

DOCTORAL DISSERTATION'S NEW CONTRIBUTIONS

Title:

**SPATIAL ORGANIZATION OF AGRO-INDUSTRIAL PARKS
IN THE NORTHWEST (THE MAIN RESEARCH AREA IS SON LA PROVINCE)**

Specialization: **Architecture** - Code: **9580101**

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SUMMARY OF DOCTORAL DISSERTATION'S NEW CONTRIBUTIONS

Thesis research on spatial organization of Agro Industrial Park (AIP) in the Northwest. This is a new centralized production model in Vietnam, combining the strengths of industrial production with agriculture. This model is very suitable for development in areas with a lot of potential and advantages in agricultural production but lacking stimulating factors.

The dissertation has achieved four research outcomes:

1. Clarifying the definition of AIP as a concentrated production area including Agro industrial production facilities (AIPFs) and support services of agricultural value chains; organized in an area with defined boundaries.

2. Identify the typical characteristics of the AIPs in the Northwest:

+ Identify types of AIPs in the Northwest: production AIP, supporting AIP, Hi-tech AIP, and mixed AIP.

+ Identify basic functional components (agricultural production zone, industrial production zone, central zone and technical infrastructure zone) and expanded functional components (research-experiments zone, expert accommodation zone, exhibition zone, eco-tourism,...)

+ Identify the characteristics of various types of AIPFs (crop production,

livestock production and industrial production) in terms of products, scale and production technology.

3. Propose 4 perspectives and 3 principles about spatial organization of AIP and the architecture of AIPFs in the Northwest. This is the orientation for proposing solutions to exploit and promote the region's unique natural factors (location, terrain, climate,...) economic, political, social, and economic factors. technical infrastructure and natural landscape environment. Key directions: organize Multi-functional centralized production park, use the most of available conditions to save investment costs, save land area, protect the living environment and natural landscape environment.

4. Proposing solutions for spatial organization AIPs in the Northwest under the impact of typical factors of the region:

+ Develop a 4-step sequence for selecting the type, scale and location of AIP.

+ Propose solutions to organize the total area according to types of AIPs.

5. Propose architectural solutions for AIPFs in the Northwest's AIPs according to the orientation: simple, coherent architectural shape integration with the common landscape, functional subdivision according to terrain elevation from top to bottom with cell level increasing contamination, using a steel structure frame with a lightweight cover that combines many frame shapes to increase aesthetics.

The new contributions of this dissertation's research results go hand in hand with its content & match the set-out research aims.

PhD CANDIDATE