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**DEVELOPMENT
OF ENVIRONMENTAL MANAGEMENT SYSTEM IN LATVIA
AND THREATS OF ENVIRONMENTAL TERRORISM**

**ROZWÓJ SYSTEMU ZARZĄDZANIA ŚRODOWISKIEM NA ŁOTWIE
I GROŹBY TERRORYZMU ŚRODOWISKOWEGO**

Abstract: Sustainable development and warfare as well as terrorism particularly environmental terrorism are the main problems in the modern world that are concerned with environment. Sustainable development is focused on human beings and aimed at improving the living conditions of humans by preserving the environment including natural, social and economic spheres. Environmental terrorism is mainly set to achieve relatively narrow political aims of different organizations and groups that carry out impacts on the environment reducing its quality. Environmental terrorism can be defined as primarily reduction of environmental system quality with malice intention in order to seize power in local or global scale that is carried out on political, economical, ethical, religious or/and other social base. The developed hard environmental management system perform frame for economical development that is under strong environmental inspection. It excludes generally or reduces the gap of illegal actions as well as consolidates environmental protection system toward sustainable development and simultaneously removes possibilities of environmental terrorism.

Keywords: sustainable development, environmental terrorism, environmental management

Introduction

The long history of civilization shows that development of human society causes environmental damage. It is a perceivable process whose intensity depends on human appreciation of environmental impact capacity. Therefore the second half of the 20th century was the milestone in order to create a new relationship between nature and human society with simultaneous aim to ensure qualitative improvement of human living conditions and environmental prevention and protection performing discretionary relations between natural, social and economic spheres that not exceed the supporting capacity of the ecosystems. In 1972 the United Nations (UN) Conference on the Human Environment that became in Stockholm focused world attention to the problem of environmental deterioration. In late 80-ties of the 20th century in the world commenced the signifi-

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cant international political processes, marking the beginning of a new way of thinking. The World Commission on Environment and Development established by the UN in its report *Our Common Future* (1987), for the first time analyzed and described the outlook of the world's development, showing the deadlock, which the world would face unless political thinking is changed. This authoritative document had, for the first time, defined the sustainable development within the framework of international policy purposes as "continuous, willful and logically managed development process of social changes at the global, regional and local levels, which meets the need of the present without compromising the ability of future generations to meet their own needs." The Commission introduced with the principle of Environmentally Sustainable Development whose main goal is reasonable use of natural resources for human survival and maintenance satisfied quality of environment. Sustainable development integrates the economics and environment.

Actual changes in the global policy commenced in 1992, when the UN Conference on Environment and Development (Rio de Janeiro) adopted the Action Program for the 21st Century, the UN general Conventions On Biodiversity and On Climate Changes were signed, the UN Principles for the Use of Forests were approved, and the Declaration On the Environment and Development. The Rio Conference was a significant milestone that set a new agenda for sustainable development [1]. In 2002 the further sustainable development was expanded at the Johannesburg Summit for implementation the vision of sustainable development. The Johannesburg Summit has also confirmed that significant progress has been made towards achieving a global consensus and partnership among all the people of our planet.

From the Romans in 146 BC salting fields around Carthage to impair food production to the burning of oil wells in Iraq in recent days, the environmental destruction resulting from warfare has had an enduring legacy [2]. In spite of international laws, conventions, and agreements in the sphere of environmental protection and weapon prohibition although at present the use of military power (wars, terrorist attacks, and subversions) is very active for solving human mutual relations (local and international scale conflicts). In this respect, for example, the 24th principle of the Rio Declaration on Environment and Development (Annex 1) is ignored. It declares that warfare is inherently destructive of sustainable development and states shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary [1]. Warfare including different forms of terrorism significantly causes environmental quality reduction, damage, impacts and loss of human life. The release of the nerve agent sarin in a Tokyo subway in 1995 focused the world's attention on the reality of chemical or biological weapons on a civilian population. In that incident the use of this nerve gas resulted in injury more than 5 thousand adults and children, with 12 deaths [3].

Two completely contrary movements - sustainable development and warfare as well as terrorism - happen and terrorist threats exit in the modern world. Terrorism is mainly set to achieve relatively narrow political and economical aims of different organizations and groups in comparison with the concept of sustainable development.

The present study discusses that the developed hard environmental management system solves two functions - reduction of environmental terrorism threats and simultaneously promotion of environmental quality towards sustainable development.

Terrorism, environmental and ecoterrorism

Terrorism is primarily political and inherently about the pursuit, acquisition, and the use of power. It is defined in different ways, but universally accepted definition does not exist. Many of them include war crimes and crimes against humanity. In some cases, these terms are not valid because today terrorism has a wider range of political, religious, ethnic, and social implications. Terrorism is a separate phenomenon, a philosophy of coordinated violence which tends to have a high degree of social impact on the target society. Terrorist violence may be perpetrated by rebels in opposition to an established social order or it may be inflicted by a state upon its own citizens or those of another state. Terrorism is the illegal use of force on unrelated and or undefended persons and or property for political objectives committed by either an individual, non-state organization, or legitimate government. Terrorism is defined as the calculated use of violence (or threat of violence) against civilians in order to attain goals that are political or religious or ideological in nature that is done through intimidation or coercion or instilling fear.

Terrorism is classified in different ways - by place, personality trait, purpose, target, issue and some other ways [4]. Ecoterrorism and environmental terrorism is included in terrorism way classified by issue. In the context of present study more attention is given to environmental and ecoterrorism.

Ecoterrorism is a crime committed to save nature. It involves extremist views on environmental issues and animal rights, and is a form of terrorism aimed primarily at inflicting economic damage on those seen as profiting from the destruction and exploitation of the environment. The FBI defines ecoterrorism as the use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally-oriented, sub national group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature [5]. It seems that the aim of ecoterrorism is to destroy civilization in order to save the planet. It differs, for instance, from Greenpeace politics and other environmentalist groups whose aim is to preserve the environment and protect endangered species.

Environmental terrorism is very broad term that is sometimes used as synonym in respect to *ecoterrorism* or *ecological terrorism*. Environmental terrorism is separated from ecoterrorism. It is like environmental warfare that involves the utilization of the forces of nature for hostile purposes [6]. Uncertainty of the term "environment" causes difficulties for precise definition of environmental terrorism. More common scientific understanding of environment includes all of the surroundings of an organism, including other living things, climate and soil etc or in other words, the environment indicates the conditions for development or growth [7]. Author's definition of the term "environment" holds two parts - natural systems and human society as well as interactions between human themselves and between nature and human [8, 9]. Although legal definitions of the term "environment" are expressed more specific but they differ in various states. For example, Canadian Environmental Protection Act [10] stated that environment means the components of the Earth and includes (a) air, land and water; (b) all layers of the atmosphere; (c) all organic and inorganic matter and living organisms; and (d) the interacting natural systems that include components referred to in paragraphs (a) to (c). In return Environmental Impact assessment Act of Iceland sets that environment indicates a collective term for human beings, fauna, flora and other life forms, soil, geological forma-

tions, water, air, climate and landscape, society, health, culture and cultural artifacts, employment and material assets. Owing the wide interpretation of the term “environment” environmental terrorism can be defined as primarily reduction of environmental system quality with malice intention in order to seize power in local, regional or global scale that is carried out on political, economical, ethical, religious or/and other social base. It underlines environmental concern and interaction factors between human and between human and nature. Another definition states that environmental terrorism is the unlawful use of force against *in situ* environmental resources so as to deprive populations of their benefit(s) and/or destroy other property [11].

Environmental terrorism is a conflicting action of sustainable development accepted by world’s governments during the Rio Conference. Environmental terrorism is targeted on additional disorder increase that appears in the form of environmental pollution and degradation, strained human relations and disjointed social economical and political systems. It causes society withdrawal (in global meaning) from the state of sustainable development.

Environmental terrorism is spreading in two ways. The first way includes local, regional and global level decisions and real actions of economical development ignoring environment capability, environmental protection limitations and legal acts, for example, building of living and public use houses, and tourism centers, for example, in the Baltic Sea and Gulf of Riga coastal protection zone, in surface water body protection zones (rivers and lakes). Another environmental crime is originated with permits issued by environmental state institutions. The meaning of environmental permits involves admissible to limit or prohibit an activity or measure that may affect the environment or human health. A practically environmental permit allows engaging and/or continuing product production by enterprise with partly developed technological scheme. Most of all it refers to solid waste and sewage management. It indicates illegal actions of waste utilization and precautionary principle is disregarded. Therefore at present environmental problems are comprised and consequently agricultural and woody land is littered and polluted with different substances and materials including dangerous, for example, slate, utilized oil and others. Such environmental permit interpretation creates a system of environmental management that is far-away from sustainable development and is environmental terrorism and crime called by author. Therefore ecosystem stability, quality and resilience are advisedly reduced as well as human health is affected. Environment is a victim in the noted way of environmental terrorism.

The second way of environmental terrorism involves the use of the traditional weapons - chemical, radioactive, microbiological and biological weapons as well as legally useful materials and substances called toxic weapons. They could be common types of hazardous materials such as irritants, choking agents, flammable industrial gases, water supply contaminants, organophosphate pesticides and various industrial compounds. Different forms of toxic waste, for example, petroleum spills, smoke, refuse, sewage, and medical waste can also be used in toxic warfare [12]. Terrorist attacks are firstly set to human health and life that is a victim and secondly ecosystems are damaged.

The simplest and most primitive terrorist nuclear device is a radiological weapon or radiological dispersal device, commonly called a “dirty bomb” that contains a conventional high explosive, for example, dynamite or TNT, and a quantity of a radioisotope such as ^{137}Cs (half-life $T_{1/2} = 30$ years), ^{60}Co ($T_{1/2} = 5.26$ years), ^{90}Sr ($T_{1/2} = 27.7$ years),

^{192}Ir ($T_{1/2} = 74.2$ days). The conventional high explosive is used to spread radioactive contamination. A radiological weapon does not involve a nuclear explosion. If the bomb is exploded in a city, as it almost certainly would be, some people are likely to be exposed to a dose of radiation. But the dose is in most cases likely to be relatively small. A low-level exposure to radiation would slightly increase the long-term risk of cancer. The main potential impact of a dirty bomb is psychological - it would cause considerable fear, panic and social disruption, exactly the effects terrorists wish to achieve. Any radioisotope could be used in a "dirty bomb". The most likely one to be used is one that is relatively easily available, has a relatively long half-life, and emits energetic gamma radiation. There are many of radioactive sources used worldwide in scientific studies, medicine, industry and agriculture that could be used to fabricate a dirty bomb. Besides, they are often not kept securely [13]. There have been many incidents of toxic warfare in recent years. During the military action on the territory of Yugoslavia and on neighboring countries (Albania and FYR Macedonia, Bulgaria and Romania) the impacts on ecosystems involve water, air, soil, biodiversity and human health contamination. PCBs have been released from damaged transformer stations. During the Pancevo and Novi Sad attacks, large oil depots were burned with the following impact - a cloud of smoke some 15 km in length lasted for 10 days and concentrations of soot, SO_2 and chlorocarbons increased by 4-8 times the allowable limits. Acid rain was measured in a number of areas and was in pH range from 4.23 to 5.7 [14].

Both ways of environmental terrorism reduce environmental quality including human health. Sustainable development and environmental terrorism have common background - environment. Sustainable development has a goal to decrease disorder and to build commensurable relations between human and nature. In return environmental terrorism increases disorder. Developed environmental management is a way how to reach sustainable development and simultaneously to depress threats of environmental terrorism.

Core of environmental management

Environmental management is defined as the planned and systematic implementation of environmental strategies and targets set by state or by any organization. It comprises of corresponding measures and instruments in order to reduce environmental impacts as well as to maintain conditioned equilibrium between environment and economics development. Environmental management emphasizes the ecological complexity and interdependency of humans and nature. The scope of environmental management is to reach sustainable development that includes integration of environmental, social and economic concerns now and in the future under capacity of the environment. The objective is therefore to ensure that development does not compromise environmental sustainability, health and safety and that natural and cultural resource is not endangered. Environmental management could be organized in accordance with political and administrative boundaries of territories and/or considering the complexity of natural systems. Ecosystem boundaries are defined by geographic features, for example, watersheds, mountains [15].

The traditional environmental management takes place for human defined, unnatural, and administrative boundaries. Therefore ecosystems are man-made divided and

nature protection can not be uniformly ensured. It mostly refers to state boundaries with different environmental politics.

The river basin management adopted by Water Framework Directive proposes a “combined approach” based on hydrographic basins, both national and international [16]. Ecosystem management approaches the complexity of systems and the need to view it holistically by making jurisdictions correspond to ecosystem boundaries, increasing the levels of coordination, and combining multiple information sources from across the ecosystem [17]. The central goal of ecosystem management is ecological integrity maintenance [15]. The concept of integrated environmental management constitutes a holistic approach to the management and may be regarded as coordinated control, direction, or influence of all human activities in a defined environmental system to achieve and balance the broadest possible range of short- and long-term objectives [18].

Environmental management consists of the following elements.

1. Analysis of the environmental effects and impacts and assessment of the present environmental stage.
2. Defining the environmental policy, setting environmental targets, strategies, program and legal instruments.
3. Establishing an environmental management system, responsible institutions for management system introduction and environmental control system in all levels of national and local administration as well as in international sense (river basin, ecosystem and integrated environmental management).
4. Conducting an environmental audit and communication for continuous improvement of environmental management process.

Developed environmental management system governs and conducts administration of air, water, waste, chemical substances and chemical products, nuclear materials, land use, landscape and other environmental protection spheres. Environmental management can be developed in the soft and hard ways that differ on priority definition in respect to environmental protection and economics progress. The problem is mainly focused on choice during decision making process. Different even extreme value systems exist among environmentalists and among economics developers. Therefore in general compromise situation between environment and economics is very difficult to achieve. In spite of the used environmental management system (traditional, integrated, river basin or ecosystem) environmental legislation and its consideration in local and international level as well as comprehensive environmental control are the main elements in order to achieve equilibrium state between environment and economical development in sustainable development sense. Legal norms perform the frame for economical development.

The eco-management and audit scheme (EMAS) is an efficient tool to establish and promote continuous improvements in the environmental performance that is focused on the lowest level. The EMAS comprises organization activities under conditions of equilibrium between its development and environmental protection. A Community Regulation No. 761/2001 of 19 March 2001 allows voluntary company participation in EMAS. The EMAS stresses, firstly, consideration of the existing EU legislation and national laws as well as technical standards regarding environmental controls and, secondly, the duties of companies under those laws and standards.

The soft environmental management has a priority of economy and environmental protection is its subdivision. The soft environmental management causes a gap of lawless

actions in order to solve economical problems that have precedence as well as weak environmental control. They create conditions for both ways of environmental terrorism that inevitably cause environmental violation. The soft environmental management admits the following assumptions - firstly, sustainable development is infinitive, secondly, unlimited economic growth and improvement of human well-being, thirdly, impacts of economics development are mainly negligible and environment capacity is immeasurable and, fourthly, environment in general is only a tool to reach political, economical, and religious or other goals. The soft environmental management admits precautionary principle readjustment as follows - human activities or measures could be forbidden if their impacts are not sufficiently assessed or scientifically proved but prohibition has to be a proportionate means for environment or human health protection. Although the term "proportionate means" involves uncertainty that could be varied interpreted. The position of soft environmental management does not promote sustainable development but turns off equilibrium between economic and environment into direction of the last degradation and causes new environmental problems.

The hard environmental management postulates a priority of environment. In that way economy is a subdivision of the environment and has to be only developed under ecosystem capability. The hard environmental management excludes the gap of illegal actions that consolidates environmental protection system toward sustainable development and simultaneously removes possibilities of both kinds of environmental terrorism. The hard environmental management challenges strongly developed and comprehensive environmental control as well as consideration of legal procedures and standards in all social groups in national and international levels. The position of hard environmental management postulates the precautionary principle in the following interpretation - it is admissible to limit or prohibit human activities or measures that may affect the environment including human health or there is a lack of full scientific certainty. From the view point of the hard environmental management EMAS introduction has to be compulsory premise in order an organization commences its activities. The hard environmental management causes attainment and maintenance of equilibrium stage between economic and environmental protection.

Environmental management of the Republic of Latvia

Latvia adopted constitutional provisions to protect the environment. The Constitution of the Republic of Latvia declares *the State shall protect the right of everyone to live in a benevolent environment by providing information about environmental conditions and by promoting the preservation and improvement of the environment* (Section 115). Latvia environmental laws, rules and procedures are aligned with the European Union (EU) *acquis communautaire* that includes the directives, regulations, and decisions adopted on the basis of the various Treaties that together make up the primary law of the EU and Communities. The approximation of legislation is a unique obligation of membership in the EU. The integration of environmental policy is formulated in the treaties of the EU. Environmental protection measures were created with the Single European Act in 1987 that in 1993 were further established in the Maastricht Treaty.

The main goal of Latvia environmental policy postulates integration of environmental policy into all branches and fields of life. Therefore the basis for sustainable de-

velopment is established. Its complete introduction under the hard environmental management will reduce threats of environmental terrorism. Legislation intends the administrative, criminal or other liability if persons have violated requirements specified in the special laws on environmental protection. Administrative and criminal liability includes also discrete elements of environmental terrorism. Latvia legislation does not directly define the ecoterrorism and environmental terrorism. The Criminal Law sets the terrorism and subversion that involve the aspects close to the above-mentioned definition of the environmental terrorism. In this respect terrorism is *an action that causes an explosion or fire, or other intentional acts directed towards destruction of human beings or infliction of bodily injury to or other harm to the health of human beings, or commits destruction or damaging of undertakings, structures, oil or gas lines, power lines, transport routes and means of transport, telecommunications networks, ionizing radiation facilities or other property of national significance for purposes of harming the Republic of Latvia or its inhabitants, or causes, for the same purposes, a nuclear accident, radiation accident, mass poisoning, or spreading of epidemics and epizootic diseases* (Section 88). In return the subversion is stressed on economic sectors (destruction of the financial system, industrial, transport, agricultural, trade and other) as well as on destruction of the operations of any institutions or organizations, with the purpose of harming the Republic of Latvia (Section 89). The above-mentioned legal norms of the terrorism and subversion form legal background for security against environmental terrorism attacks.

Besides, measures for reducing harm of both ways of environmental terrorism are also stated in legal acts of civil protection and territory (land use) planning. The legal acts define the term "high risk objects". They are the objects in which hazardous substances and materials are produced, used and stored and that can commit harm to natural, social and economic environment. The legal acts of civil protection and territory (land use) planning require their identification in territory plans of districts, towns, and state.

Environmental impact assessment (EIA) is an important environmental management tool to reduce significant impacts of proposed development and planning documents. The EIA is carried out in accordance with the provisions stipulated in the Law "On Environmental impact assessment", passed on October 14, 1998 and the Cabinet of Ministers regulations [19]. The EIA involves all information relating to the proposed activity, environmental quality before and after project implementation, pollution characteristics, monitoring program, mitigation plan as well as information on polluted territories, vulnerable sites and high risk objects. The EIA is the use of the precautionary principle.

Examples of environmental terrorism

The sites those are without adequate protection - open to physical or emotional harm, are called the vulnerable sites. In Latvia they include the Baltic Sea and Gulf of Riga coastal protection zone; surface water bodies, groundwater, drinking water sources, and specially protected nature territories.

At present there are more than 70 high risk objects in Latvia that include oil, oil product and gas pipelines, storage facilities, road and railway transportation, hazardous waste transportation, collection and burning sites and other toxic chemical substances.

High risk objects are considered as potential threats to environment due to the possible accidents, malice property getting, and lack of responsibility and to other considerations.

Geographical location of Latvia encourages development of transit cargo from the East to the West through Latvia harbors including transport of oil and oil products by pipeline, railway and shipping through the Baltic Sea and Gulf of Riga. Cargo transit intensifies during the last 15-20 years. It encourages construction of the new oil terminals in Latvia. Therefore oil and oil product spills are pollution sources mainly of soil, surface water ecosystems including sea and the largest harbor water territories, groundwater. Statistics show that approximately 90% of oil and oil product pollution observed in the Baltic Sea arrives with municipal rain water drainage, river water, and deposition from air and about 10% as a result of shipping. During the last 5 years (2003-2007) State Environmental Service has stated 331 accidents that cause ecosystem pollution from which spills of chemical substances, oil and oil products make 83%. In return 36% of the identified spills refer to illegal connections to oil product pipelines. Estimation shows that spills due to illegal connections are typically 50±90 Mg in each event. About half of the discharged oil is collected after the accident, and the rest in further decontamination work. Illegal connections to oil product pipelines have double crime - firstly, misappropriation of oil products and secondly, ecosystem damage. The last crime is a typical example of the first way environmental terrorism - natural ecosystems are victim but the rest accidents characterize weak environmental control.

In Latvia four river basins are determined in accordance with Water Framework Directive 2000/60/EC. Surface water quality is dependent on transboundary pollution from Lithuania, Russia, and Belarus. Transboundary pollution in the river Daugava originates in Belarus and Russia, while the transboundary pollution in the river Venta and the river Lielupe originates in Lithuania. In the period from 1990 to 1997 three large accidents happened in the river Daugava basin. In November 1990 during filling a railroad tank in a chemical plant "Polimir", Novopolock (Belarus) spill of acetonecyanohydrin (ACH) occurred. According to the assessment 128 Mg of ACH leaked into the river Daugava. Due to the pollution mass fish deaths were observed in the river. In order to guarantee the health of the population water supply from the Daugava River was interrupted in Daugavpils (November 6-9) and in Riga (November 8-15). The ACH operates on respiratory centers. Its effect is similar to cyanides. The second accident involved sanitation leakage from Belarus in the middle of 1990s. The last accident, disruption of oil pipe line Unecha - Ventpils (enterprise „Zapad-Transnefteprodukt", Russia), caused the river Daugava ecosystem contamination with diesel fuel that happened 23 March 2007. Diesel fuel of 4,171 Mg enters into the territory of Latvia, but ~ 90% was collected from the river Daugava waters. The noted accidents are closely to Riga drinking water intake, because the capital of Latvia is the only town whose drinking water is mixture - artesian (~ 50%) and surface waters (50%; from the river Daugava water after purification). In Latvia mostly drinking water supply is developed from artesian waters for central water supply, while groundwater is used in farmsteads and small settlements. Drinking water wells are safely protected. In return in countryside groundwater wells are private property and usually they are not protected from outside affect. Drinking water supply system can be considered as partly protected from view point of ecoterroristic attack that mainly refers to Riga drinking water.

In Latvia traditional action is the burning of the last year grass that is environmental terrorism. The last year grass burning takes place in spring and is a potential threat to human and material values as well as to environment in general. The last year grass burning is caused by the main unsolved problems - approximately 1/3 of agriculture land is not cultivated and unfavorable social economical conditions in countryside. They promote the last year grass territory spreading and its burning can cause domino effect - forest and building fires. The last year grass burning process is one of pollution sources of toxic substances (such as dioxins and furans) into the atmosphere. Statistics of the State Firefighting and Rescue Service shows that in the period 1996-2004 there were 16400 fires of the last year grass. They caused death of 24 inhabitants, 19 victims and burnt of 1818 buildings of different importance. The last year grass burning could be assessed as terrorism weapon.

The noted examples show that environmental degradation takes place in spite of the developed environmental management system in Latvia. It is mainly caused by the soft environmental management.

Conclusions

Environmental terrorism is a conflicting action of sustainable development. Environmental terrorism is spreading in two ways. The first way includes economical development ignoring environment capability, environmental protection limitations and legal acts. The second way of environmental terrorism involves the use of the traditional weapons - chemical, radioactive, microbiological and biological weapons as well as legally useful materials and substances.

The soft and hard environmental management is characterized. They separate in priority option - the soft environmental management prefers economics development but the hard environmental management postulates priority of environment and economics could be developed only under environmental capacity. The hard environmental management challenges strong consideration of environmental legislation and environmental control.

The Baltic Sea and Gulf of Riga coastal protection zone, surface water body protection zones (rivers and lakes), drinking water wells in countryside and Riga drinking water supply system as well as the last grass burning are the main vulnerable sites in Latvia.

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ROZWÓJ SYSTEMU ZARZĄDZANIA ŚRODOWISKIEM NA ŁOTWIE I GROŹBY TERRORYZMU ŚRODOWISKOWEGO

Abstrakt: Zrównoważony rozwój i walka z terroryzmem, w szczególności z terroryzmem środowiskowym, są głównym problemem współczesnego świata dotyczącym środowiska. Zrównoważony rozwój jest skoncentrowany na ludziach i ma na celu poprawę warunków ich życia w sferach przyrodniczej, społecznej i gospodarczej. Terroryzm środowiskowy jest przede wszystkim instrumentem osiągnięcia względnie wąskich celów politycznych różnych organizacji i grup, które oddziałują na środowisko, pogarszając jego jakość. Terroryzm środowiskowy można zdefiniować jako działania pogarszające jakość systemu środowiskowego w celu przejęcia władzy w skali lokalnej lub globalnej. W tym celu są wykorzystywane czynniki polityczne, ekonomiczne, etyczne, religijne i pewne zjawiska społeczne. Opracowany system całościowego zarządzania środowiskiem stwarza podstawę do rozwoju ekonomicznego, podlegającego silnej kontroli ze względu na jego wpływ na stan środowiska. Wyklucza on, a przynajmniej ogranicza zasięg nielegalnych działań, a także konsoliduje system ochrony środowiska w kierunku zrównoważonego rozwoju, eliminując jednocześnie możliwość działań typu terroryzmu środowiskowego.

Słowa kluczowe: zrównoważony rozwój, terroryzm środowiskowy, zarządzanie środowiskiem