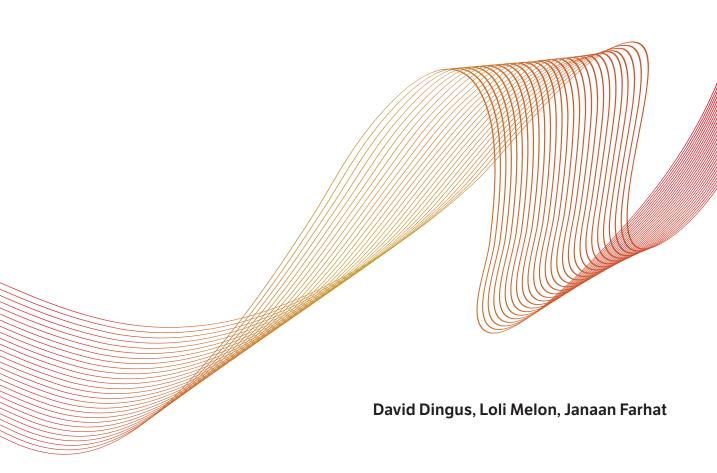
Animal Welfare in the United Arab Emirates

Addressing Underlying Causes of Stray and Abandoned Animals in Ras Al Khaimah and Greater UAE



Animal Welfare in the United Arab Emirates

Over the last year, there have been increasing reports of stray, abandoned, and surrendered animals in Ras Al Khaimah and other emirates. This has led to growing complaints from the community to address the issue and the resulting costs and demands on local governments as these animals pose environmental and safety concerns. This is especially challenging as stray and abandoned animals threaten the natural ecosystem and give the environment an unfavorable image, which can negatively impact local businesses and tourism. The stray and abandoned animal population requires human intervention to control; otherwise, the population may grow exponentially, further impacting the environment and increasing costs to the community.

Several strategies can be used to control the stray and abandoned animal population, such as Trap-Neuter-Release (TNR) programs.² However, several factors impact the effectiveness of TNR programs, most notably the community's knowledge and awareness. It is recommended that TNR programs be complemented by other initiatives on raising awareness and educating the public, which can be further supported through collaborations with other stakeholders in the animal welfare sector.

By identifying strategies to support animal welfare and address stray and abandoned animals in Ras Al Khaimah and the United Arab Emirates (UAE) in general, this report aims to identify key stakeholders, what is currently being done to support animal welfare – including TNR, and the community's understanding and awareness around these topics. It begins with a literature review on TNR, followed by an explanation of the methodology used. The findings are presented in three parts: the stakeholder landscape, the community's feedback, and the perspectives of concerned public sector officials before concluding with a discussion on the challenges and recommending potential next steps to consider.

Background

Motivated by the increasing pressures on Ras Al Khaimah Animal Welfare Center (RAK AWC), this report initially aimed to understand the underlying factors and context of stray and abandoned animals in Ras Al Khaimah. However, our findings revealed that the challenges around animal welfare in Ras Al Khaimah are also applicable in other emirates. Thus, this report is presented to support animal welfare across the UAE. In addition, it should be noted that this report focuses on cats and dogs since they represent the majority of abandoned, stray, and surrendered animals in the UAE. Nonetheless, we acknowledge that a diverse range of animals are kept as pets in the emirates, which may also need to be addressed separately.

Due to the impacts of the Covid-19 pandemic on the economy, it remains uncertain which factors explain the increases in pet abandonments and surrenders in Ras Al Khaimah and the UAE more broadly. On the one hand, there has been an increase in demand for pets, including through adoptions, and pet products and services. However, the pandemic has also seen many cats and dogs abandoned or surrendered to shelters. Many believe that the pandemic's increased financial pressures have led to some families being unable to afford care for their pets, leading to increased pet abandonment and surrenders to shelters. This issue is further compounded by owners' lack of knowledge and misperceptions regarding the demands and commitments of pet ownership.

The exponential increase in stray, abandoned, and surrendered animals is particularly concerning because their presence affects the environment, destroying and disrupting the ecosystem, local agriculture, and livestock business. The destruction of biodiversity presents a high cost to local and global communities, and the growth of stray cat populations causes feral cats to compete with local wildlife for space and food reserves (Webster, 2013). Stray animals are usually not vaccinated and put other animals at risk by exposing them to diseases. They also impact local tourist destination economies, as shown by a research study conducted in 2012 (Webster, 2013). Webster (2013) found that 41% of tourists would never return to a destination if they observed neglect, abuse, cruelty toward, or abandonment of stray cats and dogs. As such, the humane management of the stray animal population can contribute to the stability of the environment, protect native wildlife, and support the local tourism industry. One strategy to address the challenges

¹ This report focuses on cats and dogs.

² In the interest of brevity, "TNR" is used here to refer to "Trap-Neuter-Release" for cats and Trap-Neuter then shelter for adoption for dogs. In addition, the term "neuter" also includes the spaying of female dogs. The word "release" can also be referred to as return.

associated with stray, abandoned, and surrendered animals is implementing TNR programs. TNR programs are generally only used for cats as dogs are usually not released back into the environment because the community may feel threatened by stray dogs. Instead, dogs are often trapped-neutered (male dogs) or trapped-spayed (female dogs) and then sheltered for adoption. Many shelters will also keep trapped and neutered cats for adoption and often attempt to socialize these animals at the shelter for adoption purposes while further removing and rehoming young kittens (Swarbrick & Rand, 2018). In the interest of brevity, this report uses TNR to refer to all strategies that involve trapping and neutering or spaying stray and abandoned animals and either returning them to their environment or sheltering them for adoption.

Much of the evidence on the effectiveness of TNR focuses on cats, with findings highlighting that it can be a valuable, humane tool to redress problems associated with cat overpopulation (Levy et al. 2003; Natoli et al. 2006; Zito et al. 2018; Spehar and Wolf 2019). For example, in a study conducted by Tan et al. (2017), TNR activities undertaken by individuals in parts of Australia helped decrease the size of a cat colony by 31% over two years while further enabling many cat semi-owners to provide them with improved healthcare. Similarly, in another study conducted by Swarbrick and Rand (2018), a nine-year cat management program decreased the total cat population from 122 to 15 cats at a university campus. The benefits of TNR were further supplemented by the low institutional costs required to neuter, vaccinate, register, and care for the cats, which simultaneously improved their health and decreased the complaints of students and staff members. The costs of implementing such a program were also reduced by recruiting volunteers to feed desexed cats, examine the animals for signs of illness, and identify the migration of new cats to a specific location (Swarbrick and Rand 2018; Spehar and Wolf 2017).

There are also several benefits to long-term community engagement in neutering practices, including raising awareness of animal welfare issues to sustain the benefits accrued from TNR activities. One study reports that educating people about the benefits of having a neutered cat population was reinforced through online and in-person events, which improved people's behavioral intent and attitude toward stray cats (McDonald et al. 2018). Examples of such events include fun days, giving talks at local schools and forums, and creating active Facebook groups. These events were subsequently reported to increase volunteering and effectively change people's negative perceptions of unowned animals. In addition, dedicated volunteers and

animal shelter staff can collaborate to raise community awareness by informing residents about an existing TNR program or encouraging them to identify non-sterilized cats that can be trapped and neutered accordingly (McDonald et al., 2018; Levy et al. 2014). Hence, TNR programs can become more successful through greater societal engagement in volunteering, raising awareness about neutering practices, and pet adoption.

Therefore, it is essential that TNR programs are complemented by other activities, programs, and regulations adapted to the local context to ensure that the TNR program is as impactful as possible. Moreover, studies have shown that the additional challenges brought on by an effective TNR program, such as the financial burden, can be addressed by recruiting volunteers and attaining private funding (Tan et al., 2017). Overall, Tan et al. (2017) found that a well-designed TNR program can control the stray and abandoned animal population while mitigating the costs to the local government and supporting the local economy.

Methodology

Data was collected using four methods to understand animal welfare from a provider, community-based, and governmental perspective. First, an online search was used to identify key stakeholders in the sector through their websites and social media presence. Within the UAE, 132 animal welfare stakeholders were identified. Information on each stakeholder was collected, including the type of organization, services provided, and location. The data was then coded and analyzed in Excel. Although multiple individuals conducted an extensive online search, it is important to note that other stakeholders may exist, especially those with a limited or no online presence.

Second, interviews were conducted to identify the causes and impact of stray animal populations, other challenges the sector faces, currently implemented solutions, and potential collaborations. From the sample of 132 stakeholders, ten organizations that shelter animals, most of which also conduct TNR programs, were contacted for interviews. Four shelters accepted the invitation, and a 45-60 minute interview was held with each. One additional shelter also agreed to participate by writing in answers to the survey questionnaire. The other organizations did not respond to our inquiry. The interviews were then grouped into themes and the data was tabulated for analysis. Although the number of interviews conducted was limited and influenced by those identified online, they provide valuable insight into the sector's activities, challenges, and solutions. Nonetheless, interviews with other stakeholders may provide additional information essential to developing and implementing solutions at animal welfare centers and shelters across the UAE.

Third, an online survey was distributed via social media to assess Ras Al Khaimah residents' knowledge of animal welfare, pet ownership, and TNR. The survey was bilingual (Arabic/English) and open to all residents. The results were then reviewed, including cross-tabs by nationality, and automatically charted using the Alchemer survey software. In total, 276 respondents took the survey, 48 of which were Emirati (17.4%). The survey mainly attracted pet owners (75%) who live in pet-friendly areas. Overall, 26% of respondents live in Al Hamra, 14% in Al Dhait, and 7% in both Mina Al Arab and Khuzam, with expatriates mostly in Al Hamra (34%), Mina Al Arab (9%), and Marjan (8%), and Emiratis in Al Dhait (29%), Al Rams (10%), and Khuzam (8%).

Because the survey was conducted online, a convenience sampling method was used, which was more successful in attracting pet owners, expatriates, and affluent individuals. As such, the survey responses are not entirely representative of the community. Nonetheless, they provide valuable insight into the community's perspective on challenges pertaining to animal welfare and its knowledge. There may be additional challenges not captured by the survey, and more than likely, many of these challenges may be larger in magnitude than reflected here. Finally, although the survey focused on Ras Al Khaimah, much of the findings are applicable to the national context and were corroborated by stakeholders in other emirates.

Fourth, a focus group was held with experienced individuals working in the public sector in RAK to gain insight into their perceptions and responsibilities regarding the issue of stray animal populations. Individuals from five governmental departments were invited to partake in the focus group with four departments accepting the invitation: (1) Public Services Department/RAK AWC, (2) RAK Municipality Department (hereinafter Municipality), (3) RAK Tourism Development Authority (hereinafter Tourism Department), and (4) RAK Department of Economic Development (hereinafter RAK DED). The focus group was approximately 2.5 hours long. A single representative from each department attended based on a previously expressed interest in animal welfare or the nature of his or her work.

Findings

Report findings are broken down into three sections. In the first section, the landscape analysis and interviews are presented together, followed by the community's feedback from the online survey, and lastly, the perceptions of government stakeholders. These are analyzed separately to identify differences between what is being done and what is needed.

Stakeholder Landscape Findings

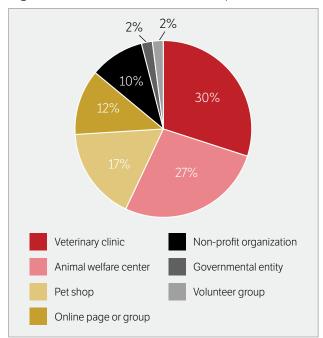
This section presents the findings specific to stakeholders classified as providers of goods and services pertaining to animal welfare. These findings highlight the key results from the stakeholder landscape analysis and the interviews conducted with the shelters.

There is a diverse range of stakeholders, but they are mainly concentrated in Dubai

The majority of the stakeholders identified are either animal welfare centers or veterinary clinics. Overall, of the 132 stakeholders identified in the UAE, 40 (30%) are veterinary clinics, 35 (27%) are animal welfare centers, 22 (17%) are pet shops, 16 (12%) are online animal welfare organizations with a social media presence, 13 (10%) are non-profit organizations, 3 (2%) are governmental organizations, and 3 (2%) are volunteer rescue groups (see Figure 1).

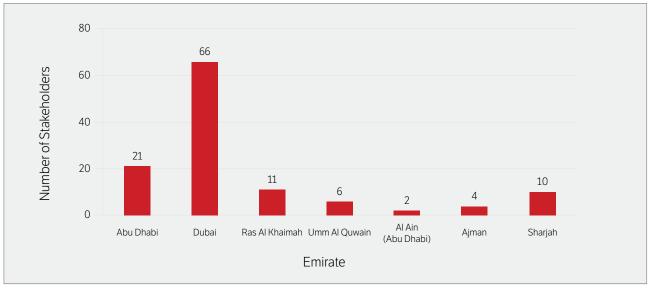
In terms of geographic distribution, Dubai has the most significant proportion of stakeholders (66), followed by Abu Dhabi (21) and Ras Al Khaimah (11) (see Figure 2). Fewer stakeholders support animal welfare in the northern emirates, which may explain the higher number of stray, abandoned, and surrendered animals reported by interviewees in this region.

Figure 1: UAE Animal Welfare Landscape



³ The interviewees have been anonymized in the interest of confidentiality. More information is available upon request.

Figure 2: Geographical Distribution of Animal Welfare Stakeholders in the UAE



Most stakeholders offer services focusing on profitability, but few stakeholders are engaged in addressing animal welfare through education, pet rescue, or TNR

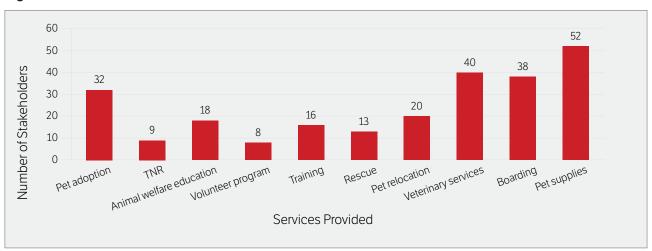
There is a diverse range of services offered by numerous animal welfare organizations throughout the UAE. The majority of the services provided focus on income generation through the sale of pet supplies – including online (52), veterinary services (40), and boarding services (38). However, while 32 organizations are engaged in pet adoption, only 18 provide animal welfare education services, 13 rescue animals, and nine conduct TNR. Amongst those that conduct TNR, five are animal welfare centers, two are non-profits, one is a veterinary clinic, and one is a volunteer group.

During interviews with the organizations conducting TNR, many stressed that the financial burden of conducting TNR is always a challenge further

compounded by the fact that they are not registered charities and cannot collect donations. Instead, they use various creative measures to raise funds or reduce costs, such as selling donated artwork and using volunteers for TNR.

Due to the financial costs of TNR, many of the interviewed organizations engaged in TNR are government-funded. They view TNR as a necessary expense of running their emirate to ensure that the stray and abandoned animal population is kept under control to prevent property damage and ensure that residents are not bothered or threatened by these animals. One interviewee explained that keeping the stray and abandoned animal population under control helps support businesses and maintains the area's beauty, which might otherwise be threatened by a sizeable population of such animals. The interviewed organization approaches businesses to explain the benefits of supporting animal welfare, especially in the hospitality industry, to obtain funding for the organization, including its TNR program.

Figure 3: Animal Welfare Services Provided in the UAE



3

There is a higher number of abandoned and surrendered animals in the northern emirates, possibly due to financial pressures

Although official data on the number of abandoned and surrendered animals at the emirate or national level could not be located, some interviewees could share their organizations' recorded numbers. For example, in Ras Al Khaimah and Fujairah, the number of abandoned and surrendered dogs and cats was relatively high (e.g., 200 dogs in Fujairah and 195 cats in Ras Al Khaimah), with both reporting that their numbers have increased since the pandemic. Furthermore, the actual numbers are predicted to be much higher as the organizations interviewed in Ras Al Khaimah, Fujairah, and Sharjah reported being at capacity, and that they do not record the number of abandoned or surrendered animals once they are at capacity. As such, their numbers only reflect the number of animals admitted to the facility. On the other hand, the two organizations interviewed in Abu Dhabi reported that the number of stray and abandoned animals hasn't changed and remains constant. One of the two also reported that the number of stray animals has decreased by 21% in its area over the last two years due to its TNR program.

In the northern emirates, interviewees speculated that the increase in abandoned and surrendered animals is in part driven by financial pressures from people losing their jobs during the pandemic, compounded by people not anticipating the costs of owning an animal or repatriating it. Interviewees also brought up the role of pet shops and breeders. They explained that pet shops and breeders are profit-driven and therefore fail to properly care for the pets and ensure that the owners are in a position to care for the animal and understand the commitment. Moreover, two interviewees explained that many breeders are not officially registered, operate illegally, and are issuing fake documents. However, they do not collect enough information to verify these issues but stressed that they could be addressed if the current laws and regulations were enforced correctly.

One interviewee also described the Sharjah Animal Souk as a collection of businesses that provide easy access to animals with few mechanisms in place to ensure the wellbeing of the animals. More importantly, the Sharjah Animal Souk poses a health risk because it puts many animals and diverse species in close proximity, facilitating the spread of diseases. The Sharjah Animal Souk has since closed and is being relocated, but it is unclear if the new facility will improve.



Most interviewed organizations emphasized their key challenges to be educating the public, capacity issues, and addressing laws and regulations around animal welfare

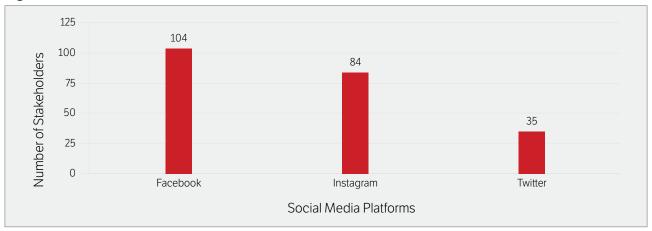
Educating the public came up as a challenge in every interview. Stakeholders explained the importance of educating the public, including non-pet owners, to understand how and why to report stray and abandoned animals for TNR. Ideally, education on animal welfare should start at a young age in schools.

However, all interviewees expressed difficulty designing and implementing a large-scale, sustainable education program and often conduct one-off education sessions. They attributed this to a lack of proper facilities, resources, and staff to run the education programs they believe are needed. The interviewees also highlighted challenges around social and cultural norms that do not value animals or support animal welfare.

In addition, most of the interviewees have adoption programs and emphasized the importance of screening applicants and educating them on the commitment of adopting an animal. For example, some organizations require applicants to complete a survey, possibly a follow-up interview, and provide applicants with materials on what to do and expect for the journey home, the initial acclimation period, and the longer term. However, the interviewees explained that educating pet adopters does not address the root causes of pets being returned, abandoned, or surrendered; instead, only education on animal welfare starting at a young age combined with public awareness campaigns can create the necessary culture to support animal welfare.

Many interviewees said that there are many good laws and regulations already in existence, but their enforcement remains an issue. In particular, it remains unclear who the responsible parties are, such as the police not knowing when or how to intervene in an offense involving an animal. Moreover, one interviewee explained that different government parties do not coordinate and therefore cannot design appropriate legislation or carry out those laws effectively. However, they stressed that they are not aware of what is being officially done, only what they observe in practice. The only governmental service is the official online platform of the Ministry of Climate Change and Environment, on which one can report animal health, agriculture, and food-related incidents. However, this platform is not designed in such a way as to facilitate coordination and disseminate information.

Figure 4: Animal Welfare Stakeholders' use of Social Media



Almost all stakeholders use social media, with Facebook being the most popular platform

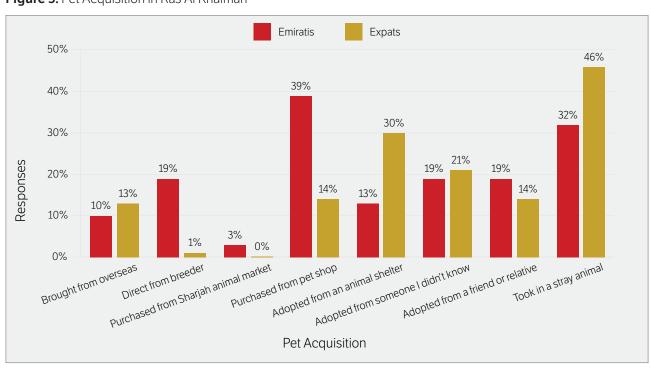
Overall, 104 of the 132 stakeholders use Facebook, 84 use Instagram, and 35 use Twitter (see Figure 4). In total, we identified 16 organizations solely operating as online communities. Social media plays a crucial role in animal welfare in the UAE, helping to locate and identify lost animals, report stray and abandoned animals, and coordinate efforts among volunteer groups or concerned residents. In Sharjah, Umm Al Quwain, Ras Al Khaimah, and Fujairah, networks of volunteers are even more important because an insufficient number of shelters and welfare centers are tasked with managing all stray, abandoned, and surrendered animal issues in their areas.

Social media can also be used in other ways to support animal welfare. For example, one interviewee explained that they also use social media to promote businesses that support the organization, including TNR and feeding strays, to improve their public image. They do this by using platforms such as TripAdvisor and issuing banners and stickers to supporting businesses to display to customers and promote their positive contribution to the community.

Community Survey Findings

This section presents the findings specific to Ras Al Khaimah residents and their knowledge of and perspective on animal welfare. As identified earlier, although the survey focused on Ras Al Khaimah, much of the findings are applicable to the national context and were corroborated by stakeholders in other emirates. The findings of the survey are organized into six key themes of (1) pet acquisition, (2) sterilization and vaccination, (3) stray and abandoned animals, (4) TNR, (5) RAK AWC, and (6) media and awareness campaigns. In addition, the results for expatriates and Emiratis are highlighted separately when a significant difference was observed.

Figure 5: Pet Acquisition in Ras Al Khaimah



1

Cats are the most popular pet, with expats generally adopting their pet and Emiratis purchasing them from a pet shop

Cats are the most popular pet, with around 74% of respondents owning a cat, followed by dogs at 35%. 43% of respondents reported taking in a stray animal, and 66% reported adopting at least one of their pets (26% from RAK AWC).

However, there were observable differences in how expatriates and Emirati respondents acquired their pets. Amongst expatriates, 30% adopted their pet from a shelter, while only 14% reported purchasing their pet from a pet shop. Only one expatriate respondent reported purchasing their pet from a breeder, while 13% of expatriates reported bringing their pets from overseas. In contrast, 39% of Emirati respondents reported purchasing their pets from a pet shop, 19% directly bought their pet from a breeder, and 13% adopted them from a shelter (see Figure 5).

2

Most expats reported neutering their pets, while less than half of Emiratis did, stemming from cost barriers and a lack of information

Amongst expatriate respondents, 92% reported that their pets were neutered compared to 63% of Emirati respondents. When asked why they did not neuter their pets, 40% of Emirati respondents said they think it is unnatural, 20% did not know where to go, and 10% had not thought about it.

Expatriates and Emiratis responded similarly regarding annual vaccinations, with 79% of all participants reporting that their pets are vaccinated annually. Amongst those

who responded that they do not vaccinate their pets annually, 26% cited the cost, 18.5% did not know about annual vaccinations, and 15% cited concerns for safety. Among Emirati respondents, these reasons were slightly higher, with 38% of Emiratis citing safety concerns and 25% not knowing about annual vaccinations. These findings align with the interviewees from animal shelters and welfare centers, who emphasized the need to educate the public and pet owners.

3

Most respondents reported seeing stray or abandoned cats, but few dogs

Respondents reported similar sightings of stray cats and dogs both around their homes and in other areas. Overall, 76% of respondents reported recently seeing stray animals, mostly cats, with 59% reporting seeing 2-5 stray cats per month, and 33% reported seeing more than five stray cats per month. The majority of respondents reported seeing few or no stray dogs, with 68% reporting seeing none, 17% seeing one stray dog, and 12% seeing two or three dogs per month (see Figure 7). There were very few observable differences in the responses between expatriates and Emiratis and between different areas.

4

The majority of expats reported knowing about TNR, but few knew whom to contact, while almost no Emiratis knew about TNR

RAK AWC is the primary animal welfare center conducting TNR in Ras Al Khaimah. Among expatriate respondents, 67% said they were familiar with TNR, of which 52% knew RAK AWC performs TNR in Ras Al Khaimah, or 35% total (see Figure 8). Nonetheless, 63%



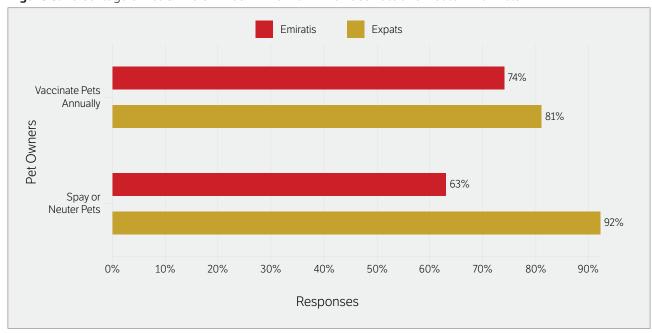
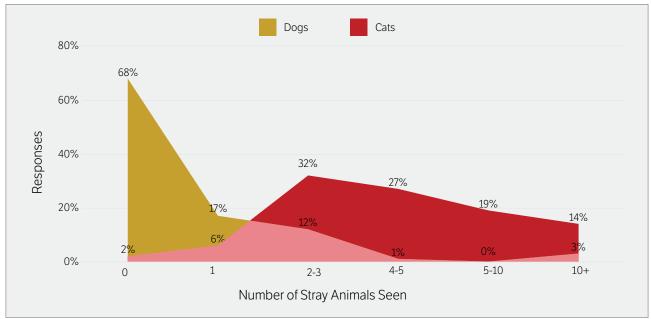


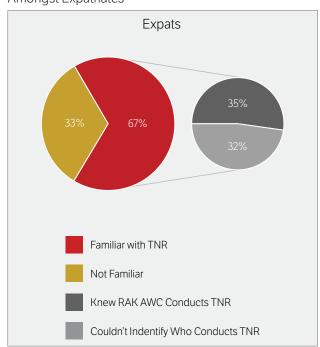
Figure 7: Number of Stray Animals Pet Owners in Ras Al Khaimah Reported Seeing Near Their Home per Month



of expatriates reported never having reported a stray animal for TNR, and 22% responded that they had only ever reported one or two animals. When asked why they had not reported stray or abandoned animals for TNR, 29% of expatriate respondents said they did not know who to contact for TNR, and 19% said it hadn't occurred to them.

Amongst Emirati respondents, only 23% knew about TNR, of which 49% knew who conducts TNR in Ras

Figure 8: Awareness of TNR and RAK AWC Amongst Expatriates



Al Khaimah; in other words, less than 12% of Emirati respondents knew that RAK AWC performs TNR (see Figure 9). Likewise, 72% of Emirati respondents reported never having reported a stray animal for TNR, and 14% said that they had reported a stray animal once. When asked why they had not reported a stay or abandoned animal for TNR, 40% of Emirati respondents said they did not know whom to contact, 12% reported that it had not occurred to them, and 12% also reported that they did not have the time.

Figure 9: Awareness of TNR and RAK AWC Amongst Emiratis

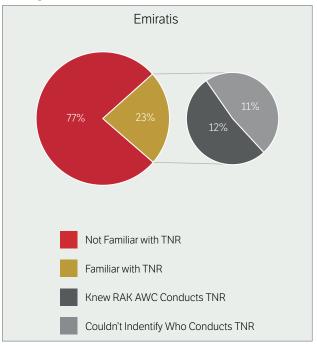
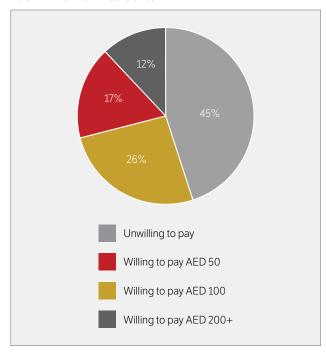


Figure 10: Price Sensitivity of TNR Among Ras Al Khaimah Residents



Respondents were also asked if they would be willing to pay for TNR for a stray or abandoned animal and how much they would be willing to pay. Overall, 45% of respondents reported that they were unwilling to pay for TNR for a stray or abandoned animal, 26% reported a willingness to pay 50 AED, 17% a willingness to pay 100 AED, and 12% a willingness to pay more than 200 AED (see Figure 10). Currently, RAK AWC requires individuals who report stray or abandoned animals for TNR to pay 100 AED.

The majority of all respondents had 5 been to RAK AWC, but expats and **Emiratis had visited for** different reasons

74% of expatriate respondents reported having been to RAK AWC, of which 80% were for veterinary services, 50% for food and supplies, 35% for adoption, and 28% for the animal park. Among Emiratis, 63% had been to RAK AWC but for different reasons than expatriates, with 42% going for the animal park, 39% to volunteer, and 35% for veterinary services (see Figure 11). These findings may indicate a knowledge gap and preference differences between expatriates and Emiratis.

All respondents agreed that social 6 media is the best way to raise awareness, with expats favoring Facebook and Instagram and **Emiratis favoring Instagram and** Snapchat

94% of respondents said that social media is the best way to raise awareness around TNR and other RAK AWC services. 59% also said that awareness campaigns should be implemented via outdoor advertisements, and 43% said via the RAK AWC website (see Figure 12).

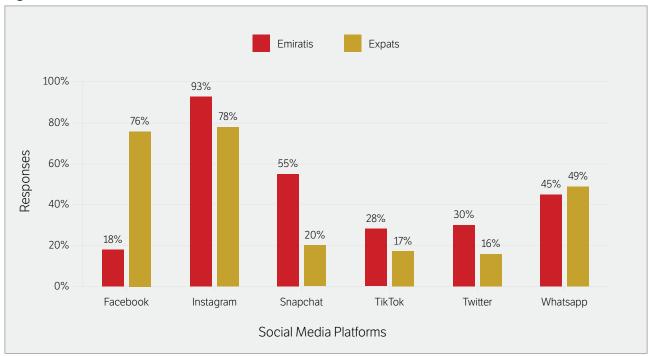
Figure 11: Proportion of Ras Al Khaimah Residents Visiting RAK AWC and Why



Website Social Media Preferences Smartphone application Radio Outdoor Advertisement 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% Responses

Figure 12: Ras Al Khaimah Residents Preferred Scoial Media Platforms for Promotion of TNR and RAK AWC Programs

Figure 13: Social Media Preferences of Ras Al Khaimah Residents



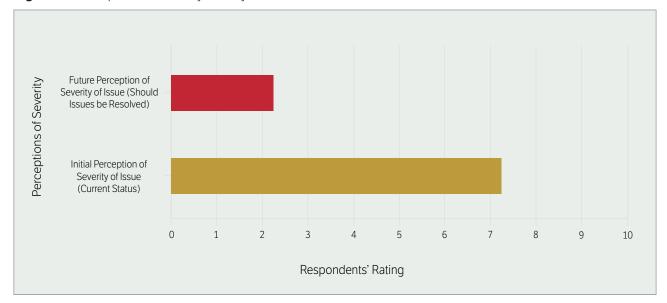
Governmental Focus Group Findings

This section presents the findings specific to a focus group on animal welfare that was conducted with four governmental officials in Ras Al Khaimah. These findings are organized into four themes, including (1) perceptions of stray animals, (2) social awareness, (3) governmental responsibilities, and (4) logistical challenges to reducing the size of the stray animal population.

The majority of all focus group participants perceive the existence of stray and abandoned animals in Ras Al Khaimah to be a key issue

Toward the start of the focus group session, participants were asked to rate the extent to which they consider the existence of stray and abandoned animals to be an issue in Ras Al Khaimah on a scale of 1 to 10. A score of

Figure 14: Perceptions of Severity of Stray and Abandoned Animals Issue in Ras Al Khaimah



1 indicates that it is not a problem whatsoever, whereas a rating of 10 implies that it is an issue of utmost severity. On average, the cumulative score of 7.25/10 indicates that participants perceive the existence of stray and abandoned animals in the emirate to be a key problem (see Figure 14). However, it was not rated as a 10 by two of the participants since they saw stray cats, in particular, as a natural product of the ecosystem. In addition, stray cats are seen as being useful due to their ability to hunt down rodents.

However, toward the end of the session, the participants were asked to provide recommendations to the challenges they had mentioned earlier. Given the hypothetical situation that all of their recommendations would be implemented, participants were subsequently asked to re-evaluate on a scale of 1 to 10 the extent to which the prevalence of stray and abandoned animals would continue to be a severe problem in Ras Al Khaimah. A score of 1 indicates that it is not a problem whatsoever, whereas a score of 10 insinuates that it remains an issue of utmost severity. In this case, the participants' cumulative rating was 2.25/10, which is nearly three times lower than the initial score of 7.25/10, indicating they strongly believed these recommendations would have a positive impact on the current situation (see Figure 14).

Governmental stakeholders concur that there is a lack of awareness within society on animal welfare concerns

The participants further indicated that stray and abandoned animals have a negative impact on the environment, tourism, and residential areas. However, due to limited social awareness campaigns, residents are often unaware of how they may exacerbate such problems. For example, participants reflected on how

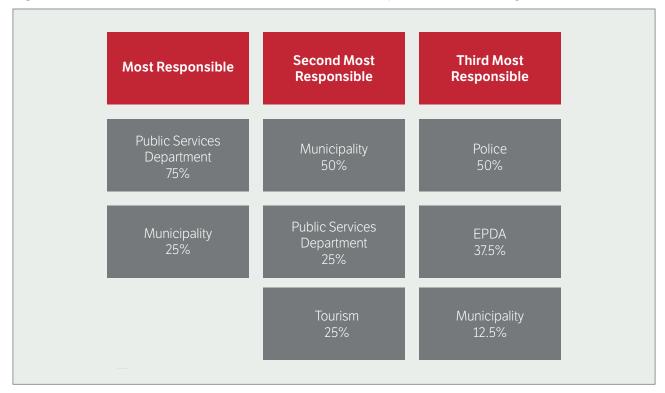
residents often feed stray cats, which encourages them to populate certain areas. While 50% of the public sector employees indicated that education and awareness-raising initiatives exist, the majority concurred that they are insufficient. In addition, certain sectors of society, including the elderly and those living in remote areas, are typically less likely to be reached through mainstream animal welfare awareness-raising campaigns. A second issue that was raised pertains to pet owners and their lack of knowledge of how to care for their pets, which may further lead to the latter's death or abandonment. In sum, the participants indicated that there is a lack of awareness across different segments of society with regard to animal welfare and caring for pets.

3

The governmental department perceived as most responsible for addressing animal welfare concerns is the Public Services Department, followed by the Municipality

During the focus group, the participants listed a total of five departments that are most responsible for redressing the issue of stray and abandoned animals in Ras Al Khaimah: (1) the Public Services Department/ RAK AWC, (2) Municipality, (3) the Tourism Department, (4) the Police, and (5) the Environmental Protection and Development Authority (EPDA). In total, 75% of participants identified the Public Services Department, specifically RAK AWC, as most responsible for animal welfare concerns. The department that is next most responsible for maintaining animal welfare is the Municipality, as indicated by 50% of the participants. Lastly, the third most responsible governmental department for animal welfare-related concerns was the police, as identified by 50% of the representatives. In Figure 15, the entities that government stakeholders believe are the most responsible (the Public Services

Figure 15: Who RAK Government Stakeholders Believe is Most Responsible for Addressing Animal Welfare Concerns



Department and Municipality) for addressing animal welfare concerns are specified in the first column. Those which are perceived as second most responsible (Municipality, the Public Services Department, and Tourism Department) are shown in the second column, whereas the third most responsible (police, EPDA, and Municipality) are shown in the third column.

The abovementioned organizations were identified by participants in this particular order because the Public Services Department, as the most responsible entity, is known for its care of stray and abandoned animals, specifically through RAK AWC. In addition, the Municipality has been specified as the second most responsible because such animals constitute a concern to public health and safety in RAK. Hence, this explains the involvement of its Public Health Administration. The police have also been identified as the third most responsible authority since they receive complaints from concerned citizens and forward them to the designated authorities.



Logistical challenges make it challenging for governmental departments to effectively collaborate and respond to animal welfare issues in a timely manner

Moreover, there are a few logistical challenges that were identified by the focus group participants. First, they noted that capturing and housing stray and abandoned animals in RAK AWC is challenging due to animal overcrowding in physical facilities and the limited number

of personnel working on this issue in governmental departments. Second, a streamlined complaints portal does not currently exist as departments do not always forward residents' complaints directly to the Public Services Department. Instead, other governmental departments may forward them to the Municipality, even if the substance of the complaint is the purview of the Public Services Department. This makes it more challenging to respond to complainants in a timely manner. Moreover, only 25% of participants were able to identify Federal Law No. 18 of 2016 on animal welfare, and half of the focus group participants did not know that any such laws exist. This indicates that similarly to residents, governmental employees are also less informed with regard to animal welfare legislation.

Discussion

The UAE's animal welfare landscape is full of diverse stakeholders offering a variety of products and services. However, these stakeholders are heavily concentrated in Dubai and focus on products and services that generate profit while neglecting essential welfare services such as pet education, TNR, and animal rescue. Although there are at least ten other animal welfare centers and shelters across the emirates that offer these services, they often lack the capacity and resources to fully address the volume of animal welfare needs in the UAE. This results in a gap between the supply and demand of animal welfare provision. This gap is partly addressed by most animal welfare stakeholders' strong online presence, especially formal and non-formal volunteer groups and non-profits passionate about animal welfare.

Unfortunately, based on the survey of residents in Ras Al Khaimah, there is also an awareness gap. Many community members lack knowledge and information on topics around animal welfare. This gap tends to be more present among Emiratis and low-income households, leading these groups to be less informed about TNR (including whom to contact and why it is important), vaccinations, and the financial commitment a pet requires. In addition, Emiratis also tend to purchase their pets instead of adopting them, which adds to the awareness and knowledge challenges since pet shops generally do not provide information and education services around animal welfare to customers. These findings were also corroborated by interviewees in other emirates, suggesting that these challenges can be found across the UAE. Moreover, an awareness gap also exists amongst governmental employees in several departments, indicating that greater coordination within the public sector is needed to address animal welfare challenges. Additionally, many laws exist to regulate the animal sector, although enforcement may not always occur. The situation is further compounded by the absence of a centralized portal detailing critical information on stakeholders, the roles of government entities, laws and regulations, and a way to track pet ownership.4

These challenges, and perhaps exacerbated by the pandemic's financial pressures, have seen an increase in the number of animals that are surrendered to animal welfare centers and shelters in the northern emirates. further straining the already limited capacities of these organizations and their ability to support animal welfare. We suggest greater engagement with online communities, volunteers, and the private sector to address these challenges. As demonstrated by the work of an animal welfare organization in Abu Dhabi, the private sector, especially hospitality, could help support animal welfare through financial or in-kind support as part of a corporate social responsibility (CSR) initiative. In return, the private sector would benefit from a more pleasant environment and positive brand positioning as a strong supporter for animal welfare in the community for residents and tourists, potentially growing their business.

Animal welfare centers and shelters across the UAE would benefit from a cohesive strategy to guide their community engagement and outreach efforts, including volunteering, education, collaborations, and public awareness campaigns, especially to reach children and Emiratis (see Table A1 in the Appendix for examples of the different components). Partnerships with other stakeholders, who already have effective volunteer programs and private sector support, may help in designing and implementing robust, effective programs. The creation of a centralized national platform that details information on key stakeholders, responsible government entities, laws and regulations, as well as a place to register and trace pet ownership for lost and abandoned animals, may also do a great deal to address the misconceptions and lack information in the community around animal welfare. Finally, the process of reporting stray and abandoned animals must be standardized and implemented across local governments to help gather data reliably and consistently over time. This data would aid in identifying trends in animal welfare to inform the design of animal welfare programs and help to evaluate these programs and how they affect the stray and abandoned animal population.

Efforts to improve animal welfare in the UAE may be limited if the capacities and resources of animal welfare centers and shelters are also not addressed. In addition, it will be important to enlist the collaboration and support of other government entities. For example, the police will need to understand the regulations governing pet shops and breeders and who to contact when violations are identified to ensure that animal welfare is fully supported. It is also essential that information and campaigns on the importance of animal welfare—such as TNR, vaccinations, and financial commitments of pet ownership—reach all community members, including children, Emiratis, and low-income households, to address both the lack of awareness and cultural norms. Any efforts to improve animal welfare in the UAE will also need to acknowledge the current economic climate and be financially viable.

⁴ Currently, there is no centralized database of pet microchips. Instead, individual organizations maintain their own database, which makes it difficult to locate an owner if the pet is brought to a different organization.

Recommended Next Steps

- 1. Create a database of registered pets and animals that is overseen by governmental entities. This database should consist of a record of all pets with microchips that are registered within an emirate, which can be further used to help reunite lost pets with their owners.
- 2. Draft a comprehensive animal welfare law that includes a clause penalizing the ownership of animals or pets that are not registered and microchipped and introduces fines for the willful abandonment, neglect, or mistreatment of animals. Such a law should also ensure that expats who travel to the UAE and bring along with them their pets cannot leave the country without taking their pets with them, demonstrating proof of transfer of ownership to another individual or entity, or by providing a death certificate should the animal have died in an accident or of natural causes. This measure is intended to promote the regulation of animal adoption and sales and decrease the overall incidence of stray and abandoned animals.
- 3. Form a centralized multilingual information database and stray and abandoned animal reporting portal. Such a portal should be user-friendly and include information about pet licensing, fostering and adopting pets, existing veterinary clinics, and caring for pets in Arabic, English, Hindi, Malayalam, Urdu, and Tagalog. In addition, it must enable users to file complaints or report stray and abandoned animals by filling out online forms that are pre-programmed to be sent to the responsible departments, based on the type of complaint or problem that is reported. Through this portal, trends in pet abandonment and strays can be identified, which could also support evaluations on the impact of animal welfare programming.
- **4. Establish an interdepartmental committee on stray and abandoned animals** which meets regularly, such as on a quarterly basis, to outline existing challenges, follow up on progress, and discuss solutions. The agenda of such meetings should involve outlining short- and long-term goals, identifying problem areas or hotspots, and clarifying the commitments, roles, and responsibilities of each department. Alternatively, a separate department could be formed using existing resources and personnel from different governmental departments which would be solely responsible for animal welfare.
- 5. Create a coordinated online calendar of animal welfare related events to reach a larger number of concerned residents. Different events run by governmental departments, animal shelters, or entities in the private sector can also be highlighted and used to raise community awareness and education regarding animal welfare at the local and national levels, especially in schools and public spaces. Such events can also be used to recruit volunteers and/or serve as networking opportunities for concerned residents and citizens.
- 6. Improve education and awareness-raising campaigns to reach more segments of society. This can be done by (1) utilizing social media to reach mainstream society, make information more accessible, and highlight any upcoming animal welfare-related events; (2) hosting informative events and inviting key stakeholders, specialists, and experts to attend and share their expertise with attendees; (3) distributing physical or virtual leaflets and brochures prior to an event to explain its purpose; (4) setting up reward schemes to publicly thank community members for "good deeds," such as reporting stray and abandoned animals in distress; and (5) positively engaging residents through asset-based community development, which can encourage cooperation between the Ras Al Khaimah governmental departments and society, such as through volunteering and the monitoring of problem areas.
- 7. Foster collaboration between different networks, including amongst animal welfare stakeholders. This would necessitate improved coordination between animal welfare centers, shelters, volunteer groups, and others. Moreover, the private sector should be engaged to rally their support for animal welfare and demonstrate the benefits to their businesses.

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Appendix

Table A1: Example Components of a Community Awareness & Education Strategy

	TNR
	What it is
	Who conducts it
	Where is it done
	Why it is important
Topics	How to report strays Vaccinations
	Which vaccinations
	Why they are important
	How often they should be done
	Who does them
	Where they are done
	Adoptions
	Why adopt
	Who can adopt
	Where to adopt
	Animal Commitment
	How long
	Costs of a pet
	Environmental requirements
	Relocation abroad
	Registering a Pet
	Why it is important
	Where to do it
	How to do it
	Animal Welfare Centers & Shelters
	Goods and services
	Volunteer program
	Adoption program
	Way to support
	Public Media (Radio, TV, Displays)
Delivery	Outdoor Advertisements
	Social Media
	Schools & Community Centers
	Local Animal Welfare Centers & Shelters
	Animal Welfare Ambassadors/Volunteers
Target groups	Expatriates
	Emiratis
	Low-Income Households
	Children Visitors
	Private Sector
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Based in the emirate of Ras Al Khaimah, the Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research is a non-profit foundation that was established in 2009 under the patronage of His Highness Sheikh Saud bin Saqr Al Qasimi, United Arab Emirates Supreme Council Member and Ruler of Ras Al Khaimah. The Foundation has three broad functions:

- To inform policymaking by conducting and commissioning high quality research;
- to enrich the local public sector, especially education, by providing educators and civil servants in Ras Al Khaimah with tools to make a positive impact on their own society; and
- to build a spirit of community, collaboration, and shared vision through purposeful engagement that fosters relationships among individuals and organizations.

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