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ENVIRONMENTAL CHALLENGES IN MY TOWN

“R.I.V.E.R.S.” Project
2020-2022



Erasmus+ Assignment

Environmental challenges in my town

An Erasmus+ assignment for the “RIVERS”
project



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Preface

One of the activities of the first quarter of the RIVERS Erasmus+ project was to investigate the current situation regarding waste management in the cities of the participating schools. At the same time, the participating students had to propose specific actions to improve the environmental conditions in their cities but also to describe their general attitude towards their environmental awareness.

For this purpose we created an online questionnaire, and students and teachers had to answer a survey and compare the situation in each country. Using tools such as Microsoft Excel students made graphs and calculations and they noted their results.

The results were gathered in this cohesive e-book. The main purpose was to raise awareness for cleaner neighborhoods, and personal responsibility.

The various subjects of the questionnaire were assigned to each one of our schools, so they could draw as valid conclusions as possible. In this way, the students who worked together on their processing could do it more easily.

Thus, from the seven thematic sections that made up the questionnaire, each country was responsible for the following:

- i. Littering at streets: Lithuania
- ii. Recycling: Portugal
- iii. Garbage disposal procedures: Slovakia
- iv. Natural environment: Greece
- v. Stray animals: Bulgaria
- vi-vii. Light pollution and graffiti: Croatia

QUESTIONNAIRE

i. Littering at streets

1. When you walk in your city, do you see discarded plastic bags on the street?

Very often

Several times

Never

2. When you leave the house do you see discarded papers on the street?

Very often

Several times

Never

3. When you walk in your city, do you see discarded cigarette butts on the street?

Very often

Several times

Never

4. When you walk in your city, do you see discarded medical masks or gloves on the street?

Very often

Several times

Never

5. When you walk in your city, do you see discarded cans of beer or soft drinks on the street?

Very often

Several times

Never

6. How often do municipality workers sweep the streets?

Never

Several times

Very often

7. How often does the garbage truck pass to empty the bins?

Rarely

Every three days

Daily

ii. Recycling

8. Do you separate recycled garbage at home?

Never

Several times

Very often

9. How common is the presence of recycling bins in your neighborhood?

There is no bin

There are some bins

There are many bins everywhere

10. Are there places in your city to hand over the batteries for recycling?

There are not

There are few

There are a lot

iii. Garbage disposal procedures

11. Have you ever seen discarded car tires in the open (eg fields, roadside, etc.)?

Many times

Several times

Never

12. Have you ever seen old refrigerators or other household appliances discarded in a public place?

Many times

Several times

Never

13. Where does your municipality collect garbage?

At an open unattended space

In a landfill

In an organized management center

iv. Natural environment

14. Is there enough green space in the municipality where you live (parks, forests, gardens)?

No, everything is made of cement	There is green but not enough	I live in a green area
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15. How is the air quality in your municipality?

There is dust and exhaust gases	Sometimes the atmosphere is clean	The air is very clean
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16. Are there any bad odours in the air in your area?

Always	Sometimes	Never
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17. How is the water quality in your municipality?

You can not drink tap water	You can drink tap water but many people prefer bottled	Tap water is generally very good
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18. Is there a lot of car traffic in your municipality?

Very large	Moderate	Very little
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19. Is there much noise in your neighborhood?

There is a lot of noise	There is noise but you can stand it	It is generally a quiet area
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v. Problems with animals

20. Are there stray dogs or cats in your area?

There are and sometimes they are dangerous	There are but the situation is under control	There are no stray animals
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21. Have you ever seen (or stepped on) dog faeces on the street?

Too many times	A few times	Never
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vi. Light pollution

22. Can you see the stars at night if you go a little farther from home?

No - the city lights are very strong	Yes - but only the brightest stars	I can see a lot of stars
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23. Does the light from the street bother you at night?

Very much. I have to close the curtains	Not so much	No problem with the night lighting
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vii. Graffiti or advertisements / posters on the walls

24. Have you ever seen inscriptions on the walls of the buildings or graffiti on your way to school?

Almost everywhere	On some walls	Nowhere - all the walls are clean
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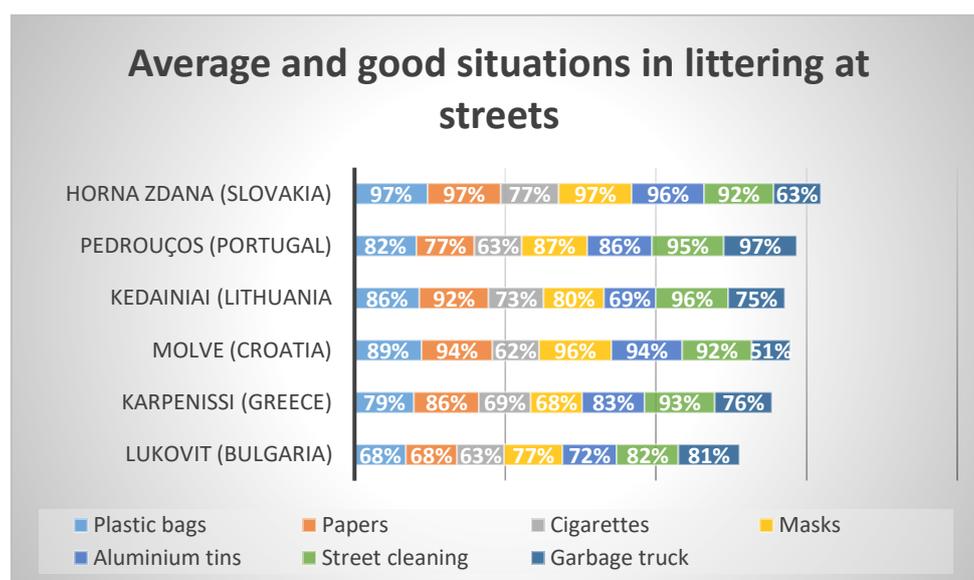
25. Are there billboards or old torn posters on the walls of buildings?

Almost everywhere	On some walls	Nowhere - all the walls are clean
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Results and discussion

i. Littering at streets

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
Plastic bags	32%	50%	18%	21%	48%	31%	10%	71%	18%	13%	75%	11%	18%	56%	26%	3%	52%	45%
Papers	32%	50%	18%	14%	52%	34%	6%	65%	29%	8%	72%	20%	23%	67%	10%	3%	62%	35%
Cigarettes	36%	36%	27%	31%	48%	21%	39%	33%	29%	26%	57%	16%	38%	56%	7%	23%	65%	12%
Masks	23%	41%	36%	31%	34%	34%	4%	35%	61%	20%	67%	13%	13%	59%	28%	3%	40%	57%
Aluminium tins	27%	36%	36%	17%	55%	28%	6%	65%	29%	31%	49%	20%	13%	70%	16%	3%	63%	33%
Street cleaning	18%	27%	55%	7%	62%	31%	8%	41%	51%	3%	44%	52%	5%	75%	20%	8%	87%	5%
Garbage truck	18%	45%	36%	24%	28%	48%	49%	37%	14%	25%	64%	11%	3%	28%	69%	37%	60%	3%



Analysis by Lithuanian School

According to research results, in relation to the **plastic bags on the streets**, it seems that the city Lukovit in Bulgaria is in the worst condition with a percentage of 32%. On the contrary, the city Horna Ždana, Slovakia is in very good condition with a percentage of 3%. We can also see that the cities Karpenissi, Greece-21% and Pedroucos, Portugal -18 % face a problem with plastic bags.

To improve the situation with plastic bags we would suggest try not to use plastic bags: instead of them use paper bags; moreover schools' can organise some „green“ actions, showing people that it's very important not to drop plastic bags, saying them, that we have protectour planet.

The situation **with paper** on the street is almost the same as with the plastic bags: Lukovit in Bulgaria has the biggest percent of littering paper-32%, in the second place-Pedroucos, Portugal-23%. The best situation with paper on the street in Horna Ždana, Slovakia, Molve, Croatia-6% and Kedainiai, Lithuania-8%.



In spite of good situation with paper in Molve, Croatia, this city has the worst results with boxes from cigarets-39%, near it is Pedroucos with 38% and Lukovit with 36%-it seems that these cities have the biggest number of smokers. In other cities the situation is a little bit better but not the best: Karpenissi-31%, Kedainiai-23% and Horna Ždana-23%. To improve the situation we suggest again to take actions against smoking and government should do something too.

Nowadays, in Covid 19 conditions people started behave not in responsible they- they throw in relation with on the street. The worst situation in Karpenissi-31% and in Lukovit-23%. On the contrary, the cities Horna Ždana-3% and Molve-4% show their best results.

In relation **with aluminum tins** Kedainiai, Lithuania is in the worst place -31%. We can also see that the cities Lukovit -27% and 17% face a problem with aluminum tins. The cleanest cities in this term are Horna Ždana-3% and Molve-6%.

According to research results, almost in all cities municipality workers **sweep the streets well**. Almost in all cities the percent even doesn't reach 10 %, and only Lukovit has 18%.

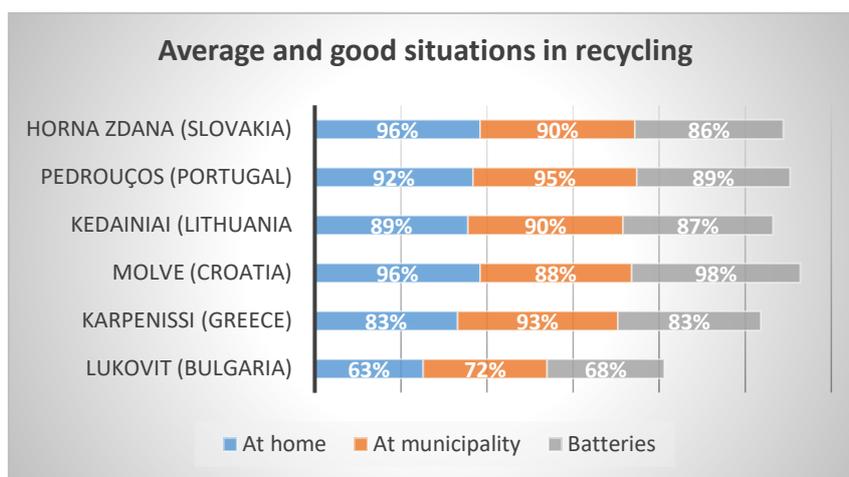
The **garbage truck** pass to empty the bins daily in Pedroucos -69% and Karpenissi-48%, rarely in Molve-49%, Horna Ždana 37%-but this fact isn't bad for these cities, because we guess that citizens in both cities behave responsibly and don't litter their cities.



To sum up, according to the situation in term of littering on the streets, first of all citizens should be responsible and take care of the place where they are living. The second, we believe that the main role in improving the situation with littering should take government. Only then we will have healthy planet!!!

ii. Recycling

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
At home	36%	27%	36%	17%	38%	45%	4%	20%	76%	11%	41%	48%	8%	15%	77%	3%	8%	88%
At municipality	27%	45%	27%	7%	62%	31%	12%	57%	31%	10%	33%	57%	5%	36%	59%	10%	55%	35%
Batteries	32%	41%	27%	17%	52%	31%	2%	76%	22%	13%	64%	23%	11%	79%	10%	13%	73%	13%



Analysis by Portuguese School

Regarding **recycling at home**, it appears that the city of Horná Zdana (Eslóvquia) is in very good condition with a percentage of 88%. On the contrary, the city of Lukovit (Bulgaria) is in a worse state with a percentage of 36%.

Regarding **recycling in the municipality**, we found that the city that is in the best ranking with 59% is Pedrouços (Portugal). However, the city of Lukovit (Bulgaria) also in this item is in a worse state with a percentage of 27%.

With regard **to batteries**, we found that the city of Karpenissi (Greece) is in good condition with 31%, while the city of Lukovit, again, is in worse condition with a percentage of 32%.

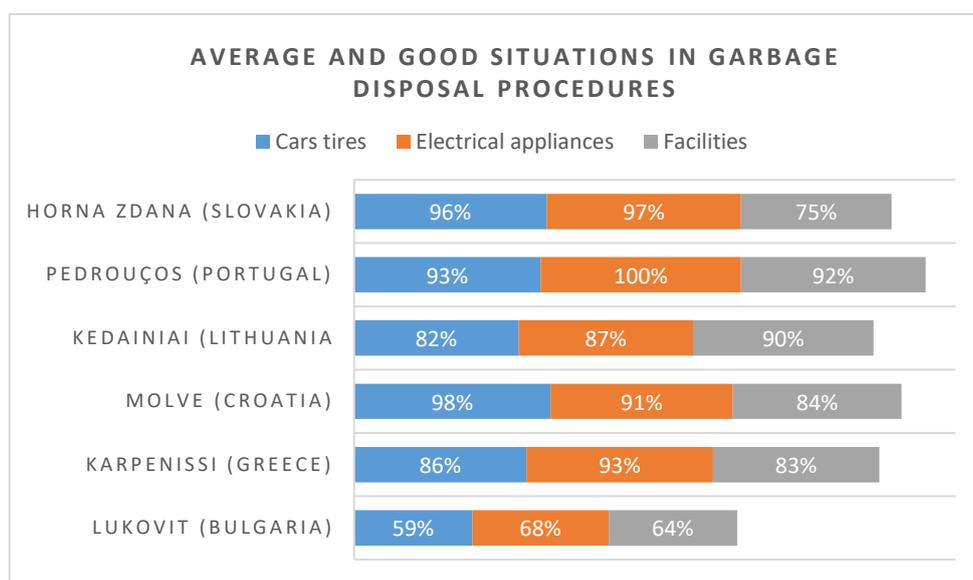
We also observed that in all cities recycling at home is in a better condition than recycling in the municipality and recycling batteries.

To improve this situation, we believe that more campaigns should be carried out, distribute more ecopoints for batteries on the streets and maybe even carry out selective collection door to door.



iii. Garbage disposal procedures

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
Cars tires	41%	32%	27%	14%	34%	52%	2%	39%	59%	18%	43%	39%	7%	34%	59%	3%	48%	48%
Electrical appliances	32%	41%	27%	7%	17%	76%	8%	20%	71%	13%	43%	44%	0%	61%	39%	3%	27%	70%
Facilities	36%	55%	9%	17%	66%	17%	16%	43%	41%	10%	31%	59%	8%	18%	74%	25%	25%	50%



Analysis by Slovakian School

We live in a small village Horná Ždaňa in Slovakia. Pupils from three other municipalities come to our school. We looked at environmental issues in all the municipalities from which the students come.

We found that our environment is much cleaner than the city, that we have a lot of trees in the villages and around, water areas and relatively clean air.

Even in our villages, the inhabitants do not always behave exemplary and we find comfortable things that belong in the basket. In our village, there are rubbish bins along the way, people sort waste into



collection containers and bags, which then take large cars to landfills. Large waste is handed over in the collection yard or in large containers.

At school, we have a system of eco-patrols that oversee the cleanliness of the school and the surrounding area. We sort paper and plastics.

What can we do? We will place posters on the notice board in the village, which will alert people to the need to recycle and reuse waste. We will implement this in our families as well.

From the questionnaire, we found that the city of Lukovit in Bulgaria has the biggest problems with **tires in nature**, because it is bad up to 41%. The city of Kedainiai, which has 18%, is also quite bad. The city of Karpenissi in Greece has a large decrease of 14% compared to Lukovit. Another relatively large decline is the city of Pedrouços in Portugal,



which has only 7%. Horná Ždaňa in Slovakia has only 3%. The best situation is at the city of Molve from Croatia, which has only 2% in this problem. We do not see tires in nature in our village or in the surrounding villages. We see them behind the village, in ditches along the road

We have a few suggestions on how to make the most of them. We can produce stools, coffee tables, garden decorations, tire baskets, garden furniture from tires, flower pots, ... and many other options.

In nature, an old tire decomposes about 500 years. We have found on the Internet that when they are handed over for collection, industrial ones are lifted, processed and used for car accessories, carpets, bumpers, rubber boots, shoe soles, special road surfaces and much more. That's why it's important to convince people to put old tires in their collection.

We found that in terms of discarded electrical **appliances in nature**, the city of Lukovit in Bulgaria is at its worst, because the rate of electrical appliances is 32%, which means that it is very bad. On the other hand, the best is the Portuguese city of Pedroucos, which even has 0% of electrical appliances in nature, for which we praise them. Horná Ždaňa is also good with 3%, but not bad for the Greek Karpenissi with 7% and for the Croatian Molva with 8%. After Lukovita, the city of Kedainiai in Lithuania is weaker with 13%, where we would suggest an improvement. Improvements are also needed in Karpenissi and Molva, as well as in Lukovit.

We propose to improve the situation in all cities so that in each city there are rubbish bins in the public space, into which only electrical appliances would be put. In addition, the collection of used appliances operates in the stores where they are sold.

People often throw away still-functioning electrical appliances. Here we propose a secondary use - to give a functional electrical appliance to people who will still use it. If our electrical appliance breaks down, we don't have to throw it away right away, we can have it repaired.



Hazardous waste, such as electrical appliances, should not be disposed of in nature and forests, but should be handed over, if necessary, to a municipal landfill or to a special municipal collection point.

Everyone should think about where to throw, and if we see the papers on the ground, it is not a shame to pick them up and put them in the trash. It's just about people, what future we and our families will have. Therefore it is necessary to recycle !!!

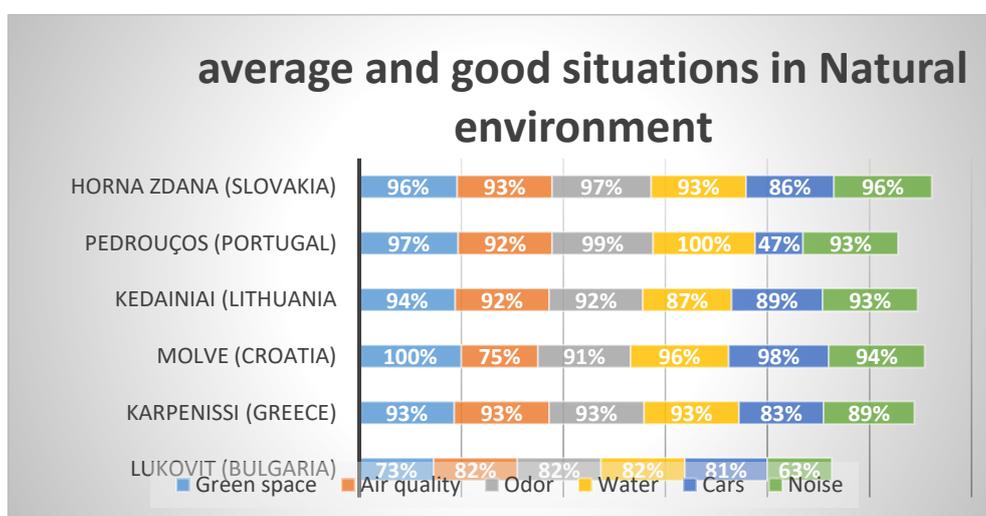
Lukovit from Bulgaria is the worst **in urban waste collection** with 36%. On the other hand, the best is the Portuguese Pedroucos, which is only 8% bad and 74% good. We see that Horná Ždaňa and Karpenissi are not the best with a percentage of 17-25%

We could improve the situation in the cities by more than 10% thanks to a greater expansion of **collection bins**. It is necessary to place baskets for textiles from which people could take away unused clothes or toys. Municipalities should give enough money to other collection points and to remove cans by garbage trucks. This would produce more cans that could be recycled, saving material, money and protecting the piece of nature we still have left. Even in cities with a smaller percentage, which have almost no problem, we would nevertheless suggest arranging some sampling points so that the situation and the environment do not deteriorate, but so that there is even greater improvement. Wherever possible, we propose recycling and re-use.



iv. Natural environment

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
Green space	27%	64%	9%	7%	3%	90%	0%	18%	82%	7%	48%	46%	3%	56%	41%	3%	8%	88%
Air quality	18%	73%	9%	7%	17%	76%	24%	20%	55%	8%	56%	36%	8%	59%	33%	7%	23%	70%
Odor	18%	64%	18%	7%	69%	24%	8%	73%	18%	8%	66%	26%	2%	51%	48%	3%	27%	70%
Water	18%	59%	23%	7%	24%	69%	4%	14%	82%	13%	28%	59%	0%	59%	41%	7%	13%	80%
Cars	18%	45%	36%	17%	59%	24%	2%	84%	14%	11%	87%	2%	52%	34%	13%	13%	28%	58%
Noise	36%	27%	36%	10%	10%	79%	6%	41%	53%	7%	59%	34%	7%	54%	39%	3%	13%	83%



Analysis by Greek School

In relation to **green spaces**, it seems that the city of Lukovit in Bulgaria is in the worst situation with a percentage of 27%. The cities of Pedrouços in Portugal and Kedainiai in Lithuania are in the middle with 56% and 48% respectively.

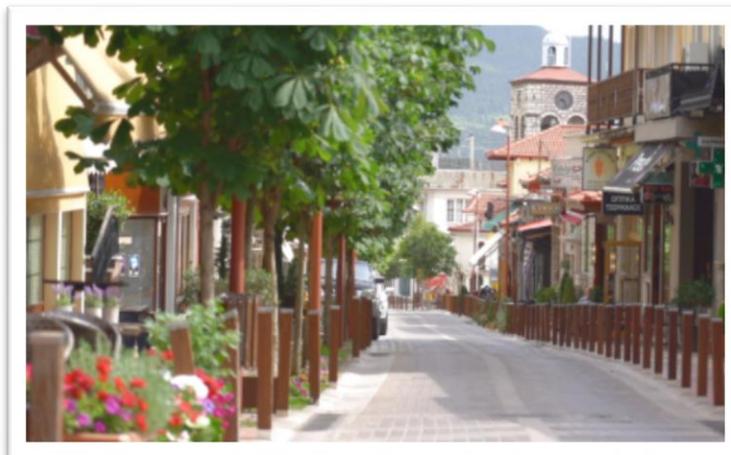
In contrast, the cities of Molve in Croatia with 82% and HornaZdana in Slovakia with 88% are in very good condition. The city of Karpenisi in Greece seems to have more green spaces than all the other cities with a percentage of 90%.

To improve the situation in the city of Lukovit in Bulgaria, I would suggest promoting spatial and environmental protection programs. I would suggest



interventions to increase green spaces so as to improve the air quality of the area, biodiversity, water and noise quality and in general the aesthetic appearance of the city.

In terms of **air quality** in the cities, Karpenissi and the city of Horná Ždaňa in Slovakia are in the best condition as 76% and 70% of their inhabitants, respectively, state that the situation is good. The city of Lukovit seems to be in the worst situation as only 9% of the inhabitants consider the situation in the city to be good.

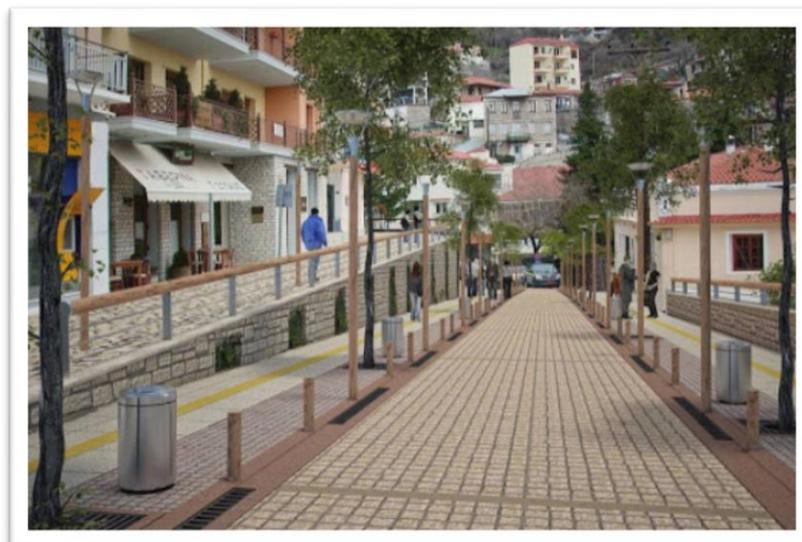


The cities of Pedrouços in Portugal and Kedainiai in Lithuania also seem to have some air quality problems, with only 33% and 36% of citizens considering the situation in their city to be good.

Croatia's Molve also seems to be facing problems, as although 55% of citizens say they are satisfied with the air quality, 24% consider the air to be polluted by exhaust fumes and dust.

In order to improve the air quality in the cities, adjustments should be made to the excessive traffic of cars and the green spaces should be strengthened. If there are factories near the cities, the regulations for the emission of pollutants must be strictly observed.

In terms of **odor** the city of Lucovit in Bulgaria is in the worst condition with 18%. In better condition however is the city of Pedrouçosin Portugal with 2%. The next cities are Molve in Croatia and Kedainiai in Lithuania with 8%, Karpenissi in Greece with 7% and Horná Ždaňa in Slovakia with 3%.



To improve the situation in all cities, I suggest landfills. Garbage should be collected daily. Factories and livestock units should be built further away from the city. Finally, do not light the fireplaces when it is not too cold.

Noise pollution is a serious problem in modern cities.

As for the noise, Lukovit in Bulgaria faces the most difficulties with a 36% percentage. On the contrary, Horná Ždaňa in Slovakia and Karpenissi in Greece are in a very good condition, with a percentage of 83% and 79% respectively. At a medium level of noise pollution we find the cities Kedainiai in Lithuania (59%), Pedrouçosin Portugal (54%) and Molve in Croatia (41%).

To improve the problem of noise pollution, I suggest that common hours of keeping quiet be established and followed. Moreover, people should prefer using bikes or going on foot, instead of using cars all the time.

In terms of **water quality**, the city of Luovit in Bulgaria is in the worst condition with a percentage of 18%.

By contrast, the Croatian town of Molve is in a very good condition with 82%, followed by the cities Horná Ždaňa in Slovakia, Karpenissi in Greece, Kedainiai in Lithuania and Pedrouçosin Portugal.

We can also notice that the city of Kedainiai in Lithuania is facing a problem with water quality, as 13% of its people say that its quality is poor.

In order to improve the situation in both the Bulgarian city of Luovit and the Lithuanian city of Kedainiai, I would suggest that strict measures be taken and severe fines be imposed on all those human activities (industrial and urban waste water and waste, landfills, agricultural activities) that pollute groundwater.

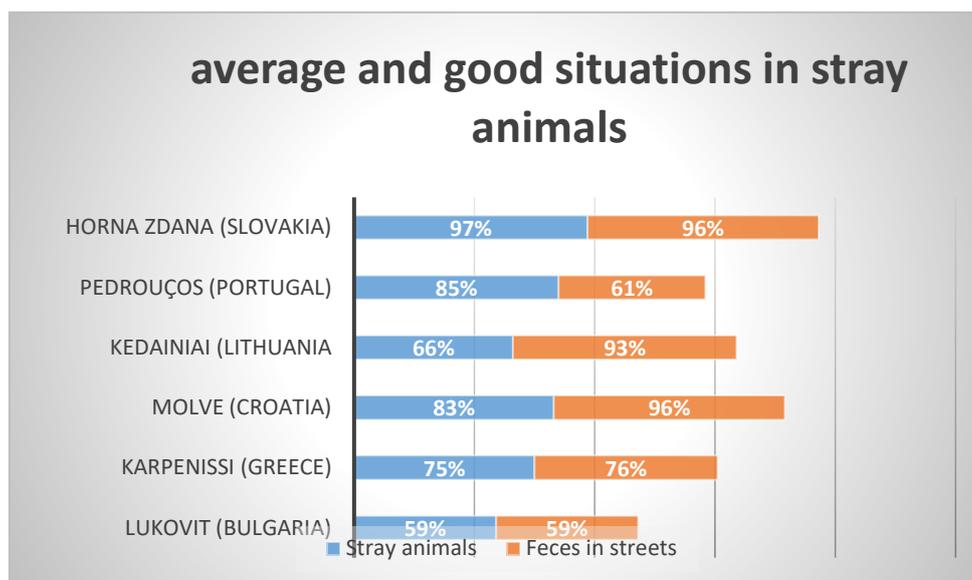
In terms of **car traffic** in the city, the city of Pedrouços in Portugal is in the worst position as its citizens 52% believe that the situation is bad. In contrast, the town of Horná Ždaňa in Slovakia is in very good condition as 58% of its inhabitants believe that the situation is good. The cities of Molve in Croatia and Kedainiai in Lithuania also seem to have some traffic problems as 84% and 87% of their residents respectively consider the situation to be moderate compared to car traffic. Finally, the cities of Lukovit and Karpenissi seem to face a smaller problem as 36% and 24% respectively consider the situation in their city to be good.

To improve the situation in cities with serious traffic problems, residents need to use public transport more or choose where it is possible to travel on foot or by bicycle. The state's concern for the creation of ring roads in these cities can also help to improve the problem.



v. Problems with animals

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
Stray animals	41%	23%	36%	24%	72%	3%	16%	67%	16%	34%	61%	5%	15%	69%	16%	3%	62%	35%
Feces in streets	41%	23%	36%	24%	62%	14%	4%	57%	39%	7%	52%	41%	39%	51%	10%	3%	63%	33%



Analysis by Bulgarian School

The data from the survey of students from the Primary School in Lukovit, Bulgaria in connection with the topic "Environmental issues" introduced by the RIVERS project under the Erasmus + program are another proof that the problem of stray animals stems from the irresponsibility of pet owners and cats. According to the survey data, it seems that Lukovit is the city



with the largest number of stray animals on the streets. 41% of the respondents answered that they very often come across dangerous stray animals. 23% of the answers show that there is a problem in the city, but it is within normal limits and is under control.

At the same time, 36% of respondents said that there are no stray and dangerous animals in their neighborhood. In all likelihood, the large percentage comes from the

East neighborhood, where the number of dogs is really large and the population of stray animals is a consequence of the irresponsible way of keeping pets and the low culture of their owners. We can also say that Karpenisi in Greece also reports a significant percentage of 72% presence of street animals, but with them the



situation in the city is under control. The city of Pedrouços Portugal is of the same opinion with 69%. The survey reports that the safest place is Horna Zhdanya in Slovakia. For 35% of the respondents in the city there are no stray animals and the city is a safe place in terms of this criteria.

According to the team that analyzes the results in the Bulgarian school, the measures that must be taken to eliminate the source of street animals are simple - mass castration of stray and domestic animals, strict control over the owners, a ban on breeding outside licensed farms and trade in pets of unknown origin

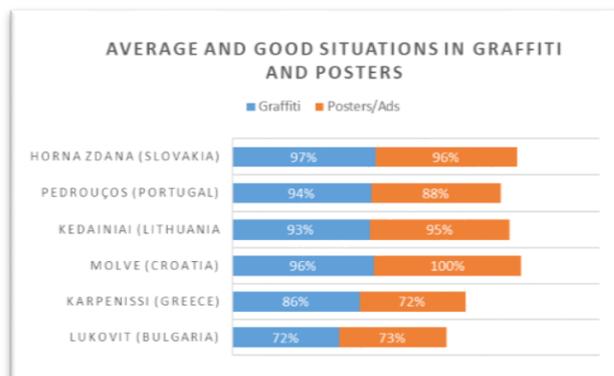
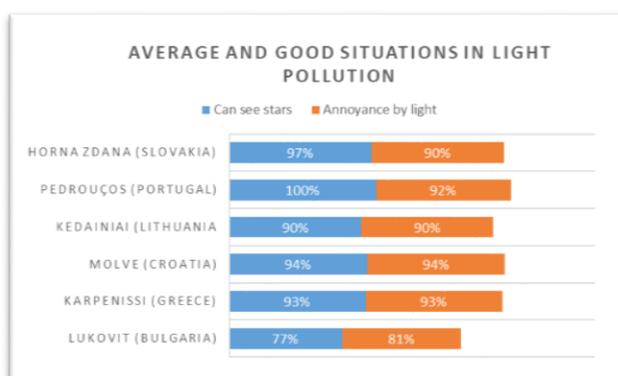
Big cities are a center of attraction for animals, as they offer the necessary living environment, but they are not the source of the problem. In most large district centers, dogs and cats are kept mainly in apartments, and this greatly reduces the risk of unwanted insemination and subsequent abandonment of the young. There the owners are also more educated and financially secure, there is also the main percentage of neutered animals. On the other hand, four out of five dogs are kept in houses with yards in suburbs or small settlements.



Their owners do not have the necessary resources and knowledge to provide adequate care, and the number of neutered animals is very low. This is a consequence of the irresponsible way of raising pets in smaller settlements and the low culture of their owners. In the case of street animals, the case is complex and complicated. Animals have no guilt. We humans are the ones who need to realize and solve this problem. Here are some simple things we can do, but in order to do so, the law and municipal authorities must give them the opportunity - easier and faster creation of private shelters, even certain incentives for people who want to do so, a policy of open doors to castration campaigns with donation money, etc. for them.

vi. Light pollution - vii. Graffiti or advertisements / posters on the walls

	Lukovit (Bulgaria)			Karpenissi (Greece)			Molve (Croatia)			Kedainiai (Lithuania)			Pedrouços (Portugal)			Horna Zdana (Slovakia)		
	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good	bad	avg	good
Can see stars	23%	41%	36%	7%	31%	62%	6%	27%	67%	10%	28%	62%	0%	64%	36%	3%	7%	90%
Annoyance by light	18%	45%	36%	7%	45%	48%	6%	55%	39%	10%	70%	20%	8%	49%	43%	10%	18%	72%
Graffiti	27%	36%	36%	14%	52%	34%	4%	49%	47%	7%	77%	16%	7%	84%	10%	3%	45%	52%
Posters/Ads	27%	55%	18%	28%	62%	10%	0%	65%	35%	5%	70%	25%	11%	67%	21%	3%	43%	53%



Analysis by Croatian School

Croatian students made a research of two very interesting issues related to the pollution of the places participating in the project: the town of Lukovit from Bulgaria, Karpenissi from Greece, Kedainiai from Lithuania, Pedroucos from Portugal, Horna Ždana from Slovakia and Molve from Croatia.



They completed a questionnaire on the R.I.V.E.R.S. Erasmus + project and discussed its results. They paid special attention to the topic of light pollution and graffiti / posters.

Light pollution

According to the collected data expressed in percentages of the survey, the students made a conclusion that the town of Lukovit in Bulgaria, is the most difficult place to observe the starry sky near populated areas. Such an answer was given by 23% of respondents. Most respondents from Slovakia stated that they can easily see the stars, but Greece, Croatia and Lithuania see only the brightest stars near their houses.



Most respondents from Bulgaria said they were bothered by street lighting, while other countries were on average. Street lighting bothers the residents of the town of Horna Ždana from Slovakia the least - as many as 90% of respondents said that there are no problems with street lighting at night.

The students concluded that the city of Lukovit is a large city and that it was expected to have a lot of light pollution. They suggest some solutions to residents:

- reduce driving at night
- walk
- use public transport
- ride a bicycle
- suggest to the city authorities to turn off every other street light - this will reduce brightness and save energy.

Graffiti and posters

The students from Molve were a bit surprised by this question because in Molve they have almost no opportunity to see graffiti or torn posters on the walls. They studied the results of the questionnaire and noticed that in the Bulgarian town of Lukovit, the most graffiti was observed - 27%, and the least in the Slovak town of Horna Ždana - only 3%. The torn posters or posters on the walls of the buildings were noticed by the most inhabitants of the Greek city of Karpenissi, 28% of them, and the least in Molve - 0%.

Other cities are in a good or very good situation related to the pollution of places with graffiti, posters and placards on the walls of houses or buildings.

Discussing the problems they have noticed in some cities, students suggest:

- educating the population about the importance of a clean and tidy appearance of the walls of houses and buildings
- renovation and regular maintenance of damaged walls
- rebuilding destroyed walls.

Summary of findings

According to research results, the cleanest town is Horna Zdana in Slovakia. The dirtiest town is Lukovit in Bulgaria. The best situation with green areas and clean air is in Greece and Karpenissi. In all towns the situation with posters and drawings on the walls is good, according to the results all of them got into average category.

In house waste recycling is the most widespread in the Slovakian town and recycling in the local administration is the best in Portugal and the town of Pedrucos. In Molve, Croatia, the numbers of the thrown out tires is the lowest of all towns. The cleanest skies at night are visible in Horna Zdana. The overall situation in Kedaniai is average.

