

A holistic approach to harmonious co-existence between humans and dogs in communities



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Introduction

Rabies was reintroduced to Zanzibar in 1991 and 1998, on Unguja and Pemba respectively, by East African dhow sailors smuggling dogs on to these islands. In attempts to control the disease Zanzibar's government implemented prevention measures including rabies education, country-wide dog and cat vaccination, and stray dog shootings. Despite these measures, rabies became endemic on the islands.

We started working with the Zanzibar government in 2000. Our approach was to integrate animal health and welfare into their policy and practice. In 2009, the 'Rabies and Dog Management Project' was launched by the Zanzibar government and ran until 2012.

This project involved a holistic approach with a 'One Health' focus. It involved relevant people from the ministries of health, livestock, and education and the local government. This evolved into the Zanzibar Rabies Prevention and Elimination Project (ZRPEP) in 2013.

Knowledge sharing and a One Health approach are critical to the sustainability of a successful dog management and rabies elimination programme. One Health involves the tackling of human and animal health issues together. Crucially, the approach needs to be backed by political will and resources.



Ali Salim Jecha, local community animal health worker, says: **"Rabies is no longer a problem here. We have seen the number of dog bite incidents decrease each year because of all the education we have done around the importance of vaccinations and the effect of rabies."**



Mohammed Mauly, local dog welfare expert, says: **"We started small and scaled up, it took time but it was worth it. I even took my own dogs to local communities to be vaccinated as an example of what responsible ownership is and to demonstrate how simple caring for dogs can be."**



Tumwa Mohamed Ali, aged 15, local dog owner says: **"We used to run away from the dogs. Now they lie next to us. People are no longer afraid."**

Method

In 2008, we facilitated a dog demography survey which ultimately enabled the development of a rabies elimination strategy. Following the survey, meetings were arranged for representatives from the district authority, district councils, municipalities, dog owner organisations and the police force. These meetings were vital in fostering a better understanding of everyone's role and the project's logistics.

With support from World Animal Protection, staff at the veterinary department were trained in dog handling and vaccination, and rabies surveillance and sample collection. The paraveterinarians became the communication point between village leaders, the district health management team and the dog owners. They also made communities aware of upcoming vaccination and awareness campaigns and collated information on the disease.

Education on dog bite management and post-exposure prophylaxis for humans was provided by the ministry of health to medical and project staff. School children were educated on rabies and responsible dog ownership.

Public awareness campaigns were provided in collaboration with the local NGOs Zanzibar Animal Affection Society (ZAASO) and Zanzibar Society for Prevention of Cruelty to Animals (ZSPCA). They also established animal clinics on the island where owners could bring their animals to be vaccinated or treated when ill.

Television and radio programmes about rabies were broadcast regularly to raise awareness of the disease.

Results

Through the project almost 2,000 students have been educated about rabies and responsible dog ownership; 132 teachers have been trained in teaching these topics. Thirteen education officers have also been trained as education ambassadors for rabies prevention and responsible dog ownership.

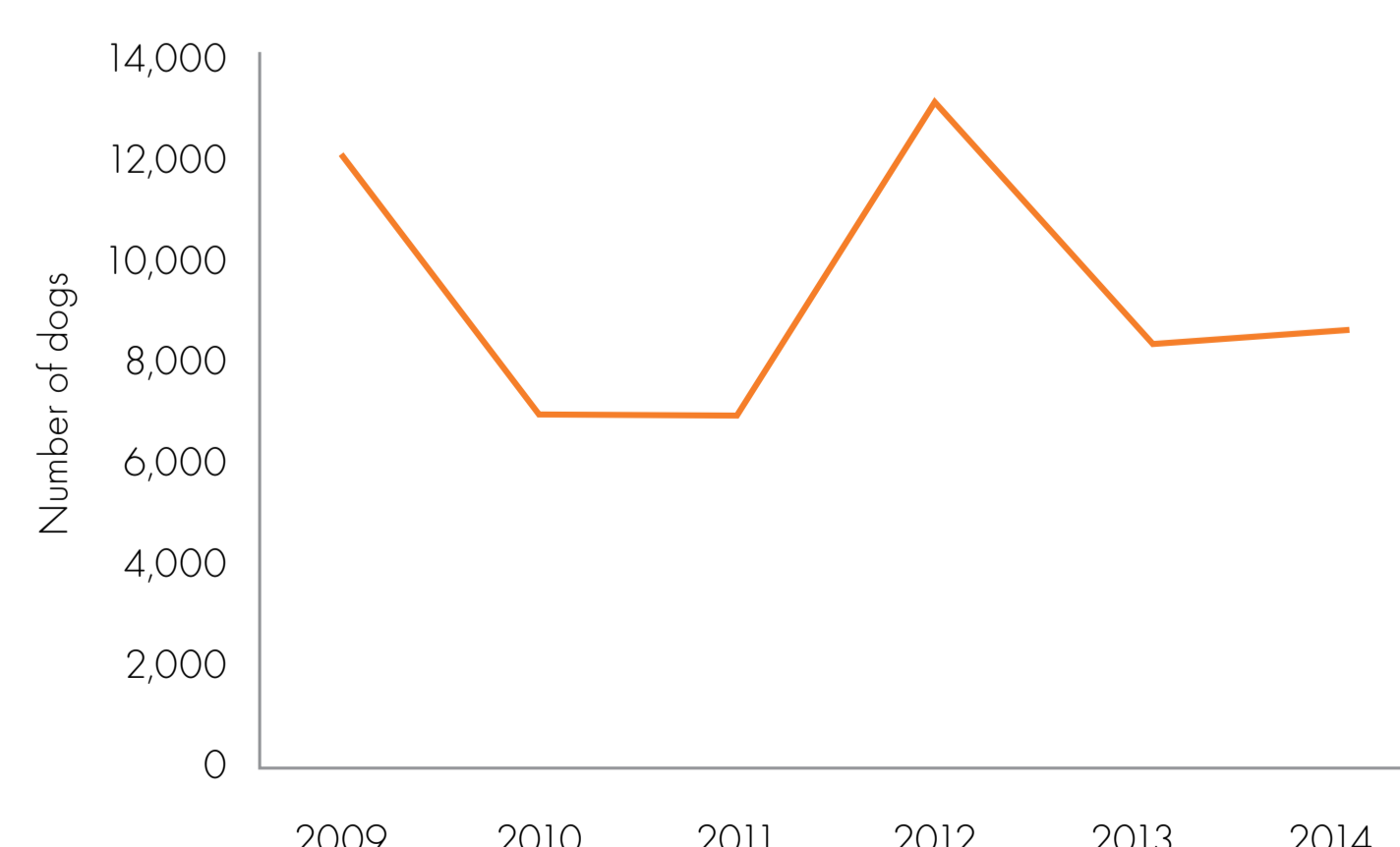
Rabies awareness raising in schools and communities has led to a 65% decrease in reported dog bite cases and no human rabies cases have been reported. An increase in people seeking veterinary assistance for dogs has also been noted.

The dog demography survey carried out in 2008 (mathematical extrapolation estimated the dog population at 18,798. The island was hit by a

canine distemper outbreak in 2010 and 2012. This resulted in a large number of dogs dying which affected the number of rabies vaccines administered. Another (physical) dog census was carried out in 2013 and the dog population was estimated at 9,893.

The rabies elimination strategies were implemented in 2009 and by the end of 2013, 85% of the owned dog population had been vaccinated. By the end of 2014, 100% coverage had been reached. This is more than the 70% vaccination coverage recommended by the World Health Organization (WHO)¹. As of October 2015, there have been no human cases of rabies or any suspected or confirmed dog rabies cases reported since December 2013.

Figure 1. Number of dogs vaccinated between 2009 and 2014. Distemper outbreak in 2010 and 2012 where a large number of dogs died. Estimated dog population in 2008 was 18,798 and in 2013 9,893.



What is 'One Health'?

One Health is a concept that involves the collaboration and communication between human, animal and environmental sectors. Its aim is to advance human and animal health and welfare, and to promote sustainable management of the environment².

Conclusion

Rabies is being successfully controlled on Zanzibar because of interdisciplinary collaboration and implementation of control measures that include mass dog vaccination and neutering programmes. Community engagement and education have also played a key role in preventing dog bites and motivating people to take their dogs to vaccination and sterilisation clinics. Because of its success the ZRPEP has now moved into the elimination and surveillance stage.

World Animal Protection supports a holistic approach where animal and human health and welfare are inextricably connected. By combining humane management measures with responsible ownership and mass dog rabies vaccination, conflict between humans and dogs can be mitigated, creating a harmonious co-existence.

References

1. WHO expert consultation on rabies (2013). Second report, Geneva, Switzerland, [WHO technical report series no.982].
2. One Health initiative. About the One Health Initiative [online]. www.onehealthinitiative.com/about.php [Accessed on 14 October 2014]

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