



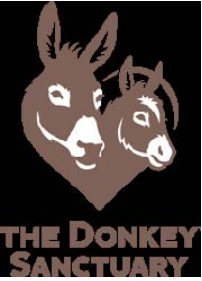
THE DONKEY  
SANCTUARY

# Biosecurity and disease risks of the donkey skin trade: A global perspective

3<sup>RD</sup> African Animal Welfare Conference, Addis Ababa, Ethiopia



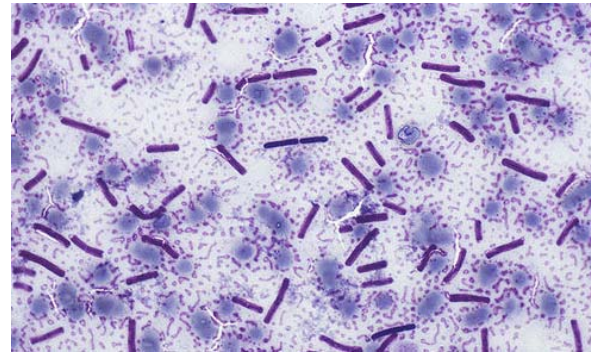
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## Infectious diseases affecting donkeys

Donkeys are considered to be resistant or tolerant or resilient carriers of many diseases

- But they are potentially infected by many Bacterial, Viral, Parasitic and fungal diseases
- This is particularly the case given working donkeys live under stressful conditions and are often immunocompromised.





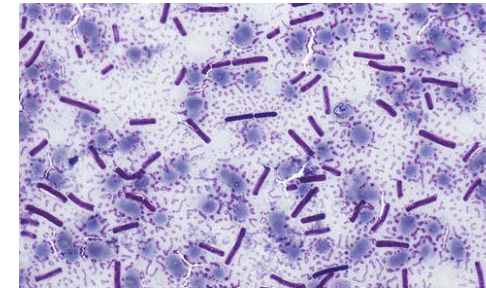
# Epidemiological and zoonotic roles

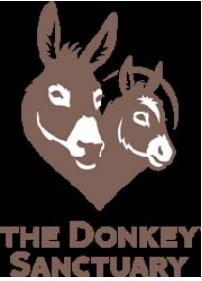
Given that

- Many diseases affecting donkeys are endemic
- A number of them are zoonotic
- Their silent carriers or reservoirs of many infectious agents (even if not diseased).
- Donkeys are not covered by livestock development policies to contain the diseases.
- free movement of animals across the countries and borders with no movement restrictions or quarantine measures in place
- Donkeys have a very close relationship with their owner in their day to day activities

\*\* The epidemiological/zoonotic roles they may play in sustaining these diseases and transmitting to other animals and humans could be immense

\*\* Developing countries are already under a significant biosecurity risk of disease transmission and spread across the countries and borders





# What additional biosecurity risk has the donkey skin trade brought?

Important factors that make this trade quite alarming concerning biosecurity and disease risks are:

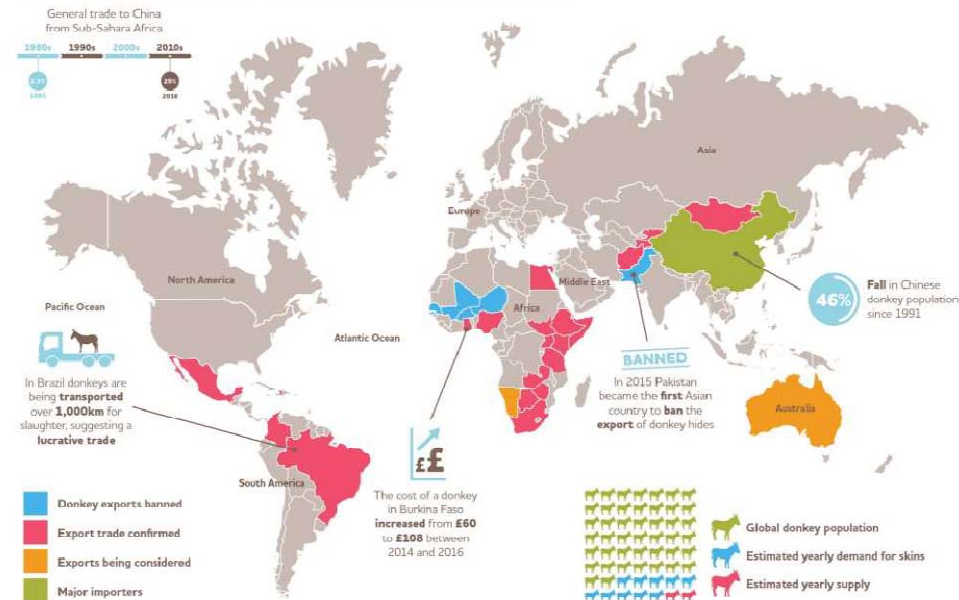
## 1. The trade targeted countries over 90% of the world donkey population

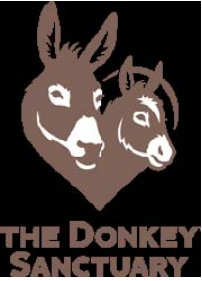
- over 95% of the African donkey population
- Over 91% of the South and Central America
- Over 47% of Asian donkey population
- Thousands of feral donkeys (Brazil, Australia).
- Wild asses????

## 2. The trade operates in countries where many equine diseases are

- Endemic
- Notifiable
- exotic to many developed world
- zoonotic

### OVERVIEW OF THE SKIN TRADE: A GLOBAL THREAT TO DONKEY WELFARE





### 3. The trade operates where

- Thousands of donkeys are transported across the country/ or borders with no movement control
- legal slaughter houses are not properly managed, regulated and monitored
- Biosecurity measures are not in place or enforced.
- Hundreds and thousands of donkeys are indiscriminately slaughtered daily ( often beyond their capacity)
- illegal trades are wide spread and thousands of donkeys are slaughtered/killed

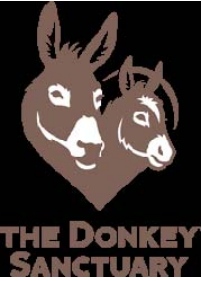




# Biosecurity and Disease risks of movement and transport of donkeys

- Animal movement is a significant factor in the spread of infectious agents and diseases.
- Under natural conditions working donkeys are already under constant stressful conditions
- These are the animals
  - That face long distance trekking or trucking without water, feed and vet care.
  - Transported indiscriminately irrespective of their health status, stage of pregnancy
  - Face trekking and trucking in adverse environmental condition
  - That are transported with high stocking density
  - Kept in holding or waiting kraals (collection points)

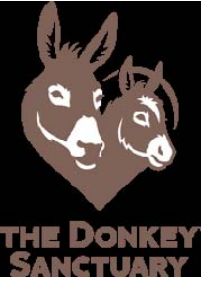




Such hardship conditions further exacerbate the stressful condition: further immunocompromised.

- making them highly vulnerable and easily succumb to diseases that they were tolerant, resilient for,
- Create suitable condition for the relapse of certain diseases (EHV);
- A number of donkeys die on the routes
  
- Predispose pregnant jennies to abortion (stress-triggered infectious diseases such as EHV)
  
- Sick animals are spreading the infectious agents to surrounding on the route (equids, other domestic and wild animals, human)
- Animals which die on the route are skinned leaving the carcasses behind;
- Aborted foetus are left behind
  - left carcasses and aborted foetus serve as a source of infectious agents
  - contaminate/pollute the environment





## Biosecurity risks related with slaughterhouses, lairage and carcass disposal

The fact that

- Donkeys are transported to SH indiscriminately irrespective of their health status (sick, pregnant);
- No inspection of donkeys in the lairage or collection point before slaughtering;
- No attempt is made to segregate sick animals; all are slaughtered indiscriminately together
- Animals died in lairage are not inspected to determine the cause, rather only skinned disposing the carcasses
- Slaughterhouses in many countries are operating
  - Unhygienically
  - Without biosecurity measures in place
- Inappropriate carcass disposal and waste products

All of these clearly show grave biosecurity concerns for disease spread and environmental contamination/pollution, and public health hazard







## Biosecurity risk of environmental contamination and public health

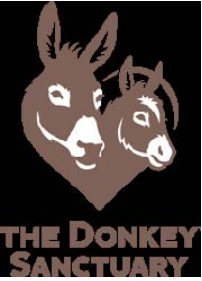
Carcass and waste products disposal operations should be within acceptable scientific principles

- To destroy pathogenic agents and
- To address public and environmental concerns

Improperly disposed carcass and waste products, apart from the stench and air pollution, can easily contaminate

- Soil, grazing and farming lands;
- ground water ( water wells or boreholes) and surface water
- pathogens can easily washed away by rain, streams irrigation, or river further spreading to other distant places

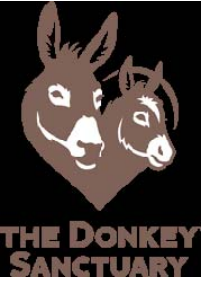




## Carcasses & waste products as source of methane gas and Leachate

- Carcass and waste products decomposition generate methane, a greenhouse gas, which contributes to global climate change
- Leachate from carcass and waste products is known to contain over 12,000 mg/L of nitrogen as ammonium
- 900Kg carcass generates about 7 L of leachate (about 9-10 bodies of donkeys);
- WHO drinking water standard is 50 mg/L of Nitrate
- Excessive nitrate in drinking water can be fatal for children- methemoglobinemia
- Excessive nitrate if washed in water is fatal for fish
- These are alarming facts given
  - the rate at which donkeys are slaughtered per day
  - Wide spread illegal killings only for the skin, leaving carcasses to rot
  - improper disposal of carcasses and waste products
- This is particularly the case in areas
  - Where sandy soils predominate
  - Where slaughterhouse are built nearby water sources or
  - Illegal slaughtering is taking place such as around
    - Water wells/rivers/lakes/ponds/irrigation canals/streams/water ways





# The impact of the trade on the global equine industry

Given that

- The indiscriminate and uncontrolled movement of donkeys and their products
- Lack of biosecurity measures or SPS measures
- the fact that the trade has a global trend or route involving many countries across the continents

It is alarming for interconnected global equine industry in which horses travel long distances across the globe for equestrian events

- This might have a devastating effect given
  - the rapid climate change which has a profound effect on the ecology of insect vectors favoring their expansion and
    - hence the diseases they transmit to new areas or countries where they are absent or eradicated.
- This is particularly the case in illegal trade associated with poaching, and smuggling of products



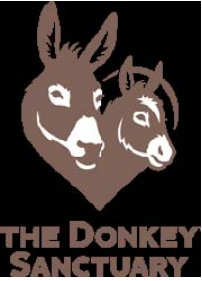
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Such unregulated and uncontrolled donkey trade operation clearly shows not only the interaction but also dangerous interconnection between

- animals (donkeys)
- human and
- the environment
  - that put all parties in danger of contracting and spreading infectious agents and diseases apart from its grave welfare and socio-economic issues.





## The trade's further impediment

One of the main factors why some countries, like developing countries, are poor, given enough resources, is due to

- the wide spread of livestock diseases
- zoonotic diseases
- absence or inadequate Sanitary and Phyto-sanitary (SPS) measures or biosecurity measures.

From the world wide disease control perspective, especially nowadays when

- emerging and re-emerging infectious diseases from developing countries are considered a big threat to the developed world,
- It is clear that this donkey skin trade brought further impediment to the countries' economy
  - by further escalating the already existing restriction of export of livestock and their products.





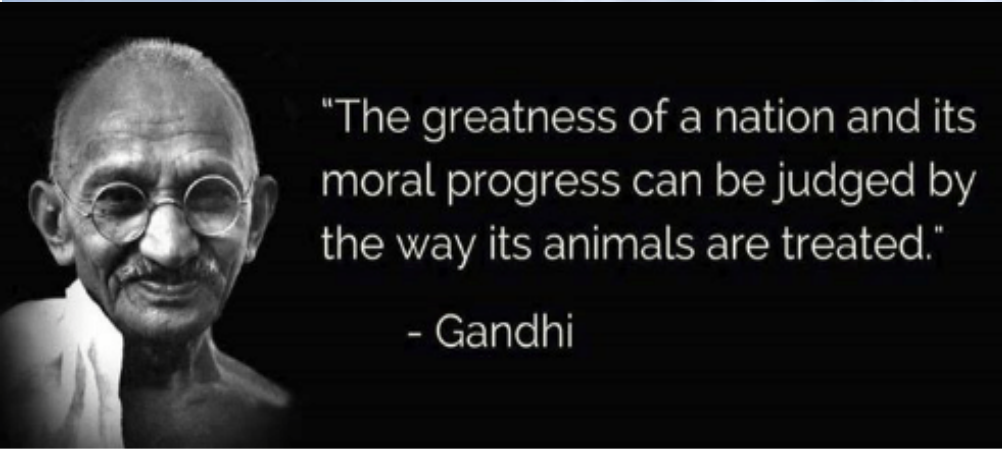
The trade may generate revenues and create job opportunities but  
It is at expense of

- Severe animal welfare issues
- Livelihood of resource-limited donkey-dependent communities;
- Cultural and religious conflicts
- Significant decline of donkey population (unsustainability)
- Disease transmission and spread (outbreaks of diseases)
- Zoonotic diseases risks
- Environmental contamination and pollution and the resulting risks
- further export restriction on livestock and their products;

Therefore, the industry must be scrutinised and weighed from these  
and other relevant angles;



# Worth remembering



**IF YOU WANT TO KNOW THE END,  
LOOK AT THE BEGINNING'  
"African proverb"**

**Many thanks for your attention**