## INFORMATION ON DOCTORAL DISSERTATION IN ECONOMICS

Thesis: "Optimizing the transporting system

for exporting rice in Viet Nam".

Speciality: Transport organization and Management.

Code: 62840103

PhD candidate: Nguyen Thi Lien

Supervisor: 1. Assoc. Prof. Pham Van Cuong

2. Assoc. Prof. Vu Tru Phi

**Training institution:** Vietnam Maritime University

### 1. Aim and tasks of the research:

Aim: Optimizing the transporting system for exporting rice in Viet Nam.

Tasks: To get the above - written aim, the thesis has laid and completed the following tasks:

- Building up the literature review on the transporting system for exporting rice;
- Evaluating the present state of the transporting system for exporting rice in Vietnam and making a further look on the issue in question in the future on stages. Based on these, PhD candidate can select the basic parameters as the basement to build an optimum transporting system for exporting rice in Viet Nam;
- Building up the optimum transporting system for exporting rice matching the present situation including: Forming the general model for transporting for rice exporting; the model for each case, calculating model and selecting the optimal methods for each specific case of the transporting system for exporting rice.

# 2. Objective and scope of the thesis:

*Objective*: The objectives of the thesis are the general model and case models which help optimize the transporting system for exporting rice.

*Scope*: The amount of rice exported originating from the Cuu Long Delta is proportional to 95,17% of Vietnam exported rice. This is why PhD candidate focused on analysizing the transporting system for exporting rice in the Cuu Long Delta (the Western - Southern region) in each stage, counting to the year 2030 by inland waterway and by sea at optimum.

# 3. Research methodology

To accomplish the tasks, the thesis has applied the following methods:

- Summarization, statistics and analysis, comparison and contrast, systematization and logic, dialectical materialism, historical materialism;
  - Modeling and economic mathematics;

- Comparative summarization, specialist analysis.

Besides these, the thesis has also employed some professional calculation software, including: LINGO 13.0 FOR WINDOWS, Exel, etc.

## 4. Scientific and practical significance:

Scientific significance:

- The research result has contributed on the accomplishment of the scientific theory and systematization of science, logic on the transporting system for exporting rice in Viet Nam.
- Recommending the methodology to construct the Vietnam rice exporting transporting system, based on the basic parameters ensuring the top optimum, being suitable to the prevailing situation in Viet Nam.
- The research result has particularly contributed to the specialist science, transport organization and management. Moreover, the thesis can be very good reference for experts, plan makers, ect,...

Practical significance:

- The research result has constructed successfully the general model of transporting system for exporting rice in Viet Nam, basing on mathematic model and primary parameters selected;
- Constructing the rice exporting transporting system in general and for each solution of the two specific cases. Based on these, PhD candidate can summarize, analyze, estimate and select the optimal model for the rice exporting transporting system at present, in the development stage in future up to the year 2030, trending benefically and ensuring high economic effect.
- The model of exported rice shipping system has been constructed, applied widely in fact, suitably with the opinions of objects and elements taking part in the activities of shipping economy, shipping exploitation.
- The model of rice exporting transporting system has been constructed and can be applied widely in the reality, suitable to the factors and participants in the field in question.

## 5. New contributions of the thesis:

- Systematization of the theoretical background on shipping system, optimization of rice - exporting transporting system. Moreover, defining on our own the term "Vietnam rice - exporting transporting system" ensuring logic, science and reality. Analyzing and estimating the details of rice - exporting transporting system in the region of Cuu Long Delta. This is the ground for us to select and analyze the dialectical relationship between 7 primary parameters, to construct Vietnam optimal rice - exporting transporting system. These seven primary parameters includes: Estimation of the amount of exported rice; Rice exporting market; Rice importing country; Inland waterway routes for rice - exporting transportation; Means for

exporting rice transportation; Rice exporting loading and discharging port; The charge of rice exporting transportation;

- Constructing successfully the general model of rice exporting transportation, from which to construct the specific model for each case of rice exporting transportation, from the primary parameters selected, in details:
- Case 1: Main port (transferring) of Vietnam exported rice is Sai Gon port. This is the case of being applied at present. Because the Dinh An mouth piloting ships into Can Tho port is quite shallow, constantly raised by silt, sand bar, etc., the ships with over 5000 tons get difficulty passing Dinh An mouth.
- Case 2: Main port (transferring) of Vietnam exported rice is both Sai Gon port and Can Tho port. This is the case constructed to apply since 2020, because "Project for large vessel channel into Hau river" (called Quan Chanh Bo channel) belonging to Tra Vinh province, expected to be completed and taken into exploitation in 2018, when the ships with 10.000 tons 20.000 tons in load reduction can directly pass the channel into Can Tho.
- Having constructed mathematic model, particular calculation of each solution for case 1 and case 2 (each case is calculated in 5 solutions), from which to define and select successfully the optimal solution for each case of the model of exported rice shipping system.

In the usage of calculation software of LINGO 13.0 FOR WINDOWS, supplying the result quickly, particularly, in details and high confidence.

### 6. The construction of the thesis

It consists of parts in following order: Opening; Main content (*including 3 chapters*); Conclusion and recommendations; List of research projects published relating to the thesis; Reference; Index (*including 2 indexes*).

Hai Phong, 23/01/2017