



Fondacioni për të Drejtat e Kafshëve
Animal Rights Foundation
Fondacija za prava životinja

REPORT ON THE ASSESSMENT OF THE DOG POPULATION DYNAMICS IN THE MUNICIPALITY OF PRISHTINA



PRISHTINA, MAY 2023



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REPORT ON THE ASSESSMENT OF THE **DOG** POPULATION DYNAMICS IN THE MUNICIPALITY OF **PRISHTINA**

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The data and perceptions presented in this report are not a final assessment of the work of the institutions regarding the situation with stray dogs. The report will serve as an instrument to address deficiencies, but also as an indicator of the effectiveness of the measures taken for the management and control of the **(stray) dog population**.

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ABBREVIATIONS:

AI	→	Administrative Instruction
ARF	→	Animal Rights Foundation
CNVR	→	Catch, Neuter, Vaccinate, Release
DPM	→	Dog Population Management
FVA	→	Food and Veterinary Agency
ICAM	→	International Companion Animal Management Coalition
MLGA	→	Ministry of Local Government Administration
WOAH	→	World Organization for Animal Health



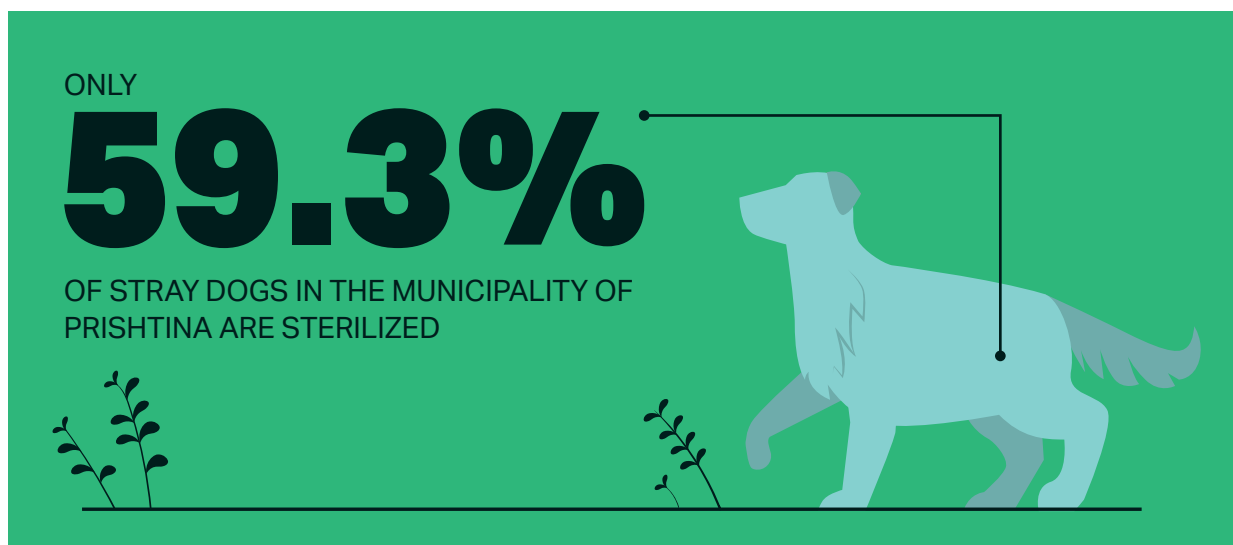
EXECUTIVE SUMMARY

The project "**Assessment of the dynamics of the dog population**" is the first project of its kind in Kosovo, implemented by the organization "**Animal Rights Foundation**", after participating in the training organized by RAWC¹ in July 2022, for the guidelines for the assessment of interventions in DPM created by ICAM. After completing this training, ARF implemented the dog survey pilot project and assessed their welfare during July and August 2022.

The ICAM guideline provides detailed recommendations for accurate, reliable, and feasible methods of evaluating DPM interventions to track progress and improve interventions where necessary. These guidelines focus on simple and repeatable methods and meaningful indicators for entities seeking to conduct cost-effective DPM impact assessment.

The process of initial evaluation and analysis of dog population dynamics explores and identifies the root causes of apparent problems in a specific location, including the sources of dogs causing or experiencing those problems.

This report presents the findings of the street dog survey conducted in the territory of the **Municipality of Prishtina**, their estimated number and the welfare and reproduction status. These data were gathered during two different time periods: October/November 2022 and March 2023. During the first phase, the findings of the survey show that the sterilization percentage of stray dogs was 59.3%, while on the second phase of the survey, the sterilization rate was 58.61%, which are still low percentages to stabilize the number of dogs on the streets.²



¹www.rawc.eu

²<https://www.icam-coalition.org/wp-content/uploads/2019/09/2019-ICAM-DPM-guidance-Interactive-updated-15-Oct-2019.pdf>

This project also reflects the conditions and the manners of keeping dogs in households, as a source of the increase of the number of stray dogs. From the data collected, many owned dogs are unsterilized and allowed to roam freely outside the home premises, increasing the possibility of reproduction with unsterilized stray dogs and thus increasing their number.

This project was also focused on the inclusion of citizens as part of the solutions for reducing the number of stray dogs, therefore the opinion of the citizens was taken on potential solutions for the stray dog situation, the care for stray dogs and concerns from the presence of dogs on the streets, as well as the interest in adopting these dogs. From the findings of the survey, the citizens of Prishtina have shown preferences for reducing the number of stray dogs through humane methods, and **not through methods such as killing/culling.**

This report contains concrete recommendations based on field data, for the design and implementation of a sustainable DPM program in the Municipality of Prishtina, but these recommendations also apply to central level institutions that are mandated to design measures for DPM.

The design of local DPM programs, the preliminary assessment of the dog population in Kosovo, as well as the monitoring and evaluation of interventions for DPM at the municipal level, are key parts of the **'National Strategy for the Management and Control of Dogs with and without Owners'**³ drafted by the inter-institutional working group led by MLGA, where ARF was also a member. The strategy was approved on October 26, 2022, by the Government of the Republic of Kosovo.

In order to reduce the number of stray dogs at the country level, ARF recommends (also based on the aforementioned National Strategy) *that each municipality make an initial assessment of the dog population in their territory and design measures based on the data collected from the surveys*, as it is very important that the dog population is controlled and managed by all municipalities in parallel. Only one or a few municipalities cannot reduce the number of dogs on the street in a sustainable and long-term way.



³<https://mapl.rks-gov.net/news/ne-mbledhjen-e-102-te-te-qeverise-se-republikes-se-kosoves-miratohet-draft-strategjia-kombetare-per-menaxhimin-dhe-kontrollin-e-qenve-me-dhe-pa-pronar-per-periudhen-2022-2028/>



INTRODUCTION

For several years now, **the situation with the large number of dogs on the streets is causing problems for people and the welfare of dogs**, therefore it is important that institutions (local and central) undertake effective and humane measures for sustainable solutions to this situation, based on the scientific and statistical data about the actual situation with the dog population in our country. An initial professional assessment of the field situation is essential and will help design successful local DPM programs.

The current situation with the large number of stray dogs in the Capital (but also in other municipalities) is a topic that is quite talked about by the citizens and recently it is also discussed by the institutions mandated to solve this problem, either at the central or local level, and this is thanks to the tireless work of ARF.

"Animal Rights Foundation" has been working since 2018 on monitoring and evaluating central and local level projects regarding the stray dog control programs, and unfortunately none of the public projects/contracts (more than 68 projects from 2008-2021) have been designed and implemented based on an initial assessment of the number of dogs on the street, nor with a proper monitoring system by the state or municipalities during the implementation of said projects. Moreover, there was no evaluation of the measures after the end of the interventions to measure their effectiveness in reducing the number of stray dogs.

Therefore, with this project, ARF has aimed to collect relevant data on the dynamics and the estimated number of dogs in the Municipality of Pristina, to support the municipality in designing and implementing sustainable measures to reduce the number of dogs on the street. In the strategic plan of the municipality of Prishtina for the DPM ⁴, in addition to CNVR, the implementation of other measures is foreseen, such as: **identification & registration of stray dogs with a microchip, the construction of a temporary care center⁵ for stray animals and the feeding stations for stray dogs to avoid incidents due to the lack of food and to care for the welfare of stray dogs.**

An additional measure, such as the **Identification & Registration of dogs with keepers (owners)**, which is an obligation of the municipal level, is being implemented and offered free of charge by the Food and Veterinary Agency, to all dog owners in thirty (30) municipalities of Kosovo.⁶

⁴ <https://telegrafi.com/qente-endacake-komuna-e-prishtines-dhjetefish-shume-buxhet-per-trajtimin-e-tyre/>

⁵ <https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=15166>

⁶ <https://auvk.rks-gov.net/njoftim-7/>

Identification & Registration of dogs with keepers (owners) is an essential measure to control the dog population in general and specially to prevent dogs from being abandoned on the street by many dog keepers/owners.

After consultations between ARF and the Municipality, the municipality of Prishtina has established the municipal inter-institutional working group for the management of the situation with stray dogs, as recommended by ICAM⁷ and many other foreign organizations with many years of experience in DPM.⁸ ARF, as part of this working group, has contributed to advising the Municipality since the beginning for the undertaking of sustainable measures that are based on factual data and successful practices from other countries.

Through the data collected by the project "**Assessment of the dynamics of the dog population**", ARF aims to support the responsible institutions to enforce the legal provisions of Kosovo to create a systematic and serious institutional approach to a sustainable management of the (stray) dog population in Prishtina, by creating a genuine local dog population management program, which will ensure the most effective use of municipal resources by focusing on the most pressing issues related to dog population dynamics.

Any measure or intervention for the management and control of the dog population must be based on real data from the field. Monitoring and evaluation of these interventions are also especially important to ensure the effectiveness and the proper impact from the undertaken measures.

Although there is no official international standard for the initial assessment of dog population dynamics and the measurement of interventions for the DPM, ICAM has created a dedicated guideline⁹ for public institutions and NGOs for monitoring and evaluating interventions for the control and management of the dog population.

⁷ International Companion Animal Management Coalition (ICAM) was formed in 2006 to support the development and use of humane and effective management of companion animal populations worldwide and is comprised of global organizations such as the RSPCA, FOUR PAWS, WORLD ANIMAL PROTECTION, WSAVA, INTERNATIONAL CAT CARE, DOGSTRUST, BATTERSEA.

⁸ <https://prishtinaonline.com/lajmet/3557/themelohet-grupi-punues-ne-bashkepunim-edhe-me-aktore-jashte-strukture-komunale-per-trajtimin-e-qenve-endacake-ne-kryeqytet>

⁹ <https://www.icam-coalition.org/download/are-we-making-a-difference/>

IDENTIFICATION AND REGISTRATION OF DOGS WITH MICROCHIP





METHODOLOGY

According to ICAM, to achieve a successful management of the dog population, the most important impacts (objectives) that must be achieved through the measures taken, are as follows:

1	→	Improving the welfare of dogs
2	→	Improving the care provided to dogs
3	→	Reducing the density (number) of dogs
4	→	Reducing the risks to public health and safety
5	→	Improving the performance of rehoming centers
6	→	Reducing negative impacts of dogs on wildlife
7	→	Reducing negative impacts of dogs on companion animals

For each of these impacts, *more than one indicator is proposed* to evaluate the effectiveness of the undertaken measures (public or private projects).

For the purposes of this project, the focus was set on the objectives **1-4**, for which the following *indicators* were used:

- In1.** Evaluation of the body condition of dogs on the street
- In2.** Assessment of the skin condition of dogs on the street
- In3.** Male – Female ratio in stray dogs
- In4.** Community care for stray dogs
- In5.** Density (number) of dogs on the street
- In6.** Number of lactating females
- In7.** Number of puppies
- In8.** Reproduction status
- In9.** Number of incidents with dogs on the street
- In10.** Number of dogs vaccinated against rabies
- In11.** Adoption of dogs
- In12.** Citizen behavior around stray dogs
- In13.** Concerns about stray dogs
- In14.** Abuse and abandonment of dogs

The measurement of the dynamics of dogs on the street is done with the above-mentioned indicators and through the following activities:

- A. Street surveys (density and welfare assessment)**
- B. Household surveys for the assessment of the dog population dynamics**

A.

Street surveys (Density and welfare assessment)

Street surveys are an efficient data collection method based on a series of indicators to assess the welfare of stray dogs and their density (number). The efficiency of this method makes it suitable for monitoring and evaluation because it can be repeated several times during a DPM intervention.

The street survey is divided into two components. The **first component** includes *unbiased routes*, or neutral areas, while the **second component** includes areas that are known for a large presence of dogs (*hotspot routes*).

Unbiased routes show the approximate number of dogs on the streets by surveying at least **20 km of streets in four (4) parts of the city: south, north, east, and west** - to derive the estimated number of dogs according to the recommended calculations of ICAM. The hotspot routes show the reproductive state of the dogs and measure the following indicators:

- ▶ Body condition of dogs
- ▶ Skin condition of dogs
- ▶ Male – Female ratio in stray dogs
- ▶ Density of dogs on the street
- ▶ Number of lactating females
- ▶ Number of puppies
- ▶ Reproduction status
- ▶ Number of dogs vaccinated against rabies

The survey teams were composed of at least three (3) people. All team members were responsible for spotting dogs on the street and one person entered the data into the dedicated dog survey mobile application. The teams followed a predetermined route, stopping to record any dogs seen in public spaces, before moving on as quickly as possible; maintaining a constant pace is important to cover the route efficiently and to avoid double counting.

To assess the dog's body condition in terms of weight, the ICAM recommendations for the body condition score (from 1-5) were used.¹⁰

¹⁰ <https://www.icam-coalition.org/tool/dog-body-condition-scoring-training/>

For the survey of the visible dogs on the street, each dog is divided into one of **seven (7) categories: male, neutered male, female, spayed female, lactating female, puppy (under 4 months), adult of unknown sex.** Each dog was also assessed for the welfare status (*body condition score and presence of visible skin disease*) and whether it had a collar or not.

Since in Kosovo **dogs treated with the CNVR method are identified by an ear tag**, for the purposes of this project, the presence or absence of an ear tag served as an indicator of the dog's reproductive status and rabies vaccination.

In cases in which the attributes such as gender, reproductive and welfare status, could not be accurately assessed because the dog was too far away from the survey team, dogs were categorized as unknown with respect to gender, reproduction status and welfare.



Applications used for **Activity A**

To set up the unbiased routes, the online platform **TrailRouter**¹¹ was used, which automatically generates the routes, so that the **four (4)** neutral routes are not subjective in any way in relation to the presence of dogs.

Google My Maps¹² was used to set up the *hotspot routes*.

For the creation of the templates for the routes, for route navigation, as well as for dog surveys, the mobile application **Talea**¹³ was used, which is an application developed by ICAM, precisely for the purpose of collecting data about dogs on the streets.

¹¹<https://www.trailrouter.com>

¹²<https://mymaps.google.com>

¹³<https://www.icam-coalition.org/tool/talea-street-survey-app/>

B.

Household surveys for the dog dynamics

Household surveys serve to measure a wide range of indicators:

- ▶ Community care for stray dogs
- ▶ Number of incidents with dogs on the street
- ▶ Adoption of dogs
- ▶ Behavior around stray dogs
- ▶ Concerns about stray dogs
- ▶ Abuse and abandonment of dogs
- ▶ Dog keeping in households

The activity of household surveys has foreseen the surveying of 623 respondents (households) with effective interviews. The above number of surveyed respondents was determined to better understand the situation and tendency to keep and abandon the dogs and to measure the human care for the stray dogs or any disturbance caused by them.

The activity of household questionnaires was conducted by asking questions about the situation of stray dogs in different neighborhoods, to understand how many households allow their dogs to roam freely and other questions in the interest of assessing the dog dynamics and assessing the situation of dog population management and control from the community perspective. The survey on dog keeping is important to understand what percentage of owned dogs who are allowed to roam freely populate the streets; the same dogs that are not spayed/neutered, reproduce with the current dogs on the street.

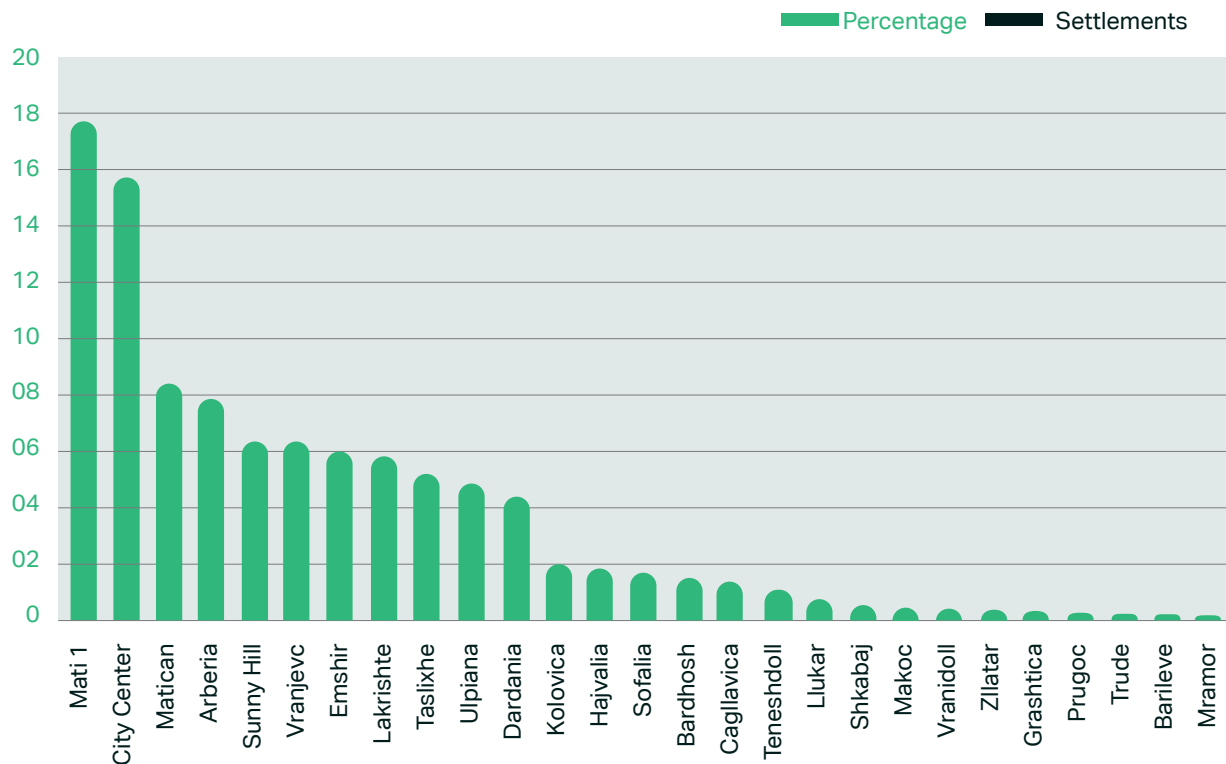
The questionnaire included a set of standard questions that were closed-ended (questions with a limited set of answers to choose from, such as 'yes' or 'no') or in multiple-choice answer formats to help on the data analysis with all listed answers, including a "I don't know" answer to avoid forcing the respondent to guess an answer.

The graph below (*Graph 1*) reveals the *distribution after the application of the 'sample weighting' (correction)*, which was applied to correct the proportions between the survey totals obtained from rural and urban settlements. The *correction* was applied to the sample obtained to reflect the actual distribution of the population, in the sense of the distribution of the population between urban and rural settlements.

Accordingly, the achieved survey sample (before the correction) has a higher representation of rural settlements in relation to their proportion in general at the municipality level, and this has been corrected for the needs of the analysis and the possibility of statistical inference (generalization) of findings from the sample to the target population.

Referring to the urban development plan of the municipality of Pristina¹⁴, the surveyed sample is corrected to reflect the distribution of the population in terms of territory, **92% urban areas and 8% rural areas.**

SAMPLE DISTRIBUTION - EX POST CORRECTION **N=623**



GRAPH. 1. DISTRIBUTION OF THE SURVEY SAMPLE AFTER APPLYING WEIGHTING (CORRECTION)

The **KoboToolbox**¹⁵ application was used for household surveys. To create the questionnaire, a template created by ICAM was used, which was translated and adapted for the reality in Kosovo and for this project's purposes.

The teams conducted the survey over 12 days, while the distribution of the sample covering the villages and neighborhoods of the municipality of Pristina is shown below (*Fig. 1 and Tab. 1*).

¹⁴https://kk.rks-gov.net/prishtine/wp-content/uploads/sites/45/2018/02/PZHU-_Prishtina.pdf

¹⁵<https://www.kobotoolbox.org/>

TAB.1. DISTRIBUTION OF THE SURVEY SAMPLE

AREA	NUMBER OF SURVEYS	PERCENTAGE
Mati 1	66	10.6
City Center	59	9.5
Hajvalia	52	8.3
Bardhosh	41	6.6
Cagllavica	35	5.6
Matican	32	5.1
Arbëria	30	4.8
Sunny Hill	25	4.0
Taslixhe	25	4.0
Vranjevc	25	4.0
Emshir	24	3.9
Teneshdoll	23	3.7
Lakrishte	22	3.5
Llukar	21	3.4
Ulpiana	18	2.9
Dardania	17	2.7
Shkabaj	15	2.4
Makoc	14	2.2
Vranidoll	13	2.1
Zllatar	11	1.8
Grashtica	10	1.6
Prugoc	10	1.6
Truda	9	1.4
Kolovica	8	1.3
Barileva	7	1.1
Mramor	6	1.0
Sofali	5	0.8

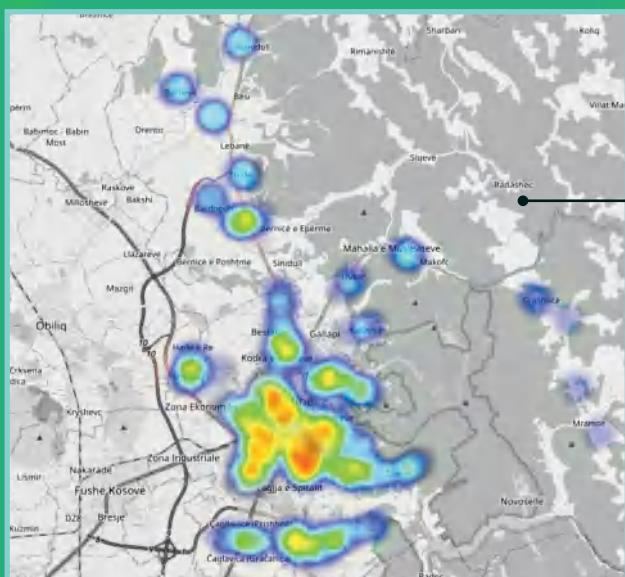


FIG 1. COVERAGE MAP OF THE HOUSEHOLD SURVEYS IN THE MUNICIPALITY OF PRISTINA

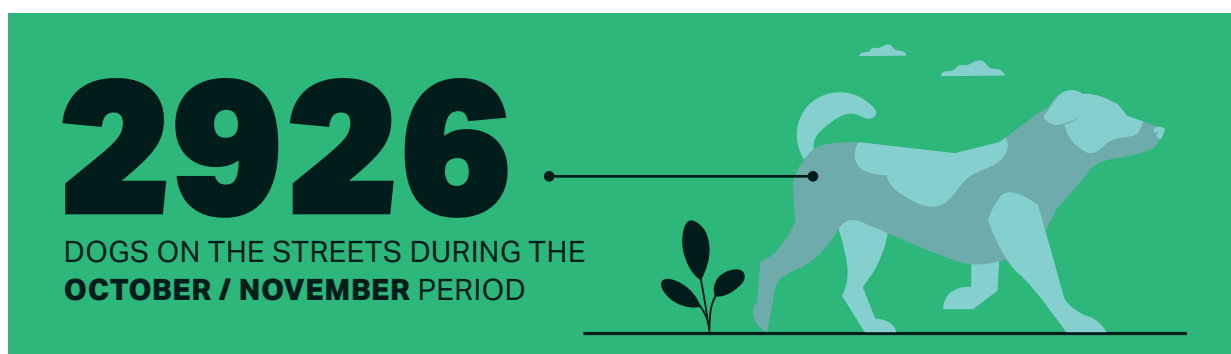
IV.

FINDINGS AND DATA

1. Street survey results based on routes

1.1. Unbiased routes

1.1.1 FIRST PHASE: **OCTOBER/NOVEMBER 2022**



Estimated number of dogs in the territory of the municipality of **Pristina** for the period *October/November 2022*, is: **2926**.

The average number of dogs per kilometer (km) on the surveyed routes was: **2.36**. The approximate number of dogs visible in the **early morning hours** was **1170** and the **0.44 dog visibility index** was used according to ICAM recommendations.¹⁶

In total, in the Municipality of Pristina, the gender ratio of dogs was 35.4% male and 20.83% female. Out of the total visible dogs on the streets, **59% of dogs were castrated/sterilized**. From the total number of dogs counted, **43.7%** of the dogs could not be identified in terms of gender and reproductive status or body condition score. From the total number of identified male dogs, **70.6%** were castrated, while from the total number of identified female dogs, **40%** were sterilized. Of the total female dogs identified, only **10% were lactating**¹⁷ and no puppies were seen during the unbiased routes surveys.

¹⁶ We used the estimate of 0.4 because there is no other estimate for an urban area in Eastern Europe. ICAM found that this figure was closer to 0.3 in a study in Serbia, but this was in a rural area, where there were different opportunities for dogs to hide compared to a city environment. If we get an estimate of detectability in Pristina (e.g. using a mark-resight study of dogs on the street), or in a similar city, we have to change the calculations, until then we think 0.4 is the best we have.

¹⁷ Lactating (breastfeeding) female dogs

The area with the highest coverage of castration/sterilization was the **western part** of the city with **71.4%** (fig. 2), while the **southern part** (fig. 3) had no coverage at all regarding castration and sterilization of dogs.

Of the total number of identified dogs, **94%** had ideal body condition (*body condition score 3*), while **87.5%** of dogs had no visible skin problems.

Considering the data above, it can be concluded that 91% of the dogs identified in Prishtina are healthy based on their external appearance.



During the street surveys, the survey teams did not come across any dogs with aggressive behavior.



FIG .2. UNBIASED ROUTE SURVEY IN THE WESTERN PART OF PRISHTINA

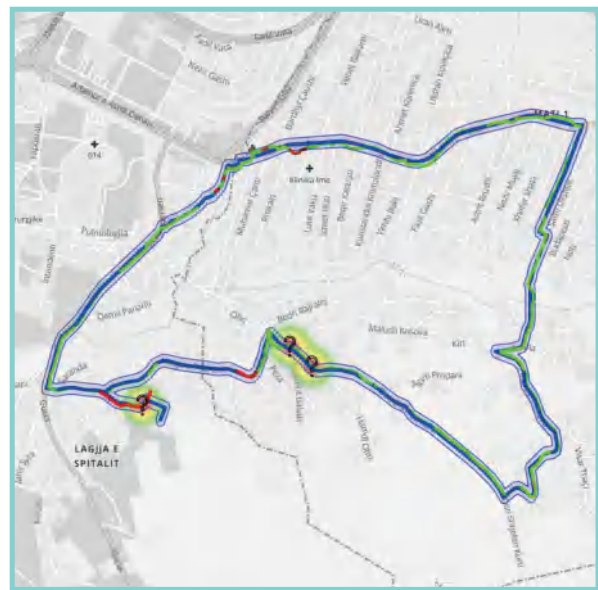


FIG .3. UNBIASED ROUTE SURVEY IN THE SOUTHERN PART OF PRISHTINA



FIG .4. UNBIASED ROUTE SURVEY IN THE EASTERN PART OF PRISHTINA

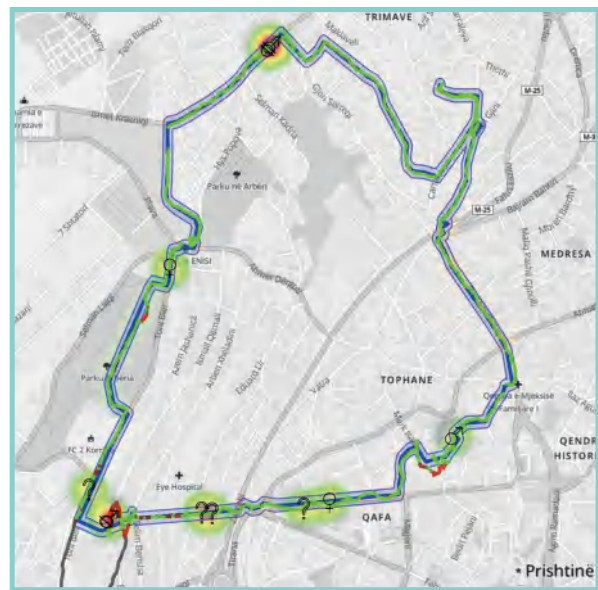
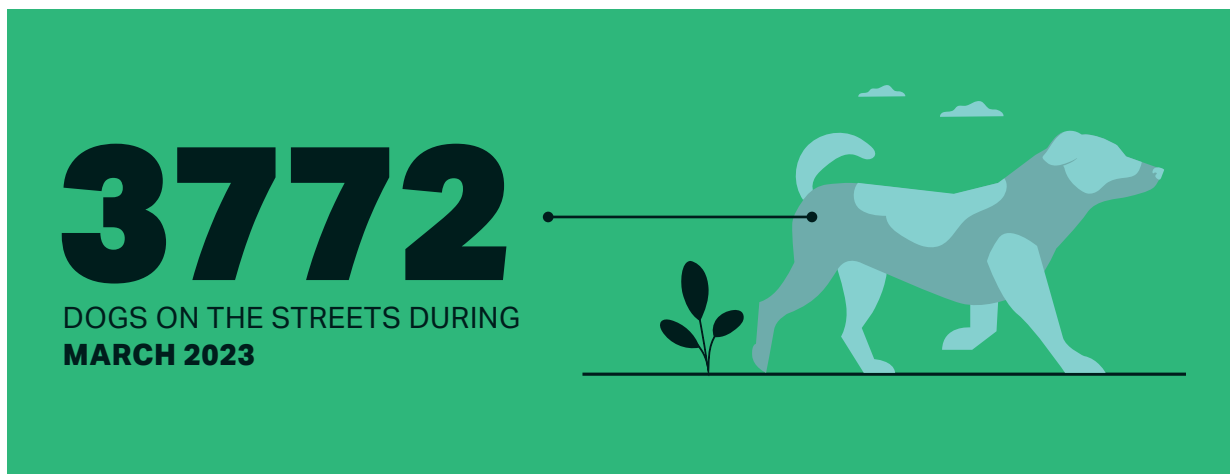


FIG .5. UNBIASED ROUTE SURVEY IN THE NORTHERN PART OF PRISHTINA



The average number of dogs in the territory of the municipality of Prishtina for **the second phase** was: **3772**.

Average number of dogs per kilometer (km) on surveyed routes: **3**. Approximate number of dogs visible in the **early morning hours**: **1,509**.

In the Municipality of Pristina, the gender ratio of dogs was **34.42% male and 32.79% female**. Out of the total, **58.6% of dogs of visible sex were spayed/neutered**, whereas **27.8%** of the dogs could not be identified in terms of gender and reproductive status or body condition score. From the total number of identified male dogs, **66.67%** were *neutered*, while from the total number of identified female dogs, **55%** were *spayed*. Of the total female dogs identified, **10%** were *lactating* and **4.9%** were *puppies*.

The area with the **highest castration/sterilization coverage was the northern part** of the city with **73.3% (fig. 9)**, while the **western part (fig. 6) had the lowest coverage in terms of castration and sterilization** of dogs, with **50%**.

Of the total dogs identified, **88.5%** had **ideal body condition** (body condition index 3) and had no visible skin problems.

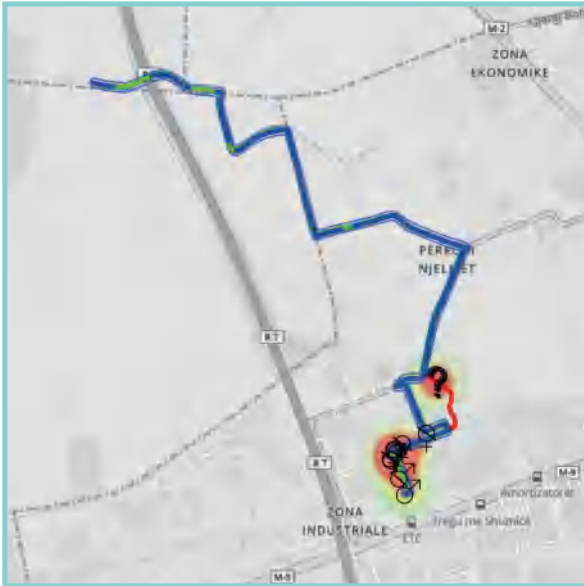


FIG. 6. UNBIASED ROUTE SURVEY IN THE WESTERN PART OF PRISHTINA

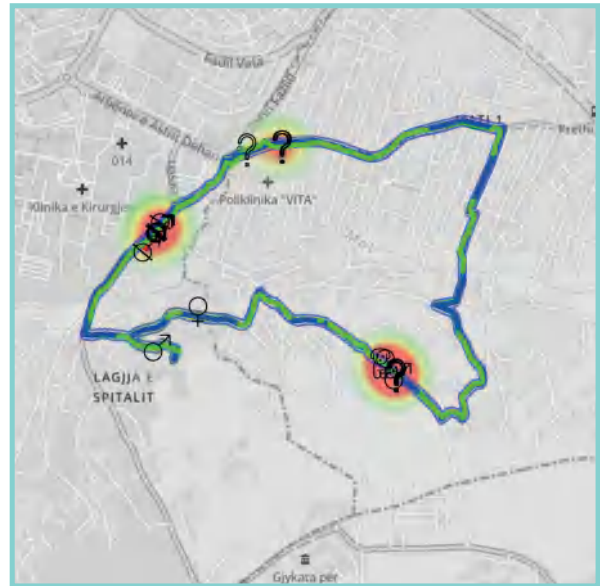


FIG. 7. UNBIASED ROUTE SURVEY IN THE SOUTHERN PART OF PRISHTINA

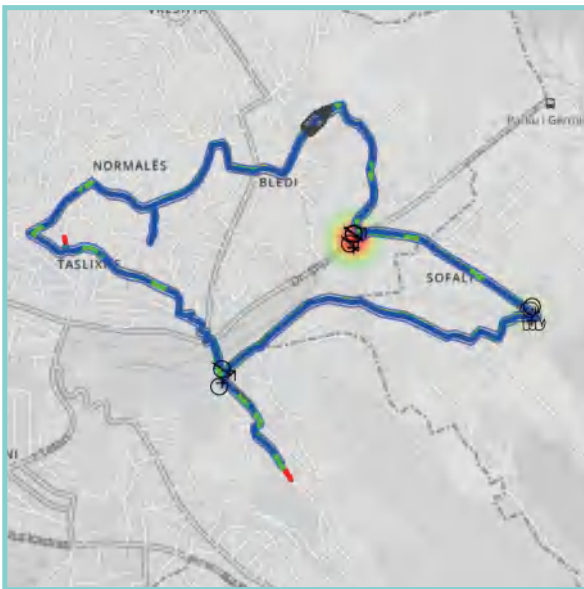


FIG. 8. UNBIASED ROUTE SURVEY IN THE EASTERN PART OF PRISHTINA



FIG. 9. UNBIASED ROUTE SURVEY IN THE NORTHERN PART OF PRISHTINA

1.2. HOTSPOT ROUTES

1.2.1 FIRST PHASE: OCTOBER/NOVEMBER 2022

The **"Hotspot"** routes are parts of the city known for a large presence of dogs. These areas are surveyed to see the reproduction status of the dogs, their welfare, the number of lactating females or in total to reflect the situation with the puppies on the street. Hotspot routes show the situation in general, but they also clearly show for each part surveyed how the condition of the dogs is and what measures for the dog population management are still missing in those parts with a large presence of dogs.



During the survey of hotspot routes, **78 dogs** were counted in the first phase.

Of the total number of dogs counted, **41%** could not be identified in terms of gender and reproductive status or body condition, whereas of the total dogs whose gender could be identified, **59%** were *spayed/neutered*.

Of the total number of identified male dogs in all surveyed hotspot routes, **60%** were neutered. Of the total number of identified female dogs in all surveyed hotspot routes, **57%** were spayed. From the total number of identified female dogs, 14% were lactating, while **9%** were puppies.

The hotspot route with the **greatest spay/neuter coverage was the city center with 79%** (*fig. 10*). The hotspot route in 'Sunny Hill' had **57%** (*fig. 11*) of spayed/neutered dogs, while the hotspot route in 'Germia Park' had only **50%** spay/neuter coverage (*fig. 12*). Hotspot route "B & C Street" had the smallest coverage in terms of spay & neuter, with only **14%** (*fig. 13*).

From the total number of dogs identified, **78%** of dogs had ideal body condition (body condition score 3), while **90%** of dogs had no visible skin problems.

Considering the data above, it can be concluded that 84% of the dogs identified in Pristina in areas known for a large presence of dogs (hotspots), based on the external appearance, are in good health.



During the survey of hotspot areas, the teams did not find any dogs with aggressive behavior.

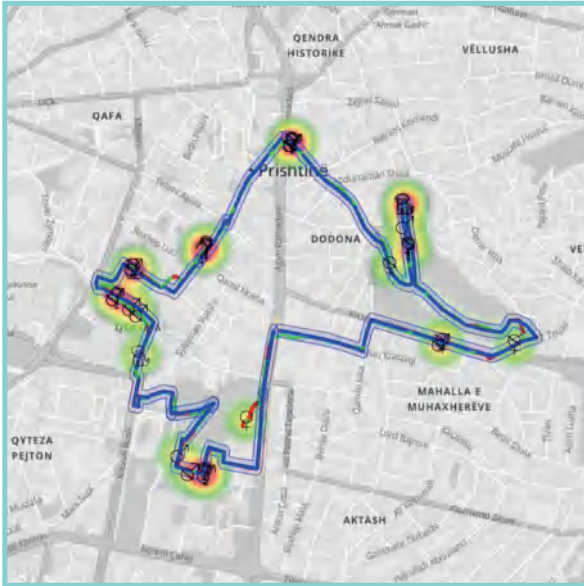


FIG.10. HOTSPOT ROUTE – CITY CENTER

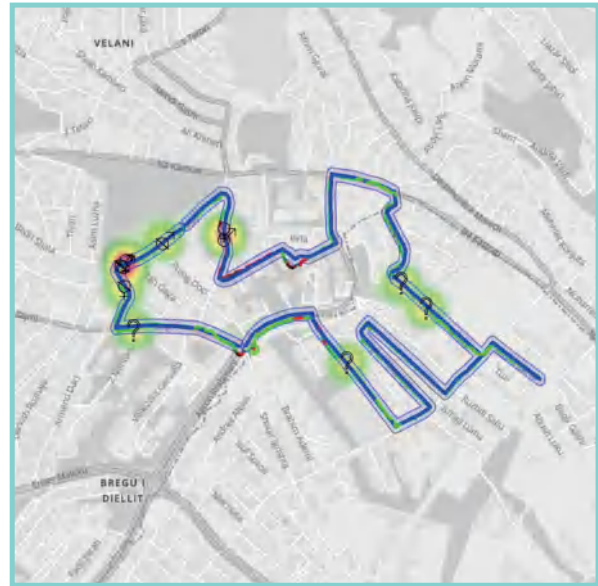


FIG. 11. HOTSPOT ROUTE – SUNNY HILL



FIG.12. HOTSPOT ROUTE – GERMIA PARK

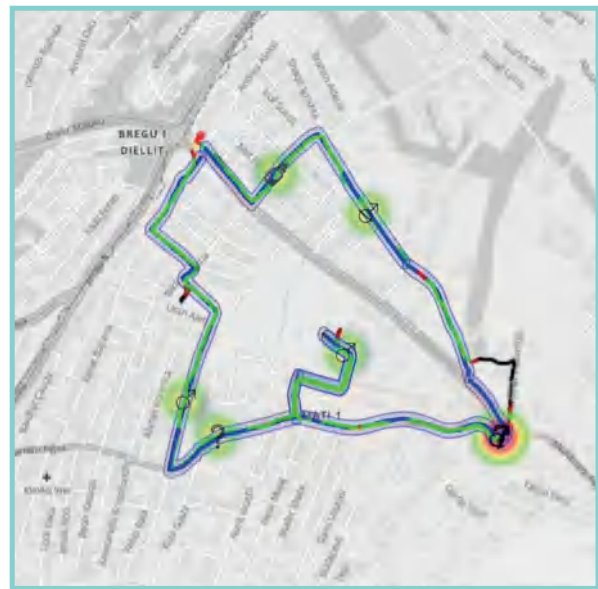


FIG.13. HOTSPOT ROUTE – STREETS B & C

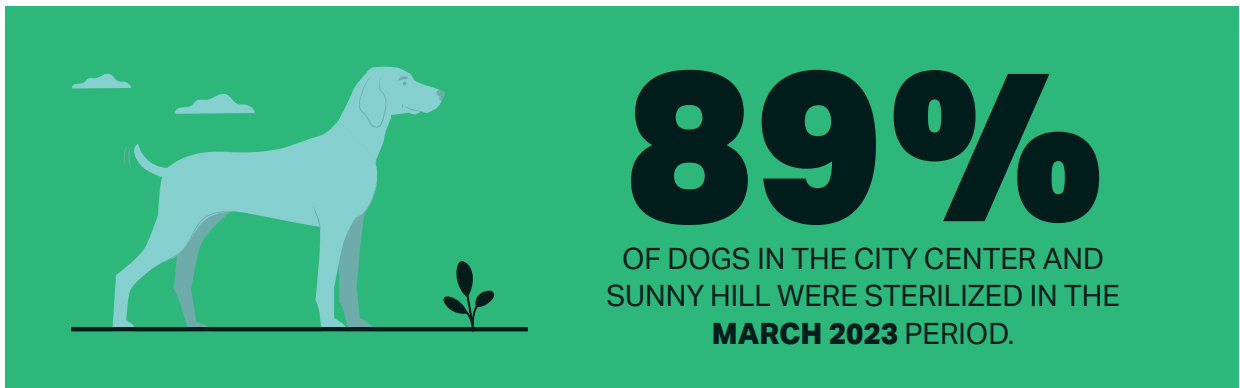
1.2.2. SECOND PHASE: MARCH 2023

During the survey of the hotspot routes, **88 dogs** were counted in the second phase.

Of the total number of dogs counted, **23.87%** could not be identified in terms of gender and reproductive status or body condition. Of the total number of dogs whose gender could be identified, **72%** were spayed/neutered.

Of the total number of identified male dogs in all surveyed hotspot areas, **65%** were *neutered*. Of the total number of identified female dogs in all surveyed hotspot areas, **87.9%** were **spayed** and **1%** were **lactating**, while from the total number of counted dogs, **4.5%** were **puppies**.

The hotspot routes with the highest *spay/neuter* coverage were the City Center and the Sunny Hill with **89%**, while the hotspot route on "B" and "C" streets had the lowest coverage in terms of spay/neuter of dogs, with **50%**, but there was an increase from the first phase where the spay/neuter coverage was only **14.29%**. The hotspot route in Germia Park had 60% spay/neuter coverage, **10%** more than in the *October/November 2022 period*.



In all hotspot routes in March 2023, there was a significant increase in spay/neuter coverage.

From the total number of dogs identified, **83%** of the dogs had **ideal body condition** (body condition index 3), while **75%** of the dogs had no visible skin problems.

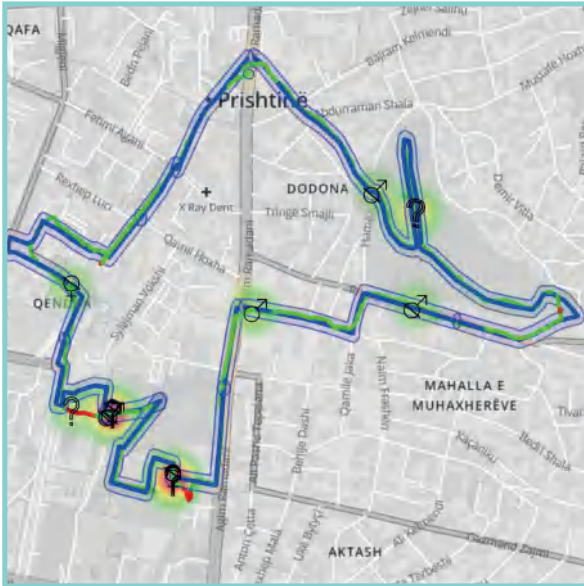


FIG .14. HOTSPOT ROUTE - CITY CENTER



FIG .15. HOTSPOT ROUTE - SUNNY HILL



FIG .16. ZHOTSPOT ROUTE - GËRMIA PARK

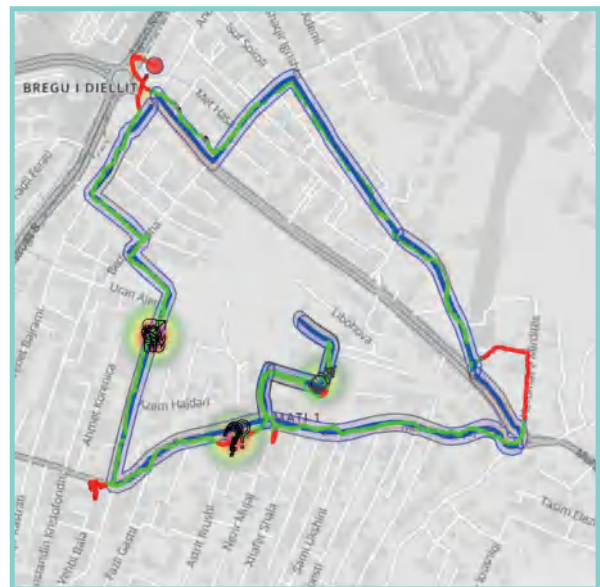


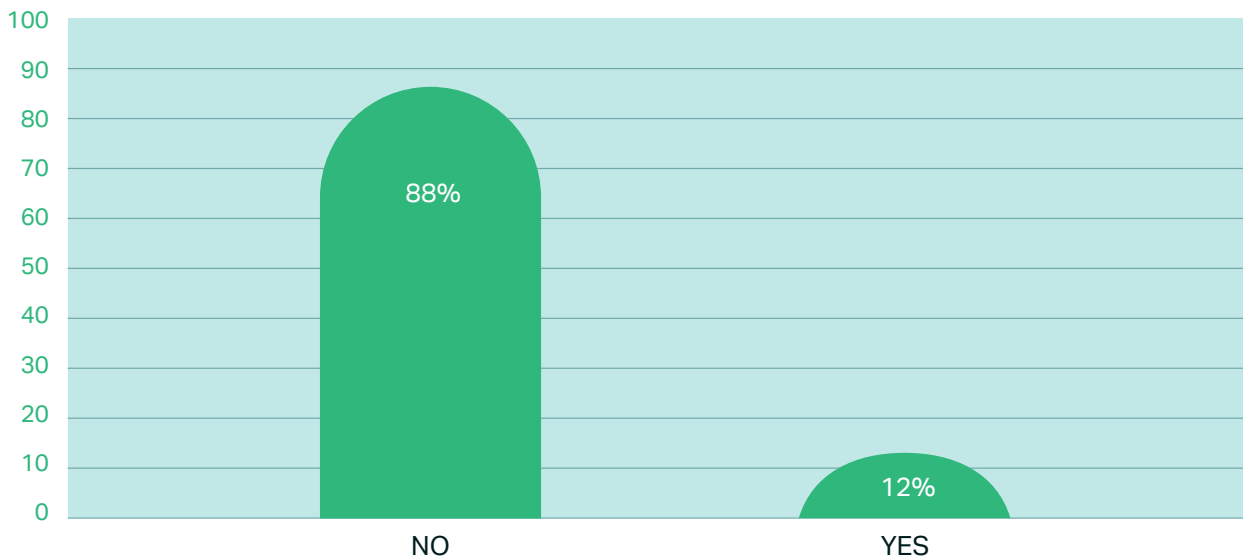
FIG .17. HOTSPOT ROUTE - STREETS B & C

2. Household questionnaire results

2.1. Dog keeping and their reproduction status

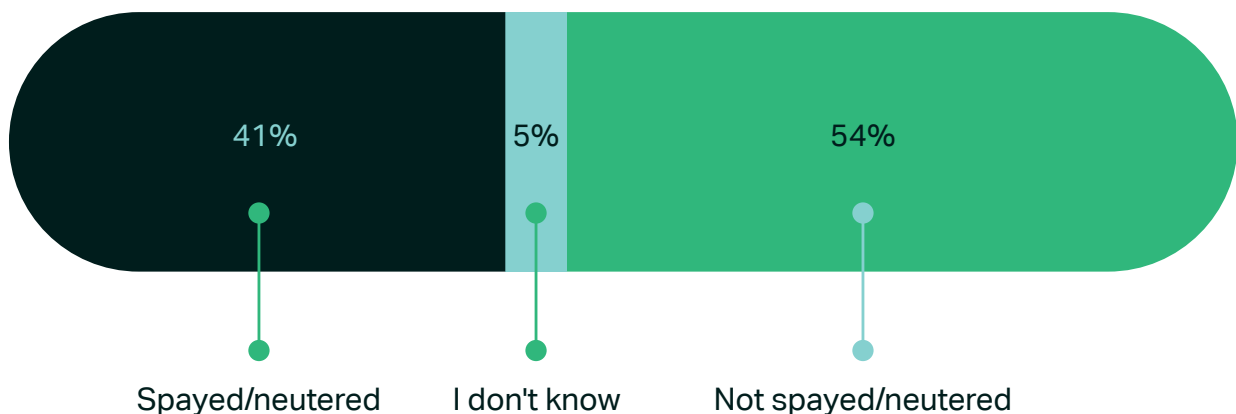
From the data collected from household questionnaires, a clear overview of the source of the increase in the number of dogs on the street from abandonment appears, as well as the degree of care of citizens for stray dogs, concerns caused by stray dogs but also the potential mistreatment of dogs by the citizens, as a potential trigger of unfriendly behavior or aggression of some dogs towards people.

From the results of the survey, keeping dogs is still not a very widespread phenomenon in the municipality of Pristina, with only **12%** of the surveyed respondents stating that they keep dogs at home (*Graph. 2*).



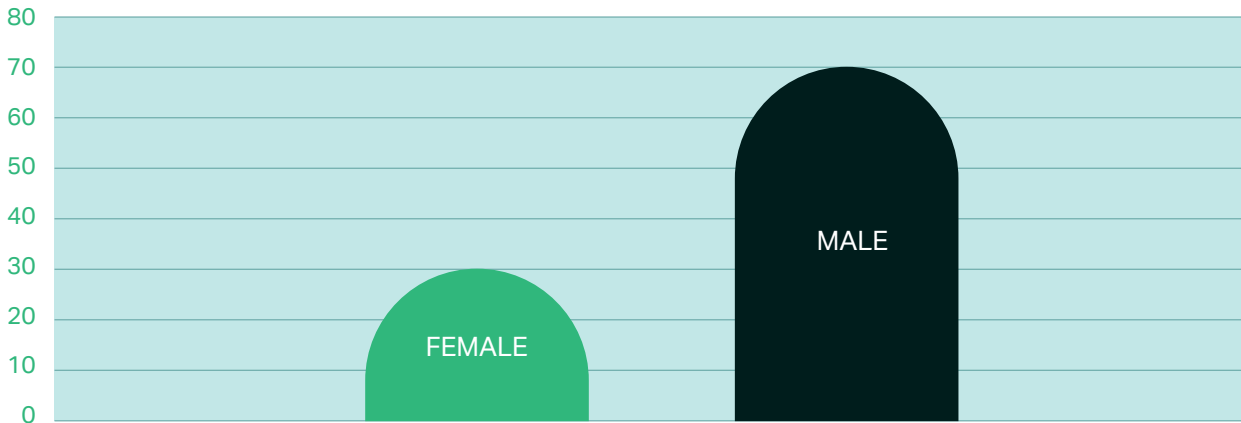
GRAPH.2. DOG KEEPING IN HOUSEHOLDS

From the data collected from the dog keepers (owners) who answered the questionnaire, **54% of the dogs are not spayed/neutered** in terms of reproductive status (*Graph 3*).



GRAPH.3. REPRODUCTION STATUS OF DOGS WITH KEEPERS/OWNERS

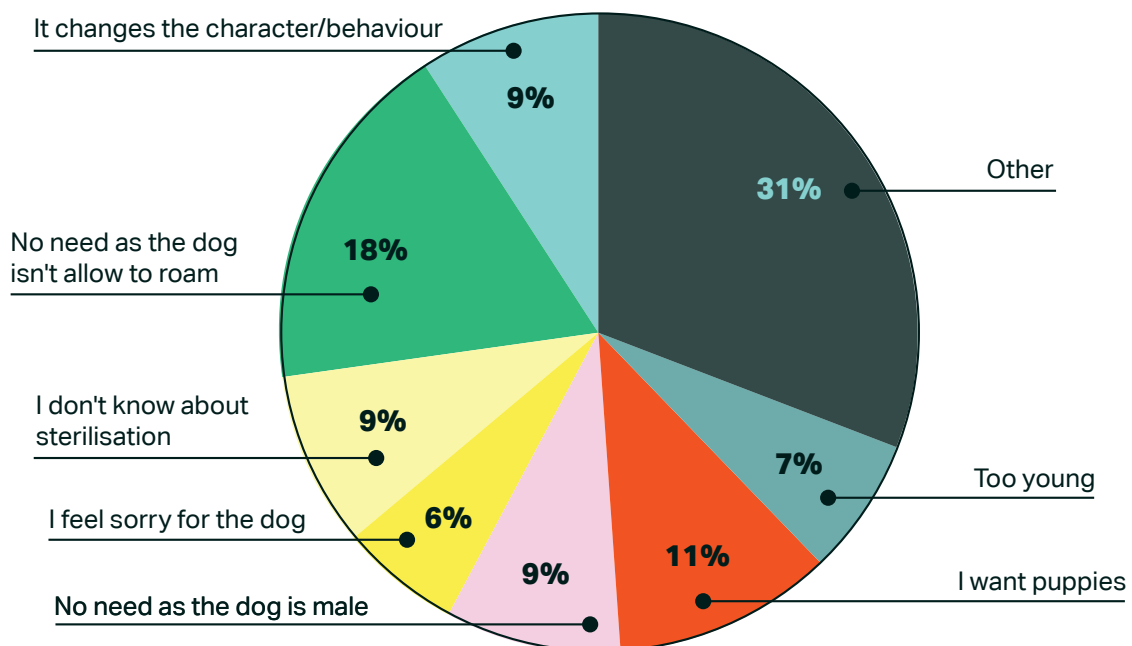
From the total number of dogs with keepers (owners), **70% are male dogs**, while **30% are female dogs** (Graph 4).



GRAPH.4. GENDER OF DOGS WITH KEEPERS (OWNERS)

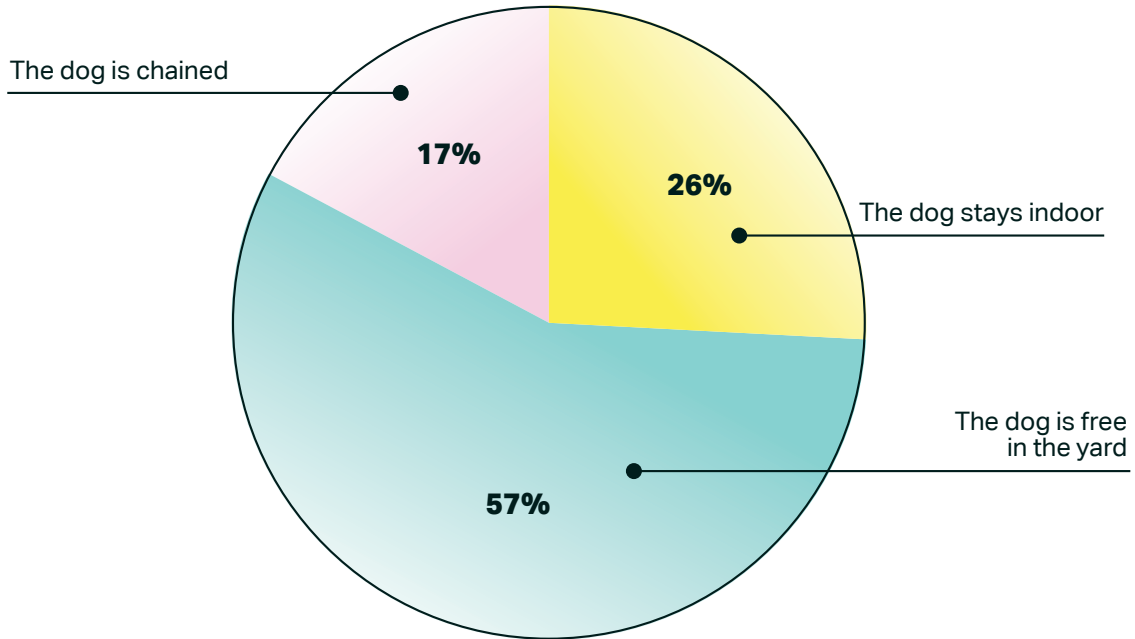
It is also worth emphasizing the reasons given by the respondents regarding the lack of regarding not spaying/neutering their dogs.

In the graph below (Graph. 5), **40%** of people did not know about about spaying and neutering and answered with "I don't know about sterilization" but also the "other" option since they did not have a specific reason for not spaying/neutering their dog or even for any personal reason. Moreover, **18%** of the respondents who keep a dog stated that their dog does not need to be spayed/neutered since their dog is not allowed to roam. However, it is important to note that many dogs, even if they are left alone in the yard and/or are on a leash, *can reproduce with other dogs* if the yard where the owned dog is kept is not properly fenced to prevent the entry of other dogs. Finally, **11%** of the respondents stated that they want puppies and therefore do not want to spay/neuter their dogs, and some were convinced that the dog's character changes or that there was no need for neutering since they had male dogs.



GRAPH. 5. REASONS FOR NOT SPAYING/NEUTERING DOGS

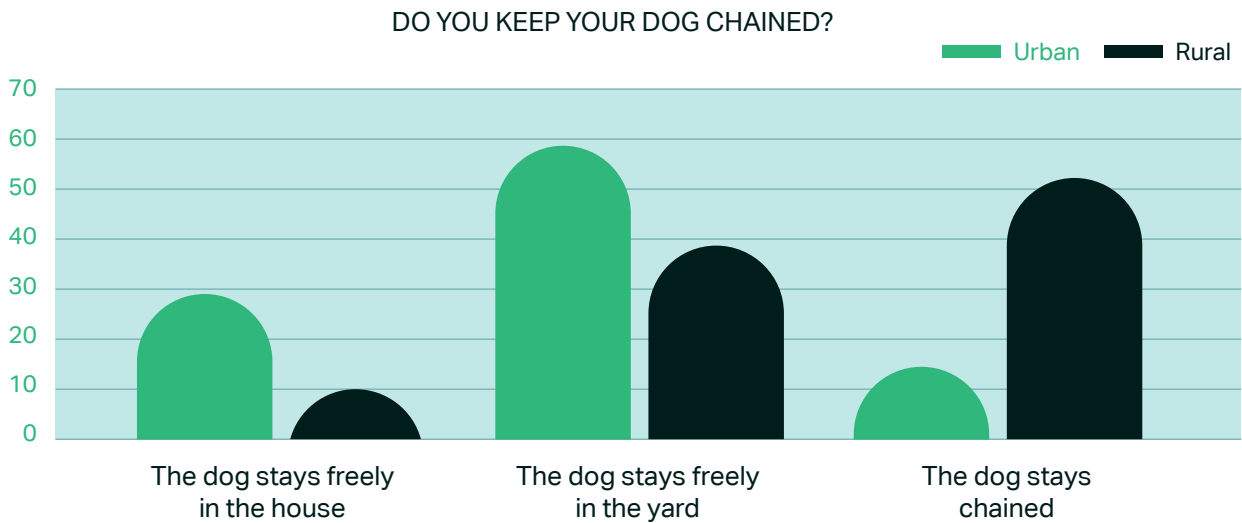
As for the conditions of dog keeping in the surveyed households, **17%** of the citizens stated that they keep their dog on chain, **57%** of the respondents stated that their dog is free in the yard, while **26.63%** stated that their dog stays inside the house (Graph. 6).



GRAPH. 6. THE WAY OF KEEPING DOGS IN HOUSEHOLDS

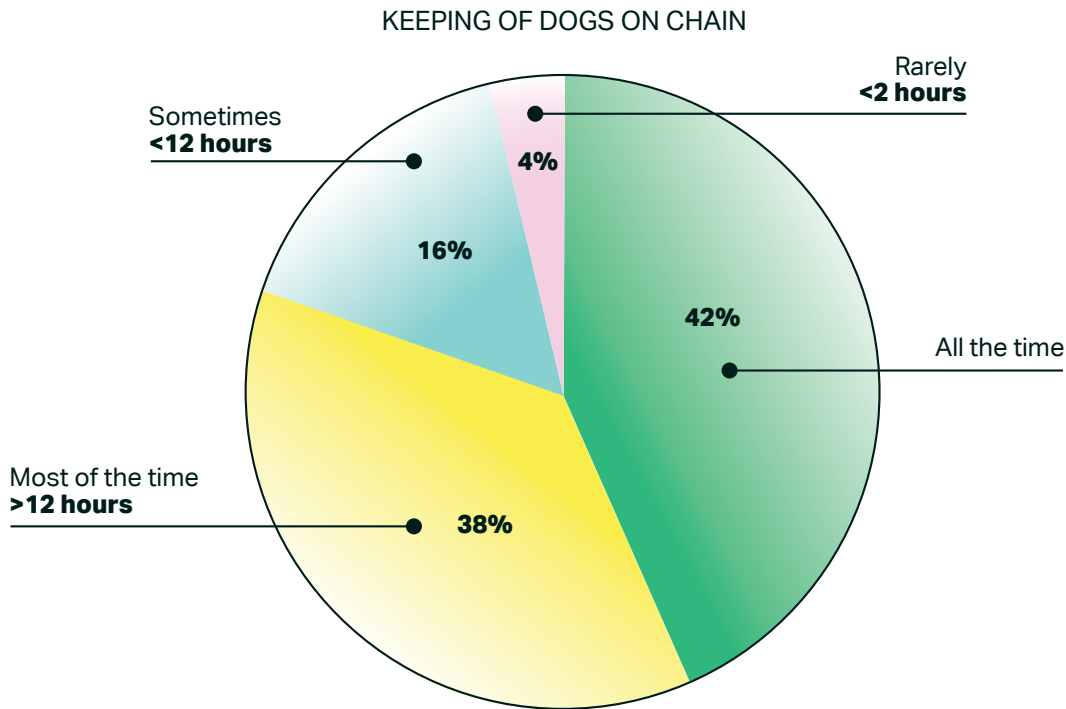
There is a visible difference between urban and rural areas in terms of keeping dogs on chains. More than **50%** of the respondents in rural areas stated that their dog is chained, while in urban areas, this number is much smaller, only **14%**.

This difference can also be observed in situations where the dog is kept freely inside the house, with **28%** of the respondents from urban areas who stated that they keep the dog free at home, while in rural areas this percentage is smaller, with only **10%** of the respondents who stated that they keep the dog inside the house (Graph. 7).



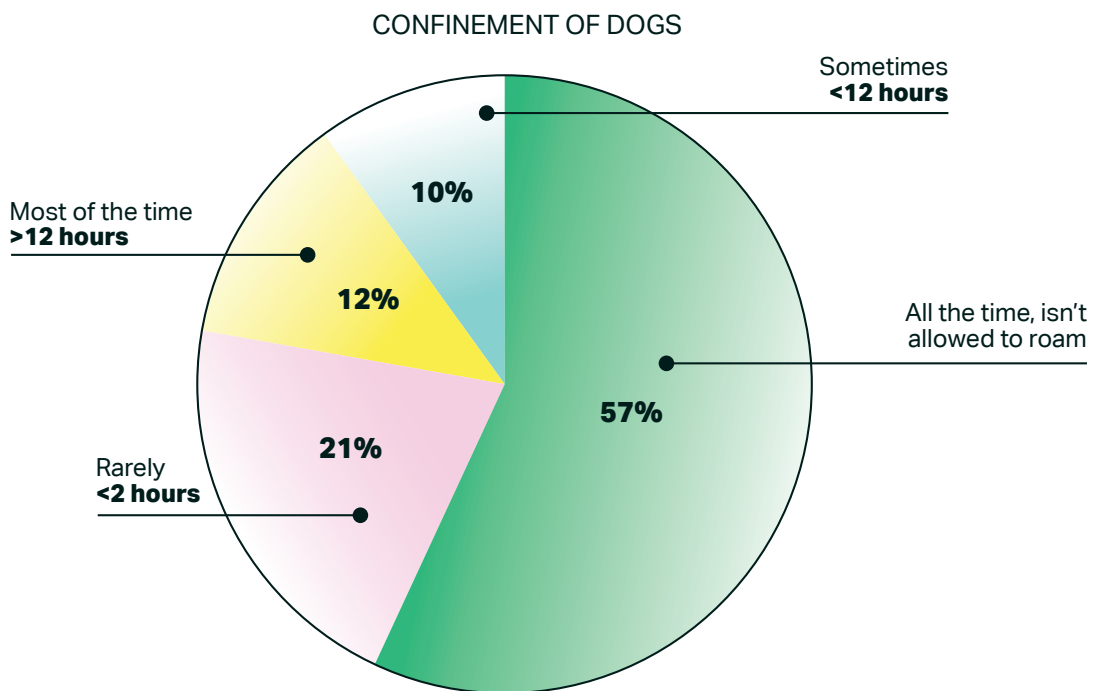
GRAPH. 7. KEEPING OF DOGS ON CHAIN IN URBAN AND RURAL AREAS

Respondents who confirmed that they keep their dog on chain also answered the question "how long does the dog stay on a chain?" and **42%** of them stated that they keep the dog chained all the time (Graph. 8).



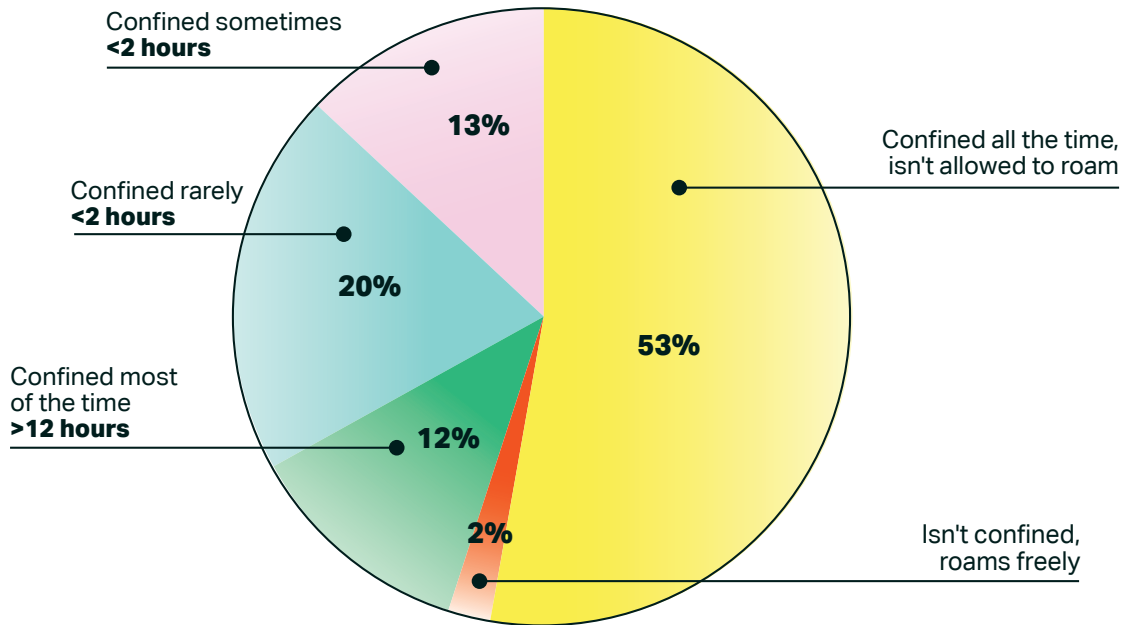
GRAPH. 8. DURATION OF DOGS BEING CHAINED

As for the confinement of owned dogs (whether they are allowed to roam outside the house), **43%** of the owners stated that the dogs are not confined all the time and are allowed to roam outside the premises of the house as well (Graph. 9).



GRAPH. 9. DURATION OF CONFINEMENT OF OWNED DOGS

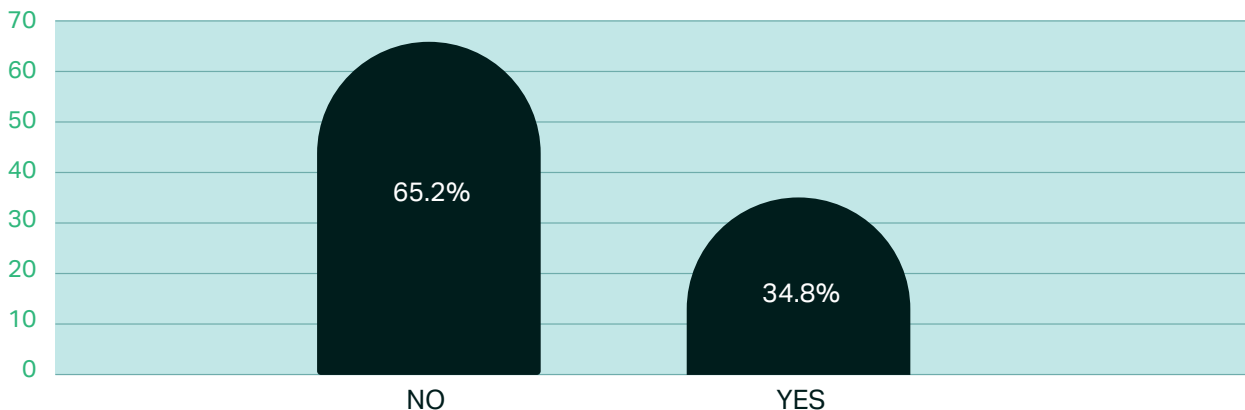
Unspayed/unneutered dogs that are allowed to roam outside the home are a potential source of increasing the number of stray dogs, as these same dogs can breed and reproduce with current unspayed/unneutered stray dogs. In the graph below (Graph. 10) it is observed that only **53%** of unspayed dogs stay confined all the time and do not roam in the street, while **47% of dogs that are not always confined can be considered as a source of reproduction** with stray dogs and thus increasing the dog population on the street. Dogs and animals in general roam during the reproduction cycle, so even if some dog keepers (owners) state that their dogs roam the streets very rarely or only briefly, this would be enough for their dog to contribute to increasing the number of dogs on the street through reproduction with unspayed/unneutered dogs on the street, even against the keeper's (owner's) will.



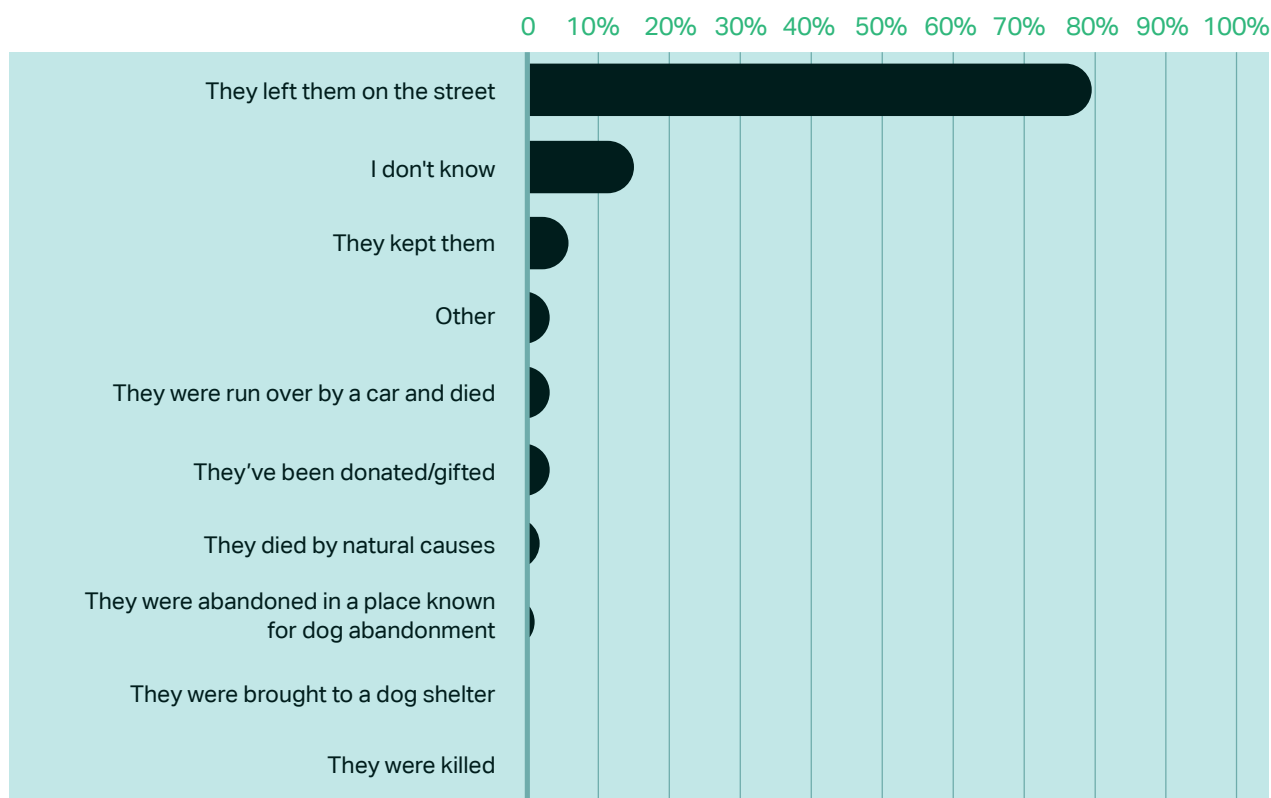
GRAPH.10. CONFINEMENT OF UNSPAID/UNNEUTERED DOGS WITH KEEPERS/OWNERS

Another important data from this survey shows us that **35%** of citizens have declared that they know someone in their neighborhood or village, whose dog has given birth to puppies in the last 12 months (Graph. 11). The overwhelming percentage (**79%**) of these puppies, according to the answers of the respondents, ended up on the street (abandoned), thus increasing the number of stray dogs (Graph. 12).

RESPONDENTS THAT ARE AWARE OF THE BIRTH OF PUPPIES BY OWNED DOGS, IN THE LAST 12 MONTHS



GRAPH. 11. BIRTH OF PUPPIES FROM DOGS WITH OWNERS IN THE LAST 12 MONTHS



GRAPH.12. ABANDONMENT OF PUPPIES

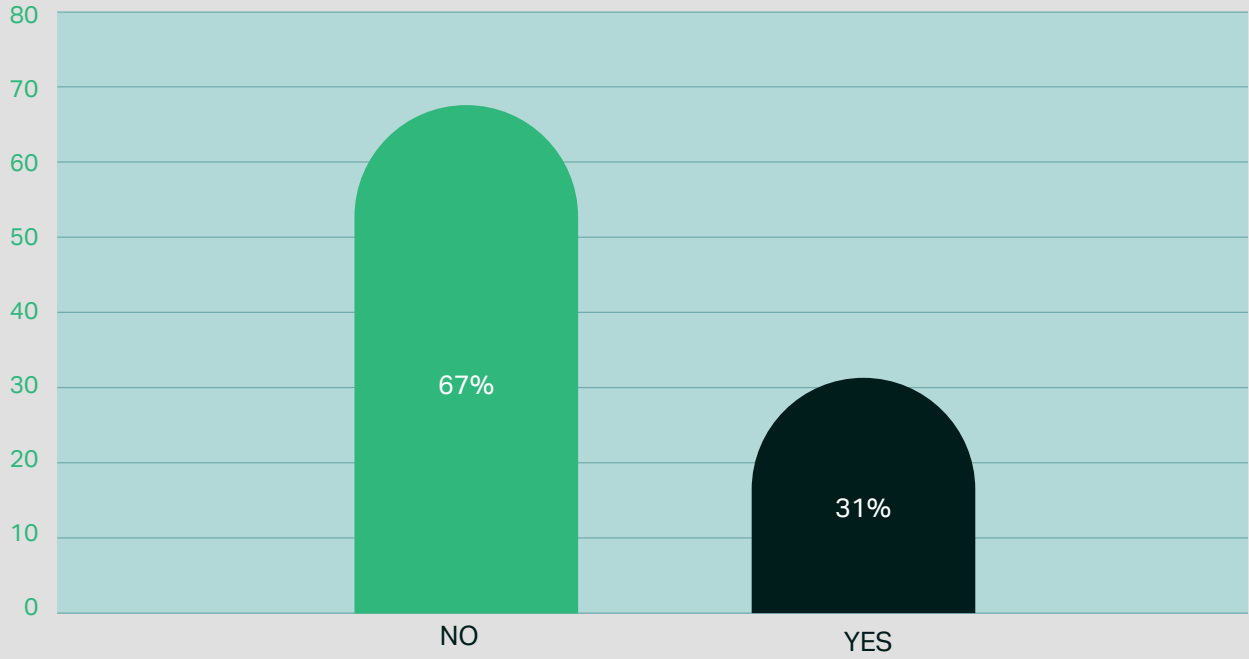
2.2. Community care for stray dogs

One of the objectives of this project, in addition to identifying the sources of the increase in the number of stray dogs, was also to measure households' perception of dogs and the tolerance that citizens have by taking care of stray dogs.

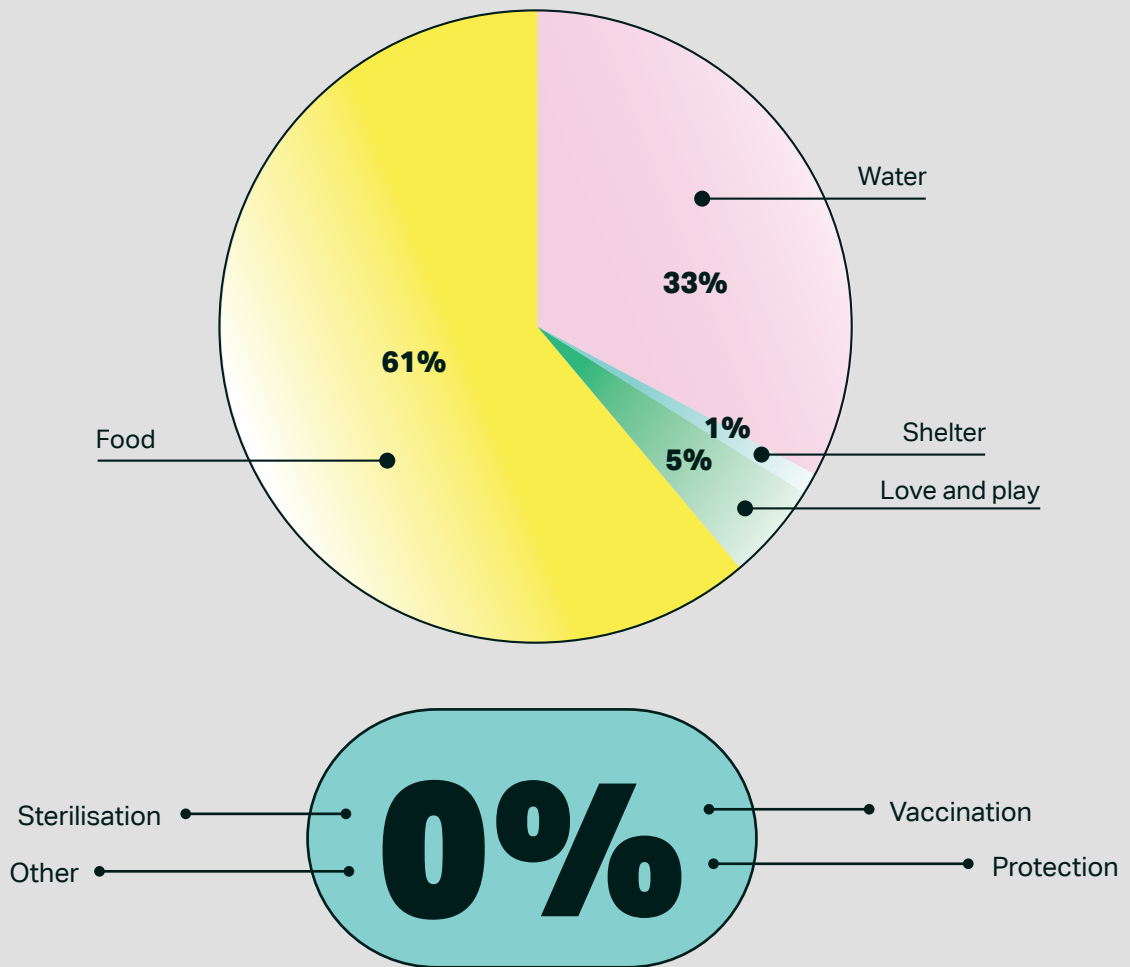
Community care for street dogs turns out to be at a low level, with only **31%** of respondents stating that they care for stray dogs (Graph 13). The main way of caring for stray dogs is **providing food (61%)** and **water (33%)**, **play and love (5%)** and **shelter (1%)**.

Meanwhile, the care for stray dogs through the provision of vaccination, treatment against parasites, spay/neuter, or protection, is not present in the municipality of Pristina (Graph. 14). This figure clearly shows that the number of people (also called stray animal protection activists) is still exceedingly small.

COMMUNITY CARE FOR STRAY DOGS



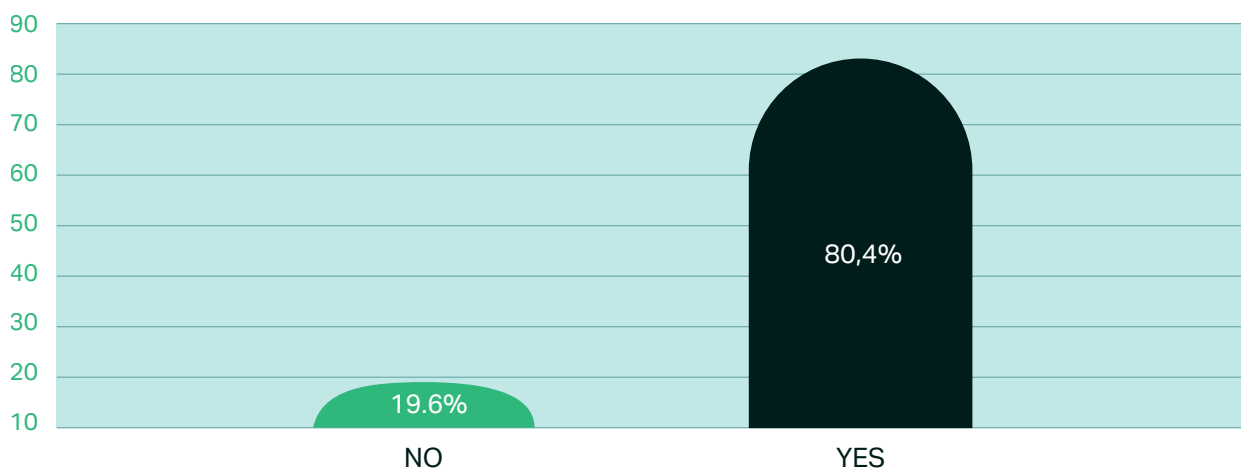
GRAPH. 13. COMMUNITY CARE FOR STRAY DOGS



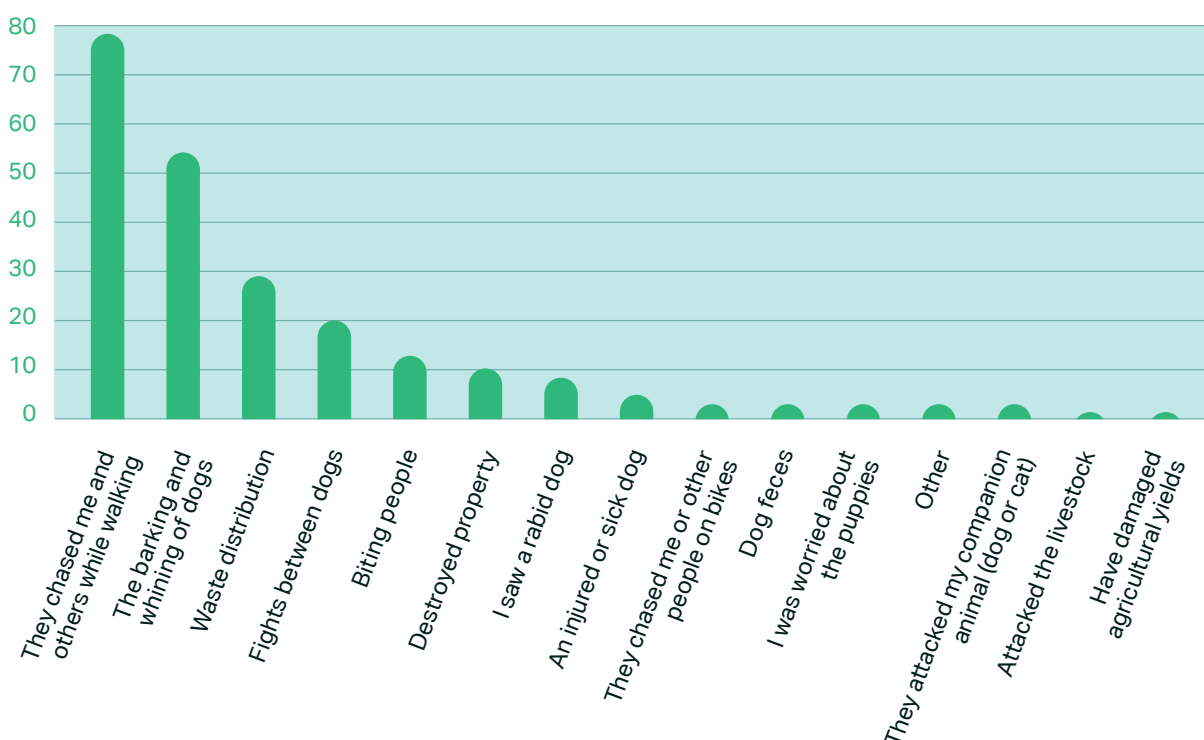
GRAPH. 14. TYPE OF CARE PROVIDED TO STRAY DOGS

2.3. Disturbances by stray dogs and their mistreatment or intimidation

As for disturbances and concerns from stray dogs, **80% of the respondents stated that they were disturbed by dogs on the street in the last 12 months** (Graph. 15). The main concerns of citizens related to stray dogs are dogs chasing people (**77%**), barking and howling (**53%**), littering (**29%**), fights between dogs (**21%**), bites (**11%**) and property damage (**10%**). Meanwhile, only **2% of respondents stated that they had concerns related to the welfare of dogs on the street** (Graph. 16).

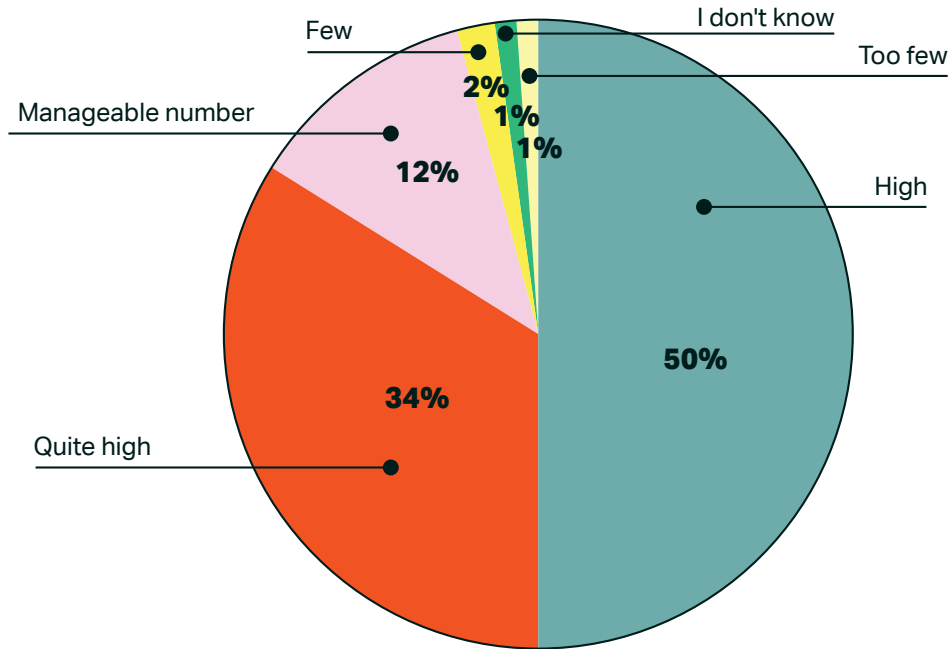


GRAPH. 15. DISTURBANCES BY STRAY DOGS IN THE LAST MONTH

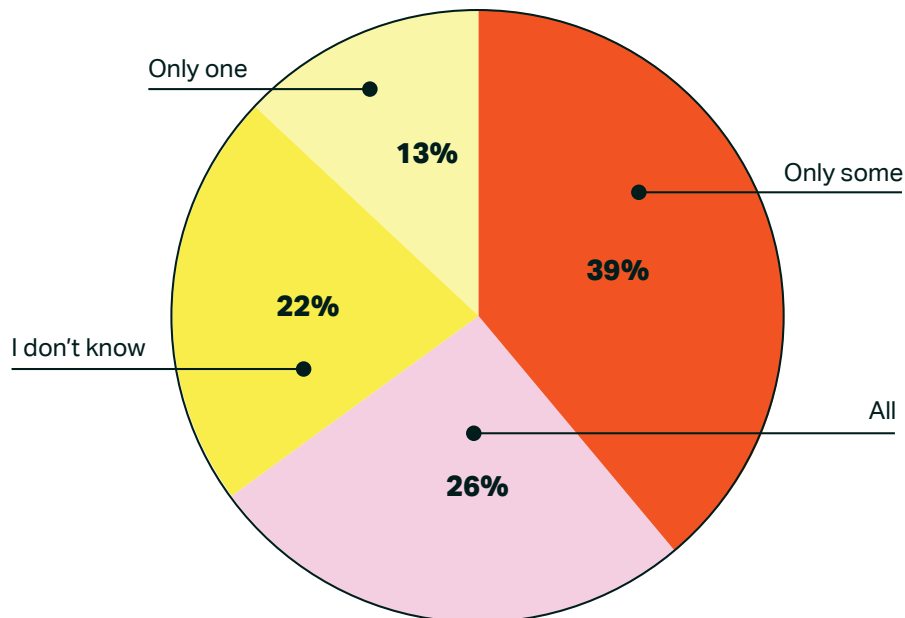


GRAPH. 16. TYPES OF DISTURBANCES CAUSED BY STRAY DOGS

Regarding the general situation with stray dogs, **84%** of households think that the number of stray dogs is high and very high (Graph. 17). In the question "Is it all dogs that are causing problems or just one/some?", **52% of the respondents stated that only one or a few dogs on the street cause problems and concerns**, while **26%** think that the problem is with all the dogs on the streets (Graph. 18).



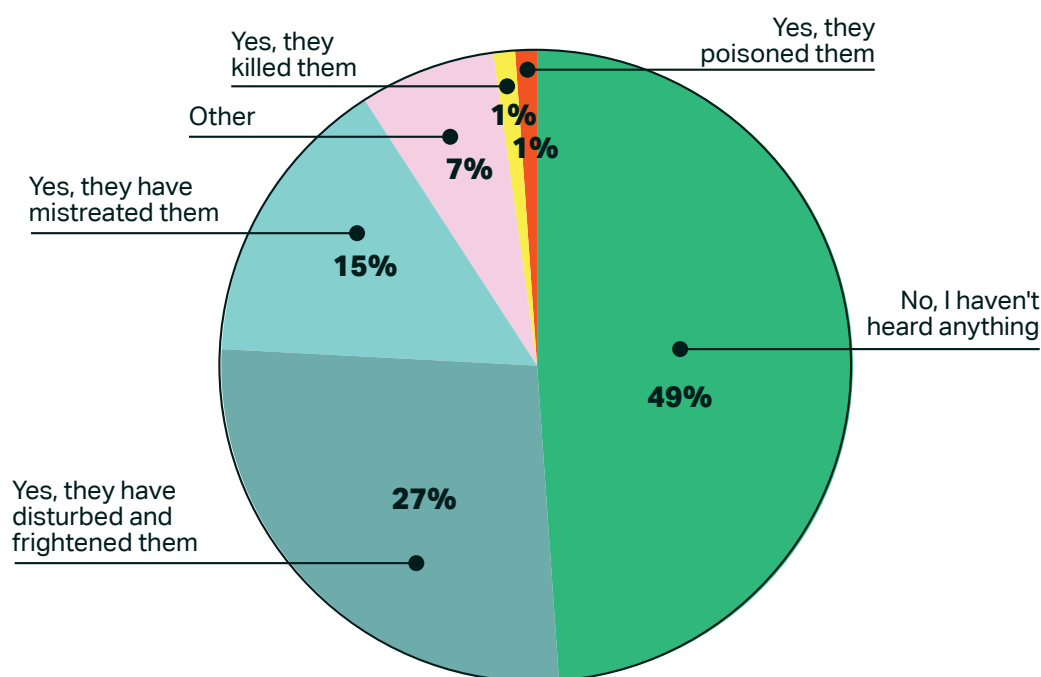
GRAPH. 17. STRAY DOG DENSITY ACCORDING TO THE RESPONDENTS



GRAPH. 18. DOGS CAUSING PROBLEMS IN THE COMMUNITY

Another objective of this project was to collect data on the mistreatment of dogs on the street by people, as a key component of the behavior of dogs towards people. According to WOAH¹⁸, ICAM and other international organizations, the behavior of dogs on the street in relation to people is closely related to the behavior of people towards these dogs.

Based on the results of the survey, **43%** of the respondents confirmed that they heard that in their village or neighborhood someone mistreated, disturbed, or poisoned stray dogs. Of these cases, **15% were mistreatment, while disturbance and intimidation were 27% of the cases** (Graph. 19).

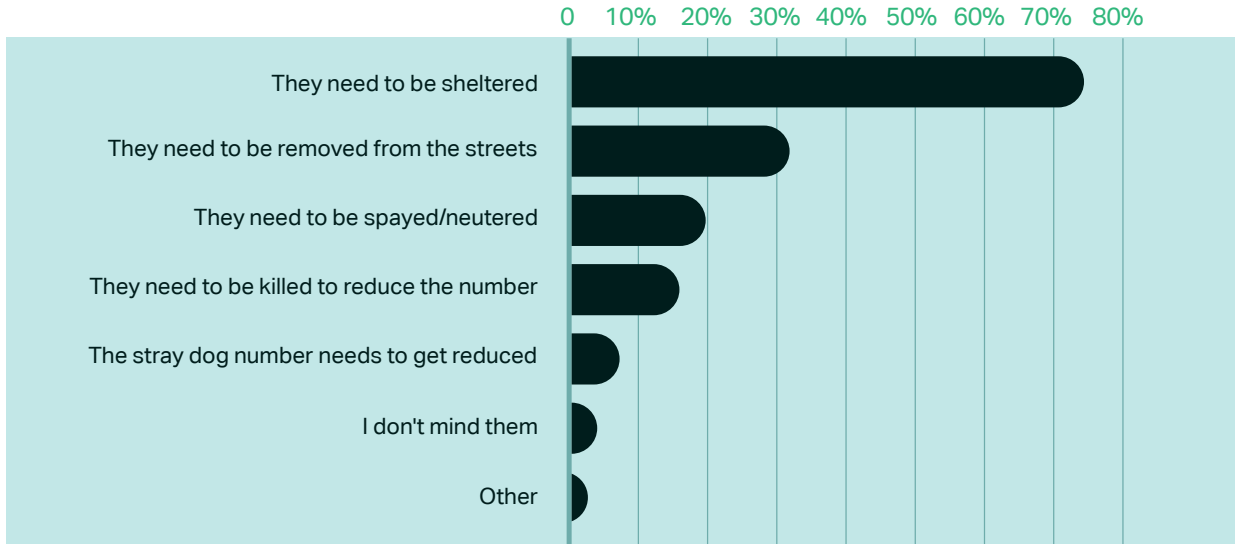


GRAPH. 19. RESPONDENTS WHO ARE AWARE OF MISTREATMENT OR HARRASMENT OF STRAY DOGS

2.4. Solution for stray dogs according to citizens

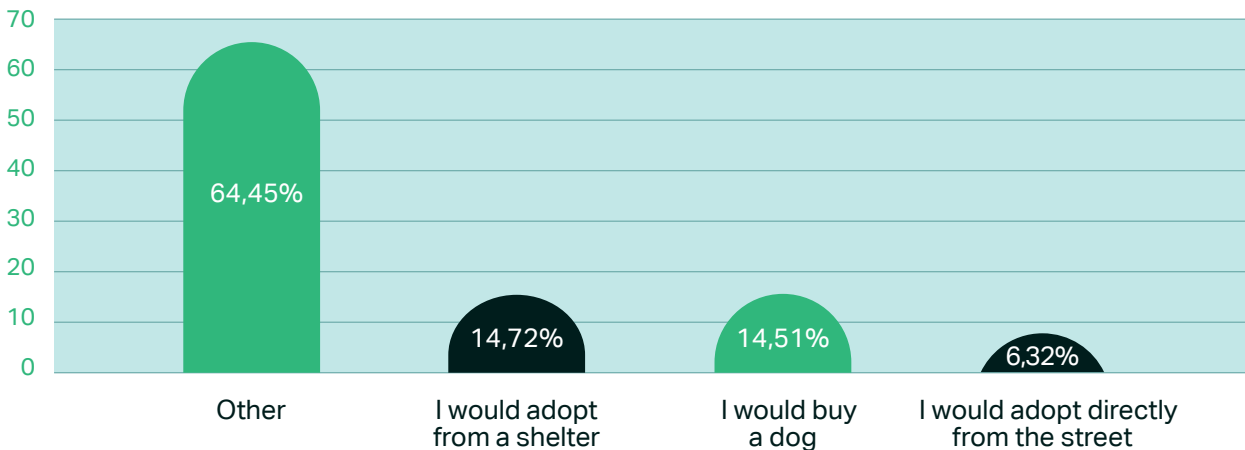
As for solving the problem with the large number of stray dogs, over **70%** of respondents stated that the number of stray dogs should be reduced with humane methods through measures such as sheltering and castration/sterilization. Only **16%** of citizens have proposed inhumane measures such as culling (Graph. 20).

¹⁸<https://www.woah.org/en/home/>



GRAPH.20. SOLUTION FOR STRAY DOGS ACCORDING TO RESPONDENTS

Regarding the interest in adopting stray dogs (*Graph. 21*), **64%** of respondents stated that they are not interested in keeping dogs at all, while **21%** of respondents stated that they would adopt a dog directly from the street (**6%**) or from the shelter (**15%**).



GRAPH.21. INTEREST FOR ADOPTION

In the municipality of Prishtina or in any other municipality, there is no public rescue center, with the aim to provide temporary shelter for stray dogs until they find forever homes. This aspect has also been highlighted in the National Strategy, where it has been stated that there is a lack of infrastructure for housing dogs that would potentially end up abandoned on the streets and that the development of sustainable and humane housing infrastructure will be important to support the implementation of DPM services and programs, only if it is accompanied by other measures that are foreseen in the strategy and that aim to reduce and control the number of stray dogs currently on the streets, because shelter facilities must be used only for temporary housing. Building traditional shelters where all street dogs or many of them would be placed, is not a sustainable measure for the management and control of the dog population and would only present problems in the functionality and the proper work of the shelter.

It is important to note that there is a high probability that the trend of getting a dog as a companion animal will increase in Kosovo, therefore increased priority should be given to adopting dogs from rescue centers/shelters or even directly from the street, since around **36%** of people have shown interest in getting a dog (*Graph. 21*).

V.

CONCLUSIONS AND RECOMMENDATIONS

The project '**Assessment of the dynamics of the dog population**' has been implemented using 14 indicators (Chapter III) to assess the level of the problem and the sources of this problem. Through the project's activities, it was aimed to collect data on the indicators, to reach a professional assessment of the situation on the ground. Data collection for this project has been divided into two phases: **1) the survey of the dynamics of dogs on the street and 2) the survey of households**. The first phase included only the city's urban area to survey the dog population, while the second phase included urban and rural areas.

Data from the field was collected by teams consisting of veterinary and sociology students. The ARF team, with the assistance of professors from the Faculty of Agriculture and Veterinary, Dr. Bardhyl Noci and Dr. Driton Çausi, along with data analysis expert MSc. Berat Abdiu, prepared and analyzed the data. These efforts have led to the emergence of the initial findings regarding the dynamics of the dog population in Pristina.

According to the '**National Strategy for the Management and Control of Dogs with and without Owners**' approved by the Government of Kosovo, street surveys can be combined with household surveys to show which factors are most important in dog population control and therefore the types of measures that need to be implemented. This can suggest objectives that should be set to track the progress of the implemented measures. Areas with the highest number (density) of stray dogs can be selected as priority areas; however other factors (e.g., frequency of complaints about dogs, or welfare problems experienced by dogs in certain areas) may also be important to be considered as a priority.

From the findings of the assessment of the dynamics of dogs on the street and from the measurement of the perception of households in the municipality of Pristina, for the first time in a municipality of Kosovo, the situation with dogs on the street has been shown and proven for the first time that dogs with keepers (owners) are the main source of stray dogs.

Almost **half of the respondents** who stated that they keep dogs in their homes have confirmed that their unspayed/unneutered dogs are not confined all the time within the house premises. This means that unspayed/unneutered dogs with owners can roam the streets (even if they are rarely found roaming outside), reproducing with stray dogs and thus increasing the number of dogs on the streets. Although dogs create their own territory where they spend most of their time, during the reproduction cycle they also roam outside the territory in search of other dogs to mate with. This is also one of the main reasons for the loss of dogs.

Given that the state project of **Identification & Registration of dogs with owners in all of Kosovo** has just started, it can be said that until now there is still no state control over dogs with keepers (owners) in Kosovo, and only after **2-3 years** the result of dog registration can be measured, if also veterinary inspections are regular and punitive measures are applied to individuals who abandon dogs or puppies on the street.

Data collected on the field regarding the street survey shows an unsatisfactory rate of spaying/neutering of stray dogs, which makes it difficult to control their number through reproduction. The data also shows that some parts of Pristina have little coverage in CNVR projects (Chapter IV).

The Body Condition Score Index shows that the welfare of stray dogs in Pristina is good, with **over 80%** of dogs showing *no visible signs of skin problems or weight problems*. There is also a visible trend of **greater rate of neutering of male dogs than spaying of female dogs**, while the **small presence of puppies on the street or lactating female dogs** shows that currently the *abandonment of adult dogs on the streets by owners* remains the main cause of the increase in the number of dogs on the streets.

Meanwhile, from the household surveys it is observed that there is a considerable number of dogs with owners that **are not spayed/neutered** and that **are allowed to roam outside the home spaces (47%)**, thus increasing the likelihood of reproducing with current dogs on the street, further increasing their number. **Unwanted births of puppies** usually end up with the abandonment of these puppies on the street. In the absence of much-needed parental care for the first weeks of their lives, for these puppies, *the chances of survival on the street or being rescued are small*.

Mistreatment, harassment and intimidation of stray dogs remains a concern for the safety of dogs and people themselves, as dogs that are mistreated by humans are more likely to view humans as enemies and attack them to "drive them away from their territory". A peaceful and caring approach by humans is needed to prevent incidents between dogs and humans. It is extremely important that awareness campaigns are organized based on the real (lack of) knowledge of the citizens and focus on the main topics that contribute to the increase of community awareness regarding the responsible keeping of dogs and proper care for them.

According to the findings of this report, ARF recommends the following:

► **RECOMMENDATION 1:**

1.1. The CNVR project must be implemented continuously and expanded to the rural areas of the city (villages), to prevent the unwanted birth of puppies and migration of dogs to urban areas in search of better sources of food. CNVR should also aim to increase the number of sterilized female dogs to prevent the birth of puppies. The aim for the total spay/neuter rate should be at least 80%.

1.2. It is recommended that CNVR focuses as soon as possible on the southern part of Pristina (Hospital District, Mati 1, Matiqan and Sunny Hill) and,

1.3. CNVR should also focus on the eastern part of Pristina (Sofali, Taslixhe, Germia Park).

► RECOMMENDATION 2:

Castration/sterilization of dogs with keepers (owners) should be promoted by the Municipality as a preventive measure of unwanted/unplanned births of puppies. The Municipality, depending on its financial capacities, should consider the possibility of subsidizing this service for a certain period, especially in the villages (rural parts) of the Municipality of Prishtina.

► RECOMMENDATION 3:

Legal provisions in force for the identification and registration of dogs with owners should be enforced, including fines for abandoning dogs. It should be aimed to identify and register every dog as a companion animal (with keeper/owner) in the municipality of Pristina.

► RECOMMENDATION 4:

Meetings should be organized between the Municipality, the Kosovo Police and the Food and Veterinary Agency, to address the negative and illegal phenomenon of numerous dog abandonments in Pristina, so that more serious and intensive institutional measures are taken to detect and punish the numerous dog abandonments in the Capital City.

► RECOMMENDATION 5:

5.1. Awareness campaigns should be organized (especially informational activities in neighborhoods with the community) in cooperation with NGOs and other relevant actors. Awareness campaigns should focus on promoting the responsible keeping of dogs as companion animals, informing citizens about dog behaviors and their nature (especially stray dogs), and caring for stray dogs as the best way to prevent incidents between people and dogs on the street.

5.2. To organize educational sessions for pupils and young people.

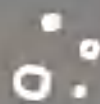
5.3. To continuously promote the adoption of dogs;

► RECOMMENDATION 6:

Taking into account the fact that the level of adoption of dogs in the Municipality of Pristina is still quite low, it is not recommended to build shelters with large capacities for housing a huge number of dogs, but the focus should be on building temporary rescue centers, with smaller and more manageable capacities, to promote and facilitate adoptions of dogs that would be accommodated in those centers.

► RECOMMENDATION 7:

It is recommended to draft and approve a municipal regulation that defines the rules for keeping dogs as companion animals, but also the handling of dogs in public spaces. It is recommended that the regulation also foresees the establishment of a municipal tax for dog keeping, to cover the costs of managing and controlling the dog population in the municipality of Pristina.



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The content of this document is the responsibility of the **Animal Rights Foundation** and *does not necessarily represent the views of* **KCSF, SDC, Sweden or Luxembourg**.

REGJISTRIMI I QENVE ËSHTË

OBLIGIM
LIGJOR



DËRGOJE QENIN
TEK **VETERINARI**



REGJISTROJE QENIN
ME **MIKROÇIP**



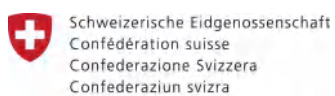
MBAJE QENIN ME
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ADOPTO, MOS BLET

MË ADOPTO
TË LUTEM!



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