Deepening Analysis Of Solutions For Industrial Clusters In North Of Vietnam And Discussion On Protecting Children As Laborers And Consumers In Industrial Zones

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APA Citation:
Submission Date: 25/10/2021
Acceptance Date: 20/12/2021

Abstract
In our country Vietnam, industrial cluster is a new form of territorial production organization, it is formed and developed mainly according to the guidelines, policies and planning of the State. Therefore, there are unavoidable shortcomings in the development of industrial zones and infrastructural construction. Hence, by using qualitative analysis with synthesis, explanatory, and inductive methods, in this paper, For socio-economic development, new rural development, authors will propose suitable solutions and recommendations for industrial clusters development in Hanoi city, Vietnam, and last but not least, we also mention issue of protecting children as laborers and consumers in industrial zones.

Key words: industrial clusters, zones, children, laborers, consumers.

1. Introduction
Regarding industry - construction, in the period 2006 - 2010 industry - construction achieved an average growth rate of 12.41%/year. Industry is developed selectively, focusing on high-tech industries such as electronics - informatics, telecommunications, biotechnology,
precision mechanics and new materials, industrial product groups Industry has advantages and brands. The key industries of Hanoi (Mechanical engineering, Electrical - Electronics, Textile - Footwear, Food processing) from the end of 2008 up to now, have been prioritized and have a growth rate of 15 years. 81% is higher than the 11.3% growth rate of the whole industry. In 2010, the key economic sectors reached 71,621 billion VND, accounting for 68.5% of the whole industry.

Regarding agricultural production, the internal structure of the industry shifted in a positive direction: increasing the proportion of livestock, aquaculture and agricultural services. Value added in agriculture in the period 2006 - 2010 averaged 1.75%/year; total food production reached over 1 million tons/year. The crop structure has been shifted towards efficiency, the area for planting flowers, ornamental plants and specialty fruit trees has continued to be expanded.

The economic structure continues to shift in the right direction: services - industry - agriculture, meeting the requirements of industrialization and modernization of the country. If in 2000, Hanoi's economic structure was: industry - construction: 36.4%, agriculture - forestry - fishery: 10.4%; services: 53.2%, the economic structure of 2010 is: 41.4%; 6.1%; 52.5%. Fig 1 - Hanoi develop IC (clusters)

![Source: internet](image)

Regarding the non-state economy, including handicrafts and craft villages occupy an important position in the economy of the capital and this is also a significant source of internal resources. Hanoi’s craft village is the largest and strongest compared to the whole country. Currently, Hanoi has 1350 craft villages (accounting for nearly 59% of the total number of villages in Hanoi), 272 craft villages are recognized by the City People's Committee, including 198 recognized traditional craft villages. Hanoi has 47 occupations out of 52 occupations in the country. Craft villages have contributed to increasing the proportion of industry and commerce to 80% in the structure of the production value of craft villages, reaching VND 8,663 billion. The contribution rate of craft villages, mainly through the production value of the handicraft sector to the City's GDP, has increased over the years from: 9.83% (in 2000) to over 11% (in 2010). In the past 5 years (2006-2010), the city has invested about 50 trillion VND to develop the suburban socio-economic. Hanoi is a city with limited land, many people, little arable land, and low labor time in agriculture. Developing craft villages, created jobs for 600,000 workers, accounting for 65% of the suburban population and 42% of the total number of industrial - handicraft workers in Hanoi.

2. Literature review

Second, Authors summarize studies in below table:

Table 1 - Previous studies

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Content, result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ngoc, T.T.B et al</td>
<td>2019</td>
<td>discusses about the importance and impact of industrialization and ongoing internal migration, as a result of industrial development, on socio-economic development by reviewing the relationship among them using multivariate statistical and comparative research methods. Case study research methodology has also been used by the researchers to examine the positive and negative impacts of immigration on infrastructure of destination locality. The article presents the statistical data and the practical experience gained in Binh Duong province which has a huge number of industrial zones and with highest in-migration rate in the country; a detailed analysis of the challenges faced by local governments is presented with the appropriate recommendations for policymakin</td>
</tr>
<tr>
<td>Janku et al</td>
<td>2020</td>
<td>deals with the occupied area (the area of a particular industrial zone), the percentage utilisation of that industrial zone, the number of employees in the industrial</td>
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</tbody>
</table>
zone, and the land quality expressed by means of the agricultural land protection class. The results of the analysis show the low usability of industrial zones, the large occupation of the agricultural land, and the low benefits to the Czech state and Czech citizens. The results also show the poor land use policy in relation to the soil protection. This work is followed by the project Sustainable management of natural resources with an emphasis on non-production and production ability of the soil, the results of which will be included in legislation and be binding for spatial planning.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Year</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoang, N.T., &amp; Huy, D.T.N.</td>
<td>2021</td>
<td>We need to make Cost-benefit Analysis of FDI: FDI Barriers and Firm Internal Capabilities in clusters development</td>
</tr>
<tr>
<td>Nguyen Thi Dung et al</td>
<td>2021</td>
<td>Through analysis of industrial zone development, the research shows that the industrial zones of Bac Giang province, Vietnam are in the stage of rapid development, along with the emergence of industrial zones, the proportion of industrial, foreign direct investment in the province increases and solve a number of employees for the province and neighboring areas. However, the level of increase is still limited. In addition, the province's workforce comes mainly from rural areas, so the quality of the labor force is not high; the ability to</td>
</tr>
</tbody>
</table>
apply scientific advances to production is limited. This causes difficulties in the development of industrial zones in the province.

(source: author synthesis)

3. Methodology
- The main research subjects are economic issues, organization and management of infrastructure construction of industrial zones in Hanoi such as: Planning, policy and construction of key elements constituting industrial infrastructure...
- Research scope of the thesis: The thesis deeply researches the issue of infrastructure construction of industrial clusters in Hanoi (expanded Hanoi) from 2000 to 2010, orientation to 2020

4. Main findings

4.1 Limitations of industrial clusters (IC) to overcome
Currently, there are 968 IC (CCNs) established nationwide, distributed in 63 provinces and cities (with a total land area of nearly 31,000 ha). Many difficulties exist in the management, investment and development of industrial zones, such as the quality of planning in many localities not keeping up with development needs; CCN environmental treatment problem.

Over the past time, the Ministry of Industry and Trade has actively advised the Government to manage industrial zones nationwide. To date, the current legal documents on the management of industrial clusters, including Decree No. 68/2017/ND-CP, Decree 66/2020/ND-CP, Circular 28/2020/TT-BCT on basically created a legal corridor for management and development of industrial zones unified from planning, establishment and expansion of industrial zones to investment in infrastructure construction and production in industrial zones.

Currently, Hanoi has about 70 industrial clusters operating, significantly contributing to economic growth and ensuring social security. These industrial clusters operate in 17 districts, districts and towns with a total planned area of more than 1.6 thousand hectares, of which more than 1.3 thousand hectares are invested in infrastructure construction and operation. stability.

(source: moitruongvadothi.vn, access date 6/8/2022)

According to data reported by the Hanoi Department of Industry and Trade, in 2021, Hanoi has assigned a plan to start construction of technical infrastructure for 43 industrial clusters. However, only Dai Thang craft village industrial cluster and Phu Tuc craft village industrial cluster (Phu Xuyen district) have just started construction, most of the rest have not yet completed site clearance.

In order to solve the remaining problems, the leaders of Hanoi have come up with specific solutions to help remove difficulties and obstacles in the implementation of investment and construction of industrial clusters.
Some industrial clusters with specific characteristics, still facing difficulties and obstacles, can be considered to determine the time to start construction of technical infrastructure in accordance with actual conditions. In particular, it is required that leaders of departments, agencies and chairpersons of People's Committees of districts and towns strengthen inspection, urge and take full responsibility before the city for the implementation of plans according to their assigned functions and tasks; implement solutions to remove obstacles, shorten at least 50% of the time to carry out administrative procedures…

4.2 Lessons from other industrial clusters
An example: Construction and development of an industrial cluster in Yen Bai
As of 2010 in Yen Bai province, there are 18 industrial clusters with a total area of about 425.4 ha, of which 08 industrial clusters are investing in infrastructure construction with a total area of 167.5 ha; the remaining 10 industrial clusters are in the planning and detailed planning stage.

Table 5- Summary of current situation of planning and construction of industrial zones in Yen Bai

<table>
<thead>
<tr>
<th>TT</th>
<th>Cụm công nghiệp</th>
<th>DV</th>
<th>Diện tích quy hoạch</th>
<th>Dạng xây dựng</th>
<th>Đáp duyệt quy hoạch</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Đồng Lục A</td>
<td>ha</td>
<td>10.5</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Yên Thế</td>
<td>ha</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Đồng An</td>
<td>ha</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Bão Đập</td>
<td>ha</td>
<td>25</td>
<td>25</td>
<td></td>
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<tr>
<td>5</td>
<td>Hưng Khánh</td>
<td>ha</td>
<td>20</td>
<td>20</td>
<td></td>
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<tr>
<td>6</td>
<td>Minh Tiến</td>
<td>ha</td>
<td>20</td>
<td>20</td>
<td></td>
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<tr>
<td>7</td>
<td>Pú Trạng</td>
<td>ha</td>
<td>21</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Cụm CN khu 5</td>
<td>ha</td>
<td>6.5</td>
<td>6.5</td>
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<tr>
<td>9</td>
<td>Khánh Hòa</td>
<td>ha</td>
<td>30</td>
<td>30</td>
<td></td>
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<tr>
<td>10</td>
<td>Phú Thịnh</td>
<td>ha</td>
<td>30</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Ba Khe</td>
<td>ha</td>
<td>30</td>
<td>30</td>
<td></td>
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<tr>
<td>12</td>
<td>Gia Hội</td>
<td>ha</td>
<td>30</td>
<td>30</td>
<td></td>
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<tr>
<td>13</td>
<td>Vĩnh Lạc</td>
<td>ha</td>
<td>31</td>
<td>31</td>
<td></td>
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<tr>
<td>14</td>
<td>Mông Sơn</td>
<td>ha</td>
<td>25.9</td>
<td>25.9</td>
<td></td>
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<tr>
<td>15</td>
<td>Tân Lĩnh</td>
<td>ha</td>
<td>26.5</td>
<td>26.5</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>An Thịnh</td>
<td>ha</td>
<td>43</td>
<td>43</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Cố Phúc</td>
<td>ha</td>
<td>5</td>
<td>5</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>425,4</td>
<td>167,5</td>
<td>257,9</td>
</tr>
</tbody>
</table>

Source: Yen Bai Department of Industry and Trade
Some policies to attract investment in Yen Bai province are:

- Support 50% of the cost of compensation, clearance and ground leveling, with late payment of that amount for a period of 3-5 years, depending on the investment capital of the project (Projects with investment capital less than 1 billion dong is deferred for 3
years; Projects with investment capital from 1 billion to less than 2 billion dong are deferred for 4 years; Projects with investment capital of 2 billion dong or more are deferred for 5 years

1) The provincial budget supports up to 5 billion VND to invest in the construction of essential technical infrastructure works inside and outside the industrial park.

2) Decision No. 27/2008/QD-TTg dated February 2, 2008 of the Prime Minister on the promulgation of mechanisms and policies to support socio-economic development for the Midlands and Mountainous regions. Northern Vietnam to 2010: "Support for investment from the central budget to build infrastructure of industrial clusters, handicrafts, not exceeding 6 billion VND/cluster and not more than 70 billion VND for one province by 2010"

3) Through the actual situation of implementing the planning on construction of industrial zones in Yen Bai province, there are some problems as follows:

4) Industrial clusters, even though they have been built for many years, have not yet had management regulations or have been slow to develop management regulations. The production scale is still small and not yet highly industrial, lacks stability, and has low industrial production value.

5) Industrial clusters that are in the process of investing in infrastructure construction are slow to deploy, always face difficulties in investment capital, in compensation for site clearance and resettlement, thus affecting the investment progress. projects registered in industrial cluster.

6) Implementation of industrial cluster planning is slow due to lack of capital and limited land fund for construction of industrial zones. The construction and planning work is slow, the land fund is mainly taken from residential areas and arable land, so the cost of compensation for site clearance is often high.

7) Lessons learned from experience in developing industrial clusters and building infrastructure in industrial clusters in some countries and provinces in the country

8) Experiences of localities, foreign and domestic industrial enterprises in infrastructure development that can help Hanoi City learn are:

9) The formation and development of industrial zones is an objective and necessary necessity and it has obvious effects, which are: i) Promoting socio-economic development, making an important contribution to the economic restructuring of the region, local; ii) Creating jobs, contributing to the transfer of a part of low-income agricultural laborers to developing higher-income occupations; iii) Create good infrastructure to develop production - business; iv) Promote specialized production and strengthen economic linkages in the Cluster, thereby affecting the development and increasing competitiveness of enterprises in the industrial cluster; v) Contributing to solving the problem of environmental pollution.

10) The city should plan and build industrial zones so that there is linkage and mutual support between production and business establishments in the cluster and links with other industrial clusters. Industrial cluster development is associated with the development of supporting industries, creating production linkage networks and forming value chains.

11) The city plays an active and important role in the construction and development of industrial infrastructure, which is reflected in:

12) Concretize the policies of the Central State, strategies, development planning, standards and regulations for the construction of industrial zones;

13) Provide incentives and incentives to attract investment in industrial cluster;

14) Acquiring land fund for construction of industrial parks;

15) The State invests in the construction of infrastructure outside the industrial zone fence and supports investment in infrastructure construction within the industrial zone fence.
16) Local governments with industrial clusters should be given a high degree of autonomy in terms of investment policies, use of local resources, and attraction of external resources. These policies are committed to consistent long-term to ensure confidence for investors.

17) It is necessary to clearly decentralize and avoid overlapping the functions and tasks of the Management Board with the local State management agencies and functional departments. Strictly implement the "one-stop shop" mechanism and speed up the reform of administrative procedures to create maximum conditions and reduce troubles for investors.

18) Environmental factors must be regularly checked and assessed.

19) Encourage the development of services for industrial development such as: credit guarantee, insurance and export promotion, organization of fairs.

20) Construction and development of industrial infrastructure must ensure synchronous requirements and effective development of industrial zones. The expression of that synchronization is: synchronization between inside and outside the industrial cluster; synchronization between technical infrastructure and social infrastructure; synchronization between the constituent elements of the infrastructure. Industrial clusters must win land fund for: building production factories; internal traffic; electricity, water and telecommunications supply systems; build a centralized wastewater treatment station; planting trees; building operator, managing industrial cluster…

21) Socialize investment in infrastructure construction, attract investment capital from the State budget, from production and business establishments in industrial zones and from other capital sources. Diversify economic sectors in infrastructure construction investment. The diversification of organizational forms of infrastructure development companies will create flexibility in mobilizing capital sources and dynamism in activities, thereby helping industrial clusters in Hanoi develop successfully.

22) Select qualified infrastructure construction investors. The investor's capacity is reflected in the experience, financial resources, human and material resources, this is an important factor and has a great influence on the construction progress of the industrial clusters.

23) Industrial cluster model needs to be diverse, flexible, not stereotyped, mechanical. The size of the Clusters should depend on the specific conditions of each locality.

4.3 Protecting children as laborers and consumers in industrial clusters
Determining the importance of the environment for child care and development and the difficulties posed to women in general, female workers in industrial parks and export processing zones (IZs, EPZs) in particular, The project "Supporting and developing a group of independent young children in IZs and EPZs until 2020" (Project 404) was born. After six years of implementation, the project has achieved remarkable results, creating a foundation and mechanism to continue developing a group of independent children in the locality.

As the lead agency, the Vietnam Women's Union has actively coordinated with ministries, branches and agencies to implement the project. However, according to the President of the Vietnam Women's Union, along with the socio-economic development of the country, the economic structure has developed towards industrialization and modernization, the number of employees is increasing, working in an ever-growing and ever-changing industrial enterprise. The life of many female workers is still difficult in terms of housing, salary, working hours, places of cultural activities, places to take care of children, etc., leading to not being able to take care of small children. Support child care places to work
safely in the condition of working shifts, working shifts and being far from family, having to rent accommodation.

Therefore, in the coming time, all levels and sectors need to step in with specific mechanisms and policies, creating conditions to mobilize children of the age to have access to preschool education, including groups of young children. Quality private independence, ensuring a balance in enjoyment for all children; interested in meeting the needs of sending children of workers in IZs and EPZs. In addition, it is necessary to improve the quality of child care and protection from the family and the community through communicating and guiding parents, grandparents and family members on child care and development. , develop community models to support parents to raise children...

At the same time, promote the role and strengths of the organization of the Vietnam Women's Union in child care and development through providing knowledge knowledge and skills for parents, connecting parent support services, especially workers with children under 36 months old.

(source: nhadn.vn, access date 6/8/2022)

Pursuant to Clause 1, Article 8 of Decree 105/2020/ND-CP stipulating the beneficiaries of the subsidy policy for preschool children who are the children of workers and employees working in industrial parks as follows:

- Policy beneficiaries
Children who are studying at pre-school education institutions of the people-founded or private type, which have been licensed by competent authorities to establish and operate in accordance with regulations, have a parent or caregiver or caregiver. I am a worker, an employee who is working in an industrial park with a labor contract signed by the enterprise in accordance with regulations.

Pursuant to Clause 2, Article 8 of Decree 105/2020/ND-CP stipulates the following policy contents:

Children who fall into the categories specified in Clause 1 of this Article are supported at least 160,000 VND/child/month. The support period is calculated according to the actual number of months of study, but not more than 9 months/school year.
The level of support shall be developed by the People's Committee of the province in accordance with the local budget capacity and submitted to the People's Council of the same level for consideration and decision.

5. Discussion and conclusion

We will propose some recommendations following:

- Attract businesses and artisans in craft villages and associate with schools and jobs in human resource training for industrial clusters. This is a demonstration of the combination of public private and socialization in human resource training for industrial cluster.

- Innovate program content, form and training.

Regarding the content, it is necessary to attach importance to vocational skills training. For workers that are skills, professional standards, for managers, professionals need to pay attention to training skills: Marketing, trade promotion; quality management skills; Financial skills, accounting...

In terms of training, one can study at vocational training centers, institutions or in
infrastructure enterprises. Appreciate vocational training in the form of vocational transmission.

- The city needs to create a mechanism to encourage the establishment of vocational training centers with the coordination between enterprises and vocational schools directly serving enterprises in industrial zones.

- Improve the training quality of vocational schools and vocational training centers by renewing training curricula, standardizing lecturers, strengthening technical facilities for vocational schools and centers. Along with the policies to encourage learners being applied today, there should be clearer and more specific policies for teaching and learners, for example, supporting investment in equipping vocational schools and training schools. Vocational training center, building a model program on training a number of occupations, training and remuneration for teachers.

- Protecting children as laborers and consumers in industrial zones by regulations and create good conditions for mothers and women to work in IC.

Fig 2 - More than forty Industrial clusters still develop in Hanoi

(source: internet)

Research limitation
Author can add quantitative analysis in this study.

Acknowledgement
Thank you editors and friends to assist this publishing

Conflicts of interest
There is no conflict of interest

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