Phụ lục II.10.9

INSTITUTE OF SCIENCE METHOLOGY AND CLIMATE CHANGE	**SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness**

NEW CONTRIBUTIONS INFORMATION PAGE ABOUT ACADEMY, THEORETICAL OF THE DOCTORAL THESIS

1. Thesis title: *"Study on solutions to strengthen the capacity of the police in disaster prevention and search and rescue in the context of climate change".*

- Industry: Climate change;
- Code: 9440221.

2. PhD student: Nguyen Van Khiem

Instructor 1: Assoc. Dr. Huynh Thi Lan Huong

Instructor 2: Assoc. Dr. Mai Van Khiem

Training institution: Institute of Meteorology, Hydrology and Climate Change.

3. Introduction to the thesis:

Vietnam is one of a few countries heavily affected by climate change. In addition, with its geographical location and complicated topographical conditions, in our country, in recent years, natural disasters have occurred in all regions of the country, causing great loss of life, properties, economic, cultural and social infrastructure, adverse impacts on the environment. Especially, in the context of climate change, natural disasters in Vietnam are increasing in number, intensity and degree of impact, causing negative impacts on production activities and socio-economic development.

The Public Security Sector is one of the ministries/sectors that make important contributions to Vietnam's efforts in natural disaster prevention and control. The People's Public Security Force is the core force in the evacuation of people, vehicles and properties, search and rescue, and assurance of security, social order and safety under the direction of competent persons. However, the public security sector, especially the police in units and localities, has not yet met the current requirements. In order to well meet the actual requirements and promote the role for the tasks of responding to climate change, natural disaster prevention, search and rescue as well as overcoming the consequences of natural disasters, the assessment of this activity of the police sector needs to be carried out methodically and scientifically. Therefore, the thesis focuses on researching the theoretical and

practical basis to propose the contents for the assessment of disaster prevention, earch and rescue activities, thereby proposing solutions to enhance the capacity of the people. force to perform the tasks of the Ministry of Public Security in the context of climate change.

The objectives of the thesis are: (1) Assess the current status and contribution of the People's Public Security force in natural disaster prevention, search and rescue and the shortcomings and challenges in the context of climate change; (2) Proposing solutions to strengthen the capacity of the People's Public Security force in the context of climate change, contributing to disaster prevention, search and rescue.

4. List the new contributions of the thesis:

(1) On the basis of top-down and bottom-up approaches, the thesis has identified the disaster management process and necessary contents to serve the assessment of the current status, contributions and challenges of the disaster management system and public security sector in preventing, responding to and overcoming the consequences of natural disasters and extreme climate increases due to climate change.

(2) The thesis has assessed the shortcomings that need to be solved in order to improve the effectiveness of the police in disaster prevention, search and rescue in the context of climate change.

(3) The thesis has proposed a number of solutions to strengthen the capacity and contribution of the police sector in disaster prevention, search and rescue in the context of climate change, including: (1) Proposing the organization of the operating apparatus; (2) Completing mechanisms and policies; (3) Strengthening resources; (4) Propaganda, education and raining to improve qualifications.

- ***Scientific significance:*** The thesis has proposed a closed 4-step disaster management process and proposed contents for assessing the current status and contribution of the police in disaster prevention and search rescue.

- ***Practical significance:*** The results of the thesis are to support the managers of the Ministry of Public Security in applying solutions to improve the effectiveness of natural disaster prevention, search and rescue in the context of climate change.

- The process proposed in the framework of the thesis can be applied to other management levels in the locality (province level, district level and commune level) to serve disaster prevention, search and rescue.

- *Publication:* The PhD student has published 04 scientific articles, including 03 articles in the Journal of Climate Change Science and 01 article in the Journal of Hydrometeorology. In addition, the PhD student also has a number of articles published in the Journal of Science, Technology and Environment of the Ministry of Public Security. This ensures the richness and reliability of the data and the publicity of the research results.

- *Other contributions:* The PhD student has worked as a project manager for 01 grassroots level project; participate in implementing 02 grassroots level projects and 02 ministerial level projects; The PhD student chairs and advises on organizing training courses in response to climate change, disaster prevention, search and rescue for units of Traffic Police, Mobile Police, Fire and Rescue Police, Training Department and Police in 63 provinces and cities nationwide.

**** General assessment***

- PhD student Nguyen Van Khiem has a spirit of learning and working actively, seriously, with enthusiasm and high responsibility during his study at the Institute, at the Office of the Ministry of Public Security (Standing Committee of the Steering Committee for Response) climate change, disaster prevention, search and rescue/Ministry of Public Security), at Nghe An Public Security. The results of the Thesis are rich, reliable and up-to-date data. The thesis is elaborately built, in accordance with current regulations and has been revised and supplemented according to the comments.

- The guiding staff gave comments to PhD student Nguyen Van Khiem at the grassroots thesis evaluation session on November 30, 2021 and unanimously appreciated the Thesis, the thesis completely satisfied and meet the requirements of a PhD Thesis in Climate Change.

Instructor		**Postgraduate**
Instructor 1	**Instructor 2**	
Assoc. Dr. Huynh Thi Lan Huong	**Assoc. Dr. Mai Van Khiem**	**Nguyen Van Khiem**