obvious that the development does not take place everywhere or at the same time but it starts from one then expand to the other areas. The starting point is called “pole”. This idea will be successful depending on the factors that are to stimulate the growth (such as the change of industrial structure, the sufficiency of technological innovation, etc.), and the building of channels to transfer or distribute products and

services (such as development of transportations, development of communication and regional networks, etc.) (Doosadee Thaitakoo, 2013, Daranee Thavinpipatkul, (n.d.)).

2) Location Theory

Industrial location selection takes a major role due to the difference of location causing the advantages to the industrial business. Nonetheless, in the present day when the transport is rapidly developed, the channels of transport are wide. Moreover, there are many types of new fuels. Apart from the transports, the topic that is required to consider is the selection of industrial location which includes cost, land, and labors (Doosadee Thaitakoo, 2013, Daranee Thavinpipatkul, (n.d.)).

3) Sustainable Development

The sustainable development focuses on the balance of economic development, social development, and environmental development as it concerns the limit of natural resources and environment in responding the demands for the present and the future and the impact from activities. (Waralak Khongouan, 2016 and American Planning Association, 2007).

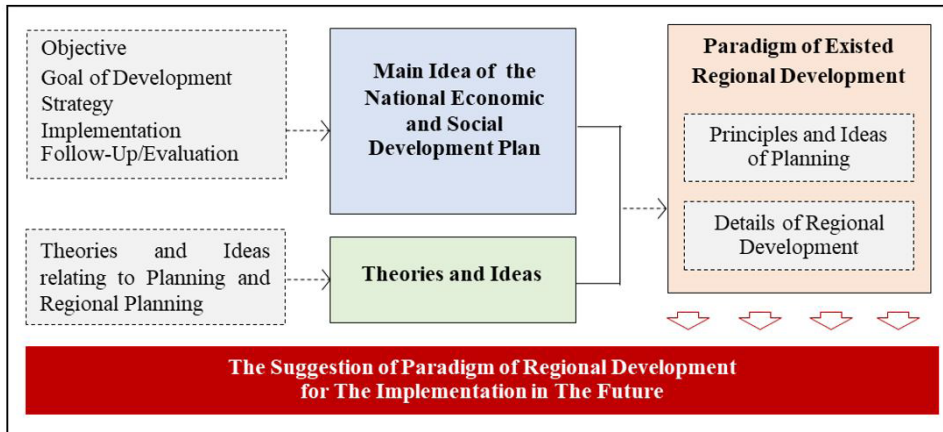
- (1) Social Dimension focuses on developing people to have the literacy of changing, to have morality, and lifestyle that support nature. They have the right and opportunity to allocate resource fairly and could depend on themselves with stability.
- (2) Economic Dimension focuses on the constant long-term stability, the economic expansion with quality, the economic development supporting the majority, the economic growth from environmental-friendly and non-polluted process
- (3) Environmental Dimension focuses on the use of natural resources that still remain the biological diversity, the prevention and solution of pollution from human development and activities, for the next generation could use it for their lives in the future.

4) Public Participation

Public participation means to increase the opportunity of people in politics, administration and decision, and allocating the community and national resources, which affects lifestyle and way of life of people (Kanongnij Sribuaiam, 2002). Public participation according to Arnstein, S.R. (1971) is divided into 3 levels which are non-participation, degree of Tokenism, and degree citizen power.

According to the literature review as aforementioned, it could be concluded that the scope of this research is “to realize the main idea of the plan managed by the unit whose main role is to develop the nation. Theories and ideas relating to planning and regional planning could lead to the analysis of paradigm of regional development by regarding principles and ideas of planning, details the regional development, differences and changes of all plans. This will benefit the suggestion of paradigm of regional development for the implementation in the future”. (Figure 1.).

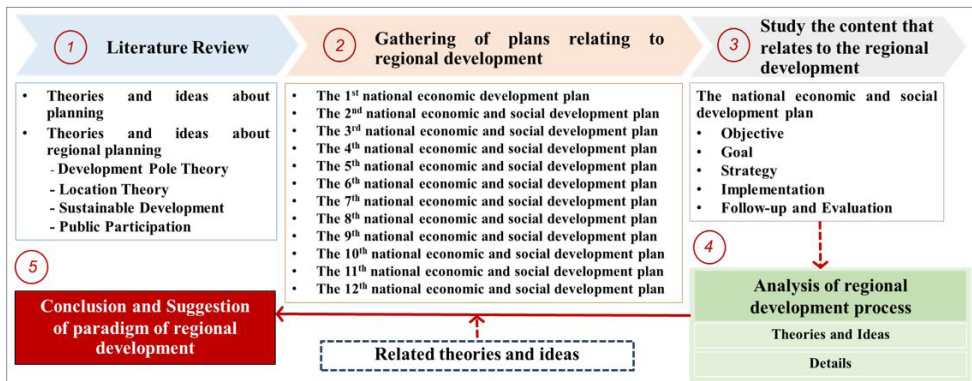
Figure 1. Scope of Research.



5 METHODOLOGY

The researching process consists of 5 major processes which are 1) literature review, 2) collection of data relating to regional development, 3) study of the main ideas on the plans that relate to regional development, 4) analysis of paradigm of regional development, and 5) conclusion of results and suggestion of paradigm of regional development (Figure 2.).

Figure 2. Methodology.



6 RESULT

6.1 MAIN IDEAS OF THAILAND REGIONAL DEVELOPMENT PLAN

The study of the main idea of regional plan from the NESDP is to consider the details of environmental development, objective, goals, strategy, implementation, and evaluation. It was found that each NESDP has different details which depend on the environment outside and inside the country, for example, the external development gives importance to the climate change and it results in the 12th NESDP focusing on conserving and recovery natural resources and environmental quality to support the eco-friendly growth; moreover, it leads to the setting of strategy that mainly focuses on environmental-friendly activities for sustainable development, etc.

6.2 PRINCIPLES AND CONCEPTS

The NESDP from 1-12 issues have the principles and concepts differently affecting the regional development.

1) The first NESDP (1961 - 1966) is chiefly under the principle and concept of growing. As it reflects through the regional development procedures, for example, the development of infrastructure, investment of infrastructure for transportation, reservoir system for irrigation and electrical power, public assistance system, etc., this is to elevate the cost of living and extending the growth from the urban area to the rural area.

2) The second NESDP (1967-1971) is chiefly under the principle and concept of growing and development planning for each dimension. As it reflects through the development of infrastructure, investment of infrastructure for transportation, reservoir system for irrigation and electrical power, public assistance system, etc., this is to elevate the cost of living and extending the growth from the urban area to the rural area including the remote area. Furthermore, it contains the special project of ministries, bureaus, and department such as regional development project, Accelerated Urban Development project, farmer project, etc.

3) The third NESDP (1972-1976) is chiefly under the principle and concept of growing, an extension of growth to regions, increasing agricultural products. As it reflects through the regional developments such as the development concerning economic stability by preserving the extension rate of currency, preserving price for cost of living and export, accelerated development of the main cities, distribution of economic and social services to the urban area, improvement of agricultural and loan institutions and organizations, preserving price of agricultural products, etc.

4) The fourth NESDP (1977-1981) is chiefly under the principle and concept of expanding the growth to the other regions, cross development, promotion of social welfare for the people, building a constant economy for the country's stability. These reflect through the details of the procedures, for example, acceleration of main city development, expansion of economic and social services to the rural area, promotion of agriculture that conforms to the site capacity, foundation of industrial estate and export industrial area, expansion and distribution of social services to access to all, expansion of public utility, public assistance, transportations, and electrical powers, etc.

5) The fifth NESDP (1982-1986) is chiefly under the principle and concept of expanding the growth to the other regions, restructuring economic base, implementation, and balancing economic and social development. As reflected through the details of regional development procedures, for example, setting main cities and less-visited cities, promotion of development in Chonburi province, Rayong province, and Chachoengsao province to be the main industrial sources, restructuring the economy, distribution production, development of the economy at borderlands by founding the industrial estate in the main city, arranging the new development administrative system for the rural area, balancing the solution of economy and society, development of social structure and service distribution, development of population quality, mental development, etc.

6) The sixth NESDP (1987-1991) is chiefly under the principle and concept of expanding the growth to the other regions, economic and social solutions, an increase of domestic development efficiency in terms of human resources and science development, implementation. It reflects through the details of regional development procedures for example, specification of main cities and less-visited cities, development of eastern coastal area, economic expansion in combination with conservation of financial stability by focusing on domestic saving, saving the state's expense and use the budget with efficiency, the role of the private sector in the development, development of labors and quality of life, making the short-term, the medium-term, and the long-term plans, ministry's practices, etc.

7) The seventh NESDP (1992-1996) is chiefly under the principle and concept of expanding the growth to the other regions, for example, remaining the economic growth rate to be constant and stable in combination with developing quality of life, environment, and natural resources, development of industry in every region which includes the provinces of Chiang Mai, Phitsanulok, Nakhon Sawan, Khon Kaen, Nakhonratchasima, Saraburi, Ratchaburi, Suratthani, and Songkhla, etc.

8) The eighth NESDP (1997-2001) is chiefly under the principle and concept of the human capital as the center of development using the downward characteristics and implementation. It reflects through the details of regional development procedures,

for example, promotion of participation in the society, integration, entire development, development of civil state as the development of the state to have the competency and main mission in enhancement of competency and capacity in the development of people, etc.

9) The ninth NESDP (2002-2006) is chiefly under the principle and concept of economic sufficiency, development of the balance between human, society, economy, and environment. The main ideas are reflected through the details of regional development procedures, for example, preparation to enter the economic center of the region while conserving agricultural area in the central region, conservation of water sources and rivers to remain forever fruitful and beneficial in combination with conservation of Lanna culture in the northern region, etc.

10) The tenth NESDP (2007-2011) is chiefly under the principle and concept of living together with happiness and peace and sustainable development. The main ideas reflect through the detail of regional development procedures, for example, social power reinforcement to have participation from every sector, promotion of human quality development and Thai society to the society of wisdom and learning, development promotion based on diversity, building stability of resource and environmental quality, restructuring economy to make balance and sustainability, etc.

11) The eleventh NESDP (2012-2016) is chiefly under the principle and concept of philosophy of sufficiency economy, development of growth, safety and stabile society, good environment, eco-friend production system, and stability of food and energy. The main ideas reflect from the details of the regional development procedures, for example, creating Thai value, eco-friendly production and consumption, restructuring of production and service of the country to be the creative and green economy, etc.

12) The twelfth NESDP (2017-2021) is chiefly under the principle and concept of the philosophy of sufficiency economy, human capital, and economic growth. It reflects from the details of the regional development procedures, for example, promotion of eco-friend growth, preservation of diversity, conservation of community's way of life, value, tradition, and culture, expanding the economic growth to middle-class population, setting goals to extend the economic opportunity, social opportunity, and income, etc.

6.3 DETAILS

In regards to the principles and concepts of the NESDP as aforementioned, considering the details of the procedures, there are interesting ideas found as follows (Figure 3).

1) The NESDP issue 1-3 The development during these issues still deprives of lucid specifications of roles and direction. They focus on management and development

of infrastructure mainly, which is according to the development of economic growth and growth distribution to the other regions. The examples of the operation in accordance with these plans, therefore, are the construction of Bhumibol Dam and power development from water energy in the north, water dredging for deep seaport in the south, development of all regional infrastructure. On the other hand, these plans concern the significance and initiation to found the commission to manage the plan.

2) The NESDP issue 4-6, due to the domestic situation during these plans, the country encountered the density of development and the fast expansion of the capital, the guidelines to develop the region, therefore, focuses on the main cities and less-visited cities as a means to distribute the growth to the other region and decrease the density of development and expansion in the capital. The ongoing developed cities are Chiang Mai, Khon Kaen, Nakhonratchasima, Chonburi, and Songkhla-Hat Yai. The early developed countries are Phitsanulok, Udorn Thani, Nakhon Sawan, Ratchaburi, Surat Thani, Phuket, and the central cities of growth in other regions are Chiang Rai, Lampang, Sakon Nakhon, Roi Et, Ubon Ratchathani, Surin, Saraburi, Kanchanaburi, Petchaburi, Rayong, and Pattani. Furthermore, the regional development of these issues emphasizes the economic development and growth from agricultural products and industrial investment. As they promoted the land reform to help increasing agricultural products and solving poverty in the north-eastern border. The plans involve the development of Chonburi, Rayong, and Chachoengsao to be the main industrial sources of the country, the promotion of Pak Panang River Basin Area (in Nakhon Si Thammarat) to be the major rice production of the south, etc.

3) The NESDP issue 7-9 The operation during these plans focus on industrial central development in every region which are Chiang Mai, Phitsanulok, Nakhon Sawan, Khon Kaen, Saraburi, Ratchaburi, Surat Thani, and Songkhla. The appropriate regional development is to confirm the region's competency and resources, for instance, the competency of the southern area which is close to the sea benefits production and transport to eastern Asia and southern Asia, including the development of tourism conservation at Andaman Sea to reach the world's standard. As Phuket, Phang Nga, and Krabi are the center, they connect the production with the area in Thai Bay where Songkhla and Pattani are the central tradings and Halal food with neighbor countries. The role of the development in each region during these plans is quite clarified.

4) The NESDP issue 10-12 The operation during these plans focus on sustainable development promotion, for example, the development of provincial groups to reach the organic agricultural standard and safety food, sustainable agriculture, city development, eco-industry, development of special economic zone in the borderland, etc. Furthermore, if considering the details of the twelfth NESDP which is the current plan, it was found

that the content is very clear, especially the roles of development in each region, for example, the north focuses on developing creative economic base which has the high value; the northeast focuses on escaping the poverty and be independent; the central region focuses on being the leading economic base; the south focuses on being the base of making various incomes.

Figure 3. Details of Regional Development from the National Economic and Social Development.

<p>The national economic and social development plan issue 1-3</p>	<ul style="list-style-type: none"> • The roles of developing the region are not clarified and it focuses on developing infrastructure in every region • Start founding the commission but the process is still abstract. 	<p>Pranakhon-Thonburi : Modernize the city North : Development of high lands, building reservoirs East: Building seaport, Industry in the coast</p> <p>Central: Development of infrastructure, irrigation North-East : Allocation of lands, Power Development South: Dredging, Power Development</p>
<p>The national economic and social development plan issue 4-6</p>	<ul style="list-style-type: none"> • Focusing on the main cities and less-visited cities as a means to distribute the growth to the other region and decrease the density of development and expansion in the capital 	<p>Bangkok: Improvement of infrastructure North: Development of high lands, agricultural development East : Main industry, Commercial deep-sea port</p> <p>Central: Agricultural Reform, agricultural development North-East : Provide water sources, Development of rural areas. South: Petroleum Development, agricultural development</p>
<p>The national economic and social development plan issue 7-9</p>	<ul style="list-style-type: none"> • Development of central industrial development in every region • Developing the region in conformity of its capacity and competency 	<p>Central : Development of existed production, and conservation of agricultural areas North: Conservation of natural resources and cultural sources, an increase of agricultural products</p> <p>North-East : Increase of agricultural products, conservation of tourism resources South: Utilize the sea area to produce tourism, transport</p>
<p>The national economic and social development plan issue 10-12</p>	<ul style="list-style-type: none"> • Sustainable development promotion, for example, developing the provincial areas to be organic agriculture and safe food, sustainable agriculture, eco-industrial city development, development of special economic area in the borderland, etc. 	<p>Bangkok and boundaries : Development of main cities North : Development to be the creative economic base East : Promotion of industrial investment</p> <p>Central : Development to be the leading economic base North-East : Poverty solution South : Building Various income</p>

7 CONCLUSION AND SUGGESTION

7.1 CONCLUSION

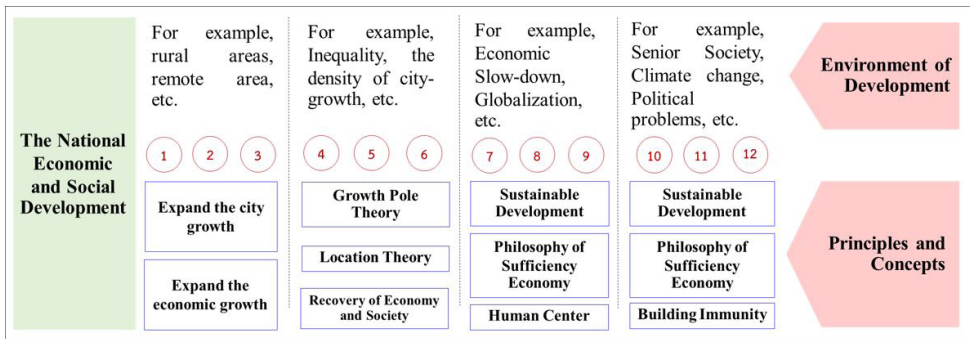
According to the main ideas of the aforementioned, the conclusion and the result relate to the major principles and concepts and details of the development which lead to the realization of the paradigm of regional development as follows:

7.1.1 All the plans change principles and concepts differently

Regarding the study and the analysis of the main content and the principles and the concepts of the NESDP, they are changed by the feedback and the changing current of the world and the economic situation, including society and environment in the country.

As we can see from the NESDP issue 1-3, the principles and the concepts mostly aim at distributing the growth to the regions and building the economic growth because Thailand at that time still had a lot of rural and remote areas. The development, therefore, focuses on infrastructure which are transports, irrigation, electrical power, etc., as a means to elevate the standard of living and to prepare for basic service for the industry, the commerce, and the service. (Figure 4.).

Figure 4. Change of Principles and Concepts of the National Economic and Social Development.



Meanwhile, the NESDP issue 4-6 were made during the time when Thailand face the environment of development: the change from a low-income country to underdeveloped country which the income is moderate. The country faced the density of development and the growth just in the capital, the problem of inequality between the urban household and the rural household, etc. The concepts of regional development, consequently, pays attention to the main cities and the less-visited cities in order to distribute the growth and reduce the density of population in the capital to the other regions, which is in accordance with the theory and the concept of Growth from outside in the characteristics of Spread Effects (spreading the growth to the other region, the surrounding regions will receive the benefits too) or Growth Pole Theory created by F. Perroux (the development from any area will spread to the other areas).

In addition, in regards to the concepts and details of the plan during this period, it promotes the east, in the Chonburi and Rayong become the main industrial source and deep-sea port as a means to promote the industrial sector and adds more jobs apart from Bangkok. These procedures reflect the adaptation of Location Theory by selecting the competent site as the area is close to the sea; it provides the convenience of freight and transport services with other countries.

For the NESDP issue 7-9, the world's economy was slow-down. Thailand encountered the economic crisis and globalization, resulting in the principles and the

concepts at that time aiming at adjusting the economy from the root level to the macro level. The regional development that is appropriate and according to the competency of the site, etc. The regional development is based on sustainable development and philosophy of sufficiency economy and the concept of the eighth NESDP focuses on “human” as the center of the development. It affects the concern of social dimension, economic dimension, and environmental dimension which conform to sustainable development.

As for the NESDP issues 10-12, Thailand faces the various changes of environment, for instance, the political conflicts, the senior society, the climate change, free trading, etc. The development concept still inherits philosophy of sufficiency economy and sustainable development that concern the public participation, the flexibility of the changing situation, and the support for creative economic development which is friendly to the environment.

7.1.2 Prioritization of Implementation and Evaluation

In regards to the study and the analysis of the planning process, it was evident that implementation and evaluation are the main factors of success. According to the details of the NESDP, implementation and evaluation are the process that has been never neglected even though during the earlier plans (issue 1-5), they do not clarify the roles or this sector but the details indicate measurements, projects, operating units, and budgets which benefit the practices. Additionally, if considering the main ideas of the twelfth NESDP which is the current plan, it was found that the details are indicated clearly in the part of implementation and evaluation. This conforms to the planning process concept of Larz T. Anderson (1995) that it requires to state the plan of enforcement.

7.1.3 Incompetent Participation of the State Sector, the Private Sector, and the Public

In respect to the main ideas of the plans, although they give importance to the participation of the state sector, the private sector, and the public in managing the implementation, the plans still remain the “downward” process, resulting in the concepts and the development guidelines in the NESDP remaining incompetent in terms of practice, for example, the application of Growth Pole Theory in the NESDP issue 4-6 specifies the main cities and the less-visited cities with the expectation to develop an area and expand the growth. However, in terms of the practice, it deprives of collaboration with local administration and the private sector to expand the growth, to change the industrial structure, to build sufficient innovative technology, etc. These lead to failure.

7.2 SUGGESTION

According to the conclusion of the research on the paradigm of regional development, the suggestions for the future paradigm process based on related concepts and theories as follows:

7.2.1 More promotions of Implementation and Evaluation

Regarding the study and the analysis of concepts about the planning process, it is apparent that implementation and evaluation are the main factors of success. In consequence, the foundation of a new special unit to take the responsibility by using legal measure in the administration to the practice, the foundation of local administrative commission organization for managing and pushing the project, etc. are the method to increase the efficiency of these implementation and evaluation processes.

In addition, for evaluation process should be operated regularly every year by inspecting indicators, hypotheses, and goals, including reporting the operating process to the state unit, the independent organization, and the community.

7.2.2 Offer the Opportunity of Public Participation in Managing Implementation

From the details of the plans, it is obvious that, though it gives importance to the public participation more, Thailand's process goes as the "downward" process, resulting in local administrative organizations and the people lack the participation. As a result, to open the opportunity for the people, local or private sector to share the role in providing data, making-decision, operation, evaluation, public hearing, seminar, and doing e-questionnaires, for instance. These will bring up consensus and the plan could be achieved.

7.2.3 Promotion of Connectivity

The success of vision or objective of the regional development could happen when every level of all plans is connected. In consequence, apart from concerning principles and concepts that should be at the same direction, the unit, the state sector, the private sector, and the local sectors who relate must cooperate with each other, particularly for planning the procedures and the projects which are the major strategies of the development.

7.2.4 The use of academic concepts for planning should concern knowledge, comprehension, and demand of the local unit, and competency of local resources

The planning in the past duration is often based on consideration of the development environment and the change of the world. On the other hand, the use

of academic principles and concepts in the planning should concern on knowledge, comprehension, demand of the local unit, and competency of local resources so that the plan would be efficient, able to respond the demand of local populations, and usable.

REFERENCES

American Planning Association. (2007): Planning and Urban Design Standards Student Edition. New Jersey: John Wiley and Son, Inc.

Arnstein, S.R. (1971): A Ladder of Citizen Participation. In I. M .Stein (ed.). New York: classic reading in urban planning McGraw-Hill.

Daranee Thavinpipatkul. (n.d.): Economy for Regional Planner. Bangkok: Department of Urban and Regional Planning, Faculty of Architecture, Chulalongkorn University [In Thai].

Doosadee Thaitakoo. (1994): Regional Planning. Bangkok: Chulalongkorn University [In Thai].

Freire, M. (2006): Urban Planning: Challenges in Developing Countries. Retrieved from 1 August 2019, Website: <http://www.reduniversitaria.es/ficheros/Mila%20Freire%28i%29.pdf>.

Hall, Peter. (2002): Urban and Regional Planning. 4th ed. London: Routledge.

Haselsberger, B. (2008): Regional Survey: New Thinking about Regional Planning in the YAN. In Regions: The Voice of the Membership.

Kanongnij Sribuaiam. (2002): Direction of the Promotion of Participatory Democracy under the B.E. 2540 Constitution of the Kingdom of Thailand: Problems, Obstacles, and Solutions. Bangkok: King Prajadhipok's Institute [In Thai].

Larz T.. Anderson. (1995): Guidelines for preparing urban plans. Chicago: APA Planners Press.

United Nations. (2015): 2014 Revision of World Urbanization Prospects. Retrieved from 19 October 2015, Website: <http://esa.un.org/unpd/wup/FinalReport/WUP2014-Report.pdf>

Wannasin Phiraphan. (2013): Analytical Technique for Urban and Regional Planning. Third Edition. Bangkok: Charansanitwong Printing Co., Ltd. [In Thai].

SOBRE OS ORGANIZADORES

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