Does a holistic approach to improving equine welfare produce better outcomes?

Minimising cart donkeys' foot conditions through community awareness-raising, capacity-building and linking relevant stakeholders in Jacobabad



### The Brooke Pakistan

Shah S Z A<sup>1</sup>, Nawaz S<sup>1</sup>, Laghari H<sup>1</sup>, Shafi M<sup>1</sup>, Upjohn M<sup>2</sup> and Eager R<sup>2</sup>

zahir@thebrooke.org.pk

The Brooke, Opposite Telephone Exchange, Charsadda Road, Peshawar 25000, Pakistan
The Brooke, 5<sup>th</sup> Floor, Friars Bridge Court, 41-45 Blackfriars Road, London, SE1 8NZ, UK

## Summary

- Poor awareness regarding foot care, poor terrain and unavailability of trained farriers and health workers can lead to relatively higher prevalence of lower limb conditions: for example, overgrown and cracked/worn-out hooves and lameness
- Brooke organised awareness sessions on basic management practices, trained an animal owner as a farrier and another as a community-based animal health worker, then linked them with two needy and willing communities with a total of 36 donkeys

#### As a result prevalence of foot conditions in target donkeys reduced notably

## Introduction

- A survey on 210 cart donkeys in Jacobabad Pakistan, March 2012 revealed high frequency of pastern joint swelling, hoof cracks, elongated hooves, abnormal gait and bruised and diseased soles (Figure 1)
- It was hypothesised that these problems were due to poor community awareness and non-availability of trained local service providers
- A community education initiative was designed, supported by training a farrier (Figure 2) and a community-based animal health worker (CBAHW) with the aim of improving the hoof health of donkeys in this region



Figure 1: Elongated hooves in a donkey



Figure 2: Brooke-trained farrier

## Methods

- The frequency of various foot conditions in two communities was recorded every two weeks
- Two donkey owners in each community were trained by Brooke staff, one as a farrier and one as a CBAHW
- Community members set their own indicators for animal-based measures and owner awareness on basic management practices (BMPs) for follow-up and impact assessment
- A total of 24 awareness-raising sessions were conducted on BMPs, including foot care
- Animal-based indicators were measured on the same animals prior to, and following, the intervention
- At the end of the pilot study, communities evaluated the impact of the pilot project through the participatory rural appraisal tool "now and before analysis"

<b>Community-measured</b>	%	%
indicators	before	after
Grooming awareness	2	90
Foot cleaning awareness	30	85
Appropriate hoof trimming	15	75
frequency	T	/5
Frequency of elongated hooves	75	0
Frequency of lame animals	70	30
Appropriate stable management	20	55

**Table 1**: Results of community impact assessment ofthe intervention



**Figure 3**: Community-led impact assessment of the intervention

#### Conclusions

1. The combination of increasing owners' awareness, training and linking stakeholders brought positive change in these animals' foot conditions

## Results

- Awareness of the BMPs in the communities was enhanced (Table 1)
- The trained farrier and CBAHW were linked with target communities
- Prevalence of foot conditions was significantly reduced (Table 2, Figure 4)
- This improvement was acknowledged in the community's own assessment following the pilot intervention (Table 1, Figure 3)

**Table 2:** Prevalence of foot conditions in 36 donkeys before and following the intervention

Veterinary- measured indicators	% before	% after	P-value	
Hoof cracks	97	11	< 0.001	
Overgrown	C1		-0.001	





- Community engagement with ownership of the project kept it active and enthusiastic, leading to positive human behaviour change
- 3. However, further work is required to evaluate which component of the intervention had most impact on foot conditions This will inform future scaling-up of the project in similar areas

hooves	61	0	<0.001
Animals with	31	69	0.002
normal gait	31	05	0.002
Bruised/			
punctured	50	0	<0.001
sole			
Overgrown	92	0	<0.001
frog	92	U	<b>\U.UU1</b>
Trimming	0	47	< 0.001

**Figure 4**: Measuring the animal-based indicators

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