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ECONOMIC TRANSITION AND ITS IMPACTS TO URBAN DEVELOPMENT OF BAC NINH

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INTRODUCTION

1. Rationale

Economic transition and urbanization is the inevitable law of socio-economic development of every country, region or locality. Vietnam has been under economic transition towards industrialization and modernization and forward economic restructuring to create rapid and sustainable growth. Economic transition has also had impacts that have changed the face of urban areas in Vietnam. However, impacts of economic transition on urban development are slow and localized.

Bac Ninh is not outside the law of development, from a poor province with low economic development, economic transition has made Bac Ninh into a province with strong development of industry - building accounting for 77.6% of GDP, becoming the key province of the State budget revenue and foreign investment attracting (2013). At the same time, economic transition has contributed significantly to changing the province's urban network. Urban grade is raised, urban space is expanded and urban infrastructure is increasingly synchronous and modern, especially the transportation network and positive changes in occupational structure and income of the urban population... However, economic transition in Bac Ninh is still difficult and its impact on urban development can clearly be seen only in two main urban centers such as Bac Ninh city and Tu Son town, the remaining is blurred.

Thus, for Bac Ninh to successfully integrate into the world’s economy, effectively implementing economic transition and sustainable urban development in the following years (2015 - 2030), there should be specific, scientific, objective analysis, and evaluation of success and limitations of economic transition and its impact on urban systems recently. In addition, Bac Ninh should have optimal solutions to overcome the difficulties and limitations in order to successfully implement the goals and orientations set out. From that practical requirement and along with the desire to partly contribute to the development of the motherland, the author has chosen the theme: **"Economic transition and its impacts to urban development of Bac Ninh".**

2. History of the study

Economic transition, urbanization and urban development are issues attracting many domestic and foreign scholars to study and is the topic of many domestic and international seminars and conferences.

2.1. Studies on economic transition

2.1.1. Studies around the world

Economic transition issues were mentioned in reasoned opinions and theory on economic development of well-known economists from many different schools.

Arguments about the stage of economic development were made by "*Patterns of Development*, 1954–1970" and "*Not only is economic growth, introduction to sustainable development*" gave theory on economic transition consisting of three phases: (1) agriculture, (2) industrialization, and (3) economic development with an increasing shift from agriculture to industry and service. With schools "structure argument" have works "*Economic Growth of Nations: Total Output and Production Structure*" and "*Structural Change and Economic Growth: a Theoretical essay on the dynamics of the wealth of nations*" said that the development of these countries will be associated with the development of three regions: Region I (agriculture), Region II (industrial) and Region III (services). Each region has its own characteristics and production shifts between regions. In particular, the service sector has great potential for development in modern society.

The opinions above are interpreting the economic development period associated with economic transition and then interpreting conditions and motivation to economic transition and growth promotion on that basis. They are important points for the dissertation to inherit.

2.1.2. Studies in Vietnam

A lot of studies on economic transition has been done in Vietnam with the analysis and evaluation on the theoretical and practical basis of economic transition, conditions, and factors affecting economic transition in Vietnam from the Perspective on industrialization and modernization process. Economic transition has also been the theme of many doctoral dissertations under various majors.

2.1.3. Studies in Bac Ninh

Given the fact that economic transition is growing strongly, there have been a lot of articles in newspapers and magazines and studies reflecting various aspects of Bac Ninh economic transition, including as Dr. Le Van Huong with a Geographic doctoral dissertation on the development of craft villages in Bac Ninh in the direction of industrialization and modernization - an orientation of economic transition on rural agriculture.

2.2. Urban

2.2.1. Studies around the world

There were a lot of studies on urban with different aspects such as social factors affecting urban development, the origin and the development of the urbanization process, the problems of urbanization, urbanization with socio-economic growth... Other issues relating to urban also become the concern of many international organizations.

2.2.2. Studies in Vietnam

Urban development and urbanization in Vietnam have been sudied both theoretically and practically.

In terms of theory, there are concepts of urban, urban functions, urban form, urbanization were .... including studies on various urban aspects. Practically, it is the overall picture of the current state of urban development in our country with the development orientation in the context of urbanization in the world and in the region.

2.2.3. Studies in Bac Ninh

Studies of urban development and urbanization process in Bac Ninh are mainly articles in newspapers, magazines and in the planning of urban development in Bac Ninh province.

2.3. Impacts of economic transition to urban development

Regarding studies and articles to which the author has access, there was little concern or unclear intepratation on impacts of economic transition to urban development.

In Bac Ninh, the process of urbanization and economic transition is developing strongly, its impacts on the development of the provincial urban networks have received the attention of relevant leaders and departments, however, no single study or a specific paper on this issue has been done so far.

Obviously, there are a number of studies on urban and economic transition, some of which focused on quantitative, conditions, and new factors in the socio-economic life, but there are few papers related to the assessment of the impacts of economic transition on urban development or roles of economic transition in urbanization process.

3. Objectives and tasks and limit of the study

3.1.Objectives

Based on the overview of the theoretical and practical basis on economic transition and urban development in the world and in Vietnam, the dissertation aims to clarify the process of economic transition and its impacts on urban development in Bac Ninh, then propose solutions to effective and sustanable economic transition and urban development in Bac Ninh.

3.2. Tasks

The dissertation focuses on solving the following tasks:

- Sum up the theoretical and practical basis on economic transition and urban development to apply it in Bac Ninh.

- Assess factors affecting economic transition. Analyse the current situation of economic transition in Bac Ninh from 2000 to 2013.

- Analyse of impacts of economic transition on urban development in Bac Ninh.

- Propose solutions to effective and proper economic transition and urban development in Bac Ninh in the future.

3.3. Limit

- Regarding the content: The dissertation focuses on economic transition

process and its impact to urban development in Bac Ninh from 2000 to 2013 and vision to 2030 (affecting factors, the current situation of economic transition in terms of industries, sectors and regions, and impacts on urban development in Bac Ninh).

- Regarding the territory

+ The dissertation studies economic transition process on the territorial scope of Bac Ninh, with analysis at district, town, city and inter-district levels. The dissertation also puts Bac Ninh in relation to the Red River Delta (RRD), the key economic region in the North and the country.

+ When assessing the impacts of economic transition on urban development, the dissertation focuses on the two localities including Bac Ninh city and Tu Son town.

- Regarding time for study: The data in the dissertation were collected in the period 2000 - 2013 and vision to 2030.

4. Perspectives and study methods

4.1. Perspectives

The dissertation is based on scientific perspectives on system, territory synthesis economy, far-sighted history and sustainable development.

4.2. Methods

In addition to theoretical methods such as collection, analysis and synthesisof data and documents, mathematical statistical methods, experts methods the dissertation uses methods associated with the fac including investigation and surveys to obtain multi-dimensional perspectives in accordance with the objective reality. The author also used the method of mapping and geographic information to present research findings.

5. Contribution of the study

- Inherit, supplement and clarify the theoretical and practical basison economic transition and its impacts on urban development. Determine criteria for economic transition evaluation at the provincial level.

- Analyze the current situation of economic transition in view of geographical study under the selected criteria.

- Clarify major impacts of economic transition on urban development in terms of formation and urban function transformation, scale and urban population lives, urban economic structure, career structure and income of the urban population, urban infrastructure and planning and urban management.

- Propose some solutions to economic transition and sustainable and efficient urban development in the future.

6. Structure of the dissertation

Apart from the introduction, conclusion, list of references and appendices, the content of the dissertation is divided into three chapters as follows:

Chapter 1: Theoretical and practical basis of economic transition and its impacts to the urban.

Chapter 2: Affecting factors, the current situation of economic transition and its impact on urban development in Bac Ninh in the period 2000-2013.

Chapter 3: Orientation and solutions of economic transition and urban development in Bac Ninh by 2030.

Chapter 1
THEORETICAL AND PRACTICAL BASIS ON ECONOMIC TRANSITION AND ITS IMPACTS ON URBAN DEVELOPMENT

1.1. Theoretical basis

1.1.1. Economic transition

1.1.1.1. Economic structure

Economic structure refers to all sectors of the economy which have organic ties with each other in certain proportions in terms of quantity and are closely related to each other in terms of quality. The economic sectors have mutual interaction in the same space and time to achieve high economic efficiency. Economic structure is a big system including multiple small systems as a perfect whole. The components of the economic system are arranged in a certain number and a certain percentage. If the arrangement is done objectively and scientifically consistent with the general trend of the times, there would be a reasonable structure. Economic structure is analyzed under three angles: industry, territory and property.

1.1.1.2. Economic transition

There are so many different concepts about economic transition but the economic transition concept by Ngo Doan Vinh that *"Economic transition is the percentage change in components of the economic structure from this state to another state to get better and more efficient development"* reflects the nature, characteristics and goals of economic transition.

Economic transition includes three aspects: industry, territory and sectors. Factors affecting economic transition include geographic location, territory, socio-economic conditions, natural and natural resources conditions. Each group of factors has certain roles and significance for the economic transition process. The evaluation criteria to apply for the provincial economic transition selected by the dissertation author include sectorial indicators (index of labor productivity, structural indicators of

total gross domestic product and GDP/ person, production value and production value structure, export - import value/ GDP) and territorial indicators (forms of territorial organization by sector: Industrial Parks and other forms of territorial organization in space: economoc sub-regions).

1.1.2. Urban and urbanization

Urban and urbanization is a complex social phenomenon, there are many different views.

1.1.3. The impact of economic restructuring to urban development

1.1.3.1. Formation, expansion and transformation of urban functions

a. Formation, urban expansion and urban networks

Economic transition from agriculture to industry and services under the strong impacts of science and technology gives rise to typical urban centres for each shift stage. Besides, economic transition creates residential areas of urban chracteristics - the urban expansion for the formation of massive urban and megacities.

b. Transformation of urban functions

Economic transition causes urban socio-economic changes and development at a high level, therfore, the greater the role and scope of influence are, the more functions are added. An urban centre may be the administrative, political, economic, cultural, scientific, technological, educational center.

1.1.3.2. Urban socio-economic development

a.Urban economy

The process economic transition has indirect impacts on urban through economic growth and urban economic transition by industry and territory. First of all, in terms of industry structure, economic transition makes the proportion of non-agricultural sectors increase in urban areas and decides the selection of the leading economic sectors of the urban area. Urban economic transition is the shift from capital-intensive and labor-intensiveeconomic sectors into knowledge economic sectors (science, engineering, technology, education ...), generating clear growth about the value added of all economic sectors. The development of rural areas in the urban centre gives rise to the growth of craft villages, new economic models, farms, ecological villages or hi-tech agricultural villages.... Thus, the process of urban economic transition is a basic hallmark distinguishing urban from rural areas to make up the functions in the national economy.

b.Urban society

Economic transition strengthens the centralization of economic resources into urban centers, which creates urban appeal to an increase in population size and rate of urban population, urban labor and non-angricultural labor. Economic transition with the

strong development of industry and services changes the urban population occupation of structural change leading to income and living standards of the urban population. Economic transition also changes and urban culture through urban lifestyle.

1.1.3.3. Development of urban infrastructure

Urban infrastructure is physical space for all urban activities such as labor, accommodation, travel, education, communication and consciousness. Urban infrastructure is the criterion for distinguishing between urban and rural areas as well as assessing the level of urban development. Economic transition requires modern and synchronous urban infrastructure meeting the needs of economic sectors and inhabitants because the urban center is the driving-force territory for the development. In addition, economic transition is the source of funding to complete and modernize the infrastructure and investment in infrastructure construction is always vital to civilized urban centres.

1.1.3.4. Changing urban management

Economic transition has impacts on urban management through changes from the state as the creator and main provider of urban services to the private sectors. Economic transition creates an opportunity for companies and businesses to participate more in activities of planning, building and urban environment management.

1.1.3.5. Strengthening exploited, use resource and urban environmental change

The formation and development of IPs and ICs, urban areas, urban infrastructure ....demanded to use urban resources increased (especially land resources). The urban extend the area or convert the land use purposes (mainly shifted from agricultural to residential land and land for special use) to have enough land for urban development. Urban land become scarce, expensive and land for agricultural production is shrinking, threatening the food security of urban and ecological imbalance. Besides urban land is also being wasted and degraded.

Economic trainsition has increased the urban economic activities and urban population caused urban environmental pollution problems become serious especially water, air, noise and light... However, economic trainsition has been done to change perceptions, actions of people about protecting natural resources and environment for development towards the green city.

1.2. Practical basis

1.2.1. Economic transition and its impacts on urban development in Vietnam

Vietnam is in the process economic transition towards industrialization and modernization. In the period 2000 - 2013 economic structure by sector tended to reduce the density of agriculture - forestry - fishery from 24.5% in 2000 to 18.4% in

2013, down 6.1% while the density of industry - construction increased slightly from 36.7 to 38.3%, the service sector increased from 24.6% to 43.3%. Within each economic sector there was also a positive shift. Economic transition by components has made a relatively clear shift towards reducing the proportion of the State sector and increasing the proportion of the non-state sector and foreign investment sector which can promote capital and technology capacity. Regarding territorial economic transition, there is a great disparity between regions and localities.

Economic transition process has had huge impacts on urban development in Vietnam. The increasing proportion of non-agricultural sector led to an increase in urban population Urban centres have added new functions. Many urban centres have been upgradded and expanded. Urban economy increasingly plays an nuclear role when ocupying a high proportion of the national GDP. Investment in urban infrastructure construction has increased and there have been positive changes in urban issues have.

1.2.2. Economic transition and its impacts on the urban development of the Red River Delta

There were many changes in economic structure of the Red River Delta (RRD): agriculture-forestry-fishery sector accounting for 23.4% in 2000 fell to 12.6% in 2010 and 10.9% in 2013, the industrial - construction sector raised the proportion from 32.7% in 2000 to 46.2% in 2013, the service sector maintained the density of 42.9%. According to the economic sectors, the state sector played a key role, therefore, its proportion remained low and alomost stable while the proportion of the non-state sector tended to decrease, and the density of the foreign investment sector quickly increased in structure. In terms of territory, there was a significant difference between northern and southern provinces.

Economic transition caused the increasing number of urban centres from 105 urban centres to 123 cities and the region with the two cities under the central and great urban density. The increasing rate of non-agricultural sector in GDP also led to an increase in the urban population at a lower rate than that of the non-agricultural sector. The difference in economic transition speed among provinces caused the differentiation in the distribution of regional urban centers.

Chapter 2
AFFECTING FACTORS, CURRENT SITUATION OF ECONOMIC TRANSITION AND ITS IMPACTS ON URBAN DEVELOPMENT IN BAC NINH

2.1. Factors affecting the economic transition in Bac Ninh

Economic transition process in Bac Ninh has been influenced by many factors: geographical location, socio-economic factors, natural and natural resources group. In

particular, the geographical location is considered as a comparative advantage, the capital is the driving force for economic transition whereas policies, infrastructure, regional linking are the strengths of the province. Other factors have a significant impact on economic transition in Bac Ninh.

Economic position and convenient transportation have created "difference in rent for land" for Bac Ninh to attract investment capital, while also giving the province a large market with easy regional linking and favorable conditions for transition of crops and livestock and producing high-quality goods. In particular, the advantage of being located next to Hanoi and the new National Highway 1 is a prerequisite for Bac Ninh to attract investment.

Bac Ninh is a key province in attracting investment capital. From 2000 to the end of 2013, Bac Ninh attracted over 640 domestic projects with the registered capital of 75 433 billion dong and 476 projects of foreign direct investment (FDI) with the registered capital of 5.8 billion USD, disbursing 60.3% of the registered capital (3.5 billion USD). In particular, regarding FDI, the number of projects and the total investment have continuously increased with many prestigious corporations in the world.

Bac Ninh gave a lot of guidelines and proper policy for positive economic transition process. Bac Ninh was among the top 10 cities and provinces with high provincial competitiveness index. Infrastructure and technical conditions always received interest in investing in upgrading, new construction and modernization. Regular regional linking and cooperation formed a potential market which was always expanded. In addition, there were other factors having a certain impact on economic transition.

2.2. Current situation of economic transition in Bac Ninh

2.2.1. Overview

Economic scale has been increasing and GDP ranked 9/63 cities and provinces (2013), GDP growth rate were always in two digits. GDP/person increased rapidly. FDI companies contributed to the growth of GDP, though this did not reflect the actual quality of people's lives, it showed the efficiency of the economic transition process. Labor productivity was improved obviously. In particular, industry - construction industry brought high labor productivity by promoting the advantages of technology and capital.

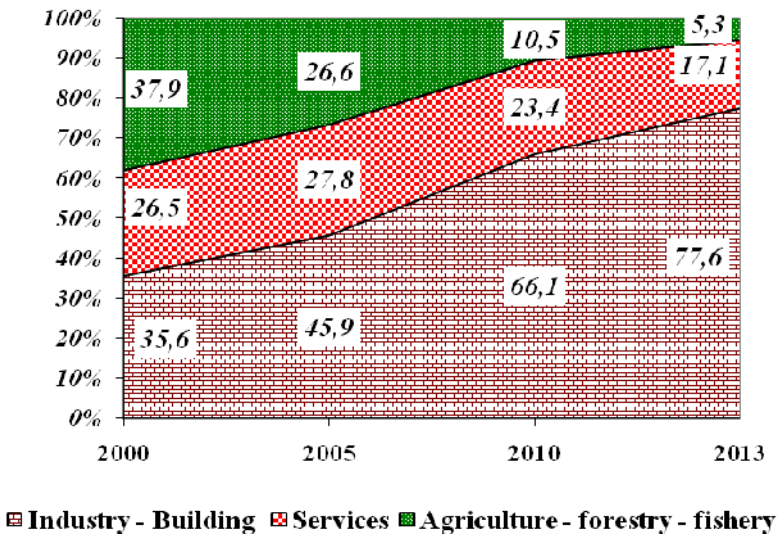
2.2.2 Economic transition

2.2.2.1. Economic transition by sector

a. Transition in three sectors

In the period 2000 - 2013, Bac Ninh economy shifted in the direction that the density of agriculture - forestry - fishery group decreased rapidly giving way to the

industrial - construction sector while the density of services sector was relatively stable in the GDP structure.



Picture 2.4. Chart economic transition in Bac Ninh 2000-2013 (real prices)

Through this transition can be seen the enormous role of the industry - building sector for economic development of the province when it occupied 77.3% of GDP. Within each sector there were positive changes.

b. Economic transition within each sector

** Industry*

With the goal to become an industrial province in 2015, Bac Ninh had many preferential policies for industrial development and industry made a breakthrough. Industrial production value increased continuously, from 2689.7 billion dong in 2000, to 12,995.4 billion dong in 2005 and reached 693 338 billion dong in 2013 (real prices). Within 13 years the industrial production value increased 346.6 times with very a high growth rate.

Economic structure by industry changed quickly through each stage, especially from 2010 to 2013 there was a huge shift trend: industries with a high concentration of modern knowledge, accounting for a large and stable proportion compared to the small and decreasing density of resource-intensive and labor-intensive industries. Processing industry almost always occupied the absolute and unchanged proportion during the period 2000- 2013 (2000: 99.9%, 2010: 99.4%, and in 2013: 99.8%) because Bac Ninh issued a lot of preferential policies for the processing industry development, attracting many investment projects of large corporations in the world and in Vietnam (projects of Samsung, Nokia, Canon, VinaSoy, Vinamilk Lotte, Fujikin, Konishi ...) contributing to very high production value.

From 2000 to 2013, the structure of industrial production value by leve-2 sector were more varied due to the emergence and development of the chemical

industry, food - beverages, electronic - computing ... and electronics - informatics industry has a very important role.

Table 2.8. Production value and structure of industrial production value in Bac Ninh 2000-2013

(Unit: real prices, billion dong, %)

Target	2000		2005		2010		2013	
	billion dong	%	*billion dong*	%	*billion dong*	%	*billion dong*	%
The whole sector	**2.689,7**	***100***	**12.995,4**	***100***	***109.535***	***100***	**693.338**	***100***
Electronics - informatics	-	-	723,6	*5,6*	53.124,5	*48,5*	580.986	*83,8*
Production of metal	718,6	*26,7*	4.583,8	*35,3*	16.430,3	*15,0*	22.444	*3.2*
Food - beverages	362,9	*13,5*	1.971	*15,2*	11.829,8	*10,8*	21.388	*3,1*
Chemical production	39,5	*1,5*	342,2	*2,6*	7.119,9	*6,5*	13.559	*2,0*
Wood and forest products processing	361,4	*13,4*	1.818,2	*14,0*	6.572	*6,0*	11.877	*1,7*
Paper production	157,2	*5,8*	743,2	*5,7*	3.505	*3,2*	8.764	*1,3*
Metalworking	110,5	*4,1*	301,2	*2,3*	4.052,8	*3,7*	2.534	*0,4*
Others	939,6	*35,0*	2.512,2	*19,3*	6.900,7	*6,3*	31.786	*4,6*

Source*: processed from [19],[22]*

- Electronics - informatics industry

From 2005 to 2013 the industrial production value of electronic - informatics industry grew rapidly, accounting for 83.8% of the total production value. Bac Ninh had the highest density of electronics - informatics industry nationwide (12.6% in 2013). Electronics - informatics industry was the key economic sector and the key industrial products of the province. The presence of Samsung high-tech complex and Nokia mobile phones plant officially named Bac Ninh - Vietnam on the map of global mobile technologies. By the end of 2013, the electronic - informatics industry attracted over 100 businesses (80 businesses in operation and over 20 companies under construction). Of all, there were 4 businesses of 3 large corporations, namely, Canon (Canon in Que Vo and Tien Son Industrial Zone), Samsung (Samsung Electronics, Samsung Display in Yen Phong Industrial Zone), Nokia (Nokia at VSIP - Tu Son) and 70 supporting businesses.

- There were other industries with asynchronous development in technology and scale, production, low efficiency and instable market

** Services*

The production value of the services sector continuously increased, from 1260.9 billion dong in 2000 to 3348.4 billion dong in 2005 and reached 20 778 billion dong in 2013, up 16.5 times within 13 years. Bac Ninh service industry sector consisted of a variety of services groups, but trade, transportation, finance - banking - insurance groups were much more important and it was the trade sector that made significant and major contribution to the provincial economic transition.

It is the trade sector that reflects the economic openness of Bac Ninh through international, inter-regional, inter-provincial relations and the level of development of the market economy. Trade increased significantly in value and proportion of production due to the strong development of the industry especially when large corporations invested in the construction of infrastructure, expansion of production in the industrial zones. On the other hand due to the rapid growth of consumer demand when people's life improved and the number of policies and measures to promote trade activities were issued. In particular, foreign trade built infrastructure and developing conditions such as Bac Ninh Customs establishment and inland container depot, logistics system (Maple & Tree warehousing, Northern logistics center project ...)

Table 2.10. Value of import-export goods in Bac Ninh 2000 - 2013

	2000	**2005**	**2010**	**2013**
Total import and export value (million USD)	92,3	257,0	4.817,4	48.860,0
Export value (million USD)	48,4	95,7	2.451,4	26.283,0
Import value (million USD)	43,9	161,3	2.366,0	22.577,0
Import-export balance	+45	-65,6	+85,4	+3.706,0
Import-export/GDP (%)	54,8	61,7	259,6	897,0

Source*: processed from [19],[22]*

The total export turnover in the period 2000 - 2013 of Bac Ninh increased rapidly, up 529.4 times. In particular, in 2013, the total import and export value accounted for 18.5% of total import and export value of the country (264,065.5 million USD) due to the operation of the industrial parks, especially the electronic – informatics businesses (Samsung high-tech complex). This also made Bac Ninh export surplus. Value export / GDP increased over the years, from 54.8% in 2000 to 61.7% in 2005 and 897% by 2013, this ratio was much higher than the national average (163, 7%). This showed that the province's economy had a large openness with effective economic transition process.

** Agriculture - forestry - fishery*

Although the density of agriculture - forestry - fishery in the provincial economic structure was small production value continuously increased from 1933.4 billion dong in 2000 to 9859.9 billion dong in 2013, an increase of 5.0 times. In particular, agriculture which always accounted for the highest proportion and was an important industry was on the slight decrease from 95.8% to 85.5%. Internal agriculture was on the transition towards the production of high quality goods. Livestock increasingly occupied the large proportion of production value structure, associated with industrialization and urbanization. Cultivation tended to subside. Agricultural services had high growth rate, but the proportion was still very modest, and increased slightly, from 3.4% to 8.3%. In the shift of agriculture - forestry-fishery, there was little cooperation of industries and services sector, therefore, many products were not competitive enough in the market.

2.2.2.2. Economic transition by sectors

Along with the trend of international integration and economic development policy of many components, economic structure in terms of components of Bac Ninh had many positive changes. In the province's GDP, the foreign investment sector had actually played the key role since 2007 and continued to grow (accounting for 68.2% in 2013) with large corporations such as Samsung, Nokia, Canon ABB ... The non-state sector had a high density, but tended to decrease due to the impacts of the economic downturn and the correlation with the foreign investment sector. The state sector accounted for only a small proportion and only held important economic sectors which were capital-intensive but slowly profitable.

2.2.2.3. Economic transition by territory

The territorial economic transition had many changes, but there still was a difference in speed, scale between districts, regions, urban and rural areas...

In the province, there was a differentiation into two sub-regions: the Northern Duong River sub-region with high level and faster pace of economic transition compared to the slow economic transition in the Southern Duong River sub-region. In terms of administrative units, Yen Phong district had the biggest positive shift speed and production value accounting for the highest proportion (general and industrial production value) due to the growth of Yen Phong Industrial Zone with Samsung high-tech complex. In Bac Ninh the driving-force triangle consisting of Yen Phong, Tien Du and Que Vo was formed.

Territorial organization of the provincial economy was diversified with various advanced and modern types and industrial zones with great role and significance may be seen as a major factor creating the efficiency of Bac Ninh economic transition process.

2.3. Impacts of economic transition on urban development in Bac Ninh

2.3.1. Urban networks development in Bac Ninh

Bac Ninh has a long history with many changes of administrative boundaries and names, on January 1st 1997, Bac Ninh province was re-established after being separated from Ha Bac Province. After that the province's urban face constantly underwent changes.

The urban population continuously rose, leading to an increasing rate of urban population. The number of urban centers increased with a relatively high urban density. Urban grade also improved, from 1 town and 6 townships (grade IV and V) in 2000 to 1 city (grade II), 1 town (grade IV) with 6 townships (grade V). In particular, Bac Ninh city and Tu Son town are the two most important urban centers of the province.

Bac Ninh urban development was inextricably linked with the Metropolitan region and was a satellite unrban center on a preferential belt and Bac Ninh urban centers strived to become green, modern, civilized, harmonious.

2.3.2. Impacts of economic transition on urban development in Bac Ninh

2.3.2.1. Formation, expansion of urban networks and urban functional transformation

a. Formation, expansion and improvement of urban grade

** Creating premise for new urban formation in the future*

The industrial development with 8 IZs (Industrial Zones) and 22 ICs (Industrial Clusters) in operation, and many craft villages created urban areas - the premise of urban formation in the future. In Bac Ninh there was a system of centralized townships in Yen Phong, Tien Du, Que Vo and Thuan Thanh. The townships became would-be towns or areas for extending the existing urban centers.

The development of the IZ sans ICs system creates urban areas next to industrial parks (urban IPs) - initially formed urban industrial areas in Tien Son Industrial Park, Que Vo Industrial Park I, Yen Phong IZ. In particular, some IPs' planning was adjusted to form urban industrial parks such as VSIP, Dai Kim and Nam Son - Hap Linh.

** Creating a basis for extending the existing urban centers*

Industrial zones located closely to National Highway 1A, Highway 18, Highway 38 forming residential areas for local laborers, especially the industrial workers, made a quite strong urbanization process in this area. This was the basis for urban expansion in terms of area and population (Bac Ninh City and Tu Son town). The urban population of Bac Ninh steadily increased over the years, from 90.5 thousand people in 2000 to 269.4 thousand people and 289.3 thousand people in 2010, and by 3.2 times in 2013, with the average growth rate of 10% /year. Urban land area increased significantly over the past 13 years, from 9.138ha in 2000 to 23.276,3ha in 2013.

** Creating motivation for improving urban grade*

With 8 IPs and 22ICs in operation and many craft villages restored, thousands of jobs were directly and indirectly created, leading to an increase in the state budget revenues increased, in the proportion of non-agricultural population, in the capital spending on urban development and strengthening non-agricultural economic activities in the urban centers, new industries making urban economic structure diversified ..., which was the driving force of urban development so as to meet the standards of higher urban grade. Bac Ninh city upon approval from the town (grade IV) to the city (grade III) reached a total score of 86.3 points (defined scores of third grade is 70 points) including the absolute score (15/15 and 20/20) of socio-economic indicators and non-agricultural workers compared to the relatively high scores of the remaining indicators.

** Differences in the economic transition led to differences in urban networks development between sub-regions*

There were differences in Bac Ninh urban networks between the northern Duong river sub-region and the southern Duong River sub-region. The northern Duong river sub-region was filled with IPs, ICs, and many craft villages with important traffic routes, therefore, there was a high urbanization rate as well as an intimate relationship between urban centers and IPs or ICs with Bac Ninh city as the nuclear urban center. In the future, the urban stretch of Tu Son - Tien Du - Bac Ninh would be the biggest urbanization area in Bac Ninh. In the southern Duong River sub-region, the number of IPs and ICs was small, thus, links between industrial parks and urban areas was still limited with low urbanization speed and only 3 towns in the urban system. Thus, the province's urbanization process was slower than its economic transition because its impacts on urban development were of "delayed level" and mechanism of spreading effects.

b. Transformation of urban functions

The effectiveness of IPs or ICs promoted socio-economic relations between urban societies in and outside the province, contributing to improving urban grade of Bac Ninh and changing the quality of urban centers, especially big urban centers (Tu Son town and Bac Ninh city). By 2013, Bac Ninh had one city as the center of politics, culture, science and education in the province, one town as the center of economy (handicraft), culture, tourism of the Northern Duong river sub-region along with other six townships as administrative, services and cultural centers of the districts. In the provincial urban development planning by 2030 Bac Ninh city playing a *"leading and nuclear"* role is a major economic center, a city of culture, ecology, modernity, civilization, harmony and sustainability with an important position in terms of security and defense.

2.3.2.2. Promoting socio-economic development of urban centers

a. Urban economy

Urban economy - a very important part of the economy in Bac Ninh plays a nuclear role in promoting the economy of the entire province. Many new industries came into being during economic transition process, especially services in urban areas, making the urban industry structure more diversified. The non-agricultural rate of production value structure by sector in urban areas is proportional to the ratio of the whole province. The high shift level of the province was + 33.1%, compared to that of + 23.5% in urban areas, particularly in Bac Ninh city and Tu Son town, two urban centers of the province, the economic transition was + 34% and + 25% respectively while the non-agricultural rate was up to 98-99%. In addition, various modern modes of production developed (farm, food belt) along with a variety of services (workers pick, portions supply ...). The economic relationship in urban centers became more closely. Economic transition promoted and effectively exploited the advantages of each urban center to form characteristic development.

b. Urban society

** Urban labor, labor quality and the rate of non-agricultural employment increased*

Labor in the economic sectors in urban areas tended to increase in number and density.

The author conducted a survey and an investigation on 120 households in 3 wards and 1 village (Van Duong ward, Kinh Bac ward, Dong Ngan ward and Huong Mac villge) in Bac Ninh city and Tu Son town. The survey results showed that 87 households changed their career, particularly 81 households changing from agricultural to non-agricultural sector, 52 households from agriculture to industry, 29 households from agriculture to services. This meant that the proportion of non-agricultural employment in the provincial urban labor structure increased and the major cause that promoted the career change wad the development of the Industrial Park (Que Vo IP) and craft villages (fine arts furniture production).

** More positive changes in the structure of income and living standards of urban population*

- Income structure

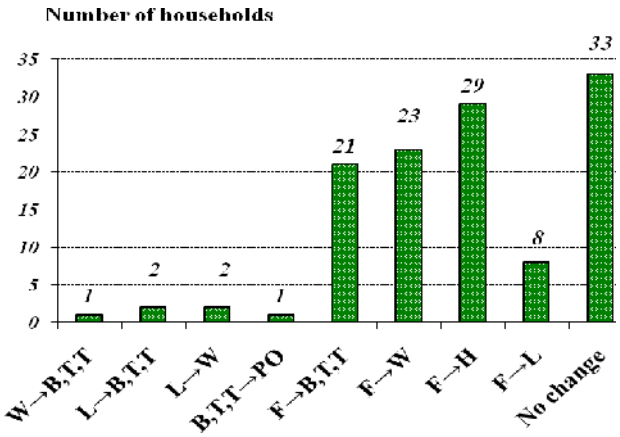
Jobs (direct and indirect) were created by a variety of activities of IPs, ICs and craft villages, making an increase in per capita income of urban population, as well as positive changes in the income structure of urban population. Income from industry - construction increased from 29.5% to 59.4% while there was always a high income rate in services. The income proportion from wages considerably rose from 28.5% in 2002 to

40.1% in 2013 while revenues from industrial production and services increased slightly, from 49.4% in 2002 to 54.2% in 2013. This was a positive shift that must be maintained and promoted.

- Living standards

From 2000 to 2013, the urban population's living standards constantly improved. Income / person / month in urban areas increased by 7.2 times within 13 years (2000-2013). Not only the income but the level of savings, housing values, the value of durable goods increased as well. The poverty rate declined from 6.14% in 2000 to 2.08% in 2013. There were also changes in the expense structure in life.

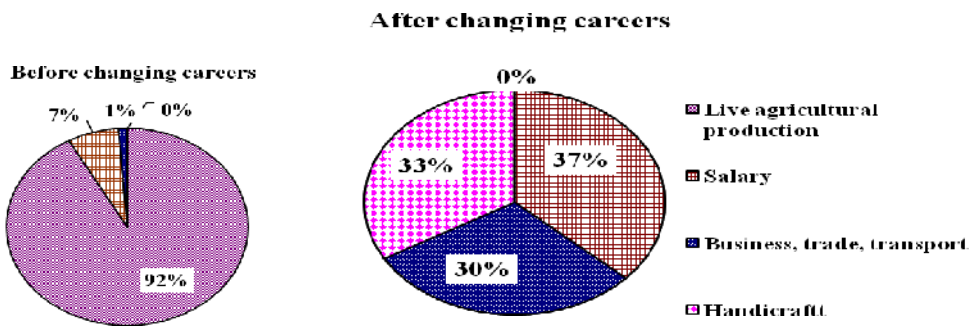
According to the survey results of 120 households, economic transition affected income through career change of households. 87/120 households changed career including 81 rural households. The career change and income were strongly shown in suburban areas or in new areas merged into urban areas while there was almost no change in inner-city areas.



Picture 2.8. Chart the number of households involving in career change as surveyed

** 1. B,T,T: Business, trade, transport; 2. L: Laborers hired; 3. W: Workers 4.PO:Public Officials; 5. F: Farming; 6. H: Handicraftt; 7. No change*

** Career change (from agriculture to industry).*



Picture 2.9. Chart income structure before and after career change as surveyed

It was the positive change in the life of the survey area that attracted 12 households from other place to live (8 households outside the province, 4 households in the province).

** Changing urban culture*

As a land of culture, land of rich cultural traditions of old Kinh Bac, economic transition together with the development of IPs and ICs brought a lot of changes in cultural life, especially lifestyle of Bac Ninh urban population. These changes were clearly seen in suburban areas or new areas annexed into the province's urban centers. The transition from farmers to urban residents led to changes in their lifestyle. Idle-farming lifestyle was gradually replaced by industrial lifestyle with rapid pace and hurry in addition to the development of deviant lifestyle with high appreciation of money. Lifestyle "with high appreciation of affection" of old Kinh Bac people was turned into practical lifestyle by a part of the urban population when they entertained with Quan Ho folk songs, asking for tips. Social evils: prostitution, thefts, drug trafficking ... developed.

2.3.2.3. Promoting urban infrastructure development

The development of production and business activities, particularly in IPs, ICs, and craft villages along with various types of services required urban infrastructure development, meeting circulation needs and creating investment funds for urban gentrification. From 2006 to 2013, investment in infrastructure construction earned from the provincial budget, with about 1774.8 billion dong, accounting for 75% of total investment under the provincial budget. In 2013, Bac Ninh city alone, invested 1,113 billion dong for the repair, upgrade and new social infrastructure construction, including 251.6 billion dong from the provincial budget.

Housing quality improved through the expansion of the urban area, forming new urban areas. Urban transport, water and sewage systems, electricity supply and communication were always invested for upgrade, repairs and new construction to meet urban development and socio-economic development. The system of health and education highly developed in Bac Ninh city.

2.3.2.4. Making changes in planning and urban management

a. Urban planning

Economic transition had direct impacts on urban spatial structure and urban planning orientation. The planning and development of ICs and IPs changed the phased general urban planning Bac Ninh during the economic transition process. In particularly, the period 2006 - 2013 was meaningful for Bac Ninh urban planning.

At the beginning of the period, zoning urban space was complicated. However,

when the IPs and ICs were stable in operation and the economic transition process nearly reached the target, zoning urban space in Bac Ninh was stable and gradually showed characteristics of development orientation. The urban system was division into two sub-regions:

+ Northern Duong River Sub-region: Bac Ninh city, Tu Son town, Cho, Pho Moi and Lim townships included. The urban space development was radial (Bac Ninh city, the center), along new and old Highway 18, 1A, new urban strips of high urbanization levels.

+ Southern Duong River Sub-region: Ho, Gia Binh, Thua townships included. The urban space development dispersed by cluster. Ho township was the center of the sub-region.

b. Urban management

Economic transition changed the size of population, the area size, the economy scale, and urban grade improvement ... leading to changes in urban management and enhancing the management stature of the state machinery in urban management. Of all the fields of interest including management of urban planning, urban land management, management of urban environmental sanitation, urban construction management, management of urban water supply, ... management of urban planning and construction of Bac Ninh attracted participation of an increasing number of domestic and foreign enterprises and companies. Bac Ninh city was the home of significant changes in management.

1.1.3.5. Strengthen exploitation and use of natural resources and urban environmental change

Formation and activities of industrial parks, industrial complexes, urban areas, urban infrastructures has huge impact resources, the urban environment. Urban resource exploitation, overuse, inefficiencies resulting in degradation and depletion of natural resources especially land and water. Impact of economic restructuring to resources, the urban environment according to the mechanism distribution - consumption - emissions did the urban environment serious pollution is mainly polluted water, air, noise and lighting.

Beside positive impacts, the economic transition process had negative impacts or restrictions on urban development in Bac Ninh.

First, impacts on economic transition were mainly seen in two major urban centers, including Bac Ninh city and Tu Son town while the remaining encountered unclear effects, particularly Cho township - Yen Phong. This was because of "late

effects" and spreading effects of economic transition, but more importantly, the development of the public transportation system and workers pick service made a “pendulum” move style of workers and residents.

The urban population increased quickly but the proportion of urban residents was low, arising more complex social issues, especially the development of social evils. The focus of the positive impacts on the two urban centers, including Bac Ninh city and Tu Son town gave a rise to the disparity in levels of socio-economic development, particularly the urbanization process between the two major urban centers and the remaining**.** Process economic restructuring making the the transition land use purpose happen quickly and strong. The area of agricultural land in the area reduced conversion efficiency of unused land resource wasters. The problem of urban pollution is increasing.

Chapter 3
ORIENTATION AND SOLUTIONS TO ECONOMIC TRANSITION AND URBAN DEVELOPMENT IN BAC NINH

3.1. Views, goals and direction of economic transition and urban development

3.1.1. Points of view

3.1.1.1. Viewpoints on economic transformation

Bac Ninh economic transition was based on the specific points of view clearly identified and linked to the overall development of the world and Vietnam. Economic transition was put in relation to the larger territorial level, building economic structure with key sectors as the focus, economic restructuring associated with growth paradigm shift towards quality and efficiency, and economic transition must take advantages, ensuring green growth goals, stability and sustainability.

3.1.1.2. Urban development perspectives

Construct and develop Bac Ninh into a large urban-oriented area: *"Modern, Civilized, Cultural, Harmonious, Sustainable"*, accelerate the process of urbanization in rural areas in the direction of eliminating the differences in conditions and quality of life of the population between the regions in the province, develop the space following the model *"ecological green urban”* based on the natural frame.

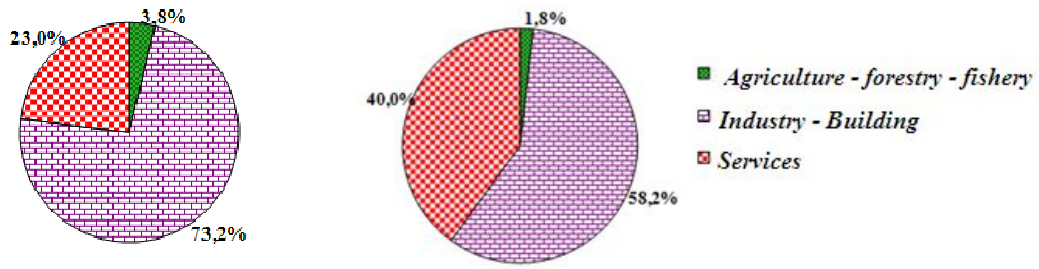
3.1.2. Targets

The process of economic transition and urban development in Bac Ninh was identified with very specific goals phased to get the route done to ensuring the ultimate success.

3.1.3 Orientation of economic transition and urban development in Bac Ninh

3.1.3.1 Orientation of economic transition

Based on the research results of economic transition in the period 2000 - 2013, planning to build Bac Ninh by 2030 and planning for Bac Ninh socio-economic development by 2020, Bac Ninh economic transition was determined to continue mitigating the agriculture - forestry - fishery, industry and increase services.



Year 2020 **Year 2030**

Picture 3.1.Chart Bac Ninh economic structure in 2020 and in 2030 (at real prices)

In each sector there was a very clear direction to achieve the growth rate, density and transformation orientation. Territorial orientation was determined by sector which focused on developing various forms of modern territorial organization. Orientation by sector referred to the assertion of the role of non-state sector and effective promotion of foreign investment sector.

Bac Ninh economic transition orientation more focused on services so that in next time Bac Ninh would be the nation's largest center of science, education, culture, and health care. Orientation was concretized and phased under implementation route with clear targets to ensure feasibility. Orientation of economic transition promoted the success of the economic transition process in the period 2000 - 2013 anticipated the difficulties and limitations. Orientation also took account of the development trend of the world and Vietnam. However, for economic transition to bring optimal efficiency, pay more attention and have more specific linkages between sectors, components and territory.

3.1.3.2. Orientation of urban development in Bac Ninh

Orientation of urban development included orientation on urban functions, urban economy, urban society and urban spatial structure.

3.2. Measures to promote economic restructuring and urban development

3.2.1. Mobilization and effective use of investment capital

This was the most practical solution to create incentives for economic transition, turning the provincial potentials into economic efficiency. Focus on attracting domestic investment, mobilizing capital from a maximum of land, the socialization of the health

sector, education, culture - sports ... Bac Ninh continued to promote and diversify forms of promotion, investment promotion. Continue to improve provincial competitiveness to create convenience and most openness for investors. Have specific attracting solutions for each type of funding.

Strengthen strict manage at all phases of the construction investment. Improve the quality and efficiency of investment projects, strictly and rigorously manage the investment process, fight against waste and loss. Strengthen community supervision.

3.2.2. Proper use of land resources

Proper use of land resources would be the key to success of the economic transition process and the development of green economy. Properly shift the land use purpose, ensure land resources for the development of agricultural production. Publicity and transparency of land use planning must be done. Make maximum use of existing land for agricultural production and improve alluvial land along Duong River and Thai Binh River. Strictly implement and comply with land use plans approved.

3.2.3. Improving the quality of human resources

Regarding improving the quality of human resources, promote education about human resources needs through the websites and job fairs. Improve the quality of education at all levels. Match the training in secondary schools, colleges and universities in the province with labor needs. Expand joint training with big training centers such as Hanoi. In addition, Bac Ninh should concretize and institutionalize policies to encourage investment, improve the quality of human resources. Promote education socialization.

3.2.4. Strengthening cooperation and links

Strengthen cooperation with China's southeastern provinces through two economic corridors. Focus on strengthening cooperation and partnership with the provinces and the Capital region and the Northern key economic region through the exchange of agricultural goods with Hanoi, exchange of experience in the management of urban planning, industrial parks and construction investment projects from major cities.

3.2.5. Development coordination across sectors (areas) and territories

Boost the production linkages between sectors, areas and territories. Focus on the relationship between industry, agriculture and services to increase value added. Encourage businesses and companies to use agricultural products as raw material for production. Build material regions for processing industry. Raise awareness and

responsibility of farmers to comply with the requirements on the quality of products under the provisions of the enterprise.

3.2.6. Accelerating the application of scientific achievements

Successfully implement technological - technical transfer in foreign investment firms. Encourage the use of technology - modern techniques in IPs and ICs and craft villages. Complete two training, technological applications parks (two university villages). Improve the roles of the industrial promotion centers. Encourage scientific research and application of scientific projects into practice.

3.2.7. Construction and development of green economy in order to protect the environment.

Bac Ninh must improve the system of green economy policies. Integrate the principles and contents of green development in the strategy, planning and socio-economic development plans. Build and develop models and initiatives of green economy development. Encourage businesses and business establishments to use technologies, new and clean materials. Strengthen management, environmental inspection in IPs, ICs, and craft villages.

3.2.8. Development of supporting industries

Promote the complete supporting industrial planning, identify areas (sectors), focus on the development of supporting industries. Innovate policies to encourage investment in the development of supporting industries. Improve the quality of labor for supporting industries. Strengthen the links between enterprises during the development of supporting industries. Modernize the infrastructure system, enabling supporting industries to grow. Bac Ninh must establish an organization in charge of monitoring and directing the implementation of supporting industries development planning.

CONCLUSION

Economic transition was the process of components percentage change in economic structure from this state to the other state taking account of the relationships between the components in order to get better and more effective development. In addition, economic transition had huge impacts on urban development. Economic transition process and its implications to the urban centers in Vietnam and Red River Delta was the factual basis to apply in specific analysis of Bac Ninh.

Bac Ninh economic transition process had advantages of geographic location, investment and infrastructure. In particular, the geographical location and infrastructure were comparative advantages for Bac Ninh to attract foreign

investment. Investment capital was the motivational factor turning potentials into facts of socio-economic development. Besides, Bac Ninh encountered some limitations and difficulties during economic transition process.

In the period 2000 - 2013 in Bac Ninh carried out the positive, progressive and effective economic transition. Economy scale rose quickly, always in two digits, labor productivity and GDP / person were high. Economic structure by sector shifted towards reducing the density of agriculture - forestry - fishery (from 37.9% to 5.3%), increased the proportion of industry - construction (from 35.6% to 77.6 %) and services with diversified structure meeting social needs. Economic structure by components shifted towards the trend: foreign investment capital sector quickly increased (from 6.1% to 68.2%); non-state and state sectors tended to decrease density. Territorial economic transition involved in the formation and development of some forms of advanced and modern territorial organization of working effectively such as IPs and ICs. Particularly, in Bac Ninh there were the development motivation regions formed such as Bac Ninh city, Tu Son town and Yen Phong district. The formation and development of IPs or ICs during economic transition had many positive impacts on urban development: the premise of formation and expansion of urban scale through the townships system. Urban functions were enhanced from purely administrative function to more other functions. Some urban centers were upgraded to an urban center of the higher classification level. Investment in the infrastructure construction and gentrification increased, making Bac Ninh urban infrastructure increasingly modern and perfect. Urban economy shifted to the general rule and made great contribution to provincial GDP. Urban population’s lives increasingly improved. Planning and urban management made progress with a clear hierarchy. Besides, there are negative effects.

With natural and socio-economic conditions, and the practical economic transition process as well as its impacts on urban development in recent time, in next time (2015 - 2030), economic structure was determined the shift towards services - industry (services: 40%, industry – construction: 58.2%). Bac Ninh would be a civilized and harmonious city. To achieve these objectives Bac Ninh must synchronously implement a system of eight groups of solutions including the breakthrough solutions: mobilizing investment, improving the quality of human resources, development of supporting industries and proper use of land resources.

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