



HAL
open science

Ecocide: a Crime against Sustainable Development

Nasrin Mehra, Gholamreza Gholipour, Erfan Babakhani

► **To cite this version:**

Nasrin Mehra, Gholamreza Gholipour, Erfan Babakhani. Ecocide: a Crime against Sustainable Development. Ankara Üniversitesi SBF Dergisi, 2019, 15. hal-03156805

HAL Id: hal-03156805

<https://hal.parisnanterre.fr/hal-03156805v1>

Submitted on 2 Mar 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Ecocide: a Crime against Sustainable Development

Dr Nasrin Mehra¹

Associated professor of criminal law and criminology, Shahid Beheshti
University of Tehran

Gholamreza Gholipour²

Doctoral student in criminal law and criminology, Shahid Beheshti University
of Tehran

Erfan Babakhani³

Doctoral student in criminal law and member of the research academy of Law,
Paris-Nanterre University

SUMMARY

The Doctrine of sustainable development requires every generation of human beings to utilize natural resources in a way that while human needs are satisfied, the resources necessary for future generations are not damaged. This new doctrine, which has turned into the optimal global model of development, provides the concept of development with a new meaning and a different scope: apart from the economic aspect, development acquires both social and environmental dimensions. Thus, optimal development would be a balanced economic, social and environmental development. In this model, protecting the environment not only has an essential value, but is also vital and undeniable in the development of any given society, because any serious damage to the environment and natural resources subsequently affects the economy of a society adversely. In fact, the close interaction between economic development

¹ Docnas@mail.com

² Yasseen1365@gmail.com

³ Babakhani_erfan@yahoo.com

and the environment causes any environmental threat to turn into an economic menace. In the other words, the violation of “the right to a healthy environment” will result in the violation of “the right to development”.

From this analytical perspective, the crime of ecocide – as the gravest environmental crime – should be considered as a serious threat to sustainable development because ecocide, especially its governmental and corporate types, severely damages and destroys the environment, and in addition to the threat it poses to environmental security, ecocide undermines the foundations of economic and social security. As an immediate consequence of the crime of ecocide, the economic foundations and security of any society are undermined and destroyed, which can result in the emergence or development of serious social crises, such as poverty, diseases, unemployment, tensions, illiteracy, immigration, displacement, ethnic struggles, and armed conflicts.

Thus, it can be said that ecocide, as the fifth most serious crime against global peace, is a new threat to national and international economic systems, especially to the sustainable development and green economy model. Therefore, its criminalization and a common criminal policy are vital to prevent and deal with ecocide so that its development is prevented and its perpetrators, especially multinational companies – corporate ecocide – are punished.

The present study tries, through a descriptive-analytical approach, to show that the commission of ecocide by multinational companies inflicts severe and widespread and durable harms to the environment, whose outcome will be threats to the economic security of societies and global economy as a whole. Thus, in order to ensure sustainable development, we should start to address ecocide globally.

Keywords: ecocide, sustainable development, green economy, the environment, economic security

Introduction

Since the second half of 20th century, the issue of environment has found a universal dimension and has turned to be a permanent menace, a menace in which seriously threatens whatever lives on planet. Nowadays, with the growth of the global warming issue and climate change, this menace has found a new dimension. This menace is going to make massive social changes in human' life by force; a menace which puts natural and vital resources in danger. It means that global economy is under threat through production and spread of greenhouse gases. In fact, un judicious production and spread of carbon leads us to "climate crimes" or "carbon crimes" era.

That's why, in recent years, the science of criminology (green criminology) and criminal law (environment criminal law), have payed specific attention towards environmental damages; damages which may put an end to civilization of human beings. Therefore, according to Wolfgang Zax, Survival of planet earth is a convenient reason for a new wave of governments' intervention in human lives all around the world⁴, in order to guarantee human kind survival and immune human kind of this newly born global issue through policy making.

Among all, ecocide, as the most important and most severe kind of environmental damage and delinquency will receive great attention. Due to this

⁴ Zax, Wolfgang (1998), "Environment" in Zax Wolfgang, *New Perspectives Towards Development*, translated by Farideh Farahi and Vahid Bozorgi, Tehran, *Markaz* publications, First Publications, p. 41, and Nasiri, Hossein, (2000), "Sustainable Development, A Third World Perspective", Tehran, *Farhang and Andishe* publications, first publish, p. 120.

destructive crime, vital resources of planet earth, which are the main reason for balanced and dynamic economy, will be eliminated. Therefore, working and publishing about its global criminality will not be meaningless. In line with what mentioned previously, current study tries to found a theoretical foundation for a circuit development and an orient economy axis for the criminality of ecocide and make a mutual-global policy against it.

The primary question of this study is to seek whether current law order can identify ecocide as a menace for sustainable development? If yes, is there a necessity towards criminality of ecocide and making a mutual-universal criminality against this crime?

The arrange of the current study is in a way that in the beginning, the morphology of the fundamental concepts of the study, which is the crime of ecocide, will be worked upon (in first part) and then the evolution of the societies' development patterns will be investigated in brief (in second part). Then through analytic approach, negative outcomes of ecocide on each of the three main cores of the sustainable development, which are economic development, social development, and environmental preservation will be noted (in third part), and then at the end, the significance of making a mutual-global crime against ecocide will be tackled (in fourth part).

First Part: What is Ecocide

Historically, the term ecocide was first coined by the American biologist Arthur W. Galston in the conference entitled “War and National Responsibility”. In this conference, Galston named damaging and destruction of environment, ecocide⁵. Based on terminology, the term

⁵ Zierler, David (2011), The invention of ecocide: agent orange, Vietnam, and the scientists who changed the way we think about the environment, The University of Georgia Press, First publication, p. 15” and, Crasson,

ecocide, was combined by two words, the Greek word “okios” which means home and the Latin word “caedere” that means destruction or killing. Therefore, its literal meaning is destructing home⁶. Ecocide’s meaning in jargon is not far from its literal meaning. In legal term, ecocide is severely damaging or destructing the environment massively or its environmental elements in a way to disrupt the residence peaceful enjoyment of an ecosystem. Although it should be mentioned that so far no legal definition of ecocide has been made, since the introduction of ecocide, lawyers tried to define the term that two of these definitions will be mentioned in the following parts.

A) Falk’s definition:

It seems that the first disciplined definition of the crime of ecocide was made by Richard A. Falk. Simultaneously with the United Nation’s conference on human’s environment in Stockholm, Sweden (1972) and in reaction towards United States shameful act about spreading the Orange Agent on Vietnam, ecocide’s treaty draft was prepared by Falk’s innovation. Falk’s effort was to criminalize the crime of ecocide with the inspiration of preventing and penalties for genocide crimes treaty (1948)⁷ According to article 2 of this draft, ecocide has been defined:

“In the present Convention, ecocide means any of the following acts committed with intent to disrupt or destroy, in whole or in part, a human ecosystem:

- a) The use of weapons of mass destruction, whether nuclear, bacteriological, chemical, or other;*
- b) The use of chemical herbicides to defoliate and deforest natural forests for military purposes;*

Audrey (2017), “The case of Chevron in Ecuador: The Need for an International Crime against the Environment”, *Amsterdam Law Forum*, Vol. 9: 3, p. 39.

⁶ Kalkandelen, Kübra et al. (2017), “On ecocide: toward a conceptual framework”, *Distinktion: Journal of Social Theory*, Vol. 18, No. 3, p. 334.

⁷ Higgins, Polly et al. (2013), “Protecting the planet: a proposal for a law of ecocide”, *Crime, Law and Social Change*, Vol. 59, No. 1, p. 9.

- c) *The use of bombs and artillery in such quantity, density, or size as to impair the quality of soil or the enhance the prospect of diseases dangerous to human beings, animals, or crops;*
- d) *The use of bulldozing equipment to destroy large tracts of forest or cropland for military purposes;*
- e) *The use of techniques designed to increase or decrease rainfall or otherwise modify weather as a weapon of war;*
- f) *The forcible removal of human beings or animals from their habitual places of habitation to expedite the pursuit of military or industrial objectives”⁸.*

B) Higgins definition:

In 2010, Polly Higgins, revived the significance of criminalizing and paying attention towards the crime of ecocide in the international society. According to Higgins, ecocide is:

“The extensive damage to, destruction of, or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been or will be severely diminished”⁹.

According to the given plan, pernicious behaviors against all the species and biological elements including soils, sea, trees, animals, fish, human beings, and environmental spaces can be wanted due to the crime of ecocide. Of course, the destruction should be severe, widespread, and long term, if not, any destruction and elimination cannot be identified as an international crime. That’s why that according to the authors of the current study, ecocide is definitely a menace against sustainable development, but the question is this, what is meant by sustainable development?

⁸ Falk, Richard A. (1973), “Environmental Warfare and Ecocide: Facts, Appraisal and Proposals”, March, Vol. 4, p. 21.

⁹ Higgins, Polly et al. (2012), “Protecting the planet after Rio – the need for a crime of ecocide”, Centre for Crime and Justice Studies, No. 90, December, p. 4.

Part Two: From Economic Development Towards Sustainable Development

The concept of development was first introduced in international arena and then posed in international law. In this period and after world war 2 totally three main intellectual flows in the economic development of war-torn and backward societies were emerged in which each of these competitive flows was presented specific policies and programs for moving societies towards development and realizing the right of develop. These 3 flows are:

A) *Economic growth:*

The first theories of development relied on economic development. In this classic attitude, or what was called later unsustainable development, development was considered as increase in the per capita income increase in gross output be industrialized, technological advancement, accumulation and concentration of capital, or social modernization¹⁰. Classic approach or traditional development was proved over time to be unable to meet human beings needs¹¹. Since development studies (the study of development) represented that although some of the countries reached economic development, poverty, inequality, illness, illiteracy, violence, delinquency, war, discrimination, violation of children's rights, violation of worker's rights, ... in some of this societies are in scandalous situation. Therefore, these countries so as not to retreat from their political and economic rivals, consume natural resources injudiciously and caused severe and massive

¹⁰ Zarshenas, Shahriar (2010), "Development", Tehran, Ketab Sobh publications, third published, p, 14.

¹¹ Salim, Emil (2012), "The Paradigm of Sustainable Development: in the Organization of Cooperation in Economics and Development Institutionalization of Sustainable Development", Translated by Yahya Kamali, Tehran, *Jahad Daneshgahi* publications, First publication, p. 40.

damages not only to their own environment, but also other countries environment and in some cases all the world. So, such development cannot be desirable for human societies and cannot be supported as the right template for development. That's why that this pattern, both from human rights movement and environment movement, was harshly criticized and for quitting this destructive and unevenness pattern, new patterns were replaced.

B) Zero-orientalism:

Against with economic growth pattern, a movement appeared gradually in which instead of emphasis on economic growth, insisted on preserving the environment and stop of the growing wheels (environment-oriented pattern). Advocators of this school of thought were named as zeros because of their support of zero development. They advocated zero rate of population growth, zero rate of pollution, zero rate of using fossil fuels, According to their beliefs, global environmental crisis could only be treated with the stop of development ¹²

It is crystal clear that this development pattern highly advocates the environment and neglects other aspects of development. Proposed policies by its advocators were too radical, not standard, and unadaptable with the societies situation and is on the contrary with the right of development. In fact, how can we fight with poverty, illnesses, hunger, thirst, homelessness, ... without rational exploitation of nature? Therefore, this pessimistic

and radical attitude was also rejected and didn't last for a long time. So, it was replaced with a new and moderate attitude.

C) Sustainable Development:

¹² Nasiri, Hossein, (2000), "Sustainable Development, A Third World Perspective", Tehran, *Farhang and Andishe* publications, first publish, p. 141.

On the contrary with zeros on one hand and growers on the other hand, there was an intermediate way which neither considered economic growth as an evil phenomenon nor considered preserving environment as an obstacle against development, though considered both correlative in a way that without one the other would not exist. This intellectual process was going to compromise with the two concept and make a balance between these two excessive intellectual schools. This integrated or hybrid approach finally manifested itself as “sustainable development”. In the light of this discourse, the green belief that (preserving the environment is a part and parcel of the sustainable development), was formed.

Sustainable development was officially first defined in Miss. Brunetland’s (1987) report as “our common future). According to this report, sustainable development is a development in which meets current needs without damaging to future generations’ ability to meet their needs¹³. This report which blended the concepts of development and environment, laid down the new political rule in which neither development without sustainability is possible nor sustainability is possible with divorce of development¹⁴. In other words, sustainable development meant that societies that aim to be developed should not just concentrate on its economic core, though, should concentrate on other two cores which policy makers must pay attention towards in developing policies for development. These two concepts are as follows: the core of society (social development) and the core of environment (environment development). According to the triple cores of sustainable development, 1: development should be economically sustainable, 2: development

¹³Ramezani, Ghavamabadi and Mohammadhossein Shafighfar, Hassan (2016), “Sustainable Development and the Law of Green Environment: A Perspective Towards Future Generations” *Quarterly of Global Politics*, Vol. 15, Spring 2016, p. 272.

¹⁴Zax, Wolfgang (1998), “Environment” in Zax Wolfgang, *New Perspectives Towards Development*, translated by Farideh Farahi and Vahid Bozorgi, Tehran, *Markaz publications*, First Publications, p. 40.

ought to be socially stable, and 3: development should be environmentally settled. If not, development never finds its true value and meaning. That's the reason that the crime of ecocide is in complete opposition with sustainable development and has highly negative effects on human's movement towards sustainable development.

Part Three: Ecocide's Destructive Outcomes on Sustainable Development

In the previous part it was said that sustainable development is consisted of triple cores in which sheer support of each of these cores is bound to non-development. Focusing on these triple cores, in this part we are going to investigate the negative outcomes of ecocide on each of these cores briefly.

A) Ecocide as a Menace for Sustainable Development

In economics, it is emphasized that a complete and sustainable economy relies on three main elements; workforce, resource, and capital. If we take a closer look on of these elements, it can be cleared that ecocide directly destroys the natural resources factor and indirectly jeopardizes the other two elements, human resources and capital. In this study, our scope is on resources. It is crystal clear that the economy of each society relies on its natural resources which are water, seas, soil, climate, mountains, mines, jungles, gardens, sowings, livestock, sightseeing, In economic terms, ecocide is nothing other than long-term, massive, and severe destruction of these resources, so if any of this vital and decisive resources is destroyed because of ecocide, the economic order of the society will collapse automatically. Therefore, society will face severe economic crises such as famine, intense inflation, industry closure, severe decline in agriculture, energy crisis, widespread unemployment, disorder in stock market, withdrawal of capital, pervasive poverty, so on. According to this, as long as ecocide is occurring in various forms (nuclear, petroleum,

mineral, forest, water, marine, climate, so on), sustainable development is meaningless either. Since ecocide is on contradictions not only with sustainable development, but also with pure economic development (growth oriented) (although ecocide is the result of the same pattern of development) and destroys natural resources of the societies and makes them dependable on foreign countries. That's why in modern economics there must be a new perspective towards environmental issues and economy must be rescued from ecocide, since wherever ecocide occurs, the economic order of that society will definitely be disrupted for a period. That's why the crime of ecocide definitely threatens local, national, regional, and international economic security.

B) Ecocide as a Menace for Sustainable Social development

Not only does ecocide is an environmental crisis itself, it also is the origin of political, social, economic, cultural, so on crises. To put it in another way, ecocide is a crime which leads to crises and this fact doubles the significance of fighting and preventing ecocide. It means that ecocide regularly produces and spreads poverty, joblessness, illnesses¹⁵, delinquency, armed conflict, ethnic tensions¹⁶, displacement¹⁷, homelessness, poverty of the soil, pollution, pouring of soil, water contamination, thirst, hunger, general famine, illiteracy, financial corruption, ... turns the goal of social justice into mirage of hopelessness. In the

¹⁵ For example, in the state of Louisiana in the United States, there is a neighborhood that for its severe pollution and the highest death rate from cancer is well known as (Cancer alley). This area is mainly inhabitation of poor, minority, and low educated people. Katz, Rebecca S. (2012), "Environmental pollution: Corporate crime and cancer mortality", *Contemporary Justice Review*, Routledge Taylor & Francis Group, Vol. X, No. X, XXXX 2012, XXX-XXX, March, pp. 1-30.

¹⁶ For example, in Colombia, from January 1, 1985 to December 3, 2012, the conflicts for accessing, ownership and exploitation of land, caused the death of 220000 people and displacement of 5.7 million people. Darvish, alireza, et, al (translators), "A Reflection on Critical Criminology with a Green Criminology Approach", Tehran, *Mehr Kalam* publications, First Publication, 2018.

¹⁷ For example, in Nigeria, elicitation and production of oil and oil products by major Western oil companies have caused highly devastating consequences for the environment and indigenous resources of the Nigerian Delta and can be known a case of the crime of ecocide (petroleum ecocide). Following this act, a group of indigenous people took action to migrate, especially to European countries, in which in Europe they are called as economic refugees (Donatus, 2016).

simplest analysis, ecocide destroys the vital resources for the survival of human being and it is axiomatic that with the deterioration or paucity of vital resources, quarrel for the survival begins.

C) Ecocide as a Menace for Global Environment

Undoubtedly, the most tangible negative outcome of ecocide on societies and their sustainable development is its environmental outcome, since ecocide firstly is a crime against environment, and nature and destroys ecosystems. Therefore, ecocide threatens environmental safety or the safety of global ecology. According to what was mentioned, massive environmental damages such as climate change, global warming, contaminant of water, pouring of soil, pollution, decreasing the biodiversity of flora and fauna, inappropriate waste disposal especially dangerous and poisonous wastes, olfactory contamination, ... are outcomes of ecocide or in another interpretation are the result of oppressive exploitation of planet earth ¹⁸. Therefore, according to the commonplace definition of ecocide, which most of it includes severe, massive, and long-term damage to environment, we can estimate that if ecocide occurred, how much of environments and ecosystems would destruct (imagine the destruction of the forests of Vietnam due to the rampant of Orange Agent). A prominent example of ecocide, is “forest ecocide” or deforestation which mostly occurs in tropical regions and rainforests. Unpleasant phenomenon of deforestation¹⁹ threatens human health (e.g. the disappearance of the oldest human societies) and leads to the destruction of environment, gradual destruction of natural resources, and animal and plants extinction ²⁰.

¹⁸ Raisdana, Fariborz, “Globalization of the Massacre”, Tehran, *Negah* publications Institute, First Publications, 2004, p. 422.

¹⁹ For example, in Rio province of Indonesia, over the past 25 years, 65% of the jungles, 84% of the population of the elephants, and 70% of seeds have been destroyed (Darvish et, al., 2018: p.70).

²⁰ Darvish, alireza, et, al (translators), “A Reflection on Critical Criminology with a Green Criminology Approach”, Tehran, *Mehr Kalam* publications, First Publication, 2018, p. 83.

What has been mentioned is just a little destructive part of the negative outcomes of ecocide. The aim was to explain this hypothesis that ecocide is a serious menace against all three cores of sustainable development. Therefore, if it were to guarantee sustainable development through preserving the environment, a global fight against ecocide should occur.

Fourth Part: Towards a Common Global Criminal Policy Against Ecocide

As Wolfgang Zax correctly pointed since we live on single planet, we are condemned to a single destiny ²¹. The fact of having single planet and single destiny leads governments towards convergence and green cooperation and common global criminal policy against environmental delinquency especially ecocide. The reason for the need of common global and criminal policy should be investigated in the world's nature. Ecocide is a common global menace against global shared values and benefits and against shared home of human beings, especially the fact that earth is in total interconnected and united, and contractual boundaries of mankind cannot eliminate inherent integrity and inherent boundaries. According to these features and with regards to the native outcomes of ecocide on "mankind" and "nature", ecocide is mentioned as the "fifth crime against peace and human safety. Therefore, making a common global policy against ecocide is an undeniable necessity, so there is no safe haven for destroyers of ecosystems, especially in poor and third world countries. Such a common policy in various and multiple areas has been made such as desertification, torture, racial discrimination, forced disappearance, war crimes, corruption, international terrorism, financing terrorism, money laundering, drug trafficking and psychotropic drugs, human, worker, and immigrants trafficking, smuggling weapons, transnational organized crimes,

²¹ Zax, Wolfgang (1998), "United Universe" in Zax, Wolfgang, *New Perspectives Towards Development*, translated by Farideh Farahi and Vahid Bozorgi, Tehran, *Markaz* publications, First Publications, p. 104.

piracy, so on can be mentioned²². Undoubtedly, the philosophy of the emergence and birth of a common criminal policy in mentioned areas has been the threat of collective and global benefits, protect universal values, and provide international peace and security. If we take a closer look at the latter point, such philosophy is also hidden in ecocide. That's why that in article 26 of the draft law on crimes against human peace and security (1991), crimes against environment was criminalized.

Within the framework of the criminal policy against ecocide includes newly emerged policies in the field of environmental protection that one part of it is criminal (criminal law of ecocide), another part of it is restoration (remedial right of ecocide), and third part of it is preventive (preventive law of ecocide)²³. The aim of all of these triple policies is effective, efficient, and fruitful protection and conservation of environment against destructive and devastating behaviors.

What matters among them is the necessity of global criminalizing of ecocide. Criminal law should arise through appropriate criminality and sophistication of ecocide, with the help of sustainable development and planet earth. Therefore, a new criminal code named "*the rule of the crime of ecocide*" or "*the rule of prohibiting ecocide*" is needed, which is the most severe kind of criminal support of the environment so far. According to this criminal code *anyone who, whether natural or legal, that consciously or intentionally or with recklessness/indifference towards the environmental and ecological consequences of his behavior (whether act or omission), cause massive, severe, or permanent damages to all or part of the ecosystem or its constituent elements, in a way to disrupt the biotic cycle of the ecosystem and the*

²² Laurent, Neyret, Pour la reconnaissance du crime d'écocide, *Revue juridique de l'environnement*, 2014, p. 185.

²³ Castiaux, Gaëlle, "Revendication d'un crime d'écocide: les droits fondamentaux pour la protection de l'environnement sont-ils suffisants ?", mémoire, Université catholique de Louvain, 2017, pp. 50-51.

ecological dominant order, has committed the ecocide crime and he has to be responsive for his criminal behavior and in the event of failure to rationalize and justify his act, he is recognized responsible and has to tolerate the legal penalty.

From the perspective of the economy, it can be said that “**the rule of prohibiting ecocide**” safeguards the benefits and economic benefits of the countries and seeks to ensure the security of the order and economy of the societies, since ecocide, collapses local, national, regional, and international economy. So, if we closely investigate ecocide based on any economic approach (even pure growth pattern) and in the light of any economic theory (even pure liberal), it has to be condemned and prevented, due to the fact that ecocide is completely economic loss. Because in the event of repetition and continuity of ecocides, no economy would remain. With the loss of the natural resources factor, the other two factors which are capital and human resources will destroy, and production and supply and demand and finally, markets would collapse. Therefore, making a common global policy against ecocide so as to face this phenomenon, especially with intensifying the global crisis of climate change is an undeniable necessity.

English References

1. Crasson, Audrey (2017), "The case of Chevron in Ecuador: The Need for an International Crime against the Environment", *Amsterdam Law Forum*, Vol. 9: 3, pp. 29-48.
2. Falk, Richard A. (1973), "Environmental Warfare and Ecocide: Facts, Appraisal and Proposals", *March*, Vol. 4, pp. 80-96.
3. Higgins, Polly et al. (2012), "Protecting the planet after Rio – the need for a crime of ecocide", *Centre for Crime and Justice Studies*, No. 90, December, pp. 4-5.
4. Higgins, Polly et al. (2013), "Protecting the planet: a proposal for a law of ecocide", *Crime, Law and Social Change*, Vol. 59, No. 1, pp. 1-17.
5. Kalkandelen, Kübra et al. (2017), "On ecocide: toward a conceptual framework", *Distinktion: Journal of Social Theory*, Vol. 18, No. 3, pp. 333-349.
6. Katz, Rebecca S. (2012), "Environmental pollution: Corporate crime and cancer mortality", *Contemporary Justice Review*, Routledge Taylor & Francis Group, Vol. X, No. X, XXXX 2012, XXX-XXX, March, pp. 1-30.
7. Zierler, David (2011), *The invention of ecocide: agent orange, Vietnam, and the scientists who changed the way we think about the environment*, The University of Georgia Press, First publication.

French References

8. Castiaux, Gaëlle, "Revendication d'un crime d'écocide: les droits fondamentaux pour la protection de l'environnement sont-ils suffisants ?", *mémoire*, Université catholique de Louvain, 2017.
9. Neyret, Laurent, *Pour la reconnaissance du crime d'écocide*, *Revue juridique de l'environnement*, 2014.
10. Neyret, Laurent, Delmas-Marty, Mireille, *Des écocrimes à l'écocide : le droit pénal au secours de l'environnement / sous la direction de Laurent Neyret ; préface de Mireille Delmas-Marty*, Bruylant, Bruxelles, 2015.

Persian References

11. Darvish, alireza, et, al (translators), “A Reflection on Critical Criminology with a Green Criminology Approach”, Tehran, Mehr Kalam publications, First Publication, 2018.
12. Nasiri, Hossein, (2000), “Sustainable Development, A Third World Perspective”, Tehran, Farhang and Andishe publications, first publish.
13. Ramezani, Ghavamabadi and Mohammadhossein Shafighfar, Hassan (2016), “Sustainable Development and the Law of Green Environment: A Perspective Towards Future Generations” *Quarterly of Global Politics*, Vol. 15, Spring 2016, pp. 267-299.
14. Salim, Emil (2012), “The Paradigm of Sustainable Development: in the Organization of Cooperation in Economics and Development Institutionalization of Sustainable Development”, Translated by Yahya Kamali, Tehran, Jahad Daneshgahi publications, First publication, pp. 39-44.
15. Zarshenas, Shahriar (2010), “Development”, Tehran, Ketab Sobh publications, third published.
16. Zax, Wolfgang (1998), “United Universe” in Zax, Wolfgang, *New Perspectives Towards Development*, translated by Farideh Farahi and Vahid Bozorgi, Tehran, Markaz publications, First Publications, pp. 97-114.
17. Zax, Wolfgang (1998), “Environment” in Zax Wolfgang, *New Perspectives Towards Development*, translated by Farideh Farahi and Vahid Bozorgi, Tehran, Markaz publications, First Publications, pp. 38-45.
18. Raisdana, Fariborz, “Globalization of the Massacre”, Tehran, Negah publications Institute, First Publications, 2004, p. 422.