

## RESEARCH ARTICLE

# Conflicts in Land Use and Management

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### ABSTRACT

As land is limited, conflicts between land uses, and, consequently, conflicts between land users about land use inevitably arise. The objective of this paper is to provide a broad, cross-sectional overview of land use conflicts as perceived by different actors and to explore the actors' experiences with these conflicts. We conducted 45 face-to-face interviews with key land use actors in the Republic of North Macedonia. Then we applied a qualitative text analysis or identification of keywords to identify the most relevant conflicts across all land use sectors (agriculture, forestry, nature protection, etc.) and their impacts on local actors' daily experiences. The results show that actors are aware of many diverse land use conflicts, most frequently regarding land uses for environmental/species conservation, forestry, and agriculture. Thus, land use conflicts play an important and mostly negative role in the experiences of land use actors. These findings fill current gaps in the literature on land use conflicts regarding the types of conflicts of which actors are aware and the consequences of these conflicts. The results also underline the relevance of addressing conflicts in land use planning and governance, the need for appropriate conflict management, and the necessity of providing local actors with sufficient resources to deal with land use conflicts.

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## 1. Introduction

Land as one of the most important resources is the subject of interest of various users. The needs and requirements of the users are different: as an ecosystem for agricultural production and other primary activities, space for the construction and development of human settlements, for the use of natural resources and other economic activities. Users have different goals, priorities and interests that are often conflicting. The inappropriate and irrational use of land by different users is a possibility for producing numerous conflicts and is often the cause of various forms of land degradation. Therefore, to ensure sustainable development and rational use of this important

resource, conflict management is imposed as an integral part of land planning, use, management and protection.

The focus of the subject research is conflicts related to land use and land resources. The complexity of the land as an integral structure that unites the soil, relief, hydrological and mineral resources, the living world and climatic characteristics, condition the complexity and diversity of the conflicts that are present in the use of the land.

## 2. Theoretical Background

Conflicts as a social phenomenon are not only related to politics and political issues. The occurrence of conflicts and conflict situations is present in all segments of social

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development, as a result of different attitudes, representations, perceptions and interests. The broadest definition of conflicts comes from Walker and Daniels (1997), who provide a list of terms to define the concept of conflict: struggle, competition, tension, incompatibility, communication, strategic behavior and interaction. Conflicts are most often classified according to intensity. Keltner and Robinson (1993) offers a wide range of degrees of conflict intensity, from mild differences to litigation and physical confrontation.

There are many conflict theories in the literature. The earliest political theorists, from Thucydides and Sun Tsu to Machiavelli and von Clausewitz, concentrated on just one element: force. The use of force is a central element of macro conflict theory. Proponents of this theory agree that power takes many different forms: economic, political, war, and even cultural (Cunningham, 1998, p. 9). A common assumption of macro or classical theories of conflict is that the root of conflict lies in competition between groups.

The opposite of the macro theory is the behaviourist or micro theory which is based on the observation of individuals in their environment.

Another element that defines conflicts is the material aspect. According to O'Connell (1989), "With the advent of agriculture, and later politics, the conflict became part of the human experience". Human Needs Theory is a generic or holistic theory of human behaviour. It is based on the hypothesis of basic human needs that need to be met, to ensure stable societies (Cunningham, 1998, p. 20). People in conflict situations struggle within their institutional environments at all social levels to satisfy their primal and universal needs, such as: security, identity, recognition and development. They constantly strive to control their environment. Since the demands for basic human needs always exceed the supply, conflicts are the result of people's failure to meet their needs. The role of conflict management is to enable the actors to understand that everyone has legitimate needs that must be met to resolve the conflict (Cunningham, 1998, p. 22) which is necessary to ensure the satisfaction of their needs.

Finally, conflict management theories attempt to produce a synthesis between consensus and conflict theories. Turtiainen (1996, p. 21), advocates a potentially positive role for conflicts in social development, because they keep public authorities on their toes, raise awareness of problems, help define them, promote checks and balances in the adoption of decisions, motivate and encourage solutions to problems, raise morale and cohesion, encourage creativity and allow individual interests to be heard.

### 3. Methodology

To detect conflicts in land use, the qualitative method was applied in the research - face-to-face interviews with

representatives of the stakeholders from which primary data were obtained that confirm or deny what was previously ascertained based on the analysis of secondary data. The interview was conducted based on a previously prepared questionnaire. It is formulated as semi-structured with a total of 12 questions, of which 4 direct answers are given, and on 8 questions the respondent gives his opinion. The issues are grouped into 4 groups, namely: issues of a socioeconomic nature, issues related to conflicts during land use planning; questions about ways of managing conflict situations, questions about overcoming conflicts, that is, recommendations for future work. The conceptualization of the questions was influenced by the determination to make a real selection of respondents who, based on their competencies and expertise, will make a significant contribution to the qualitative research. A total of 45 interviews were conducted with representatives of institutions responsible for the management, use, planning and protection of natural resources, that is:

- Ministry of Agriculture, Forestry and Water Management,
- Ministry of Environment and Spatial Planning,
- Ministry of Economy,
- Ministry of Local Self-Government,
- Ministry of Transport and Communications,
- Hans Em Faculty of Forest Science, Landscape Architecture and Ecoengineering,
- Faculty for agriculture,
- Spatial planning agency
- The City of Skopje,
- ELS Sopishte, Ilinden, Petrovec, Zelenikovo,
- State Forestry and Hunting Inspectorate,
- State Environmental Inspectorate,
- PE National Forests,
- PE Macedonian Pastures,
- PE Parks and greenery,
- PUK Water and sewerage
- PE MSH, Karadzica Branch,
- HS Skopsko Pole,
- PU PNP Jasen,
- NGO Ursus Speleo,
- NGO Peoni.

1-4 representatives of each institution were interviewed, depending on the structure of the institutions (the number of departments and departments relevant to the research). All respondents are professional and competent in their scope of competencies and most of them hold high and managerial positions in their respective institutions. The interviews were conducted in the period March - May 2012, in the working environment of the respondents. After completing the

interviews, the material was averaged and analyzed by coding keywords.

## 4. Results and Discussion

The topics of the interviews conducted with the representatives of the institutions responsible for land use and management, i.e. their answers to the questions, can be grouped into several groups:

### 4.1. Socioeconomic Issues

The first group of questions refers to the structure of the respondents: their position in the institutions, work experience and communication and cooperation with other institutions.

Most of the respondents are state, i.e. public servants, employed in administrative bodies, public enterprises and LGUs, in management positions and with work experience in the current position of 3-5 years, and with a total work experience in the same institution of 5-15 and more years. The institutions with which the respondents most often cooperate are the ministries, PE National Forests, PE Pastures, ELS, the City of Skopje, the State Inspectorate and NGOs. Most of the respondents stated that the cooperation with the institutions is not satisfactory. They are either partially satisfied with the cooperation with all institutions in general or indicate specific satisfaction or dissatisfaction with individual institutions. Thus, according to the answers of the representatives of the Ministry of Environment and Spatial Planning, the cooperation with the Ministry of Transport and Communications is “unsatisfactory, because there is no adequate treatment of the activity of spatial planning, even though it is the basis for the preparation of urban plans”. The representative of the Ministry of Local Self-Government expressed total dissatisfaction with the cooperation with the ministries and municipalities, due to, as he stated, “insufficient communication, information and coordination in conducting compatible policies”.

### 4.2. Issues Related to Conflicts

The second group of questions refers to the conflicts, that is, the problems faced by the respondents in the course of work, the nature of the problems, the reasons for their occurrence and the time frame. The problems are different, but most often they arise between the institutions that have competencies that complement each other, intertwine, or are opposed. Thus, respondents working in institutions responsible for agricultural and forest land cited the transformation of agricultural land and the issuance of concessions as frequent and serious conflicts. Also, when issuing concessions for the exploitation of mineral resources, it happens that the subject of the concession is land for which approval was previously issued by another institution or an agreement was concluded for the lease of land or the use of pasture, or it is located in a protected area. Allowing a concession for one raw material sometimes has detrimental effects on another. Thus, when issuing a concession for the

exploitation of mineral resources on forest land, the forest roads are exploited, that is, the roads are destroyed without compensation.

The problems with uncontrolled conversion of fertile agricultural land into construction land, which often has the character of usurpation, is the most serious and current conflict, according to the statements of representatives of the Faculty of Agriculture. At the same time, the determination of the Spatial Plan of the Republic of Macedonia (which also has the meaning of law) is ignored, which strictly advocates the protection of productive land of categories 1-4.

Some of the respondents whose competencies are in the field of forestry indicated the sectoral approach, especially during the preparation and adoption of forest management plans, as a serious source of conflicts. Precisely because of this approach, as well as due to the absence of legal provisions, there is no planning of other public functions of forests for tourism, recreation and other purposes that do not conflict with the use and protection of forests. According to the statement of the representative of PE NF Karadžica, “the exclusion of the public in the procedure of adoption of the Business Plans also leads to the impossibility of intervention on the one hand and the adoption of bad plans on the other hand”.

In protected areas, the problems seem to be the most serious, or at least the most complicated. There, the responsibilities of the environmental inspection, forests, and LGUs are intertwined, and according to the law there is an entity for managing the protected areas which, according to the Law on Nature and the Proclamation Act, integrally manages the entire territory of the protected area. “The overlapping of powers between the competent institutions and the lack of regulation are the biggest problems in the operation”, according to the words of the representative of the Environmental Administration at the Ministry of Environment. From the responses of the respondents, it can be concluded that the approach is mostly sectoral, and sometimes beyond the own powers provided by the law. Illegal activities are present in the protected areas, starting from the construction of buildings without respecting the measures for integral protection, through the exploitation of forests in a way that is not suitable for a protected area, to the exploitation of mineral resources. The problems are all the more serious because part of these activities are foreseen by appropriate planning documents to which the Ministry of Environment and Spatial Planning is obliged to give its opinions, i.e. consents, for the positive outcome of which part of the administration is often exposed to political pressures from high level. Part of the respondents see the source of such problems in the way of declaring the protected areas, which according to them is often unprofessional and non-transparent, with which the representatives of the Ministry of Forestry and Hunting agreed. If the boundaries of the future protected area are not defined as a result of a comprehensive analysis and

research, it often happens that they include natural resources that do not have protection values and that have economic value, which, by declaring the area as protected, cannot be used, that is, subject to rigorous protection measures, which are often the reason for unprofitability of exploitation.

#### **4.3. Issues Related to Conflict Resolution, that is, Conflict Management**

The third group of questions refers to problem solving, the method of solving and the main actors in conflict management. A very small part of the respondents answered that they manage to deal with the problems, that is, to manage them in cooperation with representatives of other involved institutions, so that the problems do not get a bigger dimension. The majority of the respondents answered that the problems are difficult to solve, that there is usually no dialogue from the other side and it often happens that they rise to the highest level, while not infrequently there are also "pressures to solve", as stated by the representative of PE Pastures.

#### **4.4. Recommendations for Overcoming the Problems**

The last group of questions asked the respondents to give their suggestions, solutions and recommendations for overcoming the problems. The representatives of the institutions responsible for water management emphasized the institutional reorganization, because they believe that within their competencies, the main cause of the problems is precisely the fragmentation of competencies in many institutions that are not coordinated among themselves and do not cooperate in the direction of an integral solution to the problems. Thus, the representative of the Water Management Administration proposed "integrating all the responsibilities related to water in one institution, including water management and energy; establishing a special inspectorate for water, or a special department within the State Inspectorate".

The representatives of the institutions responsible for forests and pastures also proposed a more serious approach in the procedures for the exploitation of mineral resources to ensure a more equal treatment of resources by introducing compensation for destroyed resources, degraded areas, use of forest infrastructure and the endangerment of the environment at the expense of exploitation. Due to the seriousness of the conflicts in the field of forestry, some of the interviewees also proposed systemic reforms that imply legal changes, transformation of competent institutions and strengthening of their capacity. Within the support of integral management as a necessary approach, the representative of "JP NS Karadžica" suggested the "unification of all competencies except agriculture (forests, pastures, mineral resources, water and protected areas) in one institution".

The representative of the Water Management Authority stated that "it is particularly important to respect the expert's

word, that is, making decisions with respect for the expert's opinion, which should be a guide in management".

A characteristic of the answers in this group of questions is that a large part of the recommendations was proposed by the majority of respondents. They are the following:

- the necessity of changes in the legal regulation in the direction of simplifying the competencies and their clear definition to avoid overlaps,
- strengthening (where it exists), i.e. introducing an integral approach in planning and management,
- respect for expert opinion at all levels of planning, management and decision-making,
- strengthening the capacity of competent institutions, greater control and responsibility and a higher level of cooperation,
- participatory approach - equal participation of all actors, especially those outside the state institutions,
- political will and support, which is necessary to realize all unlisted recommendations,
- creation, updating and maintenance of the database, and as the next stage creation of a comprehensive electronic cadastre with which all institutions will be connected in a single database.

To involve local people in ecosystem management, the results of scientific analysis must be communicated more effectively and structurally to politicians, planners and managers, and the public. This is done by promoting and supporting local co-management initiatives, learning lessons and methods from experiences, supporting the development of collaborative management policies and fighting for the inclusion of collaborative management principles and practices.

### **5. Conclusion**

Theoretical analyses and specific research unequivocally indicate that conflicts in land use are a very present element in our practice of planning, implementation of plans and land management.

The huge number of theories and scientists and experts dealing with the problem of conflicts only confirms the seriousness of the issue of conflicts and indicates the necessity of its management at all levels.

The conclusions of the conducted interviews confirm that the conflicts in the Skopje region, as the most developed in the Republic of North Macedonia, not only appear in many forms and on a large scale, but already manifest various forms of land degradation, as one of the most serious consequences.

The lack of fertile land for agricultural cultivation is felt, as a result of the intensification of the process of permanent sealing of the land with various constructions.

Hence, the basic priority of the overall development of the region should be to control the processes of degradation and prevent their occurrence, first of all, the phenomena of land sealing.

A necessary tool for the realization of this priority goal is the management of conflicts in land use.

Success in conflict management can only be guaranteed by the integral involvement of conflict management at all levels (national, regional, local) in the planning, implementation and monitoring of land use planning solutions.

## Conflict of Interest

The authors declare that they have no conflict of interest.

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