

Implementation of Ecological Policies in Danube Delta Area



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Abstract. *Public authorities and the local community have become lately increasingly aware of the complex relationship between the environment and the economic activity and of the need for integrating environmental requirements into economic activities. Therefore, a strategy that aims at a sustained development which takes into account the environmental aspects is imperative. Environmental policies represent a set of measures and tools with the objective of controlling and limiting the process of deterioration of environment quality. The design of environmental policies for the Danube Delta is not an easy task, due primarily to the major changes that affect the deltaic ecosystem, the patterns of behavior and consumption, poverty and isolation of the local communities, etc. The environmental policies in the Danube Delta have no longer an auxiliary role, rather reactive, but instead they are meant to set objectives at the economic, legal, educational and social levels and to guide the strategy for their achievement. In this paper I have outlined both the objectives of the environmental policies and the types of measures (general, direct and indirect) for their implementation in the area of the Danube Delta.*

Key words: environmental policies; sustainable use; reconstruction of ecosystems; traditional economic activities; legal instruments.



1. Objectives of the ecological policy implementation in Danube Delta Area

The natural mechanisms that determine the perpetuance in time, functionality of the Danube Delta Biosphere Reservation, maintenance of its capacity of permanently regenerating the life conditions and the necessary resources for its support have overstepped, as against the atrophic activity, the intangible sphere.

The interaction of the two systems, nature and economy, considered independent so far, is now evident.

The fact that this situation was understood is proved by the preoccupation, at political level, for monitoring and limitation of human impact.

Ecological policies represent a set of measures and instruments designed to control and reduce the deterioration

process of the environment, to produce resources and to ensure life conditions. (Bran, Ioan, 2003, p. 100)

Another definition, characterized by a greater concreteness, is that *Environmental (ecological) policy represents a set of measures elaborated at macro and micro economical level in order to reduce the deterioration process of human health and environment, as well as the nature (maintenance of valuables and diversity of life forms) and environmental elements which affect production (soil, vegetation, raw material, etc.)* (Rojanschi et al., 2004, pp. 72-73).

Ecological policies in Danube Delta area has not been auxiliary for long time but they are oriented to formulate

objectives in economical, juridical, educational, social, etc. field and to elaborate their achievement strategy. It is true that ecological policy formulation into the Danube Delta is not quite easy especially due to ample changes to which the deltaic ecosystem is subjected, behavior and consumption models, local traditions, poorness and isolation of the local communities, etc.

As I was born and spent my childhood in the Danube Delta, and later by my job being permanently in contact with the trends of this zone of Tulcea County, I can declare that, at a first stage, ecological policies in the Danube Delta were mainly oriented to deal with the environmental issues perceived as pollution of different types, waste disposal, ecosystem damage, etc.

In this respect, they assured “the cleaning”, “curing” and somehow, by some constraints, could influence the processes that produced negative effects.

Now, when the environmental problem is not a problem itself anymore but an aspect that accompanies every human activity in the Danube Delta, ecological policy becomes the general framework which provides the bench marks and the methods for initiating new activities and adaptation of the existing ones, interfering in all fields.

The last two decades were witnesses of promotion trends of ecological policies oriented to collaboration with economical policies, both at our whole country level as well as in the Danube Delta.

To formulate an environmental policy for an area like Danube Delta declared Biosphere Reservation is not very easy to do even if there is a database regularly updated by the National Research and Development Institute of the Danube Delta (INCDD) and the zone is administrated by an institution having specific tasks: Danube Delta Biosphere Reserve Administration (DDBRA).

Generally speaking, although the scientific substratum of a policy is of high importance, nevertheless its formulation is rather pragmatic than scientific because it implies incertitude and human factor.

Due to uncertainty, the formulation process of a policy should progress continuously to a higher certainty.

For a *complex territory* like Danube Delta, many details are unavoidable uncertain during a policy formulation process but these can be approached in an advanced stage, because the planning process itself generates knowledge and let all detail of the problem to be understood.

If we refer at scientific incertitude, this is related to difficulty in obtaining some data regarding the environment. This kind of incertitude has substantially reduced its effect on environmental policy formulation in Danube Delta area due to a prestigious activity of INCDD Tulcea and tight cooperation relationships between this institution and DDBRA.

Less productive was, in this respect, the relationship between DDBRA and Environmental Protection Agency, especially in the period in which, according to the Urgent Ordinance no 112/July 2000 of Romanian Government, DDBRA had no more the task of dealing with environmental issues on the administrated territory.

Normative and politics incertitude is related to values and options of society and people. In this respect one should see how much the society must and can be influenced by the formulation process of an environmental policy for the Danube Delta.

The base factor of this intervention depends on how different parts appreciate the importance of environmental damages in connection with social and economic interests, with risks and distribution of costs and benefits.

Thus, in one manner the fishermen communities consider the issue of unsilting the channel that allow the fresh water to circulate into the Danube Delta and in another way the same communities of the same Danube Delta treat the protection measures for ichthyophagist birds (pelicans and cormorans).

Social incertitude refers to positions, interests and necessities of involved groups, which are only partial known. It refers also to how the decisions of these group can be influenced, fact that could affect their own decision.

The solution for these uncertainties can be done only by interactive involvement of all target groups.

It is very all known the conflict situation that was created by implementing a measure for sustainable development of piscicultural and reed resources from DDBRA, respectively granting the water mirrors and reed areas.

When preparing this measure, DDBRA did not show transparency and did not discuss the terms of tendering documentation, on which the concession action was based, with the fishermen.

Not even the potential concessionaire enjoyed the high attention from DDBRA, when preparing the concession action of Danube Delta resources.

All these uncertainties represent the reason from which disagreements often happen and the attention to the policy is diverted, determining the decision making process to be difficult.

This disagreements registered in the Danube Delta in recent period of time increase the necessity of some effective negotiations.

Human condition, human interaction process and the context must so taken into consideration separately in environmental policy formulation and implementation process into the Danube Delta.

An important moment in elaboration of environmental policy into the Danube Delta was and has been yet the setting of the objectives of these policies.

From my own point of view the objectives set could be:

A. Biodiversity preservation

A.1 Preservation species and habitats.

A.2 Preserve strictly protected area.

A.3 Delimitation and setting the functional zones.

B. Sustainable turn into good value of renewable natural resources

B.1 Substantiate the sustainable management of natural resources.

B.2 Regulate the use of natural resources.

B.3 Regulate the business activities into the Danube Delta.

C. Ecosystem reconstruction and improvement

C.1 Reconstruction of the damaged ecosystems.

C.2 Improvement of the environmental factors of water and ground ecosystems.

D. Pollution limitation

D.1 Water pollution limitation.

D.2 Soil pollution limitation.

D.3 Air pollution limitation.

E. Support for economical traditional activities of local population and protect the economic interests of the inhabitants

E.1 Making the natural resources accessible especially to local communities.

E.2 Using local labor.

E.3 Providing necessary living aids to local population.

F. Ecological information and education provided to general audience and local population

F.1 Information.

F.2 Education.

2. General measures to implement the environmental policies in Danube Delta area

This kind of measures, named in specialized works as general economical measures, too, express the necessity to harmonize economical policies in the Danube Delta with environmental ones, in the framework of adjusting structural and sectorial programs by means of monetary and budgetary policies, capital and energy market policies as well as by investment policies.

2.1. Monetary policies

By this type of environmental policy, through interest rate and up to date rate, economical development of the Danube Delta can be influenced in consensus with ecological constraints increasing the profitability of some fields of action having a positive impact on environment and in this way changing the direction of capital circulation to preserving the support capacity of natural systems.

In this context I would like to present two of my proposals, made as a county councilor, on the way in which the credit of 30 million USD, that Nordic Investment Bank wants to give to DDBRA within the project “Support for sustainable development of the Danube Delta”, may be used. Thus, besides some objectives such as:

- Improvement of the monitoring system for Danube Delta ecosystems using modern facilities of satellite supervision.
- Improvement the infrastructure regarding public utilities, transport and communication in order to reduce pollution, isolation of communities and to improve living condition.
- Restoration the function of natural ecosystems and natural habitats of endangered species from the Danube Delta.

My proposals aimed at:

- Supporting development of alternative traditional economical activities (tourism, handicrafts) by giving some credits adequate interest and up to date rate in order to reduce the pressure on pisciculture resource.

and

- Giving mini-grants to financially support preservation of local tradition in using natural resources and in home construction tradition (village landscape), promoting renewable energy (windmill, solar cells) and clean energy (navigation with electric propulsion).

2.2. Budgetary policy

Budgetary policy, as general economical measure, can play an important role in diminishing negative effects and increasing the positive ones upon the environment of the Danube Delta. This will be possible if a special attention is paid to budgetary incomes from taxes and charges on use the Danube Delta resources and, on the other hand, the subsidy system is reorganized in order to reduce distortions which this system generates at price level and financial resources granted to support environmental programs increase.

An example could be the initiative of DDBRA to surrender a share of the due from fishing area and reed area concessions for such activities and actions which ensure the sustainable exploitation of fish and reed resources.

Starting from the amount collected as due by DDBRA in a year from piscicultural and reed area concession, which was about 1 million Euros in 2004, we can propose a normative act to be initiated which allow DDBRA to include this amount in its own budget in order to be used for environmental projects.

Also, by an adequate budgetary policy, Tulcea County Council allocates a share of its incomes, coming from tax

on tourism and recreation boat access into the Danube Delta as well as from the due on concessions of the agricultural and fishery land in the Danube Delta, administrated by Tulcea County Council, for supporting some activities and actions such as:

- *Collection*, conveyance and disposal of plastics waste (PETs, etc), abandoned on administrative territory of communes and the town of Sulina in Danube Delta Biosphere Reservation (according to County Council decision no 56/2005);

- *Studies regarding restoration of some agricultural and fishery lands*, which are no more used in compliance with their designed destination.

In a period in which there is a major interest for ecological agricultural products, the Danube Delta offering excellent conditions for this kind of activity, it would be desirable for the taxes and dues to be collected by Tulcea County Council to subsidy the best practices in deltaic agriculture.

2.3. Energy policy

Energy policy has been one of the main fields with greater impact on environmental quality in Danube Delta area, influencing renewable rate of different resources.

The measures within energy policy contributed and still can contribute to reduce pressure both in forestry ecosystems from the Danube Delta and the level and intensity of air pollution and other environmental factors.

From this point of view Danube Delta electrification, process started in 1970s and completed, by connecting Sfântu Gheorghe to the national energy system in 1992, was a great success, mainly in the benefit of local communities and it also represented a reduction of forest cut and reed and mace harvesting in heating purpose.

Another measure within energy policy, which gains more importance in DDBRA preoccupation, is promotion of recreation crafts with electric propulsion instead of those that use combustion with liquid fuel and lubricants.

In recent period the number of fast recreational crafts which circulate on channels and lakes of the delta has increased very much and their engine power increased too up to 255 horse power

Besides air pollution by emissions and water pollution by casual discharging, the fast movement of these crafts has a high negative impact on aquatic flora and fauna.

This is why I consider necessary that Tulcea County Council, DDBRA AND Ministry of Transport, Construction and Tourism to elaborate and to approve Regulations regarding circulation of recreational crafts as well as fluvial crafts of other type on channels and lakes from the Danube Delta. These regulations must forbid circulation of fast boats, with power greater than 25 Horse Power on certain channels and lakes in the delta.

The use of solar energy for hot water and heating of tourism facilities is another component of energy policy implemented in this area.

This kind of equipment is already installed in Egreta Hotel from Dunavătu de Jos, in Tourist Complex "Roșu", placed between Sulina and Sf. Gheorghe, in "Cormoran" Complex as well as in a lot of other guest houses recently built in Danube Delta localities.

Electricity from wind energy is possible in many zones of the Danube Delta Biosphere Reservation, especially in those with strong winds a long period of the year, usually in isolated zones with lack of the electricity network.

Eolian Micro power plants or eolian power plants parks can successfully replace the Diesel power Generators which proved to be not only pollution sources for all environmental factors but also great consumers of fuel and oil which lead to increasing cost.

Giving credits with subsidized interest or even grants to companies and communities, that wants to set up eolian power plants, can represent a measure capable to increase the percentage of electricity produced in unconventional way (renewable energy in this case wind) in Danube Delta in near future.

A guarantee of the success in this field would be the transfer of Know how from western countries such as: Germany, Netherlands, France and Italy.

We must also mention the fact that the use of eolian energy has also a negative impact on the environment of the Danube Delta such as: visual pollution, phonic pollution, interference with broadcasting waves and tearing risk (Dăduianu-Vasilescu, 1994, p. 175).

3. Direct implementation measures of the ecological policies in Danube Delta Area

We may appreciate that the feasibility of every ecological policy for Danube Delta area depends on the possibility of implementing, monitoring and control over it.

The Severity of the ecological policy is an important attribute that may be transformed in a simple speculation if, from objective and/or subjective reasons, the ensemble of the measures and means for environment protection can not be implemented in a sufficient important proportion into the Danube Delta. An important phase is to make the environmental policy operational in Danube Delta in order to ensure efficiency, inclusively from the point of view of the distributive impacts harmonisation, phase supposing certain conditions to be satisfied: (Negrei, 1997, pp. 137-138):

- *Qualified Human Resources* and more developed expertise capacity *providing*;

- *The existence of a legal frame* to reflect the rate between general and particular and which is based on a conscious informational transfer;
- Achievement of a *higher compatibility* between the *proposed instruments* to be used in the implementation of the ecological policy and the *technical and material base*, taking into account the possibility of its extension and modernization;
- *The design of a functional system* in order to assure control and self-control over the implementation of the ecological policy.

The central element in ecological policy implementation into the Danube Delta is represented by the environment protection instruments system.

If we start from the ecological policy objectives, which are dimensioned in the previous chapter, function of the environment issues in the Danube Delta and the social and economical development features of Danube Delta area, we will structure the alternative instruments system in order to achieve the proposed objectives.

In addition with the general economical measures, briefly presented in a previous chapter, it is also intended to use the direct (punctual) measures concretised in:

- *legislative instruments*;
- *economical instruments*;
- *horizontal support instruments*;
- *environment projects promotion*.

3.1. Legislative instruments

As a definition, legislative instruments are those instruments which have to ensure a high level of public health and environment protection, especially in the case of a high level of ecological risks, as well as in respect the obligations comprised in international agreements and conventions regarding environment (Rojanschi et al., 2004, p. 125).

In the legislative action, the accent falls on laws, normative regulations as well as on instructions which became subsidiary.

The regulation, giving directions to the citizens, societies and other organizations, may be generic due to the fact that everybody must obey this law, or may be individually oriented towards a certain situation or groups for which, for instance, an environment license is applied.

Among the characteristics of this type of direct measures, capable of favouring the rate of the technical innovation, generally, and especially the rate of innovations in the field of pollution combat technical, we can enumerate (Bran, Ioan, 2003, p. 125):

- *Imposing of some norms*, concerning the results without precisising the procedures or the used techniques;

- *Regulation of reasonable terms and a calendar* regarding the compliance to the set up norms;
- *Providing economical instruments* with complementary title, which are integrated to the market in order to incite at innovation;
- *Examination of the established obligations* and of the regulation concerning the environment protection.

The main elements and aspects that can be regulated in the structure of environment integral management law are: definitions of concepts and application field; institutional aspects (authorities, attributions); international aspects; planning; norms and standards; ecological zoning; impact evaluation over the environment; firms and administrators activities; products demands; chemical substances; environment demands types; management of different environment factors – water, waste, radiation, special activities; measurement and registrations demands; license giving procedure; financial regulation; responsibilities.

It is important to mention some of advantages and disadvantages of regulations and legislation.

Possible *advantages* of a direct regulation (Rojanschi, Bran, 2002, pp. 41-42) are:

- Establishes from the beginning:
 - The democratic wrights of all citizens;
 - Minimal standards concerning emissions, behaviour, quality, etc.
- Can be applied when the market mechanisms and the possibilities of a convincing communication are:
 - missing or without a chance;
 - in a total disagreement.

The disadvantages and the limitation of the legislative instruments reside in the fact that:

- it is necessary a long period of time in order to create a solid and integrated structure of the legislation;
- it can create a wrong impression that once solved as it should on the paper, the engagement of the regulating process would be automatically done;
- it can not cover all practical situations in a legal and flexible way.

Generally, the practice proved that it is an advantage to have lesser rules but in a better coordinated condition between them and rules less urgent and detailed but clear and better applied. For a better understanding of the way of applying the direct measures, but also for the indirect and general ones, within the implementation of the ecological policies in the Danube Delta, it is important to show how this space is organised and managed.

So, in the last years, Romania is remarked for its accentuated tendency of affirmation of some administrative structures having a specific character, including in the

territorial plan, representing true ecological circumscriptions. The last ones are monitoring the management and the protection of some environment factors, in a unitary manner, and are territorial and structural organised independently from the administrative territorial divisions of our country (Duțu, 2003, p. 298).

Danube Delta is one of the biggest and less affected wetland from Europe, constituting an international important region. In the same time, it is fragile because, in the last years, very serious damages took place as a consequence of the irrational exploiting of the delta resources, of the regulation operations as well as because of different forms of pollution.

In such a situation, in the last years, a series of measures, including legislative ones, measures targeted towards the stopping of the degradation process of delta natural patrimony and towards the ecological reconstruction.

The main result is the creation of the Danube Delta Biosphere Reservation, an institution with a complex juridical statute, having the task to provide the appropriate management and the sustainable development of the natural resources of the zone.

Through Decree no. 103/7 February 1990, the works of integral exploiting and territorial arranging of the Danube Delta were stopped. The Decree no. 92/1983 was abrogated and was forbidden all activity damaging delta zone.

Through Decree no. 187/1990, Romania subscribed at World Cultural and Natural Patrimony Convention, adopted by UNESCO at 16 November 1972, and Danube Delta was inscribed a on the world natural heritage list in December 1991, being declared as a biosphere reserve.

Through Govern Decision no. 983/1990 Danube Delta Biosphere Reserve Administration was created, juridical institution subordinated to Romania Environment Ministry.

Un important step in establishing a new protection and conservation regime for Danube Delta is Romania adhesion, Law no. 5/1991, at International Wetlands Convention, especially as a habitat of aquatic birds Convention RAMSAR) and the registration of Danube Delta, in May 1991, on the list of this Convention.

All these regulations established an ensemble of national and international rules, applicable in Danube Delta.

The legislative characteristics presented above constituted arguments in favour of the setting up of the Law no. 82/1993 regarding the creation of the Danube Delta Biosphere Reservation. This law was adopted by the Romanian Senate and the Deputies Chamber on the 8th of November 1993, published in the Official Gazette no. 283/7 December 1993.

This legislative act comprises three large categories of dispositions:

- a) regarding the general and the special regime of protection;
- b) with institutional and authorization character;
- c) sanctions.

The law provides the creation of Danube Delta Biosphere Reserve Administration, which have as main activity the protection of the environment factors, the flora and the fauna as well as the renewable natural resources.

The activity object of the Reserve Administration is the creation and the application of a special management regime for conservation and protection of the biological diversity of the deltaic natural for the development of human settlements and for the organisation of the economical correlated with ecosystem capacity support.

Also, through this law, the Reserve Administration is nominated as National Public Interest Domain Administrator and Environment Authority, which ensures the control of the way in which al legal provisions are respected concerning environment protection.

These provisions are stipulated in the Law no. 137/1995, environment protection law, which is regulating the acquirement of the environment agreement, environment authorisations issue way, etc.

In order to achieve its attributions, DDBRA uses important laws concerning other activities carried on Reservation territory. It is used the law regarding water protection, the fishing and the aquaculture, hunting and forestry as well as other laws coming in the direction of the protection of DDBR.

By the Government Decision no. 248/1994 regarding the statute of organisation and functioning of DDBR, important completions are made concerning the adoption of some measures facilitating the application of the Law no. 82/1993.

From the publication of the two normative acts (Law no. 82/1993 and G.D. 248/1994) and till now, the legislation regulating the DDBR statute, as a protected area, has suffered a lot of modifications, through the next normative acts:

- *Law no. 69/1996* for modification and completion of the article 10 of Law no. 82/1993, through which was regulated the juridical statute of some Reservation lands, being constituted the county interest public domain, administrated by Tulcea County Council;
- *Urgency Ordinance no. 112 from 29 June 2000*, for modification and completion of Law no.82/1993, through which modifications are made concerning the environment protection attributions of the DDBR. These attributions were forwarded to the Environment Protection Territorial Agencies.
- *The Law no. 454/2001* regarding the modification Urgency Ordinance 112/2000, through which DDBRA won

again its statute of protection organism for Danube Delta environment. A lot of real improvement is done for the good implementation of the activities of the Reserve Administration.

Through GD no. 367 from 18 April 2002, the base of a new statute of organisation and functioning is set for DDBRA, which complete GD no. 248/1994, re-giving to DD BRA the function of environment authority, according to the law on the reservation territory.

All these completions issued by normative acts had as a result the existence of a law package as well as other laws, all improving DDBRA activity. According to the legal dispositions, DDBRA has a double quality of administrator of the national interest public domain and of environment authority within DDBR perimeter, issuing agreements and environment authorisations in conformity with the Law no. 137/1995 for environment protection, republished with all ulterior modifications and completions.

To carry on economical and production activities, such as tourism and divertissement, by the physical and moral persons, you need to have an authorisation issued by Tulcea County Council, function of the environment authorisation issued by the Reserve Administration.

We have to make the specification that through the promulgation of the Law no. 113/2005 regarding the approval of the Government Urgency Ordinance no. 69/2004, for the modification and completion of the Law no. 192/2001 concerning the alive aquatic resources, fishing and aquaculture, the quality of Administrator of the alive aquatic resources (fish, frogs, crawfishes, etc.) from natural fisheries basins found on DDBRA territory, reverts again to the National Agency for Fishing and Aquaculture, public institution of national interest, din subordinated to the Rural Development and Agriculture Ministry and not to the Reserve Administration, as stipulated till now in the Law no. 82/1993. Also, in the same law, it is foreseen that the National Agency for Fishing and Aquaculture delegates the sustainable management of the live aquatic resources to Danube Delta Biosphere Reservation, for the reserve territory waters.

The Law no. 113/2005, is severely criticised by the representatives of the civil society, the initiators being accused that, under the demagogic cover of the European Union demands and in the name of the persecuted fisherman, they wish to impose the law in the interest of some group of persons and to create chaos and the possibility of turning back the national robbery in the Reservation.

In what concerns the sanctions and contrives regime practiced on DDBRA, we have to show that Law no. 82/1993, concerning the setting up of Danube delta Biosphere Reservation, established, among a complex

protection system for the Danube Delta, a series of sanctions in order to contribute at a safe application and observance of it. Thus, without abrogate other laws provisions such as: Law no. 192/2001 concerning fish, the fishing and the aquaculture, Law no. 103/1995, concerning the hunting and the game, Law concerning the forestry fund, Law no. 107/1996 concerning Romanian water. The Law no. 82/1993 stipulated some exceptional dispositions derogating from these normative acts with general character and they are applied only in the Reservation zone. As a consequence, in the situation of not regulating some aspects according to the exceptional dispositions, the general norms from the laws can be applied in this specially protected area.

The protection of Danube Delta Biosphere Reservation constitutes the obligation of all physical and juridical persons, being a major national objective, based on the following principles:

- *DDBR territory ecological risks and damage prevention principle;*
- *DDBR biodiversity and specific ecosystems preservation principle;*
- *Precaution principle* in the decision making process;
- *Elimination principle*, with priority, of the pollution sources damaging the nature integrity and people health.

Through *Law no. 83/1993*, concerning the constitution of the Danube Delta Biosphere Reserve, the *first special law* was adopted for a *protected area*.

In what concerns the penalty character, we may affirm that, because of the accentuated degradation of Danube Delta ecosystems, the law maker considered as necessary to strengthen the sanctions, the normative act keeping the infringement responsibility for the deeds made in such conditions. According to the penal law, these deeds are considered offences.

This specific law has the role to slow down and in the same time to drastically sanction all deed bringing damage to the natural balance.

We have to specify the article 13 letters a to h from the Law no. 82/1993, was modified through GD no. 341/2002, updating the limits of the contravention fees at very high values, to discourage the breaking of Law no. 82/1993 provisions.

3.2. Economical instruments

As, with good reasons, a specialist remarked, it is not possible and not desirable to place an ecologist agent behind every person, tourist or inhabitant of the Delta, to guard the compliance with law. It cannot be neglected that this public supervisor can have a personal interest smaller

or bigger but which can affect the implementation of environmental legislation in the Danube Delta.

This is why, regional legislation – specific to the Danube Delta, as well as national practice and international and European regulations experiment and implement some economical and fiscal instruments such as emission taxes or others such as subsidies, special funds, administrative dues, negotiable emission quota, ecological label, etc. designated to change human and company behavior against the environment.

By their nature itself, financial and economical instruments are considered, in the context of present environmental policies, to be the most efficient in adapting the relationship environment – business in DDBRA in order to get a balance among the three fields: economic, social and environment.

The fact these instruments are more and more used in present is due to the following factors (Bran, Ioan, 2003, p. 127):

- *Limitation of public power*, in general, and of *traditional system* “order – control”, especially;
- *Regulation are not enough* in comparison with environmental problems more and more serious in Danube Delta in spite of substantial economical costs;
- *The necessity to implement the “polluter pays” principle* and to include the environmental costs, such as pollution, in goods and service price;
- Necessity to *integrate environmental policies* in other fields of economical policies such as agriculture, industry, transport, tourism, etc;
- Necessity to *find more efficient and less expensive instruments* in order to improve ecological performances.

The instrument of environmental policy of financial and economical type uses and conducts the transaction mechanisms on the market with the following procedure:

- *Stimulate rational behavior* for environment
- *Finance the implementation of environmental policy* for example funds for preventive or correction measures;
- *Get funds* for other projects that indirectly contribute to achieving environmental purposes.

Economical instruments can be of several types: incentives, penalties and taxes. These are addressed either to environment itself (energy consumption, space, raw material or eco-space) or to market transactions.

Further I present some advantages and disadvantages (Rojanschi, Bran, 2002, pp. 42-43) of the concept.

Possible advantages of the mechanism of financial and economical instruments are:

- The results are often got cheaper and faster than by direct regulation;
- It is often more efficient than the use of authorizations,

standards and (discussions), public debates. This fact is especially available when:

- The effect on the economy is negative, neutral and or tangentially positive;
- Monitoring costs (cost of verification the compliance with regulations and evaluation of environmental quality) are low. This is applied in different situations such as:
 - Substitution of products with high negative environmental impact;
 - Closing some productive chains;
 - When a specific approach is needed;
 - When insurance companies monitor in their own interests.

Possible disadvantages and difficulties of this market mechanism are the following:

- Sometimes it is not available, due to the problem nature or implementation difficulties, such as: terms of international commercial and political agreements;
- It cannot offer certainty (for example it cannot make sure the production and the use of natural resources from the Danube Delta will be reduced at an optimum level);
- It does not lead inherently to “assuming” environmental values.

3.2.1. Taxes

This type of economical instrument is frequently used for product penalization of the activities damaging the environment. In a great part of cases, when a product is not wanted to be forbidden but only limited in its use, this last objective can be achieved by means of supplementary taxes instituting in order to amplify its cost.

The following taxes (Platon, 1997) categories are individualised:

Utilisation Taxes represent direct payments for use of a resource, for a waste treatment service or for pollution reduction by an institution or a public organization. The most usual are the dues for natural resources, used water treatment taxes, domestic waste collection. This kind tax depends on the volume and poured substances characteristics.

The value of the due obtained from the concession activities of pisciculture and reed on DDBR territory must assure the recuperation of the expenditure made from the national budget for conservation and management of the fish and reed from DDBRA, as follows:

- *Investments* made in the last 10 years (1990 - 2001) for the improvement of the ecological conditions in the natural fish and reed culture complexes from Danube Delta Biosphere Reservation;

- *Research annual expenditure* regarding the assessment of the fish and reed cultures from DDBR;
- *Monitoring annual expenses* for fish and reed cultures from DDBR;
- *Annual expenses of DDBRA for the management* of the fish and reed cultures from DDBRA.

The utilisation dues have as effect the introduction of the natural resources of the Danube Delta on market mechanism at prices which reflect their rarity, as well as the opportunity cost of their use.

You can notice that in order to determine the real debt of the concessionaire towards DDBRA, for the natural resource captured or harvested, it necessary to be exactly known the quantities, in our case the fish and the reed token by the concessionaire from the natural goods, in a certain period of time (month, year) The problems start from here, in the sense that DDBR is not capable at this moment to verify exactly what are the quantities of fish and reed token from the natural goods.

A good quantity from the fish (40% from the capture after some voices) goes on the black market, with all economical and ecological consequences which are not very difficult to be determined.

In this chapter of the utilisation dues, we have to show that through all concession contracts of fish and reed resources, DDBRA imposes to the concessionary companies to make investments concerning the resource protection and to provide its regeneration.

The investment works consist of:

- *Annual elaboration of an assessment study of fish and reed resources* in the concession zone and the assessment of some zones destined to wild animals habitat protection;
- *Zones signalization* for natural habitats with different protection degree, included in the valorisation zone of the concession resource;
- *Refection and repopulating actions of fish stocks* of which species is endangered by fishing activities;
- *Hygiene by controlled burning* of the reed areas;
- *Unsilting and cleaning activities* of some small channels from dead vegetation;
- *Guard and surveillance actions* of the concession zones, etc.

Also, the concessionaries are obliged, by the contract, to make adjacent investments of the resource exploitation process, such as:

- Arranging (fish) *collecting or* (reed, wood) storing points authorised by DDBR, in the concession areas;
- *Technical means endowment*, for fishing, transformation process and transportation, specific to this type of activities carried on DDBR.

DDBRA imposes in an indirect way taxes „for the made service”, representing the payment of the costs of the collective or public treatment of effluents, through the demand made to the economical agents or to physical persons, applying for DDBR activity authorisation, to present catering contracts with profiles companies for:

- *Domestic waste takeover*;
- *Fosse or ship tanks empty*;
- *Used oils and hydro-carbon residues takeover*;
- *Sewage use* to take over the domestic waters;
- *Used water treatment*, etc.

The administrative taxes are the taxes applied by environment administration for different administrative services such as for environment agreements or authorisation issue or regulation application.

Most part of the time, the administrative taxes have the role to collect revenues and not to improve the quality of the environment.

In order to issue environment agreements and the authorisations, in its double quality of public domain of national interest administrator as well as of environment authority in the DDBR Reservation, DDBRA collects the taxes established by the Minister Order.

Also administrative taxes are the authorisation taxes for the organisation and the carry on of some economical productive activities, for tourism and entertainment on DDBR territory, established by Tulcea County Council, on the bases of the founded proposal of Danube Delta Biosphere Reservation Administration. These taxes are justified and approves annually.

Authorisation taxes value, for organising and carrying on some economical productive activities for tourism and entertainment on DDBR territory, cashed in 2004, is of 182 millions of ROL. This sum is constituted as a source of own revenues in Tulcea County Council budget and it are used for financing of some activities such as:

- *Subsidizing with 50% the tariffs for potable water use*, in *Danube Delta* localities;
- *Collecting, transporting and storing the plastic waste* (pets, etc.) from the administrative surface of the *localities of DDBR*;
- *Subsidizing the interest rate difference* for the destined credits to *products stocking* strictly necessary for the autumn-winter isolated localities from Danube;
- *Communal roads rehabilitation* from Danube Delta;
- *Ecological education*, etc.

The experience of the last years shows us that the collecting of the administrative taxes by Tulcea County Council is carried on with difficulties because a lot of economical agents and tourists are avoiding paying it.

It is desirable an aggressive strategy for collecting these taxes, conceived and applied by Tulcea County Council.

3.2.2. *Detaxation and subsidies*

Tax cancellation for some products due to their significations for environmental protection proved to be an important possibility to promote some ecological objectives in DDBRA.

Thus, tax cancellation in case of unleaded gasoline let also in our country the price of this to be lower than the common gasoline, encouraging the use of this clean fuel by the inhabitants and the tourists come in the Danube Delta, for fishermen boats and especially for recreational crafts which are in a great number and of high power.

From the same reason, DDBRA will have to act accordingly with the bio-fuel for which the European Countries have total opening.

Regarding subsidies, I mention as example the *financial support* granted by governmental programs (co-finances of pre-accession programs) for waste water treatment (waste water treatment plants from Tulcea and Sulina) or those offered by Romanian Government for environmentally friendly agricultural activities in DDBRA.

The main form of subsidizing is represented by environmental fund, created to directly finance environmental protection.

Also, the 25% co-financing provided by Romanian Government for implementing the Special Programme for Agriculture and Rural Development (SAPARD), that encourages activities which decrease the pressure on natural resources of the Danube Delta (such as rural tourism, agriculture, and aquaculture), can be a good example of subsidizing as economical instrument in implementing environmental policies in Danube Delta area.

Generally, subsidies are not in concordance with the principle “the polluter pays” and present the disadvantage that they can influence the pollution increase or the number of polluters companies which benefit of subsidy.

The polluting tendency is not discouraged because funds come from administrative sources and not from the polluters.

In my opinion, the sector which needs subsidies with priority is waste management all over the DDBRA territory.

3.2.3. *Consignment systems*

It is a market mechanism more and more frequent especially in European countries, and has in view the compulsory consignment of recipients to encourage their return or recycling.

In Danube Delta as well as in the whole country this system has been practiced for long time in what concern glass recipients, by reuse of them and expenses disbursement.

In time, this mechanism was abandoned being considered that it did not influence significantly the number of return recipient and thus a low ecological efficiency.

I consider that the persons responsible for ecological policies that must be implemented in Danube Delta area has enough reasons to introduce consignment systems for packaging which represent an important part of domestic waste met in this territory.

I refer especially to those packages made of plastic, but also to the drink cans, which “invaded” the whole Danube Delta following the high flood from the spring of 2005.

It must be mentioned, that the concern regarding the use of consignment systems for environmental protection should be balanced as against the principle of free competition and free circulation of goods within Danube Delta Biosphere Reservation.

3.2.4. *Insurances*

Besides economical instruments presented above, insurances can play an important role especially when environmental damages produced by business and social activities must be repaired.

This kind of instrument is not used in the Danube Delta in present, but it can constitute a challenge for DDBRA to impose this kind of instrument for companies that do bunker operations of maritime or River ships or for companies that trade gasoline, Diesel and oil for naval engines in the whole Danube Delta.

It must be mentioned that insurances usually cover only damages that comes from a defined event or from an accident.

If damage is gradually, from example by a pollution cumulated upstream from a gasoline and Diesel selling point of the Danube bank, the insurance cannot cover this kind of damage.

3.2.5. *Green label*

Starting with 70s, for the first time in Germany (“blue angel” in 1978), then in other European countries, but in recent years in our country, too, the vision was expressed, according to which it is important to discover and to prevent environmental problem before they produce, instead of reaction after they produce some means that can be very expensive. In this respect *green label* becomes continuously very important.

Green label represents a promotional environmental instrument for environment friendly products calling for public interests and manufacture *prudence* (Duțu, 2003, p. 376).

By this method producers are requested to examine the whole life cycle of product (respectively manufacturing, distribution, use and disposal), in order to prevent environmental damages in every stages and in respect with every factor: air, water, soil.

The main role of ecological label is to inform the consumers about products and services that are considered less destructive for environmental and health than other similar ones.

The criteria must be a global appreciation of the ecological quality of the product.

According to stipulations of the Urgent Ordinance of Romanian Government no. 91/2000 that introduced a methodology for implementing the basic principles and for recognition of products with low impact on the environment, we can presume that the green label can be applied in the Danube Delta for the following products and services:

- *Cereals* cultivated on agricultural lands in the Danube Delta;
- Vegetables and fruit (melons);
- *products and semi-products from aquaculture* (fish, frogs, river shrimps snail, etc);
- *Tourism services*;
- *Medicinal plants*;
- *Honey and honey products*;
- *Eatable mushrooms* etc.

It must be mentioned that ecological label can be used as instrument with especially moral value, of prestige, of identification and underlying some exceptional natural elements or consecrated ecological practices.

In this sense it is desirable to implement into the Danube Delta the initiative launched in 1998 by the World Wide Fund for Nature (WWF), label for ecological exploitation of forest.

DDBR zoning, the specificity and complexity of these zones, makes me recommend that, among the marking means of ecological dimensions of these zones, blue flag and black flag can be used.

By Government Decision no 335/4th of April 2002, some measures were adopted for implementing the “Blue Flag“ Programs, in Romania.

3.3. Horizontal supporting instruments

This kind of instruments aims at the following important actions:

- Update the database of DDBRA;
- Promote scientific research in the Danube Delta;
- Improve sectorial and spatial planning;
- Develop public information systems and professional training.

3.3.1. Update the DDBRA data base

Due to the fact several institutions administrate the public land of DDBRA or are involved in implementing environmental regulations in this territory, generate difficulties in setting and continue updating of

environmental data base strictly necessary when establishing environmental policy objectives and their implementation in the Danube Delta.

Present technical solutions permit a system which can interconnect environmental data bases and other connected fields among the following institutions:

- DDBRA;
- National Institute for Danube Delta Research (INCDD);
- Tulcea County Environmental Protection Agency (EPA);
- Environment Guard;
- Tulcea County Council;
- Local Council of the local communities in DDBR;
- County Department Romsilva Tulcea;
- Tulcea Water management branch of Romanian Waters “Dobrogea, Seaside” from Constantza.

This system which we propose can positively influence the methodology and the quality of annual report regarding the environment status in Danube Delta Biosphere Reservation.

3.3.2. Promotion scientific research

Scientific and technological research, as horizontal support instrument, plays a determinant role in sustainable management of the Danube Delta. An institution well-known in this field at national and international level is National Institute for Danube Delta Research from Tulcea.

A proof in this respect is represented by several actions concerning Danube Delta carried out by this institution in 2005:

- *The study regarding the consequences* of Bistroe canal from Danube biosphere reservation Ukraine, on environment as well in regard with economy and social aspect in Danube Delta biosphere reservation.

The conclusions were presented within the Scientific Council of DDBRA in order to include the ecological reconstruction strategy 2005-2015 in the Management Plan of DDBRA.

- *Monitoring* of hydrological, morphological, sediment and ecological effects on the Danube River, delta and the sea coast determined by the construction of the new navigation way by Ukraine.

- *Studies and research* for:

- implementing Water Framework Directive (DC/2000/60/CE) and European Network of protected areas NATURE 2000;

- Assessing and monitoring the status of environmental factors in order to scientifically substantiate the strategy of sustainable use of renewable natural resources of DDBRA.

- Cadastral works in DDBRA – sit NATURE 2000, for the communities of Sulina, Murighiol and Sfântu Gheorghe;
- Feasibility Studies and technical design for investments included in the management plan of DDBRA.

An important characteristic that must be mentioned in this chapter is the necessity to synchronize in regard with time and space the research and activity with the objectives and instruments of environmental policy in the Danube Delta and its adjacent area.

An example would be the study named “Management plan for sustainable development of protected natural area from Danube Delta Euro-region” financed by CBC TACIS Programs of European Union (tspf 0302/0040). The project partners were Odessa Regional Council and Danube Biosphere Reserve (Ukraine), Cahul County and Scientific Reserve “Lower Prut” (Republic of Moldova) and Tulcea County Council and the lead partner Danube Delta Biosphere Reservation Administration (Romania).

The project, launched in 2002, created the possibilities to authorities of each reserve, authorities of each regional public administration from the three neighboring countries to develop crossborder cooperation in setting and implementing the first management plan of natural protected areas from Danube Delta and Lower Prut River of Lower Danube Euroregion. The Management Plan consists of a selection of objectives that will determine some harmonized actions in the fields of environmental protection and sustainable use of natural resources by a better public consultation and a better involvement of local communities in sustainable development process.

This management plan represented, in the same time, an important step in developing crossborder cooperation relationships, in implementing concrete actions of ecological reconstruction and not the least in rediscovering and turning to good account the traditions and cultural customs of communities that live in this generous and sensible area.

We must mention that there are already some important premises for approaching the set objectives, created by some international cooperation documents signed by the three neighboring countries: The agreement of environment ministers from Romania, Ukraine and Republic of Moldova regarding crossborder cooperation in natural protected areas from Danube Delta and Lower Prut River, signed in Bucharest, on the 5th of June 2000 and the Protocol regarding cooperation in the framework of Green Corridor Program, signed by environmental ministers of Bulgaria, Romania, Republic of Moldova and Ukraine, on the 5th of June 2000, too, in Bucharest.

On the other hand, the “Lower Danube” Euroregion created in 1998 as association of border regions Brăila, Galați and Tulcea from Romania, Cantemir and Cahul from the Republic of Moldova and Odessa from Ukraine represent a new framework for regional cooperation in environmental protection field.

The creation of a trilateral biosphere reservation, as proposed by specialists for the near future, will offer a real chance to governments and specialists of the three countries to develop a European crossborder cooperation model in preserving the largest wetland area of Europe. This action comes to underline the extraordinary ecological importance of this area and, simultaneously, the universal responsibility of decision makers regarding this area where people live, work and rest and where must be created and maintained all necessary conditions for sustainable development.

3.3.3. Develop public information system and professional training. Public awareness strategy in DDBRA

People – inhabitants and visitors cannot be separated from delta nature: their presence and activities have an important impact over delta heritage. Taking into account this fact, Danube Delta Biosphere Reserve Administration had got as main objective the increase of public awareness among local population, visitors and other interested groups in the Danube Delta.

The first public awareness strategy was developed with support and experience of international organizations, by a participative process which involves key target groups from the Danube Delta.

It is the first step in developing real collaboration and communication between DDBRA and the other interested groups, on the one hand, and improving the internal communication within DDBRA, on the other.

The strategic objective is to support preservation and sustainable management of natural resources in the Danube Delta, increasing social and economical benefits of local population as well as financial sustainability of DDBRA by implementing integrated and oriented awareness actions.

The strategy was financed by the World Bank in the framework of the Project GEF Danube Delta Biodiversity, and was facilitated by the organization Fauna & Flora International.

The strategy was elaborated between October 1999 – May 2000.

3.4. Environment projects promotion

The financing of the ecological activities in Danube Delta by means of the environment funds represents only an instrument to reach the ecological policy objectives in this area.

The real improvement of environment quality is depending on the coordinated actions within the political reform, on the institutional consolidation and, not at last, on financing.

We make the specification that the financing can not act as a substitute of the other two elements.

On a long term, only the integration of the ecological policies objectives of Danube Delta area in the regional policy and even in the Romania macro-economical one will allow efficient progresses towards these objectives, the funds destined for deltaic environment having as main goal to sustain policies integration efforts in order to achieve the objectives of Danube Delta ecological policy. The promotion of some environment projects in Danube Delta has, at its base, two financing sources:

- *Internal sources*
 - State budget (including the environment fund, water fund, forests conservation and regeneration fund);
 - Own sources of:
 - DDBRA
 - “Romsilva” Autonomous Administration
 - “Apele Române” Autonomous Administration.
- *External sources*
 - Non-reimbursable credits resulted from pre-accession funds;
 - Global facilities for environment;
 - Funds from multilateral agreements for financing environment protection projects ;
 - Advantageous credits from financial institutions from outside the country, guaranteed by the government, etc.

Among the most important projects promoted on DDBR territory, having intern source of financing, we cite the following projects:

- *Danube Delta Ecological Reconstruction Project* (approved by GD no. 455/09.05.2001), with the following objectives:

- a) Improvement of the circulation conditions of the water within DDBR natural aquatic complexes;

The re-profiled length in the seven big aquatic complexes from DDBR is more than 300 km, the complexes representing the main source of fresh water in the case of a low level of Danube waters.

- b) Ecological reconstruction works in order to improve environment conditions for fish natural reproduction.

These investment objectives are necessary in order to achieve works for some channels re-profiling for re-establishing the connection between the main water circulation networks within the aquatic complexes and the natural reproduction affected zones. The achievement of these works will contribute to a productivity progress of about 5-7 kg/ha of lakes surfaces level.

- *Potable water supply programme* of Danube Delta localities (approved by GD no. 950/1996).
- *Stone pavement program for communal roads* from Danube Delta (approved by GD no. 577/1997).
- *Programme “Houses for rent for young people”* (62 units in Sulina, 28 units in Murighiol and 18 units in Sarichioi).
- *Programme “gym centre”* (gym centre in Sulina and Crişan).
- *Defence programme against flooding* of Danube Delta localities, through which hydro technical works were achieved in 7 localities.
- *Programme “Tulcea County Development”*, with a total value of 100 billions of ROL (approved by G.D. no. 1116/2001), through which was targeted the creation of tourism structures in Danube Delta, including new places of work.
- *Ecological reconstruction programme* for some Danube Delta localities.

The most important environment projects promoted on DDBR territory, with extern financing source are:

- Project “Danube Delta Biodiversity Conservation”, financed by the World Bank, with a total value of 4.5 mil. USD, through Global Environmental Facilities – GEF), implemented in 1995 – 2000 period of time;
- Project “Biological fight against Lymantria in Romania and Danube Delta forests”, financed with 359.000 USD from the total value by FAO programmes;
- Within LIFE Programme (financial instrument for environment) launched by European Union, in nature and environment domain, we have the projects:
 - “Sun and wind for Energy: a model of sustainable management” (LIFE - Nature);
 - “Save Pelicanus Crispus in Danube Delta” (LIFE - Nature)
 - “Letea and Caraorman Forests – Nature 2000 sites from Danube Delta” (LIFE - Environment);
 - *Wasteless Wetland* (LIFE - Environment) proposed to be financed by the Association “Save Danube Delta”, in quality of leader and beneficiary of the project.
- Within INTERREG III Program – East Zone, projects: Delta MED and Delta PLAN
- *Within CBS-TACIS Programme*, financed by the European Union, “Biological diversity conservation and sustainable Development management objectives in the protected areas in Lower Danube Euro region”;
- Within *SAPARD Program*, the projects focusing tourism development in Danube Delta (*Measure 3.4*) and rural infrastructure (*Measure 2.1*), in the following localities: Crişan, Pardina, Jurilovca, Sarichioi;

- Within *Rural Development Program (RDP)*, implemented in 5 pilot counties, including Tulcea County, we have projects concerning water supply systems, sewage and road rehabilitation in Danube Delta localities (C.A. Rosetti, Sf. Gheorghe, Beștepe, Mahmudia, Murighiol);
- Within *ISPA Program*, the following projects are indicated to be achieved (proposal):
 - Water treatment station and sewage systems in Tulcea Municipality;
 - Water treatment station and water supply system as well as sewage system in Sulina town;
 - Waste management in Danube Delta.
- “*Support for Sustainable Development in DDBR*”, proposal for financing from Investment Northern Bank.

4. Indirect support measures for implementing ecological policies in Danube Delta area

Indirect and support measures sphere comprises:

- Revising the institution of the property regarding the use of the lands;
- The access to the property;
- Possibilities to be valorised by Danube Delta communities in order to research the control over the activities carried on in the perimeter of the property;
- Operational cost optimization of environment policy through the improvement of the informational system, the simplification of juridical procedures and juridical reforms.

4.1. Property institution revising

The failure of the communist regime makes that landed property regime in Danube Delta to return at the existent regulations which were suspended during the former regime.

Till the moment of the adoption of the Constitution in 1992, the following provisions were applicable (art. 476 from the Civil Code):

“The big roads, the small roads and the narrow streets which are in state responsibility, the rivers and the navigable rivers, the shores, added banks, the lands were water had retracted, natural or artificial ports, banks for ship accosting as well as all Romanian land which is not private property are considered to be public domain”.

The adoption of the Landed Fund Law no. 18/1991 clarifies explicitly for the first time the situation of the Danube Delta lands.

According to 5th article of the law: “river beds, vats and lakes of public interest, beds of interior maritime and territorial waters, Black Sea Coast shore, including the beaches, the land for natural reserves (...) constitutes the public domain”.

The Romanian Constitution from 1992, art. 135(3), establishes the subjects of the public property wrights: the state and the territorial administration units. The 5th paragraph offers the possibility of administrating all public natural goods to public institutions or to autonomous administrations.

According to the 10th article of the Law no. 82/1993, regarding the setting up of the Danube Delta Biosphere Reservation, terrestrial and aquatic surfaces, including the lands found permanently under water and which are component parts of the reservation together with its natural resources, excepting the lands forming the object of a private property or that are in public or private domain of local interest, constitute natural patrimony of national interest found under the unique direct administration of the reservation.

Till now, every thing was constructed on a simple logic, the conditions for a unitary exercise of the attributions, given by law, being ensured for DDBRA. There are especially 2 categories of attributions: natural patrimony administration from national public interest of the reservation and, respectively, of refection and protection of its physical and geographical interest.

A parliamentary initiative followed, at the demand and the request of Tulcea County Council, through which the provisions of the 10th article of the Law no. 82/1993 are modified. In its new form, it is established that Tulcea county public domain is constituted by the lands comprising fish ponds and agricultural lands on DDBR territory. Tulcea County Council is the administrator of this sum of lands.

We must make the specification, from the beginning, that the approaches of Tulcea County Council had mainly a economical motivation, in a period in which its own budget was not capable of covering al expenses that had to be done for a favourable resolution of its attributions regarding the responsibility on the county interest public services.

The take over in administration of 79.541 ha of land with fish ponds and agricultural polders from DDBR opens the perspective for own revenues coming from concessions of these lands to the juridical and physical interested persons. Indeed, year after year, the sum of the dues was more and more important, reaching 39.305 billions of ROL in 2004.

By the help of this amount of money, Tulcea County Council has solved some major problems of the county, including problems of Danube Delta communities such as:

- *Communal and county roads rehabilitation;*
- *Interest rate subsidy* for the credits demanded by the economical agents *ensuring the autumn-winter supply for the isolated localities from Danube Delta;*
- *50% of subsidy of the tariff* for using potable water from the centralized networks of Danube Delta localities;

- *Children and persons found in difficulty protection;*
- *Ethnic cultural tradition promotion in Danube Delta;*
- *Plastic waste recovery (pets) in DDBR, etc.*

Another important reason for taking over, by the county council, the above lands in administration was also the fact that 13 commercial agricultural and pisciculture companies, created according to Tulcea Prefecture Decision no. 93/1991, carry on activities on Danube Delta. The companies were created as a consequence of the reorganization of the Economical Company Danube Delta, Law no. 15/1990, being declared economical units of local interest. In that period, the companies were crossing difficult times having a critical economical and financial situation.

I appreciate that, in a wrong way, it was considered that Tulcea County Council could give some oxygen for the activity of these companies, by entrusting directly the concession of the land and taking a minimal due.

The situation complicated a lot in the moment when the most part of these companies started to fail and lost their main active shares. The County Public Finances Direction levies the distraint upon them in order to retrieve the debts of these companies in favour of the state budget.

The crumble of the social capital of the 13 commercial pisciculture and agricultural companies, organized on the public domain of county interest, process that kept the “secrets” of the Romanian economical transition, led to an alarming growth of the concessionaires (physical and juridical persons) of the above lands.

Thus, when implementing the Law no. 219/1998 regarding concession status, and also the Law no. 99/1999 regarding the privatization, Tulcea County Council granted the lands to 113 persons, either natural or legal (64 fishery land and 49 agricultural), in 2005.

It stands to reason that the majority of the concessionaires were animated by business interests and less by those regarding environmental protection in granted area.

Even the stipulations regarding environmental protection, formulated in tendering documentation for granting the lands, were small in number and are somehow general (article 5.2 and article 5.3 of the tendering documentation approved by Tulcea County Decision no. 43/31st of August 2004).

It must be shown that the Law no. 82/1993, modified by the Law no. 454/2001, provides that “the lands included in the public domain of county or local interest, used as agricultural and fishery lands but which can no more be exploited in this respect due to degradation or other causes,

will be restored at their natural regime by doing all the necessary works of ecological reconstruction, established by DDBRA AND Tulcea County Council.”

Presently, Tulcea County Council and the local community’s councils from the Danube Delta are in the position of not completely complying with this stipulation of the law because the majority of the fish breeding ponds, as well as some of agricultural lands are not used according to their designed purpose, being exploited either in a semi-intensive or natural regime, without irrigation or drainage systems. Most of the fish ponds and fish reproduction basins of the fish breeding ponds are drained and used for agricultural purposes.

Up to now, Tulcea County Council has not presented any proposal to DDBRA for ecological reconstruction of some parts of the fish breeding ponds.

Taking into account the situation presented above, and having in view the big investments made by Romanian Government for renaturation of large areas of the Danube Delta, an integrated coordination is necessary for implementing environmental policies and a sustainable management of DDBRA.

It is evident that deterioration or loss of some assets of natural heritage represents damages which are sometimes irrecoverable. Protection, preservation and improvement of environmental quality, including preservation of natural habitats, of wild flora and fauna are of major public interest, taking into account that biological diversity that forms natural heritage provides the most part of products, goods and services necessary to society being the base of sustainable development.

From this reasons there are more and more authorized voices, to whom I join, too getting rid of the “tog” of county administration person, that require the amending of article 10 from the Law no. 82/1993 with subsequent modifications and supplements made by the Law no. 69/1996, Urgent Ordinance no. 112/2000 approved by the Law no. 454/2001 particularly passing the lands of fish breeding ponds and agricultural lands from county and local public domain administrated by Tulcea County Council and local councils, into national public domain, administrated by DDBRA.

In this way, the ground and water surfaces, including lands permanently under water, which are in DDBR, excepting the lands which, according to the law, are private property of natural persons and the lands that are public or private property of local communities, together with natural resources they generate, form natural heritage of national interest as stipulated by the Law no. 213/1998 regarding public property and its juridical regime.

Also, the Law no. 462/2001 for approving the Urgent Ordinance no. 236/2000 regarding natural protected areas

regime, preservation of natural habitats, wild flora and fauna, provides at the article 22(1) that fishery and agricultural lands inside natural protected areas, legal constituted, achieved by public investments on lands belonging to public domain, will be mainly dedicated to administrative and scientific activities run by those that manage the protected areas.

The return of the lands occupied by fishery and agriculture to the previously juridical regime, I presume that can guarantee the use of these exploitation lands in their initial purposes, as well renaturation of some lands that were affected by human actions.

The ecological reconstruction of lands of the fisheries and agriculture, which cannot be anymore operated in their initial purpose, must be done with direct implication of DDBRA based on studies made by research institutes and

with endorsement of Romanian Academy – Natural Monument Protection Committee.

Conclusions

In this presentation I tried to demonstrate, without pretending to succeed, the modality in which the revision of property institution regarding land use can become a indirect measure that support the implementation of environmental policies in Danube Delta area.

It remains as a special problem for politicians and the managers of Tulcea County administration to convince the Romanian Government and Parliament to issue an normative document according to which an amount of about 50 billions ROL to be provided to local communities in the Danube Delta to ensure all necessary public services at a proper level.

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