

A One Health approach to creating lasting change in the brick kilns of South Asia



Authors: Naeem Abbas, Dr Shereene Williams and Carine Bambara

Authors' affiliation: Brooke Pakistan, Brooke UK

Background: the problem

Brooke is an international animal welfare organisation that works to improve the welfare of 500,000 working equids in brick kilns across South Asia.

There are about 150,000 brick kilns employing over 4 million people and producing 86% of the world's bricks.

The kilns employ traditional techniques where hand-made bricks are transported by animals and baked in coal fueled kilns. The work is dangerous, the environment hazardous and the industry unregulated and exploitative.

Results

Animal Health:

Poor housing conditions, limited access to veterinary care and dangerous working conditions result in frequent illness and injury.

Many animals are overworked and overloaded and have limited access to water.

Common issues include:

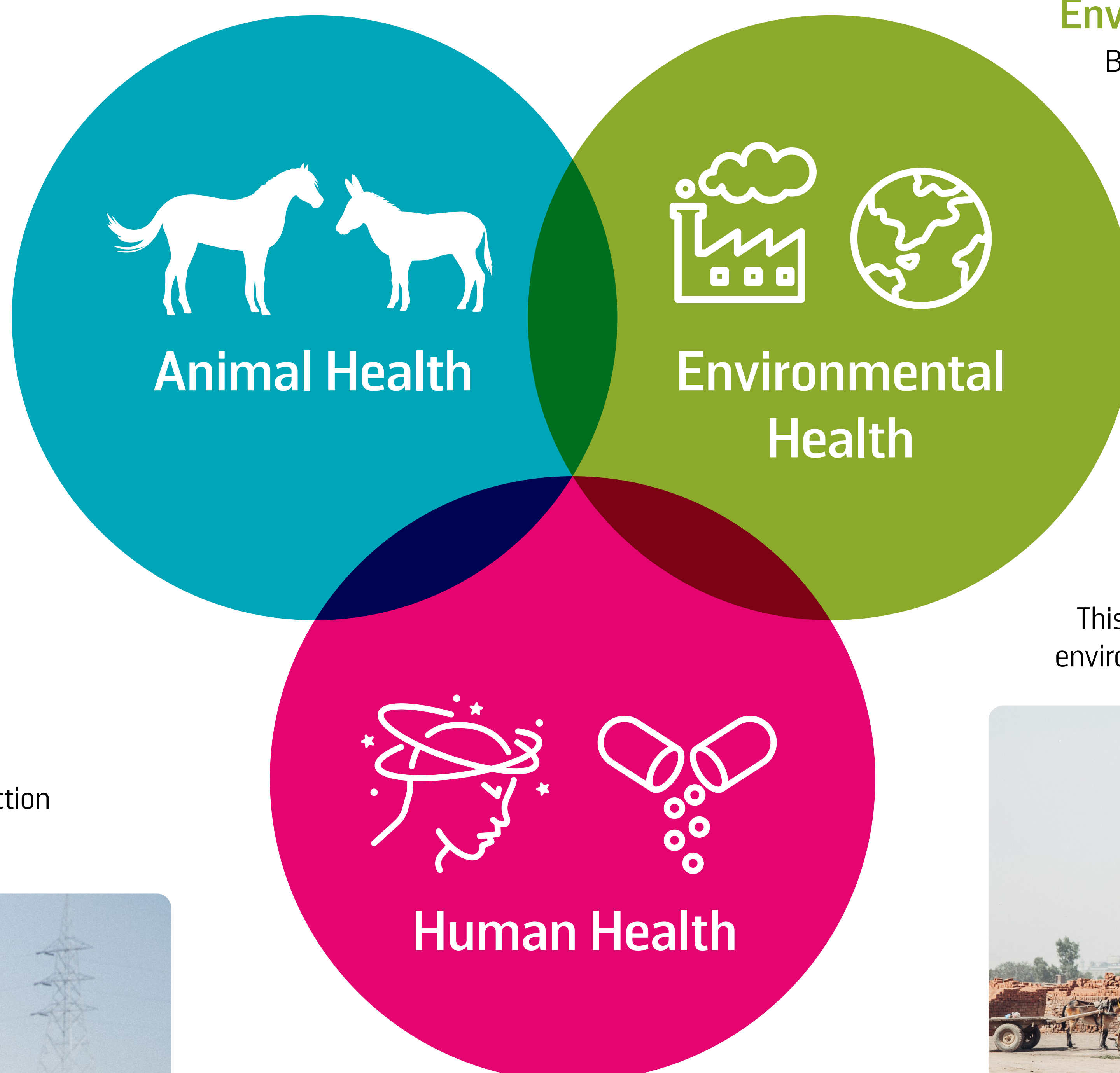
-  **50%** hoof problems
-  **30%** wounds
-  **52%** abnormal gait
-  **30%** fear of human interaction



Methodology

This paper is informed by:




- Primary data from Brooke's Standardised Equine Based Welfare Assessment Tool (SEBWAT) and field observations from 8,683 brick kilns in India, Pakistan, Nepal and Afghanistan.
- Cross-sectoral discussions including two regional workshops (2017/2019) with 14 other relevant organisations.
- A systematic literature review of more than 120 published and unpublished sources including research papers, academic journals and organisational reports.



Environmental Health:

Brick kilns are huge consumers of coal and emit significant volumes of carbon dioxide.

In India, kilns:

-  are the **3rd** largest industrial coal consumer
-  use **24m** tons of coal annually
-  use **78m** tons of CO₂ annually

This has huge effects on the health of the environment as well as people and animals.



Common issues include:

-  **80%** workers have no running water
-  **60%** workers live below the poverty line
-  **60%** workers have no latrine facilities
-  **57%** women gave birth without medical assistance

Human Health:

Poor living conditions, dangerous work and limited access to professional healthcare are common.

Restricted access to local healthcare services results in high rates of self-medication/use of unqualified doctors.

Psychological health is affected with **80%** workers in one kiln reporting lack of pride in their work and **60%** feeling no control over their lives.

Conclusions

1 This analysis and Brooke's first-hand experience highlights the multi-sectorial issues within the brick kiln industry and the applicability of a One Health approach.

2 Operationalizing One Health within this challenging context will make improvements to the people, animals and environment of the brick kilns. It will also provide learning to inform and benefit a One Health approach in other contexts.

Towards a solution

Brooke has led the formation of a consortium of international NGOs and regional bodies to address challenges in brick kilns. This multi-disciplinary group of experts are collectively advocating for and facilitating improvements in human, environmental and animal health.

