Introduction

- “No foot, No horse” reflects the importance of the hoof in equine welfare.
- Foot problems have been identified as one of the main welfare issues in 30 district units of Brooke India.
- It is difficult to improve hoof care because it is not an infectious disease that you can vaccinate against. Skilled paraprofessionals are required who are affordable, and at the same time, owners need to realize the benefits of regular hoof care.
- By increasing the capacity and knowledge of equid owners with respect to foot (and farriery) care, the hypothesis was that demand for farriers of sufficient quality would be generated, ultimately leading to better foot health.
- The aim of this study was to investigate the effectiveness of owner-level foot care training.

Methods

- Invitations for training were given to owners of working equids from Barabanki district of Uttar Pradesh, India in villages where foot-related problems were prevalent.
- Owners received monthly training on hoof cleaning, recognition of hoof shape, importance of hoof anatomy, and need for proper farriery at regular intervals (Figure 1 and 2).
- Equid owners developed eight animal-based indicators:
  - (i) forelimb toe:heel ratio
  - (ii) hindlimb toe:heel ratio
  - (iii) frog condition
  - (iv) no evidence of toe dumping
  - (v) concave sole
  - (vi) shiny hoof wall without cracks
  - (vii) heel lengths
  - (viii) shoes fitted appropriately
- Owners used these indicators within a participatory welfare needs assessment framework to evaluate proper farriery and hoof health prior to the start, and one year after, the training.
- Assessment of hoof health in equids by Brooke staff in the selected villages was undertaken following the intervention. Additionally, clinical records for these villages from Brooke India were examined for lameness cases over the study period.

Summary

- Foot problems were identified as one of the main welfare issues in 30 districts where Brooke India operates by welfare assessment. Consequently, training of owners was implemented at village level.
- By capacity building of equid owners on foot (and farriery) care, it is envisaged that demand will be generated for quality farriers, ultimately leading to better foot health. Technical training of farriers was undertaken alongside this project to improve their farriery skills so that they could provide effective services.
- There was a marked reduction in problems related to foot health following implementation of this training regimen.

<table>
<thead>
<tr>
<th>Assessment criteria</th>
<th>Number of animals (% of total animal assessed)</th>
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<tbody>
<tr>
<td>Foul-smelling frog</td>
<td>May 2012: 134 (53%)</td>
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<tr>
<td></td>
<td>May 2013: 36 (14%)</td>
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<tr>
<td>Interference lesions in fore limbs</td>
<td>May 2012: 89 (35%)</td>
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<tr>
<td></td>
<td>May 2013: 41 (16%)</td>
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<tr>
<td>Interference lesions in hind limbs</td>
<td>May 2012: 65 (26%)</td>
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<tr>
<td></td>
<td>May 2013: 46 (18%)</td>
</tr>
<tr>
<td>Abnormal hoof shape in fore limb</td>
<td>May 2012: 131 (51%)</td>
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<tr>
<td></td>
<td>May 2013: 31 (12%)</td>
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<tr>
<td>Abnormal hoof shape in hind limb</td>
<td>May 2012: 118 (46%)</td>
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<td>May 2013: 72 (28%)</td>
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</table>

Table 1: Assessment of hoof and lower limb health before and after the intervention

Results

- 113 owners of 257 equids in 8 villages received training.
- Hoof and lower limb health improved following the intervention (Table 1).

Conclusion

- In previous interventions by Brooke India, stand-alone training of local farriers has been insufficient to improve foot health of working equids. This study describes a strategic initiative to train owners in foot care and consequently create demand for good farriery services.
- We are planning to replicate this strategy in other places where hoof-related problems are identified, bearing in mind differences between different contexts: i.e. migration of owners during brick kiln season.
- Challenges that were faced during this project included gathering the same equid owners at the training venue for each session and preparation of innovative models as resource materials for training.
- Technical training of farriers continued alongside this project to improve their farriery skills, allowing them to provide effective services when equid owners demand better quality farriery.