

A PARTICIPATORY MODEL OF THE MANAGEMENT OF PROTECTED NATURAL AREAS IN THE NERETVA DELTA

VIŠNJA BUKVIĆ¹ & NIKOLA GLAMUZINA²

¹Sveučilište Hercegovina Mostar, Fakultet društvenih znanosti dr. Milenka Brkića, Mostar, Bosnia and Herzegovina

²Filozofski fakultet, Sveučilište u Splitu, Split, Hrvatska

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The paper analyses the issue of the implementation of nature conservation policy in the Lower Neretva Delta. Institutional nature protection in that part of the Croatian coast is burdened with various problems, of which poaching, burning of swamp reeds, illegal conversion of wetlands into agricultural land, and illegal construction should be singled out. Since the current concept of nature protection, based on the top-down command-and-control principle, proved to be ineffective in resolving conflicts with the local community, the authors of this paper considered the participatory management model of protected natural areas as an alternative possibility. A comparative analysis of the current state of nature protection in the Upper Neretva Delta, in the neighbouring Bosnia and Herzegovina, where protected areas are located within the Hutovo Blato Nature Park, is also given. The authors also researched the issue of the development of ecotourism as the most adequate sustainable form of tourism in the Lower Delta. The potential of ecotourism, as a response to social, ecological and economic problems that burden the local community, has been critically studied, based on experiences from other parts of the world. The research shows the need to involve stakeholders from the local community in the implementation of the nature protection policy using a participatory model.

Key words: Neretva delta, wetlands, natural resources, local community, ecotourism

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U radu je analizirano pitanje provedbe politike zaštite prirode u donjoneretvanskoj delti. Institucionalna je zaštita prirode u tom dijelu hrvatskoga primorja opterećena raznim problemima, od kojih posebno treba izdvojiti krivolov, opožarivanje močvarnih tršćaka, nelegalno pretvaranje močvarnih površina u poljoprivredno zemljište te „divlju“ gradnju. Budući da se trenutni koncept zaštite prirode, zasnovan na načelu od vrha prema dnu pokazao neučinkovitim u rješavanju konflikta s lokalnom zajednicom, autori ovoga rada razmotrili su participativni model upravljanja zaštićenim prirodnim područjima kao alternativnu mogućnost. Također je dana komparativna analiza trenutnoga stanja zaštite prirode u gornjoneretvanskoj delti, na teritoriju susjedne Bosne i Hercegovine, gdje se zaštićena područja nalaze u okviru Parka prirode Hutovo blato. Na kraju je analizirano i pitanje razvoja ekoturizma kao najadekvatnijega održivoga oblika turizma u donjoneretvanskoj delti. Pritom je posebno dan kritički osvrt, utemeljen na iskustvima iz drugih dijelova svijeta, na mogućnosti razvoja ekoturizma kao odgovora na društvene, ekološke i gospodarske probleme koji opterećuju lokalnu zajednicu. Istraživanje pokazuje potrebu za uključivanjem dionika iz redova lokalne zajednice u provedbu politike zaštite prirode primjenom participativnoga modela.

Ključne riječi: močvarna područja, prirodni resursi, dionici, lokalna zajednica, ekoturizam

INTRODUCTION

The implementation of the nature protection policy is one of the issues encountered in various parts of the world, regardless of their development. The contemporary economic development

of the world in the first decades of the 21st century led to ever greater pressure on natural resources. This process did not bypass the protected natural areas and the local communities that traditionally use natural resources in their daily life. The question of the sustainability of the current economic development in the further future is one of those that greatly burdens modern civilization. Today's dominant paradigm of the market economy is based on the encouragement of individuals and local communities towards entrepreneurial activities. In such circumstances are local communities whose existence traditionally depend on local natural resources under legal protection.

The problem of conflict between local communities and the policy of nature protection has been present for a long time, but only in the last decades has it begun to receive attention in the scientific literature. At the same time, scientists have developed different models that should help mitigate and even resolve these conflicts in the foreseeable future. Most of these models are based on the concept of participation of the local community or interest groups (stakeholders) within a local community that are more or less affected by the implementation of the nature protection policy.

In this paper, the issue of the possibility of involving the local community in the implementation of the nature protection policy in the Lower Neretva Delta is analysed. In that part of Croatia (Fig. 1), the animosity of certain stakeholders towards the nature protection policy, and especially towards the upgrading of the current protection policy through the establishment of a nature park, has been expressed for a long time. The authors of this paper researched the possibility of applying a participatory model of nature resource management as one of the answers to the conflict.

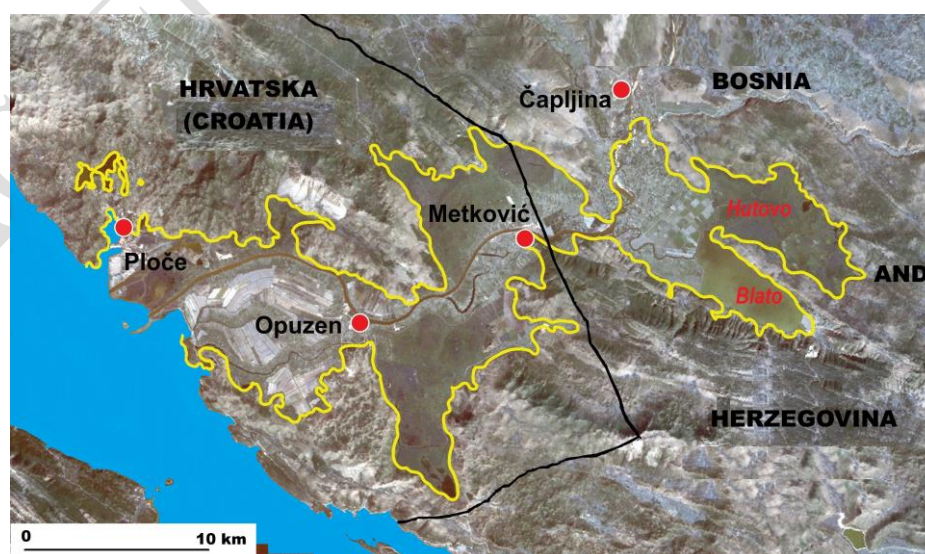


Fig. 1. State border (black line) almost completely coincides with the natural division of the Neretva delta (yellow line) into the Lower (in Croatia) and the Upper part (in Bosnia and Herzegovina).

On the other hand, in the Upper Neretva Delta, within the borders of neighbouring Bosnia and Herzegovina, the legal protection of nature was raised to a higher level during the 1990s with the establishing of the *Hutovo Blato* Nature Park. However, the higher institutional level of protection did not solve the problems of conflict with local stakeholders regarding the use of natural resources and the consistent implementation of the protection policy. The experiences from protected natural areas in the Hutovo Blato have been compared with those from the Lower Delta.

OVERVIEW OF SCIENTIFIC RESEARCH

Participatory management of natural resources has recently become an increasingly popular topic in scientific works that deal with protected natural areas, where it is understood in different conceptual forms.

Contemporary concepts of participatory management of natural resources emphasize the importance of research and participatory learning through experience. Such an approach is the basis of participatory planning and monitoring of the implementation of the nature protection policy, and it takes place in three phases. In the first phase of planning, it is necessary to set goals, develop approaches for achieving them, and determine a plan for participatory monitoring and evaluation. Then come the second phase of analysis of achieved success, upcoming challenges and newly discovered conclusions. Finally, there is a re-planning phase based on recommendations for further process improvement (GERMAN, 2006).

In recent times, the importance of integrated management of natural resources has been emphasized more and more. Such an approach also has a separate dimension of interaction between different stakeholders and the natural environment. It underlines the need to understand the decision-making process on how to use local natural resources (BAGINE *et al.*, 2010). Some researchers warn of the need for detailed planning with the aim of finding a clear holistic approach in the integrated management of natural resources. To evaluate the impact of an integrated approach, they single out four important dimensions of that process: finding feasible spatial and temporal boundaries, participation of stakeholders in the impact assessment process, connecting research results with development impact, and selection of success criteria (GOTTRET & WHITE, 2003). From this key role of stakeholders emerged the concept that gives the local community a special role in the management of natural resources. Such an approach is also used to correct mistakes in cases where legislators and governing structures have excluded local communities from the natural resource management process (WASONGA *et al.*,

2010). The very role of politics and governing structures in the management of natural resources has also been researched in the scientific literature. Most researchers emphasize the complexity, dynamism, and sometimes non-transparency of nature protection policy in many countries. Because of this, it is often necessary to achieve results in nature protection through discussions, negotiations and compromises with the local community (NYARIKI *et al.*, 2010). Scientists can provide special assistance to the authorities and the local community in the implementation of nature protection policy. Scientific research itself is the basis for understanding the problems and conflicts arising from the implementation of nature protection policy. With the aim of overcoming these problems and conflicts, scientists in various parts of the world have developed different innovative concepts of nature resource management. They are based on the inclusion of stakeholders from the local community in all phases of nature protection policy implementation (MUGABE *et al.*, 2010).

The integrated approach itself is actually a concept that helps to solve complex socio-ecological problems. Integration is a desirable process that can make all the results of scientific research more useful and relevant for a larger number of stakeholders and involved institutions. However, to be truly useful and meaningful, an integrated approach must be well defined. On the other hand, this type of approach must be flexible, and some of its domains should be applied when it is relevant and adapted to the already existing context and social-ecological system (TENGBERG & VALENCIA, 2017). It is also important to keep in mind that models need to be evaluated and upgraded over time with the aim of improving the system and achieving broader development changes (DOUTHWAITE *et al.*, 2004).

Scientists have a significant role in shaping different models of participatory management of natural resources, as well as in all other phases of the implementation of nature protection policy. At the same time, it is important to underline that the participation of stakeholders may and should be carried out during scientific research as well. In this way, it is possible to find relevant solutions to problems that arise during the implementation of nature protection policy (ASHBY, 2003). In addition, the scientific research for the purposes of integrated management of natural resources should contribute to the understanding of three large systems: the ecosystem, the socio-economic system and the political-institutional system (HENDERSON, 2005).

At the same time, there are many critical reviews of the existing practice of research for the needs of nature resource management. The traditionally weak strategic orientation of research is especially singled out, as well as the feeling of insecurity of certain stakeholders, especially

local farmers, regarding their role in research (PROBST *et al.*, 2003). Experiences from various parts of the world show that the involvement of local farmers in the process of nature protection is a long-term process during which numerous obstacles appear. Finding appropriate solutions therefore requires good communication between competent institutions, scientists and local farmers. Although it is a process that often requires a long time, its benefits are crucial for the establishment of a sustainable system of nature protection and a constructive attitude of farmers towards natural resources (SNAPP & HEONG, 2003). A large number of researches emphasize the need for innovative concepts and models in solving specific problems that arise in the process of nature resource management. This is exactly what many researchers see as the strength of the integrated approach (CULLEN *et al.*, 2014).

Although there is no solidly structured understanding of the participatory model in scientific works, most researchers focus on five aspects: understanding the short-term and long-term goals of the local population as well as their visions of future development, defining the techniques that can be applied in achieving these goals and visions, developing an approach that enables scientists to have better access to local stakeholders and their participation in the implementation of nature protection policy, the application of innovations that enable agreements and cooperation in the process of implementation of protection, and a creative approach in resolving the problem of agricultural land use in order to ensure the existence of the local population and implementation of nature protection policy (ROCHELEAU, 2003).

CURRENT STATE OF THE NATURE PROTECTION POLICY IN THE NERETVA DELTA

Although the two parts of the Neretva delta form a unique ecosystem, in terms of the current nature protection policy there are considerable differences that are determined by socio-geographic features (primarily population and economic development trends) and the political framework. In terms of the level of institutional protection, Bosnia and Herzegovina is significantly further ahead than Croatia, since there is the *Hutovo Blato* Nature Park (established in 1995). Thanks to the authorities of the Nature Park, bird hunting was soon banned, and the entire area was also put in the lists of wetlands of international significance (BUKVIĆ & GLAMUZINA, 2020). On the other hand, the institutional protection of nature in the part of the delta within the borders of Croatia began in 1965, when two special reserves were declared for the protection of ornithofauna. The conservation policy in the Lower Delta continued in the following decades and today there are six special reserves (five ornithological

and one ornithological-ichthyological) and one forest locality that is protected as an important landscape. The very implementation of the nature protection policy is within the scope of the Public Institution for the Management of Protected Nature Areas of the Dubrovnik-Neretva County. The institution was founded in December 2004 with its seat in Dubrovnik, and today as many as 34 protected localities in the county are under its authority.

Institutional frameworks are not the sole difference between the Upper and the Lower Delta: the Lower Delta is characterized by a significantly higher number of inhabitants, the bigger and numerous settlements, as well as a higher level of economic activity. However, the similarities between the two areas are noticeable from the point of view of the processes that have affected them from the beginning of the 21st century: depopulation, agricultural decline and economic stagnation in general.

Why involve the local community in the implementation of the nature protection policy in the Neretva Delta? It is possible to single out two strong arguments that would justify a positive answer to that question. The first stems from the need to resolve internal conflicts that take place within protected areas. These are conflicts between certain groups of local residents who feel affected by the nature protection policy and the institutions responsible for implementing that policy. The practice of poaching and illegal fishing within protected areas has not yet died out, just like the individual interventions of draining peripheral parts of swamps in order to obtain parcels of arable land. Illegal construction of residential and/or commercial buildings in the peripheral parts of protected areas is also widespread. Furthermore, the arsoning of the wetland reeds, dumping waste, and the inappropriate and excessive use of chemicals in agriculture have particularly destructive consequences. The fact is that so far these problems have not been solved satisfactorily.

Another reason for involving the local community in nature protection policy is the need to fight against negative external influences on protected nature. At this moment, the external influences are the most visible in the Upper Delta due to the occasional negative effects of the nearby hydroelectric power plant. Periodic retention and release of water from reservoirs has a negative impact on the local wetlands. This negative impact is additionally felt by the population living in the areas close to the wetlands and the Neretva riverflow, primarily in the Lower Delta.

Since the Neretva Delta represents a unique ecosystem, the need for cooperation, in this case cross-border, is imposed by itself. This is especially the case when it comes to the protection of waters just as fishes and birds since the effectiveness of partial protection is questionable.

At the moment, there is collaboration between scientists studying the Delta from the Bosnian and Croatian sides of the border. The scientific cooperation can be expanded even more by including scientists of various profiles who are currently less represented in research. Cooperation is also possible in the segment of tourism development, which is particularly important for the local population. In the circumstances of industrial collapse and agricultural decline, tourism turns to be a new development possibility. The current dynamics of tourism in the Croatian coast and the western part of Herzegovina provides good preconditions for a development of sustainable tourism in the protected areas of the Delta.

A PARTICIPATORY MODEL OF NATURE PROTECTION POLICY IMPLEMENTATION IN THE NERETVA DELTA

The proposed model for the implementation of the nature protection policy in the Neretva Delta is based on experiences from other countries, while taking into account local circumstances. It also starts from respecting the legal framework of nature protection on the territory of two neighbouring countries, as well as the institutions authorized to implement the protection policy. On the other hand, this model also takes into account the fact that current policy of nature protection is not efficient enough and does not reach the standards prescribed by the corresponding legal documents. From this point of view arises the main goal of the participatory model, which is an effective nature protection.

Since the participatory model puts the local community in the foreground as an important participant in the process of nature protection, it is important to define the stakeholders inside the local community. Stakeholders are understood as groups within the local population that are affected by the implementation of the nature protection policy, either in a negative or positive sense (GLAMUZINA, 2018). Previous research shows that in the area of the Lower Delta, there are three stakeholders: farmers, the construction sector and the environmentalists. The stakeholder group of farmers consists of individuals and families who depend of agriculture as the main and/or only source of income, as well as those for whom agriculture is an additional source of income. This is a group that openly opposes possible restrictions on the traditional farming as well as those on hunting and fishing. The construction sector consists of construction entrepreneurs, real estate agents, as well as that part of the local population that is concerned about possible restrictions on current construction regulations. On the other hand, environmentalists have a positive attitude towards nature conservation policy and demand for a greater role of institutions in more consistent implementation of the laws on the nature

protection (GLAMUZINA, 2018). In a participatory model all the stakeholders would be represented in the representative council, a non-institutional body where they could express their views, concerns and problems resulting from the implementation of the nature protection policy (Fig. 2). Institutions responsible for nature protection would also have their representatives in the same council: in the case of the Lower Delta, it is a public institution at the regional (county) level. The representative council itself would be of an open type and, in addition to stakeholders and institutions, its meetings could also be attended by individuals or groups who are also interested in the protection of local nature. The attitudes and problems of the stakeholders, the questions and the discussion itself can serve the institution in charge to a considerable extent in the implementation of the nature protection policy. Understanding the attitudes of stakeholders and the segments of their lives that are affected by nature protection policy can greatly help in finding appropriate solutions. In this way, in addition to the institutional implementation of the protection policy, participatory protection could be organized in which the local stakeholders would be involved.

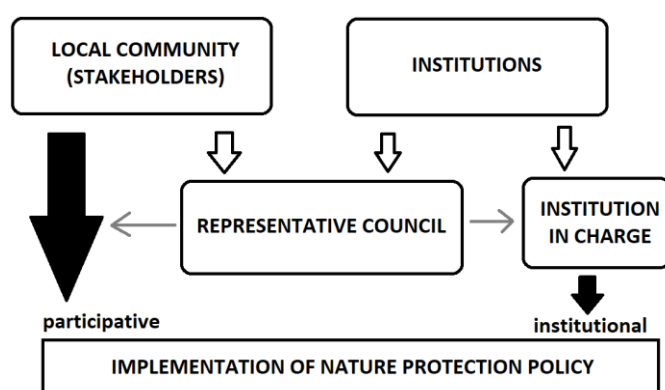


Fig. 2. Draft proposal of a participatory nature protection model.

The participatory model itself, in various forms, has been analysed in many scientific papers, and it is precisely the help of scientists that is necessary for the elaboration of the concept that could be applied in the Neretva Delta. Since the participatory model is based on the assumption of evolution and changeability, i.e. upgrading over time, continuous scientific research can greatly help the competent institutions and the local community. In addition to the research of protected nature, it is also important to analyse the attitudes of stakeholders and the problems that burden the local community. In doing so, scientists could assume the role of a mediator within the participatory model, just like educators (about alternative types of agriculture and sustainable tourism, traditional construction, etc.).

The same model can be applied in the Upper Delta, where five stakeholders are determined (Fig. 3), two of which have a positive attitude towards nature protection (these are the Nature

Park institution and the tourism sector). On the opposite side are three stakeholders who generally have a negative attitude: the hydropower sector, hunters and fishermen and the part of the local population that depend on agriculture and hunting and fishing as additional activities (BUKVIĆ & GLAMUZINA, 2020). The difference between the Croatian and Bosnian parts of the Delta is that the implementation of the nature protection policy on the territory of Bosnia and Herzegovina is handled by the institution of the Nature Park, which is based within the protected natural area. However, regardless of that, almost identical problems exist in that area as well. Therefore, it can be concluded that a paradigm shift is needed in such a way that, beside the natural resources, people (i.e. the local community) should be included in the current model of nature protection.

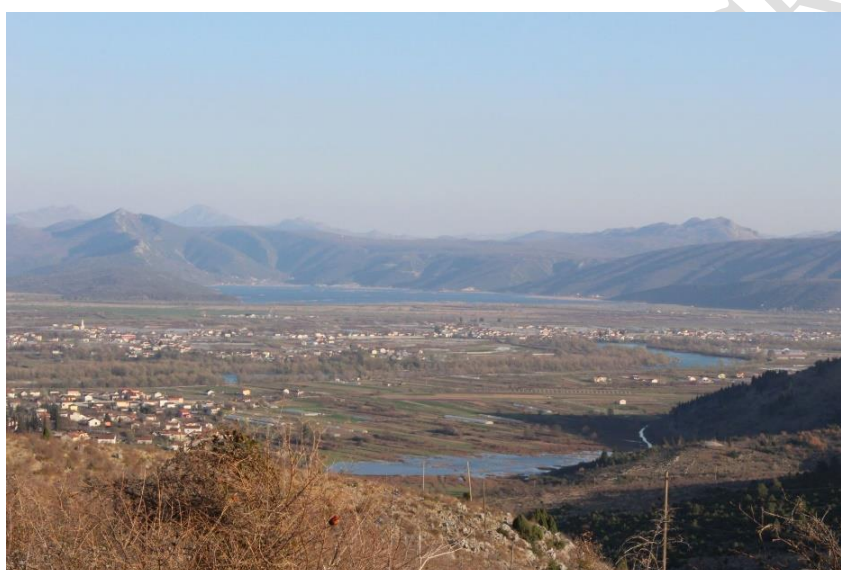


Fig. 3. Stakeholders in the Upper Neretva Delta live in settlements located along the edge of the Nature Park.

What are the limitations of the proposed participatory model? First of all, the participatory model starts from the consensus of all stakeholders that the implementation of regulations on nature protection in the legally protected areas of the Lower Delta is unquestionable. Therefore, the stakeholders should be in agreement with the legal frame and behave in accordance with it instead of adopting the participatory model as a kind of solution that allows the arbitrariness of individuals and certain interest groups. The participatory model will not enable the implementation of the views and attitudes of individual stakeholders that are in conflict with legal protection.

It is important to underline that the representative council does not represent any parallel decision-making body or decision-making body that is superior to the institution in charge. Therefore, it is necessary to eliminate such points of view from the very beginning, especially

because of the possible aspirations of individuals to manipulate certain stakeholders and the entire process of nature protection.

The participatory model implies greater interaction between institutions and the local community. It also implies a greater engagement of competent institutions, from local and regional to the national level, in this interaction through various educational programs for the local community. In addition to education about the meaning and importance of environmental conservation, it is necessary to instruct individuals in the basics of alternative types of agriculture (organic/bio/eco agriculture, permaculture, etc.) as well as the ways and possibilities of tourism development with an emphasis on selective types of tourism (ecotourism, birdwatching, cycle tourism, etc.). The locals should also be instructed about the need to preserve certain traditional elements of local culture (traditional construction, cultural-historical monuments, traditional way of life).

It should not be expected that the introduction of a participatory model will solve all problems by itself and miraculously result in satisfactory protection of natural resources. However, the fact is that the current practice has not resulted with adequate level of protection and that it is necessary to try different approaches.

On the other hand, we should not ignore the arguments against the implementation of the participatory model. Resistance to the introduction of such a model, as well as to the change of the entire paradigm of nature protection, can be expected from national and regional institutions in charge of the implementation of nature protection policy. Although the application of the participatory model does not mean any modification of the current legal regulations on protected nature areas, the fact is that it is perceived exactly that way by the institutions in charge. The reason for such a point of view is in the shift of power that would be introduced by the participatory model: instead of the classic concept of top-down command-and-control system, an opposite way of distribution of power would be applied. The local community would be given the right to get involved in matters of nature protection and the use of natural resources. There is another argument against the participatory model, and it stems from the danger of misunderstanding its very goal among members of the local community. This model was designed for a better and more efficient implementation of the nature protection policy, and not as some kind of partial or gradual abolition of the nature protection policy. A special problem can arise if individuals or certain groups within the local community use the participatory model to manipulate stakeholders and achieve their goals that are in conflict with nature protection policy. It is a very realistic outcome that should not be ignored.

Since the participatory model implies a shift of focus from a primarily office-based, inventory-planning form of management to a local-participatory one, it also requires greater involvement of institutions in charge. Such a transition from a static, standardized, linear model of nature protection policy implementation to a dynamic, diversified, inclusive and complex system is in contrast to the dominantly reductionist model that is currently being applied. Instead of a stable and predictable way of management, a model with completely opposite features based on a constructivist approach would be introduced. For this reason, it remains questionable to what extent the institutions in charge would be willing to actually, and not just formally, implement it in the protected area. The basis for designing an appropriate system of implementation and supervision would be based on continuous scientific research, so it would also be necessary to achieve cooperation with scientists who deal with this issue. By applying the results of the research, the current tightly structured model, which rests on pre-determined prescribed settings, would be transformed into an evolutionary model.

Abandoning the current rigorous system of management and supervision of nature protection, which is not implemented in reality, puts two tasks to stakeholders from the local community. The first arises from the willingness of involvement in finding an appropriate evolutionary participatory model. The second lies in the need for a self-critical perception of one's relationship to protected nature. To what extent are the relevant stakeholders really interested in accepting these tasks? Although from a conservationist-activist and scientific-environmentalist point of view, a positive response is initially given, experiences from various parts of the world show that it is a continuous and long-term process.

GOALS OF THE PARTICIPATIVE MODEL

Why change the current nature protection policy at all and introduce new models? The answer to that question can be found in the various incidents that continue to occur in the area of the Nature Park in the Upper Delta, as well as in the protected areas in the Lower Delta. By far the worst incidents are the occasional arsoning of wetland reeds, which have a disastrous effect on the flora and fauna (Fig. 4). Furthermore, certain agricultural plantations and buildings (such as greenhouses) located on the edge of the wetlands are often destroyed in these fires. Even worse, the fires, supported by the wind, spread to the surrounding hilly areas and engulf the local coniferous forest and maquis, and even threatens the houses in certain settlements. Increased investments in the fire service, as well as the engagement of firefighting aircrafts, contributed to more effective fire protection, but ultimately led to an increase in costs in the fight against

fire. In addition, such a measure, just like the installation of surveillance cameras on the surrounding hills, did not lead to the extinction of the practice of causing fires at all. In the end, the individuals who intentionally cause fires usually remain undetected.



Fig. 4. Fires in the reeds are most often caused by humans, and occur in both parts of the delta.

The current nature protection model has not solved the problem of poaching within protected areas that individuals continue to practice. Although it is a practice that has above all marginal economic significance, the poaching and illegal fishing have been maintained as a kind of recreation and an expression of tendency for preserving the traditional way of life. It should not be ignored that some individuals practice them as a certain form of protest against nature protection policy.

An additional problem comes as a result of individual construction and melioration operations, such as filling with soil the peripheral parts of wetlands in order to obtain agricultural parcels and/or illegally build various facilities. Such a practice is widespread in the settlements that are located along the edge of certain wetland reserves.

The introduction of a participatory model could begin the process of dealing with the aforementioned problems, which have been systematically and long-term silenced. This confrontation would not be hostile towards the local community, but a constructive one. A designed approach would be applied in achieving effective nature protection based on the mutual cooperation of institutions in charge and the local community, with the help of relevant scientists.

TOURISM IN PROTECTED AREAS: A POTENTIAL OR A CONTRADICTION?

Tourism began to develop significantly in the protected wetlands of the Neretva Delta at the

end of the 20th century, with a rising tendency until today. Tourism development (which is often referred to as *ecotourism*) began spontaneously without prior planning and until today is carried out exclusively by the initiative of individual restaurateurs (Fig. 5). It also takes place in an atmosphere of reluctance on the part of state institutions to effectively implement regulations on nature protection, which is a consequence of their shying away from conflict with the local population. In such circumstances, the question of the future of tourist development in the protected areas of Neretva Delta is left without an adequate answer(s).



Fig. 5. Ecotourism is developing spontaneously, especially in the Lower Neretva Delta.

The answer to that question is not simple and unequivocal, and the tourism policy at the national level should not be neglected either. It is based on encouraging a constant increase in the number of tourists and income generated by tourism. We should also keep in mind the broader picture, which is determined by the fact that tourism management in the conditions of a market economy is problematic for certain sustainable forms of tourism (such as ecotourism). Contemporary capitalism, together with tourism as one of the most profitable activities, is based on the policy of constant growth. This growth, when talking about tourism, is exclusively measured by the number of tourist arrivals and respective income. Closely related to this approach is a narrow economic point of view, which understands protected nature as a *product* on the basis of which it is necessary to build an appropriate (tourism) infrastructure with the aim of *branding* it and placing it as best as possible on the increasingly competitive tourism market.

On the other hand, the fact is that the need for sustainable and "green" growth is increasingly being emphasized at the global, national, regional and local levels. However, there is still no answer to the question of how this can be achieved. This is a problem that not only burdens

tourism in general (and especially mass tourism as its main development axis), but also certain types of selective tourism. Among them is also ecotourism, which is often advocated in activist, scientific, and even political circles as a desirable sustainable type of tourism in the protected natural areas of the Neretva Delta. Ecotourism is especially advocated by conservationists and environmentalists in the hope that the economic benefit will encourage the local population to actively participate in the implementation of nature protection policy. It should not be overlooked that, in addition to income, ecotourism also has an important intangible dimension of raising the level of ecological awareness of the local population and visitors (KOHL, 2008; DUBIN, 2008).

Ecotourism based on the strong role of the local community would certainly be preferable because it involves the local population, i.e. individual stakeholders, in the process of control and implementation of the nature protection policy. At the same time, fiscal benefits for the local population would also be realised. With the development of ecotourism, indigenous knowledge about natural resources would also be activated in the process of environmental protection. The question of the need to involve the local community in the development of sustainable tourism has already been answered positively at the global level: the only question that remains is how the local population should be involved in that process (STRONZA, 2008). At the same time, we should not ignore research that shows that, due to the very sustainability of tourism, the effects of ecotourism should not be measured by data on income and/or the number of visitors. Ecotourism development programs should be designed with the aim of increasing the level of ecotourism usefulness, building subjective norms and an appropriate attitude towards the environment. Ultimately, ecotourism can and should become part of the identity of the local population (LEE & JAN, 2018).

Experiences from certain parts of the world show that long-term support of the local community for nature conservation is difficult to win, even when there is an obvious economic benefit. The problem lies in the fact that ecotourism cannot solve the intertwined ecological, social and economic problems that burden the local population (DE VASCONCELLOS PÊGAS & STRONZA, 2008). It is also questionable how much income ecotourism can generate and whether it can take place all year round. Furthermore, the advocacy of a stronger development of ecotourism, which could replace agriculture as an economic activity, is above all questionable. Experiences from certain parts of the world show that ecotourism can increase income for the local population, but it can also increase inequalities between households within protected natural areas (MA *et al.*, 2019). Ultimately, this results in the deepening of conflicts

within the local community. Instead of encouraging the abandonment of agriculture and directing the local population exclusively towards tourism, the possibility of connecting tourism and organic (ecological, biological) agriculture should be considered. This would enable greater economic stability for the local population with simultaneously better environmental protection and would help maintain the indigenous natural environment in the conditions of the expansion of the urban landscape (ROBBINS *et al.*, 2019).

However, questioning the role of ecotourism should not be understood as discouraging its potential development, but rather as underlying the need for a realistic assessment of its strengths and weaknesses. In the current circumstances of tourism development in Croatia, it certainly stands out as the best solution for the Neretva Delta.

CONCLUSION

Participatory model of protection of natural resources represents one of the possible models that can be applied in the Lower Neretva Delta as a response to frequent incident situations in protected areas. The current level of protection, which is primarily of a declarative nature, does not lead to the implementation of valid regulations on protected natural areas. In such circumstances, the flora and fauna, as well as the entire landscape, are most exposed to the negative influence of man. The possible application of the participatory model should be well designed and elaborated in order to eliminate the possibility of its wrong understanding and interpretation at the very beginning. In addition to stakeholders from the local community, it is important to introduce a category of scientific research that would monitor the situation on the ground and make proposals on the necessary actions.

Experiences from the Upper Neretva Delta, within the borders of neighbouring Bosnia and Herzegovina, show that the formal status of a protected natural area does not mean an automatic solution to all problems arising from the attitude of the local community to the official protection policy. Therefore, the participatory model would be applicable in the area of the *Hutovo Blato* Nature Park, and the further implementation of the nature protection policy could and should certainly take on the dimension of cross-border cooperation.

By involving individual stakeholders and the wider local community, as well as scientists, in the implementation of the nature protection policy, it would be much easier to identify problems that appear in areas under protection. This would also make it easier and timely to react to them. And finally, it is necessary to take into account that the participatory model will not by itself solve the accumulated problems that burden the local population, as well as the

protected areas. However, its evolutionary dimension, adaptability and inclusiveness represent extremely strong points compared to the current inefficient protection model.

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