

Perception of Villagers from Ali Koch and Rastani Towards Forest Management Performed by the PE “Macedonian Forests”

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Background and purpose: This paper describes the perception of the local population from two villages Ali Koch and Rastani regarding the forest management of the Public Enterprise (PE) Macedonian Forests.

Materials and methods: For the purpose of this research a multistage cluster sampling had been applied, where municipalities of Radovis and Veles were randomly selected from all municipalities in the country. These chosen municipalities were divided into areas (settlements), where each settlement represents a different cluster. Settlements were further divided into smaller areas - houses that are located closer or further to the forest. All households near the forests were approached and survey of 93 interviews was done.

Results and conclusion: Results showed that perceptions of the villagers from both villages in the Republic are almost the same. According to the obtained results perception of the local population towards management of the PE Macedonian Forests is not very satisfying, because most of them think that the enterprise activities are mostly focused on harvesting. Results provide information that can be helpful for the managers to improve the management of the enterprise, which can lead towards better perception of the forestry in the Republic.

Keywords: local perception, forest management, PE Macedonian Forests

INTRODUCTION

Through the history different environmental, economical and social factors have been influencing public perception toward forest and forestry. Each of them has been influencing public perception in a different

way, resulting with a permanent change on the public perception through the time. In order to manage forest in accordance with the society needs and to have efficient forest policy and legislation, it's very important to be aware and take into account the public perception of the forest [1].

Effective forest management requires both detailed knowledge of the resources and the involvement of the local forest users, who are often the most knowledgeable about the resources [2].

Commonly cited definitions for the term sustainable forest management generally include or imply the following elements: the continued existence and use of forest to meet human physical, economic, and social needs, the desire to preserve the health of forest ecosystems in perpetuity; and the ethical choice of preserving options for future generations while meeting the needs of the present. The concept of sustainability incorporates the knowledge that forests play a major role in sustaining human health and welfare. They contribute to the long term viability of watersheds, communities and economies. Sustainability depends on citizens and stakeholders adopting stewardship and individual responsibility as tenets by which to live and moving from conflicts to collaboration [3].

Attempts at forest management partnerships between local people and government employees are becoming more and more common. Establishing sustainable forest management schemes which promote the better integration and empowerment of local people requires an improved understanding and assimilation of local users' perceptions and use classifications of the forest [2].

Many local communities, including a significant number of indigenous groups, live in and around forest areas. They are primary users of forest products

and they often create their own, locally adapted and accepted rules for how to use the forest part of what is often referred to as local institutions. Support for increased local access to and control of forest resources for these groups, thus legitimizing their role as responsible forest managers, has proved to be a constructive strategy to achieve sustainable forest management [4].

Accuracy and assessment of public perception for the management of public forest represent one of the basic problems. Public perception, as well the responses of the affected and interested members play an important role in creation and preparation of forest legislation and management plans. Public debates and research can be used as a mean to fulfil these obligations, but often there might be heard only people motivated by strong emotions [5].

Total forest area in Republic of Macedonia is about 906.635 ha or 35% of the total surface of the country, from which 90.1% is state and 9.9% private forests [6].

Considering the fact that country is facing a long transition period with aspiration toward EU entrance, forestry sector have been experiencing many changes.

Until the adaption of the Forest law from 1997 (Official gazette of Republic of Macedonia, no. 47/97) forest management have been performed by 30 independent companies. Nowadays the management of state forests is performed by Public enterprise Macedonian Forests (PEMF) which was established by the decision of the government on 15th December 1997 (Official gazette of Republic of Macedonia, no. 65/97). The enterprise begun to operate on 1st July 1998, as a legal successor of those 30 independent companies organized in one head and 30 branch offices with centralized budget and decision-making [7].

The new organizational structure did not involve new approaches related to forest management, especially involvement of local population. Traditional way of management is still prevailing with high percentage of the revenues coming only from production of fuel wood, neglecting ecological and social aspects of the forests. Perception of the villagers, citizens towards forest management has never been analyzed and this study will be a basis for further and deeper investigations related to this topic.

Thus, the main goal of the paper is to describe the perception of the local population from two villages in the Republic related to the forest management performed by PEMF.

In order to achieve the main goal the study will have the following objectives:

- expose perception of the villagers towards present condition of the forests and forest management;
- determinate villagers' perception of main causes which have negative effects on the forest quality;

- present perception of villagers about illegal activities of the employees in the PEMF;
- providing ideas for improvement of the current situation.

Hence, the main research question in this paper is "Which is the perception of the local population towards forest management of PEMF?"

CONCEPTUAL FRAMEWORK

Forestry is nowadays a knowledge-based industry but this message has still not reached the general public. Modern forest products industry uses the latest technology to grow, manage, harvest and process its renewable resource. Nevertheless, negative perceptions persist about forestry, forest products and the forest products industry [8].

The management of forest resources has always been important to many aspects of human society. The most prominent of these resources in terms of human consumption is wood. It is incredibly versatile, having been used for cooking and/or heating fuel, structural timbers for homes, and as pulp for paper production. Fortunately, as computer technology has improved, so have the means of conveying information to the general public about forest practices. Maps detailing management areas and the practices within can now be quickly and easily created to inform interested or concerned parties. In this way, the general public can be included in the management process to an extent, and a more favourable perception of forest practices can begin to be created [9].

The perceptions of forestry vary widely throughout the world based on social, ecological, and economical influences. In the United States and Europe, the perceptions of forestry are very different. Many of these perceptions are not based on facts but rather what society implies based on the media, personal experiences, or biased information [10].

In the Nordic countries of Europe including Denmark, Finland, Iceland, Norway, and Sweden forestry receives very strong support. The majority of Europeans consider Nordic forestry to be a benchmark for the rest of Europe and rate the natural resource management in the north as more sustainable than any other region in Europe [10].

Central European countries including Germany, Austria, and Switzerland accepts forestry positively. In a study asking central Europeans about what they thought about their forests? The answers were affirming. Perceptions of forestry in Central Europe are generally positive [10].

Eastern Europe consists of many countries that were occupied by the former Soviet Union (Russia, Ukraine Belarus, Lithuania, and Latvia). Since the collapse of

the Soviet Union in the early 1990s, these countries have had an interest restructuring their forests. "While the rest of Europe is steadily progressing towards sustainable forest management, Eastern European countries are facing many challenges in better managing forest products following the restitution of land from the State to their previous owners" [11].

The public opinions of forestry within the countries of Eastern Europe are consistent around sustainable management and providing for a greener future. The greatest problem with these countries is their lack of ability to enforce environmental laws and regulations [11].

The public perceptions of forestry in the United States are generally misinformed. A large majority of the public relies on mainstream media sources for their information on subjects that they are not personally interested or professionally involved in. Many people do not realize that the mainstream media is not always correct, factual, and unbiased. This results in many misconceptions of forestry that are occurring in the United States [12].

METHODOLOGY

The research has been performed in villages Ali Koch and Rastani located at two different municipalities in Republic of Macedonia. Ali Koch by its geographical coordinates of 41°40'43.77" North and 22° 25' 44.46" East is situated in Radovis, while Rastani is located in Veles municipality with geographical coordinates of 41°43'25.44" North and 21°42'45.17" East.

For the purpose of this paper multistage cluster sampling method has been applied. Two municipalities in the Republic of Macedonia were selected by SRS (Sample Random Sampling). Using this method an equal chances were given to every municipality to be chosen. Municipalities that have been chosen were divided into areas (settlements), where each settlement represents a different cluster. So, in Radovis municipality there were 33 clusters, while in Veles 28. Randomly was selected one cluster in each municipality and selected clusters were Ali Koch and Rastani. Clusters were further divided into two parts-houses near the forests and the forest road is passing nearby and houses farther from the forests. In the first part of the clusters or houses near the forest and the forest road is passing nearby were determined 93 households or 46 in Ali Koch from 328 houses in total and 47 in Rastani from 286 in total. All of them (93 households) were approached and were part of the study.

The major study tools included a survey conducted by interviewers using a semi-structured questionnaire for individual interviews (households). The questionnaire contains twelve questions, to that first few questions are about age, gender, work and place of living of the respondents while rest other questions are relating on perception of the local population toward managements activities of PEMF.

The survey was undertaken during August-September 2011 using trained and experienced interviewers.

Answers from respondents during the survey were entered into excel so later were processed and statistically analysed.

RESULTS

The description of the main results is in accordance with the main research question drawn from the literature review.

According to the first question 87% of respondents that participated in this survey are people that have permanent residence in the villages, while 13% of them are temporary settled, so they only stay during the vacations and holidays (Figure 1).

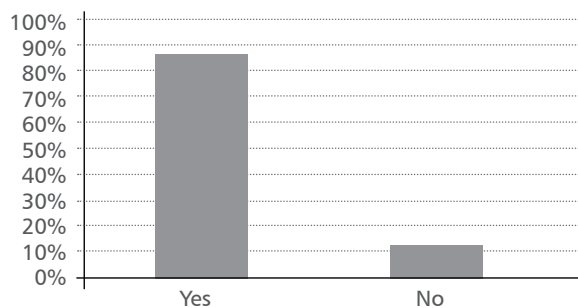


FIGURE 1
Question 1: Is this your place of living?

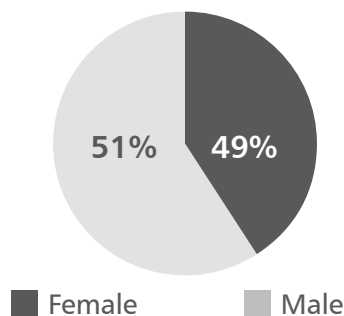


FIGURE 2
Question 2: What gender are you?

More than a half of respondents or 59% are male population and the rest of 41% are female population (Figure 2).

The age structure of respondents was divided into 4 categories. First category includes all respondents younger than 20 years, the second is between 21 to 40, the third class is from 41 to 60 and in the fourth class are respondents older than 61. As it can be concluded from the Figure 3 the biggest share (42%) have respondents from 41 to 60 years and respondents over 61 have 31%. It means that about 73% of respondents

belong to the category over 40 years. Only 17% belong to the category from 21 to 40 and 10% of respondents goes to age class of beyond 20.

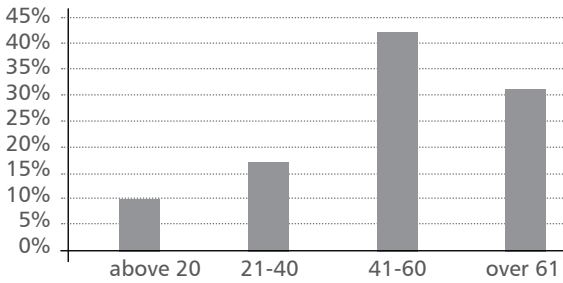


FIGURE 3
Question 3: How old are you?

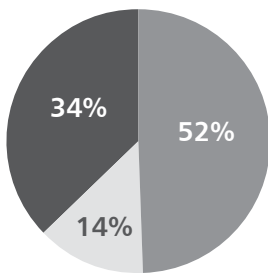


FIGURE 4
Question 4: Where do you work?

Results show that more than a half or 52% of respondents are unemployed or pensioners, while 34% are employed in other activities. The rest of 14% work in the forestry sector (Figure 4).

According to the obtained responses perception of the local population towards the current situation on the forests in their surrounding, can be concluded that 31% think that the forest is in crisis, while 22% of them think that situation is normal but with a tendency of deterioration. About 17% of the respondents think that forest is in a quite bad situation while only 16% of them think that current situation of the forest is normal with tendency of improvements. Other 14% don't have any comments about the current situation of the forest (Figure 5).

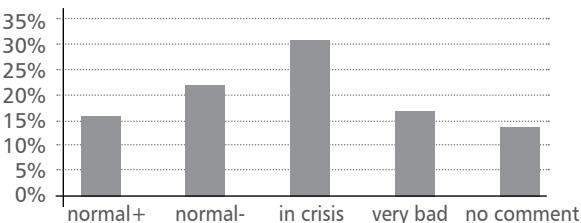


FIGURE 5
Question 5: How do you evaluate current situation of the forest in the municipality?

The question number six was focused on activities that negatively influence on the quality of the forest. This perception varies greatly among respondents. Illegal logging was pointed out as a significant reason that can cause great damages on the forest quality and it was set up on the first place with 25%, then follows inefficient management of the PEMF with 21%. About 18% of the respondents think that illegal activities are problem that should be solved, while 13% think that lack of commitment of the employees in their work is causing damage. Only 9% of the respondents don't have any comment, while 4% stated that other reasons are causing the damage of the forest (Figure 6).

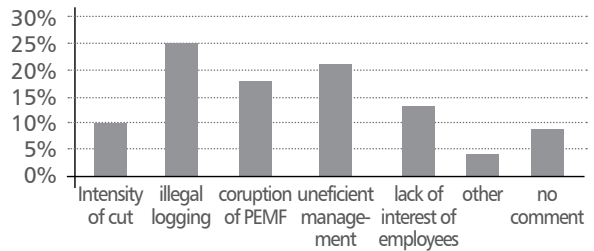


FIGURE 6
Question 6: According to you what do you think is the biggest problems that cause damage of the forest?

Answers on the question where respondents give opinion about the current techniques applied in forest management provide significant information about the perception of the villagers towards PEMF and their way of managing forests, because as it was stressed in the beginning 90% of the forests are managed by them. Management of the forest from the PEMF according to 40% of respondents is not very satisfying, while 25% perceive the management of the enterprise as very bad. Only 24% think that the management of the PEMF is good, while 11% of the respondents' state that this company is practising a very good management activities (Figure 7).

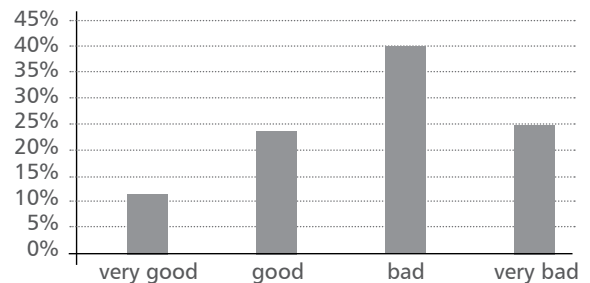


FIGURE 7
Question 7: How do you evaluate the work of the PEMF?

There are no significant differences among responds of villagers regarding the harvesting activities of the PEMF. More than a half of them or 54% of respondents

think that harvesting dominates in their management activities while 46% stated the opposite (Figure 8).

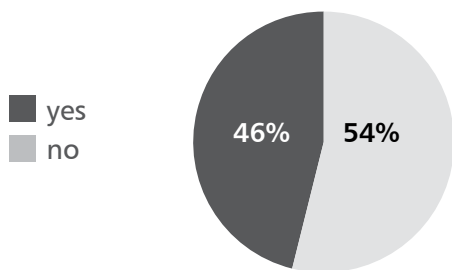


FIGURE 8
Question 8: Do you think PEMF only cut forest?

According to the results gained from the question related to the afforestation activities we can clearly conclude that 68% of respondents think that PEMF applies afforestation, while 32% of them don't agree (Figure 9).

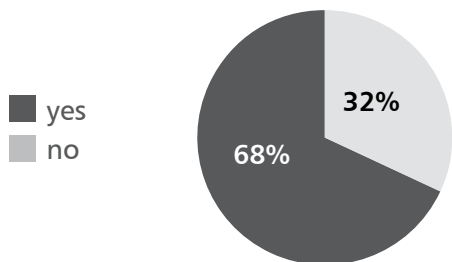


FIGURE 9
Question 9: Do you think that PEMF do afforestation?

The question number 10 was focused on illegal activities of the employees from the PEMF and respondents needed to indicate at which management stage illegal activities are mostly involved. More than a half of them (54%) stated that some or almost all of the employees (all management stages) are involved in "illegal" activities. About 13% of the respondents said that people employed in administration are the most involved, while 12% of them consider that forest guardians are the most involved. The forest engineers are mentioned from 10% of respondents and technicians with 7%. Only 6% of respondents think that people who are involved in illegal activities are not mentioned in the possible answers (Figure 10).

In order to find out the perception toward the presence of the employees of PEMF in the forests doing their daily activities respondents were asked how often they meet the employees in forests. This question gives the answer to the selected methodology because clusters were divided into houses located near the forests where the forest road is passing nearby. Answers were divided in 4 groups, and according to the obtained responses 39% of respondents rarely meet, while 34% of them never meet some of the employees in the forests. Only 15% of the respondents often meet employees

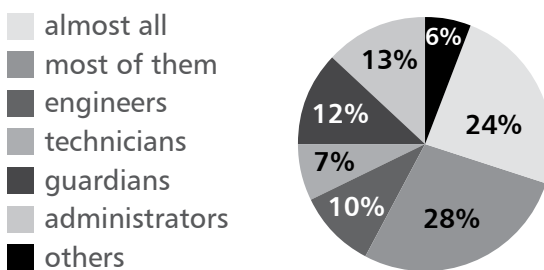


FIGURE 10
Question 10: At which management stage employees in PEMF are involved in illegal activities?

from the PEMF in the forests, while 12% stated that they meet them very often (Figure 11).

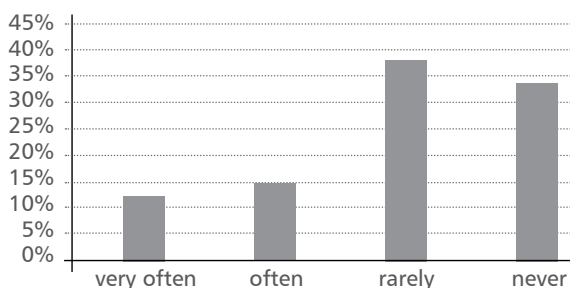


FIGURE 11
Question 11: How often you have meet employee of the PEMF in the forest in the last 2 years?

The last question was open where the respondents got the opportunity to provide information on which measurements or activities should be taken by PEMF in order to improve the current situation.

According to the cognition of the villagers forest management can be ameliorated in many ways. Enlarged control over illegal logging was pointed out by 24% of the respondents. About 16% argued that employment of professionals in this enterprise can be also one of the measures that can improve the present situation. Only 14% stated that afforestation, as one of the most beneficial activities, can also modify the current situation. Particular attention should be paid on reduction of illegal activities among the employees in PEMF according to 13%, and the same percentage of respondent's state that they don't have any idea how to alter the current situation. Sustainable forest management can help in solving this problem for 6%, while 4% of them see involvement of EU measurements of protection as a possible solution. Diminishing the political influence and power on the management of the PEMF is important for 3% of the respondents, while 2% of them stated that fire protection and communication with customers should ameliorate the current situation. Privatization, removal of the forest

- increased control for illegal logging 24%
- increased a foreststation 14%
- diminishing the illegal activities 13%
- nothing 13%
- EU measurments of protection 4%
- higher engagement of the employees for their work 1%
- employment of professionals 16%
- fire protection 2%
- removal of the forest waste 1%
- sustainable forest management 6%
- diminishing the political influence 3%
- improvement in the communication with the customers 2%
- privatization 1%

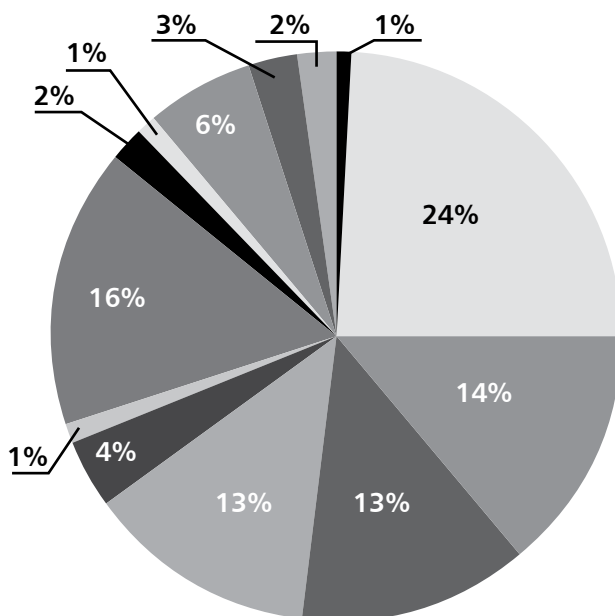


FIGURE 12
Question 12: According to you how the current situation will be improved?

waste and larger engagement of the employees on their work are placed at the lowest position according to the 1% of the respondents (Figure 12).

DISCUSSION AND CONCLUSION

Bearing in mind that forests are national wealth and public good, thus management of the forest is one of the most important things in forestry sector in each country worldwide. Hence, knowing the perception of the local population especially on those who live near forest will give us the information and indicators about the forest management and what should be done, changed and improved in this field.

Perception of the respondents concerning management of two different branches of PEMF from both villages is almost the same, taking into account that they occupy different territories of the Republic. According to the obtained results by the local population we might conclude that the company does not give an image of a well-managed company. Most of the villagers had evaluated the conditions of the forest as rather unsatisfactory with tendency for deterioration. This perception qualifies the PEMF as a company that should try to make changes in their everyday activities. The illegal logging and illegal activities were indicated as main reasons for the current situation of the PEMF.

Regarding the harvesting and afforestation performed by the enterprise among respondents there is a different perception. Around 46% of respondents think that the enterprise is focused only on harvesting activities. Thus in future enterprise should also focus on development of the social and ecological functions of the forest. When it comes to activities associated with the afforestation 68% of the respondents think that PEMF are focused on afforestation. This attitude

of respondents can be explained by the fact that there is an existence of an action named "Tree day" established by NGO in 2008 in the Republic of Macedonia. Supported by the Government this action had been performed for two times per a year from 2008 until today, including the whole territory of the country and planting from 2 to 5 million seedlings.

The perception of the villagers towards involvement in illegal activities only complements the unsatisfactory image that forestry sector already has. Existence of illegal activities among all management stages of employees is pointed out from respondents, even though there are differences at the perception about the stage where it is applied. Initiations of strict measures and penalties, motivation or increasing salaries of employees are just some of the many opportunities to reduce or completely eradicate illegal activities in this enterprise.

Respondents had the opportunity to elaborate their opinion on measurements and activities that need to be taken in order to improve the current situation. Again the problem with illegal activities was pointed out as the main issue that should be approached very seriously working on its' diminishing.

One of the most interesting and significant issues raised by the villagers was the qualification structure of the employees within the enterprise. According to their perception this enterprise has a shortage of professionals as a result of the political influence in the management of the company. Sustainable forest management, communication with customers, EU protection measures are just few of the many ideas presented by respondents as strategic activities which need to be set on a priority list of the PE, if it wants to improve the perception of the local population.

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