



Investment for industrial zones development in Northern Vietnam key economic region

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Abstract

To implement the socio-economic development objectives of Vietnam Northern key economic region to 2030, IZ investment and development is considered as an important strategy contributing to boost economic growth and development as well as economic restructuring towards industrialization and modernization. By systematizing theoretical frameworks in IZ investment and development, combining with qualitative analysis, this paper has concerned: The scale of investment capital for the development of IZ in Vietnam Northern key economic region has continuously increased; number of established IZs and the scale of IZs has increases, the industrial production turnover, export turnover of industrial goods, turnover of enterprises in Izs also increased significantly. Despite a lot of positive results, investment and development of Izs in Northern Vietnam key economic region still have many problems to research and solve such as low capital scales; unreasonable capital resources; unsynchronized infrastructure investment; inappropriate investment system by industries and fields which only attract low technology investment projects, weak economic clusters relationship; bad human resources and environment protection investment and development. Based on the limitation causes and investment orientation of the IZs in the next period, the study proposes 7 groups of solution to improve the investment and development efficiency as follows (1) Improvement of investment planning quality; (2) Completion of policies; (3) Diversified capital and infrastructure improvement; (4) Investment promotion; (5) Human resources investment; (6) Environmental protection investment; (7) Government management improvement.

Key words: Economic Zones, Industrial Parks, Industrial zones



1. Introduction

Vietnam is under the industrializational, modernizational and integrational economic development process. To become an industrial country, the development of industrial zone (IZ) plays an important role. Realizing the importance of IZ, IZs have been developed in the key economic region of Northern Vietnam to attract domestic and foreign investment for socio-economic development. However, the investment and development of IZs over the 20 years have revealed a number of issues such as inappropriate capital structure, unattractive preferential investment policies, unsynchronized infrastructure investment, low occupancy rate, etc. With the desire to contribute to solve these existing problems, the author has selected the topic "**Investment for industrial zones development in Northern Vietnam key economic region**" as the dissertation subject.

2. IZs and investment for IZs development

2.1. IZs and their role to the socio-economic development

With different approaches to the process of forming IZs, the author summaries some definitions of IZs as follows:

"The industrial park is an area zoned where concentrated industrial enterprises and industrial production services with no inhabitants. This model was built in some countries such as Malaysia, Indonesia, Thailand, Taiwan etc, ... "

According to the Decree No. 29/2008 /ND-CP on IZs on export processing zones and economic zones, "industrial park is an area specializing in producing industrial goods and providing services for industrial production with defined geographical boundaries, established under the conditions, order and procedures stipulated in this decree. "

The Investment Law of 2014 also states that "an industrial park is a region with a defined geographic boundary, specialized in the production of industrial goods and the provision of services for industrial production"

From the above definitions of industrial park, the author can draw some conclusions as follows:

- An IZs is an area with defined geographical boundaries which is separated by a visible or invisible lines.
- The IZs' heart concentrates industrial manufacturing companies and its supporting enterprises including services and industrial production firms.

Industrial park plays an important role in the economic development: attracting investment capital; modernize of the infrastructure system; accelerate the process of national industrialization and modernization by restructuring the economy; improve technology and management method; create jobs for laborers and improve the quality of human resources; strengthen economic linkages between enterprises to reduce production costs; promote the development of the economy.



2.2. Definitions and characteristics of industrial park development

"The investment and development in industrial park is the overall activity of mobilizing and using resources to build and develop industrial zones in a certain area, certain period of time associated with the impact of natural and socio-economic factors of the region "

The investment in developing industrial zones has some basic features as follows:

Firstly, the investment and development of industrial zones requires large amount of capital. Secondly, investment capital for development of industrial zones is mobilized from various sources such as state budget, enterprises participating in the industrial park, enterprises providing infrastructure services. Thirdly, investment in developing industrial zones is long term. Fourthly, investment in developing IZs poses high risks. Fifth, the achievement of investment in developing industrial zones has long-term value.

2.3. Capital resources for IZs development investment

The investment capital for developing IZs in the open emerging economy is formed from two major sources: domestic and foreign capital.

However, as stated in the theoretical framework, to avoid overlapping the author has categorized the investment capital for development of industrial zones into three major sources:

State budget; Enterprises providing infrastructure services (domestic and foreign); enterprises operating in industrial zones (domestic and foreign).

In the analysis of the situation of investment and development of industrial zones, due to difficulties in extracting data, the author classifies the investment capital for development of industrial zones into two sources: domestic investment capital and foreign one.

2.4. Investment activities for IZs development

The investment for developing IZs includes (1) Construction of infrastructure; (2) Development of business production; (3) Development of human resources; (4) Development of support services for enterprises; (5) Investment in environmental protection.

3. Investment situation of IZs in Northern Vietnam key economic region.

3.1. Development situation of industrial zones in Vietnam and Northern Vietnam key economic region.

After more than 25 years of industrial zone development, Vietnam has established a nationwide network of IZs. These IZs have played a leading role in technology transfer, experiences management, competitiveness enhancement and supporting industries development promotion. By the end of December 2018, Vietnam established and built 325 IZs with total registered capital of infrastructure investment equivalent to \$12.1 billion. These IZs have attracted 7,450 FDI projects and 6,381 domestic projects, creating jobs for over 2.81 million direct laborers.



By the end of December 2018, the whole Northern Vietnam key economic region has 70 IZs with total land area of 18,052 ha, of which the industrial leasing area is 11,947 ha. Thus, in comparison with the whole country, the Northern accounts for 21.54% of the total number of IZs (as of 12/2018) and 19.03% of total land area.

Most of the IZs in Northern are located near the major national roadways, which supports the connection to external transportation system.

3.2. Development investment capital and capital resources

Table 1: Development investment capital from 2012 to 2018

| Year | Capital (billion VND) ** | Investment Growth rate (%) | GDP (billion VND) | Investment for IZs/GDP (%) |
|------|-----------------------------|----------------------------------|----------------------|-------------------------------|
| 2012 | 86,210 | - | 602,867 | 14.3 |
| 2013 | 103,835 | 20.44 | 683,125 | 15.2 |
| 2014 | 203,730 | 96.21 | 1,170,862 | 17.4 |
| 2015 | 256,852 | 26.07 | 1,556,676 | 16.5 |
| 2016 | 308,254 | 20.01 | 1,751,443 | 17.6 |
| 2017 | 436,021 | 41.45 | 2,520,353 | 17.3 |
| 2018 | 469,110 | 7.59 | 2,743,327 | 17.1 |

Source: Industrial zones operation report 2012 - 2018, Department of Management of Economic Zones, Ministry of Planning and Investment and Annual Statistical Yearbook 2010-2016, General Statistics Office

According to the Table 1, the development investment capital has been relatively large and continuously increased over the years

Table 2: Development investment capital resources structure from 2012 to 2018

Unit: billion VND

| Year | Total capital | Domestic capital | | Foreign capital |
|------|---------------|------------------|---------|-----------------|
| | | Public | Private | |
| 2012 | 86,210 | 3,552 | 20,275 | 62,383 |
| 2013 | 103,835 | 4,548 | 24,066 | 75,221 |
| 2014 | 203,730 | 9,224 | 35,923 | 158,583 |



| | | | | |
|------|---------|--------|--------|---------|
| 2015 | 256,852 | 9,861 | 43,262 | 203,729 |
| 2016 | 308,254 | 10,486 | 31,655 | 266,113 |
| 2017 | 436,021 | 18,879 | 40,610 | 376,532 |
| 2018 | 469,110 | 15,246 | 47,830 | 406,034 |

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zones, ministry of planning and investment.

In the period of 2012-2018, the size of foreign and domestic investment capital both increased. However, foreign investment still accounted for a large proportion of the total investment and development capital of IZs. The scale of domestic capital, though increasing, still accounted for a small proportion and tended to decrease. It is obviously seen that investment and development activities of IZs in Northern Vietnam relied too much on foreign investment capital.

3.3. Development Investment Contents

Table 3: Capital structure by contents

Unit: billion VND

| Year | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1.Infrastructure investment capital | 17,964 | 18,748 | 22,834 | 23,544 | 25,828 | 30,072 | 30,433 |
| 2.Business production investment capital | 61,128 | 76,945 | 164,807 | 212,045 | 257,121 | 370,865 | 400,494 |
| 3.Other investment capital | 7,118 | 8,142 | 16,089 | 21,263 | 25,305 | 35,084 | 38,183 |
| Total capital | 86,210 | 103,835 | 203,730 | 256,852 | 308,254 | 436,021 | 469,110 |

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zone, ministry of planning and investment

Infrastructure investments tend to increase, with the balance between domestic and foreign investment at 50% each. However, domestic investment disbursement rate accounted for a low rate of 40%. The disbursement of foreign investment was higher than average of 43.59%. This figure is higher than that of Central Vietnam and the whole country (38.2% and 33.85% respectively). Hence, it could be inferred that foreign investors are implementing projects faster. In general, investment capital for infrastructure construction activities was not high, especially those of

domestic investors. Therefore, provinces in the Northern Vietnam key economic region must take effective measures to raise the investment capital ratio for the infrastructure development.

By December 2018, the IZs attracted a total of 2,466 investment projects, of which 1,553 are foreign owned with the registered capital of 622,060 billion VND (17.7% of total projects and 20% of foreign investment capital in industrial zones in Vietnam) and 913 domestic projects with the registered capital of 84,952 billion VND (14.2% of total projects and 18.4% of domestic investment capital in industrial zones in Vietnam).

The number of domestic and foreign projects and total investment capital registered for business production of IZs in the Northern Vietnam key economic region ranked second after the Southern Vietnam key economic region.

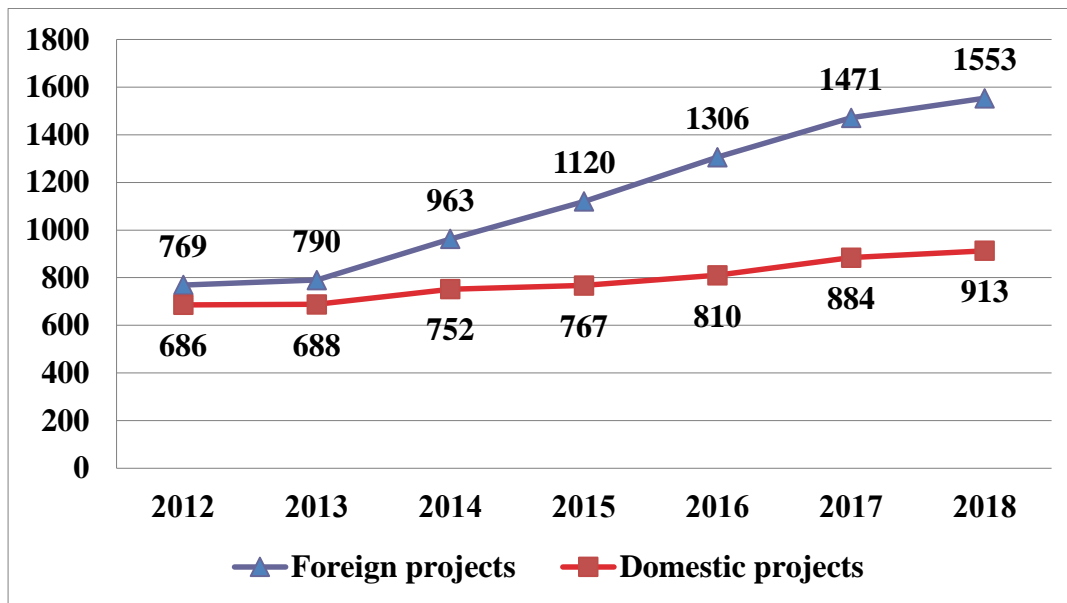


Figure 1: Total attracted projects on business production of IZs in Northern Vietnam key economic region

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zones, ministry of planning and investment.



**Table 4: Registered capital on business production of enterprises
in IZs from 2012 to 2018**

| | Unit | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|---|--------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Registered capital | Billion VND | 323,508 | 342,313 | 357,155 | 411,908 | 465,095 | 579,864 | 622,060 |
| Growth rate | % | - | 5.49 | 4.34 | 15.33 | 12.91 | 24.68 | 7.28 |
| Growth rate compared to year of 2012 | % | - | 5.49 | 10.06 | 26.93 | 43.32 | 78.69 | 91.69 |

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zones.

Foreign investment accounted for a large proportion of total registered investment capital for business production in the industrial zone at 85,53% on average in the period 2012-2018, which is higher than the Central and Southern key economic regions. Meanwhile, domestic investment accounted for only 14.47%. In addition to the increase in the number of projects and the investment capital scale, the implemented investment capital over registered investment capital ratio for business production of Northern Vietnam key economic region has been an apparent breakthrough. This ratio has increased sharply from 18.84% in 2012 to 64.38% in 2018. The average rate of investment capital disbursement in the period 2012-2018 is 46,08%. The results were achieved thanks to the clearer and faster licensing and management procedures of the government. However, the domestic investment capital disbursement rate was 41.25% lower than that of foreign investment.

Apart from the development investment of infrastructure, development investment of business production, there are others development investment activities such as: human resources investment, support services investment and environment protection investment. The capital scale for these activities tended to increase continuously over the years, proving that provinces have paid more attention to serve the effectiveness of business enterprises in Northern IZs.

4. Investment activities evaluation

4.1. Achieved results

General criteria

- The number of established IZs has increased. By the end of December 2018, 70 industrial zones had been planned and developed.
- The scales of IZs has also been increasing in size.
- The occupancy rate of IZs, though low, is on the upward trend.

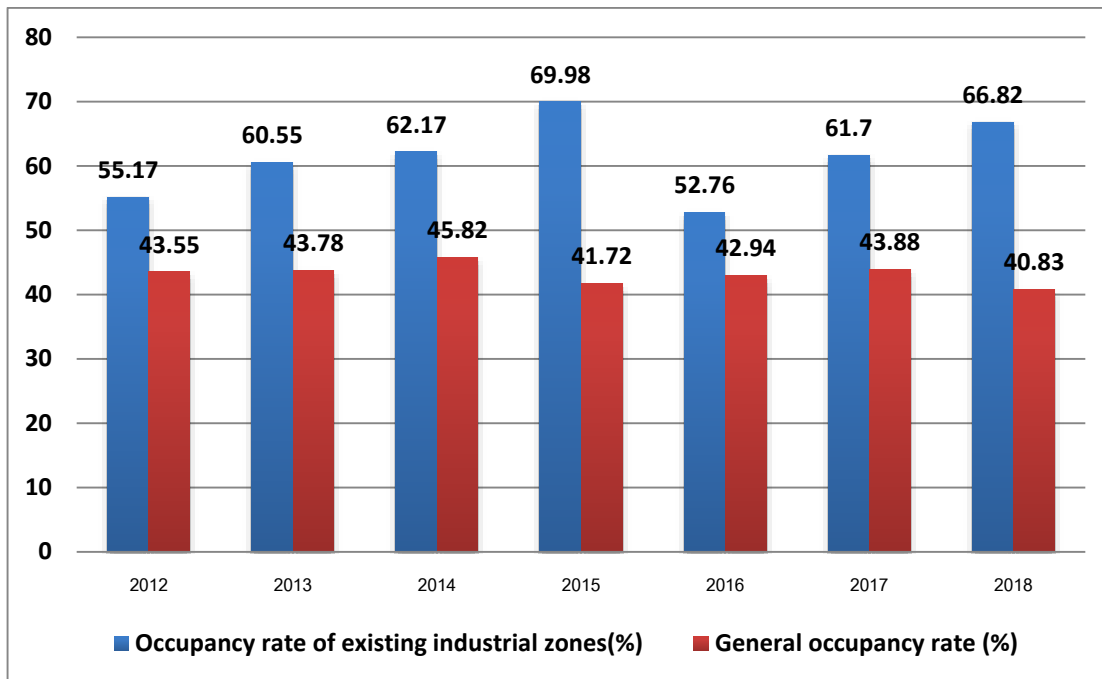


Figure 2: Occupancy rate of IZs in Northern Vietnam key economic region in 2012-2018

Evaluation criteria for infrastructure investment of IZs

In 2012-2018 period, the investment capital for infrastructure construction has increased continuously over the years, but the ratio between the implemented capital and the registered capital has not been consistent from 40.35% in 2012 to 46.12% in 2017 then plummeted to 40.78% in 2018. The average disbursement rate is 41.77%, which is higher than the disbursement rate in 2012- 2018 (the average disbursement rate was 33%).

Evaluation criteria for production investment activities of IZs

- Industrial production turnover:

The industrial production value of enterprises has increased rapidly over the years, which is shown in Figure 3

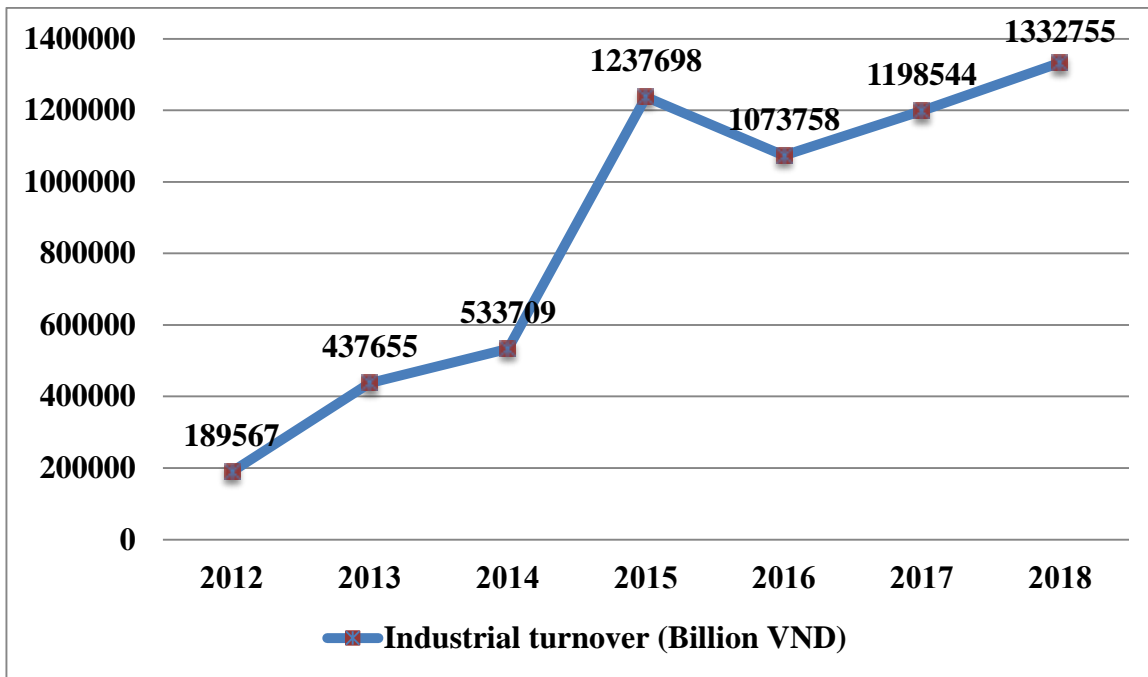


Figure 3: Industrial turnover of enterprises in IZs in Northern Vietnam key economic region

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zone, ministry of planning and investment

In 2012, industrial production value of industrial zones increased 189,567 billion VND, reaching 1,332,755 billion VND in 2018 which is 6.03 times higher than 2012, 11.19% higher compared to 2017 and accounted for 43.7% of total industrial production value of IZs in Vietnam. The annual average growth rate of the industrial production value is 12.04% per year, higher than the national average of 6.7%.

- Exported industrial product turnover:

With more than 50% of foreign invested enterprises operating and producing in industrial zones, the export turnover of industrial products has increased rapidly over the years. In 2012, the export value was only 89.159 billion VND (exchange rate of 2012) to 746.343 billion VND in 2018 (8 times higher). In fact, the export turnover of IZs in North Vietnam key economic region has always reached a high and stable growth rate. This turnover of IZs has significantly contributed to the total export turnover of the region. By 2018, IZs have become a major factor with export turnover reached more than \$38.27 billion (equivalent to 746.343 billion VND).



Table 5: Investment efficiency by export turnovers from 2012 to 2018

| | Unit | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1. Industrial exported goods turnover | Billion VND | 89,159 | 249,464 | 325,562 | 655,980 | 665,730 | 695,156 | 746,343 |
| 2. Total investment capital | Billion VND | 86,210 | 103,835 | 203,730 | 256,852 | 308,254 | 436,021 | 469,110 |
| 3. Leasing revenue of industrial area | Ha | 3,503 | 3,654 | 4,175 | 4,049 | 4,146 | 4,345 | 4,878 |
| 4. Total labor | Person | 266,710 | 286,399 | 360,809 | 456,968 | 512,949 | 560,070 | 584,578 |
| 5. $\frac{\Delta \text{Export Turnover}}{\text{Total investment capital}}$ | Billion VND | | 1.54 | 0.37 | 1.29 | 0.03 | 0.07 | 0.11 |
| 6. $\frac{\Delta \text{Export Turnover}}{\text{Leasing industrial area si}}$ | Billion/h a | | 43.87 | 18.23 | 81.60 | 2.35 | 6.77 | 10.49 |
| 7. $\frac{\Delta \text{Export Turnover}}{\text{Total labor}}$ | Billion/ Person | | 0.56 | 0.21 | 0.72 | 0.02 | 0.05 | 0.09 |

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zones, ministry of planning and investment

- Business turnovers of IZs in Northern Vietnam key economic region.

Invest in the development of IZs in the Northern key economic region not only increases the industrial production turnover and export turnover but also contributes to the increase of business turnover as well as tax payment of enterprises in the IZ. These data are shown in Table 6



Table 6: Investment efficiency by region turnover from 2012 to 2018

| | Unit | Năm 2012 | Năm 2013 | Năm 2014 | Năm 2015 | Năm 2016 | Năm 2017 | Năm 2018 |
|---|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| 1. Total turnover | Billion VND | 189.498 | 271.365 | 423.071 | 566.332 | 616.724 | 690.768 | 856.434 |
| 2. Total investment capital | Billion VND | 86.210 | 103.835 | 203.730 | 256.852 | 308.254 | 436.021 | 469.110 |
| 3. Leasing revenue of industrial area | Ha | 3.503 | 3.654 | 4.175 | 4.049 | 4.146 | 4.345 | 4.878 |
| 4. $\frac{\Delta \text{Total turnover}}{\text{Total investment}}$ | Billion VND | - | 0,788 | 0,745 | 0,558 | 0,163 | 0,170 | 0,353 |
| 5. $\frac{\Delta \text{Total turnover}}{\text{Leasing industrial area size}}$ | Billion/ha | 54,10 | 74,27 | 101,33 | 139,87 | 148,75 | 158,98 | 175,57 |

Source: Industrial zones operation report 2012 - 2018, Department of Economic Zones, ministry of planning and investment.

The turnover of enterprises in the Northern Vietnam key economic region in the period 2012-2018 increased progressively through the years from 189,498 billion VND in 2012 to VND856,434 billion in 2018 (an enormous increase of 351.95%). However, it is still much lower than the Southern key economic region, which had reached 1,319,417 billion VND.

4.2. Existing limitation

Besides these encouraging achievements, there are still a lot of drawbacks in the investment and development of IZs in the Northern Vietnam key economic region as follows:

Despite the continuous increase over the years, the investment and development capital scale of IZs still has not met the demand for development of industrial zones, which still depended to much on foreign investment capital.

Low infrastructure systems of some IZs, especially the differences between inside and outside technical infrastructure, and between technical and social infrastructure. Bank credit access and policies for infrastructure construction investment in IZs is still considered as inappropriate.

Weak attraction to high-tech investment projects and limited investment attraction to create economic links among enterprises in the IZ are other problems.

Lastly, human resource development and environmental protection investment has not been adequately considered.



4. 3. Limitations causes

By qualitative and quantitative methods, the limitations causes that negatively affect the investment and development of IZs in the Northern Vietnam key economic region are summarized as follows:

(1) Poor investment and development planning; (2) Unstable preferential policies for investment and development of IZs; (3) Undiversified capital mobilization methods and infrastructure investment and development; (4) Inappropriate investment promotion; (5) Unnoticed human resources investment and development; (6) Poor environmental protection investment.

5. Orientations and Solutions for development investment of IZs in Northern Vietnam key economic region

5.1. General plan for socio-economic and industrial development in the Northern Vietnam key economic region vision to 2030.

According to the Ministry of Industry and Trade on approval of general plan for industrial development of Northern Vietnam key economic region in 2020, vision to 2030, industrial orientations were delivered as follows:

By 2030, Northern Vietnam key economic region shall develop its industry in an environmentally friendly orientation, along with clean and high-tech industry, concentrate on modern technology fields and equipments. High quality, value, regional, competitive and international brands will be developed to meet the advanced standards of developed countries and could participate in several processes the global industrial value chains. Key and dominant industries would be electronics, mechanical engineering and mechatronics are key and dominant industries, which are highly effective in the domestic industrial production value chains and export as well.

5.2. Solutions for development investment of IZs in Northern Vietnam key economic region vision 2030

Based on the limitation causes and investment orientation of the IZs in the next period, the paper proposes 7 groups of solution to improve the investment and development efficiency as follows:

5.2.1. Improvement of investment planning quality

Firstly, the development plan of IZs must be in line with the local socio-economic development plan and the industrial development plan.

Secondly, sustainable development must be concerned.

Thirdly, IZs must have a clear plan on business fields and scope of activities of enterprises.



Fourth, inside and outside infrastructure should be considered.

5.2.2. Completion of policy

Firstly, IZs should continue to complete the existing mechanisms and policies to ensure favorable and stable preferences for the investment and development.

Secondly, IZs must formulate attractive and competitive international investment policies with important contents such as investment preferential, for new IZs model, in which strategic investors could receive more preferences and regimes.

5.2.3. Diversified capital and infrastructure improvement

Firstly, enhance and diversify the investment capital for infrastructure construction in IZs, including the optimization between public and private sectors.

Secondly, invest in the synchronized construction and modernization of technical infrastructure inside and outside IZs.

Thirdly, invest in the synchronized construction and modernization of social infrastructure outside IZs.

Fourthly, create a link between technical infrastructure of all IZs in Northern Vietnam key economic region.

5.2.4. Investment promotion

First, strengthen market research activities and build the relationship with investment partners.

Second, enhance the planning quality and the project lists of IZs.

Third, always innovate, diversify investment promotion methods.

Fourth, improve the quality of propagating information and publications.

Fifth, strengthen the bilateral and multilateral cooperation.

5.2.5. Human resources investment

First, determine the orientations and objectives of human resources training to fit the actual enterprises' needs.

Second, invest in training facilities upgrade.

Third, improve the knowledge of instructor.

Fourth, diversify the training type.

Fifth, complete the treatment and award policies for laborers.



5.2.6. Environmental protection investment

Firstly, in planning process of IZs, Government should issue clear and adequate regulations on environmental protection both inside and outside the IZs (such as water pollution, air pollution, noise pollution, waste pollution, etc.)

Secondly, improve the appraisal quality, especially in terms of environmental protection.

Thirdly, put priority on clean and pollution - free industries. Highly polluting projects in the same industry should be located in an IZ for easy waste treatment.

Fourthly, issue incentive policies for private investors to engage in the planning and constructing plants for wastewater and solid wastes in IZ such as enterprises support (low interest rate, concessional interest rate or rewards) for investment in the environmental treatment facilities construction, or create favorable conditions for enterprises using less environmentally harmful technologies.

Fifth, the infrastructure development enterprises of IZ which have not owned a centralized wastewater treatment plant must commit to plan this system and closely monitor the implementation of the commitments.

5.2.7. Government management improvement

Firstly, issue a regulation on cooperation between IZ Management Board and Provincial Departments and Branches to clearly define functions, tasks and authorities of IZ Management Board.

Secondly, functional units of the management board of the IZ need to be aware of their responsibility to enhance management board role in order to support the operation of enterprises in IZs.

Thirdly, delegate to the management board of IZs to inspect all activities of operating enterprises in each IZ.



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