



# Environment Protection and Regulations in Industrial Cluster (IC) Development - A Case in Hanoi Vietnam

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Received: 03 Jul 2023; Received in revised form: 03 Aug 2023; Accepted: 11 Aug 2023; Available online: 18 Aug 2023

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**Abstract**— Production and business establishments in industrial clusters (CCNs) have opportunities and conditions to increase productivity and reduce costs through taking advantage of geographical proximity. At present, some CCNs and the majority of CCNs are established and developed on the basis of value chain of production and product supply. Therefore, CCN has promoted cooperation, association and increased competitiveness of production and business establishments in the cluster. According to Michael Porter, CCNs have the potential to affect competition in three ways: i) By increasing the efficiency of firms in the Cluster; ii) By regulating innovation in the region; iii) By encouraging businesses in the area. Therefore, CCN is the nucleus that promotes regional and local socio-economic development

**Keywords**— IC development, industrial clusters, regulations, shortcomings.

## I. INTRODUCTION

First of all, according to DECREE No: 68/2017/ND-CP

Hanoi, May 25, 2017

ON MANAGEMENT AND DEVELOPMENT OF INDUSTRIAL Clusters In this Decree, the following terms are construed as follows:

PLANNING AND ESTABLISHMENT OF INDUSTRIAL Clusters

Section 1. INDUSTRIAL Cluster DEVELOPMENT PLANNING

Article 5. Industrial cluster development planning

1. Basis for formulation of industrial cluster development planning:

a) Socio-economic development planning; Industrial and handicraft development planning; Land use planning;

Construction planning and planning of other related industries, products and fields in the locality;

b) The demand for ground space to attract and relocate organizations and individuals to invest in production and business in the industrial cluster;

c) Ability to mobilize investment capital sources of enterprises, the State and other lawful capital sources for investment in building a system of technical infrastructure works of industrial clusters in the locality.

2. Contents of industrial cluster development planning:

a) Legal grounds and necessity for planning;

b) Assess and anticipate the development needs of industries, occupations, handicrafts and factors affecting the development of industrial clusters; demand for premises of organizations and individuals investing in industrial clusters;

c) Assessment of the current status and progress of planning, investment in construction of technical infrastructure, investment attraction, occupancy rate, and operational efficiency of each industrial cluster; aspects of gain, existence and cause;

d) Orientation for distribution and development of industrial clusters, justification for planning each industrial cluster (including: Name, location, area, and current land status on the principle of restricting the use of planned land for rice cultivation. , business lines, technical infrastructure investment progress, ability to connect technical infrastructure outside the industrial cluster; demand for land lease and sublease of the industrial cluster and advantages and disadvantages);

dd) Assessment of the current environmental status and environmental management of established industrial clusters in the area; forecast impacts, measures to deal with the environment of industrial clusters to be planned;

e) Estimated total investment in construction of technical infrastructure of industrial clusters; solutions on mechanisms, policies, the ability to mobilize investment capital sources; the plan for organizing the implementation of the planning;

g) Proposed planning list of industrial clusters according to the options; select an option and show it on the planning map (including: Name, location, area, industry, expected total investment in technical infrastructure, planning stage).

3. Funds for formulation of industrial cluster development planning shall be covered by local budgets and comply with current regulations.

4. The planning on development of industrial clusters in the province is made for each 10-year period, taking into account the prospects for the next 10 years, and announced no later than 30 days after the approval decision is issued.

Article 6. Formulation and approval of industrial cluster development planning

1. The order of formulation and approval of industrial cluster development planning shall comply with the law on socio-economic development master plan.

2. The Department of Industry and Trade shall assume the prime responsibility for, and coordinate with relevant departments, branches and district-level People's Committees in organizing the formulation and appraisal of the planning on development of industrial

clusters in the area, and submit it to the provincial-level People's Committees for submission to them. Ministry of Industry and Trade to agree on the planning as prescribed in Clauses 3 and 4 of this Article.

CCN is the geographical concentration of production - business establishments, organizations related to each other in terms of production, use of infrastructure and limiting environmental pollution. Therefore, CCN can be considered as the focal point for implementing internal linkages between industries and services and linking industry with rural areas in the region and locality. Therefore, CCN is the nucleus that promotes regional and local socio-economic development

### 1. Methodology

Authors have used qualitative and analytical methods, descriptive method for primary model, synthesis , historical and discussion methods in this paper.

## II. MAIN FINDINGS

### 2.1 Background

The English word Infrastructure is directly composed of two words: i) Infra below, the lower part is also called infrastructure and ii) structure means structure, structure) is translated as infrastructure or infrastructure. Some authors define: "Infrastructure or infrastructure is a general concept to refer to roads, railways, hospitals, schools, irrigation systems, water supply, etc., accumulated from central and local state investments. This concept also includes intangible assets such as capital and human resources, i.e. investments in workforce training. Infrastructure plays an important role in achieving high rates of economic growth and raising the overall standard of living of a country." According to this concept, infrastructure is seen as sectors and fields of the national economy, not only the material and technical conditions (building systems) created. established to ensure socio-economic development, but also has the human, financial, management and training factors and conditions to create and the material and technical conditions and operate them to serve as the foundation foundation for economic and social activities.

Vietnamese dictionary defines "Infrastructure is the whole system of works such as roads, electricity supply roads, water supply, drainage, waste... in relation to the constructions and houses being built. in that area. In my understanding, "infrastructure" is specialized works for

production and social life, and "infrastructure" is also a construction, but built in a certain area. As we say, the scope mentioned in "infrastructure" is narrower than "infrastructure".

An industrial cluster is a territorial form of production organization, it is an inevitable result of the process of agglomeration and concentration of production, of the process of rearranging and reorganizing production and business establishments in order to overcome restore environmental pollution, create better infrastructure for production and improve the competitiveness of production and business establishments in the cluster. CCN was formed and developed after the Decision No. 132/2000/QĐ - TTg dated 24/11/2000 on a number of policies to encourage the development of rural industries.

As of 2010, the whole country has planned about 1,785 CCNs with the corresponding land area of about 81,872 ha (table 2.2). In which, there are 873 CCNs that have been established, are under construction or are in operation with an area of land equivalent to 38,680 ha. The industrial land area for lease is about 9,646 ha, accounting for 25% of the industrial land area of the CCN according to the planning and 44% of the industrial land on the completed construction area.



Fig 1 - Hanoi develop ICs  
(source: internet)

## 2.2 Relevant Regulations

- a) Article 10. Building, managing and operating the industrial cluster database
- b) The local Department of Industry and Trade organizes the construction, management and operation

of the nationwide industrial cluster database; guide the Department of Industry and Trade to update data into the nationwide industrial cluster database.

c) The Department of Industry and Trade shall organize the construction, management, operation and guidance of the Department of Industry and Trade management under the People's Committee of the district to update data into the database of industrial clusters in the province; be responsible for fully, timely and accurately updating industrial cluster data in the locality into the nationwide industrial cluster database.

d) The specialized division of industry and trade management under the district-level People's Committee is responsible for fully, timely and accurately updating data on industrial clusters in the province into the database of industrial clusters in the province.

### III. DISCUSSION AND CONCLUSION

According to Document (CIRCULARS) No: 28/2020/TT-BCT

Hanoi, November 16, 2020

PROVISIONS AND INSTRUCTIONS FOR IMPLEMENTATION OF SOME CONTENT OF DECREE NO. 68/2017/ND-CP DATE MAY 25, 2017 OF THE GOVERNMENT ON MANAGEMENT AND DEVELOPMENT OF INDUSTRIAL Clusters AND DECREE No. 66/2020/ND-CP JUNE 11, 2020 OF THE GOVERNMENT AMENDING AND SUPPLEMENTING SOME ARTICLES OF DECREE NO. 68/2017/ND-CP

Section 2. INVESTMENT IN TECHNICAL INFRASTRUCTURE OF INDUSTRIAL Clusters

e) Article 6. Investment projects on construction of technical infrastructure of industrial clusters

f) Investment projects on construction of technical infrastructure of industrial clusters are not required to carry out procedures for deciding on investment policies as prescribed in Clause 1, Article 18 of Decree No. 68/2017/ND-CP.

g) Contents and procedures for formulation, appraisal, approval and management of investment projects on construction of technical infrastructure of industrial clusters comply with the provisions of Decree No. 59/2015/ND-CP dated May 18 June 2015 of the Government on construction investment project management and Decree No. 42/2017/ND-CP dated April



5, 2017 of the Government amending and supplementing a number of articles of Decree No. 59/2015 /ND-CP and other relevant laws.

h) When formulating a work construction investment project, the investor shall concurrently make a report on environmental impact assessment of the project. Contents and procedures for making, appraising and approving the project's environmental impact assessment report shall comply with the Government's Decree No. 18/2015/ND-CP dated February 14, 2015. on environmental protection planning, strategic environmental assessment, environmental impact assessment and environmental protection plan; Decree No. 40/2019/ND-CP dated May 13, 2019 of the Government amending and supplementing a number of articles of the Decree detailing and guiding the implementation of the Law on Environmental Protection and other legal regulations. other relevant laws.



Fig 2 - ICs development  
(source: internet)

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