Climate Change, Trade, and Animal Health

STDF Event on Linkages Between Climate Change and SPS Issues
STDF Secretariat in Collaboration with OIE And FAO
Climate Change and Animal Health
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Food systems for health and nutrition

Triple burden
Zoonoses: neglected and emerging

• Neglected zoonoses: *brucellosis*, *bovine tuberculosis*, *leptospirosis*, *Rift Valley fever*

• Emerging zoonoses: *mad cow*, *bird flu*, *SARS*, *MERS*, *COVID-19*
Warning! Increasing frequency of pandemics

Emergence of significant diseases caused by coronaviruses and other pathogens

1931
Avian infectious bronchitis

1971
Porcine epidemic diarrhoea (PED)

2003
Severe acute respiratory syndrome (SARS)

2012
Middle East respiratory syndrome (MERS)

2016
Swine acute diarrhoea syndrome

2019
Coronavirus disease 2019 (COVID-19)

1920s
Human Immunodeficiency Virus (HIV) infection

1937
West Nile Fever

1947
Zika virus disease

1976
Ebola virus disease

1986
Bovine spongiform encephalopathy or mad cow disease

1994
Hendra virus infection

1996
Highly pathogenic avian influenza or bird flu

1998
Nipah virus infection

These trends have important drivers

- Climate change
- Trade in livestock & products
- Human population growth
- Intensifying livestock
- Wildlife reservoirs
- Social change
- Economic growth
- Deforestation
- Urbanisation
- Food price
- Wildlife areas incursion
- Habitat loss
- Biodiversity
- Land use change
- Conflict
- Poverty increase
- Wildlife conservation
- Irrigation
- In-migration
- Inequality
- Land purchase by foreigners

[Bar chart showing the importance of various drivers]
External Factors Important For Vet Services

Member Country perspective

0 is no importance
5 is maximum importance

Triple burden
AH impacts on trade

21st Conference of the OIE Regional commission for Africa,
16th-20th February, 2015, Rabat, Morocco

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Trade, climate change and animal health

CSAD
- Ectoparasites
- Liver fluke
- Diarrhoeal diseases
- FMD
- HS
- CBPP

Zoonoses
- Anthrax
- Lepto
- Schisto
- Tryps
- RVF
- Flu
- Corona
- TB
- Rabies
- Leish
- Brucella

TADs
- FMD
- RVF
- Flu
- Corona

Climate Sensitive Animal Disease – CCAFS/ILRI
Top zoonoses – ILRI
Transboundary animal diseases – EMPRES, FAO
Initiatives related to AH, CC, trade

- 2020 GBADs launched
- 2020 OHRECA launched: zoonoses, FBD, AMR
- 2020 AU SPS Policy Framework and Animal Health Strategy for Africa endorsed
- 2021 AfCFTA - 55 member states – enacted
- 2022 COHESA – 11 countries - launched
- 2022 Animal Health Systems Facilitating Trade within the African Union launched
Acknowledgements and Further Reading

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Climate and livestock disease: assessing the vulnerability of agricultural systems to livestock pests under climate change scenarios

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