

# THE PLACE AND ROLE OF PUBLIC AUTHORITIES IN ENSURING THE CONSERVATION OF BIODIVERSITY AS A TOOL TO PREVENT ECOLOGICAL CRISIS IN MOLDAVIA

*Eugenia GUGULAN\**

## Abstract

*Biodiversity values are part of the natural heritage in the context of sustainable development, to be used by the current generations without jeopardizing future generations the opportunity to enjoy the same living. Endangering biodiversity obviously can cause ecological crisis. Government bodies are vested with powers to remove the consequences of ecological crisis. Government manages crises and is empowered to develop environmental policy and national security. This article determines the ecological crisis concepts, skills administrative bodies in crisis and would like to make suggestions to improve the legislation*

Key Words: *biodiversity, ecological crisis, environmental crisis, emergencies, crisis prevention, management of emergencies, crises in government.*

## 1. Introduction

By Biodiversity we understand the variety of expressions of the living world, plant species (flora), and animal (fauna) microorganisms. Biodiversity values are part of the natural heritage in the context of sustainable development, to be used by the current generations without endangering future generations the chance to enjoy the same living. Therefore, biodiversity is "*an environmental insurance policy*" favoring its ability to adapt to changes caused by any human activity destructive.

Conservation of biodiversity is one of the problems in the current internationally important. But lately the conservation of biodiversity at ecosystems, species, populations and genes even level is becoming more acute due to increased human impact on the biosphere. In this context, maintaining biodiversity is necessary not only to ensure life now but also for future generations, because it preserves the ecological balance regionally and globally, ensures the regeneration of biological resources and maintaining environmental quality necessary for society.

Biodiversity studies have been made over the years in several stages:

- At the end of the 60 studies were made only at a local level. The species studied were the endangered, endemic or rare (Red Book). In this period it was signed the Convention on International Trade in Endangered Species (CITES);
- In the 80 the studies were expanded from local to regional ones. Also during

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\* University lecturer, Ph.D. Academy "Stefan cel Mare" of Ministry of Internal Affairs, Republic of Moldavia.

these years it is recognized the economic importance of plants and animals;

- The 90s are characterized by the development of a comprehensive outlook on biodiversity.

- Subsequently Global Environment Fund was established at the United Nations.

- The United Nations declared 2010 the International Year of Biodiversity, on which occasion the results of some studies have been initiated since 2002 on how governments have made commitments to protect biodiversity.

Biological resources sustain life, answering fundamental human of needs. Biological diversity is under the influence of negative factors of anthropogenic origin, such as the exploitation of natural biological resources and pollution and of natural origin such as droughts, floods, volcanic eruptions, earthquakes, actions and phenomena that compromise, sometimes irretrievably. Compromising anthropogenic or natural biodiversity of nature is an ongoing process. If anthropogenic against destructive nature may then struggle against natural human opposition is.<sup>1</sup>

As life support, human attitude towards biodiversity needs to be oriented towards protection, conservation and monitoring of national and international nature based on the concept of sustainable development.

## 2. Theoretical

Biodiversity conservation is primary vector in ecological crisis prevention. It is indisputable that the conservation is ensured through representative bodies' branch of government. Ensure the preservation of the rule is determined by environmental policy is presented by adopting strategies such as the "National Strategy Romanian sustainable development of forestry in the period 2000-2020" and "Environmental protection strategy in Romania during 2000-2020".

Therefore, environmental policy appears as a form of guidance and organization of complex environmental work, called to establish the strategies, methods and means used in actions undertaken nationally and internationally to prevent and combat pollution, improve environmental conditions.<sup>2</sup>

In Moldavia it was developed environmental policy concept which was developed to connect major objectives of environmental policy socio-economic change in the country, programs, and regional and global trends in the field, to prevent environmental degradation. Develop it was due to the promotion of a uniform policy on the environment and use of natural resources, the implementation of environmental requirements into national economic reform process, policy orientation towards European integration.

The main objectives of the above environmental policy are:

- to prevent and reduce the negative impact of economic activity on the environment, natural resources and public health in the context of sustainable national development,

- ensuring ecological security of the country.

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<sup>1</sup> Ș. Țarcă, *Treaty of Environmental law*, Lumina Lex Publishing House, Bucharest, 2010, p. 115.

<sup>2</sup> E. Lupan, *Treaty Environmental protection law*, C.H. Beck Publishing House, Bucharest, 2009, p. 19.

It is necessary to refer to the phenomenon place when pollution and ecological crisis situation. Speaking of pollution it can be found in violation of ecological balance. *Ecological balance is considered a state of balance between environmental components and processes that contributes to long natural systems and their successful development, while environmental ecological imbalance is considered abnormal condition, state of pollution.*<sup>3</sup>

***The notion of pollution can be understood as:***

- Destruction of ecological balance activity by vitiating the environment threatening the health, life, heritage, peace, welfare of the people.
- A state of affairs where the imbalance is established after harmful activity (polluted).

Considering that the destructive consequences on the environment rebounds territory where not only occurred but have a much wider territorial condition, to be developed environmental measures and their application requires centralized control.

Thus, at present these problems within the competence of the state because:

- Pollution and combating it is a problem both national and international;
- State through its authorized representative utilities environment, and therefore reap the results of such uses;
- State determines and establishes rules of conduct, including environmental protection;
- Through its specialized state can pursue legal compliance;
- In case of violation of citizens' mandatory legal norms, the rule empowers its representative bodies to impose sanctions;
- State bodies are also competent to resolve disputes that arise during the operation of the environment;
- Approved the annual national budget reserved certain amount of money to achieve prevention activities, remediation and improvement of environmental conditions.

Having concluded that the State through its representative bodies is that which directs and coordinates the institute of biodiversity conservation is to deliver on what is an environmental crisis, environmental crisis and emergency situations or emergencies.

Thus, in the literature can be found define multiple views on the crisis in general. It is worth mentioning that distinguishes crises of social, political, economic, and sociological.

The words "emergency" and "crisis" are often used interchangeably in the media and within government institutions. *An emergency* is an abnormal situation that requires quick action beyond normal procedures to limit the damage that might occur to persons, property or the environment. *A crisis is* a situation that somehow affects expediency, traditions or values, security or public protection or integrity of government.<sup>4</sup> An emergency situation could turn into crisis when it is perceived as being controlled by government or other authority legally vested with managing it.

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<sup>3</sup> I. Trofimov, *Environmental law*, Chişinău, 2002, p. 9.

<sup>4</sup> P. Duţu, *The administrative leadership of the army in times of crisis and war*, University of National Defense "Carol I", Bucharest, 2009, p. 27.

However the Moldavian law determines the categories such as exceptional situation "natural or nature exceptional situation". This **exceptional situation** is a situation in a given territory, as a result of damage, dangerous natural phenomenon, catastrophes, natural disasters or other nature that may cause or have caused human casualties, damage human health or the environment, considerable material losses and vital conditions of the people affected. A particularly natural character is the situation in a given territory, as a result of a natural source exceptional situation that may cause or has caused human casualties, damage human health and / or environment, considerable material losses and damage vital activity of human conditions.<sup>5</sup>

Following the **ecological crisis ecological and environmental catastrophe** is the condition in which there is air, water, soil, subsoil or construction and fauna, flora or people living creature in space as a result of changes in ecological normality caused by objective factors or subjective. Objective factors in this situation are usually natural phenomena and subjective factors are determined by human actions.<sup>6</sup>

Other author identifies **the environmental crisis can be understood in terms of declining capacity of the planet to sustain life, in violation of three fundamental laws of ecology, namely: interdependence of all forms of vine, the stability of ecosystems due to the diversity and complexity, the finite nature of resources** . In turn **ecological crisis is defined as a dramatic deterioration, unexpected and irreversible environmental leads to significant reductions in welfare**.<sup>7</sup>

### 3. Scientific research

Where there are ecological crises, bodies empowered to do so are to be urgently engaged. It is indisputable that it is less expensive to prevent an environmental crisis than to remove its consequences, especially because they often effects and reflections are sometimes irreversible and unavoidable. Therefore, the competence of the branch first takes development and implementation of protection measures and prevents possible environmental crises and the development of key measures and management programs such situations. Moldavian legislation governing the conservation of biodiversity and ecological crisis prevention through the following acts:

- **Law on Environmental Impact Assessment**<sup>8</sup>;

This law partially transposes Directive 2011/92 / EU of the European Parliament and of the Council of 13 December 2011 on the effects of certain public and private projects on the environment, published in the Official Journal of the European Union nr. L26 from 1 January 2012.

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<sup>5</sup> Paragraph 2 of the Regulation on the classification of emergency situations and how to build and disclosure in protection of population in case of emergencies, the Official Gazette of the Republic of Moldavia no. 227-230 of 19.11.2010.

<sup>6</sup> M.V. Grigoriu, *Contemporary crises and conflicts*, Publisher Ministry of Administration and Interior, Bucharest, 2006, pp. 52-53.

<sup>7</sup> C. Băhnăreanu, *Potential crises that may affect national security: prevention, containment and crisis resolution*, University of National Defense "Carol ", Bucharest, 2011, pp. 30-31.

<sup>8</sup> Law no. 86 of 29.05.2014, Official Gazette of the Republic of Moldavia no. 174-177 of 07/04/2014.

It establishes a legal framework and mechanisms for assessing the environmental impact of certain public and private projects or certain types of activities planned to ensure its prevention in early stages of minimizing negative impacts on the environment and human health. Applicative procedures and arrangements are determined in the environmental impact assessment of certain public and private projects which may have a significant environmental impact in Moldavia or other countries.

If the Republic of Moldavia is provided for realization of planned activities with cross-border impact or when an activity other countries can have a significant environmental impact in Moldavia, environmental impact assessment is carried out in accordance with the requirements of the *Convention on Environmental Impact Assessment in context borders*.

The authority empowered to assess environmental impacts and achieving planned activities to prevent an impact or ecological crisis mean *is the central government (Ministry of Environment)*.

The environmental impact assessment will identify, describe and assess in an appropriate manner and in each case, the direct and indirect effects of activities on human beings, fauna and flora, soil, water, air, climate, material assets and cultural heritage. The environmental impact assessment of the central organs of government determines the specific technical measures, likely to reduce or avoid negative impacts on environmental factors and underlying decision to approve or not to approve the actions mentioned.

- **Law on Environmental Protection**<sup>9</sup>;

The normative act in question establishes a legal framework the basic aim of:

- ensuring every person the right to a healthy environment and aesthetically pleasing,
- the supreme responsibility of each generation to achieve environmental protection in future generations,
- to obtain a wide range of use natural resources without exceeding allowable limits, avoiding the depletion and degradation, risk to health and other consequences undesirable and unpredictable,
- soil and subsoil and air pollution chemical, physical and biological, the other actions that disturb the ecological balance,
- preserving biodiversity and Genetic Resources, integrity of natural systems, historical and cultural national values,
- restoring ecosystems and their components affected by human activity (human) or natural disasters.

However, the administrative jurisdiction is determined to ensure biodiversity conservation and environmental crisis prevention. ***The Moldavian Parliament:***

- approves the general policy principles for environmental protection and use of natural resources,
- adopt legislation on environmental protection and use of natural resources,
- Government approves the proposal limits the use of natural resources of national importance, limits the harmful environmental emissions and discharges,

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<sup>9</sup>Law no. 1515 of 16.06.1993, the Parliament of Moldavia Gazette no. 10 of 10.01.1993.

waste disposal limits production and household in the republic, fees for the use of natural resources, environmental pollution and waste disposal ,

- approved environmental recovery programs,
- says territories as crisis areas ecological and environmental catastrophe, they establish a management regime and status of citizens.

**The Government's powers** to ensure biodiversity conservation can include the following:

- Parliament achieved environmental policy and ensures rational use of natural resources

- jointly provide local authorities with biodiversity conservation actions,

- coordinate protection environment carried out by ministries, departments and local authorities,

- develop measures to prevent crises and ecological disasters, and if their production is organizing a complex of actions for liquidation of their consequences

- Moldavia's external relations with other states and with international organizations in environmental protection.

- **Law on Civil Protection<sup>10</sup>**;

Civil protection of the Republic of Moldavia is a system of measures and actions undertaken to the entire state in peacetime and war, in order to protect the population, property and environmental conditions of natural calamities, accidents and catastrophes, disease outbreaks, fires, and when applying modern means of destruction. In case of occurrence of exceptional situation, public authorities develop and approve measures and actions, as reflected in the special plans and programs of civil protection. Civil Protection includes managing bodies, administration, National Network Observation and Control Laboratory on the environment and potentially dangerous objects, forces and means of liquidating the effects of emergency situations, training system of civil protection.

Civil protection is organized according to the territorial principle of production in accordance with the administrative-territorial division of the country, including all branches of the national economy. The organization carries a mandatory civil protection. Civil protection responsibility of preparing bodies to carry out activities under emergency situations is attributed to the Government, heads of ministries, other central administrative authorities, local government entities.

Civil Protection and Emergencies of the Ministry of Internal Affairs is the central public administration specialized in the field of civil protection. The unit's main organs are the Service, Department of Civil Protection, Fire & Rescue Department, and Operations Manager.

General Management of Civil Protection is exercised by the Government, which determines the character, volume and time course of their work ensuring civil protection tasks. The government exercises the functions of government by the Civil Protection and Emergencies of the Ministry of Internal Affairs and other public authorities. In order to satisfy the public authorities and the provision of executive functions to prevent and action in emergency situations arising from natural disasters,

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<sup>10</sup> Law Nb. 271 of 09.11.1994, Official Gazette of the Republic of Moldavia No. 20 of 12.29.1994.

large-scale accidents, disasters, fires, epidemics, epizootic and other hazardous phenomena, establishes the Commission for Emergencies Moldavia, whose president is the Prime Minister. The government decision approved the nominal composition of the committee and its regulation activity. All committee decisions and provisions are binding for all subjects of law.

• **Government Decision on the classification of emergency situations and how the accumulation of information on population protection in case of emergencies<sup>11</sup>.**

This decision was taken for the efficient execution of the Law on Civil Protection. It was also approved the *Regulation on the classification of emergency situations and how to build and disclosure in protection of population in case of emergencies*.

Given that the ecological crisis can be attributed to the category of exceptional or emergency situations that regulation takes on a much broader applicability.

Ensuring ecological crisis prevention is to be achieved by continuous and uninterrupted monitoring processes of the facts of the status of biodiversity. Information on emergencies or crises must contain data about forecasted and triggered emergencies and their consequences on the situation of radioactive, chemical, medical-biological, incendiary and ecological.

Specialized central public administration and local government authorities are responsible for the accuracy and completeness of the information presented on the state of crisis. A legal person, irrespective of the organization is to present information about local emergencies, such as central government or other central organizations under subordination.

The specialty central bodies of public administration and local government authorities jointly with territorial subdivisions of Civil Protection and Emergencies of the Ministry of Internal Affairs conducted as set collection, processing and submission to the Civil Protection and Emergencies of the Ministry of Internal information about emergencies at the local level, local and object, to take appropriate measures for prevention and liquidation of consequences of emergency situations and informing the population about the danger of outbreak or occurrence of such situations.

Report about emergencies presents Civil Protection and Emergencies of the Ministry of Internal Affairs, through operative dispatching service in the following terms:

- About the danger onset emergencies Minutes (by phone) within 30 minutes of receipt forecast,
- About onset emergencies Minutes (by phone) IMED, with subsequent confirmation in writing (by fax), according to the forms established by order of Vice-President for Emergency Situations of the Republic of Moldavia, Head of Civil Protection and Emergencies of the Ministry of Internal,
- Details about the liquidation of consequences of emergency situations, in writing, to

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<sup>11</sup> Government Decision no. 1076, Official Gazette of the Republic of Moldavia ~~nr.~~ no. 227-230 of 19.11.2010.

7.00 and to 18.00 daily, until their completion by removal of the consequences of crisis.

***Service of Civil Protection and Emergencies of the Ministry of Interior is empowered to:***

- Coordinate and perform the collection, accumulation, storage, processing, transmission and exchange of information about crisis situations presented by the central bodies of public administration and government authorities' local government,
- Report to the Government on cross-border emergencies, national, territorial, local and object and action taken for their liquidation.
- Bear survey of emergencies,
- Inform the public by means of notification and communication, as well as through Mass media about expected or already produced exceptional circumstances, their consequences, as well as providing protection, chemical safety and radioactivity, biological and medical protection engineering.

#### **4. Conclusions and Implications**

Conservation of biodiversity is one of the main remit and objectives of environmental policy. Currently, several bills are being developed such as environmental policy concept of Moldavia Moldova's national security concept which sets the main instruments to achieve environmental protection and establish national security measures in all branches of the national economy. Regrettably, we can find a concrete action plan regarding the elimination of the consequences of ecological crisis. Its existence would have beneficial effects in terms of measures to remove the negative consequences on the environment.

Proper management and complex crisis situations including environmental and ecological consequences will successfully attack a problem that can result for example of a natural disaster or one conditioned by human factor.

Effective management can be achieved through training activities that guidance would include operational planning and communiqués, setting intervention teams, designating participants, establishing systems development and verification plans.

Planning presumed operations and releases at least two plans namely the operational plan and communications. The operational plan should be a document that would gather all necessary information to the competent subdivisions heads have to eliminate the consequences of crisis and will set goals and directions of realization. The plan should be concrete, clear information on skills with public administration authorities. The aim is to set up a concise document that will contain relevant information on crisis management. An operational plan should include the following components such as the definition of crises and emergencies covered in the plan, hierarchical structures (management teams, intervention, relations with line ministries, central administration), administrative policies and procedures for to activate the plan and facilitate decision making.

However, the operational plan should be consistent with the communication plan. The communication plan should include strategic and tactical guides required



before, during and after crises. He would allow everyone involved to have the same reference and reactions during surgery.

All actions and interventions of the plans in question should be harmonized and inter-level communication profile. It would be desirable to operational and communication plans developed by each ministry, which is in concordance viable.

We conclude that the role and place of government in preventing ecological crisis is of paramount importance. Thanks to well-designed administrative coherent measures are still drawn and the reflection on the elimination of the consequences of a crisis. All citizens of Earth and governments are responsible for the irrational use of natural resources and biodiversity.

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