

**ENVIRONMENTAL CRIME: A CASE STUDY OF
WILDLIFE TRAFFICKING IN THAILAND**



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THE DEGREE OF DOCTOR OF PHILOSOPHY
(CRIMINOLOGY, JUSTICE ADMINISTRATION AND SOCIETY)
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entitled
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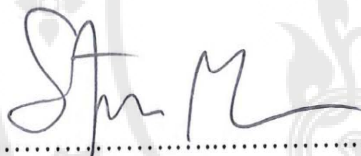
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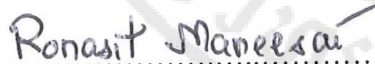
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ABSTRACT

Wildlife trafficking is a prolonged crisis of environmental crime in Thailand. The policy of wildlife also regulated without thoughtful studying on the problems. Ineffective law enforcement and corruption of officials regarding wildlife trafficking has become a problem that cause huge damage to Thailand. The negative outcomes therefore led to explore Green Criminology possibly defined the situation and occurrences of wildlife trafficking in Thailand. Including, the policy of protection of suppression in wildlife trafficking in Thailand appeared whether the way to decline wildlife trafficking in Thailand. The methodology was qualitative research. Study on documentary and in-depth interviews was conducted with the key informants who are involved in the prevention and suppression of wildlife trafficking from public agencies, private sectors, academic sector and civil society.

The Green Criminology concept can be demonstrated the situation of wildlife trafficking in Thailand because it causes huge damage to humans and society, wildlife, environment and ecosystems. Even though Thailand has policies to protect and suppress wildlife trafficking, however, wildlife trafficking repeatedly occurs in Thailand due to problems on law enforcement, policy and agency and offender. Those were obstacles to the effective implementation of policies. Thus, cooperation among government agencies, private sectors, academic sectors and civil society is required to achieve both proactive and reactive operations in order to reduce problem of wildlife trafficking in Thailand.

**KEY WORDS: WILLIFE/ TRAFFICKING/ ENVIRONMENT/
GREEN CRIMINOLOGY**

อาชญาวิทยาสิ่งแวดล้อม: กรณีศึกษาการลักลอบค้าสัตว์ป่าของไทย

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บทคัดย่อ

การลักลอบค้าสัตว์ป่าเป็นปัญหาอาชญากรรมสิ่งแวดล้อมที่เกิดขึ้นในไทยมายาวนาน อีกทั้งการกำหนดนโยบายด้านสัตว์ป่าที่ไม่ได้ศึกษาถึงสภาพปัญหาอย่างลึกซึ้ง ความอ่อนแอในการบังคับใช้กฎหมาย และการทุจริตของเจ้าหน้าที่ จึงทำให้การลักลอบค้าสัตว์ป่าที่เกิดขึ้นกลายเป็นปัญหาที่สร้างความเสียหายต่อประเทศ จึงนำมาสู่การศึกษาว่าแนวคิดอาชญาวิทยาสิ่งแวดล้อมสามารถอธิบายสถานการณ์การลักลอบค้าสัตว์ป่าที่เกิดขึ้นในไทยได้หรือไม่ อย่างไร อีกทั้งนโยบายป้องกันและปราบปรามการลักลอบค้าสัตว์ป่าของไทยมีแนวทางการป้องกันและปราบปรามให้การลักลอบค้าสัตว์ป่าที่เกิดขึ้นในไทยลดลงหรือไม่ อย่างไร โดยใช้ระเบียบวิธีวิจัยเชิงคุณภาพ ด้วยการศึกษจากเอกสารการสัมภาษณ์เชิงลึกผู้มีส่วนเกี่ยวข้องด้านการป้องกันและปราบปรามการลักลอบค้าสัตว์ป่าจากหน่วยงานภาครัฐ ภาคเอกชน ภาควิชาการ และภาคประชาสังคม

โดยแนวคิดอาชญาวิทยาสิ่งแวดล้อมสามารถนำมาใช้อธิบายสถานการณ์การลักลอบค้าสัตว์ป่าที่เกิดขึ้นในไทยได้ เนื่องจากสถานการณ์ที่เกิดขึ้นสร้างความเสียหายต่อมนุษย์และสังคม สัตว์ป่า สิ่งแวดล้อมและระบบนิเวศ อย่างไรก็ตามแม้จะมีแนวทางการป้องกันและปราบปรามการลักลอบค้าสัตว์ป่าแต่การลักลอบค้าสัตว์ป่าก็ยังคงเกิดขึ้นในไทยอย่างต่อเนื่อง เนื่องจากจากปัญหาด้านกฎหมายและการบังคับใช้กฎหมาย ด้านนโยบายและองค์การ และด้านผู้กระทำผิด ซึ่งเป็นอุปสรรคต่อการนำนโยบายไปปฏิบัติให้เกิดผล ดังนั้นการประสานความร่วมมือทั้งจากหน่วยงานภาครัฐ ภาคเอกชน ภาควิชาการ และภาคประชาสังคม เพื่อให้เกิดการดำเนินงานทั้งเชิงรุกและเชิงรับ จะทำให้ปัญหาการลักลอบค้าสัตว์ป่าที่เกิดขึ้นในไทยนั้นมีแนวโน้มลดลง

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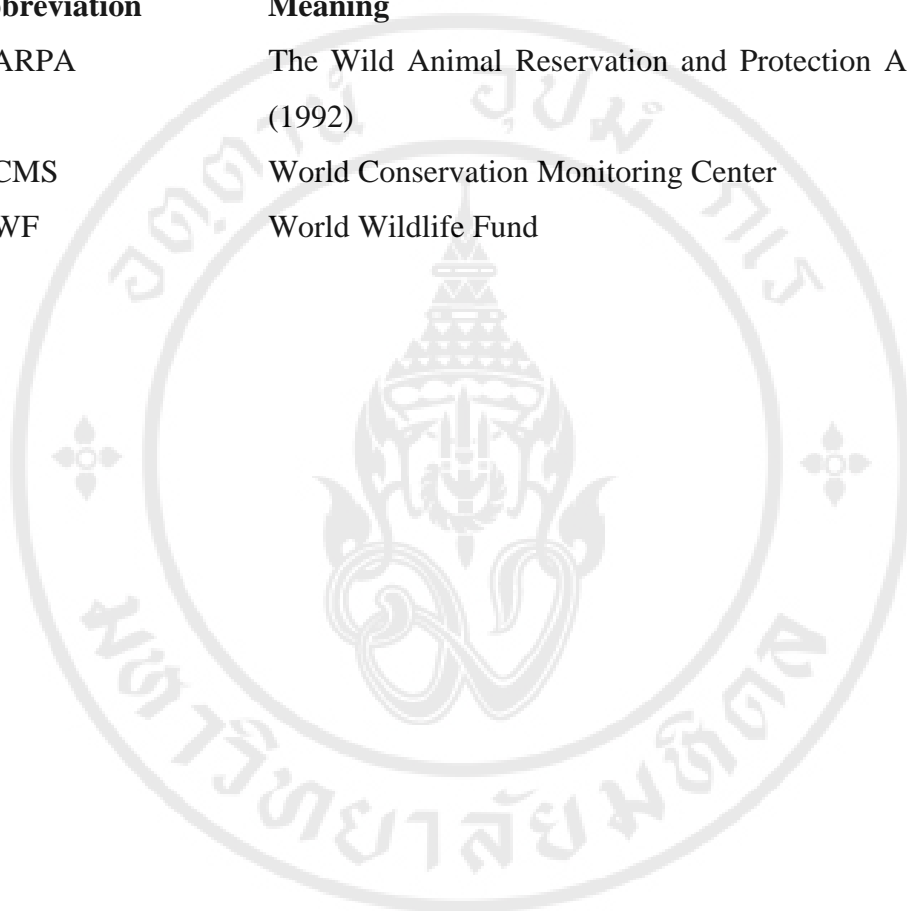
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LIST OF ABBREVIATIONS

Abbreviation	Meaning
COP	Conference of the Parties
CPT	Crime Pattern Theory
DNP	The Department of National Parks, Wildlife and Plant Conservation
IRB	Institution Review Board
IUCN	International Union for Conservation of Nature
NRECD	the Natural Resources and Environmental Crime Division
RAA	Routine Activity Approach
RAT	Rational Choice Theory
RCP	Rational Choice Perspective
SARS	Severe acute respiratory syndrome
SCPT	Situational Crime Prevention Theory
Thailand-WEN	Thailand Wildlife Enforcement Network
The CITES Convention	Convention on International Trade in Endangered Species of Wild Fauna and Flora
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNICR	United Nations Interregional Crime and Justice Research Institute
UNODC	United Nations Office on Drug and Crime
UNTOC	United Nations Convention Against Transnational Organized Crime
USAID	United States Agency for International Development
USAID	United States Agency for International Development

LIST OF ABBREVIATIONS (cont.)

Abbreviation	Meaning
WARPA	The Wild Animal Reservation and Protection Act B.E. 2535 (1992)
WCMS	World Conservation Monitoring Center
WWF	World Wildlife Fund



CHAPTER I INTRODUCTION

1.1 Background and Justification

Wildlife are key performance indicators to demonstrate how the exuberance of forests and Ecology; of which means that they need to be protected and apportioned as useful as possible for maximum benefit. In order to conserve a variety of species of wildlife and conserve the ecosystem to be balanced; issues have to be averted and reduce less damage; especially international trade business.

This is a type of business that could affect many species of wildlife animals; and the livelihood of humans in future generations. This follows the conditions of the Convention of International Trade in Endangered Species of Wildlife Fauna and Flora (CITES). Since 1975. it has been enforced to be acted upon seriously. “No matter if there are conditions or rules about selling species of wildlife animals, the amount of selling and buying of wild animals has increased exponentially; especially since 1978 till the present” (Broad, Mulliken, & Roe, 2003).

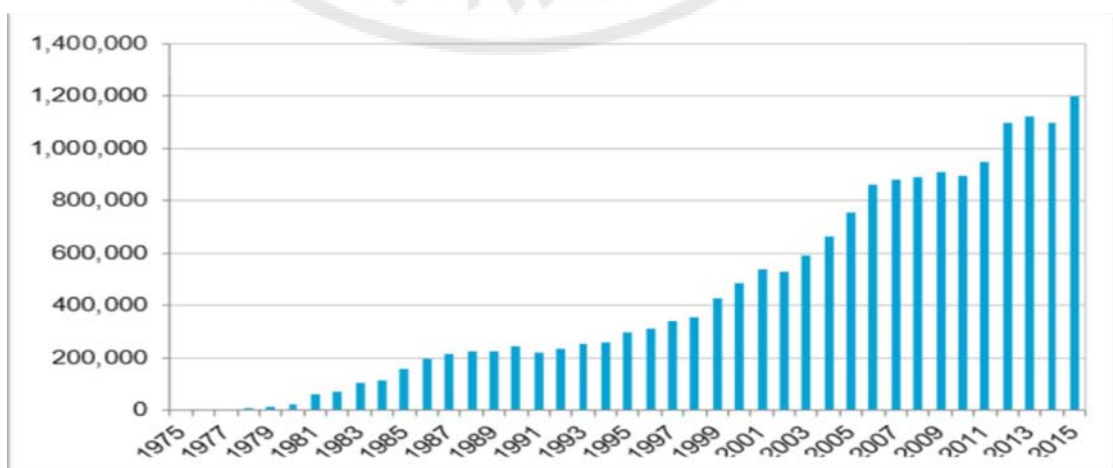


Figure 1.1 International Trade of Endangered Species of Species of Wild Fauna and Flora 1975–2015

Source: CITES, 2018.

When customers request wildlife continuously, they want to be responded to quickly. For instance, some individuals want wild animals for the ingredients of their food, medicines, to be pets, animal test subjects, or want to exhibit these wild animals, etc. From being seriously enforced by the CITES Convention, it has focused on these conditions set forth and had affected wildlife animals quite often; in terms of not being able to buy or sell them. At the same time, if the customer request too frequently there are rules in place to not purchase or sell wildlife animals. As a result, wildlife trafficking is prominent because of there being enforced rules. Inside the country, wildlife trafficking is evident; as well as through the international trade of foreign countries; including individuals to large organizations.

The United Nations Office on Drug and Crime (UNODC) realized that there is crime determined from international trade. It's known as a phenomenon that could occur in every continent around the world, where crime is present. This is a problem that has to be resolved, and protected; so animals would be able to survive from being attacked from humans. There is an important component that we could have for crime suppression of other types of crime. For example, transnational crimes, organized crime, and economic crime until terrorism, corruption, money laundering; of which everything could be hidden through trafficking. This especially true around Africa and Asia, that has a lot of natural resources. This is the reason why criminal crime and organized crime is focused upon throughout those particular continents that criminals want to traverse to. "In addition, they could go to that said continent to obtain benefits from wildlife animals with neglecting the outcome that would occur that would affect humanity" (United Nations on Economic and Social Council, 2002, p.6).

This demonstrates that there is a lot of observable damage created from wildlife trafficking. For instance, there are results from the case studies of UNODC (UNODC, 2010). In addition, it's shown from 2010, that there was wildlife trafficking of ivory from elephant tusks, rhino horns, and tiger carcasses in Asia. The value of this material from wildlife animals was estimated at US\$75 million; or from the estimate result from the attraction (Transnational Organized Crime in East Asia and the Pacific: A Threat Assessment) (UNODC, 2013, pp.1-4) determined that in between 2546 to 2013.

The value of wildlife trafficking of wildlife in East Asia and the Pacific regions, was about US\$2.5 million, or to be an average for wildlife trafficking around

the world is estimated at US\$10 million per year of which is the 3rd illegal market around the globe next to crimes, drugs, and military weaponry only. (Hass, Moloney and Chambliss, 2016)

At the same time, the case result studies of Mara Zimmerman (2003, pp.1657-1690) and Greg Warchol (2004, pp.57-63), still supported and demonstrated that the value of wildlife trafficking causes environmental damage; especially national security damage, the criminal organizations of China, Hong Kong, Japan, Italy, and Russia. For example, (WoShing Wo group), is about (14K) of Hong Kong and the (Yakuza) of Japan, etc. These are large criminal organizations with vast amounts of power, and violence to protect and control wildlife trafficking. In addition, there is a group called terrorist groups; of which are expanded into the trade of wildlife trafficking; to be able to find financial benefits, etc. During the same time period, the potential of government organizations would be able to respond with the conditions set forth by the law. This would be done, to protect against transnational crimes and suppression. However, this suppression is still very inefficient; of which is at the request of the both customers and the international trade market needs. Furthermore, they need a lot of value continually; to be able to respond to their needs. This is the reason why these individuals attempt to do wildlife trafficking with illegal businesses; as well as be able to make benefits and increase income for the offender organization.

Thailand is a country that still has a lot of natural resources; of which are specified as endangered species. Furthermore, there are benefits for the ecological balance of this country and of the world. Nonetheless, it is forests, mangrove forests, soil, water, minerals, that are important components for wildlife; of which this country has for Thai people; including humans that are able to survive around the world. This done by the ingestion and utilization of resources. If comparing with other countries, they value their wildlife, and how wildlife trafficking endangers these animals, and their ecosystems being destroyed until these endangered species of animals become extinct (UNODC, 2017, p.1). Thailand is still member of the world ecosystem. This is the reason why Thailand has to realize and start to resolve issues regarding wildlife trafficking seriously throughout the country. This is demonstrated, no matter if Thailand has a lot of natural capital, but the government and Thai people

won't prevent or let the value of wildlife change goals; or to let them destroy the economic system, political, social, and culture of the Thai people. Furthermore, this would affect the survival of humanity from all around the world.

If mentioning about the environmental resources of Thailand, there are many types of natural resources that had been attacked and destroyed in a sudden manner. Also, the damage would be much higher than the resupply of natural resources could generate. Furthermore, the areas throughout forests are areas where wildlife animals live. These areas have now decreased from the economic development project and the enlargement of the city. As a result, "these animals have become extinct from Thailand" (World Wildlife Fund for Nature, 2001, p.7; Office of the National Environment Board, 1990, pp.2–3; Phoboon, 2008, pp.1–39). The Forest Protection and Fire Control Office found that the Manis birthed, turtles, snakes, monitor lizards, crocodiles, iguana, and frogs, are types of animals that people love to do trafficking with. Around 2016, there was a criminal case about animals; regarding 288 cases of which was encompassed by wildlife trafficking. "The amount of wild animals trafficked was 8,044, and the carcasses of wild animals amounted to 687" (Forest Protection and Fire Control Office, 2016).

In addition, Thailand was affected by wildlife trafficking; as well as destroying natural resources, and the ecosystem. Furthermore, this causes an effect to the security and stability of the government and individuals. The reason why is because other foreign countries believe that Thailand is a country of origin, transit country, and a destination country of wildlife trafficking as well as a big amount of trafficking throughout South East Asia; especially around Thailand's borders, crossing points, Thai-Lao, Thai-Myanmar, and Thai-Malaysia. Illegal exporting includes taking illegal wildlife, and wild animal carcasses to be sent to the destination country. For example, "Vietnam, China". (The Secretariat of the Cabinet, 2007; Maneesai, 2014).

This is displayed by the public media, and through the research of Thai and foreign researchers. For the example, the research results of Shepherd, Sukumaranand and Wich (2004, pp.12–16), "determined that Bangkok is a destination country; of which was birthed in the Jungle; especially the cockatoo bird from the sellers at Medan Market. This is a big location that sells many types of animals throughout the Sumatra islands of Indonesia. The results of the case study of (Nijman

and Shepherd (2015, pp.3–6), “found that Thailand is still the center of selling wild animal around the world; especially turtles, by smuggling them through illegal import and wild animal to sell in the market. For example, in Chatuchak Market and from the news report for BBC news on the 4th of June 2016, found that: The officer in the Department of National Parks, Wildlife and Plant Conservation went to investigate and discovered the many carcasses of about 40 baby tiger cubs. They were located in the refrigerator of the building; as well as tiger cages, and other carcasses being on the premise too. “For instance, the carcasses of bears, deer horns, cow horns, pickled animal organs at Luang Tamahabua Temple in Kanchanaburi” (BBC, June 4, 2016).

The reason why there is still animal trafficking in Thailand is because of the value of making policy that wasn't made clearly understood about the CITES Convention. Furthermore, they are not able to realize the effects because of the CITES Convention but to just only protect wild animal; especially endangered wild animals of Fauna and Flora to protect them from becoming extinct. As a result, this would cause an effect to natural resources being protected. However, in the other manner it would control international trade; of which affects standard knowledge, community, life; as well as problems internally in the country. More so, this includes conflicts between the goals of suppressing and protecting wildlife animal trafficking, economy, and the community life. For instance, individuals selling the tusks of elephants. If there isn't stable management in the country, there would be an absence of arbitration approaches in meeting the CITES Convention parties, as being named as the CITES Convention.

“It could possibly cause an effect to tusk engraving wisdom disappearing” (Harakunarak, 2004, pp.50–54). The model of wildlife trafficking has changed transnationally illegally. This offense is more complicated than other types. For finding evidence to investigate, it is more difficult and complicated; as well as not having professional officers that understand the law and knowledge of the regulations of wildlife crime. This includes not having the proper process to cooperate with related organizations clearly. The reason why is that organizations can't manage wildlife trafficking around Thailand's borders. It wasn't successful for this circumstance; including the law regulations or the process not being regulation for managing wildlife trafficking. Additionally, it wasn't agreeable in the present, the law

isn't seriously enforced, corruption is observable; as well as officers leaving their duties unattended to.

The location of Thailand is connected to China, and Vietnam; of which there is a big market to receive wild animals from around the world, tourist promotion policy, and transportation that is convenient and fast; in order to make Thailand have people to travel to and from the control. "Thus, it's very difficult to detect whether a particular individual will do international wildlife trafficking or not" (Forestry Alumni Association, 2550, p.53; Manoi, 2013).

From the issues determined above, if the Thai government and related organizations still permit wildlife trafficking to continue it would affect Thailand tariff barriers of international trade, from the member countries of the CITES Convention. This happened before, "because the tariff barriers of international trade made 100 billion baht; that had affected the economy as well as the development of the country in many ways" (Department of National Park, Wildlife and Plant Conservation, 2015; Thai News Agency, 23 June 2016). The results of the research had determined and displayed a lot of research; regarding wildlife crime protection and suppression. It showed that the model of crime protection and suppression; especially that enforcement is very important for wildlife trafficking protection and suppression.

Thus, the research aimed to examine the cause, pattern, the process; as well as the recent effect of wildlife trafficking in Thailand. In addition, the objective of the Wildlife protection and suppression policy in Thailand for a period of 10 years and had been determined; in terms of the preferred process of wildlife trafficking protection and suppression in Thailand to create stability with situations that occur in Thailand. Additionally, this would follow the Green Criminology concept, by the results showing basic information that had a lot of usefulness for related organizations; in order to develop and move on from policy. Thus, this would be alternative measure; to bring cooperation and development of every part; to be able to protect and suppress wildlife trafficking in Thailand to be stable and substantial.

1.2 Research question

Green Criminology Concept could be able to explain the situation of wildlife trafficking in Thailand or not and how? Also, a wildlife protection and suppression policy has a guideline to decrease the wildlife trafficking in Thailand or not?

1.3 Objectives of the study

1.3.1 To study the situation, cause, pattern, process and impact by wildlife trafficking that occurred in Thailand

1.3.2 To investigate the policy that is related to protect and suppress the wildlife trafficking in Thailand.

1.3.3 To recommend the guideline to protect and suppress the wildlife trafficking in Thailand for the Thai's relevant organization.

1.4 Scope of the study

The study "Environmental crime: a case study of wildlife trafficking in Thailand" To study wildlife trafficking, and the policy to protect and suppress the wildlife trafficking in Thailand; as well as to study the period of time from 10 years ago (2007-2016) by the following:

1) **Wildlife trafficking that occurred in Thailand**, was studied about in terms of the situations and reasons from the process and the effect to use to the green criminology concept; of which is from the source country, transit through the country, the destination country of wildlife trafficking.

2) **The protection and suppression of wildlife trafficking policy in Thailand** was only studied by the CITES Convention and by the following acts: Wildlife Preservation and Protection Act B.E. 2535 (1992), Wildlife Preservation and Protection Act (No. 2) B.E. 2546 (2003), Wildlife Reserve and Protection Act (No. 3) B.E. 2557 (2014) to study the purpose of policy; as well as the structure of policy and the details of the policy. These details of the policy were asked to bring the policy

cooperatively; as well as to understand the results of the bringing policy for operation. There are daily issues from bringing the policy to be put into operation.

1.5 Definition term

1.5.1 Green Criminology means the studying and analysing an offense against an environment that has anyone is a direct or an indirect victim from environmental crime. The offense against the environment is harm to natural resources ecosystems even though human which leads to seeking guidelines or measures such as legal measures, social measures or alternative measures can be used to control the offense against the environment.

1.5.2. Environmental crime means to make wildlife trafficking; results in something destroying the animal's nature habitat, resources, killing animals, buying/selling, and import/export; as well as to own it and bring them to make a profit. This is done by not realizing what could have happen to the ecosystem. Furthermore, this would create a loss of balance in nature. In addition, this had affected human livelihood, policy, economy, and society; as a result of wildlife trafficking. Many groups have to cooperate with one another to contribute their tasks to manage each of their duties clearly through transnational organized crime.

1.5.3 Wildlife mean the parts of the body of an animal, skeletal remains, aquatic creates in the water, and avian creatures in the air; of which is reserved wildlife and protected wildlife, by following the Wildlife Preservation and Protection Act B.E. 2535 (1992); (except the beasts of burden which have been registered in accordance with the Beasts of Burden Code), the CITES Convention and other related laws.

1.5.4 Wildlife trafficking means killing animals by hunting them, selling, buying, import/export, collecting parts of the body of an animal, carcasses, aquatic creates in the water, and avian creatures in the air; of which is reserved wildlife and protected wildlife, by following the he Wildlife Preservation and Protection Act B.E. 2535 (1992); (except the beasts of burden which have been registered in accordance with the Beasts of Burden Code), the CITES Convention and other related laws. For buying and selling to have profit from many forms. Many groups have to

cooperate with one another to contribute their tasks to manage each of their duties clearly through transnational organized crime.

1.5.5 Protection and suppression of wildlife trafficking means the form, process, and activities to check planning, the process to inquire, to decide to design policy; as well as to protect and suppress wildlife trafficking in Thailand. This decreases wildlife trafficking, and offenses, including litigation and prosecution for the offender; of who committed wildlife trafficking. In addition, the promotion is conducted through government organizations, and private corporations; as well as individuals working together to protect and suppress against wildlife trafficking.

1.5.6 The effect of wildlife trafficking means the harm caused by the violation of the protection and suppression of wildlife trafficking policy in Thailand such as; the CITES Convention, Wildlife Preservation and Protection Act B.E 2553, Wildlife Preservation and Protection Act (No. 2) B.E. 2546 (2003), Wildlife Reserve and Protection Act (No. 3) B.E. 2557 (2014). The wildlife trafficking causes damage in 4 dimensions. First, the environment, which is reduced the biodiversity, propagation of exotic wildlife until destroying native species including the spread of disease from animals to humans. Second, society and economy, including political instability, government weakness, social problems, and national security, for example, the network of criminal organizations/transnational crime organizations or other crimes due to increased illegal wildlife trade, such as drug trafficking, terrorism, illegal weapons trade, corruption, money laundering, etc. The effects of wildlife trafficking that occur in 4 dimensions are all inevitably affecting each other.

1.6 Expected Results

1.6.1 To understand the wildlife protection and suppression policy in Thailand; in the past to be information to analyse the expenditure and issues of wildlife trafficking that occurred in Thailand. Therefore, a process was made to protecting and suppressing wildlife trafficking. Thus, is able to stabilize issues that occurred throughout Thailand; including correlated organizations to be able to operate with efficacy.

1.6.2 To understand the situation costs, process; of which is affected by wildlife trafficking, individuals, the economy, and Thai society. Furthermore, to be useful for analysing the process of policy development; as well as the pattern of protection and suppression of wildlife trafficking. Thus, it would be able to be stabilized with the system of Thai society.

1.6.3 To let the related organizations that protect and suppress wildlife trafficking of Thailand, could be able to bring the results from the case study; of which were determined from the development of the process to move forward with the policy for legal measures, and multiple choice measures. As a result, they would protect and suppress against wildlife trafficking. In addition, there would be organizational development from every part.

1.6.4 To be able to have knowledge of green criminology in Thai society. It is very useful to make it adapt; to be able to protect and suppress in environmental crime. Additionally, this is the biggest issue presently. In addition, wildlife trafficking managed and natural resources have to be managed and the practice kept forever.

CHAPTER II

LITERATURE REVIEW

To study “Environmental crime: a case study of wildlife trafficking in Thailand”. The researcher completed reviewing the literature consisting of 4 main concepts which develop to become a conceptual framework. The research and literature of this research by the following:

- 2.1 The protection and suppression of wildlife trafficking policy in Thailand
- 2.2 Situational Crime Prevention Theory
- 2.3 Green Criminology
- 2.4 The concept of wildlife trafficking
- 2.5 Conceptual framework

2.1 The protection and suppression of wildlife trafficking policy in Thailand

Wildlife trafficking is a crime which affects the stability of the country. For instance, biodiversity, health, society, economic, politic and national security. Currently, wildlife trafficking is an organized crime or transnational crime by the following: drug trafficking, human trafficking, terrorism, and money laundering. In regards to protect and suppress the wildlife trafficking, the government had tried to create a formal mechanism to protect society throughout the country to become peaceful. The guideline that government officers can solve issues related to wildlife trafficking is form and make a decision about wildlife policy. Furthermore, this helped an organization to be active and operative for protection and suppression.

This research aim to study about policy related to protection and suppression wildlife trafficking in Thailand by the following: the CITES Convention, Wildlife Preservation and Protection Act B.E. 2535 (1992), Wildlife Preservation and Protection Act (No. 2) B.E 2546 (2003), Wildlife Reserve and Protection Act (No. 3)

B.E. (2014). These laws are formal mechanism to protect and suppress about wildlife trafficking in Thailand. Especially these laws can decrease a wildlife trafficking problem in Thailand. The researcher try to investigate the guidelines to against wildlife trafficking throughout Thailand by the following details:

2.1.1 The Meaning of Policy

If mention about “Public Policy” the academic provided the meaning in a different manner. For example, Carl Joachim Friedrich (1963, p.70) mentioned that public policy means the suggestions for the process of the individual organization or government; in the order of the environment, of the issues, and of different opportunities. Moreso, these could be able to be motivated to create policy suggestions for bringing success towards goals and become useful towards many issues. While David Easton (1971, p.130) mentioned the meaning of the public policy, by it meaning the power of the government that is popular in society or beneficial for organizations and individual groups in the political social system. In addition, James Anderson (1970) mentioned about public policy of which is the concept for the operation of the government to have objectives that were aimed possibly about the law or law enforcement. Therefore, Anderson commented that the policy that the government created must be related to what is in the government’s capacity; by having rules to certify things that they have conducted. Furthermore, Supachai Yawapraphat (2009, p.3) and Mayuree Anumanratchathon (2008, p.6) provided meaning that public policy is the government’s decision whether or not to do it. In addition, this included all activities completed in the past, and occurring in the present as well as activities that will occur in the future. By having process management for the success of objectives to be completed, they are completed by an operative and stable manner. Moreso, it was related to real situations that individuals need case by case.

From the meaning of the listed above, it could be summarized that public policy means activities, projects, or planning activities or project; as well as be able to act or make a decision for processing by focusing on the results for public benefits. In addition, for this study, the researcher had studied “the protection and suppression of wildlife trafficking policy in Thailand.”. It is an administration's policy

to protect and suppress the wildlife trafficking in Thailand. The protection and suppression of wildlife trafficking policy in Thailand. As a result, there had been developments made and misfortunes for individuals throughout Thailand, the economy, society, politics, and the integrity of Thailand.

2.1.2 The concepts for studying public policy

It was an activity project and plan for processing acts and decisions of the government to process; by focusing on the public benefits. For studying the concept of public policy, it examined about acts and decisions of the government to process; by focusing on the public benefits for the reasons or how to bring public policy into implementation. Thus, it could be affected by this; in order to bring analysis to avert or develop exceptionally. For studying public policy, there must be a consideration for objectives for studying it. Moreso, it must understand the public to make the objective known and clear. Thus, making decisions to be the concept for studying public policy. By studying public policy, it could be summarized as two primary concepts by the following:

(1) The concept of the perspective approach or the concept of policy studies by Anumanratchathon (2008, p.17). It mentioned studying the descriptive approach of policy, that was in regards to behavioral science and social science. Thus, it could be explained for the process of public policy; to be able to make knowledge, principles, or theories for solving issues of society. However, to study about descriptive approach policy; it must be studied by the details of the policy and the details of public policy; including the background of objectives, the process of policy. In addition, this includes the process, determination, formulation, or the related factors in policy; as well as process development. Moreso, there are factors that determine policy and to be able to explain the rational co-dependence between factors or external factors that are able to make policy; as well as factors related to the environment. For example, social, economic, political, technological, etc, result/influence of the policy. Therefore, it's brought the policy to be effective in production. Furthermore, by studying public policy means to study action/non-action of the government; of which were the reasons that originated from. Moreso, public policy

was put into effect to be operative and it is affected by public policy. To be able to analyze, it should be shown to continue or stop the policy.

(2) The concept of descriptive approach or policy studies by economics, mathematics, management science by utilizing many adaptable techniques for examination. For example, Applied Statistics determined that the best scenario and for choices under liabilities and ambiguities; in regards to how to invigorate and constitute a variety of designs. Data was gathered from the individual who had the policy making ability; in order to determine decisions to be able to choose and constitute determined policies. Moreso, this was done to make policy occur without individual/political Social and Political Influence. (Anumanratchathon, 2008, pp.17-18).

To summarize that *the concept of the perspective approach* was the concept to examine for the aimed objectives for studying how to constitute policy for. Moreso, it helps with the study of the researcher to obtain knowledge about public policy. There is a protocol for policy suggestions; of which study the approach of which was aimed at examine how policies should be determined in the correct manner. In addition, from the results obtained the researcher will have knowledge of public policy.

From the inspection of *the concepts for studying public policy* found that the studied about public policy was dependent upon the objective of that policy study by the time the researcher studied about the protection and suppression of wildlife trafficking policy in Thailand. For studying the analysis of the objective of policy and principles of content details, were brought to be tested with the Situational Crime Prevention Theory. It was done to bring the results from developing for protection and suppression of wildlife trafficking policy in Thailand; of which is policy development that was determined by the process of the policy. Therefore, this study should be decided on the concept of the perspective approach, was a concept that studied the protection and suppression of wildlife trafficking policy in Thailand in the future.

By the protection and suppression of wildlife trafficking policy in Thailand that had studied was the CITES Convention, Wildlife Preservation and Protection Act B.E 2535 (1992), Wildlife Preservation and Protection Act (No. 2) B.E. 2546 (2003), Wildlife Reserve and Protection Act (No. 3) B.E. 2557 (2014). All 4 laws not only the main laws had been enforced to protect, suppress, conserve and operate to the wildlife offenders but also can able to form or making decision

the protection and suppression of wildlife trafficking policy in Thailand. The researcher will explain details of all 4 laws in the next section.

2.1.3 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

(1) Background and Signification of the CITES Convention

From assemble all documents that mention about Background and Signification of CITES mention from CITES (2017a), Division of Wild Fauna and Flora Protection (2016b) and Sangchun Manoi (2013) found that “Convention on International Trade in Endangered Species of Wild Fauna and Flora” or Thai people called “CITES” or Washington Convention was born in 1960. By the UN Parties concerned about the extinction of wild animals and wild plants resulting from international trade. Therefore, in order to the protection and suppression of international trade in endangered species of wild fauna and flora, not to exceed the production capacity in nature before become extinct from the world. So International Union for Conservation of Nature (IUCN) on 7th year, in 1960, in order to expedite the government of all member countries to strict in the import and export of country of origin endangered species of wild fauna and flora to according with rules but in kind of hard in the operative part and the methods that allow importing countries and exporters to know the rules.

In 1963, the IUCN proposed a concept to solving issue by approving the international convention on export, transit, import or attack of endangered species of wild fauna and flora which includes the remains from attacking. So this is beginning of the CITES Convention at the present.

In 1964, the CITES Convention document were completed and developed and edited until 1969 proposing the list of species of wild fauna and flora that would be controlled into consideration at the General Assembly for the IUCN also created the new 2nd the CITES Convention draft was considered by the General Assembly of the IUCN in 1971.

In 1972, at the UN Conference on the Environment of Humanity at Stockholm, Sweden had approved the recommendation at 99.3, resulting in the meeting of representatives from 80 countries to consider the CITES Convention

draft in Washington, DC, the USA Between February-March 1973 and on March 3, 1973, representatives of 21 countries. For the example; Argentina, Belgium, Brazil, Costa Rica, Cyprus, Denmark, France, Germany, Guatemala, Iran, Italy, Luxembourg, Mauritius, Panama, Philippines, Vietnam, Africa, Thailand, the United Kingdom, the United States, and Venezuela they all signing to join the CITES Convention.

The CITES Convention is effective since 1 July 1975, which is in accordance with Article 22 the first paragraph that states the CITES Convention will be enforced to effective at 90 days after being ratification from all of 10 countries. For example Chile, Cyprus, Ecuador, Nigeria, Sweden, Switzerland, Tunisia, the United Arab Emirates, the United States and Uruguay. At the present, the member of the CITES Convention are 183 countries (Information on 20 October 2016). The latest party is Tonga ratified on 2016 (CITES, 2016a)

Thailand is a member of the CITES Convention at No.77 on 21 January 1983. Thailand in becoming a member of the CITES Convention. Manoi (2013, p.2) mentioned that being a member of the CITES Convention. The Department of National Parks, Wildlife and Plant Conservation as the main responsible to supported of this project has to pay annually for the administration of the CITES Secretariat. Furthermore, it was determined that during 2009-2011, Thailand paid approximately US\$ 10,000 per year.

(2) The objective of the CITES Convention

The CITES Convention aimed to require that the Member States recognize the beauty and diversity of wild animals and wild plants being irreplaceable in the natural systems of the world; as well as them being needed to be protected for the benefit of current and future generations.

(3) Destination of the CITES Convention

The CITES Convention aims to enable the people of the Parties to realize the value of aesthetics, images, science, culture, recreation and the economy of wild animals and wild plants. infinite Also accepting that the people and the state are the most suitable in providing protection for wild animals and wild plants. Including acknowledging that international trade in wildlife and wild plants will not affect the survival of that species in nature, which focuses on wildlife and wild plants that

are near to extinction or threatening until the amount is reduced and may cause extinction caused by international trade. (CITES, 2018; Manoi, 2013, p.2)

(4) Structure of the CITES Convention

The CITES Convention had divided the operating structure as shown in Figure 2.1 to provide flexibility in the following operations.

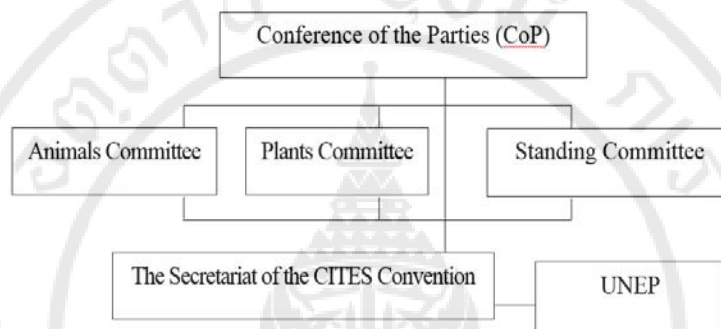


Figure 2.1 The Structure of the CITES Convention

Source: CITES, 2019.

Figure 2.1 explained the structure, composition, and roles as follows

- **Conference of the Parties (CoP)** was the meeting of the Parties of CITES that considered the operation in accordance with the obligations of the CITES Convention. Furthermore, it was in accordance with the current situation; such as the determination of rules, budgets, amendments to accounting for wildlife and wild plants. Consideration of progress in the conservation of species in the account was conducted; as well as reviewed and the meeting resolution being set for the efficiency of the implementation of the obligations of the Convention, etc. The meeting will be held every 3 years. The duration of the meeting is about 2 weeks with one Party circulating as hosts.

-**The Secretariat of the CITES Convention (the Secretariat)** is an agency established to carry out various tasks. More, it's specified in the CITES Convention with the Secretary-General as being the highest executive. In addition, the Secretary-General is appointed by the Executive Director of the UNEP.

By the Secretariat had the following important functions

(A) Preparation of meetings for parties

(B) Duties being conducted as assigned under Article 15 and 16

(C) Study and research academic affairs assigned by the Quorum of the Parties on matters that are beneficial to the enforcement of the CITES Convention; including studying the standards of preparation and transportation that are appropriate for living species products and species are classified.

(D) A variety of reports are studied from parties and additional data is requested from the parties in the event that it is deemed necessary for the operation; while confidence is constituted in the enforcement of the CITES convention.

(E) The Parties are motivated to the CITES convention and recognized the purpose of the CITES convention.

(F) A list of species is published in Appendix I, II and III for distribution to members; alongside news and useful advice for the identification of the species.

(G) The annual report of the Secretariat is prepared; to be able to propose members and enforce the CITES convention and other reports as requested by the Quorum of the Parties

(H) Members are advised to comply with the CITES convention regulations; including exchanging scientific or academic information.

- **Standing Committee (SC)** is a committee appointed by the Quorum of the Parties. It had performed duties under the policy set by the Quorum of the Parties by the Commission; consisting of representatives from 6 regions of the CITES convention including Africa, Asia, North America, Central America, South America, the Caribbean and Oceania. The number of representatives were determined by the proportion of the CITES Parties in that region. Moreover, there were representatives from Switzerland as a sponsor country (Host Government), the host country of the previous meeting and the next time included in the faculty. (Manoi, 2013)

The main duty of the regular director was to manage the work during the meeting of the Parties; including general policy management, and the Secretariat being controlled. There was a meeting organizer; of which supervised the use of budget and funding of the Secretariat Coordinate. Furthermore, there was advice for other committee members; including the working group that prepared a draft resolution for the quorum of the Parties to consider in the quorum of the Parties.

- **Animals Committee (AC)** was an academic committee on animals. It was appointed by the Quorum of the Parties; of which contained qualified candidates from each region. Their duties were to provide advice on the trade of animal species in Appendix I, II and III; as well as there being coordination with the technical departments of all parties. In addition, species classification and species name determination were both considered.

- **Plant Committee (PC)** was the academic committee in the plant. It was appointed by the Quorum of the Parties; of which contained qualified candidates from each region. Their duties were to provide advice on the trade of plant species in Appendix I, II and III; as well as there being coordination with the Technical department of all parties. Additionally, consider species classification and species name determination were considered.

- **The United Nations Environment Program (UNEP)** is the regulatory agency of the CITES Convention. In addition, there is a support unit for work; such as the World Conservation Monitoring Center (WCMS). It had protested the accuracy of statistics; in regards to there being permission to export, and import all parties each year. There is also a World Conservation Union or the IUCN helped academic support on the diversity and survival of wildlife and plant species and TRAFFIC organizations (TRAFFIC). Moreso, it was established by the IUCN and World Wildlife Fund (WWF) to help inspect trafficking in trade and illegal wildlife trafficking of Parties and transnational crime networks.

(5) Elements of the CITES Convention

The CITES Convention are divided into 25 Articles by the following:

Article I Definitions

Article II Fundamental principles

Article III Regulation of Trade in Specimens of Species included in Appendix I

Article IV Regulation of Trade in Specimens of Species included in Appendix II

Article V Regulation of Trade in Specimens of Species included in Appendix III

Article VI Permits and Certificates

Article VII Exemptions and Other Special Provisions Relating to Trade
Article VIII Measures to be Taken by the Parties
Article IX Management and Scientific Authorities
Article X Trade with States not Party to the Convention
Article XI Conference of the Parties
Article XII The Secretariat
Article XIII International Measures
Article XIV Effect on Domestic Legislation and International Conventions
Article XV Amendments to Appendices I and II
Article XVI Appendix III and Amendments thereto
Article XVII Amendment of the Convention
Article XVIII Resolution of Disputes
Article XIX Signature
Article XX Ratification, Acceptance, Approval
Article XXI Accession
Article XXII Entry into Force
Article XXIII Reservations
Article XXIV Denunciation
Article XXV Depositary

2.1.4 Wild Animal Reservation and Protection Act B.E. 2535 (1992) (WARPA)

(1) The origin and importance of the WARPA

Thailand had implemented wildlife conservation since the era of R.S. 119, as evidenced by the first wildlife protection law, the Forest Elephant Treatment Act, R.S. 119. However, this law provided only protection for wild elephants. In the past, the hunting of rural people was considered normal. For the hunting of the city, hunting was treated as a sport.

Later in the year 1960, the Wild Animal Reservation and Protection Act B.E. 2503 (1960) was enacted. Since World War II, various devices were had become modernized. The prosperity of traveling makes hunters and capitalists; to be able to easily gain entry into backcountry. Thus, hunting more and expanding agricultural

areas. The invasion had cleared the forest, caused wild animals to decrease rapidly and some became extinct.

Until 1992, there was a revision of the wildlife protection law. Since the Wild Animal Reservation and Protection Act B.E. 2503 (1960) had been enforced for more than 30 years, the existing measures were not able to effectively protect wildlife. Thailand had sent representatives to attend the drafting of the CITES convention since 1973 and had signed the CITES Convention in 1975 and ratified on January 21, 1983. The reason was the CITES conventions would permit Thailand to effectively control the illegal wildlife trade including fauna and flora; as well as international trade more convenient. In addition, cooperation from the Parties was also necessary to control and export wildlife from Thailand; in order to cooperate with the Parties in conserving wildlife resources to be extinct (Manoi, 2013, p.20)

(2) Principles and objectives of the WARPA

Since the law on the conservation and protection of wildlife in use until 1960 had been in force for a long time. A variety of measures contained in such laws couldn't make conservation and protection of wildlife become effective. Furthermore, it achieved as the objectives of the law. Together there was a need to accelerate the propagation of wild animals and conservation and protection being provided. Currently, there is an international agreement to cooperate to preserve and protect native wildlife; of which is an important resource of the world. Hence, in order to improve the measures to reserve and protect wildlife as appropriate and in accordance with international agreements, it is deemed appropriate to revise the law on conservation and protection of wildlife (Department of National Parks, Wildlife and Plant Conservation, 2016, p.18).

(3) Elements of the WARPA

The WARPA was divided into 8 chapters, 1, transitional provision totaling 70 sections, namely;

Chapter 1 General Provisions. There are 3 sections.

Chapter 2 The National Wild Animal Reservation and Protection Committee. There are 7 sections.

Chapter 3 Hunting, propagating, possessing and trading in wild animal, their carcasses and carcass products. There are 7 sections

Chapter 4 Importing, exporting, passing through, moving wild animal and wild animal check point. There are 6 sections.

Category 5 Public Zoo. There is 4 sections.

Chapter 6 Area and place under prohibition of wild animal hunting. There are 10 sections.

Chapter 7 The competent Officer. There is 4 sections.

Chapter 8 Penal provisions. There are 14 sections.

Transitional provisions There are 10 sections.

2.1.5 The Wild Animal Reservation and Protection Act (No.2) B.E. 2546 (2003)

(1) Principles and objectives of the Wild Animal Reservation and Protection Act (No.2) B.E. 2546 (2003)

The WARPA contained certain provisions correlated to the restriction of the rights and liberties of individuals, which Article 29, together with Section 48 and Section 50 of the Constitution of the Kingdom of Thailand could be made by virtue of the law.

Presently, there are many illegal wildlife possessors; of which didn't bring protected wildlife to the competent official under Section 66 or didn't inform the list of the species and the number of protected wildlife under Section 67 of the WARPA. Furthermore, the competent officers can't control the possessor of protected wild animals; as well as shall comply with the rules, procedures and conditions of the protection of wildlife. It is expedient to require that the possessor of wild animals be protected by unlawful means; to notify the possession and request permission to have possession of such protected wildlife to the competent official within the specified period. Without there being a penalty. It is necessary to enact this Act.

(2) Elements of the Wild Animal Reservation and Protection Act (No.2) B.E. 2546 (2003)

There are 4 sections in the Wild Animal Reservation and Protection Act (No.2) B.E. 2546 (2003).

2.1.6 The Wild Animal Reservation and Protection Act (No.3) B.E. 2557 (2014)

(1) Principles and objectives of the Wild Animal Reservation and Protection Act (No.3) B.E. 2557 (2014)

The rules on import, export or pass through the wildlife reserves should be amended to protect wildlife; in regards to the remains of wildlife reserves and the remains of protected wildlife. Furthermore, this covered products made from the remains of wildlife reserves or the remains of protected wildlife In order to comply with the CITES Convention. There were included amendments to penalties for offenses, help to hide, help sell, take away, buy, take a pledge or accepted to cover products made from the remains of wild animals obtained by the offense.

In addition, the amendment of the fee at the end of the WARPA covered the import, export or pass of products made from the remains of wildlife, and reserves or the remains of protected wildlife. Therefore, this Act needed to be enacted.

(2) Elements of the Wild Animal Reservation and Protection Act (No.3) B.E. 2557 (2014)

The Wild Animal Reservation and Protection Act (No.3) B.E. 2557 (2014), had 14 sections.

By the main agencies that are responsible for driving and enforcing the 4 laws mentioned above are;

- **Department of National Parks, Wildlife and Plant Conservation (DNP)**

Department of National Parks, Wildlife and Plant Conservation (2017) formerly wildlife work (except for aquatic animals that the Department of Fisheries is responsible for) is affiliated with the Royal Forest Department, and the Ministry of Natural Resources and Environment (Formerly under the Ministry of Agriculture and Cooperatives). However, on the 20th September 2002, the Senate passed a resolution of 127 to 23 to separate the work relating to forests, economics and conservation and forest protection activities. By allowing the work in the forest economy to be with the Royal Forest Department. As for conservation and protection work, the department will be re-established. And under the Ministry of Natural Resources and Environment which is a new ministry.

Later, the House of Representatives passed a resolution; that approved of the results of the Senate meeting. Moreso, it was different from the original resolution of the House of Representatives for consideration in Agenda 3 on 29 June 2002. These comments were not originally separated from the Royal Forest Department to be 2 Departments. In addition, the Royal Decree, Volume 119, Episode 99 g. Dated 2 October 2002 established the Department of National Parks, Wildlife and Plant Conservation under the Ministry of Natural Resources and Environment. On the 9th October 2002, Dr. Thaksin Shinawatra, Prime Minister at that time had ordered to appoint Dr. Plodprasop Suratsawadee, Permanent Secretary of the Ministry of Natural Resources and Environment at that time. The individual served as a government officer instead of the Director-General of the National Park, Wildlife and Plant Conservation Department. Additionally, the person was considered the first Director of the National Park, Wildlife and Plant Conservation Department. Moreso, the position was held until the 14th November 2002. Therefore, Mr. Somchai Phiensathaporn was appointed as the official director of the Department of National Parks, Wildlife and Plant Conservation.

The DNP had a mission to conserve, promote and restore forest resources, wildlife and plant species in conservation forest areas. By controlling the existing protected forest areas and forest areas that had deteriorated completely; there were strategies to promote, stimulate and raise awareness for the community to feel cherished. Also, there was participation in caring for local resources; in order to maintain the ecological and environmental balance as well as biodiversity. As a result, there were watershed source Habitats for wildlife, food sources, recreation areas and natural tourism for individuals.

With an internal unit such as the Division of Wild Fauna and Flora Protection, Forest Protection and Fire Control Office, Wildlife Conservation Office, National Park Protected Areas Regional Office in 16 areas throughout Thailand. Especially for wildlife worked to be successful in preserving important wildlife throughout the country.

- **Royal Thai Police**

The Royal Thai Police is a government agency that is under the command of the Prime Minister. This agency has the power and role to supervise, maintain

peace, arrest and suppress illegal offenders, to take care and protect the people and society to live peacefully with the citizens of the country; of which is related to the suppression of wildlife trafficking in Thailand.

There was an organization named the Natural Resources and Environmental Crime Division (NRECD) (2016) which was originally called the Forest Police. It is a division under the Central Investigation Bureau. Furthermore, the name was changed to the Crime Suppression Division on Natural Resources and Environment in 2005; in order to be in line with the mission and responsibility with greater scope.

In addition, the NRECD had the authority to maintain order; as well as to prevent and suppress crimes related to natural resources and the environment throughout the Kingdom of Thailand. Furthermore, they have to work in accordance with the Criminal Procedure Code and other laws related to criminal offenses concerning natural resources and the environment; as well as other related offenses. Additionally, they worked and supported the work of other relevant assigned agencies in case there is crime that involved wildlife.

The NRECD sectioned the internal divisions into the Directorate 1 to 6, and the Investigation Division. (But in areas where there is no legal violation of wildlife laws, agencies in the NRECD are located for the local police to work with officials from the DNP and administrative staff).

The above-related units are considered the main units that had the power and role. In law enforcement, there were proceedings against the perpetrators of wildlife trafficking cases. It also had an important role to perform in accordance with the provisions of the CITES Convention. Moreso, Thailand had joined as a member together with working with other government agencies; such as the Department of the Interior, Thai Customs, Immigration Police, Department of Livestock, Mekhong Riverine Unit, etc. The researcher will conduct in-depth interviews with the officers involved in enforcing laws and driving policies, activities, and situations of illegal wildlife trade in Thailand, both the impact caused to the political, economic and social conditions of the country; as well as the operation process. If there are issues and obstacles from law enforcement, a variety of related policies would develop policies to protect and suppress the wildlife trafficking in Thailand.

From a review of *the policies related to the protection and suppression of wildlife trafficking in Thailand*, including the CITES Convention, the WARPA, the Wild Animal Reservation and Protection Act (No.2) B.E. 2546 (2003) and the Wild Animal Reservation and Protection Act (No. 3) B.E. 2557 (2014). There were related main agencies, including DNP, Department of Fisheries and the NRECD and local police. It's the main agencies that had the authority and role to drive and enforce the four laws that are considered as the main policies in managing the wildlife problems in Thailand. It is also an important mechanism used by the government to prevent other crime from the illegal wildlife trade in Thailand. Thus, it's a national and transnational crime problem that affects security in various areas of the country as it appears today.

The researcher had studied the intent, principles, and content of the 4 policies. In order to understand each policy aim at the principles, methods, and agencies involved. Furthermore, with the prevention and suppression from wildlife trafficking in Thailand. There was analysis conducted with the Situation Crime Prevention Theory (SCPT). It had aimed to reduce crime opportunities. This will be explained the detail in the next section. Then the results of the study will be tested " the prevention and suppression of wildlife trafficking policy in Thailand, including the CITES Convention, the WARPA, the Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003) and the Wild Animal Reservation and Protection Act (No. 3) B.E. 2557 (2014), had prevention and suppression guidelines to reduce the wildlife trafficking in Thailand" by using statistics to arrest the wildlife case offender and statistics of the exhibit from wildlife case that collected by the DNP and agencies/organizations related to management and conservation of Thai wildlife. In addition, it could be a measure of the effectiveness of the implementation of all 4 policies that affected prevention and suppression of wildlife trafficking Thailand.

The results from the review of the prevention and suppression of wildlife trafficking policy in Thailand as mentioned above would be utilized. What are the prevention and suppression pattern to against wildlife trafficking in Thailand? How to proceed? How to encounter problems and obstacles? and How to prevent and suppress the wildlife trafficking in Thailand? Thus, in-depth interviews with those involved in the prevention and suppression of wildlife trafficking in Thailand would

answer these questions. The researcher will analyze the Green Criminology concept, to answer question “Is Green Criminology can apply to explain the wildlife trafficking in Thailand. Nonetheless, it may be apply to reduce the harm from wildlife trafficking in Thailand.

2.2 Situational Crime Prevention Theory

Wildlife trafficking is a crime that not only damages the environment but also affects human, health as well as the well-being and life of human beings in future generations. Therefore, in order for humanity to continue to live it is necessary to seek ways to protect and suppress the wildlife trafficking in Thailand. This is the reason why the researcher choose theory in the crime prevention theory group to be utilized in the study.

When referring to the word “crime prevention and suppression” the definition of Jeffery Ray (1976) and Gordon Hughes (2001, p.63) was consistent with this study. The idea of Ray (1976) was clearly divided. Crime prevention and crime control are different. Furthermore, crime prevention must be done before the crime occurs. This would give priority to the use of measures to reduce opportunities to commit crime and focus on adjusting the environment that will result in crime. After the crime, crime control is constituted with the focus on the activities of private government agencies and the public including the arrest, prosecution, judicial punishment; as well as correcting the behavior of the offender who violated the law. Thus, the objectives of this study aim to investigating guidelines to prevent and suppress wildlife trafficking. The researcher considered both in the dimension after the wildlife trafficking that there would be protocol of which would assist in controlling the behavior of the offender. As a result, this would cause the guilty individual to have fear and not dare to repeat the offense. Which guidelines would help to reduce the chances of wildlife trafficking in the future? The guidelines to reduce the chances of wildlife trafficking are considered that are the root of environmental crime prevention.

2.2.1 The beginning of SCPT

The situation-based crime prevention theory (SCPT) was developed by Ronald V. Clarke, a British researcher since 1973 by Clarke (1995) who conducted research on evaluating crime control mechanisms. Furthermore, he determined that the contexts of the crime causing that needed to explain about opportunities, motivations and risks. These had affected the decision to engage in crime each time. Also, there was a about children and youths who were controlled in the Juvenile Observation and Protection Center to escape from a controlled place. The outcomes of the study found that the cause of children and youths fleeing from controlled places is looseness in the performance of staff, particularly during Saturday and Sunday holidays. The reason was on that day there was staffs and control systems less than Monday to Friday, which are the working days of the staffs. Together with the descriptions of the Observation and Protection Center, it is just a place to control children and juvenile offenders which is not a prison. Also, the observation and protection officers are not a warden. Furthermore, this clearly indicated the environment of the situation and opportunity while committing an offense affected the decision to commit crime each time. Until 1976, Clarke and et al. published a book on "Opportunity is a crime (Crime as Opportunity)" which is considered the starting point for the theory of crime prevention according to Clarke's situation is more known. Many researchers and scholars had brought SCPT to study, prove and apply to various situations or crimes until expanding more widely. (Fellson, 2008)

2.2.2 Definition of the SCPT

Clarke (1995, p.91) mentioned that the SCPT was a concept sought to reduce opportunities for each type of offense that was unique. This was done by increasing the risk and difficulty in commit crime; as well as reducing the reward/benefit that would've been received from the crime.

The Scenario-based on the SCPT had a complex process because it had developed from many theories to explain where crime occurred. When did it happen? and How will it be analyzed based on the actual situation that caused the crime? The theory of the SCPT would be different from the concept of other criminological theories because the SCPT directly tried to determine the cause of crime from

the analysis of the crime scene through a variety of environmental factors which caused instead of arresting and punishing criminals. (Shariati & Guerette, 2017, pp.261-268)

However, the SCPT emphasized the opportunity to encourage offenses. Hence, the SCPT was trying to find a variety of methods, both design a protection tools, Law enforcement. As a result, would help to determine policies to assist in decreasing the situation of the environment that motivated/ encouraged offenses. It is an important condition to respond quickly and timely the situation. (Smith and Clarke, 2012).

2.2.3 The basic of concepts/ theories of the SCPT

By the basic of concepts/ theories of the SCPT developed from 3 concepts/ theory are;

(1) Rational Choice Perspective (RCP)

Clarke and Cornish (1985, pp.147-185) assumed crime is a unique behavior or action. It was combined with the ability to make reasonable decisions of the offense. For example, before the offender decides to engage in the crime. The offender would consider the benefits and penalties that would occur the cost that would be received from each action. If considering this action would benefit more than the penalty would be received. The offender would have decided to engage the crime. At the same time, if considering this action will lose more than the penalty. The offender would not decide to engage the crime. Therefore, if the decision is made based on the perception of the outcome, the circumstances of the situation would affect the decision to choose to commit crime.

The RCP helped to understand why crime had occurred at a place more than another place? or why the victim is to be a victimization more than another type? The RCP would an important role in identifying appropriate guidelines or techniques to prevent problems or crime.

(2) Routine Activity Approach (RAA)

The RAA presented by Cohen and Felson (1979, pp.588-608) is another concept that assisted in explaining why and how did crime occur?. The RAA explain that each crime must consist of three elements; offender motivation, suitable target and

lack of guardian. So if don't want a crime occur would have to be eliminated one of three elements. It will reduce the chance to commit a crime.

(3) Crime Pattern Theory (CPT)

Brantingham and et al. developed the CPT by explaining the crime that occurs each time is caused by the appropriate area that encourages to commit crime. The suitable location is divided into 3 types; 1) locations where criminals are familiar or used to regularly travel but victims have never used before 2) place where criminals and victims are familiar which both use to regularly travel and 3) places where both criminals and victims are unfamiliar. Thus, the importance of this theory is the design of security systems in place. Furthermore, it would be considered a truly crime prevention policy. (2005, pp.271-292)

The three concepts/ theories above are the basic form of the SCPT which were analyzed and developed into a form or technique used to prevent crimes that occurred in each situation.

2.2.4 The prevention patterns/techniques of the SCPT

During the year 1992, Clarke founded a crime prevention patterns/techniques based on the situation. It was divided into 3 chapters, 12 techniques. Later in 2003 Clarke and et al. developed the crime prevention model according to the situation divided into 5 chapters, 25 techniques to be utilized as a way to reduce/cut the chances of a variety of types of crime such as burglary, drunk driving behavior, Shoplifting, violence, recidivism and etc. The SCPT model have the details by the following: (Clarke, 1997; Cornish & Clarke, 2003)

Category 1 Increasing effort

- Technique 1 Target harden such as installing a car steering wheel lock device, installing safety glass and installing tamper prevention equipment.
- Technique 2 Control access to facilities such as setting passwords, using phones, utilizing electronic gate tickets, and baggage screening.
- Technique 3 Screen exits such as using the card system to enter and exit buildings and using the electronic tag system.
- Technique 4 Deflect offenders such as divide male/female toilet and close the road.

- Technique 5 Control tools/weapons such as turning off mobile phones before entering buildings/locations, installing the cutting mobile signal as well as limited sales of spray paint to youth.

Category 2 Increasing risk

- Technique 6 Extend guardianship such as adjusting daily routines as well as utilizing the neighbor alarm system

- Technique 7 Assist natural surveillance such as maintenance/repair of lighting systems on the road. Furthermore, the area could be designed with regard to safety, using the alarm system (whistleblowers) in public areas with crime risk.

- Technique 8 Reduce anonymity such as exchanging the taxi driver's license before entering the village/office building, remembering the marks/symbols of cars, people, things, observe uniforms, dress (school uniform, staff uniforms of each agency)

- Technique 9 Utilizing place managers such as installing a closed-circuit television (CCTV), adding enough staff to a convenience store as well as looking out for rewards.

- Technique 10 Strengthen formal surveillance such as using an auto camera to detect cars that pass through the red light (Red Light Camera), using a burglar alarm and hiring security personnel.

Category 3 Decreasing reward/benefit

- Technique 11 Conceal targets such as not parking on the roadside, not specified/labeled as a truck which carry valuable things.

- Technique 12 Remove targets such as removing the radio in the car and paying for a prepaid phone card.

- Technique 13 Identify property such as making a symbol for property and creating a symbol that indicates the owner.

- Technique 14 Disruptive markets such as checking commercial licenses, checking pawnshops, and controlling the classification of ads.

- Technique 15 Deny benefits such as setting rules to clean walls that are sprayed when being painted as public paint, utilizing the product tag that installs the ink spraying system when trying to pull the product tag itself and sticking the bumper for use as evidence when being hit.

Category 4 Decreasing provocation

- Technique 16 Reduce frustrations and stress such as polite service, lining up in an orderly manner, adding waiting seats and opening music to relax the mood.
- Technique 17 Avoid disputes such as splitting the competition visitors and decreasing the amount of users in entertainment venues at a fixed rate.
- Technique 18 Reduce emotional around such as controlling violence, managing embittered individuals to demonstrate proper behavior as well as the rules prohibiting racism.
- Technique 19 Neutralize peer pressure such as daring to say/deny as well as not driving when drunk.
- Technique 20 Discourage imitation such as screening and concealing inappropriate actions, rapidly changing brutal behavior and installing the V-chip system on television (locking inappropriate items)

Category 5 Removing excuse

- Techniques 21 Set rules such as registering before staying in a hotel, making a contract before renting and establishing rules for prohibiting sexual harassment.
- Technique 22 Post instruction such as prohibiting parking signs, personal property labels and equipment label for extinguishing fires.
- Technique 23 Alert conscience such as speed limit signed at the Customs House, warning signs "Picking up items in the shop without payment is theft."
- Technique 24 Assist compliance such as preparing public trash/ public toilets.
- Technique 25 Control drugs and alcohol such as reducing alcohol levels before leaving entertainment and organizing festival activities/alcohol-free places.

By summarizing the techniques for the SCPT according to the situation according to Table 2.1

Table 2.1 25 Techniques to prevent crime

Increase effort	Increase risk	Decrease reward	Decrease provocation	Remove excuse
1. target harden	6. extend guardianship	11. conceal targets	16. reduce frustrations and stress	21. set rules
2. control access to facilities	7. assist natural surveillance	12. remove targets	17. avoid disputes	22. post instruction
3. screen exits	8. reduce anonymity	13. identify property	18. reduce emotional around	23. alert conscience
4. deflect offenders	9. utilize place managers	14. disrupt market	19. neutralize peer pressure	24. assist compliance
5. control tools/weapons	10. strengthen formal surveillance	15. deny benefits	20. discourage imitation	25. control drugs and alcohol

Source: Clarke, 1995, pp.2-44; Conish and Clarke, 2003, pp.41-49.

The 5 variables according to the SCPT include (1) increase effort (2) increase risk (3) decrease reward (4) decrease provocation and (5) remove excuse so the researcher tried to test “*The prevention and suppression of wildlife trafficking policy in Thailand and policies implementation can control the wildlife trafficking in Thailand.*”

Additionally, there are many researches stated law enforcement is a public policy that can prevent and suppress the wildlife trafficking such as;

Melanie Wellsmit (2011, pp.125–148) studied "Wildlife Crime: The problems of enforcement". The result found problems from enforce wildlife trafficking law by the following:

(1) Inadequate/adequate resources to manage wildlife trafficking issues being insufficient budgets that are apportioned from the government to be used in operations. More, this is a lack of modern tools/equipment that were beneficial to wildlife operations officers as they were not trained to improve their performance.

Furthermore, the government acknowledges resolving the issue of wildlife trafficking. In addition, it requires a large budget so the problem could be resolved. However, the results obtained from the operations of the relevant agencies were vague.

(2) Offenses related to illegal wildlife trafficking that were not recorded in the dark figure were wildlife trafficking in the British context. Due to wildlife trafficking and victims weren't recorded in the crime. Moreover, the victim's survey system was connected to the official crime database. Therefore, the offense was related to illegal wildlife trade wasn't recorded in many government databases. When data about wildlife trafficking wasn't recorded in the system/database it had affected the budget apportioning in the law enforcement that related to the prevention and suppression of wildlife trafficking.

(3) Corruption is a bribery to government officers who enforce on prevention and suppression law. Therefore making illegal wildlife trafficking cases lack sufficient evidence; to be able to bring the perpetrators to be punished because the process of collecting evidence, making expressions and considering the order. Thus, corruption and the utilization of reasoning techniques became one of the factors causing weakness law enforcement of British and Wales.

(4) Wildlife trafficking is a serious issue when compared to basic crimes. Wildlife trafficking is an offense that had not been harmed to humans after immediately causing that action. However, after a period of time, the effects of illegal wildlife trade appeared. In addition, penalties for wildlife trafficking weren't very heavy compared to other basic crimes such as robbery, murder, rape, etc. that are heavily punished from imprisonment and fines. In fact, the impact of wildlife trafficking doesn't appear to any individual promptly, the impact could destroy the lives of humankind as time passes.

Furthermore, there are suggestions prevent and resolve the issue of wildlife trafficking divided into 2 ways:

(1) Development and enhancement of the law enforcement system, by developing a management system to collect data on offenses related to wildlife trafficking. Furthermore, the level of significance to other crimes was raised. In regards to human beings falling victim to crime. Also, it emphasizes the strict enforcement of laws related to illegal wildlife trade. Protocol could be developed for

decreasing/cutting consumer demand. Wildlife which is the cause of the issue of illegal wildlife trade.

(2) Uses alternative measures to control and prevent awareness of the effects of illegal wildlife trade to people because individuals are an important mechanism to assist in decreasing the demand for wildlife consumption; as well as applying the crime prevention model according to the situation to be fitted to suit each community context; as well as to decrease a variety of opportunities that would lead to misconduct.

Angus Nurse (2012) conducted a study on "Repainting the Thin Green Line Law of the UK" to examine whether the law enforcement period had more significance on the enforcement of wildlife laws through law enforcement. The study demonstrated that effective laws would occur throughout law enforcement. The more rigid the enforcement of law, the more effective it becomes. Furthermore, this is done to test that NGOs have more influence on the enforcement of wildlife laws than justice agencies. The study determined that NGOs have more influence on the enforcement of wildlife laws than justice agencies. Because NGOs play a huge role in defining and developing policies, the representatives from non-government organizations would be invited to engage in the draft policy/law. Both as a policy consultant, researcher, spatial investigation officer, witness in court, specialized manager; were an individual close to the situation and problems with wildlife and views on the analysis of wildlife problems of NGOs. It would be based on environmental and animal perspectives, particularly in examining issues to claim rights to those animals; while agencies in the judiciary would analyze wildlife crime issues under theories of criminology and criminal law that only see animals as one thing. Moreso, it was determined that the enforcement of wildlife laws was to attain the true intention of wildlife law. Thus, protecting and conserving wildlife; of which is a component of the ecosystem to be complete and balanced; in order to not have an indirect impact on humanity.

Anh Cao Ngoc and Tanya Wyatt (2013, pp.129-142) Studied on "Environmental Criminology and Wildlife Trafficking in Vietnam" (A Green Criminological Exploration of Illegal Wildlife Trade in Vietnam). The study found factors are correlated to the illegal wildlife trade situation in Vietnam; as well as

causing the problem of wildlife trafficking become serious crime and harm in Vietnam, including:

(1) Cohesion to the aspect of judging issues from the human perspective; as a base without regard to the rights of the environment in which natural resources have the opportunity and the right to be able to live.

(2) Concepts/morals in wildlife consumption

(3) Quick economic expansion

(4) There was weakness in the process of enforcing environmental laws.

Thus, to averting and decreasing the austerity of wildlife trafficking issues of government agencies. Hence, there was a need disseminate laws to protect the environment; as well as to advocate and establish moral and environmental ethics for all sectors under the political and economic context of the country at the same time.

Marin Tournier's research report (2015) organized a study on the “Countering Illegal Wildlife Trade in Southeast Asia: A Critical Comparison of the Leading Strategies and Their Corresponding Initiatives” to investigate that law enforcement or measures and awareness are assisted in resolving the issues of wildlife trafficking. The study implicated that law enforcement and awareness assist to resolve the obstacle of wildlife trafficking. This was done through the enforcement of law to assist in reducing wildlife supply through the application of project activities directed at advocating rigid and severe law enforcement. At the same time, awareness will assist in reducing wildlife demand.

Additionally, it was determined that aspects that contributed to the law enforcement and measures success were the following:

(1) Law enforcement of government agencies would assist to enforce and maintain a variety of activities/operations in accordance to the plan.

(2) Participation of NGOs to direct a variety of plans/activities.

Based on an analysis of *the Situational Crime Prevention Theory*, it was acknowledged known that the SCPT emphasized on the examination of the nature of crime, scenarios or environments that cause crime, analyze opportunities to constitute offense and determine ways to decrease those opportunities more than determining the root or intention to commit crimes Thus, wildlife trafficking is one of the types of environmental crimes that have particular offenses. Both the nature of the issue is

complex and different in accordance to the context of place, time, victim and consequences which are different from general crime.

In addition, the root of environmental crime study is the examination of the harm created by offense; to be able to avert the onset of frequent circumstances. Because of natural resources and the environment, chiefly wildlife, when obliterated until extinction wouldn't be able to return again. When extinct wildlife effects the equilibrium of ecosystems, there is an effect on the existence of humanity. Moreso, there are a variety of insecurity that would follow. There are many environmental crime researches that utilize the SCPT to test the hypothesis; as well as to determine ways to prevent a variety of impacts from environmental crime.

There are discoveries lead to the SCPT to clarify the reasons of offense and apply to develop environmental crime prevention. In this study, the researcher would apply the prevention and suppression of wildlife policy in Thailand to analyze the purpose, details, implementation and achievement of the policy has guidelines, patterns or techniques to prevent and suppress covering all 5 Categories and 25 techniques or not? If there are guidelines, patterns or techniques covered 5 Categories and 25 techniques follow the SCPT. It means the policy and implementation on prevent and suppress wildlife trafficking in Thailand is according with the theory. Moreso, it would assist in decreasing the illegal wildlife trade in Thailand; as well as lead to further proposing guidelines for prevention and suppression of wildlife trafficking in Thailand.

2.3 Green Criminology

Green Criminology is the study of actions, which are environmental harms by using relevant approaches to explain environmental issues such as social justice approach, ecological consciousness approach, destructive nature and global capitalism approach, the role of nation-state approach, inequality and discrimination approach and so on. Michael Lynch, an environmental criminologist who originated the Green Criminology approach, considered that Green Criminology has no particular theory which is able to be applied in analysis of causes of environmental crimes because presence of each environmental problem has a specific attribute in each area,

so to analyze the causes of environmental offenses or crimes based on perspective, for example, “who or which has been harmed or affected? And how to respond or deal with harm” (White, 2010, p.411).

This study focuses on wildlife trafficking that wildlife is considered natural resources that are harassed and damaged from humans' actions. Thus, it can be said that wildlife is victimized by environmental crimes committed by humans. Thus, analyzing damages caused by such actions is to preserve wildlife from extinction or taking advantage that affects the existence of humanity, including to prevent other crimes which rely on the benefits of wildlife trafficking. Therefore, the researcher deems that Green Criminology approach is suitable to be adopted in the analysis of situation, cause, pattern, and impact of wildlife trafficking in Thailand. The researcher will apply Green Criminology approach as a basis to analyze wildlife trafficking problems in Thailand in the context of the source country, transit country and exporting country in order to prove the Green Criminology approach whether it is able to be used to explain the phenomenon of Thai wildlife trafficking or not. Therefore, if the problems of wildlife trafficking in Thailand can be explained according to the Green Criminology approach, it leads to further suggestions of prevention guidelines.

Regarding the study of Green Criminology approach, the researcher will present the development of Green Criminology approach, the definition of Green Criminology and the concept of Green Criminology approach as follows:

2.3.1 Development of Green Criminology Approach

Humans' lives which take advantages and relies on natural resources without knowing values are becoming problems and has more restrictions such as global warming, climate variability, the change in sea level, greenhouse effect, Ozone depletion, acid rain, increasing fatality rate of humans caused by serious diseases from pollution. In addition to direct and indirect environmental effect, it also affects humans' living and health, economic situations, politics, and national security. The destruction of natural resources and environmental problems becomes the problem that people and legislators around the world are aware of the change of environment, which is occurring in the world. It can be seen from the existence of studies, concepts,

approaches, and measures for prevention and conservation of natural resources and environment. So, one approach which is adopted in the study and analysis of causes in environmental destruction for leading to the suitable and sustainable management of natural resources and environmental problem, i.e. “Green Criminology approach” invented by Michael Lynch in 1990s. It was the time that natural resources and the environment of the world were being harassed greatly. In addition, Lynch considered that explaining the behavior of Green Criminology or those who harm the environment is probably not able to certainly explain the nature of offenses according to traditional criminology since the environmental offense is the action that natural resources and environment are directly victimized of this type of crime. Conversely, traditional criminology is applied to explain the nature of humans’ offenses that humans are victimized in order to take the offender to be punished, rehabilitated and changed behavior to be a good person of society and do not cause any trouble to others. Additionally, today’s global society has changed rapidly, to explain environmental crime based on traditional criminology may not be able to find the exact cause of the problem that is probably unable to solve the environmental problems effectively and sustainably (Lynch and Stretesky, 2014; White, 2008).

Furthermore, Lynch and Stretesky (2014, pp.1–5) has analyzed that 4 principal causes that make most criminologists still adhere to traditional conceptual frame which focuses on street crime or street offending such as stealing, snatching, robbing, in order to control criminal behaviors with various methods by disregarding environmental crime or damages of environment problems. So, the environmental criminologists see that crime problem or street offending is a minor issue which damage between individuals/groups. However, when comparing the value of the damage caused by the destruction of natural resources and the environment, it may become the end of humanity. The 4 principle causes, i.e. (Lynch and Stretesky, 2014, pp.1–5)

First, criminology is subject to a conceptual frame of offenses that are harmful to humans under the extent of criminal law.

Second, criminology is the study of criminal behaviors under nature determining of criminal offenses, administrative law or regulations that are only have been defined.

Third, criminal law is described by individual/groups/authorized agencies to preserve interests and enforced by the police and the court in order to comply with only offenders who committed basic offenses that are mostly poor people or labor groups.

Fourth, criminology is a field of Social Sciences that put emphasize only on the study of humans' perspective, so damage, which is occurring to things that are not human beings, is neglected or not getting enough attention.

Therefore, Green Criminology is recognized overcoming traditional conceptual frame from the study of basic offense that is popular among criminologists to the study of damage caused by humans' actions with natural resources and the environment as a direct victim of crime. In order to extend scope of criminological study to cover patterns of crime which have been rapidly changed by the time, Rob White (2013, pp.17–33) stated that the study of Green Criminology focuses on damages caused by environmental crime by applying traditional and new methods to suit situations or problems which have been changed by time as well as supporting involvement of prevention and suppression of environmental crimes sector.

2.3.2 Definition of Green Criminology

Regarding the aspect of environmental crimes has different problems from basic offenses such as theft, robbery, rape, analyzing problems and causes of offenses by traditional criminology methods may not be sufficient to find and explain the causes of the offense for leading to sustainable environmental crimes problem solving. Even though criminology helps to explain the causes of offense, patterns/methods of crime committing, prevention, correction, and rehabilitation, there is a social mechanism helps to restrain wrongdoings. At the same time, some types of crime probably have a specific nature/pattern of such local or society (Sutherland and Cressey, 1970, p.1; Ua-amnoey, 2010, p.13-15). However, the global society has changed by the advance of modern technology and overexploitation of natural resources and environment that result in pollution problems affecting the security of human beings' life and living creatures in the world, so the criminologists who take an interest in the conservation of natural resources and environment has applied the knowledge of environmental education to analyze the causes of offenses, damages, and guidelines for solving problems. For this reason, the "Green Criminology" is occurred, so it is one field of criminology

that is to study crimes, criminals, and criminal behaviors, which are related to describing the law, violating the law, victims and social reactions to violations of the law.

Lynch (1990, pp.1–12), the originator of Green Criminology approach, defined that the Green Criminology is the explanation of the causes of crimes or the actions which are environmental harm, prosecution process for the offender, damage, provision of aid and protection of justification based on the principle of Green Criminology which is suitable to today's global society. Additionally, Matthew Hall further stated that Green Criminology is an interdisciplinary approach because the way to study problems of environmental crimes must integrate knowledge of jurisprudence and sociology which is influenced by Critical and Radical Criminological School to study the causes of environmental destruction or harm in the aspect of crime and social response in solving problems (Hall, 2014, pp.96-109).

Rob White (2008, pp.27–30) and Benton (1998) agreed that Green Criminology is to study problems related the destruction of natural resources and environment or violation of environmental law or being victimized by environmental crime or environmental justice that related to humans, species/nonhuman and ecosystem. It aims to study the nature of environmental damage, legal measure, social measure or mechanism to control environmental destruction behavior and the relation between environmental problems and environmental crime.

Furthermore, Brantingham & Brantingham (1991) also agreed to Lynch (1990) and White (2008) that Green Criminology aims to study patterns of environmental destruction of criminals and also to analyze humans' behavior which is the result of external factors based on humans' thoughts. So, it is another science which is developed from the Positivist School by applying the scientific method to exam the causes of crimes in society.

At the same time, besides the term "Environmental/ Green Criminology", there is the term which has a similar meaning, i.e. Conservation Criminology that is the study of environmental crimes or environmental harms by considering the relationships of environment and harm or damage (Herbig and Joubert, 2006, pp.88–103). Also, the term "Radical Green Criminology", i.e. the criticism about the damage affecting the environment or crime affecting nature. So, Green Criminology is the study of crimes due to the environment in order to seek for prevention guidelines

of such crimes with suitable management of the environment for reducing the chances of crimes (White, 2013, pp.17–33).

Therefore, the researcher has defined **the Green Criminology** that is the study and analysis of environmental harms affecting anyone or anything regardless direct or indirect victims from the environment crimes that cause damages to natural resources and environment, ecosystem, as well as humans. So, it leads to the search for approaches or measures such as legal measure, social measure, or alternative measures to control environmental degradation behaviors.

2.3.3 The conceptual frame of Green Criminology

According to the study and collection of document associated with Green Criminology approach from various criminologists, including Michael Lynch, Paul B. Stretesky or Rob White, the researcher has found that the way to understand the concept and relevant principle based on Green Criminology shall understand the term "environmental crime" that has different definition and characteristic from basic crime to understand the victims and damages caused by environmental crimes which are considered an essential principle of the Green Criminology approach.

In the term "environmental crime", there are various thinkers and scholars defining in agreeable direction such as Hayman and Brack (2002) stated that environmental crime is an international crime which includes organized crime with offenses of illegal trade or service such as illegal logging, waste dumping, illegal wildlife trade, bio piracy, trade in persistent organic pollutant, fuel smuggling. Additionally, the UK Environmental Agency and The UK Home Office referred to the environmental crime that is type or pattern of crime that cause widely effect to the community which also means to anti-social behavior, such as fly-tipping, littering, graffiti, writing, and vandalism. It also refers to waste crime, such as toxic gas emissions, wildlife crime, fishing offense (O'Brien and Yar, 2008, p.68). Also, the United Nations Interregional Crime and Justice Research Institute (UNICR), (2016) defined the environmental crime that is an illegal action which is involved in illegal wildlife trade, the violation of regulations protecting the ozone layer, hazardous waste dumping, IUU fishing, illegal logging. At the same time, according to Skinner's opinion (2013, p.2), defined the term "environmental crime" in

the sociology of crime's perspective that besides a criminal offense, it also includes all actions which violate social regulations or administrative measures.

According to the above-mentioned definition of environmental crime, it shows that aspects of environmental crime are different from a basic crime. Nathee Jitsawang (Thailand Institute of Justice, 2014) stated that there are 5 important aspects, i.e.

First, the offender does not appear immediately, so it requires the time to investigate a person who has committed a crime.

Second, the aspect of offense is in the form of a group/gang or criminal organization or directly relates to the government agency. It also corresponds to the United Nations Interregional Crime and Justice Research Institute-UNICRI (2016) which has dealt with problems of environmental crime since 1991, stated that environmental/green crime is associated with transnational crime organization because transnational environmental crime make a tremendous amount of income for criminals and it is hard to investigate and find evidence of wrongdoing. In addition, environmental crime also provoke other crimes, such as corruption, money laundering, drug trafficking, human trafficking, which has a more severe and complicated pattern.

Third, the damage caused by environmental crime does not occur immediately, so it takes a long time until the damage will appear.

Fourth, the effect caused by environmental crime results in society as a whole or a great number of in the society that does not specify individual or group.

Fifth, to prove the idea of some environmental cases is difficult since it is a delicate case that requires an effective process in searching for evidence, such as discharging wastewater of one factory causing fish to die, then people around there are unable to use the water. Thus, searching for evidence to prove that such factory discharges wastewater causing the damage to the environment and people requires a delicate process to find evidence, and so on.

According to the important aspect of environmental crime as above showing the differences from a basic crime, the type of environmental crime also helps to indicate the difference from other types of crime. Eamonn Carrabine and et al (2004, pp.316–320) has divided the type of environmental crime into 2 types, i.e.

First, primary environmental crimes, i.e. direct offense or harm to natural resources and the environment because of humans' offense such as air pollution,

deforestation, decreasing or causing the extinction of wildlife or violating animals' rights and water pollution.

Second, secondary/ symbiotic environmental crimes, i.e. indirect offense or harm to natural resources and environment by government sector setting the law or regulation to allow the government or private companies to harm the environment, such as the case of the government supports the forces to against the environmental movement group, transporting/toxic waste dumping in the form of criminal organization.

Samantha Bricknell (2010, p.4) has classified the type of environmental crime into 8 categories as following

- Pollution or other contamination of air, land, and water
- Illegal discharge, dumping and transport of, or trade in, hazardous and other regulated waste
- Illegal trade in ozone-depleting substances
- IUU fishing
- Illegal trade in (protected) flora and fauna and harms to biodiversity
- Illegal logging and timber trade
- Illegal native vegetation clearance
- Water theft

Thus, considering concept or perspective of environmental criminologists which have defined the environmental crime's meaning and mentioned environmental crime's aspects and types showing that environmental crime is different from other types of crime, the researcher, therefore, defines the term "environmental crime", i.e. humans' actions which intend to abuse or destroy the natural resources and environment so that it causes damages and affects humans, animals as well as the environment, including illegal acts on natural resources and environment defined by the state. Thus, natural resources and environmental crimes are caused by one person or group of people for aiming advantages for oneself and companions, which relies on cooperation regarding operating activity in the aspect of the domestic and international criminal organization.

The researcher has gathered Green Criminology approach derived from the relevant literature review as shown in figure 2.2

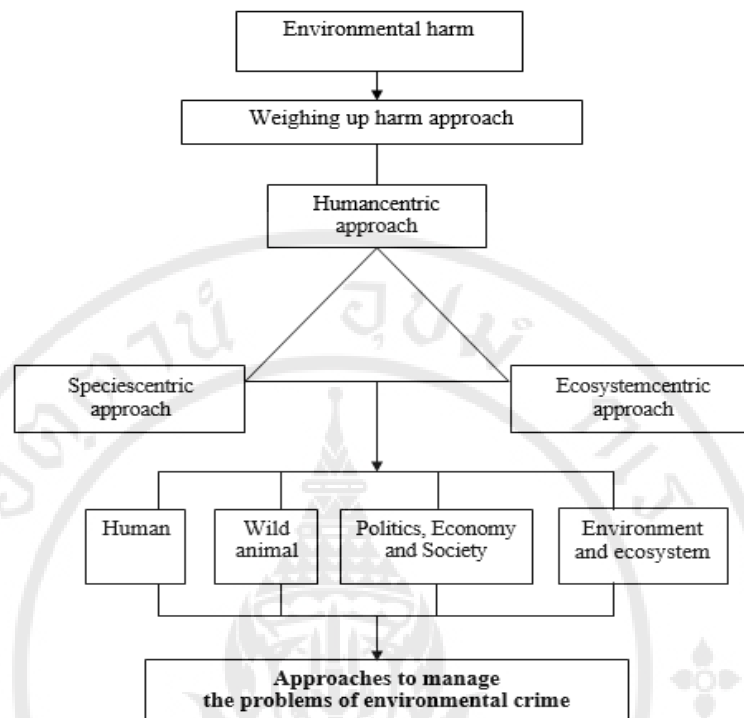


Figure 2.2 The conceptual frame of Green Criminology

Source: developed by Nanrapat Chaiakaraphong, 2019.

According to figure 2.2, when there are environment crime such as deforestation, discharging wastewater into the river/sea, forest burning, and illegal wildlife trade and so on, the environmental problems shall bring about damages. So, the damages caused by environmental crime will be considered based on **weighing up harm approach** of White and Watson (2007) which is essentially based on Green Criminology approach that must be separated and clearly identified what is damages occurring to the victim. Then, the consequences/damages caused by the victim's perspective will be analyzed in order to be fair to such a victim. In addition, the damage to direct victim and indirect victim of environmental crime is categorized into 3 groups, i.e. human, ecosystem and species/nonhuman. In consideration of the damage that should provide justice to each group of the victim, there are different methods to determine the damage based on the Green Criminology approach.

Humancentric approach: analysis of damage caused by natural resources and environmental harm by *adhering to humans as the center of all things*.

Thus, this approach considers that all humans have environmental rights, i.e. having rights in consumptions of natural things for a living or good living quality. Therefore, if the human cannot access to natural resources, it indicates that such human does not receive the environmental justice. Consequently, actions or person that obstruct the rights of the human to access natural resources and environment and affect the way of living shall be considered as environmental crime according to the humancentric approach.

Ecosystemcentric approach: analysis of damage caused by natural resources and environmental harm by adhering to *the ecosystem as the center of all things* since this approach considers that the ecosystem that is composed of various elements regardless humans, animals, natural resources and environment are all the part of the ecosystem. If anything is destroyed or damaged, other things concerned shall be affected for maintaining a balance as the cycle of the ecosystem. Hence, everything in the ecosystem has the rights to live together safely and be safe from harm caused by humans, animals, or anything affecting the lack of balance. If the ecosystem, which is the center of the relation of all things in the world, is destroyed to affect the ecosystem's balance, it means the ecosystem does not receive the environmental justice, i.e. ecological justice. Consequently, to maintain the ecological justice causes the enactment to protect forest, plants, and wildlife, such as granting rights to environmental organizations to prosecute for claim for damages when the forest is destroyed; or invasion of the national park or wildlife and plants are destroyed to be endangered (Muanpawong, 2007, pp. 269–287)

Speciescentric approach: analysis of damage caused by natural resources and environmental harm by adhering to *species as the center of all things*. This approach considers that wildlife is living creatures as humans, which is the part of the global environment. Thus, all animals have the rights such as survival, living, being safe from torture or hunting, protection from being misused for exploitation/contravention of the law, or being excluded/discriminated/insulted, as well as being safe as humans and all things in the world. Consequently, if the right to live is abused, including hunting, torturing, or ruining habitats, it is considered that those animals do not receive justice, i.e. species/animal justice. Hence, it leads to the enactment of laws and regulations to protect animals from being taken advantage.

Therefore, the damage analysis based on Green Criminology mainly puts emphasis on perspective/eco centric approach or species centric approach, but at the same time, the relationship of human, ecosystem, and animals must be considered.

Regarding victims of environmental crime, i.e. **humans, wild animals, politics, economy, society and environment and ecosystem**. Considering the status of a victim of environmental crime, it was found that wild animals, natural resources and environment are considered as **direct victim of crime** committed by humans, such as deforestation: direct victim of crime is trees, plains, flowers which are destroyed by humans, including cutting, burning and so on. Also, discharging waste water from factory into river/sea without meeting the standards required by the environment law is considered that it is directly committed by humans and firstly get damaged, as discharging waste water from factory into river/sea without standardized sewage treatment causing harmful sewage to the river/sea so that quality of water is destroyed to be an inferior quality, etc. At the same time, humans, politics, economy, society, environment, and ecosystem is an indirect victim of a crime that is secondarily committed and damaged by environmental crime, including natural resources, i.e. wild animals, wild plants, tree, air, minerals, ecosystem, and even humans and society. Because humans and natural resources and environment are living together in system of relationship between living things and environment that are composed of living things' society and environment with the interchange of substances and minerals as well as energy, the relationship between living and non-living things which are living in somewhere is complicated or it is called ecosystem (Songsunthornwong, 2010, pp. 22–33).

It can be seen that living things must be bound to the environment so that is inseparable. So if the ecosystem has trouble, living things in such ecosystem shall be affected. Because in the ecosystem, there are complicated relationships of living things and the environment, when the environment changes, living things will adapt to such an environment. For this reason, diverse nature is able to choose other living things for replacement. However, if humans destroy natural resources only for excessive use causing the change of environment to environmental problems, it will eventually cause the imbalance state of the ecosystem (Songsunthornwong, 2010, pp. 65-66).

Therefore, when recognizing the damage caused by environmental crime based on the weighing up harm approach to direct victim and indirect victim, it leads to further analysis and suggestion of approach in handling the problem to suit the victim. Mostly, scholars in the field of environmental preservation divide the **approach for preventing and solving environmental problems** into 3 approaches. Firstly, *environment and natural resources management*, i.e. when the environment and natural resources are still essential factors that are useful to humans' way of life, there is a need for systematic and effective environmental management. Thus, the natural resources are able to be used as desired without affecting the environment and resources that are able still to be used in the future. Consequently, for reducing the problem of degradation and reduction of natural resources, there are basic principles used in management, e.g. to set regulations or modify to suit a state of resources and must be enforced to all people, so it must be strictly enforced for narrowing the gap in seeking advantages for oneself or companions; the use of high technology that is able to reduce the wastefulness in the use of resources and also reduce pollution problem. In addition, to create discipline by forming a group or association with attaching importance of environment preservation in schools, organizations, communities for promoting and enhancing discipline in useful resources consumption (Songsunthornwong, 2010, pp. 280–282). Consequently, for reducing the problem of degradation and reduction of natural resources, there are basic principles used in management, e.g. to set regulations or modify to suit a state of resources and must be enforced to all people, so it must be strictly enforced for narrowing the gap in seeking advantages for oneself or companions; the use of high technology that is able to reduce the wastefulness in the use of resources and also reduce pollution problem. In addition, to create discipline by forming a group or association with attaching importance of environment preservation in schools, organizations, communities for promoting and enhancing discipline in useful resources consumption (Songsunthornwong, 2010, pp. 280–282). For the second approach, *natural resources and environmental conservation*, i.e. using natural resources wisely that must carefully consider advantages and disadvantages from usage based on economics. So, any resources which are limited should be preserved or used economically as well as seeking for methods to restore degraded environment by

different methods of natural resources conservation, e.g. exploration, prevention, reducing amount of waste, trying to use things with a lower quality such as improving the quality, replacing, reusing, repairing, improving the old one to be effective, improving the old invention, exploitation of free things or things with low investment, and so on. Therefore, the way to decide to use any methods depends on the suitability of natural resource in each area (Songsunthornwong, 2010, pp. 262–267). The third approach is *sustainable development*, i.e. to use natural resources wisely, economically, and to appreciate the value; to search for methods in maintaining the natural resources for the future generations that are able to use it to renew into the economic development system continuously and emerge to replace the old one. Therefore, it is considered that sustainable development is the approach to prevent the destruction of natural resources and environment that are helpful to humans, animals and living things in the world (Pattaramanawong, 2008, pp. 262–267).

In White's viewpoint who is an environmental criminologist, has suggested approaches to manage the problems of environmental crime in three approaches. Firstly, *the socio-legal approach*, i.e. aiming to enforce criminal law in society by developing the efficiency of environmental investigation, the enforcement of environmental law, and prosecuting environmental wrongdoer or activity harming natural resources and environment. Secondly, *the regulatory approach*, i.e. the application of social regulations and measures as a defense mechanism of destruction of natural resources and environment such as letting non-governmental organizations participate in establishing laws, reforming the production line that causes excessive consumption, and so on. Thirdly, *the social action approach*, i.e. encouraging civil society sector, political groups, socially motivated groups, general public to participate in the driving of prevention and solving of environmental problems (White, 2010, pp.418–422).

According to the review of **the Green Criminology approach**, it is found that the Green Criminology is one knowledge that has been developed by the environmental criminologists. Therefore, the perspective on the analysis of the crime problem has changed from the human centric approach to the species centric approach and the ecosystem centric approach. So, the past criminological theories have explained the causes of crime that humans are the direct victim of crime, but Green Criminology will focus on the analysis of who will be damaged by

environmental crime for searching a suitable approach to manage, relieve or remedy the damage that occurs according to each context/situation, and maintaining the balance of justice.

The researcher has decided to apply the approach of Green Criminology to prove whether or not and how the Green Criminology can be used to explain the situation of wildlife trafficking in Thailand. So, the problem of wildlife trafficking is different from a general crime that the direct victim is humans, but for the environmental crime problem that the direct victim is wildlife which is threatened and destroyed by humans for trade and also is damaged firstly. For this reason, it must be considered based on species centric approach first. Then, the damage occurring to humans, politics, economy, and society will be considered by human centric approach, and to the ecosystem will be based on ecosystem centric approach accordingly as the direct victim caused by wildlife trafficking in Thailand.

In addition, when considering approaches to manage environmental problem and environmental crime as well as the crime prevention based on the situational crime prevention theory (SCPT) as mentioned previously, the researcher has considered that the prevention and suppression is suitable to be used as the main approach to manage and solve the problem of wildlife trafficking in Thailand that is comprehensive and appropriate to the problem. Because wildlife trafficking is another problem which is associated with environmental crime and environmental problem, it is necessary to integrate both approaches of problem management in order to affect in preventing problems from occurring or recurring. In addition, it must suppress problems, which are occurring not to cause severe situations that are difficult to control.

2.4 The concept of wildlife trafficking

Wildlife was important and deemed the indicator of ecological integrity but currently it was found that the biodiversity, particularly the wildlife that lived in the area of Wildlife Sanctuary and National Park, was threaten and was at risk of extinction. Therefore, the UNODC well aware that wildlife was needed to be protected and preserved from major threat-human- and, more importantly, from other forms of

the crimes; for instances, transnational crime, organized crime, economic crime or even terrorism, corruption, money laundering which came under the form of wildlife trafficking (UNODC, 2013).

According to the aforesaid situation, the researcher thus interested in studying the situation, cause, pattern, wildlife trafficking, and the effects of wildlife trafficking in Thailand with Thailand as the source country, transit country and destination country for the last decade in accordance with the Green Criminology and the analysis of policy on wildlife trafficking prevention and suppression in Thailand in case of the links to the wildlife trafficking in Thailand that led to the crime problem and resulting in impacts on politics, economics and society, in order to prevent and suppress the wildlife trafficking in Thailand.

2.4.1 Definition and Meaning of Wildlife Trafficking

Wildlife was one of the replaceable and maintainable natural resources. Generally, wild animal or wildlife mean vertebrate animals including the insects and all kinds of arthropods whether living on land and in the water and it could divide into 6 categories, namely, reptile, amphibian, mammal, bird, insect and fish in river or swamp (Ruanganit, 2013, page 264–265).

In this research, according to the WARPA and the CITES Convention, wildlife means all kinds of animals either terrestrial or aquatic, fowls, insects or arthropods which naturally exist, or things which originated from, or are found by nature and able to sustain life in the forest or water and includes insects' eggs of all kinds of wildlife but excludes the beasts of burden which have been registered in accordance with the Beasts of Burden Code and its reproduction thereof.

According to Ragnhild Sollund, wildlife trafficking was considered as the illegal activity that generate a huge profit and it was ranked second illicit trade of the world. Wildlife trafficking was the illicit trade that respond to the consumer demand and such trade deemed wildlife destruction and threatening because, in order to sell, the seller or the huntsman had to dismantle the wildlife, parts and the carcass for the commercial benefit purpose (Walter; Westerhuis and Wyatt, 2013, p.72). At the same time, the Trade Records Analysis of Flora and Fauna in Commerce or TRAFFIC (2016b), the Wildlife Trade Monitoring Network, explained that wildlife trade was

trading and exchanging of wildlife, wildlife carcasses or the products and goods made from wildlife carcasses in order to meet the consumer demand such as leather, medicines, tourism and food. The wildlife trafficking mostly found at the country border which could be cross-border wildlife smuggling. In line with study of Nigel South and Tanya Wyatt (2011, p.538–561), the illicit wildlife trafficking was the crime involved the wrongful act such as hunting, killing, selling or collecting the endangered or preserved and protected wild animals under the relevant laws and conventions.

Moreover, according to the study of Natnicha Donpanya (2013), illicit wildlife trafficking deemed the black market which could generate high income with a huge profit from abovesaid activity. The consequences of the illicit wildlife trafficking and the forest loss costed many species into endangered wildlife. The illicit wildlife smuggling, deforestation and wildlife transportation were major problems that occurring around the world especially in developing countries. According to the study of Tanya Wyatt (2009, p.145), the illegal wildlife trade was considered as the crime pattern that had identity and involved the illicit trade including the wildlife smuggling, wildlife confinement as well as animal and endangered or rare wildlife collection.

As for this research, the researcher defined the **“wildlife trafficking”** as hunting, killing, buying-selling, importing-exporting, possessing and transporting all kinds of living wildlife, wildlife carcasses or the parts of wildlife whether terrestrial animals, poultry and insects which had described in the WARPA and the CITES in order to exchange, trade and pursuit the profit in any forms with the support from organized groups that could deem the domestic and transnational organized crime.

2.4.2 Causes/Purposes of Wildlife Trafficking

Wildlife was significant natural resources that benefitting human for a long time till present day and generating country revenue in the form of legal wildlife trade to foreign countries as well as benefitting the academic area such as animal experiments and animal use in medical research. Moreover, wildlife also healed people mind and soul with calm and relaxation in which deemed immeasurable price: more importantly, the wildlife balanced the ecosystem and thus all kinds of animal could peacefully live together. The foregoing benefits demonstrated that wildlife was an object that meeting the consumer demand and expectation of human.

When consumer demand increased, without any means to possess the wildlife, the price and value accordingly increase, and some wildlife was the market needed wildlife because they were protected wildlife by law. In order to possess such protected wildlife for buyer satisfaction, there was a correlation of wildlife trafficking by organized crime which currently considered as a serious crime. According to the World Wildlife Crime Report Trafficking in protected species 2016 of the UNODC (2016, p.16), it was found that the significant reasons of wildlife trafficking could divide into 5 purposes as follows: (1) art, décor and jewelry, (2) fashion, (3) food, medicine and tonics, (4) pets, zoos and breeding and (5) seafood.

At the same time, in line with Chris Shepherd and associates (2004), the officers who worked for the Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC), they monitored, tracked and collected the important information of wildlife trade. They said that the area of the forest in Southeast Asia deemed the essential for globally wildlife trade due to the high biodiversity: therefore, the place was important source with high demand in the market. Furthermore, the study of Stephen F. Pires (2015) indicated that the reason of wildlife trafficking still remain was because of consumer demand for satisfaction purpose such as fulfilling desire and beliefs; for instances, wildlife raising, accessorizing, consuming and wildlife product and drug such as the case that rhino horn was wanted, for curing cancer purpose, by Vietnamese and foreigners in which resulting in rhino poaching. Such rhino poaching was the main reason for rhino horn trafficking and supply (TRAFFIC, 2008; Milliken and Shaw, 2012).

Furthermore, according to the studying and document collection, the causes of wildlife trafficking could fall into 5 purposes as follows (Chan-at, 2005, pp.36-37):

(1) Consumption: mammals, birds, barking deer, deer, langurs, bears, gibbons, palm civets, jungle fowl, hornbills and the reptiles and amphibians such as turtle, frog, green frog and snake were threaten and declined due to consumer demand, especially people with the high socioeconomic status whose tastes were eating many kind of wildlife-particularly rare and endangered wildlife- such as tiger meat and bear's paws.

(2) Accessorizing: many wildlife or wildlife carcasses was accessorized such as elephant ivory, tiger leather, wildlife horn, rhino horn, tortoise shell,

snakeskin, shell and wildlife taxidermy. Some products and goods that made from wildlife were legal trade by law on the condition of with the license, such as crocodile skin and elephant ivory.

(3) Wildlife raising: some wildlife were rare with very expensive price due to the popularity among the collectors; such as wild bird that had beautiful feathers or beautiful voice, bulbul, Piciformes including the Australian parrot, gibbon, squirrel, Madagascar chameleon, Amazon Bengal monitor and Nagini.

(4) Food, medicine and tonics: Some wildlife or its parts; such as rhino horn, tiger bone, tiger tooth, tiger eye, Indonesia pangolin, was hunting and poaching due to the foods, medicine and tonics reason. The ancient beliefs of Southeast Asia people such as Chinese, Korean, Japanese, Vietnamese- was eating wildlife meat as medicine would make them healthier with properties for treatment and increase life expectancy as well.

(5) Zoo or wildlife showcase that provided by the government and private sectors: the zoo of the government and private sectors was viewed as the marketplace: and due to the unskilled manager and inefficient management of the business, there was a high number of wildlife fatalities; and with increasing private zoos dramatically, it caused more wildlife smuggling in order to be displayed.

Additionally, TRAFFIC (2016a) indicated that wildlife trafficking was caused from an economic stimulus as a main reason: it induced the local people whom had low income to illegal wildlife trade or wildlife trafficking in which some were eventually rich people and becoming the business owner. The wildlife trafficking also referred to wildlife collection, possession, transportation, industrial product, marketing, exportation and the retail business of wildlife as well.

In conclusion, **the causes/purposes of wildlife trafficking** were in accordance with the market mechanism: in other words, when consumer had demand of wildlife due to his desire such as consumption, accessorizing, decoration, clothes, medicine or tonics, showcase and others, the seller as well had supply that meeting consumer demand by killing and poaching wildlife- without consideration and without feeling guilty of his criminal action and caused so many damages and loss to human and ecosystem.

2.4.3 The Factors of Wildlife Trafficking Causes

According to the documentation and many studies toward wildlife trafficking, it was indicated that the factors that caused wildlife trafficking problem which tending to be more serious situation and could impact on human, animals, nature and environment were as follows:

(1) Demand: consumer had demand of wildlife or its product or goods due to his desire such as consumption. For example: the rhino horn was wanted by Vietnamese because they believed that it could cure cancer (Milliken and Shaw, 2012). And consumer had desire of accessorizing, decoration, clothes from wildlife and wildlife carcass (CITES Management Authority of China, 2012), as well as breeding providing the wildlife hunting competition. Such wildlife consumption demand caused wildlife trafficking and wildlife smuggling by seller (WWF, 2012, pp.9, 12).

(2) Supply: when the demand of wildlife increased, there was always numbers of seller as well. The relevant person toward wildlife trafficking could fall into many classes: for instances, huntsman who did accordingly to the order of middleman, organized crime that relating to wildlife trafficking with pursuit of profit purpose for criminal activities or professional wild hunter at national and international level who hunted wildlife in exchange of for a large amount of money. Nonetheless, the wildlife trafficking mostly was done by domestic and transnational organized crime with the huge money as incentive while, on the contrary, the risk of arrest was low and the punishment was not hard; thus with such high return and low risk, it could lead to the wildlife trafficking that according to the crime triangle theory (Brack and Hayman, 2002, pp.10-11).

(3) Corruption: organized crime or the people who export the wildlife products and goods mostly were people with high socioeconomic status whom enabling bribe the government officers, such as Customs officers and police officers, to do or not to do something or facilitate them on wildlife trafficking such as transporting, exporting or importing wildlife to the organized crime. According to the study of Tanya Wyatt and Anh Ngoc Cao (2015, pp.20–22), it was found that wildlife trafficking had relation to corruption among Vietnamese government agencies especially in bribery and the most officers who involved such bribery were local operational forestry officer, local

natural resources and environment police officer as well as high authority of local government agencies who facilitate the wildlife smuggling, killing, poaching including exporting, transiting and importing the wildlife.

(4) Poverty: the lack of channel to earn money had high influence to wildlife trafficking situation since the earning from wildlife trafficking was worth the risk because the probability to be arrest was very low comparing to a large amount of money from wildlife trafficking. Thus, the poverty played important role in increasing wildlife trafficking (WWF, 2012, p.14).

(5) Weak government: the corrupted government caused the ineffective and inefficient governance which affected the rule of law of the country, nation security, economic stability, public safety, and political responsibility. The stated issues could support the wildlife trafficking and gradually turned into a serious problem in the future (WWF, 2012, p.14).

In conclusion, **the factors of wildlife trafficking causes** had demand for satisfaction purpose and supply with consumer demand purpose as primary causes with the wild hunter or domestic and transnational organized crime as supplier so that they could satisfy the consumer need. Moreover, corruption issue, poverty issue and weak government also were considered as support factors of wildlife trafficking in the society. Therefore, the researcher needed to prove that the aforementioned wildlife trafficking factors had led Thailand to currently encounter a serious wildlife trafficking and the result of research could deliver the true causes of the issue in order to further explore the guideline on wildlife trafficking prevention and suppression in Thailand.

2.4.4 The Crimes of Wildlife Trafficking

When there was a crime occurrence in society, the society had to explore the solution of such crime to handle the offender in order to express the standpoint of a zero-tolerance policy. Each community had the different measures and preventive approaches according to the core values, belief and social norm of the community in which continuously and constantly changing (Suteesorn, 2004, p.31). Therefore, wildlife trafficking whether hunting, poaching, transporting, importing, exporting or possessing for any reasons was still considered as criminal offense prescribing by law.

Surprisingly, wildlife eating or parts of wildlife eating, accessory made from wildlife carcass possession for power demonstration purpose were legal conduct in some countries, but as for other countries, such action deemed illegal activity because wildlife hunting, wildlife trafficking and wildlife possession was illegal since such wrongdoings had impacts on human, economic condition, politics and society in the country. Thus, it could be said that whether wildlife trafficking was legal or illegal action depended on social context, tradition and other condition of the country.

Nevertheless, the wrongful act to wildlife yet deemed special crime that had relation to other forms of crime and therefore it was necessary to enact the law with different explicit punishments, measures, preventions and wrongdoing correction. The characteristic of the crime or the crimes of wildlife trafficking could analyze as follows:

(1) Wildlife trafficking was environmental crime: the United Nations Interregional Crime and Justice Research Institute (UNICRI) (2016) explained that the environmental crime was criminal activity which included illegal trade in wildlife, smuggling of ozone-depleting substances ODS, illicit trade of hazardous waste and the action that caused air pollution, water pollution, land pollution which threatening the living organism of the Earth. Moreover, the environmental crime was considered as criminal activity conducted by organized cross-border crime in order to pursuit the benefit and huge profit from such criminal activity. An according to the study of Anop Chubamroong and Unisa Lerttormornsakul study (2012, p.112), it was indicated that the environmental crime referred to the wrongdoing from damaging the natural resources and environment such as air pollution, water pollution, land pollution, deforestation, ecosystem destruction, illegal wildlife and plant resources trade.

(2) According to the study of Jutharat Ua-amnoey (2010, pp.144-145) and Weerapong Bunyoophat (2010, p.20), the wildlife trafficking was economic crime. The economic crime referred to the wrongdoing with intention to pursuit the profit or the economic benefits in which such wrongdoing-that against the economic and commercial laws undermined the economic and national security. According to the study of Prathan Wattanaphanit (2003, p.229), the study explained that the motives of the economic crime were as follows; (1) poverty (2) greed (3) committing a crime for living Therefore, as regard to the characteristics and the objectives of wildlife

trafficking, the demand was primary cause in case of wildlife trafficking in which such wildlife trafficking had a large sum of money or other benefits in exchange. For instance; the study of Hui Min Neo found that the money or profit from rhino horn trafficking per one time of illicit trade in South Africa could worth US\$ 60,000 per one kilogram which was higher than diamonds or cocaine on the illegal market or the black market and as regard to the punishment of rhino horn trafficking under the law of South Africa, the offender would merely be fine US\$ 14,000 comparing to the 5 years of confinement for cocaine smuggling. Therefore, wildlife trafficking deemed new crime pattern that challenged the government agency officer performance in order to maintain the wildlife resource, the stability and the national security (WWF, 2012, pp.10–11).

(3) The wildlife trafficking was organized crime, in line with the study of Quinney (1980) and Atchariya Chootinan (2012, p.43), and it was wrongdoing by the governing elites in order to maintain their influence in the society and for sexism and racism purpose. Such wrongdoing also had motive in ensuring the working class obedience and not powering them as well. Additionally, it was also done by the organization, that had well management and effective methods which difficult for government officers to suppress, with the purpose of financial crime. Furthermore, according to Annop Chubamroong and Unisa Lerttormornsakul study (2012, p.112), it was found that characteristics of organized crime comprised of 4 factors, namely, hierarchical structure, criminal activity for a period of time, permanent self-reliance in the organized crime and relevant criminal activity for the benefit of the organized crime.

Moreover, United Nations Convention against Transnational Organized Crime (UNTOC) added that a crime organization refers to a group, which has a structure of three or more people that exist for a period of time and have coordination between each other with the goals of serious crimes or committing an offense as defined under the Convention in order to directly and indirectly obtain financial or other material benefits (United Nation, 2004, p.5). The nature of organizational crimes according to the concept of the UNTOC organized as follows.

- There is a combination of criminal groups with the aim of engaging in crime with a stable combination and establish an organization with mutual benefit.
- It divides responsibility with efficiency and serious results.

- There is a person who is a criminal leader and such person is recognized with economic and political power by society and has a high social status
- Government officials and politicians are joined the organization and provide funds for the benefit of civil servants and politicians to exchange for the organization to work easily.
- A crime often uses violence in illegal business operations and members of the organization itself are immediately exterminates when violated the rules.
- A crime is a professional and try to expand the business to a wider extent as well as doing cross-border business.
- It provide special funds to take care of family members and families are not suffer and be neglected if members of the organization are arrested and prosecuted.
- There is a bribe for government officials in the judicial process
- There are plans to set policies and implement various measures to prevent obstacles in the operation of the organization.

The wildlife trafficking, especially the smuggling of international trade, is an offense that relates to criminal organizations/criminal networks of wildlife exporters. Mostly, a group of people has economic status, funds or property to exchange benefits with government officials such as customs officers, police in order to facilitate the export, import and pass through of the wildlife trafficking.

Therefore, it can be said that illegal wildlife trafficking, especially international trade, is an action that requires a group of people in a network/criminal organization to smuggle, kill, export, import, buy, sell wild animals that illegal wildlife trafficking sometime may give bribe to officials to facilitate the illegal wildlife trafficking. Similarly to the study of Tanya Wyatt and Anh Ngoc Cao (2015, pp.20–22), it found that wildlife trafficking has contributed to the corruption in Vietnamese government agencies, especially bribery of local forestry officials, local police, natural resources and environment officials, high-executives officials in sub-district administration, district administration and provincial administration to facilitate the smuggling, killing, exporting, importing and carrying through of wildlife. It shows that wildlife trafficking is a form of corporate crime.

Based on a review of **concept of crime toward wildlife trafficking**, it found that illegal wildlife trafficking was an offense that the state has designated as a mala prohibita. It is considered a destruction of wildlife resources by hunting, killing, carrying through of wildlife for the purpose of exploitation without taking into account the impact on the ecosystem and imbalance between humans, wildlife and the environment. It also has important affect the way of life security for the body, mind and human beings in the present and future. The illegal wildlife trade is also considered to be an act of a criminal organization that clearly divides its duties in activities to aim for economic benefits in various forms. The result of the offense has created and delivered tremendous rewards/profits to the offenders in cases of escaping from arrest and prosecution of justice.

2.4.5 Impacts of wildlife trafficking

Wildlife trafficking is an act that directly and indirectly affects humans. According to relevant documents and reports, especially from the results of Tanya Wyatt's study (2013, pp.130-158), who conducted the research on the Security Implications of the Illegal Wildlife Trade. Wyatt's study attempted to prove the assumption that wildlife trafficking affects national security in the environment, human, economy and national security. Wyatt studies and analyzes situations and problems in the area of environmental crime. The study found that smuggling of wildlife was related to environmental security, human, economy and national security. The researchers divided the impact of wildlife trafficking into four areas, which were environmental, health, social and economic aspects. The effects of wildlife trafficking is related as shown in Figure 2.3

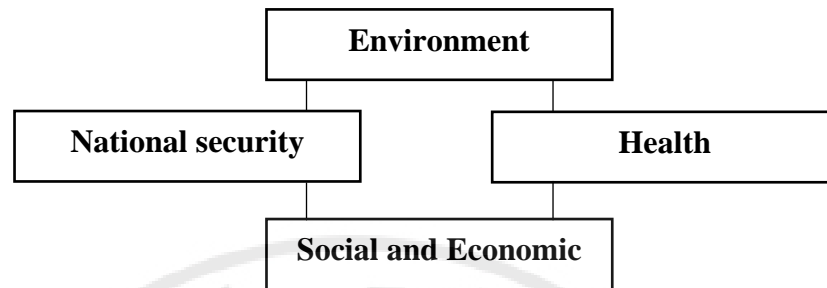


Figure 2.3 The impact of illegal wildlife trade

Source: Developed from WWF, 2012

Figure 2.3 can explain the details of the impact wildlife in each area as follows.

(1) Environmental impacts: wildlife is an essential natural resources and wildlife trafficking is a cause to make wildlife extinction without being able to be recovered (WWF, 2012, pp.16–19). Science predicts that if the situation of wildlife trafficking still occurs and continues, around 13–42 percent of wildlife in Southeast Asia will be extinct in this century and half rate of such extinct amount, it is assumed that those wild animals will become extinct from the world permanently. Moreover, the destructed ecosystems will continue to affect the watershed and food sources as well as causing the variability of weather conditions. As a result, the wild animals lack of food and die from drought due to insufficient resources for the livelihood of wildlife (Donpanya, 2013).

(2) Health impact: the rate of risk from the spread of the virus and germs from animals to humans has increased because killing and removing animals from the forest without prevention and control the spread of germs in hygienic conditions may cause the spread of diseases that can be transmitted from animals to humans. For example, the Severe Acute Respiratory Syndrome (SARS) that spreads from cats into humans, which originated from China. There is also an infection of Avian Influenza, smallpox monkey (Monkeypox), which is a virus found from monkeys in Africa. When monkeys smuggled to the United States, thus, the virus spread from monkeys to dogs or other pets until spread to humans (Wyler and Sheikh, 2008, pp.13-15).

(3) Social and economic impacts: wildlife trafficking is related to corruption. It causes economic growth, especially in various investment sectors can proceed slowly. It also results in reduced government performance. The rule of law of

the country is destroyed. It is loss of national reputation and affect the growth of local communities (WWF, 2012, pp.16–19).

(4) The impact of national security: wildlife trafficking is an act that is involved in criminal organizations both domestically and internationally. The profits from wildlife trade will be taken to support terrorist activities or insurgency and also links other crimes (Donpanya, 2013; Wyatt, 2013, pp.130-158). It additionally explain that wildlife trafficking is associated with the problem of refugees/smugglers. Due to the lack of natural resources in their own country, their livelihoods and lifestyle are difficult. This includes the problem of over exploitation in cultivated areas, people then illegally emigrate across the border into other countries. Also, it cause corruption problems both in cases where politicians do not enact laws relating to wildlife trafficking in order to demand benefits for themselves and their fellow citizens or in the case of bribes of police officers. While terrorist groups do not expect the direct results of wildlife trafficking or contact with people/groups of illegal wildlife trade, but wild animals are kill and transport to spread the disease from animals to humans or can be called a biological war. This is different from the insurgency group that only relies on illegal wildlife trafficking to earn money for their own group as a wild animal smuggler. The illegal wildlife trade will carry out activities to expand the network of criminal organizations at the same time with organized crime groups, drug trafficking, war weapons trade or human trafficking.

Therefore, it can be concluded that **the wildlife trafficking has created effects** that cover four dimensions. The biodiversity is reduced. Bleeding of exotic wildlife destructs wild animals, native species and health, including the spread of disease from animals to humans. Social and economic dimension includes political and governmental instability. Social problems and national security can be the expanding of network of criminal organizations / transnational crime organizations, other crimes due to increasing of wildlife trafficking, such as drug trafficking, terrorism, weapon trade, corruption, money laundering. The effects of all four dimensions cannot be avoided.

2.4.6 Forms of wildlife trafficking

From research and collecting of documents, it was found that wildlife trafficking can be divided into two main forms, namely domestic wildlife trafficking and international wildlife trafficking. It describes the following.

(1) Domestic wildlife trafficking is to do activities such as hunting, killing, trading, possession, which is considered illegal action on wildlife. Those wild animals originate and live in forests in that country with a pattern/process for smuggling and capturing wild animals from domestic forests for the purpose until the species of wild animals became rare or extinct from the local forests. When those wild animals became rare wildlife, the value of wild animals increased and became more demanding by consumers such as beautiful birds, reptile and various amphibians, etc.

Nonetheless, consumers who need to possess those rare wild animals do not taking into account the remained number of wildlife in the forest for further breeding. For example, snakes and lizards are killed to make luxury leather products, that all actions make those animals to be more rare or extinct (Animal Welfare Institute, 2016).

(2) International wildlife trafficking is an action involving hunting, killing, exporting, passing through, importing, trade wildlife from one country to another country. Such acts are a violation of international law, international conventions or domestic laws related to wildlife trafficking (Wyler and Sheikh, 2013, p.3). The WWF (2012, pp.9-13) explained that the international wildlife trafficking process will begin with wildlife export countries that comprise of individual local poachers and professional poachers who will be national/international professional hunter and criminal group. When all three types of wildlife poachers can hunt wildlife, they will sell wildlife/wildlife carcasses by themselves or to local middleman in the domestic market, which is considered a form of domestic wildlife trafficking. If middlemen/wildlife hunters export wildlife into another the country by international transportation in various forms (logistic) that is considered an international wildlife trafficking. After exporting of wildlife from the source, those wildlife will be transported to transit countries with international/regional middlemen and international wildlife traders to take and transmit those wildlife to the destination country or import country. Middlemen of destination countries/ imported countries deliver wildlife to consumers

or to sell on their own in the domestic market to meet consumer objectives such as medicine, food, pets, and products/goods. The researcher can summarize the process of international wildlife trafficking in figure 2.4

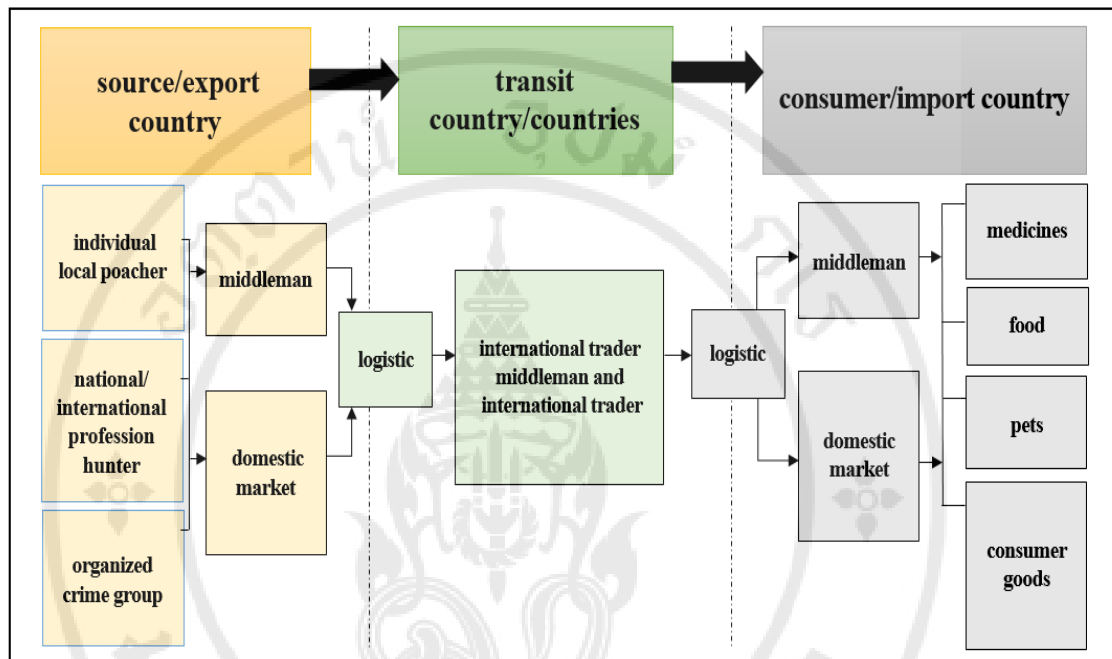


Figure 2.4 The process of international wildlife trafficking

Source: WWF, 2012.

From reviewing in the concept of wildlife trafficking, it has been understand that wildlife trafficking is caused by the demand for wildlife to fulfill objectives such as food, medicine, jewelry/decoration, apparel, pets, exhibits. When consumers demand to consume wildlife, there is a need to sell wildlife. Thus, it cause individuals/groups to smuggle, kill, buy, sell, export, pass through and import wildlife for delivery to consumers. In most cases, wildlife trafficking is divided into two forms, which are domestic wildlife trafficking and international wildlife trafficking. Any form of wildlife trafficking will affect nature such as reduced biodiversity, death or inability of bleeding of domestic wildlife due to the invasive wildlife, and spread of disease from wildlife into human. Moreover, the impact on national security from crime in the form of a network of criminal organizations/transnational criminal organizations and the increase of other crimes due to

wildlife trafficking, such as drug trafficking, terrorism, firearms trade, corruption, money laundering, political and governmental instability.

In addition to literature review of wildlife trafficking, it also noted that the victims of wildlife trafficking are divided into 3 categories: (1) human and society (2) wildlife and (3) environment and ecosystems. When introducing the concept of wildlife trafficking, the literature review of environmental criminology, criminology and wildlife trafficking is seen that variables that indicate damage to humans, society, wildlife, environment and ecosystems appears in figure 2.5

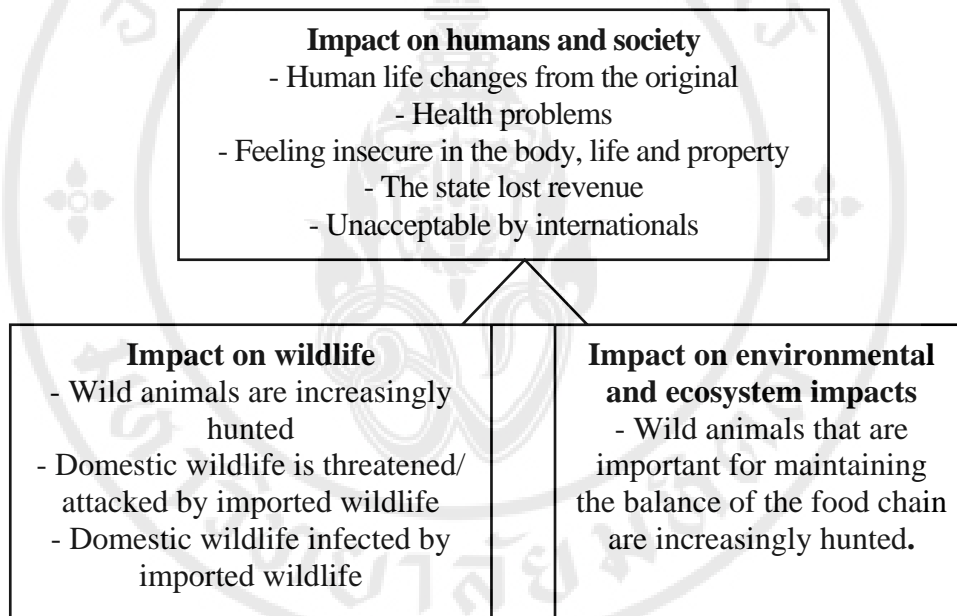


Figure 2.5 The impact on wildlife trafficking on Green Criminology concepts

Source: developed from Rob White (2008) by Nantrapat Chaisakarapong, 2019.

Figure 2.5 can be seen that the variables that will indicate *the impact on human beings and society according to the human concept* as follows: (1) human life changes from the original (2) health problems (3) insecurity in the body, life and property (4) state loss of income and (5) unacceptable by internationals. While the impact on wildlife based on animal concepts is (1) wild animals are hunted increasingly (2) native wildlife is threatened / attacked by imported wildlife (3) native wildlife is infected by imported wildlife. Based on the concept of environment ecosystems, wildlife that is important for maintaining balance of the food chain being increasingly

hunted. Therefore, if the situation of wildlife trafficking in Thailand has affected all three aspects as aforementioned, it means that the concept of environmental criminology (Green Criminology) can be used to explain the situation of wildlife trafficking that occurs in Thailand

Regard with this study, the researcher aims to explore the situation, causes, patterns, processes and effects of wildlife trafficking in Thailand. It researches on the areas of exported country, pass through and imported country in the last decade that according to the concept of green criminology together with the analysis of the policy toward protection and suppression in environmental crime in Thailand. It also investigate the policy of protection and suppression in wildlife trafficking that can assist prevention and suppression of wildlife trafficking in Thailand or not. This leads to the proposed guidelines for further prevention and combating wildlife traffic in Thailand.

2.5 Research conceptual framework

The research on Environmental Crime: A Case Study of Wildlife Trafficking in Thailand, the researchers employed theories, concepts, documents and relevant research that has been reviewed to develop into a research conceptual framework according to figure 2.6

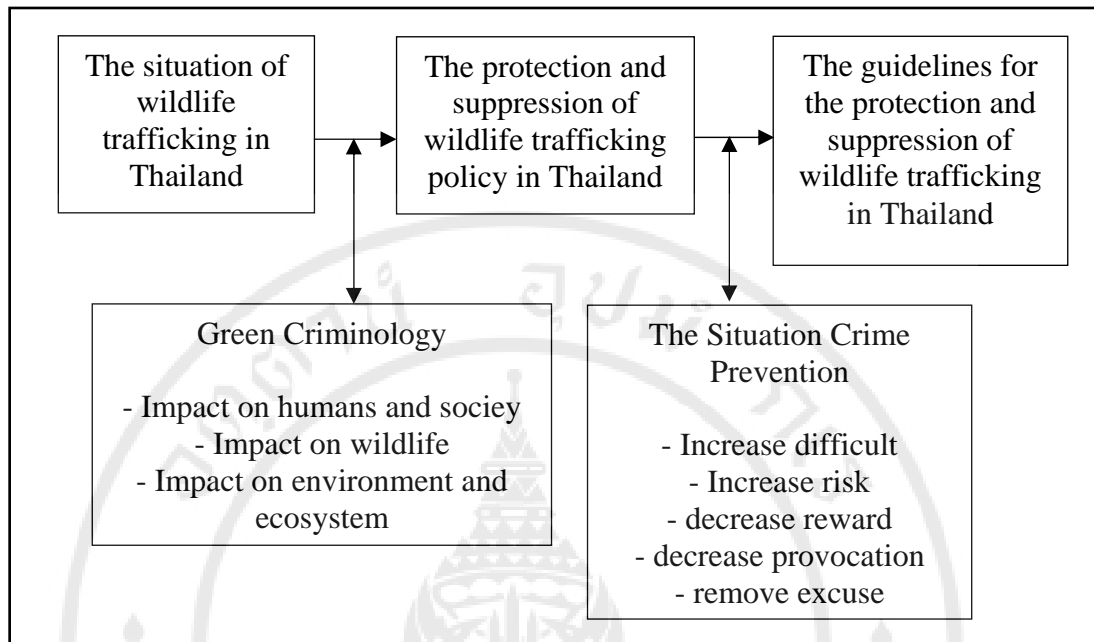


Figure 2.6 conceptual framework

Source: developed by Nanrapat Chaiakaraphong, 2019.

Figure 2.6 demonstrates that wildlife trafficking has occurred in Thailand such the situation, cause, form, process of smuggling over the previous decade. It has an impact that is based on the concept of Green Criminology, which is the impacts on human, society, wildlife, ecosystem and environment. Therefore, it lead to issue policies in the form of policy toward protection and suppression of wildlife trafficking in Thailand. The protection and suppression of wildlife trafficking policy in Thailand are (1) the Convention on International Trade in Endangered Species of Wild Fauna and Flora, (2) the Wild Animal Reservation and Protection Act B.E. 2535 (1992), (3) the Wild Animal Reservation and Protection Act B.E. 2546 (No. 2), (4) the Wild Animal Reservation and Protection Act B.E. 2557 (No. 3). All policies and implementation of policies have guidelines that increase difficulty and risk, decrease benefits, provocation and remove excuses that is consistent with the Situational Crime Prevention Theory. This lead to the development of guidelines for the protection and suppression of wildlife trafficking that are appropriate to the current situation and further in Thailand.

CHAPTER III

METHODOLOGY

The research study “ENVIRONMENTAL CRIME: A CASE STUDY OF WILDLIFE TRAFFICKING IN THAILAND” It is based on qualitative research, by processing with a documentary study and in-depth interviews being conducted. Furthermore, it made the research obtain in-depth information; of which was useful for analyzing integration for preferred process to develop guideline.

3.1 Literature review and Related Research

The researcher accumulated and studies about secondary data from credible information, in Thai and foreign languages. For instance, books, academic articles, research articles, Thesis, journals, statistics of related organizations. etc. Situation Crime Prevention Theory, Green Criminology, Policies about protecting and suppressing wildlife trafficking approach. Literature review obtains to develop of research concepts; as well as the process for in-depth interviews in the next period.

3.2 Tools of research

To analyze the quality of the tools of research, there are 2 steps; such as NO. 1 step 1 for constructing research tools.

The researcher brought data and outcomes, from the document research; in order to construct semi-structure interviews with open-ended questions. The information was determined to flexible in manner; to be able to collect data easily according to when wildlife trafficking occurred.

For the main component of the question, there are 4 parts

Part 1 mentioned about situations and conditions of problems; as well as the processes involved, format, and impacts from wildlife trafficking how it occurred in Thailand in last 10 years.

Part 2 mentioned about the policy of the protection and suppression of wildlife trafficking in Thailand, and related organizations/enforced regulations. There was a procedure for processing and resolving issues; as well as there being strength and weakness points.

The factors of success/supporting factors to assist with bringing policy to be operated; in order to how it made it successful for protecting and suppressing wildlife trafficking throughout Thailand.

Part 3 mentions how the format is to protect and suppress wildlife trafficking throughout Thailand.

Part 4 made suggestions to bring processes; in regards to protecting and suppressing wildlife trafficking throughout Thailand.

Step 2 to be able to analyze the quality of research tools

The researcher sent the format of the interviews; in order for professionals to check the quality of there being stable languages present for the questions; as well as to observed the completeness of the question. This was done to ask for suggestions, and the process for improving the format of interviewing to be proper; as well as to be stable with the principles of technical matters. For a matter of fact, the researcher edited the interview format; of which was followed by professional suggestions already. Then, the researcher will prefer the research for asking for certification from the Institution Review Board–IRB. Social Sciences major at Mahidol University before information was gathered.

3.3 Key Informant

The researcher will collect data from interviewing, and through in-depth interviews from key informants. Also, this is conducted through analyzing key information with purposive sampling through snowball sampling. Furthermore, this carried through professional key informants that was interviewed already. “Thus, this would permit the researcher to approach key information to obtain more in-depth information” (Chantawanich, 2550).

Therefore, wildlife trafficking of Thailand is a new type of crime issue that has occurred throughout the country. There are many complications that revolve around wildlife trafficking. This is the reason why there are officers that are personnel for the managing department and operation department/government organizations; as well as professionals that have technical knowledge of about protecting and suppressing wildlife trafficking throughout Thailand. For key information, there were about 58 individuals of which were sectioned in 5 main groups. For example the following:

The academic professionals/researchers conserving wildlife trafficking environment; as well as environmental crime of 7 individuals.

The commanding group/government officers consisting of 25 individuals of the DNP, the Thai Royal Police, the Thai Customs, the Anti-Money Laundering Office, and Veterinarian hospitals.

The commanding group/government officers consisting of 12 individuals from the Seub Nakhasathien Foundation in Thailand. United States Agency for International Development-USAID, World Society for the Protection of Animals, WWF Thailand, and the Freeland Foundation. UNODC Regional Office for Southeast Asia and the Pacific.

Media group (news reporters about natural resources and the environment consist of 6 individuals from Channel 3 News as well as TNN 24 Spring News channels.

The group of individuals has offenders, individuals who use to be offenders before, or offenders in regards to wildlife trafficking, wildlife animal selling, and hunting. There is a community that protects wildlife consist of 8 individuals.

3.4 Data Collection

Procedures for data collection are done through the following:

1) The researcher inquired in a polite manner to the Faculty of Graduate Studies, Mahidol University; of which wrote book documentation and requested for interviews to obtain information dissertation. Furthermore, this would allow for transfer of individual transfer of key information to appoint the date, and the time; as well as the location for interviewing.

2) The researcher will process; to be able to make an announcement of the objective of interviewing. In turn, the data would be explained about the primary question; in order to make the interviewer understands the given information and request to allow for a sound recording between interviews being conducted. “If the interviewer doesn’t allowed for a sound recording, the researcher would just allow to write notes during the interview” (Chantawanit, 2004).

3) Interviews were started, to inquire about questions from the questionnaire; as well as the main questions that were related for usefulness educating at the same time as interviewing the primary interviewer.

4) After the interviewer gave complete information, the researcher will try to repeat the information and summarized the primary standpoint of information; in order to show that this data is correct.

3.5 Data Analysis

The researcher brought the data from the researched documentation, and data from in-depth interviews; in order to process it by the following:

1) Information interpretation is conducted to make sure that the data was correct, by analyzing and considering of key issues. Thus, this would make a process for this decision to choose another issue (Phositha, 2011, pp.340-346)

2) To design coding of opened information that was analyzed, was correlated by following the accordance of the conceptual framework (Yoddumnern-Attig and Tangchonhi, 2009, pp.42-47)

3) To bring information to be the analysis group, by content analysis in these 3 types of interpretation through constant comparison, data synthesis, and

induction are debated with wildlife situations that are shown (Chantawanit, 2007, pp.131-142).

4) To write a descriptive essay for presenting results and discussion of the research; as well as the processes, and suggestions of developed guideline to protect and suppress wildlife trafficking in Thailand.



CHAPTER IV

POLICY IMPLEMENTATION AND ITS IMPACT TOWARD WILDLIFE TRAFFICKING

The study of “Environmental Crime: Case Study of Wildlife Trafficking in Thailand”, the researcher has studied and collected data from relevant documents with the in-depth interview of the experts who have knowledge and experiences which are related to the operation of protection and suppression of wildlife trafficking from government agencies, non-governmental agencies, academic departments and media. There is also public involved in wildlife crimes, community leaders and people that contribute to protect wildlife trafficking in Thailand. Hence, the results is divided into two parts as follow.

4.1. Wildlife trafficking in Thailand

4.2 The protection and suppression of wildlife trafficking policy in Thailand

4.1 Wildlife trafficking in Thailand

According to documentary research and in-depth interview, it is found that there are situations, causes, patterns, processes, and effects caused by wildlife trafficking in Thailand.

4.1.1 The situation of wildlife trafficking in Thailand

For today’s situation of wildlife trafficking in Thailand, the key informants all agree that Thailand is still considered the source country, the transit country and the destination country of wildlife trafficking process by many countries, especially The CITES Secretariat (UNDP, 2017, p.130). Namely, the IUCN that is working on the conservation and sustainable and equal use of natural resources and also has a big role which has been respected in making and publicizing the Red List of Threatened Species. So, that list has been used as a reference in projects and activities by

international wildlife conservation organizations, e.g. the UNDP, UNODC, The CITES Secretariat, TRAFFIC, WWF, for sustainable conservation of natural resources and ecosystem. Additionally, international wildlife conservation organizations all agree that four rare species – the tigers, elephants (ivory), rhinoceros (rhino horn), and pangolins have been under threat of extinction and have been most affected by wildlife trafficking process as shown in the Red List Threatened Species (UNDP, 2017, p.4).

Thailand is regarded as **a source country of wildlife trafficking**, regardless wild animal parts, the remains of many wild animals will be traded and deliver to the last consumer in Thailand or other country. Tiger trafficking is the indicator that point the severity of the wildlife trafficking origin country. The UNODC clearly stated in the Criminal justice response to wildlife crime in Thailand: A Rapid Assessment (UNODC, 2017, p.3) that tiger is one of the two rare species of wildlife and is in demand of illegal wildlife trade. Thailand's western forest, especially Huai Kha Khaeng Wildlife Sanctuary has been accepted as one of the most abundant and safe habitats for tigers in Southeast Asia. Nowadays, it is estimated that there are about 200-250 tigers in Thailand that more than half of tigers are living in the western forest according to 100,000 tigers in Asia. So, during the last 10 years, Thailand Wildlife Enforcement Network: Thailand-WEN has arrested and prosecuted regarding tiger trafficking for a total of 14 cases with seizures, i.e. 32 tigers heads, other 420 kilograms of other body parts, and 20 people are prosecuted (Table 4.1) (UNDP, 2017, pp.166-167).

While Thailand is regarded as **a transit country of wildlife trafficking**, regardless of transit country for wildlife trafficking from the route of Africa countries, especially offender traveling with Kenya airlines. Moreover, there are airlines from Australia, Europe, America, and Asia, especially the Southeast Asian countries that are nearest sub-region of Thailand. In other words, transnational wildlife trafficking will import wildlife and its body parts into Thailand before smuggling through Thailand to destination countries where final customers live. Regularly, smuggling of wildlife, carcasses, body parts and products made by wildlife carcasses are imported into Thailand in various ways, e.g. international airports, especially Don Muang International Airport, Suvarnabhumi International Airport, Chiang Mai International

Airport. It is considered as the airport with international airlines passing through Thailand; commercial port, Khlong Toei Port in Bangkok, Laemchabang Port in Chonburi, Map Ta Phut port in Rayong, or even the ports located in Nong Khai, Bueng Kan, Nakhon Phanom and Mukdahan where the wildlife traffickers will bring ships containing wildlife landing in port or alongside the Mekong River. It is even along the border of Thailand which is adjacent to neighboring countries, Thai-Malaysia border, especially Sadao immigration checkpoint, Songkhla adjoining the state of Kedah, Malaysia; Thai-Laos border, Thai-Lao Friendship Bridge and Tha Sadet immigration checkpoint located in Mueang district, Nong Khai which is opposite Vientiane, Laos; Bueng Kan immigration checkpoint, Bueng Kan opposite Bolikhamsai province, Laos; Nakhon Phanom immigration checkpoint, Nakhon Phanom opposite Khammouane province, Laos; Mukdahan immigration checkpoint, Mukdahan opposite Savannakhet province, Laos; Second Thai-Lao Friendship Bridge, Mueng, Mukdahan province opposite Kaysone Phomvihane city, Savannakhet province, Laos.

Smuggling wildlife, wildlife body parts, and wildlife carcasses have been taken by hiding underneath clothes or luggage, suitcase, private care, public transportation, goods container. When the wildlife can be smuggled into Thailand, they will be delivered to accomplices of a wildlife trafficking until the final customer in the destination country of such trafficking. Especially, the final customer in Vietnam and China or the people who smuggle wildlife into Thailand will take that wildlife out of the country while Thailand is a transit country of transnational wildlife trafficking or the place of dropping smuggling wildlife before being traded when receiving the order from the final customer, or until the accomplices will inform to bring the wildlife to any country. As the officials of the suppression division of wildlife, trafficking stated that:

For smuggling by land, a private car will be modified with larger space that is able to carry much more and not to make a suspicious aspect, including using public transportation or smuggling through goods container combined with legal goods (Interview with the government officer 225 in Bangkok, in December 26, 2017).

For smuggling by air, they will travel with Africa and Kenya airlines. Mostly, there are African ivory or Zambia. Therefore, they will choose the airlines that fly directly to Thailand or transit in Thailand before going to Vietnam, Hong Kong, China, Japan, or Europe. Smuggling wildlife will be hidden underneath the clothes or inside suitcases (Interview with the government officer 217 in Bangkok in September 1, 2017).

The indicator on the severity of the situation of being transit country of wildlife trafficking in Thailand is rhinoceros horns and pangolins trafficking that Thailand Wildlife Enforcement Network has arrested and prosecuted the offender of trafficking in rhinoceros horns and pangolins. During 2010-2017, it was found that there were five cases in trafficking in rhinoceros horn, i.e. 31 horns were seized and 50 kilograms of body parts and 6 people were prosecuted. For trafficking in pangolins, there were 47 cases, for example, 4,145 pangolins, 1,000 kilograms of body parts, and 37 people were prosecuted (Table 4.1) (UNDP, 2017, pp.166-167).

The fact that Thailand has been considered as **destination country of wildlife trafficking**. In particular, the ivory is the indicator of the severity of being the destination country of trafficking in ivory, i.e. the ivory, which has been trafficked to the country, is mostly processed into various products, such as ivory carving, ivory necklace, ivory bracelet, ivory earrings, which can be seen in jewelry stores in Thailand.

Since the consumption of some wildlife is to meet objectives or satisfaction of Thai people or foreigners living in Thailand, regardless tourists or foreigners who work in Thailand before returning their homeland by purchasing processed goods/products from wildlife. Also, during 2010-2017, Thailand Wildlife Enforcement Network has arrested and prosecuted regarding the offense of ivory trafficking, so it was found that there were 24 cases, 586 ivories were seized, 9,293.1 kilograms of ivory parts and 4 people were arrested and prosecuted (Table 4.1) (UNDP, 2017, pp.166-167).

Table 4.1 Arrests Statistics of Trafficking In Tiger, Rhinoceros Horn, Pangolin, and Ivory by Thailand Wildlife Enforcement Network during 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*
Tiger										
Case (s)	-	2	2	2	4	-	1	3	-	-
Number of seize (body/piece/branch)	-	7 (head)	5 (head)	10	6 420 (kg.)	-	1 (head)	3 (head)	-	-
Number of the accused	-	2	6	2	10	-	-	-	-	-
Rhino Horn										
Case (s)	-	-	1	-	1	2	-	-	-	1
Number of seize (body/piece/branch)	-	-	1	-	7	12	-	-	-	21 (horn) 50 (kg.)
Number of the accused	-	-	-	-	1	-	-	-	-	5
Pangolin										
Case (s)	1	7	2	10	10	4	3	3	5	2
Number of seize (body/piece/branch)	130	662	144	887	892	232	215	490	427	66 (body) 1,000 (kg.)
Number of the accused	1	7	2	13	11	-	-	1	1	1
Ivory										
Case (s)	1	2	5	3	2	3	3	4	1	-
Number of seize (body/piece/branch)	20 (branch)	1,316 (kg.)	4,277 (kg.)	3,280 (kg.)	24 130 (kg.)	23 (branch)	9 114 (kg.)	510 (branch) 108 (kg.)	8.15 (kg.)	-
Number of the accused	-	-	3	-	1	-	-	-	-	-

* The year 2017 (1 January - 31 March, 2017)

Source: UNDP, 2017, pp.166-167.

In addition to four species such tigers, rhinoceros horn, pangolins, and elephant ivory, there are other species conserved by Thai law and international law that are smuggled to trade. According to the study of statistics report of the DNP in the last 10 years (Department of National Parks, Wildlife and Plant Conservation, 2017), as well as data acquired from key informants, it is found that wildlife which has been trafficked, both in Thailand and in aspect of transnational trafficking are in demand of the final consumer such as ornamental birds, especially Hornbill, Helmeted hornbill, and various types of Bulbul; also turtles, snakes, lizards, and so on.

4.1.2 Causes of wildlife trafficking in Thailand

According to the above-mentioned situation of wildlife trafficking in Thailand, the key informants have expressed the attitudes on the causes of wildlife trafficking in Thailand that there are various reasons. However, when the answers obtained are categorized, it is found that the causes of wildlife trafficking in Thailand are the demand and supply for wildlife with the following details:

1) Demand for wildlife consumption

Wildlife trafficking in Thailand which has been going according to the process of wildlife trafficking is to meet the final consumers' demand for different purposes. Therefore, the final consumers will not actually consider the acquisition of wildlife or wildlife products. The researcher has categorized the data of the demand for wildlife obtained from the key informants, thus there are 2 characteristics of the demand for wildlife consumption as following.

The demand for consumption of wildlife with processing wildlife as products such as foods, traditional medicines, jewelry, and decorations. Such as various types of wildlife such as elephants, tigers, bears, pangolins, deer, snakes, and so on. Therefore, after being hunted from the forest, the hunter will keep such wildlife with the best condition. When required to maintain the quality of body parts or organs to be fresh, the wildlife will be butchered into pieces in order to maintain integrity and quality of wildlife so that does not affect the price and quality before the stage of product processing. However, each wildlife species is not always required to be processed into only products, so they may be brought to be a pet or processed into traditional medicines or others based on the purpose of consumers' use. The products

processed from various wildlife species; for example, various body parts of elephants, such as hair tail, bone, and nail will be processed and carved into decorations, ivory table decor, ivory wall hanging, necklace, bracelet, pendant, elephant tail hair ring; body parts of tigers (tigers, leopard, and panther) will be processed into stuffed tiger, tiger tooth pendant, tiger rug and so on; body parts of deer, they will be processed into antler wall hanging, deer head decor; or even snake, it is popularly processed into a bag, belt, shoes and so on. As the official of wildlife suppression said:

Most of the products processed from elephant ivory that we have detected are combs, rings, framed picture, pendants, bracelets, earrings; tiger, e.g. rugs; crocodile or snake will be various leather products such as bags, belts, and shoes. So, there are more products, this is just rough examples (Interview with the government officer 204 in Bangkok, in September 22, 2017).

The demand for products processed from body parts of wildlife, especially fierce animals, e.g. tigers or other species; or even elephant which is considered a national animal of Thailand, with a personal belief regarding wildlife that it is able to protect from dangers and also to strengthen the personality with ascendancy. For this reason, it leads to illegal hunting of wildlife that to be processed into amulets, e.g. elephant hair tail ring, tiger tooth pendant, ivory necklace. As one non-government official said that:

It is about a personal belief that objects from wildlife or wildlife carcasses, especially fierce animals shall protect them from dangers, and strengthen them to have a powerful personality that to be fearful for others. Also, some people believe that national animal like an elephant shall bring good luck and good things to a person who wears them. (Interview with the non-government official 307 in Phetchaburi in October 14, 2017).

The results also found that wildlife, which has been processed also, remains some body parts that are brought to the legal production process. Therefore, some owners of processing industry also do not know what the source of such body parts that has been brought to the production process is, so they only consider that

their factory must have raw materials for producing products to sell or delivery to the customer. So, there are very few possibilities that the owners will consider the source of body parts which has been brought to the production process and it is also very difficult in practice since entering for producing products does not use only one step. Namely, the hunter will hunt wildlife and sent it to the first customer, then the first customer resells to the next customer that it may be traded at least 3 times. Therefore, the examination of the source of wildlife used in producing products is difficult to be done and caused the expenses. In order to reduce the cost of production, so the owner shall decide to reduce such cost.

Actually, the owners do not care where the body parts of wildlife come from or how they are acquired. So, they only care about their factory will have raw materials for producing to sell. Also, they do not really pay much attention to the fact that those wildlife body parts come from illegal trade (Interview with the non-government official 301 in Nonthaburi, in September 5, 2017).

In addition, it is found that products processed by the factory or legal place of production shall legalize the illegal parts to be traded in a common market even though such wildlife body parts that are used as raw materials in the production are illegally acquired. Additionally, most of the demand for the processed product from wildlife will base on a fashion trend that is always changing. The owners, therefore, have to purchase wildlife body parts to produce in a new form. Also, the culture of income earners with public profiles always want to catch on the trend, so the demand for the product from wildlife still exists. Consequently, without considering that acquisition of wildlife body parts which have been processed until the stage that they are able to purchase and use in everyday life.

Furthermore, traditional medicines are extremely popular in Asia, especially traditional medicine made in China. Therefore, there are various wildlife species, which are in demand for producing traditional medicine. However, the wildlife, carcasses and body parts wanted by consumers are pangolin scales, rhinoceros horns, snakes, snake gallbladder, tiger/leopard bones, bear paws, antlers,

tiger penis, turtle shells, shells, seahorses, and so on. The demand for traditional medicine made from wildlife is the cultural belief which has been handed down for a long time. Also, depending on which the person will believe and accept that traditional medicine made from wildlife have effects on treatments and it is better than Conventional medicine made from a chemical. Additionally, Milliken and Shaw (2012) found that traditional medicine containing rhinoceros horn has been used for at least 100 years. They also believed that such medicine has properties to reduce body heat and blood pressure, especially to detoxify and to relieve the symptoms, e.g. fever, headache, measles, stroke; various diseases which can be fatal, e.g. cancer. However, Conventional medicine has tried to prove and examine the properties of traditional medicines made from wildlife body parts that help restrain and truly treat several kinds of diseases. According to medical exam result, found that traditional medicines containing rhino horn which have been hunted, killed and smuggled from African countries through various countries with convenient transportation and weak surveillance. Also, in China, the origin of traditional medicine, it is found that such traditional medicine has no properties to cure any disease.

There are traditional alcohol medicines made from snake, tiger, centipede, pangolin scale, or pangolin, or powdered rhinoceros horn mixing in other medicines. However, today, it is much more than that, so the bone around knee joint of a giraffe is compound a medicine by saying that it is able to relieve knee pain and the knee joint will be strong as the giraffe (Interview with the non-government official 309 in Bangkok in November 22, 2017).

The process of acquisition of wildlife, wildlife carcasses for producing traditional medicines is not different from the acquisition of wildlife to meet the demand for raising and collecting wildlife, i.e. to rely on a domestic wildlife trafficking processes and transnational crime. Nowadays, wildlife, which is popularly used in producing traditional medicine, is considered endangered species and protected by the law with the prohibition of hunting, killing, trading, and other actions that cause wildlife to die early. When those wildlife has been protected by law, it is even more raised those wildlife's value. If there is wildlife trafficking with

the number of profits, it becomes a motive for criminals or criminal organizations to bring criminal networks around the world to participate in wildlife trafficking. To rely on criminal networks that have the ability to access wildlife and to protect wildlife trafficking processes in order to send wildlife to people who demand wildlife for producing traditional medicines without being suppressed by government officials, and so on.

In addition, it is found that the demand for wildlife to produce traditional medicines is higher than the demand for raising and collecting or even processed products because it is unpredictable that how much the consumer of products processed from wildlife for consumption or raising or collecting. Nevertheless, the common demand for traditional medicine of Chinese living all over the world is traditional medicine made from wildlife, wildlife carcasses, and wildlife body parts with an inherited belief. Therefore, it clearly reflects that the demand for wildlife for producing traditional medicines is higher than the demand for other purposes. Additionally, the area of the demand for wildlife for producing traditional medicine is obviously indicated that it is in China or Asian countries, which have similar beliefs. Thus, it is different from the demand for wildlife in other forms of consumption. As one non-government official said that:

Most of the people who eat or consume are Chinese people or having Chinese descent because they have such a belief. Look, where is the place that Chinese people cannot reach or live nowadays. So, the place which we thought it is a remote area still has Chinese people. It makes the demand for wildlife spreading around the world like Chinese people (Interview with the non-government official 310 in Bangkok in December 1, 2017).

Even bringing rare wildlife or ornamental wildlife to cook by wealthy people and people who have a personal taste to eat foods made from wildlife or even foreign tourists who like to eat foods made from rare wildlife all know that have to come to Thailand if wanting to eat. So, there some groups that travel agencies have organized the activity of eating foods made from wildlife. In addition, restaurants located near the forest or wildlife sanctuary also sell foods made from rare wildlife.

The popular menu for consumers who like to eat wildlife, e.g. antelope head hot pot, steamed bear paws, forest curry made from the meat of rare wildlife as consumers want, and so on.

There had been news that media presented in consecutive days; a group of Chinese, Korean and Japanese tourists came to eat antelope head hot pot at a Chinese restaurant in Bangkok famous mall. So, it is one program of the tour program in Thailand. In addition, tourists who love strange things or love to eat foods made from wildlife will say that have to come to Thailand (Interview with the scholar 105 in Bangkok in September 28, 2017).

Furthermore, it is also found that there are various rare species that besides being used in producing traditional medicine, the meat of that wildlife are popular to be cooked for the consumers who like food made from wildlife, or who want to try to eat foods which are different from general people eat. Therefore, the key informants have expressed their opinions about the appreciation of eating foods cooked from the wildlife that those people usually eat wildlife which is hunted from the forest more than wildlife which is raised. It is because there is a cultural belief that when cooking wildlife from the forest, the food will have a good taste and also remains properties more than wildlife is raised by humans.

The demand for consumption of wildlife by raising, propagating, possessing as a collection, i.e. it is considered a particular demand. So, the consumers who want to bring wildlife to raise need rare species that are protected by law because they are few in number and are in endangered or in a risk to be endangered. Consequently, if those people are able to bring those rare species, it is to show others that they have the power to possess rare wildlife which is protected by law. At the same time, they need to show that they have better financial status than general people, so they are able to buy rare wildlife. It also reflects the society that if you have a weak financial status, so you are unable to buy those rare wildlife.

Moreover, it is found that people who has illegally bought wildlife from overseas or ornamental, cute or wired animals to exhibit in various tourist attractions such as Pattaya, Khao San Road, and so on which mostly are popular among foreigner tourists

for taking a picture with such wildlife, or even providing activity to feed animals. In the meantime, some people who like to raise wildlife has smuggled, e.g. a tiger to be illegally bred in order to subrogate to the right of the tiger which is in the care of the zoo with permission to raise legally after selling such tiger to wildlife trafficking process. As the official of wildlife conservation, foundation and official of wildlife trafficking suppression stated that:

If you have a chance to go to Pattaya, around walking street or market that there are various bars, so you will see people bringing ornamental wildlife, including parrots, Lorises, chimpanzees to show and convince tourists to pet and take a picture and then have to pay the owner. So, it is a business which made money from animals (Interview with the non-government official 307 in Phetchaburi in October 14, 2017).

In addition to feeding wildlife by grasses or bananas in tourist attractions, if you go to tiger farms or tiger zoo, there are feeding milk to a tiger. So, I cannot accept it because I always believe that a tiger is a wildlife which is majestic and very wild and people are scared. When there is feeding milk to tiger, I think that a tiger is degraded its value of being wildlife (Interview with the government official 217 in Bangkok in September 1, 2017).

It is the same as the collectors of products made from wildlife that there is a demand in searching for their favorite products made from wildlife to possessing. In other words, it is a hobby of people who has financial status because products made from wildlife, especially the rare species will be high-priced due to a limited number of those animals. To access wildlife is difficult and complicated, and it is an illegal act to bring wildlife in the production process that are very meticulous to increase the value. Especially, products made from elephant ivory that is considered the popular products among the collectors.

According to the demand for wildlife for raising or collecting, an act reflects the acquisition process of rare wildlife. So, it must smuggle in order to reach rare wildlife. For killing, transporting until acquiring products or delivering goods to

the final consumers, they all depend on wildlife trafficking networks, including domestic wildlife trafficking network, or even transnational wildlife trafficking process with some government officials getting involved by forging document or bribery for official in order to facilitate the product transport until the product is delivered to the final consumer.

According to the study, people who like to consume wildlife based on above-mentioned aspects that besides being consumption for oneself, they usually give products made from wildlife carcasses as a gift for powerful people who appreciate wildlife consumption. This action is usually found in the case that the owner of construction business or selling various supplies to buy wildlife or its body parts or products made from wildlife carcasses, then give it to influential people in order to help oneself to win the bidding of government projects. Also, government officials or politicians who want to get a promotion or desired position will look for wildlife and its carcasses or products made from wildlife carcasses to be a gift. Whether they will receive a favor or not, it is helpful to build up a good relationship as well.

Contractors who want to win the bidding like building the road for access the village, building a weir, or drain, usually look for elephant ivory, antler, tiger head, or any kinds of wildlife and give it to the person they know that will help them to win the bidding (Interview with the government officer 217 in Bangkok in September 1, 2017).

Additionally, to buy wildlife, wildlife carcasses and products made from wildlife carcasses in order to collect and resell. The investors who have financial means will hire a number of villagers who are in a temporarily permitted area to buy wildlife from Lao people. Then, collecting wildlife until it is enough to meet the needs of consumers and then will inform people in wildlife trafficking network and make an appointment to trade accordingly.

When there is a temporarily permitted market, the local investors will inform villagers around there to buy wildlife from Lao people. Sometimes, those investors buy up by themselves as well and then take it to collect first until it is

enough to the order, and those wildlife will be released immediately (Interview with the scholar 101 in Bangkok in August 27, 2017).

2) the demand for selling wildlife

According to the information acquired from the key informants about the purposes of the demand for selling wildlife, it is divided into 2 characteristics as follows:

Demand for money, i.e. wildlife trafficking of any kinds that are in demand of the consumers will make money for oneself and family. The demand for money regardless payment, benefits which will receive from the trafficking whether such person is in any position or any role in the wildlife trafficking process from the hunter who must go to the forest to hunt wildlife or a person who liaises between middleman and hunter in order to explore and deliver wildlife to the destination; or even wildlife dealers. So every role in wildlife trafficking process all earn money in each time of involvement in the network. Also, they will be paid a large amount of money at a time when comparing regular work with a salary of 8,000-10,000 baht or general employment which has an uncertain contact. Therefore, it is consistent with key informants that all used to commit offenses, or used to be offenders, e.g. village leader who has transformed from wildlife trader or from the hunter. Additionally, 8 traders of foreign wildlife have all stated the same. As one former hunter stated that:

The profits that will receive from the trade and shares are huge as well. When I was a hunter, I went to the forest to hunt hornbill, helmeted hornbill or according to the order. The cost was at least five thousand baht, so the more wildlife was rare, the more I asked for a high price (Interview with the former hunter 598 in Phetchaburi in October 15, 2017).

The large amount of money which will be received from involvement in wildlife trafficking network is enough to make oneself and family members to live well and not to live day to day. Therefore, the demand for money is the main reason for the decision to involve in wildlife trafficking network without considering that it is illegal or violate regulations. It is also a torment to the wildlife which is living in the forest peacefully, so it has to be dead or becomes a thing

satisfying the final consumer. Consequently, the conscience of people in wildlife trafficking network will be reduced or disappeared when they are paid. As an official of wildlife trafficking suppression stated that:

The greed and desire are more than conscience. Although it is illegal, they do not care at all. Then, getting blind with money that is enough as long as they and family live well. If will be jailed or whatever, will sort it out later (Interview with the government officer 217 in Bangkok in September 1, 2017).

In addition to the demand for money to upgrade the economic status of oneself and family, it is also found that Thailand is not the country to indicate that populations having good economic status, income, or salary which is enough for living. Thus, it reflects that some of the people in Thailand are still poor and have to work for a daily pay or hourly pay that sometimes is not enough to pay for meals, housing, and others of living expenses. Therefore, when poverty is a pressure that people have to struggle for survival. Even though it is just one linchpin of the process in the involvement of wildlife trafficking, but the pay which will be taken is money. so it makes such a person decides to participate in exchange for a small amount of money when considering the cost of wildlife which is delivered to the final consumer. However, one alternative has to decide to do because choice and a chance to make money do not come often. As a former offender stated that:

At that time, I didn't care whether it right or wrong. Therefore, I only knew that I didn't have money, and my child needs to eat, needs to go to school, and need money. When I was offered a job and the pay was enough for living. I had to do so; otherwise, my family will all starve (Interview with the former hunter 507 in Sisaket in September 23, 2017).

While hunter (job) is one career that has been existed in Thailand for a long time and passed on through generations before the law that prohibited hunting some kinds of wildlife, or access to some areas has been enacted, so it is changing with the times. Most of these hunters who take up a career in hunting animals in

the forest are living nearby forest preserve or wildlife sanctuary. In addition, some of them still live in the forested areas. When they go to the forest to hunt animals, they bring those animals to cook for family. If there is some left, they will sell or exchange for other things such as uncooked rice, vegetables, especially money. The hunter has been taught and passed on through generations until it becomes a job without knowing that such action is illegal, including the invasion of reserved forest area or wildlife sanctuary and hunting wildlife which is protected by law. They are willing to do any job which they can in exchange for money without considering whether it will be legal or not. They do it only for money and do not care that such person who orders will do anything with wildlife. As an academic environment scholar said that:

He told me that he grew up in the family that parents and grandparents have hunted animals since the ancestors. To do other job is also difficult, so hunting is the only thing he can do and hunts for himself or for sale to make some money (Interview with the scholar 102 in Nakhon Pathom, in September 17, 2017).

Exchange for drug

In addition to the pay in the form of money that people who get involved in wildlife trafficking network will receive from trafficking, there is the pay in the form of the drug. It is found that the network of wildlife trafficking will hire teenagers who are addicted to drugs to hunt wildlife secretly as received orders. Consequently, when the teenagers have hunted wildlife, they will deliver such wildlife to a person as the network has informed and then will pick up drugs at the meeting point for the pay of wildlife trafficking. At the same time, in addition to hiring teenagers to hunt wildlife, there is another pattern, i.e. to hire teenagers to monitor the movement at various spots that the network will smuggle wildlife. If the teenager who is hired has done a great job, including reporting the police's movement or suspicious thing to smugglers during shipping until wildlife has delivered to the receiver successfully, such teenager will be paid in the form of the drug. Also, some people will get both

drugs and money. As an official of the foundation for nature and environmental conservation stated that:

Wildlife trafficking network usually seeks for new methods in exploring, transporting wildlife as in orders. From hiring villagers around the forest park to hire teenagers to hunt or take it in exchange for drugs, marijuana, Kratom, or both money and drug according to the success of work at a time (Interview with the non-government official in Nonthaburi in September 17, 2017).

Furthermore, according to the news report of Thairath Online on 16 August 2011, it indicates that wildlife tracking in exchange for the drug is something that has happened. At that time, the director-general of the DNP ordered the heads of the national park in each area to report a urine test of the officers who operated in an area of the national park. It is because the wildlife trafficking network will distribute drugs to officers at the national park in exchange for an offense of forest and wildlife. Especially, elementary school students and secondary school students in the schools in the border area of the national park, wildlife sanctuary, non-hunting area or national park were found that there was less than half of attendance rate in class. So, it is estimated that these students who miss school will get involved with the drug. Also, the head wildlife and forest gangs of illegal logging and wildlife trafficking brought drug for students or forest rangers of the national park to try and the effects of the drug caused the addiction. Consequently, they had to do it in exchange for the drug (Thairath Online, 16 August 2011).

Wildlife trafficking which still exists in Thailand that is the attitude of humans toward wildlife. Namely, wildlife is often considered a property of humans and product that humans can trade, possess, and consume whatever they want. Because humans consider that that wildlife will soon reproduce and the number will be extended, those people cannot quite see the value of and importance of wildlife conservation to making them live in the nature for maintaining a balance of the ecosystem. On the other hand, people tend to appreciate anyone who gets and finds wildlife to raise. Also, if liking the beauty of that wildlife, such person will find and raise it, even though each wildlife has their own role, e.g. the hornbill will be in charge

of afforestation that to spread seeds around the habitat. However, the general people do not understand the main role of wildlife that people may be habituated to consume pig, duck, chicken, fish, and cow as usual. So they do not take an interest that bringing wildlife out of the ecosystem to satisfy the needs of humans by consuming that wildlife without considering value and role of its existence in this world. Thus, wildlife trafficking becomes the cause of various environmental problems that is to damage and affect humans and living in the long run. The attitude of humans toward wildlife as the key informants said previously is to help promote the presence of wildlife trafficking in Thailand. As one academic environment scholar said that:

Many people still do not understand and do not have knowledge of wildlife, its importance, livelihood, expansion of the number and anything about wildlife. They see that wildlife is like a pig, duck, chicken or fish which are sold in the market that they can buy or raise as desired. However, wildlife does not the same as those animals, so such attitude toward wildlife is cannot be used because it is nobody's object or property (Interview with the scholar 105 in Bangkok in September 28, 2017).

4.1.3 pattern of wildlife trafficking in Thailand

According to the interview of all key informants, it is found that wildlife trafficking in Thailand can be divided into 2 main patterns that are interpersonal of wildlife trafficking and network of wildlife trafficking. Moreover, they appear in the aspect of domestic and international illegal wildlife trafficking, i.e.

(1) Interpersonal of wildlife trafficking: any person who needs to buy wildlife will contact wildlife trader directly, and discuss wildlife details or wish lists with agreeing on the price before making a payment, either direct payment or banking. Therefore, interpersonal of wildlife trafficking will not go through coordinator or middleman. As an official of wildlife, trafficking suppression stated that:

When we see lovely animal and want to raise it, we just go to the web site and type "buy animals" and fill name or kind of wildlife that we want. So, it will show us shop name, location, types of animals. Then, go to the

way that we have informed and ask about the price. If you agree to that price, then make a payment and pick up a product. Nowadays, it is easy to communicate that the trader and customer do not need to meet each other, so they can deliver a product to each other very easily (Interview with the government officer 209 in Bangkok in October 4, 2017).

(2) Network of wildlife trafficking: an illegal act regarding wildlife trafficking with various doer in the process each time. In addition, each of doer has its own role. For example, when the consumer contacts wildlife trader whether it be the investor contacts to any person they know that will buy wildlife from any sources, i.e. middleman. Then, the middleman will contact an influential person in the area where they are able to find such kind of wildlife in order to let the influential investor coordinate accordingly. When an influential person knows wildlife details which the middleman want, they will contact a local poacher to find wildlife and bring it to them or receiver who is responsible for transporting wildlife. When the poacher is able to hunt and bring wildlife out of the forest, wildlife will be delivered to a person whom the influential has informed. Next, a person who receives that wildlife will be in charge of shipping wildlife to a person or destination that has been informed by an influential person or middleman. Therefore, wildlife will be passed through and over until a person who orders. Therefore, it is an act that must rely on wildlife trafficking network and people in each stage do not need to meet each other face to face. Thus, just do one's duty and follow orders that have been designated. When the duty has done, they will be paid for exchange.

For an example of wildlife trafficking in the aspect of the network, in wildlife trafficking, especially pangolin trafficking, there will be various networks of people who involve in wildlife trafficking. Starting from Lao investors which are assumed to have about 5 people will receive wildlife orders from Chinese or Vietnamese people. Then, Lao investor will contact wildlife traders who live in the northeastern provinces of Thailand to provide wildlife as orders. When Thai northeastern traders have informed wildlife details, they will contact those investors who are in northeastern provinces of Thailand to gather pangolins which are smuggled in from Malaysia. Therefore, the investors from northeastern provinces will

coordinate with a smuggler to take pangolins from northeastern investors and then deliver them to Lao investors that will come to pick up pangolins at Thai-Lao border area. As a former wildlife trader stated that:

Javan pangolins are delivered from southern that has been smuggled from Indonesia to Malaysia and passing through Thai-Malaysia border, including Sadao checkpoint, Padang Besar. When they have arrived in Thailand, there are investors to pick up pangolins or to coordinate smugglers to pick up pangolins at the meeting point. After that, pangolins will be transported by vehicles from the south toward the Thai-Lao border or Nakhon Phanom-Lao border. There will be Lao investors to pick up pangolins before delivering by ferryboat into Laos. It can be seen that we work as a team that has divided the work and responsibilities systemically (Interview with the former wildlife trader 504 in Bangkok in September 13, 2017).

Additionally, when the time has changed along with technological development, wildlife trafficking network also applies modern technology system in wrongdoing, i.e. online wildlife trafficking. It is the trade of wildlife which is protected and prohibited to be traded under the WARPA and the CITES Convention, or wildlife which is able to be traded through various social media, e.g. Facebook, Line, Instagram. The trader is able to open a private group chat and to choose a request, as they want in order to offer various kinds of wildlife for sale for people in a group chat to trading and shipment of wildlife. The conversation will be done via above-mentioned applications or called online wildlife trading which is commonly known today. For example, wildlife trafficking via Facebook, e.g. the Facebook page called “Nomyen” that the trader will open private group chat and people interested in purchasing wildlife have to send a request to join a group to the owner of a chatroom with taking for 5 minutes to wait. When people interested has been allowed to join a group chat, they are able to ask about trading details form the owner of chat room or see wildlife pictures appearing on chat room, such as hornbill or body parts of hornbill, helmeted hornbill, Loris, spotted owlet, Suphan cobra, Black giant squirrel,

Javan pangolin, tiger body parts, elephant ivory, next they have to confirm an order, make payment and inform an address for delivery or meeting point.

Nowadays, technology has very developed; therefore modernity is misused by those wrongdoers. Facebook or Instagram that is especially used in illegal trade such as rare wildlife, ornamental animals both in Thailand or imported from overseas. There are also legal and illegal animals mixed up together, but most of them are wildlife. So, we, as an official are also tried to pursue them as well (Interview with the government officer 211, Bangkok in September 28, 2017).

4.1.4 Wildlife trafficking processes in Thailand

According to the pattern of wildlife tracking in respect of interpersonal and network of wildlife trafficking as mentioned in 4.1.3, it is found that in wildlife trafficking process, there are the roles in wildlife trafficking, including wildlife consumer, kingpin, middleman, operational transporter, poacher, influential person and transporter with different roles.

Wildlife trafficking starts with people who need to consume various kinds of wildlife. In other words, those who need to consume are considered primary consumer and the last consumer of the wildlife trafficking process, so the term used for the primary consumer and the last consumer in wildlife trafficking process is “Kingpin”. When the kingpin needs wildlife or products made from wildlife body parts but they themselves cannot find it, they will contact a middleman to provide wildlife that is needed. The kingpin will inform details about type, kind, and the number of wildlife which is required and ask about the price. After that, the middleman will contact the wildlife trafficking network he knows to ask the price and period of time using for working until the kingpin to get wildlife. When the coordinator has received required wildlife information, will liaise with the kingpin again in order to inform the price and period of time in working and confirm a wildlife order. If an order is confirmed, the kingpin will pay for the middleman, including a total of amount of payment which is informed or leaving a deposit. The middleman will be paid the rest when the kingpin has received the product.

When the middleman has been paid from the kingpin, will contact operational transporter which has a wider network than the middleman. Therefore, the middleman will confirm the order of wildlife and pay for operating fees to operational transporter. After that, the operational transporter will continue the next stage of operation.

In the process of getting wildlife, the operational transporter will contact the poacher who lives near the habitat of that wildlife, or the poacher who is proficient in hunting wildlife as ordered of kingpin requires. Also, the poacher may contact another poacher to hunt such kind of wildlife, or the poacher who live in the area that has such wildlife if poacher whom the operational transporter knows is not in the area where there is wildlife as ordered, then to inform details of a number that customer requires and pay the poacher wage.

At the same time, when the operational transporter has called the poacher to find wildlife as ordered, then operational transporter will contact the influential person in the area where the poacher lives in order to facilitate the poacher and also to protect the poacher to be able to access the area where wildlife live. Moreover, in order to help the poacher to bring wildlife out of the area where it is protected and monitored by government officials until the poacher is able to successfully deliver wildlife to the transporter.

If the operational transporter knows where wildlife is but does not know the poacher who will hunt that kind of wildlife, operational transporter will contact local influential person to contact local poachers and facilitate and protect those poachers to be able to access the area to hunt and bring wildlife out safely and not to be examined or arrested by officials of that area. In addition, the poacher has to deliver wildlife to transporter successfully. If the poacher is examined or arrested, a local influential person must help and save the poacher from examining and arresting. Afterward, the local influential person will contact the poacher he knows in order to hire to hunt wildlife, also contact the government official to ask for facilitating for poacher to be able to hunt wildlife and bring it out of the forest. Furthermore, the intermediary can be an influential person who is able to access wildlife and liaise on wildlife transporting, also wildlife has been delivered to the kingpin successfully.

When the poacher has hunted and taken wildlife out of the forest, will contact the operational transporter or influential person who is his employer in order to ask detail of transport that they want to deliver wildlife which has been hunted or found to any person or about what they want to do. Mostly, there are two things; firstly, the poacher is ordered to deliver wildlife that is hunted or found to a person who is in charge of wildlife transport, or a person who is in charge of wildlife transport will make appointment date, time and location to pick up such wildlife. Secondly, the poacher is required to drop wildlife to appointed location without having to care about who will pick up or move such wildlife, thus the poacher only brings wildlife to such appointed location.

When the poacher has delivered wildlife to the transporter or dropped it to appointed location, the transporter will be in charge of delivering wildlife to the destination which the operational transporter has informed. For transport, it may be single transport to the destination or shifting the transporter for many times depending on the operational transporter will inform. Regularly, wildlife transport will be divided into transport by land, transport by air, transport by water and transport by container.

There are a few roles in transnational wildlife trafficking. Starting with the kingpin wants the product, and then contacts the operational manager or the intermediary that is easy to understand. After that, the operational manager will contact and inform the price whether it is acceptable or not. If it is accepted, then wait for the product. Next, the operational manager will contact the poacher, operational transporter, transporter, and influential person to clearly divide works for delivering the product to the kingpin (Interview with the government officer 224 in Bangkok in December 26, 2017).

4.1.5 The effect caused by wildlife trafficking in Thailand

According to the problem of wildlife trafficking in Thailand because of the demand for buying and selling as mentioned above, all of them are the causes which drive wildlife trafficking is still existing in the country as it appears in various patterns such as interpersonal and network of wildlife trafficking with domestic and

international wildlife trafficking. Therefore, wildlife trafficking which is happening becomes a problem affecting various aspects of Thailand. According to data acquired from all key informants, the researcher has categorized the effect caused by wildlife trafficking in Thailand into 6 aspects as follows:

(1) Wildlife

Wildlife is regarded as a natural resource that is essential to the ecosystem not less than the forest. When various wildlife species are harmed by humans with invading forest for hunting to trade as a pet for people who want to raise rare wildlife or other reasons. Therefore, bringing wildlife which has behaviors, personalities, and instinct of wildlife to raise under the human's care with keeping in a cage or feeding a cooked food of humans shall affect that wildlife to have changed behaviors and personalities from wildlife to be a pet. Moreover, taking wildlife out the forest to live with humans is considered causing the ecosystem lacks the balance. In addition, when the ecosystem lacks the balance, living things, not only nature that will be damaged, such effect also affect humans as well. As the official from the Wildlife Protection Organizations said,

When they are boring or not cute anymore, secretly take them to the forest or by the side of the road. So, how can they live? They cannot even help themselves, so just wait to be fed by humans. Eventually, it will starve to death, and we will lose one important resource of the ecosystem as well (Interview with the non-government official 307 in Phetchaburi in October 14, 2017).

When some wildlife species are in the demand of the consumers, they will be more hunted continuously and there will be more possibility of decrease in the number of such wildlife. When the demand of the consumer still exists, but no increase in the number species of such wildlife according to the demand of humans. It causes such species are gradually decreasing to be in danger of becoming extinct or finally become extinct. For example, in the case of the tiger that has the habitat in the forest of Thailand that the survey results of WWF stated that nowadays, there are 250 tigers left in the forest of the whole forest in Thailand (Seub

Nakasathien Foundation, 2018). Therefore, to propagate tiger cubs takes very much natural time until a natural tiger cub to birth. When the demand of humans which prefer to consume tigers continues to still remain, the rest of tigers at the present are hunted to be in danger of going to extinct if there are no measures to prevent the wildlife trafficking process or stop the demand for consumption of humans.

At the same time, some kinds of wildlife which are in demand of people who prefer to consume wildlife are hunted to become very limited or extinct to the world. It is also found that the possibility of wildlife having appearance or nature which is similar to extinct species will be hunted to replace extinct wildlife species, or may change to consume other wildlife species. Thus, it shows that the demand for wildlife consumption of humans has not declined, therefore it continues to be a trend for people who prefer to consume wildlife. As the official of wildlife conservation foundation stated that:

There are a few cases now. The rhinoceros horn will be taken more difficult than before because the officials of the country that there are a number of populations of rhinoceros have more surveillance. Some of them are hunted, so there are very few lefts. Then, tiger's bone or giraffes' joint are substituted (Interview with the non-government official 309 in Bangkok in November 22, 2017).

In addition, wildlife trafficking in the respect of transnational crime is to illegally import wildlife from overseas into Thailand for a commercial purpose that is to be as a pet. The fact that some species of foreign wildlife has a beautiful appearance that attracts people who like to raise wildlife need to raise such foreign wildlife, either from the love of wildlife or a trend of raising foreign wildlife. According to raising foreign wildlife, or even native Thai wildlife, people who look after wildlife are needed to try to understand the personality, behavior, the way of living of such wildlife before deciding to raise it. It can be seen from abandoned wildlife including native wildlife and foreign wildlife, such as Macaw, Loris, Helmeted Hornbill, Hornbill, rare species of snake and so on. People who like to raise wildlife will buy the young wildlife because of cuteness during its childhood without searching

the basic knowledge regarding personality or behavior of wildlife in each age. In other words, people who prefer to raise wildlife do not pay attention to the information of such wildlife, so they only want to raise it. When such wildlife grows up, their appearance is changed from the beginning that is cute to be scary and fierce when growing up. Eventually, when the owner does not like its appearance and accepts an aggressive behavior, such wildlife will be abandoned such as leaving at temple, garbage, in the front of animal foundation. Therefore, the most worrying is releasing wildlife, especially wildlife imported from overseas, to the forests. In other words, releasing foreign wildlife to the forest will directly affect the ecosystem of such forest because foreign wildlife is more aggressive than native Thai wildlife living in the forest where the owners abandoning wildlife. When foreign wildlife enters into the forest, it will attack native Thai wildlife to death. Also, when Thai native wildlife is damaged by foreign wildlife, it shall affect the balance of the ecosystem in such area. Consequently, imbalance of the ecosystem shall affect other native Thai species in such area to be dead accordingly, and may eventually affect humans.

Additionally, smuggling wildlife from overseas into Thailand without being inspected and controlled the disease acquired from wildlife by the professionals of the control of diseases acquired from animals may result in the spread of the disease from foreign wildlife to native Thai wildlife also.

(2) Environment and ecosystem

When some kinds of wildlife are taken out of the forest by illegal hunting or killing without considering the existence of species, eventually there are not much species left or drained out of the ecosystem that affects food chain of forest areas to be unbalanced. Consequently, when the ecosystem has been unbalanced, the environment of that area will be changed to affect the ecosystem of the vicinity. Then, the damage which occurs in one ecosystem is getting bigger. For example, in case one tiger in Thailand is lost that will bring a huge loss to the ecosystem because a tiger is regarded an apex predator of the food chain that is responsible for controlling the number of populations of herbivores not to be too large. So, if there are too many herbivores in the forest, the ecosystem in the forest will be negatively affected. If in the forest has these herbivores, they will eat all the plants of the forest. Consequently, when the food in the forest is over, herbivores will not able to continue to live for

reproduction. In other words, a tiger plays an important role in the sustainability of other living organisms in nature also.

At the same time, a tiger also plays a big role to eradicate populations of various kinds of wildlife which are diseased and weak species not have a chance to continue to reproduce such weak species because these species will become a prey of a tiger. Therefore, it shows that a tiger is very important to conserve the strong and perfect wildlife species to sustain along with such forests in the future. Moreover, a tiger also has another responsibility that is to control populations of other predators living in such forest not to have too much of it., as well as small animals such as various kinds of mice, fish, crabs, snails, frogs and so on; to medium-sized animals such as Pheasant, Peafowl and so on; animals having a status as a predator such as fishing cat, large Indian civet, dhole and so on; and small predators such as normal Paradoxurus, Siberian Weasel, Ferret-badgers and so on. Most importantly, a tiger is wildlife that creates a food source for other wildlife in the ecosystem because the rest of the meat of animal remains which hunted by a tiger will be a food for flock vulture, also a bone will become an essential source of calcium for rodents such as *Hystrix hodgsoni*, Large bamboo rat, Hoary bamboo rat, Lesser bamboo rat and so on. The official of wildlife trafficking suppression stated that:

You know that hunting just one tiger will cause the ecosystem in such area are screwed up. Since a tiger is a carnivore, which is apex predator of a food chain, so to think that if there is no tiger, there will be a lot of barking deer, deer, cows or herbivores in the forest to eat all of the plants (Interview with the government officer 217 in Bangkok in September 1, 2017).

(3) Living and health of humans

According to the damages caused by wildlife trafficking in Thailand, in addition to affecting or damaging the environment and ecosystem, it also affects the way of living of Thai people. It is because most Thai people still rely on wildlife resource for living, either direct or indirect. When referring to people' living, they will be affected by wildlife trafficking, which is due to the spread of the disease from wildlife such as SARS which is acquired from cats imported from overseas, either legal or illegal importation; or Ebola acquired from monkeys, and so on. In addition, the disease spread from wildlife to humans that are able to damage humans

health, such as monkey pox, Hepatitis A and B, Herpes Simplex B, shigellosis, tuberculosis and Cysticercosis; from mammals such as tapeworm, roundworm which can reside in human organs, such as lungs, liver, brain to sabotage human health and to continue to affect humans living; from reptiles such as Salmonella; from birds such as avian flu, parrot fever, pneumonia which causes a high fever and severe headache to shock and to the death. As the veterinarian clearly stated that:

The flu which was raging all over the country several years ago, besides killing the number of wildlife such as birds and poultry of Thailand, it also killed people. Even though the government is able to control the spread of the avian flu nowadays, the government is still watching and observing, especially during migratory birds are coming to Thailand because there is a possibility that those birds will spread a disease (Interview with the government officer 213 in Bangkok in October 4, 2017).

When wildlife which is an important resource of the production process in the business sector gets a disease, the owner must close down or suspend business until the spread of diseases can be stopped. When lacking wildlife resource to enter the production process, the owner must stop hiring. Therefore, various positions of the employees must be unemployed. Consequently, when there is no work, there is no income that shall affect the well-being of people. The spread of the disease is able to occur in illegal and legal wildlife trade. However, wildlife trafficking will cause more spread of disease because there is no control of the disease which is in accordance with the standard required by law to control the spread of the disease. When compared to legal wildlife trade that there are strict control measures and examination for the spread of disease.

Moreover, the distribution of foreign wildlife that comes from wildlife trafficking and illegally importing foreign into Thailand without being controlled or inspected by the government or professionals has a possibility to let foreign wildlife harm native wildlife. Therefore, it makes the local ecosystem become defective or unbalanced that may be caused by foreign wildlife destroying food sources of native wildlife until it starves to death; or foreign wildlife harms native wildlife which

is a maintenance of a local ecosystem's balance to death eventually. Consequently, the number of some wildlife species is increasing to affect the balance of the ecosystem that such imbalance will affect the living of people in the country. In addition, excessively hunting or hunting with a wrong way causes wildlife to become in danger of going extinct that is the decrease in the number of wildlife species which is hunted will affect humans living which depends on those wildlife species for living. Thus, humans have to abandon their domicile and move to another place to become a problem of a population transfer that could endlessly affect. Additionally, it causes a problem on the stability of food because excessively hunting or hunting with a wrong way will make wildlife which is a food resource of humans is reduced or eventually disappeared.

There are illegally importing into Thailand without standard screening regarding disease from animals. So, there is no way to know that such smuggled wildlife will bring any disease, and it will be found out when people have already got the disease into the body and sick (Interview with the non-government official 304 in Bangkok in September 26, 2017).

(4) Country's economy

According to the damages caused by wildlife trafficking in Thailand, in addition to the effect on humans, it also affects the country's economy. Therefore, it is impossible to deny that Thailand does not depend on the income obtained from wildlife resource that will lead to being used to drive the economy and will be beneficial to country development accordingly. For economic damage that will be happened in Thailand or Thai people caused by the problem of wildlife, trafficking that is the fact that the government and agencies of wildlife trafficking suppression, as well as Thai people, cannot control the situation of the demand for wildlife trade in Thailand to be reduced. Especially, the transnational wildlife trafficking, if it is still allowed to happen in Thailand, it will be guilty according to the CITES that Thailand has ratified. The committee of CITES Secretariat may send a warning to Thai government to monitor and control the situation of transnational wildlife trafficking and plan the concrete operation in suppression and protection of

transnational wildlife trafficking and carry out a plan according to the stated time. If the situation still cannot be controlled, or let the situation of transnational wildlife trafficking became more critical, the Convention will conclude and announce to other member States to ban wildlife and wild plant trade which has been specified in CITES Appendices with Thailand. There may be wildlife species which have been illegally traded or to prohibit every wildlife and wild plant with Thailand. Consequently, if Thailand cannot trade wildlife which is the country' revenue, Thailand will lose the revenue which will lead to the development and driving the domestic economy.

In 1991, we got the trade ban causing loss of tens of millions to billions baht because we could not trade wildlife and wild plants with the CITES member States. It was because we did not have the law to meet the conditions which the CITES required. There were crocodile skin and especially orchids which were unable to export, so it affected so much (Interview with the scholar 101 in Bangkok in August 27, 2017).

Furthermore, according to the information of the Department of National Park, Wildlife and Plant Conservation that initial damages were assessed if Thailand has been suspended wildlife and wild plants trade based on the CITES Appendices to member States that will cause Thailand to lose tens of billions baht from the trade of wildlife and wild plants. The damage cost from trade of crocodile and crocodile skin, product made from skin of freshwater and saltwater crocodiles, Arowana, seahorse, and Arapaima and others were about 2,220 million baht; or damage cost from product made from Caiman skin, oriental parrot, insect and snake's skin, was about 1,200 million baht; or even the damage cost which will come from export income of orchids, Aquilaria crassna, ornamental plants such as Crested Euphorbia, Euphorbia milli, Cactus, Cycadales, Palm trees, and so on, were about 10,080 million baht. Besides Thailand having to lost revenue from wildlife and wild plants to member States, there is also the loss of market share of above-mentioned wildlife species and wild plant to other countries for 3-4 years. Thus, it will greatly damage and affect the business sector and employment in Thailand (the Department of National Park, Wildlife and Plant Conservation, 2019b).

In addition, the development of Thailand requires taxes obtained from activities performed by people as well as taxes obtained from business sectors, for example, agriculture sector which relies on wildlife as a part of the production process. Therefore, if there is the spread of the disease caused by illegally importing foreign wildlife into the country, or native wildlife being more threaten by foreign wildlife will negatively affect people's life. Then, it will cause a decline in profits and taxes. When populated areas of wildlife resource which is an essential factor of the production process are damaged, it will cause the problem of shortage of resource and other environmental insecurities accordingly. Eventually, there will be immigration to other places for living. Therefore, it clearly shows that when wildlife resource that is a part of the ecosystem has been damaged, humans living is also affected. In addition, when humans that are considered the major resource to drive the country's economy is unable to live well, it causes the development of Thailand's economy to proceed with difficulty.

When considering the economic effect caused by wildlife trafficking in Thailand, there are a number of people, group of people or sector that will be affected, regarding government, business sector, and the industrial sector. In other words, the government will be damaged by wildlife trafficking in the form of losing revenue which is derived from citizens' taxes and business sector. When referring to wildlife trafficking in Thailand, it points out that the government has to lost revenue which must obtain from paying taxes of legal wildlife trade. Generally, the government will obtain taxes from wildlife trade. Therefore, when there are illegal markets for wildlife trafficking, it will cause the government lost the revenue from taxes. When the government does not obtain taxes or there is a decline in paying taxes, it means that government revenue which will be applied to develop the country and take care of people in the country to have well-being will be reduced accordingly. a decline or lack of revenue to develop the country causes the country to have to momentarily delay or stop the improvement of infrastructure of public health, education and other aspects. Moreover, the fact that the government will lose revenue obtained from wildlife trade also causes a budget cut for government agencies, including the agencies which are responsible for suppression and protection of wildlife trafficking. Consequently, the management within the agency must reduce expenses

such as official's salary, budget for field suppression or inspection, budget for developing official's potential, budget for establishing activity on wildlife trafficking protection and so on, in order to make the administration of the agency to correspond to the budget received.

The illegal import and export of wildlife make Thailand losing the revenue which has to obtain from paying taxes of wildlife import or export. When wildlife trafficking process uses the method that is to hide wildlife with other products for tax evasion or to inform the number of wildlife which will be imported less than the actual number, these wrongdoings will make the government losing revenue obtained from taxes. So, such income will lead to the development of the structure of public utilities that is necessary to develop the country to be advanced and to allocate to various government agencies. When the amount of taxes is reduced, there will be a reduction of budget allocations for government agencies that will apply various policies to perform such as campaign against wildlife trafficking, or even budget for the operation of monitoring, inspecting and collecting evidence related to the offense of wildlife case, which leads to the arrest of major offender. Therefore, when the budget obtained from taxes has been allocated to the Department of National Park, Wildlife and Plant Conservation, Division of Natural Resources and Environmental Crime Suppression, police stations in various areas as well as the Customs Department which is the major agency having authority and role in operational protection and suppression of wildlife trafficking receiving a small budget, it definitely affects the operation.

Still, various business sectors and industrial sectors need to depend on wildlife resource in the production process. If the number of wildlife resource is reduced resulted from the invasion of wildlife trafficking process and related affected from wildlife trafficking, such as disease spread by foreign wildlife, or even to harm wildlife habitats, these will cause the disruption to the production process. As a result, there will be a decrease in production or it cannot produce that is business or industrial sector's income has declined. Thus, when the income of the owner of the business or industrial sector has declined, the costs of production will be reduced in order to make the business to continue to proceed. There are various methods of reducing production such as reducing the number of workers by lay-off, suspension or closing down a business. Therefore, if the ecosystem is unbalanced from reduction of biodiversity,

distribution or expansion of foreign wildlife to harm native wildlife causing a decrease in number of it, or even diseases, there will be the damage to safety or integrity of the environment which directly affects business and industrial sectors which still depends on wildlife resources to support the operations. For example, there are spread of mad cow disease, avian influenza in the meat industry (e.g. broiler and egg farm, cattle farm) that have to stop producing in order to control the disease not to spread. In other words, when the production has stopped, there will be a lay-off. Consequently, when people have been laid off, they have no income. Also, when there is no income or decrease in an income, trading goods and services will be delayed. Additionally, income and tax caused by trading will be reduced affecting the government has a reducing revenue for the country's development when there is a decrease in tax paying. As in the case of transnational pangolin trafficking that the customs official stated that:

The illegal import or export of wildlife cause the government to lose the revenue obtained from tax on such import and export. Seemingly, the tax obtained from this way may not be that much compared to other taxes. However, this tax is also considered that can be applied in developing country in many ways like roads, education, and public health (Interview with the government officer 217 in Bangkok in September 1, 2017).

(5) Society

In addition to wildlife trafficking affecting the economy, environment and people in Thailand, it is also considered that wildlife trafficking is a threat causing damages to the country and also making Thai people feel insecure to the body, life, and property that they have to live among the lack of order and peace. So, it is because wildlife is an important resource that greatly generates an income and advantage for the country. Additionally, activity in a pattern of wildlife trafficking is considered a crime that causes the country to work unstably. In other words, wildlife trafficking in Thailand is illegal under the WARPA that prohibited to buy, sell, hunt, kill, import, export, pass through, and move wildlife as required by law. However, most key informants still agree that during trafficking wildlife in Thailand, there also

wrongdoings in different forms hidden with wildlife trafficking or causing other types of crime, e.g.

Corruption and misconduct of the government official: the fact that government official who has authority in protection and suppression of wildlife trafficking follows or not follow the law which is given authority to perform a duty by corruption and misconduct caused by wildlife trafficking such as requesting bribes, neglecting one's duty and abusing authority.

According to requesting bribes from the wrongdoer by the government official, it will be in the way that the official requests money, things or something in return that they are satisfied in exchange for assistance. The offender or network of wildlife trafficking will be helped in smuggling, for example, in issuance of the import-export permit by specifying that such wildlife is able to be traded even though the fact that imported-exported wildlife is prohibited to be traded; or moving wildlife by using their position; or to report that imported-exported wildlife has been already inspected and can be import-export even though wildlife has not been actually inspected.

According to neglecting on law enforcement and one's duties, it will be in the way that the government official who enforces the law related to wildlife trafficking suppression has witnessed that there is wrongdoing but the official does not arrest or take any action with wrongdoers. For example, Javan pangolin was smuggled from Indonesia into Thailand through the border of Thailand which is adjacent to Sadao checkpoint in Malaysia, and transported along Petchkasem Road heading to Phaholyothin Road and Mittraphap Road respectively, then exported to Laos at Thai-Laos border in Nong Khai, Nakhon Phanom or Mukdahan province to across Mekong River and access Laos accordingly. Regarding above-mentioned wildlife trafficking, it shows that the route over two thousand kilometers from the Sadao checkpoint to the Nong Khai border that wildlife trafficking process has successfully smuggled wildlife out of the country. Even though there are many police checkpoints, customs checkpoints, and border patrol police checkpoints along the way, the smugglers are able to transport wildlife to the destination. For this reason, it may cause by negligence on inspection of the government officials. As the wildlife scholar stated that:

The route over two thousand kilometers from the southern border which adjacent to Malaysia to the northeastern border in Nong Khai, Nakhon Phanom and Mukdahan before transporting to Laos. It is so long that they have to face many checkpoints, at least 10 checkpoints for sure. How can they pass when carrying pangolins over the car if the officials do not know anything? (Interview with the scholar 101 in Bangkok in August 27, 2017).

Moreover, abusing the authority of the government official that is the fact that the official uses their agencies' vehicles to transport wildlife. Therefore, that action clearly reflects that such an official intends to abuse the authority which has been assigned by taking the government-issued car to transport wildlife to the destination. So, there is a reason that if using a car of government, it will help not to be inspected when passing through checkpoints that is to reduce transport period as well as a risk to be called to inspect, arrest and prosecute.

Organized crime is criminal networks both Thailand and international networks to cooperate in crime. Those criminal networks generally have experiences and skills in trafficking in other illegal products such as drugs, arms, human as well as wildlife. Additionally, the World Bank has confirmed that wildlife trafficking has been appearing along with arms trafficking and human trafficking (International for Reconstruction and Development, 2005). Therefore, wildlife trafficking process will mostly cooperate in wildlife trafficking by clearly dividing the work about who will hunt wildlife, who will be responsible for transporting wildlife to the destination, who will liaise or monitor during transporting, who will be in charge of negotiating with the police officers or the forest rangers if being inspected or arrested. Thus, these acts are considered organized crime. Furthermore, if it is transnational wildlife trafficking, it will be transnational organized crime. The international police officer stated that:

They have done in the form of the network with clearly dividing the works that who will be a transporter, a poacher, a lookout, a coordinator. For example, if being a poacher, he has to hunt or provide wildlife to anyone or anywhere, so he will know or being a transporter that he has to know who is a person that he has to pick up a product, where will he pick

up and whom he will deliver a product. Therefore, it is difficult for the officers to trace to the kingpin (Interview with the government officer 218 in Bangkok, in September 8, 2017).

In addition, the organized crime network or wildlife trafficking network or wildlife trafficking process will have techniques for trafficking or various techniques to make wildlife trafficking will be done successfully. For example, pangolin scales are smuggled with uncut stones which is deemed as a goods that is able to be legally imported; or using money obtained from wildlife trafficking to bribe the government officials; or supporting politicians in exchange for advantages such as to cover wildlife trafficking news if there is arrest of wrongdoers or facilitate about prosecution to be finished as soon as possible without being prosecuted by the law.

Influential people are a group of people who are powerful and respected by people in government agencies or local people. The influential people will use their influence or reverence that has been created to support the wildlife trafficking process. For example, to contact a poacher they know to hunt wildlife and deliver to the process, or to cooperate with people who are able to provide assistance in information about finding wildlife or backing when people in wildlife trafficking process have been arrested by the officials. Even to commit an offense by themselves, for example, influential person in the northern forest areas in Thailand has claimed that the elephant which is in his camp is born from an elephant which is allowed to raise but the truth is such an elephant originated in Myanmar and crossed the Tenasserim Hills to find food in the Thai border. When such an influential person saw an elephant, he captured it and raise in his camp. The government official of wildlife trafficking suppression stated that:

It cannot be denied the fact of influential people, especially in national parks areas. They will know every process that whom they will have to contact to get wildlife. They have a lot of networks and also know every network. Like, if they want a tiger or an elephant, whom they have to contact, or if being arrested, whom they need to coordinate (Interview with the government officer 217 in Bangkok in September 1, 2017).

Smuggling into the country: wildlife trafficking process will hire foreigners who live in neighboring countries such as Myanmar to hunt wildlife in Thailand. For example, to hire Hmong people who live along Thai- Myanmar fringe areas to hunt wildlife in the western forest located in Thanon Thong Chai Range and connected to Tenasserim Hills in western Thailand. When Hmong people have smuggled to hunt as ordered of the investors, they would be paid. In addition, if they have got other wildlife species and there are consumers who want such wildlife, the investor will buy it. If there is no one buy, they will bring hunted wildlife back to sell or consume in Myanmar. The environmental researcher stated that:

Sometimes if they cannot find Thai people to hunt or transport, they will hire people from neighboring countries like Lao people, Hmong people. Especially, in the western that is adjacent to Myanmar that there is a mountain in between, so they cross to hunt and deliver to the investors or keep for themselves (Interview with the scholars 102 in Nakhon Pathom in September 7, 2017).

Smuggling of illegal products such as arms, drugs, or other goods, which must declare or pay tax before import or export from Thailand to overseas, or from overseas to Thailand. Thus, wildlife trafficking process will use the way to combine these arms, drugs, or even wildlife that is prohibited to be traded internationally into the container which is exported to overseas before being delivered to the consumers or investors who order these products. The government official stated that:

When there are a lot of containers which has been caught and it is difficult to examine every container, so we examine them randomly. For example, we have been informed that in this container have products made from crocodile skin but when checking, there are tiger skin hidden in the container; or inform that they are bracelets made from gemstones but when checking, there are combined with bracelets made from elephant ivory (Interview with the official 224 in Bangkok in December 26, 2017).

(6) Politics

Wildlife trafficking in Thailand has brought about damages to international politics which is associated with being accepted by various countries that Thailand is the country emphasizing on protecting wildlife for surviving an extinction caused by international trade as well as transnational wildlife trafficking. Since Thailand is still a developing country, there is no power in the international stage when compared to superpowers such as the United States, China, Japan or European countries. The fact is that Thailand has agreed to ratify the CITES Convention because of the benefits obtained from the international trade in which wildlife species and wild plants is still natural resource to exist in Thailand. However, when Thailand has ratified the CITES Convention, Thailand has to abide by agreements as well as conditions, technics, some agreements or conditions that are difficult to operate in Thailand. This is because Thailand still have to depend on resource from wildlife for generating income for the country or other indirect benefits which will also come along with the international trade. When there is transnational wildlife trafficking in Thailand, whether Thailand has been accused from many countries that Thailand is the country for source, transit or destination of wildlife trafficking process. This pressures Thailand to agree or being compelled by the agreements, conditions and measures which have been decided in the CITES Convention. Such agreements conflicts with benefits generating income for the country. As in April 1991 to April 1992, Thailand was suspended the trade with State parties of the CITES Convention or even categorized as 1 of 8 countries that were at high risk of smuggling ivory. Consequently, the country was highly watched by CITES Secretariat, States parties or even other countries interested to trade with Thailand. As a result, it caused to delay a making-decision. When Thailand has been accused to be the country of source, transit or destination of the wildlife trafficking process, it causes the CITES Convention states parties also refused to trade with Thailand. As a result, besides losing the revenue from international trade, it also destroys a good reputation and image of Thailand that is also unstable in the international. The official of wildlife trafficking suppression stated that:

If not following CITES, Thailand will already face stress because Thailand is a small country. Large countries normally pressure small countries. Thailand has already been pressured from other states. When Thailand see many pressures, it causes poor reputation for Thailand. CITES Parties or partner countries will take time to order products because they have to see the attitude toward Thailand from other countries (Interviews with the government officer 224 in Bangkok in December 26, 2017).

4.2 The protection and suppression of wildlife trafficking policy in Thailand

In this study, the researcher determined the scope of the study of policies related to the protection and suppression of wildlife trafficking in Thailand. It included the CITES Convention, the WARPA, the Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003), the Wild Animal Reservation and Protection Act (No. 3) B.E. 2557 (2014). The aforesaid laws reconsidered the main mechanism established by the state to employ in terms of protection and suppression in wildlife trafficking, reducing or none of wildlife trafficking in Thailand. The researcher has adopted all four aforementioned policies together with analysis with the theory of crime prevention according to the situation (SCPT) and results of interviews with government officials involved in the implementation of the above four policies. It leads to prove that implementation of the policies by the relevant public agencies in the protection and suppression of wildlife trafficking can suppress, control, reduce the number of wildlife trafficking or it possibly promote to increase the number of wildlife or it can decline the wildlife smuggling. It also find solving, improving and development the policy in the way that will reduce wildlife trafficking in Thailand.

The results of the study will be divided into 2 parts which are the policy of protection and suppression the wildlife trafficking in Thailand with the theory of crime prevention according to the situation (SCPT) and the relevant agencies in the implementation of policies in wildlife protection and suppression.

4.2.1 The policy of protection and suppression the wildlife trafficking in Thailand with the theory of crime prevention according to the situation (SCPT)

When all four aforesaid policies were accordingly analyzed to the pattern/technique for protection and suppression of wildlife trafficking in Thailand together with the situation of crime prevention according to the situation (SCPT). There are forms / techniques for protection and suppression of wildlife trafficking in five main categories which can be described as follows.

• **Category 1: Increase difficulty** comprised of 4 techniques that are:

Technique 1 is target harden, that is definition in order to be protected by law.

Technique 2 is control access to facilities. It is own a license and a certificate that has been issued by the authority to relevant officials in the protection and suppression of wildlife trafficking such as wildlife checkpoints along the border, airports, ports, highways, etc. It also includes set of checkpoint for importing, exporting and carrying wildlife from land, water and air routes as well as rules for prohibition of trade, possession, storage, nesting, importing, exporting, carrying through (for trade) reserved wildlife, protected wildlife by law and the CITES Convention.

In addition, there are rules to prohibit wildlife hunting from sunset to sunrise. The rules prohibit any action, such as no entry into dangerous construction in wildlife reservation areas before permission or it bans collecting / assaulting reserved wildlife and protected wildlife in wildlife reservation areas. It prohibits hunting, collect/harm the habitant of reserved wildlife and protected wildlife in the temple and religious places.

Technique 3 is screen exits. It is the presentation of licenses, certificates and documents related to import, export, and carry (for trade) reserved wildlife, protected wildlife, wildlife carcasses and wildlife products to the officials at the entrance of the wildlife checkpoint. It is also establishment of the checkpoint for importing, exporting and carry of wildlife from land, water and air routes.

Technique 4 is control tools/weapons. It is the rule and forms of licenses, certificates and documents related to activities toward reserved wildlife, protected wildlife and wildlife according to Appendix 1, 2 and 3 under the CITES Convention.

It is also guidelines for licensing procedures, certificates and documents related to reserved wildlife, protected wildlife and wildlife according to Appendix 1, 2 and 3 according under CITES Convention.

• **Category 2: Increase risk** contains of

Technique 6 is extend guardianship. It is set of checkpoint in importing, exporting and carrying of wildlife, wildlife carcasses and wildlife products through border, airports, ports, shipping points, highways, land, air and water. It is also determining the roles and duties of officials in the protection and suppression of wildlife trafficking, setting the boundary area to be a national wildlife park, wildlife conservation areas, non-hunting area and the appointment of officials for wildlife conservation areas and non-hunting areas.

Technique 7 is to assist natural surveillance. It is the construction of boundary lines, fence posts, signs to indicate that it is a national wildlife park, wildlife conservation areas and non-hunting areas.

Technique 8 is to reduce anonymity, which is the presentation of ID cards all time before entering into the national wildlife park, wildlife conservation areas, non-hunting areas.

Technique 9 defines to utilize place managers. It is clearly define areas of national wildlife parks, wildlife conservation areas, non-hunting.

Technique 10 is to strengthen formal surveillance. It is the appointment of the operating officer, the technical staff and the National Wildlife Reservation and Protection Committee. It is also appointment of officials under the WARPA and the Criminal Code with clear rules, powers and roles as well as the establishment of wildlife checkpoints.

• **Category 3: Decrease reward** consists of

Technique 11 is to conceal targets. It is keeping licenses, certificates and documents related to international wildlife trade to be safe from theft or copying.

Technique 12 is to remove targets. It confiscate the exhibits such wildlife, wildlife carcasses, and wildlife products to be state property Also, it forfeit and return wildlife species to State parties who are exporters. It includes the suspension and termination of licenses, certificates and documents relating to actions that do not comply with the provisions of the WARPA and the CITES Convention as well as

delivery of reserved wildlife, protected wildlife to the agencies involved in reservation and protection or those who have obtained a license / certificate.

Technique 13 is to identify property, which is mark on wildlife in order to clarify and inspection.

Technique 14 is to disrupt market. It requests for examination of licenses, certificates and documents related to wildlife that are in the possession of traders in order to define the origin of wildlife to the authorities and trade suspension.

Technique 15 is to deny benefits. It is a punishment for both imprisonment, fines, suspension/termination of trade license, import, export, import of protected wildlife by law.

• **Category 4: Decrease provocation** comprises of

Technique 16 is to reduce frustrations and stress. It is omission of certain penalties under conditions or requirements. It is also permission to possess, trade, breed, store, nest, import, export, research, study, social benefits, which reserved wildlife, protected wildlife, wildlife carcasses, wildlife products according to the Thai wildlife conservation and protection law as well as according to Appendix 1, 2 and 3 of the CITES Convention or under the terms or conditions.

Technique 17 is to avoid disputes. It is the use of negotiation or arbitration principles to settle disputes between parties when problems arise from international wildlife trade.

Technique 18 is to reduce emotional around. It is the use of negotiation or arbitration principles to settle disputes between parties when problems arise from international wildlife trade.

• **Category 5: Remove excuse** contains of

Technique 21 is to set rules. It regulates rules and regulations in order to enforce laws related to wildlife conservation and protection. It includes setting rules for the establishment of a public zoo and it forms principles for the method and proceeding to protect wildlife species that have been added in the account of the Ministerial Regulations and according to CITES Convention.

Technique 24 is to assist compliance. It is the request for services from officials in additional office time under the rules and procedure that set by law.

It still lack five techniques, which are Techniques 4: deflecting offenders; Technique 19: neutralize peer pressure; Technique 20: discourage imitation; Techniques 22: post instruction; Techniques 23: alert conscience and Technique 25: control of drug and alcohol.

4.2.2 Agencies for implementation of policy in prevention and suppression wildlife trafficking

The CITES Convention, the WARPA, the Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003), the Wild Animal Reservation and Protection Act (No. 3) B.E. 2557 (2014) are public policies to establish legal forms. The main public agency who has authority and enforcement for the aforementioned law is DNP. Additionally, NRECD, Police Division, Thai Customs and Department of Provincial Administration has to cooperate with officials of the DNP in terms of protection and suppression of illegal wildlife trafficking in Thailand. Each department has duty, work process, performance, problems and obstacles as well as suggestions to amend and improve laws and policies. This lead to successfully support and effectively promote in protection and suppression of illegal wildlife trafficking in Thailand, increasing of wildlife number in species that risk for illegal trafficking as well as encouragement of all sectors to participate in protection and suppression in illegal wildlife trafficking. According to the study of documents and interview of the officials who involved in the implementation of the policy on protection and suppression in the illegal wildlife trafficking under the aforementioned laws, the result found as follows.

(1) Department of Natural Parks, Wildlife and Plant Conservation

(1.1) Authority, mission and duties

The DNP is the major agency and has power to suppress and protect illegal wildlife trafficking that occurs in Thailand under the WARPA. The act is the main law and roles to suppress the offender in wildlife trafficking. The major missions of the DNP relating wildlife are restoring, promoting and conservation of wildlife resources in the national wildlife park, wildlife conservation areas and non-hunting area by controlling, monitoring, inspection, suppressing in wild animals being attacked, hunt or risk of extinction. The department also encourage and increase awareness for the community to participate with the state to sustain wildlife resources

and animals. This lead to maintain balance for the ecosystem and the environment, including the biodiversity of Thailand and the world (Department of National Parks, Wildlife, Plant Conservation, 2019).

Forest rangers have the power to enforce under the WARPA, which is a relevant law to wildlife cases. The rangers have the power and duty to conserve, protect, preserve and maintain the wildlife resources to be virgin forest and full balance of nature. The rangers must also control the use of wildlife resources in a cost-effective, sustain manner and achieve maximum benefits in the economy of the country. Moreover, the rangers have to control, supervise, protect and prevent any person from exploitation of forests, which are habitat for wildlife that affect the lifestyle or exist in wildlife species. In addition, the department must focuses on the study, research and development of guidelines or various measures toward restoring, management and conservation, which will contribute to the cost-effective use of wildlife resources and maintain wildlife species as well as maintain the balance of the ecology and environment of the country (Department of National Parks, Wildlife and Plant Conservation, 2019).

(1.2) Operation

According, suppression of wildlife trafficking by forest rangers, the rangers were from various offices such as Wildlife Conservation Division, Conservation Area Management Division, Forest Fire Prevention and Control Wildlife Division and Wild Plant Protection Division under the DNP. The key informants explained that the procedures in suppression of wildlife offenses divided into 2 main cases. Firstly, it was the case of offenses occurring in the national park area and in the case of offenses occurring outside the national park area. Each case was divided into 2 types, which wildlife offenders were search at the scene and wildlife offenders disappeared from the scene. It possibly illustrate the principles of the suppression of forest services as follows.

In the case of offenses occurring in the national park area

When the forest rangers witness the wildlife offenders at the scene, the rangers will show themselves as legal authority and ask the document issued by the authorized government for wild hunting or possession of wild animals or wildlife carcasses. However, if the person has no documents or evidence to represent

the ranger immediately, the rangers then can detain that person until the mission complete. Next, the rangers will take photograph all suspects or detainees that have been found at the scene, pictures of the scene and the surrounding area, pictures of all wild animals or wild carcasses at the scene, equipment at the scene such as guns, chains, nets, animal traps, bicycles, motorcycles or vehicles, cellphone, amateur radio, etc. In case of detecting of mobile phone, the rangers must inspect the pictures on the mobile phone, contact numbers and messages, including messages containing conversations between individuals or groups to contact wildlife trade. In addition, they must also photograph the characteristics or behavior of the suspect. The detainee is at the scene during the forest official's investigation and collection of evidence at the scene as well.

After that, the rangers must check the location of the incident by checking with the map that the scene is in the forest area in accordance with the any forest law. Including, it investigated the species and number of wild animals or wild carcasses and wildlife remains. Then, it records into account and the account bring to the arrested person together with the rangers to sign at the end of the account.

When aforementioned procedure operate, the rangers will notify the person that arrest under the WARPA in accordance with Section 16, 19, 20, 21, 22, 36, 42 or other Section. The person who under arrested will be also notify that committing on offense under Section 16 (3), (15) or 16 (6) in the any case of offenses under the National Park Act B.E. 2504. The person who under arrested can be notify about the rights such as requesting a lawyer, giving or not giving information about the arrest, etc. Such right are under the Criminal Procedure Code, Section 83. Then, the ranger will prepare a record of arrest with various details as aforementioned and complete records. The rangers must draw or map the area of the scene before submitting documents and evidence to the inquiry officer to proceed in the next procedure. When all evidence and documents collect from the incident that have been prepared, the rangers will detain the arrested person and record the arresting, relevant documents and exhibit of the scene. All evidence then send to investigator who is responsible for the incident in such area to prosecution under the relevant laws.

The rangers who responded the arrest of incident must ask evidence from the prosecutor about exhibits, which are non-firearms, ammunition,

explosives for collecting. This is in accordance with the Regulation of Ministry of Agriculture and Cooperatives in the Practice of the Exhibit toward Forestry Offenses, B.E. 2533 and the Mutual Agreement between the Ministry of Natural Resources and Environment and the Royal Thai Police on August 16, 2008. Then, the ranger must report the performance to the supervisor. If it is a major case, it must report within 24 hours. If it is a minor case, it can report within 7 days or regular report that must detail the results of the arrest and attachment of copy of the inspection record and relevant documents to the supervisor in the hierarchy. In addition, the ranger must follow up on the proceedings by coordinating with the inquiry officer and prosecutor about prosecution and then report to the supervisor until the case complete.

When the offenses occurred in the national wildlife park and wildlife offenders disappeared from the scene, the rangers must firstly take pictures of the scene of wildlife and wrecks when they reach into the scene. After that, location of the incident must be inspected by checking with the map of national forest area, that the scene was in the forest area in accordance with any forest law. It included inspection of the species, number of wildlife and carcasses that found in the scene and recorded in wildlife and carcasses into account as well as the rangers inspected the area of the incident and signed in with the account. Then, the rangers considered in which offenses were in accordance with the WARPA, Section 16, 19, 20, 21, 22, 36 or 42. Also, the offences were considered with the National Park Act B.E. 2504 (1961) in Section 16 (3), (15) or 16 (6) or any case of offenses in the national wildlife park area as well as having to clearly detail the offense in the inspection report.

The rangers must record the aforementioned detail along with the map of area of the incident, documentary and evidence that support the charges in which similarity to appearances of wildlife offender in the scene. Then, the rangers brought exhibits, investigated report and relevant documents to the inquiry officer in order to conduct investigations to find the offenders for prosecution. After that, the ranger would take the exhibits back, exceptionally firearms, ammunition, and explosives that keep by the investigators. The rangers reported the results to supervisors. The process of reporting will be the same as the case where the offenders were found at the scene.

In the case of offenses occurring outside the national park area

If the rangers found guilty about wildlife outside the national wildlife park or in cases of disappear of wildlife offenders in the scene at outside the national wildlife park, the ranger will conduct as the same as in the case of offenses occurring in the national wildlife park and wildlife offenders disappeared from the scene. It was only not to inform the arrested person that he was arrested under the National Park Act B.E. 2504 (1961) in Section 16 (3), (15) or 16 (6).

Moreover, the rangers also have a role in examining the possession of wildlife or carcasses that have been permitted to wildlife trade, wildlife carcasses and products made from wildlife carcasses. It includes inspection in importing, exporting and bringing through wildlife, that have different practice, guidelines for different operations.

In the case of inspections of permission of wildlife trafficking, wildlife carcasses or products made from wildlife carcasses, the rangers will show themselves as legal officials and request to inspect the wildlife trade license, which the license is valid for 1 year from the date of issuance. It includes checking the location of wildlife care that is appropriate and safe, places for feeding of wildlife create problems or possibility of harm to nearby. Furthermore, the rangers must examine accounts of receive, sales, and accounts that show wildlife statistics, wildlife carcasses and products made from wildlife carcasses, which the trader must record and keep for at least 2 years from the date of receiving or selling. The rangers must also check whether wildlife, wildlife carcasses, or products made from wildlife in commercial locations come from breeding or have identification marks. If wildlife traders of wildlife or products made from wildlife carcasses do not present to officials about the acquisition of wildlife, wildlife carcasses or wildlife products, the rangers must arrest such person and seize the exhibits in the entire scene and then sent to the inquiry officer for further proceedings.

While the inspection of import, export and bring through in wildlife is divided into 2 cases that are in the case of an offense within the wildlife checkpoint and outside the wildlife checkpoint. Wildlife checkpoints are responsible for the protection and suppression of international wildlife trafficking and wild plants, including prevention and suppression of possession and trade of ivory in accordance

with the ivory trade law. It also formulates strategies and create a plan to prevent and suppress international trade in wildlife and wild plants for wildlife checkpoints to implement. Additionally, it operate and coordinate with the law enforcement network about wildlife for the benefit of further work. Currently, there are a total of 47 wildlife checkpoints, which 5 wildlife checkpoints are located in the central region. The regional wildlife checkpoints consist of 2 wildlife checkpoints in the Office Conservation Management Area 1 (Prachinburi), 3 wildlife checkpoints in the Office of Conservation Management Area 2 (Sriracha), 2 wildlife checkpoints in the Office of Conservation Management Area 3 (Ban Pong), 4 wildlife checkpoints in the Office of Conservation Management Area 4 (Suratthani), 8 wildlife checkpoints in the Office of Conservation Management Area 5 (Nakhon Si Thammarat), 9 wildlife checkpoints in the Office of Conservation Management Area 6 (Songkhla), 2 wildlife checkpoints in the Office of Conservation Management Area 8 (Khonkaen), 4 wildlife checkpoints in the Office of Conservation Management Area 9 (Ubonratchathani), 3 wildlife checkpoints in the Office of Conservation Management Area 10 (Udonthani), 1 wildlife checkpoint in the Office of Conservation Management Area 11 (Tak), 1 wildlife checkpoint of the Office of Conservation Management Area Conservation 13 (Phrae), 4 wildlife checkpoint in the Office of Conservation Management Area 15 (Chiang Rai), 4 wildlife checkpoints in the Office of Conservation Management Area 16 (Chiang Mai), 1 wildlife checkpoint in the Office of Conservation Management Area 6 (Pattani Branch). Each wildlife checkpoint is different location and responsible areas. There are 2 conservation and rescue centers for foreign wildlife, which are the Wildlife Conservation and Rescue Center (South) and the Wildlife Conservation and Rescue Center (Northeast). The wildlife checkpoints in the country found in land, air and sea over the country and regions. Two checkpoints will be opened soon.

In addition, during in inspecting the scene by the ranger, there is doubt about the species of wildlife or like to know the type of wildlife species of the exhibits in seize and wildlife owners, it will request to the Wildlife Forensic Science Center in order to help to detect genetic evidence of wildlife to classify species, identity for wildlife and wildlife carcasses. It also finds the genetic relationships that can be used as evidence for consideration in various cases that requested with reliable standards.

Wildlife forensic science will ask about the kind of wildlife and wildlife carcasses. There are ten thousand wild animals around the world. We have to look at the nature of the witnesses, carcasses, fur, meat, ivory, horn, leather and all part of wildlife. It can be used as object evidence that can present as evidence in court, (Interview with the government officer 204 in Bangkok in September 22, 2017).

Monitoring and inspection wildlife-related actions toward protection and suppression in wildlife offenses, wildlife carcasses or products made from wild carcasses, the rangers can coordinate with agencies that have make a memorandum of cooperation in the conservation of forest resources between the Ministry of Natural Resources and Environment and various agencies. The details of the cooperation will be implemented in a different way according to the mission of each agency that can help, support, suppress and protect wildlife offenses. Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and various agencies as follows:

- Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Royal Thai Police, B.E. 2551 (2008).
- Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Royal Thai Army, B.E. 2551 (2008).
- Memorandum of Understanding on Cooperation in Forest Resource Conservation between the Ministry of Natural Resources and Environment and Air Force, B.E. 2551 (2008).
- Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Royal Thai Navy, B.E. 2551 (2008).
- Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Ministry of Interior, B.E. 2551 (2008).

- Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Ministry of Education, B.E. 2551 (2008).

However, if the rangers found that the crime had occurred, the rangers can detain and seize the exhibit and prepare detailed records that found on the scene. Then, the ranger will coordinate with the police or administrative officials according to the Criminal Procedure Code in order to arrest the offenders under the WARPA or it sends the person to the police officer or administrative official according to the Criminal Procedure Code to investigate and continue legal proceedings

The current situation of illegal wildlife trafficking has changed the pattern of offense according to the advancement of technology, especially the illegal trade of wildlife that have been announced or advertised for selling wildlife products according to electronic media such as Facebook, Pantip, Sanook, MThai, etc. It also refer as online wildlife trafficking that is becoming popular among wildlife consumers. The DNP therefore issued an order No. 975/2560 regarding the establishment of a group of suppression in wildlife offenses (Yeaw Dong) in April 26, 2017. It is popularly called Wild hawk special group of activities to suppress, arrest, seize, inquiry, investigate and seeking evidence related to the offenses under the WARPA, the Ivory Act B.E. 2558 (2015)., especially for illegal wildlife trade via social media throughout Thailand that still currently perform duties.

In order to prevent the problem of wildlife trafficking on the internet, whether selling via the Facebook, Line, Pantip, MThai or in the pages of various blogs, the Department of National Parks, Wildlife and Plant and Conservation sees that this is a way to make more offences. The department does not ignore, therefore, it has set up Wild hawk special group to trace and arrest. Other agencies also help us in various campaigns, (Interviews with the government officer 209 in Bangkok in October 4, 2017).

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In terms of preventing illegal wildlife trade, the DNP will have the Office of Wildlife Conservation, which is a central agency that plays a major role

in managing wildlife resources, wildlife protection, wildlife breeding, research and publicize the conservation and protection of wildlife with Thai wildlife database. The DNP Libraries collect research related to wildlife in Thailand for people who are interesting to further search. It also has a role to support and encourage NGOs and all sectors to participate in wildlife conservation and prevention of wildlife trafficking through activities such as reporting of illegal wildlife trafficking via normal or online or various channels, such as the National Park Service Hotline 1632, the DNP websites at www.dnp.go.th, (@ DNP.WILDHAWK), Wildlife Rescue Coordination Center Tel. 02-561-0777 ext. 1691, Foster Wildlife Conservation Project, Elephant Food Aid Fund of Thailand

The regional areas has 19 conservation areas, consisting of Conservation Management Area Management, 1-16 and five branches the Bureau of Conservation Management Area are spread throughout the country that performs preventive work in the same manner as a central agency. In addition, the DNP is also aware of the importance of using the National Wildlife Park Service, therefore, the DNP has announced the prohibition of importing or selling in all kind of alcoholic beverages in December 27, 2010 (Government Gazette, Volume 127, Special Episodes 150 D, December 28, 2010) in order to maintain peace in the national park. It also preventing loud noise, create trouble, annoy tourists and wildlife as well as reducing the risk factors that will cause threaten wildlife in the national park area by visitors.

(1.3) Performance

The DNP greatly focuses on importance of protection and suppression of wildlife offenses under the WARPA and relevant laws. The department has collaborated with officials from Royal Thai Police, Department of Custom, military and administrative bodies to achieve the most effective suppression of offenders. Since the fiscal year 2009-2019, it was found that the ranger were able to detain the offenders under the WARPA, both with the accused and without the accused. It can be classified as minor and big cases, including lawsuits in cooperation with relevant agencies. Statistics on wildlife cases under the WARPA appears in Table 4.2

Table 4.2 Statistics on wildlife cases under the Wild Animal Reservation and Protection Act B.E. 2535 (1992) in fiscal year 2009-2019

Case	Fiscal Year												Total
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*		
offender (case)	466	464	383	487	431	412	435	471	407	423	146	4,525	
No offender (case)	134	125	145	216	152	116	118	156	147	127	32	1,468	
Total (case)	600	589	528	703	583	528	553	627	554	550	178	5,993	
Minor case (cases)	564	529	484	668	578	504	530	570	544	534	169	5,674	
Major case (cases)	36	60	44	37	5	24	23	57	10	16	9	321	
Total (cases)	600	589	528	703	583	528	553	627	554	550	178	5,993	
Cooperation with relevant agencies (Army/Police/ Administrator (case)	-	160	211	157	144	140	174	213	132	134	31	1,496	

Source: The Department of National Parks, Wildlife and Plant Conservation, January 31, 2019A.

*Fiscal year 2019 begin in October 1, 2018 - January 30, 2019.

From Table 4.2 explains that the DNP has taken action to suppress wildlife offenses in accordance with the WARPA since the fiscal year 2009-2019. The cases with accused are totally of 4,525 cases, which are 466 cases, 464 cases, 383 cases, 487 cases, 431 cases, 412 cases, 435 cases, 471 cases, 407 cases, 423 cases and 146 cases, respectively. While the case without the accused are totally of 1,468 cases, including 134 cases, 125 cases, 145 cases, 216 cases, 152 cases, 116 cases, 118 cases, 156 cases, 147 cases, 127 cases and 32 cases, respectively.

If consider separately in minor cases and large case found that minor case totaled 5,674 cases, including 564 cases, 529 cases, 484 cases, 668 cases, 578 cases, 504 cases, 530 cases, 570 cases, 544 cases, 534 cases and 169 cases, respectively. Major cases are a total of 321 cases, including 36 cases, 60 cases, 44 cases, 37 cases, 5 cases, 24 cases, 23 cases, 57 cases, 10 cases, 16 cases and 9 cases, respectively.

Moreover, there is a case of cooperation with relevant agencies in accordance with the memorandum of cooperation in the conservation of forest resources between the Ministry of Natural Resources and the Environment and various agencies, such as the military, police, administrative in a total of 1,496 cases since 2010-2019, including 160 cases, 211 cases, 157 cases, 144 cases, 140 cases, 174 cases, 213 cases, 132 cases, 134 cases and 31 cases, respectively.

In addition, it was found that during the fiscal year 2009-2019, the Department of National Parks, Wildlife, Plant Conservation can be traced to wildlife and wildlife carcasses both live wildlife and carcasses. Particularly, wildlife is in the interest and has a high value of smuggling, including tigers, elephants, pangolin and ivory. The statistic of wildlife and wildlife carcasses that seize as the exhibits are shown in Table 4.3

Table 4.3 Statistic of wildlife and wildlife carcasses that seize as the exhibits in fiscal year 2009-2019

Type of Exhibit	Fiscal Year											Total
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019*	
Wildlife alive (s)	6,236	11,414	30,369	16,345	10,109	8,703	10,754	13,426	4,852	7,275	1,149	120,632
Tiger (s)	1	1	12	5	23	2	-	8	3	2	-	57
Elephant (s)	-	1	-	30	9	3	1	4	1	-	-	49
Pangolin (s)	545	774	545	479	113	325	328	494	376	423	1	4,403
Wildlife carcass (carcasses)	2,635	2,853	1,631	3,376	1,253	5,220	1,641	1,204	1,039	1,501	725	23,078
Tiger (carcasses)	-	15	2	1	-	2	3	67	1	3	1	95
Elephant (carcasses)	6	4	5	7	5	6	3	5	2	4	1	48
Pangolin (carcasses)	69	1	17	1	11	1	4	7	1	5	1	118
Wildlife carcass (Kilograms)	3,503	4,191	1,307	4,557	3,023	2,597	10,872	3,024	1,635	1,570	480	36,759
Ivory (classifier/pieces)	-	243	515	-	31	609	870	305	-	319	-	2,892

Source: The Department of National Parks, Wildlife and Plant Conservation, January 31, 2019 B

* Fiscal year 2019 begin in October 1, 2018 -January 30, 2019

Table 4.3 can be explained that from the fiscal year 2009-2019, the DNP has been able to continuously seize the exhibit of wildlife alive, wildlife carcasses and ivory in total of 120,632, including 6,236; 11,414; 30,369; 16,345; 10,109; 8,703; 10,754; 13,426; 4,852; 7,275 and 1,149, respectively. According to the exhibits, it was found that the total number of tigers was 57, the total number of elephants was 49, and the number of pangolin was 4,403.

While the wildlife carcasses of the exhibit were 23,078 carcasses, including 2,635 carcasses, 2,853 carcasses, 1,631 carcasses, 3,376 carcasses, 1,253 carcasses, 5,220 carcasses, 1,641 carcasses, 1,204 carcasses, 1,039 carcasses, 1,501 carcasses and 725 carcasses. From the total number of wildlife carcasses of the exhibits, it was found that the total number of tiger carcasses were 95, elephant carcasses were 48, and pangolin carcasses were 118.

When considering the carcasses of the exhibit that were seized, it calculated according to the weight of kilograms in total of 36,759 kilograms, including 3,503 kilograms, 4,191 kilograms, 1,307 kilograms; 4,557 kilograms; 3,023 kilogram; 2,597 kilograms; 10,872 kilograms; 3,024 kilograms; 1,635 kilograms; 1,570 kilograms and 480 kilograms, respectively. The forestry rangers were able to seize the exhibit in totally 2,892 of ivory.

Furthermore, the summary of statistical reports about the WARPA during the fiscal year in 2009-2019, it was found that the five most common wildlife and wildlife carcasses that were exhibited as follows:

In 2009, it was found that the five most common wildlife that exhibited were 4,710 birds, 545 pangolins, 216 soft-shelled turtles, 121 squirrels, and 65 crocodiles and lizards. The five most common wildlife carcasses that exhibited were 1,000 bats, 486 squirrels, 154 macaque, 97 birds and 57 frogs.

In 2010, it was found that the five most common wildlife that seized were 6,271 birds; 2,081 turtles and soft-shelled turtles; 774 pangolins, 755 fish and 525 snakes, while the five most common wildlife carcasses that seized were 475 squirrels, 446 birds, 161 frog, 112 owls and 80 civets.

In 2011, it was found that the five most common wildlife that seized were 9,314 turtles and soft-shelled turtles; 6,140 birds; 5,483 crocodiles and lizards; 3,010 snakes and 545 pangolins while the five most common wildlife

carcasses that seized were 180 birds, 172 squirrels, 62 civet, 43 chevrotain, crocodiles, lizards and frogs, and 23 fowls.

In 2012, it was found that the five most common wildlife that seized were 8,457 birds, 2,638 snakes, 1,339 chameleons, 719 crocodiles and lizards, and 479 pangolins. The five most common wildlife carcasses that seized were 571 frogs, 365 squirrels, 151 birds, 65 crocodiles and lizards.

In 2013, it was found that the five most common wildlife that seized were 6,802 birds, 2,201 snakes, 308 turtle and soft-shelled turtles, 297 frogs and 113 pangolins. While the five most common wildlife carcasses that seized were 344 squirrels, 144 birds, 134 crocodiles and lizards, 94 frogs and 44 fowls.

In 2014, it was found that the five most common wildlife that seized were 3,684 birds; 3,328 turtles; 1,040 fishes, 325 pangolins and 105 crocodiles. The five most common wildlife carcasses that seized were 4,106 bats, 292 squirrels, 125 birds, 71 frogs, and 67 chevrotain. In 2015, it was found that the five most common wildlife that seized were 3,241 birds, 838 snakes, 700 crocodiles and lizards, 562 turtle and soft-shelled turtles, and 328 pangolin, while the five most common wildlife carcasses that seized were 341 squirrels, 227 birds, 170 frogs, 34 deer, and 31 crocodiles and lizards.

In 2016, it was found that the five most common wildlife that seized were 9,944 birds, 1,913 turtles and soft-shelled turtles, 494 pangolins, 386 crocodiles and lizards, and 386 snakes. The five most common wildlife carcasses that seized were 261 squirrels, 169 birds, 92 frogs, 67 tigers and 41 porcupines.

In 2017 found that the five most common wildlife that seized were 3,034 birds, 1,002 turtles and soft-shelled turtles, 376 pangolins, 198 crocodiles and lizards, and 77 fishes, while the five most common wildlife carcasses that seized were 248 squirrels, 205 frogs, 95 birds, 34 bear and fowl, and 25 civets.

In 2018, it was found that the five most common wildlife that seized were 3,334 birds, 1,957 snakes, 829 turtle and soft-shelled turtles, 423 pangolins and 148 crabs, while the five most common wildlife carcasses that seized were 361 frogs, 346 squirrels, 168 birds, 29 owls and 26 chevrotain.

In 2019, it was found that the five most common wildlife that seized were 566 birds, 143 frogs, 132 crabs, 81 turtles and soft-shelled turtles, and

32 civets. The five most common wildlife carcasses that seized were 331 frogs, 163 squirrels, 81 monkeys, 39 birds and 8 fowls.

In addition, in 2016, the forest rangers and related agencies inspected temples and sacred places in Bangkok, which were Bampen Tai Temple, Saen Suk Temple, Rakhang Kositaram Worawihan Temple, Bamphen Nuea Temple, Phra Phrom Shrine at Ratchaprasong Junction for wildlife smuggling and sell to people who come to temples and holy places. The authorities possibly arrested in total of 151 wildlife accused. Most exhibits of wildlife that seized were Estrildid finch, followed by turtles and pythons, respectively. When assessing the damage from illegal wildlife trafficking in temples and sacred places, value was approximately 2.5 hundred thousand Baht (Issara News Agency, 2017).

When it estimated damage value of wildlife, wildlife carcasses and products made from wild animals that were exhibits in each year, the amount of damage value that incurred to the state was over one million Baht per year. Based on data from the DNP, Table 4.4 showed the damage value of state related to wildlife in 2009-2012. Statistics on arrest of offenders under the WARPA also depended on the type and number of wildlife, wildlife carcasses and products made from wild carcasses. It was an offense against elephants, ivory, tigers and pangolin, which was extremely high value species in the illegal wildlife trade market.

Table 4.4 Statistics of damages value of wildlife cases for state in 2009-2012

Year	Damages value of wildlife (Baht)
2009	1,255,563
2010	128,700,357
2011	7,011,593
2012	8,806,403

Source: Department of Natural Park, Wildlife and Plant Conservation, 2012.

(1.4) Problems and obstacles in operations

Based on interviews with key informants whom were officials of the DNP, the officials play a role in suppression and protection of wildlife trafficking. The officials discussed the problems that occurred during the operation

until it became the obstacle to suppress and protect illegal wildlife trafficking. The details were follows.

- **It assigns the task of suppression in illegal wildlife trafficking to the division who indirectly responsible for undertaking of suppression in illegal wildlife trafficking.** This is the administrative work in the provincial areas that are divided into the 1-15 conservation area offices over the country. Some senior administrators have assigned a task to suppress the illegal wildlife trafficking, which such work is considered as cross-functional manner. Due to the mission of the Wildlife Conservation Division, its main function is to coordinate the management plan in conservation of wildlife between central agencies and operational units in responsible areas. It also manage, track performance and coordinate to promote and support the management of wildlife conservation areas, non-hunting areas and the Nature and Wildlife Education Center in the area of responsibility. Assigning the suppressing wildlife trafficking for officers may have a negative effect on the operations such as patrolling and suppression of offenses. This is because the wildlife conservation staff may have insufficient knowledge and understanding of the operations to suppress illegal wildlife trafficking, therefore, it may result in the inability to arrest illegal wildlife traffickers that have fail mission in suppression wildlife trafficking. If officials from the Wildlife Conservation Division will participate in the suppression section when there is a classification and confirmation of wildlife species that are hunted as reserved wildlife re, protected wildlife as well as wildlife species are protected by relevant laws or not, the official said that:

We have to work on the suppression and arrest. Work is overload. The main mission of our work is only wildlife management and wildlife service for the public. But if we go to suppress, it will only go into helping to identify the wildlife and offences according to the Wild Animals Reservation and Protection Act B.E. 2535 or not, (Interviews with the government officer 203 in Udonthani Province in September 10, 2017).

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- **It lack of morale in the operation by forest officials.**

Due to the current illegal wildlife trafficking in the form on behind the scene,

when the officials have to patrol the area and meet the illegal wildlife trafficking with armed gang and ability to fight. If battle occurs, the most officials are females and lacks the skills in fight as well as lack of weapons and methods of using weapons to fight illegal wildlife trafficking gang. Therefore, the officials do not need to patrol the areas and undertake suppression in illegal wildlife trafficking due to risk to life and body. A forest official said that:

We do not have self-protected courses and we have never been trained before. Now, most officers are women. So, we have to consider safety firstly. How will we fight? What are weapons for fight? And when we go out, we may die. The morale is gone. Work morale is gone, (Interviews with the government officer 203 in Udonthani province in September 12, 2017).

• **It is the corruption toward suppression and protection in wildlife trafficking by the officials.** From previous experience, the arrest of wildlife trafficking carried out at the Thai-Laos border or highway in the area of responsibility in six provinces. It found that the most wildlife that seized was the Javan pangolin that is native wildlife from Malaysia and Indonesia, both alive and carcasses. The illegal wildlife trafficking and wildlife smuggling was from the southern border of Thailand and transported to the Thai-Laos border to export to neighboring countries. The destinations were Vietnam and China. Furthermore, the wildlife business has powerful supporters for the operation and the value of the profits is huge. From this situation, it was pointed out that the checkpoint officials at the Thai-Malaysian border allowed for the importation of wildlife which were crime under the CITES Convention. Allowing wildlife smuggling in domestic may be the result of receiving bribes to open transported routes for wildlife trafficking in order to send wildlife out of the country. As a forest officer said that:

The Javan pangolins is almost impossible to find in Thailand. Most of them were taken from Indonesia and some from Malaysia, which had to pass through the southern border of Malaysia. I did not understand that the official had let up to the Northeast areas until being able to leave

the country, (Interviews with the government officer 201 in Bangkok in October 4, 2017).

• **It is re-committing in wildlife offences.** The key informant said that another obstacle that caused the officials for hard working was recommitting of wildlife offences due to penalties under the WARPA, that is the maximum penalty is not over 4 years in imprisonment or a fine not exceeding 40,000 baht or both imprisonment and fine. It cannot help the wildlife offenders to afraid punishment and do not recommit another offences. When the wildlife offenders are free, they will recommit on wildlife crime, especially wildlife traders who still smuggle wildlife that are protected by law.

We can arrest the same offenders or the same relatives, when we arrested and sent to prosecute. It was short period in prosecution. After released, then they returned to resell. It said that the penalty is not heavy, just 4 years in prison, just 40,000 Baht for fine, or both imprisonment and fine. When they sell, the profit is over 40,000 Baht. It is not too long time in imprisonment and the money remains when releasing. Therefore, they still do wildlife tracking and do not afraid at all (Interviews with the government officer 209 in Bangkok in October 4, 2017).

• **The budget and availability of tools in the operation are insufficient to continue working.** The budget that the central administrative office allocates to the suppression division and conservation division is not enough to patrol and suppress wildlife trafficking. Therefore, the officials cannot continue to patrol because patrolling has to spend various expenses, including fuel, car, food, accommodation. When the officer has been informed in wildlife smuggling, wildlife transportation, but there is no budget to operation, so, officials have to use personal budget to work. Wildlife trafficking is currently carry out in the form that will have people behind and there are many types of weapons to fight with the officials. While the officials operate to suppress the smuggling of wildlife without weapons for self-protection. Although the Conservation Division or Central Office sometime

borrow weapons from military agencies or police and having weapons for the officials when operation, however, the officials have never been trained about use of weapons, knowledge and procedures in the operation. Thus, it leads to obstacles in the suppression of wildlife trafficking.

It was sympathetic to the staff because the salary was not much. But we have to take personal money to work for many times. So, the operation could continue. If it is often, we cannot do. When going out for patrolling, there is no weapons for protection or if there is a need to borrow from the military to use. But we do not know how to use weapons because we had never taught and trained before (Interviews with the government officer 211 in Bangkok in September 10, 2017).

(2) Royal Thai Police

(2.1) Authority, mission and duties

Wildlife trafficking is considered a criminal offense. Police officers are officials under the Criminal Procedure Code, therefore, they have power and role to enforce the law in proceeding against the offenders under the WARPA. All police officers and police officers of the NRECD have mainly play the role in suppressing offenders in wildlife trafficking in Thailand.

(2.2) Operation

Suppression in wildlife trafficking begins with taking the detainees and exhibits from the scene. The police officers then records arrest, seizure, documents, evidence and other relevant documents that support allegations from forest officials. Local police officers of the incident will take the report and make daily report to the local investigator for inquiry. After complete of inquiry, polices will send the case to public prosecutors to order the prosecution or not. Nonetheless, if the value of environmental crime case is over 1 million Baht or wildlife and wildlife carcasses that the CITES parties consider as the major cases such as ivory, tigers, rhino horns and pangolins, it will conduct investigation and inquiry by the NRECD. This is in accordance with the Memorandum of Cooperation on Forest Resource Conservation between the Ministry of Natural Resources and Environment and the Royal Thai

Police, B.E. 2551 (2008), which is consistent with the plan to protect and suppress offenses relating to natural resources and the environment by the Royal Thai Police in January 22, 2019 (Royal Thai Police, 2019).

While the protection of wildlife, the Royal Thai Police will assign the subordinate police offices to set the checkpoint areas, checkpoints in Thai border and neighboring countries, transported routes in both highways roads and rural roads. Furthermore, it set the co-checkpoints for inspection with other public agencies, private sectors and people in the risk area that will cause environmental crimes like the target area with ivory trade problems such as Bangkok, Nonthaburi, Kanchanaburi, Phra Nakhon Si Ayutthaya, Uthaitani, Nakhonsawan, Sukhothai, Chiang Rai, Chiang Mai, Surin, Phuket, international airports and international ports. Moreover, it has set the checkpoints in other target area for trafficking of wildlife, wildlife carcasses and wildlife products in 30 provinces such as Bangkok, Nonthaburi, Samutprakan, Pathumthani, Phra Nakhon Si Ayutthaya, Chonburi, Chachoengsao, Nakhonratchasima, Ubonratchathani, Chaiyaphum, Mukdahan, Nong Bua Lam Phu, Nakhonphanom, Buengkan, Chiang Mai, Chiang Rai, Tak, Maehongson, Uthaitani, Phetchabun, Phetchaburi, Prachuap Khiri Khan, Chumphon, Kanchanaburi, Phuket, Suratthani, Satun, Songkhla, Phatthalung and Yala. In addition, it has fieldwork to meet community leaders or people who have a local passion to understand and conduct campaigns for conservation of wildlife, natural resources and the environment by avoiding in hunting, trade and consuming. It provides education and understanding in the importance of wildlife for humans to the villagers, children and local youth in order to be aware and good consciousness in wildlife conservation and participate in a campaign against the destruction of wildlife resources. It promotes cooperation with relevant agencies such as the DNP, Thai Customs, other public and private agencies, Non-governmental organizations (NGOs), Natural Resources and Environmental Protection Volunteer Network in order to jointly survey, investigate, trace as well as arrest new offenders and network of illegal wildlife trafficking. It improve conservation of wildlife resources in Thailand and the world. This is considered to create a network against illegal wildlife trafficking by supporting information about wildlife trafficking in targeted areas, suspect, circumstances, route, warehouse, and shop by cooperating with public, private and civil society agencies due to effective

protection and obtaining of useful information in suppression of illegal wildlife trafficking. A forest official said that:

Sometime, NGOs like us went to help some police officers and the DNP. However, we mostly focus on educating people or if we see a suspect or an offender, we will inform the relevant authorities for further proceeding because we do not have power by law to arrest (Interview with non-government official 302 at Nonthaburi in September 5, 2017).

(2.3) Performance

Suppression of the WARPA found that the Metropolitan Police Bureau, the Central Investigation Bureau, Provincial Police Division 1-9 and the Southern Border Province Police Bureau have been informed of the offense and arrested the offenders in 2015-2018 according to Table 4.5

Table 4.5 Statistics according to the offense under the Wild Animal Reservation and Protection Act B.E. 2535 in 2015-2018

Offices	2015			2016			2017			2018 (Jan-July)		
	Report (s)	Arrest (case)	Total	Report (s)	Arrest (case)	Total	Report (s)	Arrest (case)	Total	Report (s)	Arrest (case)	Total
Central Investigation Bureau	318	42	360	201	27	228	226	74	300	141	32	173
Metropolitan Police Bureau	N/A	N/A	N/A	7	7	14	59	59	118	19	18	37
Provincial Police Region 1	3	3	6	46	42	88	254	241	495	127	122	249
Provincial Police Region 2	83	62	145	50	32	82	125	94	219	95	93	188
Provincial Police Region 3	87	68	155	148	93	241	96	77	173	36	33	69
Provincial Police Region 4	66	42	108	51	38	89	64	53	117	40	25	65
Provincial Police Region 5	65	45	110	47	30	77	58	44	102	58	49	107
Provincial Police Region 6	102	91	193	88	78	166	73	51	124	53	44	97
Provincial Police Region 7	77	62	139	70	50	120	113	97	210	53	39	92
Provincial Police Region 8	126	86	212	148	104	252	113	89	202	68	62	130
Provincial Police Region 9	14	9	23	45	31	76	65	55	120	84	75	159
Southern Border Province Police Bureau	11	6	17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	952	516	1,468	901	532	1,433	1,246	934	2,180	774	592	1,366

Source : Royal Thai Police, Public Affair Division, 2019.

Table 4.5 illustrates statistics according to the offense under the WARPA in 2015-2018. Police from the Central Investigation Bureau, Metropolitan Police Bureau, Provincial Police Region 1-9 and the Southern Border Province Police Bureau, have been reported and arrested for offenses according to the offense under the WARPA. In 2015, it was informed that there were totally 952 cases of the offense under the WARPA. It was able to arrest 516 offenders. In 2016, it was informed that there were totally 901 cases of the offense under the WARPA. It was able to arrest 532 offenders. In 2017, it was informed that there were totally 1,246 cases of the offense under the WARPA. It was able to arrest 934 offenders. In 2018 (January -July), it was informed that there were totally 774 cases of the offense under the WARPA. It was able to arrest 592 offenders.

(2.4) Problems and obstacles in operation

According to interviews with key informants in the suppression of wildlife trafficking under the Royal Thai Police, it was found that the problems and obstacles in the implementation of the measures affecting the suppression and protection of wildlife trafficking were;

- **It is insufficient important equipment and tools for the operation of the relevant officials toward suppression and protection in wildlife trafficking.** The number of important equipment and tools for the operation of suppression and protection in wildlife trafficking is insufficient for forest officials, polices, administrative officer or agencies that are responsible for the suppression of wildlife trafficking. This is because wildlife trafficking in Thailand is a crime in the form of a criminal network with a capitalist group or influential people behind the scene, so they might have a powerful weapon to destroy. When the officers patrol in the forest area and fighting with the illegal wildlife trafficking without weapons for self-defenses or fight illegal wildlife trafficking, thus the officers face danger, which will affect the morale of the work. Having a tracking device set, small camera, cell phone for the spy who secretly seek the news for the authorities will help to record the sound and photos during seeking the news and it can be used as evidence that will lead to the arrest of those who involved in the illegal wildlife trafficking. It will also help the authorities immediately when the situation is unsafe or danger. Wildlife tracking device will be used to track the movement of wildlife through

the identification code embedding. If that animal is hunted, it will be able to search, track and reach the place to the animal that take. In addition, it also useful in tracking the movements of the wildlife offenders as well.

• **Budget for investigation about wildlife trafficking is insufficient to continually search the offenders who behind the scenes or the large capitalists.**

From the situation of wildlife trafficking that occurs in Thailand, it is in the form of transnational criminal organizations that have clearly divided the duties of offenses and the capitalists behind the transnational wildlife trafficking movement do not have to reveal themselves, but they can take wildlife. Thus, the offenders that the official can arrest is only a minor offender such as a smuggler of wild animals, wild hunter, small traders and those do not know the capitalists who behind or actually order wildlife products. Therefore, to investigate the capitalists behind the wildlife trafficking process, it is necessary to have a spy in both police and spies who are voluntary to help police officers or who had previously been a guilty and turn to cooperate with police officers. The spies will secretly trace the news and information related to wildlife trafficking process and send to police who involve in the suppression of wildlife trafficking in order to gather evidence. This will lead to the arrest of the major capitalists who behind wildlife trafficking and all those who involved. The investigation of information by means of sending spies to gather necessary information, it is important to prepare sufficient budget for this mission such as food expenses, travel expenses, skill training fees, clothing costs, communication equipment, audio and video recording equipment and tracking devices. All these equipment are necessary and costly to make the spy to look reliable. If it is insufficient budget, it is unable to proceed continuously or the police who conducts the case bring personal money to the detective in order to continue to work. As a police said that;

Some police have to be in debt to use personal money in spies and operation. Budget from the Central office is just small amount and it is very late to issue payment. We have to look after spy and the spy cannot stop the operation. The work will be taken from us, but the budget is unbalance (Interviews with the government officer 217 in Bangkok in September 1, 2017).

• **Experienced police officers and experts in wildlife trafficking cases has a small amount.** The NRECD have mainly play the role in suppression of wildlife trafficking or it is huge interested by public. Nonetheless, there are not many police officers in this area and the police lack of the knowledge, expertise and experience in suppressing the wildlife smuggling process. This is due to the attitude by police themselves who think that the environmental case is not important or interesting to be suppressed when compared to other types of criminal cases that are huge interested by public. Thus, it is unable to build a reputation for the operation.

The police therefore do not want to work with The NRECD, or police in the regional police stations over the country do not have much understanding and experience in the operation of suppressing offenders about wildlife trafficking. For the same reason, there is no interest or not paying attention to investigating wildlife cases because they are considered not very important cases or cause huge damage to the people. In addition, there was no victim to complain about such damage.

• **Police at local police stations lack knowledge and skills in conducting, arrests, gather evidence and legal knowledge in suppression of wildlife trafficking.** There are not many wildlife offenses committed in some areas, police then do not pay attention to trace or develop investigative skills and collect the evidence that can be used to arrest the offenders. The police do not focus on importance to the study of the types of wildlife that are protected by relevant laws. For example, police did not know the wildlife that smugglers transported and they thought that it was only a general wild animal. Therefore, they released the smugglers without photographing wildlife, suspicious appearance and behavior or requested information to contact people with wild animals or coordinated with the Bureau of Conservation Area to inspect the type of wildlife whether wildlife protected by law or not. Later, the police knew that the wild animals found at the checkpoints were protected wildlife, they were unable to arrest that person for further investigation. A police said that;

The police set the checkpoint and the driver carried many pangolins. The police did not know that the pangolins were protected and prohibited for trade by law. They thought that it was only general animal and then they released the driver. The police made only daily record about time, date and place of set the checkpoint that the animal were transported. Later, the police knew that the animals were protected by law but it could not trace (Interviews with the government officer 217 in Bangkok in September 1, 2017).

• **The commanders have less priority to investigating the case of wildlife trafficking.** Criminal offenses toward wildlife trafficking are currently in the form of a complex network or process. There are many offenders in one case, thus, it need long period to trace and investigate until the evidence that leads to the arrest and prosecution. Due to long period of procedure in investigation and arrest, the commander sees that wildlife case is hard to report the prosecution to the high executive official and not important or it cannot conduct rapidly or people do not play attention when compare to other criminal cases such as murder, rape, robbery. Therefore, it makes the commander to reduce the importance of the case in wildlife trafficking by declining the budget and use to other cases that are important and create reputation for their offices.

(3) Thai Customs

(3.1) Authority, mission and duties

The Thai Customs has the main mission to collect taxes and duties from imported and export goods for economic development of the country and prevention as well as suppression in custom smuggling in order to meet taxation goals and to be fair for business owners. Roles and duties related to the prevention and suppression of wildlife trafficking by the Department of Customs are that the department will protect and suppress in importing, exporting and carrying of wildlife, wildlife carcasses and wildlife products which protected by domestic and international law. If anyone violates or fails to comply with the Customs Act B.E. 2560 (2017), the customs officer can immediately enforce the law.

Another important mission is that the department prevent wildlife trafficking by play a role in protecting society that using a customs control system. The matters relating to endangered wildlife that are protected by the WARPA, Ivory Act B.E. 2558 (2015) and the CITES Convention is considered as social involvement. If The Thai Customs is the checkpoint for protection in interests and preserves the image of Thailand, is allowed to be smuggled, exported and brought through wild animals in Thailand, it will then contributed to make other countries to consider that Thailand is not only a source of intellectual property infringement, but also wildlife trafficking. Therefore, The Thai Customs has elevated the protection of endangered wildlife or protected wildlife by relevant laws, especially ivory, tiger and pangolins. This is the same level as prevention in the occurrence of drug problems or violating intellectual property in Thailand, which is the primary policy and priority to the operation. An executive official in the department said that;

Endangered wildlife, drugs, intellectual property is a primary policy that the department must protect. It has taking in many times but it still focus on three issues. Tax smuggling is just a little when compare to the impact of the three above issues that it has a huge effect (Interviews with the government officer 223 in Bangkok in December 26, 2017).

(3.2) Operation

Customs offices and customs checkpoints are located throughout the country. The office will be divided into two types of customs officers. Customs clearance officers will stay at customs checkpoints to inspect and collect taxes of goods and products that will import or export of the country. If it find wildlife that are protected by relevant laws, customs clearance officers can immediately arrest and prosecute smugglers. While suppression in international wildlife trafficking, if it does not show the goods or pay tax at custom checkpoints, there will be customs officers who are responsible for the investigation and suppression, review and examination of the case in every customs checkpoint that exists throughout the country. The central office is responsible for patrolling and inspection of wildlife smuggling that import, export and carry out through the land, air, sea and postal

channels, which is the outer customs area. If the investigating officer see the crime, they can proceed to arrest and prosecute offenders as well as seize the exhibits according to the Customs Act B.E. 2560 (2017). The Thai Customs has a total of 48 checkpoints that separated according to the regional customs offices. Customs Office Region 1 has 11 customs checkpoints. Customs Office Region 2 has 10 customs checkpoints. Customs Office Region 3 has 9 customs checkpoints. Customs Office Region 4 has 18 customs checkpoints (Department of Customs, 2016a).

When the customs officer of the checkpoint has been able to arrest and seize the exhibits, it must record the information related to the arrest, such as the full name, address of the offender, offense date, offense characteristics, involved person, and scene picture into the network of customs operations that also known as the Customs Enforcement Network (CEN System). Such information is stored in a central system and global customs authorities can search for information to monitor surveillance of wildlife trafficking across the country, including illegal smuggling of products that are globally spread as well. When customs officers at the checkpoint arrest the offenders of smuggling, importing and carrying through wildlife and then record data into the CEN system, it must also publish information. This includes publicize the arrest of the offenders and preventive operations such as training in knowledge and laws on protection and suppression of wildlife trafficking, training of customs officers in suppressing illegal wildlife trafficking on the intranet of the Department Customs. It allows the customs officers to learn and monitor the performance and operation of custom officers, which benefit in increasing knowledge, developing skills and practicing experience for customs officials to fight or deal with illegal wildlife trafficking.

(3.3) Performance

The Thai Customs has the responsibility to prevent and suppress illegal import and export of products that violate the CITES Convention; the WARPA. In the fiscal year 2014-2017, the Thai Customs possibly arrested the offenders of transnational wildlife trafficking cases. Table 4.6 defines the number of cases, type and number of wildlife smuggling.

Table 4.6 Statistics of arrest on smuggling, and customs evasion toward goods that that violate the Convention on International Trade in Endangered Species of Wild Fauna and Flora in the fiscal year of 2014-2017

Type	Number	Fiscal Year				Total
		2014	2015	2016	2017	
Ivory	Case (s)	12	14	9	-	35
	Exhibit (s)	441	2,086	516		3,043
	Exhibit (Kg.)	76	5,590	1,237		6,903
Rhino horn	Case (s)	2	-		1	3
	Exhibit (s)	14			21	35
Pangolin	Case (s)	2	11	1	3	17
	Exhibit (s)	167	256	-	-	423
	Exhibit (Kg.)	-	2,820	567	2,900	6,287
Turtle	Case (s)	10	13	9	-	32
	Exhibit (s)	2,341	4,036	3,852		10,229
Alive bird	Case (s)	4	6	5	-	15
	Exhibit (s)	1,028	140	157		1,325

Source: Thai Customs, 2018.

Table 4.6 was found that in 2014, there were 12 cases of ivory. It could seize 441 ivories and ivory products weighed 76 kilograms. The case of rhino horn had 2 cases and the exhibits were 14 horns. The case of pangolin was 2 cases and the exhibit was 167 pangolins. The case of turtle was 10 cases and the exhibit was 2,341 turtles. The case of alive bird was 4 cases and the exhibit was 1,028 birds.

In 2015, there were 14 cases of ivory. It could seize 2,086 ivories and ivory products weighed 5,590 kilograms. The case of pangolin was 11 cases, the exhibit was 256 pangolins and carcass of pangolin weighed 2,280 kilograms. The case of turtle was 13 cases and the exhibit was 4,036 turtles. The case of alive bird was 6 cases and the exhibit was 140 birds.

In 2016, there were 9 cases of ivory. It could seize 516 ivories and ivory products weighed 1,237 kilograms. There was a case of pangolin and the carcass of pangolin weighed 567 kilograms. The case of turtle was 9 cases and the exhibit was 3,852 turtles. The case of alive bird was 5 cases and the exhibit was 157 birds.

In 2017, there was a case of rhino horn and the exhibits were 21 horns. The case of pangolin was 9 cases and the carcass of pangolin weighed 2,900 kilograms.

In addition, it was found that the value of the exhibit obtained from the arrest of the wildlife offenders since 2009-2016, the customs officer could arrest the offenders in smuggling, import and export the ivory, rhino horns and pangolin. The damage value is shown in Table 4.7 as follow.

Table 4.7 Statistics of the value of the exhibits from arrest of custom smuggling and avoidance under the Convention on International Trade in Endangered Species of Wild Fauna and Flora in 2009-2016

Year	Goods*	The value of exhibits (million Baht)		
		Imported smuggling	Exported smuggling	Avoidance
2009	Ivory	66.01		
2010	Ivory	267.93		49.69
2011	Ivory		209.22	
2012	Ivory	29.68		
2013	Rhino horn	26.14		
	Alive snake		791.70	
2014	Rhino horn	36.60		
	Ivory			66.41
2015	Ivory	400.13		
2016	Rhino horn	180.50		
	Pangolin	51.33		

Source: Summarize from Thai Customs annual report 2009-2017.

* Goods are products that violate the CITES Convention, which are arranged in the order of 1 to 10 products that smuggle and avoid customs from huge value to little value under the responsibility of the Department of Thai Customs.

Table 4.7 can be explained that in 2009, 2010, 2012 and 2015, there were smuggling of ivory and the value of exhibits was 66.01 million Baht, 267.93 million Baht, 29.68 million Baht and 400.13 million Baht, respectively. In 2013, 2014 and 2017, there were smuggling of rhino horn and value of exhibits was 26.14 million Baht, 36.60 million Baht and 180.50 million Baht, respectively. In 2017,

smuggling of pangolin valued 51.33 million Baht. In 2011, there was an illegal export of ivory valued 209.22 million Baht. In 2013, smuggling of live snakes accounted for 791.70 million Baht. In 2010 and 2014, ivory has avoided paying taxes and the value of the exhibits was 49.69 million Baht and 66.41 million Baht, respectively.

(3.4) Problems and obstacles in operation

According to interviews with key informants in the suppression of wildlife trafficking under the Department of Customs, which has a role in preventing and suppressing smuggling, importing, exporting, transiting of wildlife into or out of Thailand. It was found that the problems and obstacles that occurred in the operation as follow.

- **The authority in operation between the Thai Customs and the DNP, Wildlife and Plant Conservation is different and it results in lack of flexibility in coordination.** When the customs officer could arrest the smuggler, exporter or importer of wildlife and seized the exhibits. According to the WARPA, it is clear that the care and feed of wildlife will be the responsibility of the forest officials in the area of the incident that will have to take care of the wildlife until the case is completed. The customs officer will be able to take the exhibits back or proceed according to customs laws when the case is completed. Customs officers who have seized the exhibits such wildlife are unable to take care of wildlife because customs officials do not have knowledge of the preservation of wild animals. If the customs officers care the wildlife, it may cause death of wildlife. Therefore, when the customs officer seized the exhibits such wildlife, the officials have to coordinate with the forest officials at the incident area to know that there are wildlife to take care. If the customs office and the conservation office of both agencies has different areas of responsibility, the customs officers do not know to coordinate with Conservation Office that will be able to pick up the exhibits such wildlife. The wildlife that seize are then weak or die before the forest staff will pick up to take care. This problem has also become a cost burden and the argument between two agencies. The controversy is that which will be responsible for the costs incurred in the care of the wildlife due to different areas of responsibility of the Regional Customs Office and the Conservation Office.

For example, customs officers at Thung Chang Customs Checkpoint, Nan Province, can arrest the smuggling of turtles. The customs officer

did not know that which Conservation Office would be responsible for care of turtles. This is because Thung Chang district, Nan province does not have a wildlife breeding station and it must contact Conservation Office Area 13 in Phrae Province, which is responsible for the area in Nan province. Contacting and waiting for picking the wildlife by Conservation Office Area 13 to take care, it must requires a longer period and might cause death of wildlife. This is because the customs authorities do not know how to care the turtle, type of food. This problem still causes customs officials to remain concerned about the practice. As a customs officer said that;

Honestly, customs officials are not experts in wildlife care and we do not know how to treat as well as what wild animals have to eat. Therefore, the relevant staff must quickly take over from the customs after seize wildlife. This is the best (Interviews with the government officer 225 in Bangkok, in December 26, 2017).

• **Wildlife, wildlife carcasses and wildlife products that from overseas were unprotected under Thai law, therefore, it could not prosecution and it results in negative image of Thailand that cannot comply the CITES Convention.** Prosecution against wildlife traffickers in both domestic or foreign must be protected wildlife by laws such as WARPA, Ministerial Regulations of Wildlife Protection B.E. 2546 (2003), Ministerial Regulations of Wildlife Protection (No. 4) B.E. 2546 and the Ivory Act B.E. 2558 (2015) which provides protection for elephants, ivory, products of ivory, or products of African ivory that has been identified in the CITES Convention and is clearly contained in Thai law. When customs officials can detect foreign wildlife smuggling in Appendix 1, 2 and 3, they will not be able to prosecute according to the WARPA because those foreign animals have not been protected under Thai law. Therefore, the customs authorities must apply other laws to foreign wildlife smugglers, such as the Animal Epidemiology Act B.E. 2558 (2015). The maximum penalties under the Animal Epidemiology Act B.E. 2558 (2015) seems to be lower than penalties under the WARPA. The maximum penalty under the Animal Epidemiology Act B.E. 2558 (2015) is imprisonment not exceeding one month or fine not exceeding twenty thousand Baht or both

imprisonment and fine. While the maximum penalty under the WARPA is imprisonment for up to four years or fine not exceeding forty thousand Baht or both imprisonment and fine. Currently, there is a problem with the smuggling of African White-Bellied Pangolin into Thailand. When the customs officials detected, they will not be able to prosecute those who smuggled African White-Bellied Pangolin under the WARPA. This is because Thai law protect Chinese pangolin (*Manis pentadactyla*) and Malay or Java pangolin (*Manis javanica*), which is a protected wildlife No. 155 and 156 in the category of wild mammals according to the Ministerial Regulation. In contrast, the African pangolin is unprotect by Thai law. The customs officer then must prosecute according to other laws that are related to the nature of the offense in order to prove that Thailand does not ignore the wildlife protection under the CITES Convention. If the Thai government or customs officials avoid the arrest of the smuggling of African pangolin which is an obligation under the CITES Convention and ratification, Thailand will be surveillance by the CITES Convention and members of the CITES Convention or there is a measure to ban trade with Thailand.

We will cannot arrest or not prosecute. It cannot be done because CITES looked at us all the time. Thailand will face pressure because even though we have laws that is consistent with CITES. But they still need to see actual action plans and activities, concrete solution and the office who is responsibility (Interview with the government officer 223 in Bangkok in December, 26 2017).

• Lack of continuity in operation between experienced and expertise officials in protection and suppression of wildlife trafficking with new officials. Most of the new officers do not clearly know the operation under the scope of authority, duties and supervision of smuggling, exporting, carrying through wildlife, wildlife carcasses and wildlife products, which is related to the WARPA, Ivory Act B.E. 2558 (2015) and the CITES Convention. When operation duties at Customs checkpoints, the new officials disregard the suppression and prevention of international wildlife trafficking and is unable to know the technique or process to operates with illegal transnational wildlife trafficking. Then,

the transnational wildlife smugglers will rely on the weak experience of the new officials to smuggling, exporting or carrying of protected wildlife from Thailand. However, when compared to experienced and expertise officials in protection and suppression in wildlife trafficking, they have experience and techniques to surveillance of transnational wildlife trafficking processes. Then, they will be able to perform vigorously suppress and prevent as well as avoid the illegal wildlife trafficking process. Another reason is that the customs officer have a shifting work in order to demonstrate transparency in operations and do not create power or influence in the area. Therefore, when the original set of officials is able to suppress illegal wildlife trafficking with clear operational plans, understanding and principles, but its operation is not long and it replaces by the new officials. As a result, the new officials may not have the knowledge, interest or experience that will be implemented plan and disregard suppression of transnational wildlife trafficking or ignorance in arrest the big capitalists. Thus, it seems to lack continuity of operation in protection and suppression of transnational wildlife trafficking. As a customs officer said that;

Traditionally, the workplace is often changed. It cannot stay at the same workplace for a long time due to transparency. When the old one goes other workplace, the new one come to work and know new things. The work cannot continue. New projects do not occur. The work is not continuous. So, solving the problem of smuggling, importing, carrying the wild animals still happen in Thailand (Interviews with the government officer 225 in Bangkok in December 26, 2017).

• **Geography along the border of Thailand and neighboring countries facilitates illegal wildlife trafficking.** 48 custom checkpoints throughout the country are considered to block wildlife trafficking. However, when its considering in geography of Thailand found that the border between Thailand and neighboring countries had a natural channel for transnational wildlife traffickers. Normally, the customs officer will stay at the checkpoint to check for smuggling, importing, exporting or carrying wildlife into Thailand. If the customs officer detects the smuggling, he can proceed with the arrest immediately. However, if the wildlife

traffickers do not pass through customs checkpoint and choosing to enter by natural channels. It is heavy workload for customs officers to patrol area and inspect along the border in order to prevent and reduce the illegal wildlife trafficking. As a customs officer said clearly that;

Customs like us, is like the gate who inspects people and things to enter Thailand. If he had brought the goods by the door that, I had watched and if we detect that it is prohibited, we can arrest. But if he walked away the door, the staff like us could not handle it. There are many natural routes to get in and out of the country (Interviews with the government officer 225 in Bangkok in December 26, 2017).

• **It relies on the name and position of influencers in the area or respectable reputation to intimidate or convince customs officers at custom checkpoint operating to be allowed.** The smuggling of imported and exported wildlife will use the name, position, job position of influential people in the area or intimate with the customs authorities to uncheck various imported luggage or exported luggage. Due to fear of the influence and possibly affect their work, customs officials cannot fight that fear and release that person without checking baggage, items or documents. As a customs officer said that;

It is a culture found in the Thai bureaucracy such as “okay, sir” or “no problem, sir”. The junior officers were fear and let them go without inspection. So, the imported goods were entered such some rhino horns and some ivory (Interview with official the government officer 223 in Bangkok in December 26, 2017).

• **The press conference on arrest of wildlife offender affects investigating a major capitalist behind the transnational wildlife trafficking.** When a police officer arrests wildlife offenders, there will be a press conference to show the action to suppress the illegal wildlife smuggling. The above pressures have both advantages and negative impacts. Many key informants agree that the press

conference on arrest of wildlife offenders such as smuggler, hunters, possession of wildlife without permission or illegal wildlife traffickers reflects to the public that government officials pay attention to the suppression of wildlife trafficking and it rethink to public about wildlife trafficking. Also, it contribute to the support and promotion of the campaign against wildlife trafficking by report on wildlife trafficking which will be beneficial to officials for operation as well. Nonetheless, the press conference on arresting of the wildlife offenders which is only a small trader, hunter or wildlife carrier and those are not the major offenders that causes illegal wildlife trafficking. Press conferences will allow the major offenders to escape or disappear from investigation. If the press conference will not immediately conduct or wait until the information is assured that the police can trace the major offenders, it may benefit the reduction or elimination of the root causes of wildlife trafficking.

According to the results of the study, wildlife trafficking in Thailand contains situation, causes, patterns, process and the effects of wildlife trafficking. Policies and relevant agencies such as the DNP, Royal Thai Police and the Thai Customs has adopted the policy of protection and suppression in wildlife trafficking to comply with the authority, role, performance and problems arising from the protection and suppression in wildlife trafficking. The results will be used to discuss and it leads to answer research questions, propose guidelines for protection and suppression in wildlife trafficking of Thailand in the next chapter.

CHAPTER V

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

The research of Environmental Crime: Case study of wildlife trafficking in Thailand aiming to explore and answer the question “how can the criminology explain the situation of wildlife trafficking in Thailand, what were Thai policy on wildlife trafficking protection and suppression and also its guideline on resolution of the issue”. The researcher categorized the proposal into four parts as follows:

5.1 Wildlife trafficking in Thailand

5.2 Thai agencies and the protection and suppression wildlife trafficking policy in Thailand

5.3 Guideline on wildlife trafficking protection and suppression in Thailand

5.4 Research limitation and recommendation for further study

5.1 Wildlife trafficking in Thailand

5.1.1 Conclusion

According to the first objective “*studying the situation, cause, pattern, wildlife trafficking, and the effects of wildlife trafficking in Thailand*”, the result was found as follows:

The Situation of Wildlife Trafficking in Thailand in the Past Decade

The CITES parties order viewed Thailand as **the source country of wildlife**, wildlife carcasses or the product made from wildlife carcasses, especially tigers, which were traded and exported from Thailand to the final consumer. While **the transit country of illegal wildlife trade**, especially the rhino horns and pangolins, in which flight paths from countries in Africa were Kenya, Tanzania, Mozambique, Botswana and South Africa to Thailand and changing the routes to destination country

where the buyer staying, or changing the route to land, river in order to transport the ivory from Africa or rhino horns and pangolins outside the country. Furthermore, Thailand also viewed as **destination country of wildlife trafficking** as well-particularly the ivory which turn into many products such as carved ivory, ivory necklace, ivory bracelet, ivory earring. And the animals that were the most wanted of wildlife trafficking, for the final consumer, in Thailand and other countries were elephant(ivory), tiger, rhino horn, pangolin, birds especially hornbill, bulbul as well as turtle, snake, crocodile and chameleon.

The Causes of Wildlife Trafficking in Thailand

The 2 significant factors for causes of wildlife trafficking in Thailand were **demand and supply of wildlife, wildlife carcasses or the product made from wildlife carcasses** in which such demand was for fulfill buyer's desire that could divided into 2 characteristics, namely, wild animal consumers demand on animal products such as food, traditional medicine, accessory and decoration- and consumers demand on wildlife breeding and possession or collectible. While the supply for illegal wildlife trade could divided into 2 characteristics which were money and drug exchange.

The wild animal consumers demand and supply on wildlife, wildlife carcasses or the product made from wildlife carcasses was in accordance with the study of Milliken and Shaw (2012), WWF (2012, pp.9, 12) Pires (2015) Chan-at and associate (2005, pp.36-37) and Brack and Hayman (2002, pp.10-11) but the characteristics of supply for illegal wildlife trade were money and drug exchange which deemed new discovery for wildlife trafficking in Thailand.

Moreover, according to the perception of some people to wildlife, they viewed wildlife as human object which could be trade, possess and consume as much as they want. Genuinely, wildlife had duty and was important to animal, human, environment and ecosystem as well. Wildlife had the right to live freely without cruelty and threatening by human: and more importantly, wildlife was essential to the existence of the world. The foregoing was new discovery from wildlife trafficking in Thailand.

Pattern and Wildlife Trafficking in Thailand

The situation of wildlife trafficking in Thailand could categorize into 2 patterns, namely, (1) interpersonal wildlife trafficking; the buyer would directly buy the wildlife from the seller and (2) network wildlife trafficking; there were many parties in wildlife trafficking which each party had his own duty to do; but with rapid advancement of technology, wildlife trafficking organizations used the advanced technology as a tool for their crime which could be name as online wildlife trafficking; the wildlife trafficking through online channel- such as Facebook, Line application and Instagram that was prohibited accordingly to WARPA and the CITES Convention

Generally, both wildlife trafficking patterns could occur and against the domestic law and international law considering the person who was the significant factor that starting the wildlife trafficking: above said demand consumer which divided into 4 categories as follows:

(1) Civilian

(2) Authority/influential people and investor: for instances; current and former police officer, current and former school administrator, current and former local administrative organizations, current and former forestry official, president of the company or construction company owner, zoo owner. Those people were under the prestige government agencies and private sectors that Thai citizen had heard of.

(3) Restaurant owner where located near the National Park, Wildlife Sanctuary and Non-hunting areas in Thailand or Chinese restaurant owner in Bangkok and central provinces.

(4) Shop owner of products made from wildlife carcasses such as ivory shop in National Park, Wildlife Sanctuary and Non-hunting areas. According to the National Park, Wildlife Sanctuary and Non-hunting areas information, there were 8 provinces where people would see the ivory trade; Bangkok, Phra Nakhon Si Ayutthaya, Nakhonsawan, Uthaithani, Buriram, Surin, Chiang Mai and Phuket , and the areas and provinces with the issue of ivory trade were Bangkok, Nonthaburi, Kanchanaburi, Phra Nakhon Si Ayutthaya, Uthaithani, Nakhonsawan, Sukhothai, Chiang Rai, Chiang Mai, Surin, Phuket, international airports, international seaports and 30 provinces, according to the Action Plan of Natural Resources and Environmental Crime Prevention and Suppression Center (NRECPCSC), that deemed the wildlife trafficking market.

The wildlife trafficking process was different depending on the categories of buyer: civilians had no power or influence to access the wildlife trafficking directly nor unknown the network wildlife trafficking but they used internet and search engine, such as Google, as a tool to access the wildlife trafficking: for instance, filling the words such eating pangolins, buying loris, finding ivory and hornbill, and then contacted the seller by email or through Line, Facebook and Instagram for more information. When the buyer and seller had agreement on wildlife trade with product selection and payment, the seller would send the product via mailing or making an appointment for trading at crowded places such department stores and markets in order to not noticeable to people and government agency officers.

On the contrary, the authority/ influential people and investor had 2 methods for wildlife trafficking: first, they would illegally enter to the National Park, Wildlife Sanctuary and Non-hunting areas for hunting the wildlife or legally enter to the National Park, Wildlife Sanctuary and Non-hunting areas by writing the request letter to DNP but hiding the genuine intention for entering, instead they had hidden agenda as wildlife hunting. The authority/ influential people such as current and former police officer, current and former school administrator, current and former local administrative organizations, current and former forestry official, president of the company or construction company owner, zoo owner. Those people were under the prestige government agencies and private sectors, especially where the agencies and organization located in the areas near to the National Park, Wildlife Sanctuary and Non-hunting areas, that Thai citizen had heard of and they had power, influence and high socioeconomic status who always coordinating with National Park, Wildlife Sanctuary and Non-hunting areas officers to facilitate on wildlife hunting to the authority/ influential people and investor. Another method of authority/influential people and investor was directly contacting the influential people who lived in National Park, Wildlife Sanctuary and Non-hunting areas for wildlife trafficking supplying and sending back to them.

Restaurant owner or Chinese restaurant owner and shop owner of products made from wildlife carcasses mostly known the influential people who lived in National Park, Wildlife Sanctuary and Non-hunting areas whom known the network

wildlife trafficking. They would contact the influential people for wildlife trafficking supplying and sending back to them.

According to the concept of the WWF (2012), illicit wildlife trafficking comprised of source country, transit country and destination country with the determined role players by wildlife trafficking organizations. Comparing to the wildlife trafficking in Thailand as source country of wildlife trafficking, it was found that the huntsman who lived near by the National Park, Wildlife Sanctuary and Non-hunting areas was ordered by the influential people whom was ordered by buyer in foreign countries in the areas hunting wildlife or finding the wildlife carcasses. And when the task was accomplished, he had to send such wildlife or wildlife carcasses to the influential people at the appointment area which later the influential people would export the wildlife or wildlife carcasses to the buyer. As regard to Thailand as transit country of wildlife trafficking, the result revealed that the carrier such as a person who was persuaded to wildlife trafficking was met the requirement of qualification on wildlife trafficking or a person who had family members or intimate acquaintance whom were in this business before- was ordered by the influential people contacting and coordinating for receiving the wildlife or wildlife carcasses from other person at the appointment area and then smuggling across border or the routes. As regard to Thailand as destination country of wildlife trafficking, it was found that the person who was the significant factor that starting the wildlife trafficking with both above said demand consumers wanted the consumption from foreign countries; they would find the information toward wildlife or wildlife carcasses from internet and search engine and then made a transaction through the influential person for wildlife trafficking supplying and the seller would send the product that made from wildlife or wildlife carcasses to them.

The Impacts of Wildlife Trafficking in Thailand

The wildlife trafficking in Thailand had impacts on six categories as follows; wildlife, environment and ecosystem, human health and wellbeing, economy, society and politics. First was **the impacts on wildlife**: some wildlife were on the verge of extinction because of continuously wildlife trafficking demand and supply and threatening foreign wildlife, that the consumers due to lack of knowledge lost their interest to raise them thus throwing them out in the forest in which such foreign wildlife did harm, causing death or even spreading germs to Thai wildlife,

resulted into tremendous increasing number of wildlife. **The impacts on environment and ecosystem** was the ecological imbalance due to the extinction of some wildlife. When wildlife was hunted and killed which harm the existence of their species in other words, causing species reduction, such wrongful action caused a food chain in ecosystem imbalance and with ecological imbalance, the environment would change in which could lead to a bigger problem as well as the damaging ecosystems in the vicinity.

Furthermore, **the impacts on human health and wellbeing was migration**: the migration occurred because the number of wildlife was continuously decreasing due to overhunting or wrong method of hunting- in which caused risk to extinction. In addition, the threatening foreign wildlife or the gems spreading caused the Thai wildlife, that important to ecosystem, reduction that affected ecosystem in the vicinity resulting in human life. **The impacts on economy** was revenue loss; the government could not collect the tax from citizen and private sectors as well as the revenue from international trade and the mentioned revenue loss was the revenue that the government spending for country development, the social well-being improvement. Thus, with such revenue loss situation, the country development could be postponed or damaging the infrastructure development, public health, education and others for a period of time including the budget cuts to many government agencies. As for the impacts on the society, due to the importance of wildlife, it could be said that wildlife was an essential resource of the country which generating revenue and hugely benefiting the country, **the impacts on society was insecurity**; safety, life and property with the bad environment such as lack of order, peace. Moreover, the wildlife trafficking was considered as the serious crime that caused the country to insecurity such as corruption of government agency officers, criminal organizations, influential people, immigration and smuggling. **The impacts on politics** was damaging the reputation, credibility and the good public image as well as causing damage to politics and international relations that had close association with recognition from other countries.

As regard to all 6 categories of impacts on the wildlife trafficking in Thailand, the study found that the impacts on wildlife was a new discovery that different from the research of Wyatt (2013b, pp.130-158) Wyler and Sheikh (2008,

pp.13-15) WWF (2012, pp.16-19) and Donpanya (2013). And all 6 categories of impacts had close relations since human, government, society, wildlife, environment had mutual support and they were inseparable in which according to the ecological relationships principle; the ecological relationships principle explained that the ecosystem comprised of organism and non-living organisms. And since the environment was changed, due to wildlife trafficking without consideration of replacing wildlife, such situation hence affected other organisms in the forest or other place such as human, government, society, environment and ecosystem.

Discussion

The discussion of the researcher on “Could Green of Rob White (2008) explain the situation of the wildlife trafficking in Thailand and how?” was based on the 3 approaches on the analysis of the loss that causing by environmental crime; Humancentric Criminology approach, Speciescentric approach and Ecosystemcentric approach, aiming at bringing justice to the victim of wildlife trafficking in which deemed the primary objective of environmental crime concept.

Therefore, according to the study on the situation, cause, patterns, methods and the impacts on wildlife trafficking in Thailand as regarded in chapter 4, ***it was revealed that environmental criminology could explain the situation of the wildlife trafficking in Thailand*** from 3 significant factors as follows: (1) impacts on human and society (2) impacts on wildlife and (3) environmental and ecological impacts as could be seen at figure 5.1

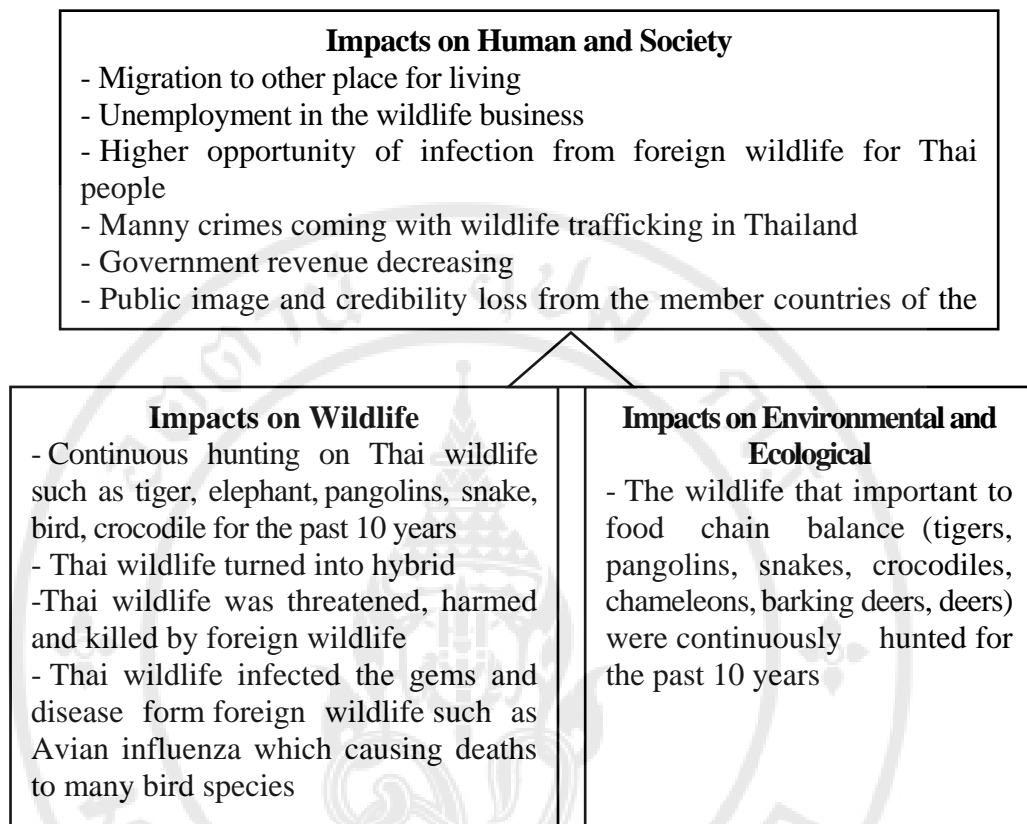


Figure 5.1 Diagram on impacts of the wildlife trafficking in Thailand in line with environmental criminology

Source: developed by Nanrapat Chaiakaraphong, 2019.

Impacts on Human and Society

The wildlife trafficking in Thailand caused **Thai people whom lived with the wildlife, wild plants and abundant environment migrating to another place** because their places were destroyed due to overhunting and no replacing which resulting in ecological imbalance that led to unable to live condition. Moreover, many **Thai people who worked in in the wildlife business were unemployed** because not only the wildlife, which deemed the important resource and essential to such business, was hunted by the wildlife trafficking organizations but also infected from foreign wildlife and thus causing the business dismissing labors or layoff. In conclusion, when there was unemployment, no income for living neither and thus causing unemployed person to find new job as consequence.

In addition, wildlife trafficking in Thailand provided **risk opportunity to infect gems in wildlife and led to the Thais health problem** such as SARS, monkeypox, parrot fever and avian flu that the latter spreading to Thai people in January 2004- 21 November 2005 and the birds flu disease that was found in Thailand were from foreign birds migration and illegal bird trade without checking up from the Centers for Disease Control and Prevention (CDC) in which causing Thai people whom had touched or eaten such birds, such as the employees who worked in the birds business, had higher opportunity to infect the disease compared to others. The influenza pandemic in that time caused 21 Thai people had infected avian influenza virus subtypes A(H5N1) which 13 of them were died and deemed 62 percent fatality rate. Although, currently in Thailand, there was no report of Thai people dying from avian influenza or bird flu infected, the government had to continuously monitor the situation as a priority because the government agencies would promptly handle and control the situation in case there was pandemic again.

Moreover, wildlife trafficking in Thailand caused **Thai people insecure of their safety, life and property and they had to live with the bad environment such as lack of order and peace because of the crimes that coming with wildlife trafficking in Thailand;** corruption of government agency officers, bribery, duty neglect or abuse of power, domestic and international criminal organizations, influential people whom had many admirers in the community or government agencies, immigration and smuggling such as weapons, narcotics or the products or goods that needed a customs declaration.

As for economic, **the government had lost revenue from taxation on legal wildlife trade from civilians and private sectors judging** from the forfeited wildlife that the forestry officers and the customs officers had seized. For the past 10 years, the government had lost the revenue from wildlife more than 2,321 million Baths instead of spending such revenue for country development, the social well-being improvement, infrastructure development, public health improvement with budget allocation to many government agencies particular the agencies relating to wildlife trafficking protection and suppression.

Furthermore, wildlife trafficking in Thailand **had damaged reputation, credibility and the good public image in the viewpoint of the CITES Convention**

at the global level because the CITES parties viewed Thailand negatively since Thailand did not take the wildlife trafficking issue seriously for wildlife extinction prevention purpose which the aforementioned action was considered as violation of the CITES ratification. And since the CITES parties had no trust in Thailand, the good public image of the country- the willingness and sincerity of wildlife protection and preservation was faded and led to a decline in trust for other parties that had one decided to trade wildlife, wild plants and other goods with Thailand. In the past, Thailand was once banned on Trade in CITES Specimens from CITES parties in April 1991 by the CITES Standing Committee and the CITES Secretariat until the CITES Standing Committee would receive the report that Thailand had taken appropriate domestic measures to enforce the provisions of the CITES Convention. Adversely, Thailand was identified, by the CITES Secretariat, as party of “primary concern” toward illegal ivory trade which making Thailand to the CITES ivory watch list from the CITES Secretariat, the CITES parties and thus even other countries that took an interest in trading with Thailand had postpone the negotiation. A suspension of trade and consideration as parties of “primary concern” were the measures that causing Thailand a huge damage; reputation loss, good public image as the country with the willingness and sincerity of wildlife protection and preservation suffering.

Therefore, since Thai people had different lifestyle from the old days, a higher chance of disease infection from wildlife which could lead to epidemic, insecurity of safety, life and property due to crime occurrence coming from wildlife trafficking in Thailand including the revenue loss of legal wildlife trade taxation or the revenue from wildlife business industry as well as the public image damage and a decline in trust from the CITES parties, they were all impacts of the wildlife trafficking in Thailand.

Impacts on Wildlife

According to the wildlife trafficking situation in Thailand, **many Thai wildlife had been hunted, killed, possessed and exported to foreign countries.** The fact was confirmed by the statistic of the DNP on wildlife and its parts seize since 2009-2019 (Table 4.4): in the past 10 years, there were many wildlife traded, approximately 120,632 wildlife and 23,078 wildlife carcasses with the weight greater than 36,759 kilogram.

Moreover, **Thai wildlife was threatened by foreign wildlife** due to the popularity in foreign wildlife possession: the consumers-due to lack of knowledge on wildlife nature and behavior- lost their interest to raise them thus throwing them out in the forest in which not only such foreign wildlife could cross-breed with Thai but they could do harm, causing death or even spreading germs to Thai wildlife, resulting into tremendous increasing number of Thai wildlife or even extinction.

And wildlife trafficking in Thailand **provided risk opportunity to infect gems in wildlife due to foreign wildlife infection** and because of such wildlife trafficking did not get checking up from the Centers for Disease Control and Prevention (CDC), it led to the health problem such as SARS, monkey pox, parrot fever and avian flu that the latter spreading to Thai people in January 2004- 21 November 2005 and the birds flu disease that was found in Thailand were from foreign birds migration and illegal bird trade.

Therefore, the wildlife trafficking in Thailand, that caused Thai wildlife continuous hunted, threatened or disease infection, had impacts on the wildlife.

Impacts on Environmental and Ecosystem

The wildlife trafficking, particular **tiger, pangolins, snake, crocodile, chameleon, barking deer, deer which played the major role in food chain balance of ecosystem, was frequently occur and the wildlife was continuously hunted for the past 10 years.** The tiger was the most wanted since the forestry officers could seize 57 tigers and 95 tiger carcasses (Table 4.4) and thus declined the number of alpha predator or top predator of the food chain cycle which, on the contrary, in ecosystem. In the past decade, the forestry officers could seize 4,403 pangolins and 118 pangolin carcasses (Department of National Parks, Wildlife and Plant Conservation, 2019) and in 2014-2017, the customs officers could seize 423 pangolins with 6,287 kilograms of pangolin carcasses (Thai Customs, 2018). The living snake, crocodile, lizard, and chameleon deemed 1 of 5 of wildlife that the forestry officers had been seized continuously.

The above said wildlife seize and forfeiture could explain the situation of wildlife hunting: in order to balance the ecosystem in Thailand, the wildlife was important of the food chain. However, since wildlife was continuously hunted, killed and destroyed by human in the past 10 years, it caused the ecological imbalance.

Moreover, when ecological imbalance occurred, it would cause the ecological imbalance to the vicinity and spread wider as well. It could be said that the wildlife trafficking in Thailand caused wildlife overhunting, and with such important resource decline, it would damage the ecosystem of Thailand.

5.2 Thai agencies and the protection and suppression wildlife trafficking policy in Thailand

According to the second objective as “*studying the policy toward wildlife trafficking protection and suppression in Thailand*”, the scope of the research was divided into (1) The CITES Convention (2) The WARPA (3) The Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003) and (4) The Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) on the issue of policy purpose, infrastructure policy, policy information, implementation, result of the implementation, problem and obstruction of the implementation, it was found that the CITES Convention and the WARPA included the Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003) and the Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) aiming at ensuring the wildlife reservation and protection without torturing, hunting, killing or illicit seeking the benefit. The CITES Convention more focused on wildlife protection in order not to affect the existence of the wildlife which led to extinction while the WARPA included Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003) and Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) aiming at complying the CITES Convention that Thailand had ratified as a party of complying the CITES Convention and also aiming at Thai wildlife reservation and protection purpose. According to capitalism, since wildlife was viewed as valued object, the purpose of wildlife hunting had changed: hunting as sport or for entertaining was changed to hunting for money, power and reputation. With advance technology hunting tools and convenient route to forest, the investor or the huntsman easier entered to the forest and find the wildlife. Moreover, the agricultural extension and forest invasion caused the wildlife reduction and extinction: therefore, the government necessary to launch the policy and enact the law for hunting, killing, possession, breeding, importing,

exporting, importing control and moving reserved wildlife, protected wildlife as described in the CITES Convention list.

The DNP was the government agency that empower 4 policies enforcement toward the wildlife crime arrest with the cooperation with police officers and customs officer who had duty in line with the Customs Act B.E. 2560 (2017) of monitoring, arrest and prosecuting the criminal whom smuggling wildlife, wildlife carcass or product made from wildlife as specified in the CITES Convention. The officers from three government agencies also had duty of wildlife trafficking protection and they would both performance duty with prevention and suppression purpose for efficiency development on wildlife trafficking protection in Thailand or wildlife trafficking reduction control.

According to 4 implementations in the past 10 years, the wildlife trafficking in Thailand still occurred and had tendency of increasing. More importantly, Thai wildlife was smuggled in order to satisfy the demand consumer in which such wildlife trafficking had caused tremendous damages to the country; Thai people, Thai society, Thai wildlife, environment and ecosystem, resulting in 2,321 million baths loss in the past 10 years of wildlife trafficking in Thailand or 230 million baths annually.

Discussion

The researcher had a discussion on “ *Convention on International Trade in Endangered Species of Wild Fauna and Flora, Wild Animal Reservation and Protection Act B.E. 2535(1992), Wild Animal Reservation and Protection Act (No. 2) B.E. 2546 (2003) and Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) had policy purpose, infrastructure policy, policy information, implementation, result of the implementation in which could prevent and suppress the wildlife trafficking in Thailand according to the Situation crime prevention*” by analyzing 5 factors, namely, (1)increasing difficulty (2) increasing the risk (3) reducing the rewards (4) reducing any provocation and (5) removing any excuses. As regard to the studying of the policy toward wildlife trafficking protection and suppression and the implementation as well as the result of the implementation and the problem or obstruction as explained in chapter 4, it revealed that “**the purpose, structure, information on the CITES Convention, the WARPA, the Wild Animal Reservation**

and Protection Act (No. 2) B.E. 2546 (2003) and Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) including the implementation by direct responsible government agencies had the guideline on wildlife trafficking protection and suppression in Thailand according to the Situation crime prevention but such guideline could not suppress wildlife trafficking in Thailand in accordance with the arrest rate on the wildlife trafficking and a tremendous number of wildlife that was seized continuously". In other words, consideration of 5 factors of Situation crime prevention as follows; (1) increasing difficulty (2) increasing the risk (3) reducing the rewards (4) reducing any provocation and (5) removing any excuses. with analysis of the purpose, structure, information of the CITES Convention, the WARPA, the Wild Animal Reservation (No. 2) B.E. 2546 (2003) and the Wild Animal Reservation and Protection Act (No. 3) B.E. 2546 (2014) and all 4 implementations of the DNP, Royal Thai Police and Thai Customs, it found that all 4 implementations had guideline on wildlife trafficking protection and suppression in Thailand covered 5 categories but not covered 25 techniques because there were lack of 6 techniques, namely, diverting attention from criminal of 4th technique, reducing pressure from other of 19th technique, reducing the behavior imitation of 20th technique, publicizing the regulation of 22nd technique and stimulating the moral sense of 23rd technique and drug using control of 25th technique. Nevertheless, the duty performance of forestry officer, police officer and customs officer with 4 implementations had fulfilled the lacking 6 techniques: which could refer that the wildlife trafficking protection and suppression policy and the implementation had guideline on wildlife trafficking protection and suppression in Thailand covering 5 categories 25 techniques in accordance with Situation crime prevention that believed that with guideline on wildlife trafficking protection and suppression, it would reduce the opportunity to commit a crime as Table 5.1

Table 5.1 Guideline on wildlife trafficking protection and suppression in Thailand in accordance with the Situational Crime Prevention Theory

Guideline on wildlife trafficking protection and suppression in Thailand in accordance with the situational crime prevention theory				
Increasing difficulty	Increasing the risk	Reducing the reward	Reducing provocation	Removing excuses
1. The law specified the species of reserved wildlife, protected wildlife and wildlife in list 1, 2 and 3	6. Wildlife checkpoints, customs checkpoints and traffic police checkpoints with the officers from all 3 agencies	11. Keeping wildlife in protected area. And keeping licenses and certificates safe from theft or copying	16. Permitting the wildlife exploitation of some species of wildlife under certain conditions	21. The WARPA and rules, regulations and notifications that supporting the wildlife protection and suppression
2. – 9 kinds of license, certification - wildlife checkpoints and customs checkpoints - ministerial regulations no. 7 (B.E.2538)(1995) and the rule on staying and tourism in National Park, National Park Act B.E. 2504 (1961)	7. A boundary marker, column, fence, sign	12. License and certification Revocation as well as giving seized wildlife, wildlife carcass or product or goods made from wild carcass to the responsible officer	17, 18 and 19. Giving knowledge and building understanding to the civilians toward the wildlife importance, cohabitation of human and wildlife and also providing the professional training	22. Wildlife warning signs in the areas

Table 5.1 Guideline on wildlife trafficking protection and suppression in Thailand in accordance with the Situational Crime Prevention Theory (cont.)

Guideline on wildlife trafficking protection and suppression in Thailand in accordance with the situational crime prevention theory				
Increasing difficulty	Increasing the risk	Reducing the reward	Reducing provocation	Removing excuses
3. Checkpoints – in and out of the National Park, Wildlife Sanctuary and the hunting area	8. Permission To enter property Letter	13. Marks / Microchip embedded on wildlife, wildlife carcasses, product or goods made from wild carcass		23. and 24. Program/ activity for wildlife protection with cohabitation of human and wildlife
4. Police officer who setting trap for reserved wildlife and protected wildlife trafficking	9. Map with the territorial responsibility	14. seizing license for trade or remove for trade		
5. Vehicle checking before entering the area region	10. Appointing the officer at the territorial area of responsibility	15. Imprisonment, fine, forfeit, forfeiture of property and revocation of license and/or certification	20. Providing press conference on wildlife trafficking arrest	25. Issuing the notification on non-alcoholic beverages in National Park, Wildlife Sanctuary and Non-hunting areas

Source: developed by Nanrapat Chaikaraphong, 2019.

As regard to table 5.1, the guideline on wildlife trafficking protection and suppression in Thailand in accordance with the SCPT indicated that all 4 policies and the implementation had increasing difficulty and the risk but lowering the benefit and inducement with eradicating the excuse in which deemed significant factors and the proves that Thailand had guideline on wildlife trafficking protection and suppression genuinely.

Increasing difficulty is a method that it is hard for criminals to smuggle or access to wildlife, including;

(1) Wildlife species that are reserved and protected by law have the right to survive from human threats. The WARPA regulated 15 kinds of reserved wildlife. The Ministerial Regulations of Wildlife B.E. 2546 and the Ministerial Regulations of Wildlife B.E. 2546 (No.4) prescribed some wildlife species to be protected in total number of 1,314 species which consisted of 201 species of mammals, 952 species of birds, 91 species of reptiles, 12 species of amphibians, 20 species of insects, 26 species of fish and 12 other invertebrates. Furthermore, the CITES Convention stipulated 5,887 species of wildlife that were divided into 3 Appendix. The Appendix 1 is threaten to extinction and trade may affect it as well as prohibiting the commercial trade that has 707 species of wildlife. The Appendix 2 is necessarily threatened with extinction but may become so unless trade in specimens and its commercial international trade can be done under the control of the CITES Convention in order to prevent that species from entering the endangered species. Then Appendix 2 has 4,964 species of wildlife. The Appendix 3 is that a country possibly require other countries to prevent smuggling that such wildlife can be commercialized internationally under the strictly control less than the Appendix 2. The Appendix 3 contains 204 species of wildlife.

(2) Licenses and certificates for control and access to reserved wildlife and protected wildlife according to the account which has 9 types, namely license for breeding; license for possession of protected wildlife derived from breeding or carcasses derived from breeding; license for trade of protected wildlife derived from breeding; license for trade protected wildlife carcasses derived from breeding or product of protected wildlife carcass from breeding; license for import or export protected wildlife and wildlife carcasses; license for import and export of wildlife and

wildlife carcasses; license for carrying through of reserved wildlife, protected wildlife, reserved wildlife carcasses, or protected wildlife carcasses; license for moving protected wildlife and protected wildlife carcasses in trade; certificate for export or import or carry through of wildlife and wildlife carcasses.

(3) Wildlife checkpoints in the responsibility of the DNP in both land checkpoints, air and waterways that are distributed across the country in totaling 47 checkpoints and two new checkpoints are opening. There are 48 checkpoints for prohibited items in the responsibility of the Thai Customs.

(4) Rules and regulations regarding entry-exit to wildlife national park, wildlife reservation areas, and non-hunting areas in accordance with the National Park Act B.E. 2504 (1961) and the WARPA, which was the Ministerial Regulation No. 7 on March 31, 1995. It was practiced and conditions for entering wildlife conservation areas and non-hunting areas as well as the rules for camping and tourism in the national park under the National Park Act B.E. 2504 (1961).

(5) The way to trace for protected wildlife trade from smugglers and online smugglers is sending spy who are general volunteer or the former offender to contact and buy wildlife along with an appointment for the purpose of receiving wildlife. Then the forest officials/or the police officers will show themselves and proceed to arrest.

(6) It is inspection of vehicles, luggage or equipment before entering the national wildlife park, wildlife conservation areas, and non-hunting areas by the forest officials at entry gate.

Increasing risk is methods that make criminals feel unsure about illegal wildlife trafficking, including;

(1) It has a responsible wildlife checkpoint by the DNP and the Thai Customs that has the power and role in surveillance wildlife trafficking both domestic and international, including land, air and sea routes as well as 195 highway police checkpoints across the country.

(2) Officials of the wildlife checkpoint, customs checkpoints, and highway police checkpoints will be appointed to serve and perform duties according to the authority.

(3) It set the main boundary, fence zone, sign to show that it is the area of the national wildlife park areas, wildlife conservation areas, and non-hunting areas.

(4) It makes requesting form for permission of accessing/permission letter for accessing and showing ID cards to park officials before entering into national wildlife park, wildlife conservation areas and non-hunting areas.

(5) It makes map of areas for responsibility, including maps of national wildlife parks, map of wildlife conservation areas and map of non-hunting areas.

(6) It appointment of officers to work in the national wildlife park, wildlife conservation areas and non-hunting areas in order to suppress and protection wildlife trafficking.

Reducing benefits is a method that makes criminals unable to successfully smuggle wildlife.

(1) It set suitable places for reserved wildlife and protected wildlife that can survive from human threats and it will have officials to provide protection and care.

(2) It delivers wildlife, wildlife carcasses and wildlife products that have been seized as the exhibits to the authorities who are directly responsible for maintaining, collecting and care.

(3) It keeps relevant licenses and certificates such possession, trade, import, export, transport, movement of wildlife, wildlife carcasses and wildlife products in a safe place from being stolen or copied.

(4) The confiscation of exhibits obtained from illegal wildlife trafficking can be protection of the DNP.

(5) Revocation of license or related certificates of possession, trade, import, export, transport wildlife, wildlife carcasses and wildlife products can be done when violation of conditions.

(6) Marking on wildlife or embedded microchip and make a registration of reserved wildlife and protected wildlife to confirm the information and it will be useful for confirming ownership, genetic and tracing.

(7) The seizure of a license for trade in protect wildlife that derived from breeding, a license for trade in protect wildlife that derived from breeding or wildlife

carcasses that derived from breeding, a license of carrying wildlife and wildlife carcasses for trade.

(8) Penalties, fine, confiscation, seize of wildlife, wildlife carcasses and wildlife products, revocation of licenses and certificates when it is found to violate relevant laws.

Reducing motivations is a method to reduce the motivating factors that will allow criminals to smuggle wildlife, including

(1) It is permission to benefit reserved wildlife and protected wildlife under certain conditions and requirements.

(2) It shall communicate with villagers living near the national wildlife park, wildlife reservation areas, and non-hunting areas to know the types of reserved wildlife and protected wildlife that cannot hunt or act on those wildlife. It also explain to the villagers the importance of each type of wildlife and point out the pros and cons of wildlife hunting or wildlife trafficking and impacts to the villagers. This is allow people and wildlife to live together, including helping to train other careers that can generate income for the villagers. In addition, it shall cooperate with organizations or foundations in wildlife protection to provide knowledge and raise awareness for people in the area.

(3) Press conference on the arrest of wildlife offenders to remind people who are thinking of smuggling wildlife or join the wildlife trafficking process do not imitate the behavior of offenders.

The elimination of excuses is a method that makes criminals unable to deny the offense, including

(1) It regulated the WARPA, including other relevant laws to protect and suppress in successfully practical consequences, such as the Ivory Act B.E. 2558 (2015), the National Park Act B.E. 2504 (1961), the Customs Act B.E. 2560 (2017), Ministerial Regulations, and Announcements of the DNP. It indicate prohibitions of practices and possibly practices in national wildlife parks, wildlife conservation areas, and non-hunting areas and the Anti-Money Laundering Act B.E. 2542 (1999), etc.

(2) The preparation and labeling of notices for various actions that would be a threat to reserved wildlife and protected wildlife, such as the installation of a sign to prohibit smuggling, export ivory at the immigration area and within the

Suvarnabhumi Airport, Don Muang Airport or Thai border crossing with neighboring countries. It also install a hunting ban label in the national wildlife park, wildlife conservation areas and non-hunting areas.

(3) Wildlife conservation projects / activities conducted by official from national wildlife park, wildlife reservation areas and non-hunting areas shall be provided and the officials shall meet with the villagers who live near the area or it can organize wildlife protection day activities by inviting youth in the area come to join the activity, which may be coordinated with organizations or foundations for wildlife conservation and the environment.

(4) Requesting service from the forestry staff in additional office hours, if it is inconvenient to request service from the forest staff directly.

(5) Notification of the DNP in Prohibition of importing or selling in all types of alcoholic beverages in national parks dated December 27, 2010.

However, although the policy on protection and suppression of Thai wildlife trafficking and implementation of the policy will cover all 5 categories, however, illegal wildlife trafficking such hunting, killing and taking into wildlife smuggling continues to occur in Thailand and international. This can see from statistics of the arrest of wildlife offenders by the DNP, the Royal Thai Police and the Thai Customs still likely to continue arrest. In addition, the number of wildlife that is popular for the consumers still continue to seize as the exhibits. The value of the damage by wildlife trafficking is counted from wildlife that have been seized, has an annual economic loss of over 230 million Baht.

The researcher therefore found three problems that impeded the law enforcement or related policies in practice.

(1) Law and law enforcement, the punishment is not serious and the law is not holy, consequently, it cannot intimidate and prevent committing or repeat offenses. The maximum penalty if a person commits a wildlife offense is imprisonment for a term not exceeding four years or fine not exceeding forty thousand baht or both in imprisonment and fine in accordance with Article 47 of the WARPA. When comparing between the minor punishment and rewards from joining the wildlife trafficking, it seems to be worth. Therefore, the existing penalties could not intimidate people from joining the wildlife trafficking or recommit offences. At the same time,

there is no sample case showing that the offender of wildlife trafficking must be punished as required by law. Hence, people or those who commit offences do not have any fear of the punishment and recommit wildlife offences.

Moreover, corruption and misconduct of law enforcement officers with a bribe/benefit, disregarding/neglect of duty or misuse of authority are actions that reflect the law enforcement officers involved in the suppression of wildlife trafficking. There is ineffective performance of duties according to the powers and roles that they should be aware.

Furthermore, the influential problem behind wildlife trafficking is another obstacle that makes law enforcement officers more difficult to work. This is because influential people, whether they were government officials, state authorities, business owners or reputation people in areas with wildlife, these influencers will use the power or networking to contact with government officials who have a high position in order to help the illegal wildlife trafficking for no prosecution or minor penalty or immediate releasing. It include exchange for benefits in various forms according to the needs and satisfaction of both parties.

In addition, the geography of Thailand is ease to wildlife trafficking because the borders have various natural routes with a very wide area and the authorities involved in the protection and suppression of wildlife trafficking are unable to control and monitor the wildlife trafficking across the country. The path of illegal wildlife transport in Thailand is also convenient both locally and internationally with a wide variety of routes linked to all regions of the world such as a route for land, air, water and container transportation. Therefore, it result in ineffective enforcement of law.

Importantly, the attitude of some law enforcement officers involved in the suppression of wildlife trafficking still see that wildlife offenses are of lower important that offences against the human body, life and property. Therefore, it seem to lack of attention in investigation, collecting of evidence, arrest of major offenders and the officials choose to do other cases that are more important or being interested by public.

(2) Policy and organization, although Thailand has a policy to protect and suppress wildlife trafficking in the form of laws such the WARPA and two additional

amendment and various action plans related the theory of crime prevention and current situation, however, the problem of wildlife trafficking still occur in Thailand. Due to the insufficient budget and inconsistent with the operations of the officials such as budgeting for patrols and service areas for people, budget for investigating, the budget for purchasing tools and equipment for operation, communication device, self-defense weapons, it allows the officials to bring personal money to use in the operation or have to postpone operation that has a lot of expenses. Thus, the operation cannot continue or a new project must be stopped.

In addition, the cross function in work, it has assist suppression in wildlife trafficking to protective officers to operate. The protective officers may have insufficient knowledge, skills, and experience to suppress the operation. It may result in the inability to arrest illegal wildlife traffickers that have failed to suppress wildlife trafficking. While most new staff will disregard the suppression and protection of wildlife trafficking because they do not know the techniques or methods to deal with transnational wildlife smuggling movements. In addition, the officials have to replace work in order to present transparency in the work. Consequently, the new officials who replace work may not have knowledge or experience that will be implemented plan. Therefore, it results lack of continuity in operations that will be beneficial to the protection and suppression of wildlife trafficking.

(3) Offender, the demand for buying and selling wildlife still exists. Currently, people are still consume wildlife, wildlife carcasses and wildlife products in both Thai and foreigners. When there is a need for consumption of wildlife, it must have to meet the consumption needs. Thus, cycle of wildlife trafficking still occur in Thailand in both origin country, carry through, and destination. It can be seen from the ongoing arrest of wildlife offenders. Huge number of wildlife, wildlife carcasses and wildlife products are still seize as the exhibits. It is same species. It reflects that the species of wildlife has decreased until the risk of extinction

An attitude towards wildlife by the offenders who need trade is that wildlife is a human treasure and goods that humans can buy and sell, eat and use as needed. This is because these wildlife can reproduce shortly and expanding. Thus, those people do not see the value and importance of wildlife conservation to live naturally in order to maintain the balance of the ecosystem. Consequently,

the smuggling of wildlife became the cause of many environmental problems that could damage and affect human beings in the long term.

In addition, personal values and beliefs toward consuming of wild animals have become a culture of wild animal consumption of offenders who want to buy wild animals. Modern technology is used to commit offences because in addition to relying on technology to find benefits for themselves and their fellow citizens, they also use those technologies as a channel to avoid inspection and control by police. Including the livelihoods of hunters, wildlife hunters still have to hunt wild animals for sale and bring income to accommodate in their life due to the occupation of wildlife hunting and no way or knowledge to do other careers. Those are obstacles to implementing policies.

Therefore, in order to effectively enforce the policy in protection and suppression in wildlife trafficking, the researcher then proposed the following guidelines for protection and suppression of wildlife trade in Thailand.

5.3 Guidelines for protection and suppression of wildlife trafficking in Thailand

The problems and obstacles from ineffective law enforcement results in continuity of wildlife trafficking in Thailand. Although there are guidelines to protect and suppress wildlife trafficking in accordance with the crime prevention theory and the situation described in section 5.2, however the researcher still present guidelines in protection and suppression of wildlife trafficking in Thailand. The guidelines are divided into two main parts that are protection and suppression as following.

(1) It coordinate for cooperation in private organizations and NGOs to help government agencies in matters "reducing the demand for buying and selling wildlife". Reducing the demand for wildlife can be carried out in the form of education into public, wildlife consumers. It can point out that the quality of meals and medicines from wildlife or wildlife carcasses is not better than ordinary meals and medicines to treatment of medical diseases or consuming. Nonetheless, when consuming those medicines and meals, there is a high risk that the human body possibly take pathogens

and infect wildlife diseases, which is harmful to the body and life. Even the natural reality that wildlife shape, character and behavior will change according to growth. Wildlife may be cuteness and good appearances when its birth and growing, however, such cuteness and appearances will disappear and fully turns into a wild animal instinct. Moreover, diseases may infect and harm to herdsman since being taken out of the forest. The products processed from wildlife and wildlife carcasses are not beautiful or valuable comparing to loss of a wildlife and many wildlife that are entitled to stay safe and escaped from human threats as well as maintain the balance of nature, ecosystem and the environment. This is because human need to rely on the integrity of the ecosystem for the fellow generations.

It can educate knowledge of wildlife such as the importance and value of wildlife, the effect of wildlife hunting for environment, ecosystems and humans, external characteristics, habits, lifestyle, wildlife diseases to the consumers in both the general person and those who like to consume wildlife. Those people can understand and realize the importance and value of wildlife to humans, the environment, the ecosystem as well as the effects into humans when taking into account the imbalance of consumption / consumption of wild animal, ecosystem, neglecting the problem of wildlife trafficking in Thailand. Finally, the human will be most affected when the imbalance of wildlife, ecosystem and environment occurs because humans still have to rely on natural resources such wildlife, forests and environment to be able long alive. If it is able to reduce the demand for consumption of wild animals, then the demand for selling wild animals will also decrease as well.

Reducing the need to buy wildlife, the DNP requests cooperation to private organizations to help organize activities promoting corporate social and environmental responsibility (Corporate Social Responsibility) both internal and external that the organization will be able to participate in wildlife conservation, anti-trafficking of wildlife such as Charoen Pokphand Group, Siam Cement Company Limited, Intouch Holdings Public Company Limited, Ratchaburi Electricity Generating Public Company Limited, etc. It also includes cooperating with non-governmental organizations (NGOs) in both Thai and international such as Sueb Nakhasathien Foundation, World Wildlife Fund Thailand (WWF Thailand), the Freeland Foundation, which places great importance on wildlife conservation and

the environment and has potential to transfer knowledge and awareness as well as access various groups of people more flexible than government officials. The cooperation between private organizations and NGOs will provide assistance in terms of protective measures for government agencies because these organizations have no legal authority to prosecute wildlife offenders. However, they will promote and support officials in the suppression of wildlife trafficking to be able to work smoothly and able to track and arrest major offenders that still cause wildlife trafficking in Thailand.

While reducing the demand for wildlife is to make income to people living around the national wildlife park, wildlife conservation areas, and non-hunting areas from hunting and sale wildlife restaurants around the national wildlife park or capitalists smuggling of wildlife. The DNP coordinate the Office of Skill Development of the province with national wildlife parks, wildlife conservation areas and non-hunting areas to send officers to practice the profession careers to the villagers, children and youth in the areas of national wildlife parks, wildlife conservation areas and non-hunting. Such training and practices can generate income instead of hunting wild animals or being involved in illegal wildlife trade in exchange for money. The forest officials living around the national wildlife park, wildlife conservation areas and non-hunting areas together with private organizations and non-governmental organizations (NGOs) shall cooperate in training for villagers along with providing knowledge on wildlife conservation and helping to find a market to buy products from these villagers. If any private organization has the potential to create and develop the business, such organizations can help to educate, develop skills, plan the creation and development of businesses for people who want to have income and economic security instead income from wildlife trafficking or other types of crime. According to of drug addicts in both park officials, children and youth who live near national wildlife parks and hunting of wildlife in exchange for drugs, it should be treated as a patient and not as a criminal. It should provide social services during the treatment by helping wildlife conservation work with NGOs in order to point out the effects and damage to the villagers, children and youth living around the national wildlife park, wildlife conservation areas, and non-hunting areas. The effects are not only leaving the jobs and finding of a new career, the families will suffer pain as well.

Those drug treatments are allowed to talk to children and youth, parents or families of children and youth who are drug addiction to take treatment in order to avoid other types of offenses which it is only wildlife trafficking.

The DNP should be able to support some budgets, experienced staff in wildlife and other information that will be useful for activities. It should give awards to the organizations that participate in the activities that helps protect and care for wildlife to maintain the balance of Thai ecosystem to the next generations.

(2) It establishes pressure and social sanction for wildlife offenders. It set a wildlife conservation club in various areas both in communities near the habitats of wildlife, schools, universities, communities in urban areas to creative activities to help protect wildlife along with the conservation of nature and the environment in the community. It will create awareness for the people in that area to promptly fight/or oppose any person or group that threatens wildlife in all its forms to claim rights and justice to wildlife. NGOs in the protection of wildlife as a leader invite people who support wildlife or see the importance and value of wildlife that must be protected and conserved to survive from human threats to gather and conduct wildlife protection and conservation campaigns. It possibly indicates the society that hunting, killing, trading, possession, or activities makes wild animals deprived of their rights. This is illegal and it is an act that people in society perceive as deviating from the general standards of society. It may use symbolic representations that indicate against people who attack, threaten, or smuggle wild animals such as wearing the same color coat or hat, wearing wildlife masks that are victims of criminals. The creating social pressure and punishment in this manner will cause the offender to realize and adjust the behavior as accepted by the society or ban the imitation of wildlife threatening behavior. This is because if anyone show socially unacceptable behavior, it will be pressured and punished by society apart from legal punishment.

(1) It supply sufficiency of budget, tools, equipment to suppress wildlife trafficking. Budget, tools and equipment in operation is the key to create morale to staff. If there is a budget for the inspection area or patrol with self-defense equipment and the officials do not have to spend personal money to work, it would be able to achieve greater results in the suppression of wildlife trafficking more than there is no

support in finance, tools and operational equipment for staff. However, waiting for the budget from the state to use in the operation alone may not be enough.

Therefore, the DNP should seek budget from other sources such as requesting funding to support the suppression of wildlife trafficking from international organizations who operating in the protection of wildlife. It is requesting support, tools and equipment that are required to be used in the operation of suppressing wildlife trafficking or get a discount on product prices, which is considered as an alternative way to reduce cost budget. It can be organizing fundraising activities from the public sector who are interested in participating in the fight against wildlife trafficking. For example, it is organizing charity event to combat illegal wildlife trade, which income after deduction of expenses, it will be used as funding to support the operations of officials suppressing illegal wildlife trafficking/or assisting wild animals that are injured by human threats, etc.

(2) Measures of confiscation in accordance with the Anti-Money Laundering Act B. E. 2546 (2003) shall be prosecution of wildlife offenders. The penalties for offenders against wildlife trafficking are not severe, thus, they can intimidate the behavior of wildlife trafficking. Therefore, measures of confiscation that are more severe than punishments according to existing laws are used to proceed against wildlife suspected of being part of international trafficking. It must confiscate the property of the offender or suspected to be involved with the wildlife trafficking until proving that the property is unrelated wildlife trafficking. This measure will cut the financial route of the wildlife trafficking process to be unable to proceed.

However, use confiscation measures, forest officers and police officers need to educate knowledge and training on rules, conditions, collecting of evidence or there is a reasonable to suspect that it will be the smuggling process of wildlife. If the officers who operate confiscation do not have knowledge and misunderstanding, as a result, they cannot seize the property

(3) It is training on knowledge and techniques for suppressing in wildlife trafficking for new officers and officials interested in the suppression of wildlife trafficking as well as enhancing the experience and new techniques for the officers who continue to suppress. It help to be more aware the wildlife offenders that has continually developed a new method of offense to escape from arrest from officials.

It shall cooperate with agencies or organizations both domestic and abroad who work in the fight against and suppress wildlife trafficking in terms of training and development in various knowledge, skills and techniques for the authorities who suppress wildlife trafficking in Thailand. The officials then are potential to have greater operation such as the Freeland Foundation and the Wildlife Conservation Society in Thailand. The organizations possibly produce and apply tools and equipment, various devices in monitoring and patrolling the wildlife trafficking such as the Interpol, UNODC and TRAFFIC that monitor transnational criminal organizations and develop techniques to suppress these transnational criminals.

Therefore, training for knowledge and developing techniques for the suppressive officers is essential to help the new officers to understand the process of suppression of wildlife offenders. They can understand the importance of carrying out protective activities together with suppression. It will also continue the operation of protection and suppression in wildlife trafficking. If there are cross-functional assignments or relocation of responsible officials or retirement, the suppression and protection of wildlife can still be flexible and there is less error.

(4) It investigates and prosecute officials who involved in the wildlife trafficking. If law enforcement officers are found to commit corruption and misconduct, the authorities who commit corruption or misconduct will have to investigate immediately by the head office. If the officer actually commit corruption, misconduct and a crime and must be prosecuted in accordance with the law as in the general person when committing a crime. Such officials must be sentenced to justice or if the officer does not actually commit the offense and allegation, it also protects the right to demonstrate transparency of performance. If proven that law enforcement officers have actually committed, the head office has to accept the results and organize a press conference for the public to acknowledge. When officials commit corruption or misconduct about wildlife trafficking, the officer must also be prosecuted and sentenced to justice under the law as all Thai citizens. Prosecution and press conferences with officials who are corrupt and misconduct to acknowledge public is a threat to prevent law enforcement officers from committing a crime. The official have will to suppress and perform duties seriously to combat wildlife trafficking in Thailand.

The researcher viewed that the protective guidelines and suppression guidelines need to be carried out simultaneously in order to be effective law enforcement in protection and suppression of wildlife trafficking. It also benefits the development of cooperation from all sectors that will have to play a role in protection and suppression of wildlife trafficking in Thailand in terms of continuity and sustainability.

5.4 Limitations in education and recommendations for further studies

5.4.1 Limitations in education

(1) Educational limitations, this study is a combination of criminology and environmental education, especially about wildlife trafficking. It is considered as a new perspective for researchers to study and learn more about the relationship between criminology, environment, wildlife, human beings and society. With the huge favor of the thesis advisory committee, who are the experts in criminology, environmental justice system, wildlife and the environment, useful suggestions and advices are provided into this study.

(2) Restrictions on information and documents in research, this study aimed to explore the relationship between environmental criminology and wildlife trafficking in Thailand. This is a new concept and issue and it does not gain huge interest in Thai society. As a result, document and information in Thai version are a small number. With the great assistance of the advisory committee, domestic and international information, sources as well as reports were advised and suggested to the researcher. Thus, this allows the researcher to obtain information to study and key informants have provided documents related to this study.

(3) Information by the key informants, this study chose the issue of wildlife trafficking in Thailand. It found that it has a small number of government officials with knowledge, experience and expertise in suppression of wildlife trafficking. Consequently, researcher found difficulty to access the group of key informants. With the great supporting of the advisor and co-advisor, they gave advice and information about the network of wildlife protection and suppression

agencies, which are government officials, non-government officials, media, ex-offenders, including community leaders in wildlife conservation. Such networks have knowledge and experience in protecting and suppressing wildlife trafficking in Thailand and overseas for contacting and requesting in-depth interview. In addition, key informants who are the network to protect and suppress wildlife trafficking also provide advice and information about individuals/ groups that will provide useful information to this study in order to coordinate for further study by the researcher.

5.4.2 Recommendations for further studies

(1) There should be a comparative study of policies between prevention and suppression of wildlife trafficking in Thailand and abroad in order to reach the best practices and it can be suitable applying to the situation of wildlife trafficking in Thailand.

(2) It should study the application of environmental criminology concepts to other environmental crimes in order to continue appropriate guidelines for prevention of environmental crimes.

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