

# Ecological terrorism - from definition to methods of fighting globally against it

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## ABSTRACT

International terrorism is the most painful wound of the contemporary world as they know the forms causes destabilization and fear. Terrorists are those who direct their hatred against the innocent motivation preceding the terrorist act is closely related to abstract and absolute ideals. Guilt to the victim is replaced with the fulfilment of a "duty faith." Terrorist killing in the name of justice, the action was considered its tool.

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## INTRODUCTION

Definition of ecological terrorism. Terrorism from yesterday, nowadays... As a phenomenon, terrorism is the same as always, being the basis of the terror's strategy exerted by the Roman legions against populations from different conquered territories (Basarabescu, 2001). The terrorism has appeared in many forms, from cave terrorism to Cyber-terrorism, depending on civility's rank of mankind, but although the means were always different, the essence remained the same: frightening, destruction and killing (M.A.N. 2002).

It is true that terrorism, like war, is part of the stock by which the world denies, hates and destroys itself, believing that it endures a purification process (M.A.N. 2002)

Terrorism can be considered a special type of war that aims to the destruction of lives and of value systems. Unlike terrorism, usually an ordinary war does not mean to destroy a value system, it aims only to defeat an army, even without bloody battles, human loss and material damage. But terrorism and also ecological terrorism, aims to destruction for the sake of destruction (M.A.N. 2002).

The term ecological terrorism leads to the definition of biological synthesis of ecology that studies the interaction between organisms, plants and the environment in which they are living (abiotic and biotic). As a result, ecology examines closely the structure, function and productivity of biological systems superindividual (population biocenosis) and mixed systems (ecosystems (DEX 2009).

Together with the evolution of societies from different places of the world, man has realized the importance of environmental conditions, the meaning of the term ecology

expanding beyond the restricted sense of biology, becoming a synonym for the idea of environmental protection.

If all the fundamentals upholds a major protection of all environmental elements, ecological terrorism comes with a destructive force affecting the environment, which aims to preserve the ecological balance by stopping any damage of the environment in order to maintain and preserve the natural patrimony and the assurance of living conditions for present and future generations(M.A.N. 2002).

Ecological terrorism is, in fact, a sudden attack, usually in weak points, aiming to kill, destroy and bring terror, to create spectacular effects, also a hell atmosphere and human misery waged to abject and unbearable.

One can say that ecological terrorism is not a unitary phenomenon, although its implementation has various levels, based on the same philosophy of destruction and terror.

Therefore, ecological terrorism can be defined as a policy instrument, namely its fastest, most secret, most dangerous, hardest to stop, control and master instrument. Ecological Terrorism represents a political strategy whose fundamental is based on the systematic use of chemicals noxious elements, products related to the virology or bacteriology, radioactive substances, dangerous insects carriers of microbes etc.

Using the above listed elements in a terrorist attack aims to spread insecurity.

## **MATERIALS AND METHODS**

Organizing the terrorist attacks. From the organizational point of view, a terrorist attack has a pyramidal structure that always states the leader or the head of the organization at the top of the pyramid. He is a strong politically motivated middle class person being obsessively possessed by the idea of injustice and having a very good education.

The next layer is occupied by the active staff and performers, men and women participating in training others, but also in executing the attacks. The third layer is occupied by the active supporters(M.A.N. 2002). Even if they don't consider themselves to be members of the organization, they provide material and financial support for the actions of the second layer, also providing technical assistance and logistics.

The last layer consists of the passive supporters or accomplices. They have some general knowledge on the subject, but apparently they are not interested in the phenomenon that occurs and develops in countries ruled by exclusive beliefs or ideologies. The passive supporters deny fundamental freedoms of human being and spread crime and violence as a method of persuasion and constraining religious or political doctrine in the world.

Steps of the terrorist attack. Constantly, analysts and military experts consider that terrorism involves several steps, which can be also found in the informational war:

- the combatants' selection from socially , ideologically or religiously motivated categories, entirely dedicated to a cause;
- the special training in centers, camps or schools organized on the territory of some permissive and well-disposed states;
- the organization of a large informative network for finding and studying the attacks' targets , with a maximum efficiency on propagandistic plan and accessible attacks;
- the performers' slinking in the countries and targets to be attacked.;
- the execution of the attacks by startling.

The risk duality: ways of reporting the human being to Earth's ecosystem. The relationship between man and nature has evolved rapidly. Nowadays it is developing at a tremendous speed, impossible to stop or control.

In the last hundred years, mainly the last ten years, man has developed rapidly and the improvement of technical or instrumental means has much more increased the human's power upon nature, upon the environment, food chains and all links from the food chains. Undoubtedly, the technology has been improved. It has also improved the quality of human life. At the same time, human life is conditioned and controlled, and the survival on Earth is seriously threatened. Thus, in the modern man's life the risk of natural or induced catastrophe has appeared and the effects of these catastrophes affect directly all the environmental elements.

Initially, we could talk exclusively about natural risks. At the same time with the development of man's technical power over nature, the caused risk, so-called technological or instrumental risk, has increased.

In this category we include all the aspects that are classified as terrorist acts with direct impact on the huge eco space and we can say that: "Today, as never before, humanity has acquired the capacity to destroy, to annihilate itself and also to annihilate the wonderful things it has achieved so far" (Lockwood, 2009).

Through unconscious actions, the seas can be polluted with highly toxic substances but discharged with direct purpose to be prejudicial to the drinking water supply, air can be infected with various viruses, microbes, spores that can cause diseases and the most serious disorders, breast milk can contain toxins, etc.

In the same way, the accumulated chemical, biological, nuclear weapons are a dangerous stock which may have serious and irreversible impacts on ecosystems and implicitly, on human being at a certain time. It is possible that in the future, the human-nature ratio to be changed. Ecological terrorism is almost invisible, it can appear in the most diverse and hard to imagine fields. An invasion of insects may be a natural phenomenon. But an invasion of insects can weaken a vegetation background on long term while insects can spread diseases and can destroy crops with a devastating speed; they can be used as weapons in ecological terrorism (Lockwood, 2009). So insects can be categorized as one of the cheapest and most destructive weapons available to terrorists. For example, after World War I, not the opposite armies, but typhus, caused by lice, sickened 30 million people and killed five million. In the Second World War, the French and Germans spread Colorado beetles to destroy enemy crops and Japanese troops killed 400,000 Chinese, spreading plague-infected fleas and flies carrying cholera virus. Also, during the Cold War, the U.S. military has created a plan of producing 100 million mosquitoes infected with "yellow fever" virus, aiming at vulnerable targets in the Soviet Union and its **ally's territories**. According to some experts in biological **defence**, a terrorist having only \$ 100, some simple instructions and a plane ticket, could bring to United States or any other targeted country, without being caught, the fever virus "Rift Valley" disease discovered in 1931, which can affect the nervous system in humans and which is potentially lethal.

Today we managed unprecedented performance. Because viruses and bacteria are not deadly enough, laboratories were able to obtain some of the most aggressive bacteriological weapons.

For example smallpox, a serious disease caused by the variola virus brings a mortality rate of at least 30%. The pox is categorized in A class of all bacteriological weapons because

of the high mortality caused by the virus and the fact that smallpox could be quickly transmitted by air.

Also Anthrax, produced by the terrible *Bacillus anthracis* bacterium. Because of the high rate of mortality and its long resistance in the environment, anthrax bacterium is also considered an A Category biological weapon. The bacteria lives in the soil where it can infect domestic animals and humans can be infected with anthrax by physical contact, inhalation and ingestion. Most cases of infection are cutaneous anthrax, transmitted through skin contact with bacteria, but the most serious and deadly form is inhalation anthrax. In cases of inhalation anthrax, mortality is 100% in untreated cases, and 75% when applied to a specific emergency treatment.

The disease called Ebola is caused by one of the most aggressive viruses, the disease is known as hemorrhagic fever. Once present in a host, the virus infects any living organism that come into contact with blood or any body fluids of the host carrier. Although there are multiple studies, there is currently no cure or vaccine against this virus Plague or "Black Death" is also an A category biological weapon, plague bacteria, *Yersinia* bacterium can trigger two types of plague, the bubonic and the pneumatological. Bubonic plague causes a much higher mortality than pneumetologic, and it is transmitted by fleas' and / or lice's bite, but also by physical contact with body fluids of an infected person.

in about 50% of organisms, mostly species of rabbits and rats. Although tularemia is known more as a disease that decimates rabbits, the mortality at humans can exceed 5%, the bacteria that trigger this disease is one of the most infectious bacteria on Earth. Botulinum toxin, *Clostridium botulinum*, is a colorless and odorless substance; however, in the first 12-36 hours after contamination, the first signs of botulism appear. At this moment, the only solution for infected people is the injecting of an anti-botulinum toxin. The disease untreated quickly leads to respiratory paralysis followed by death.

Rice's Agent is a rice crop disease triggered by *Prycularia oryzae* fungus. Bacteria, viruses, toxins have a high potential killer, though there are some biological agents specially selected for destroying food sources of potential enemies, and triggering a large-scaled famine in the attacked country. Once spread over rice crops, cereals are infected shortly by the spores of this unconventional weapon and finally the crops are destroyed.

Another disease, Rinderpesta or cattle's disease was brought by the armies of Genghis Khan in 13th century Europe. The disease is caused by a virus and can affect either domestic cattle or wild animals such as buffalo, bison, giraffes, virtually any ruminant herbivore. The condition is extremely dangerous; the infested animals suffer from fever, dysentery and inflammation of the membranes' mucous. There is an efficient vaccine, but because of the fact that the disease is highly contagious, many cattle die before vaccination.

Nipah virus is named after the region of Nipah in Malaysia where, in 1999, there were the first human victims. Nipah is spread through physical contact or body fluids of infected persons. Because of its high mortality, Nipah virus was included in A Category.

Chimeric viruses, created in the laboratory, joins the plague, smallpox, anthrax, which are the most feared biological agents created by nature. Chimeric viruses have the ability to instantly kill anything and everything([www. Descopera.ro](http://www.Descopera.ro)).

## **RESULTS AND DISCUSSIONS**

Combating the terrorism in the entire world. Terrorist acts can occur anywhere, anytime. Combating terrorist acts, however, requires a concerted effort, starting at eradicating the causes of terrorism. It is understood that it may require multiple measures related to the

implementation of some political, economical, cultural, global and regional strategies. These strategies could be developed only in relation to the conclusions that can be retained after a comprehensive investigation of all defiance, challenges and threats that characterize the life of mankind in the third millennium. The first step you should take the professional research form of the terrorism phenomenon and eco-terrorism. One should take into account that at some levels great progress has been made, such as nuclear, chemical, biological, genetic and bacteriological. Related to this vast progress, also the terrorist actions can be multiplied and diversified infinitely.

It is true that human relations have significantly deteriorated in transition to implement the objectives and structure of the new world order, which is generally characterized by a state of chaos (which therefore is required to be analyzed on chaos theory coordinates).

As a result, the individual psychology, the group psychology should function under the direction of accepting the systems' value of all existing civilizations and also the progressive decrease of the aggressive behaviour either between groups of people or international relations. However, there must be a collusion of all political makers' activities, requiring optimization of human relations already degraded significantly. Now, states are at different stages of development and progress. Even so, a general approach could be represented by promoting the dialogue and exchange of values between religions, ethnicities, ethno-cultural groups, etc. The same effort can involve military staff in all its institutions, by specific levels (tracing the attacked areas and their isolation, preventing the extension of contaminations to other areas, immediate intervention for treatment and decontamination of the area), which may contribute to the development of some strategic models with an effective action over the causes of eco-terrorism.

In the same way, one can take measures that lead to fighting against structures and terrorist actions. Such measures actually give a generic anti-terrorist strategy.

This strategy is one that contains offensive against terrorist organizations and that is a set of discovering and abolishing by political, legislative, economical and military means of those groups to which the protection and defence against terrorist actions should be added. The last one refers to a system of measures of counteracting the terrorist attacks, of protection against chemicals and pathogenic agents.

## CONCLUSION

Terrorism, whatever form it takes, represents a present problem but especially one of our common future. All kinds of attacks known all over the world, have generated fear and desire to discourage anyone who intends to conduct terrorist attacks in the beginning of the third millennium, which started with a wide antiterrorist war.

Finally, we must take into account the offensive against eco-terrorism, which requires researching and discovering groups, organizations, laboratories and means of producing chemical and biological agents. In this type of action, chemists, biologists, geneticists may be involved to support the ecological terrorism war by convergent working.

In the meantime, specific actions should be running to ban terrorists' access to all that is chemical and biological, requiring even the establishment of activities to prevent and neutralize chemical and biological terrorist attacks by using some chemical, biological counter-agents of the vaccines.

The political, economical, military resources may underlie the liquidation of the terrorist bases and organizations. Protection and **defence** against ecological terrorism actions

require involvement and participation of specialized institutions and structures, which must be the buffer solution or the interface between science and society.

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