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Suggestions for Industrial Clusters Development and a Case of CA Mau Province

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Abstract: In the context of free trade benefits, there is expansion in industrial clusters of Ca Mau province compared to the same period. In Vietnam, from the date of decision 132/2000/QĐ - TTg dated 24/11/2000 on a number of policies, encouraging the development of rural industries until before the decision 105/2009/QĐ - TTg dated 19/8/2009, CCN is understood and named very differently between localities in the country, where it is called the craft village industrial cluster, where it is called the rural industrial cluster, where it is called the medium and large industrial cluster small medium...In addition to the seafood processing enterprises of the province, the rest of the enterprises are mainly small-scale enterprises, family businesses, so the ability to access and find out information through the Internet, communication channels, Electronic information has many limitations, greatly affecting the competitiveness of enterprises.

The typical products of the province are mostly produced in small quantities, depending on the season, the quality and design of goods have not met the required standards and have not met the market demand, especially for large, modern supermarkets in the country and importers. The technical infrastructure of industrial zones and clusters in the province has not been invested yet, so it has not attracted investors to exploit the potentials of the province. (violet.org.vn).

Keywords: Industrial Clusters, Development, Ca Mau Province, Vietnam.

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INTRODUCTION

Currently, there is a divergence of understanding among Vietnamese and foreign scholars and organizations about industrial clusters.

The concept of "Geographical clusters" or "Industrial districts" appeared in the late 19th century by Alfred Marshall, stemming from his study of the concentration of industrial production in the North of England. According to Marshall, Industrial clusters have three basic advantages from centralization: The spread of information; The specialization and division of labor between establishments and the development of a diversified skilled labor market. Later, the concept evolved into two different industrial approaches. French researchers such as Courlet et Pecqueur, Colletis ... call local production systems. The British and American researchers called the Industrial Cluster "Industrial Cluster" or "Industrial districts" with the approach of G.Becattini; Michael Porter...

According to G.Becattini, Industrial cluster is a social-territorial entity characterized by the presence of a community of people and business populations in a certain geographical and historical space.

According to GS. Michael Porter (1990), Industrial cluster is the geographical concentration of companies and organizations that are related in a

particular sector and consist of interconnected industries. Industrial cluster concentrates input suppliers, product consumers, as well as manufacturers of other related products. Industrial clusters may also include organizations such as universities, research institutes, vocational schools and trade associations.



Figure 1. New Ca Mau industrial clusters
Source: Internet

METHODOLOGY

The collected data will be aggregated, descriptive statistical methods, comparative methods and interpretation of research results will be used by the writer to analyze the current situation of Vietnam's C Mau province industrial clusters

MAIN FINDINGS

Related Studies on Industrial Clusters Development

Canon effect and policy implications for industrial cluster development in Hanoi. Nguyen Thi Xuan Thuy and Truong Thi Nam Thang; Vietnam Development Forum. Proceedings of the scientific conference "Speeding up the industrialization and modernization process of the Capital", Hanoi. 2010, National Economics University Publishing House. The article researches 3 issues:

- The concept and role of CCN (industrial clusters). According to the authors, the concept of industrial clusters in Vietnam is different from the usual concept of CCN in the world. Industrial clusters development is part of regional development policy.
- Introduction to the history of industrial clusters development. According to the authors, the first person to study industrial clusters was Alfred Marshall (1890) and the one who did an in-depth study on linking industrial clusters with competition and industrial development policy was Michael Porter. Kuchiki (2007) built a policy model for industrial clusters development, which is essentially an action plan consisting of steps to be implemented in chronological order with two main phases: focus and innovation. Since the early 2000s, Japan has developed and implemented an industrial clusters policy plan
- Introduction of TLIP electronic *industrial clusters* (cooperation between Sumitomo corporation of Japan (58%) and Dong Anh mechanical company of Vietnam (42%) and Canon effect in Hanoi. 2001 and 2002 started to operate - it is the main company of *industrial clusters* TLIP.

Reorganize the textile and garment industry cluster to increase the export capacity of Vietnam's garment and textile industry. This Dong, Economic and Development Magazine No. 154 (April 2010).

The article studies a specific *industrial clusters* model of Vietnam that is the textile *industrial clusters*. The author introduced different concepts of *industrial clusters* and pointed out the benefits of territorial organization of production. According to the author, Vietnam's *industrial clusters* brings four basic benefits: i) Enterprises in the *industrial clusters* have the opportunity to increase productivity by taking advantage of geographical proximity; ii) The geographical proximity of many enterprises in the same industry or sector encourages creativity and innovation; iii) Participation in the CCN creates public awareness of a set of businesses in the CCN; iv) Participation in CCN enables businesses to receive government support.

The author has assessed the current situation of production organization according to CCN of Vietnam's garment export industry and proposed to reorganize the

textile and garment industry to enhance the export capacity of Vietnam's garment industry.

Industrial cluster models: implications for the development of craft villages and supporting industries in Vietnam. Dr. Vu Hoang Nam, Economic and Development Magazine No. 152 (October 2010).

On the basis of documents related to CCN, the author has analyzed the advantages and limitations of different conceptions of CCN such as: the concept of Michael Porter (1990), of the Ministry of Economy, Trade and Industry Japan (2001), by Sonebe & Otsuka (2006); by Kuchiki (2005). In particular, the author has paid attention to the issue of choosing a suitable CCN development model for Vietnam. According to the author: among the CCN development models, the endogenous development model of Sonebe and Otsuka has important implications for the development of CCNs in Vietnam. Meanwhile, Kuchiki's CCN development model is important for the development of the supporting industry.

In summary, there has been not many systematic research on building infrastructure of industrial zones in Hanoi city as well as Ca Mau province.



Figure 2. Developing clusters in Ca Mau
Source: internet

Planning Industrial Clusters in Ca Mau Province, Vietnam

Current status of industrial development

According to the master plan on development of concentrated industrial zones in Ca Mau province up to 2015 and orientation to 2020 approved by the Prime Minister in Official Dispatch No. 179/TTg-CN dated February 1, 2008 with With a total area of 1,477 hectares, Ca Mau province has 04 industrial zones: Khanh An Industrial Park, Hoa Trung Industrial Park, Song Doc Industrial Park, Nam Can Industrial Park (located in Nam Can Economic Zone). Especially, Nam Can economic zone in Ca Mau province has been approved by the Government for construction planning until 2030, with a scale of 11,000 ha. This is a multi-sector, multi-sector

economic zone, an international trade hub of Ca Mau province and the Mekong Delta; There is also a Gas - Electricity - Fertilizer Complex, with two power plants, with a capacity of 1,500 MW and a fertilizer plant with a capacity of 800,000 tons/year, which has been put into operation, not only playing a particularly important role, important in promoting socio-economic development of Ca Mau province, but also creating a great spillover effect, being the driving force for socio-economic development in general for the whole region; On October 28, 2011, the Provincial People's Committee issued Decision No. 1662/QĐ-UBND approving the "Plan for Industry and Trade Development of Ca Mau Province to 2020" on that basis, the whole province will planning 14 industrial clusters with a total area of 545ha However, in the process of implementation and development investment, there have been some changes compared to the original planning orientation as follows:

- **Industrial zones:** According to Official Letter No. 242/TTg-KTN dated February 25, 2014 of the Prime Minister on the adjustment of the development planning of Ca Mau IPs until 2020, there are 03 specific industrial zones: (1) Khanh Industrial Park An, area of 235.86 ha with 19 projects in operation. The industries are seafood processing industry, forestry products processing industry, gas liquefaction industry, post-gas industry, building material production industry, packaging; (2) Hoa Trung Industrial Park, area 327.13 ha, with 11 projects in operation. The professions are seafood processing industry, services and industries serving aquaculture and fishing; (3) Particularly, Song Doc Industrial Park is submitting to the Prime Minister for approval the decision to establish the Industrial Park.
- **Industrial clusters:** Out of 13 industrial clusters, there are currently 02 operating industrial clusters (Ward 8 and Hoa Thanh). Ward 8 CCN has 82 projects in operation. The main occupations are seafood production and processing, mechanical engineering for agriculture and fishery, composite production, plastic products; Hoa Thanh Industrial Park, Ca Mau City, Ca Mau City People's Committee is preparing to complete the dossier to establish the CCN Management Board to invite investors.
- **Energy field:** The potential for renewable energy development in Ca Mau province according to the approved planning is very large, especially wind power (over 3,600MW), solar power (over 1,500MW) being used by many companies. Domestic and foreign enterprises come to seek opportunities and invest in exploitation.
- Regarding wind power, up to now, it has attracted about 40 domestic and foreign enterprises to seek opportunities and **Invest in exploitation:** There have been 08 projects approved for investment with a total capacity of 550MW, expected to be put into commercial operation in the period of 2021 - 2025.

Regarding the development of rooftop solar energy, 172 customers (organizations and individuals) invested and installed with a total capacity of 1,872.06 kWp, using 2-way meters to connect to the national grid.

Regarding the industrial base: including the processing of agriculture, forestry, fishery and foodstuffs is the industry accounting for a large proportion of the economy of Ca Mau province, in which the spearhead is the seafood processing industry. In terms of the number of industrial enterprises, Ca Mau province currently has more than 280 industrial enterprises. In which, the largest concentration is in the food and beverage processing industry with 146 enterprises (accounting for 51.8% of the number of industrial enterprises); Mechanical, electronic and metal production group has 16 enterprises; wood and paper processing group has 09 enterprises; group of chemicals and fertilizers (08 enterprises)...

The province's main industry is seafood processing, which has improved its quality in both breadth and depth, which is reflected in the number of enterprises, processing output and export markets increasing year by year. Up to now, the province has 29 seafood processing enterprises with 39 factories with a total capacity of 185,000 tons. Enterprises have focused on investing in technological innovation, upgrading equipment, diversifying products, gradually improving quality and competitiveness, expanding consumption markets; total production of processed shrimp in the period 2016 - 2019 is estimated at 551,178 tons; export turnover increased by an average of 6.91% per year (in 2016 it was 982 million USD, in 2017 it was 1,089 million USD, in 2018 it was 1,179 million USD and in 2019 it was estimated to reach 1,200 million USD). (Source: vioit.org.vn)

CONCLUSION

According to the OECD (Organization for Economic Cooperation and Development): Industrial clusters can be thought of as “a production system consisting of interdependent firms (professional suppliers) training institutions (schools) universities, research institutes, engineering companies...), intermediaries (brokers, consultants...) and customers, linked together in a value-added production system.”



Figure 3. Ca Mau clusters expanded
Source: Internet

For industrial clusters included in the industrial cluster development planning approved before January 1, 2019 (still valid) or as agreed by the Ministry of Industry and Trade, the Provincial People's Committee approves adjustments and supplements in accordance with the provisions of this Decree. Regulations, meeting the conditions for establishment of an industrial cluster, the Provincial People's Committee shall consider establishing an industrial cluster according to the provisions of Decree No. 68.

For the case of annulment of the industrial cluster development planning approved by the competent authority before January 1, 2019; adjusting and supplementing the industrial cluster planning without the consent of the Ministry of Industry and Trade; to establish an industrial cluster that is not included in the planning or has an area larger than 5 hectares in comparison with the planning agreed upon by the Ministry of Industry and Trade, the Chairman of the Provincial People's Committee assigns the Department of Industry and Trade to assume the prime responsibility for, and coordinate with the Department of Construction, other departments in The relevant branches and units shall review and handle according to the provisions of law.(source: camau.gov.vn)

Conflicts of interest

There is no conflict of interest

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