

**INFORMATION SHEET ON THE NEW CONTRIBUTIONS OF THE  
PhD THESIS**

1. **Thesis title:** Developing a socio-economic climate change impact assessment model for the city of Da Nang.

- Code: 62440222

- Specialization area: Meteorology and Climatology

2. **Doctoral Candidate:** Trần Duy Hiền

Supervisors:

- Associate. Prof. Dr. Trần Hồng Thái;

- Associate Prof. Dr. Trần Quang Đức.

Host Institute: Vietnam Institute of Meteorology, Hydrology and Climate Change, Ministry of Natural Resources and Environment.

3. **Thesis overview:**

On the national level as a whole, Vietnam is among the few nations heavily affected by climate change (CC). On the regional level, Da Nang, located in the Central Coastal Zone of Vietnam faces challenges due to the impacts of CC and Sea level rise (SLR).

The study of the impacts of climate change should reach beyond determining the causes, indications of global warming, sea level rise and determine the impacts of climate change on natural, natural resources, environmental, ecological, natural disaster, and socio-economic conditions (population, poverty, livelihood, energy, industry, urban and transportation especially for the coastal communities), and determine vulnerability. Through which climate change mitigation and adaptation measures could be proposed.

Assessing the impacts of climate change on socio-economic conditions have been done in previous studies, nonetheless, the scale of assessment has been rather limited to particular sectors, without any overall and detailed assessment on a broader scale. While climate change impacts on natural, environmental and socio-economic conditions are becoming more apparent, there is an urgent need to come up with a study methodology (framework) to determine the impacts of climate change on socio-economic conditions.

On the other hand, assessing vulnerability is an important tool to communicate the impacts and provide the information for policy makers to determine adaptation measures. Assessing climate change vulnerability is essential in establishing a climate change adaptation plan.

Therefore, the doctoral candidate chooses the title of the research to be: “Developing a socio-economic climate change impact assessment model for the city of Da Nang” and have successfully reached the study objectives, which in turn are:

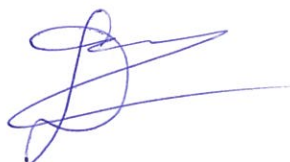
- Successfully established a climate change impact and vulnerability assessment model for the city of Da Nang;
- Quantitatively determined the impacts and vulnerability of climate change and sea level rise for selected socio-economic sectors in Da Nang.

**4. Contributions of the thesis:**

- Quantitatively determined the impacts of climate change: flooding in agriculture, industry, transportation; yield and growth changes of paddy rice and maize in agriculture;
- Quantitatively determined the vulnerability to climate change of selected socio-economic sectors.

**Supervisors**

**Doctoral Candidate**



**Assoc. Prof. Dr. Tran Hong Thai**

**Assoc. Prof. Dr. Tran Quang Duc**

**Tran Duy Hien**