Targeting Natural Resource Corruption

Harnessing knowledge, generating evidence, and supporting innovative policy and practice for more effective anti-corruption programming

This event is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents are the responsibility of the Targeting Natural Resource Corruption project and do not necessarily reflect the views of USAID, the United States Government, or individual TNRC consortium members.

Illegal wildlife markets, zoonotic disease transfer and corruption—Connections and what the global community must do about it

Dr. A. Alonso Aguirre
Chair and Professor
Department of Environmental Science and Policy
George Mason University

Steve Broad
Executive Director
TRAFFIC

Nik Sekhran
Chief Conservation Officer
World Wildlife Fund (WWF)

John M. Sellar OBE
Anti-Smuggling, Fraud and Organized Crime Consultant

Moderator

Dr. Louise Shelley
Director, Terrorism, Transnational Crime and Corruption Center
Professor, Schar School of Policy and Government
George Mason University

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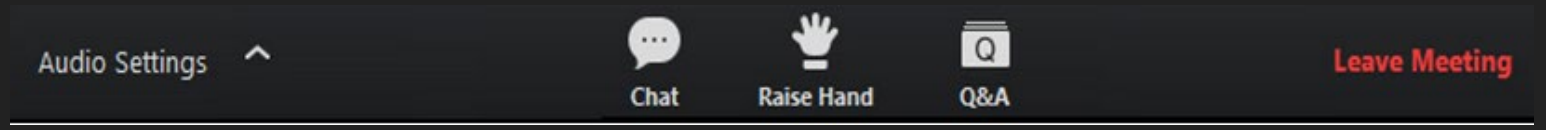
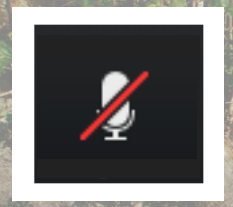
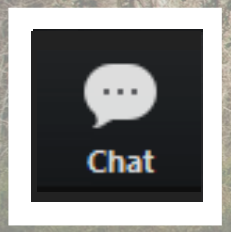
Ground rules...





1. All participants are muted

Given high attendance in this webinar, all lines will remain muted



2. Exchange thoughts and pose questions

Introduce yourself and share your own insights and questions in the chat window

Illegal wildlife markets, zoonotic disease transfer and corruption—Connections and what the global community must do about it

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Increased Awareness of Environmental Risks: WEF 2020 *Global Risks Report*

Top 10 risks in terms of

Likelihood

1. Extreme weather
2. Climate action failure
3. Natural disasters
4. Biodiversity loss
5. Human-made environmental disasters
6. Data fraud or theft
7. Cyberattacks
8. Water crises
9. Global governance failure
10. Asset bubbles

Top 10 risks in terms of

Impact

1. Climate action failure
2. Weapons of mass destruction
3. Biodiversity loss
4. Extreme weather
5. Water crises
6. Information infrastructure breakdown
7. Natural disasters
8. Cyberattacks
9. Human-made environmental disasters
10. Infectious diseases

Categories

- Economic
- Environmental
- Geopolitical
- Societal
- Technological

Considering responses in the context of systems change

Science Brief

Beyond Boundaries

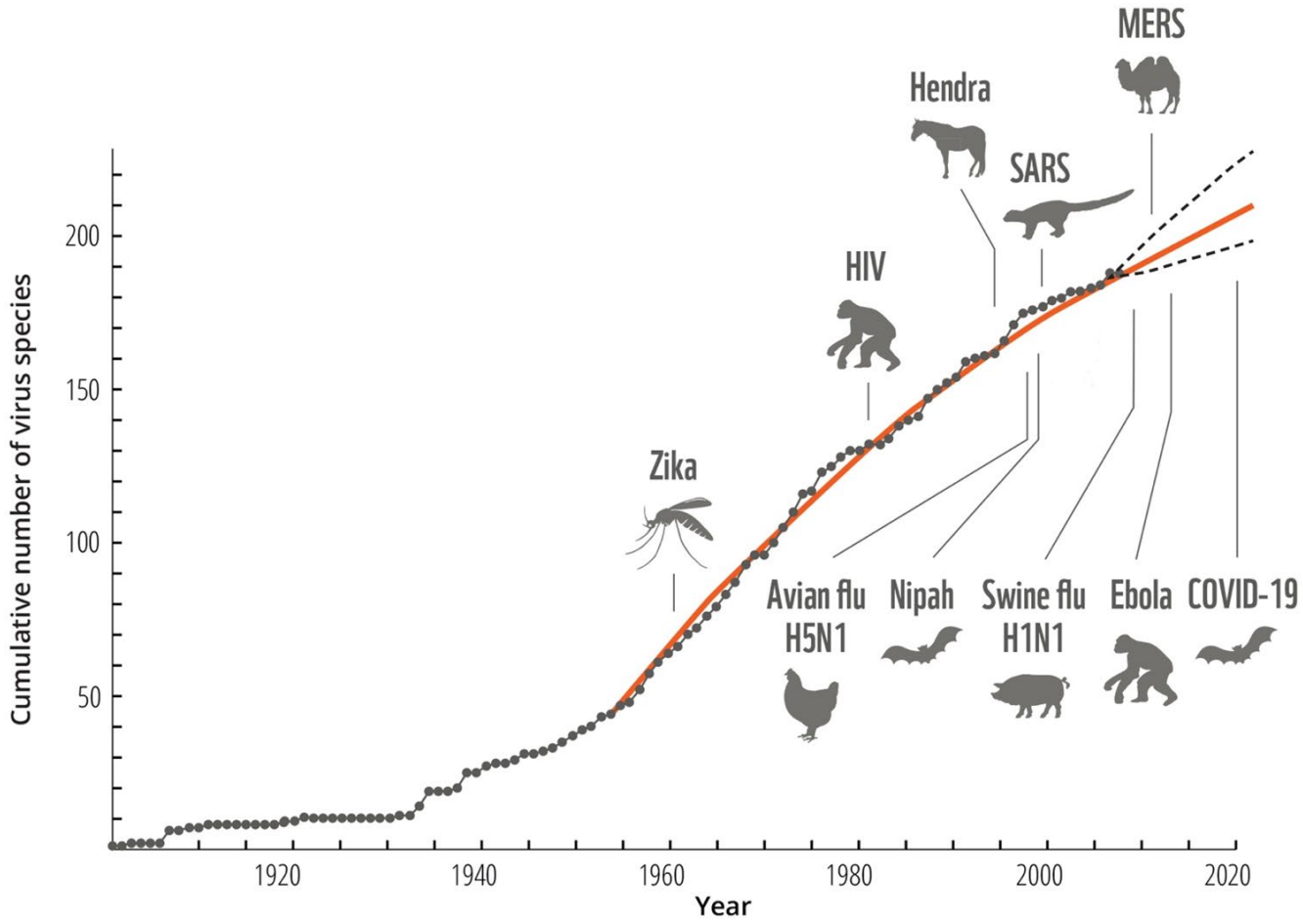
Emerging zoonotic diseases, nature, and human well-being

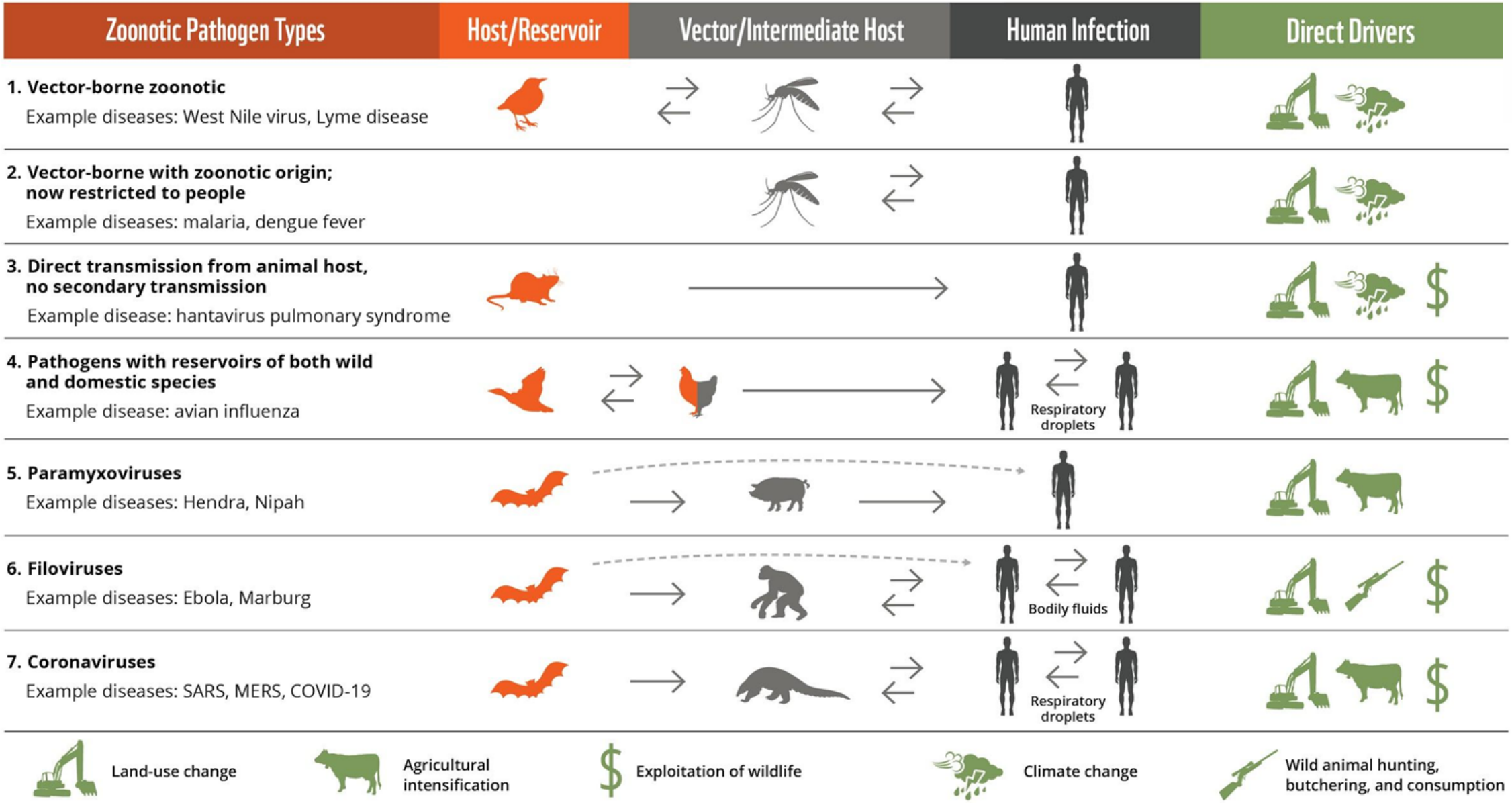
We must realize that in our crowded world of 7.7 billion people, a combination of altered human behaviors, environmental changes, and inadequate public health mechanisms now easily turn obscure animal viruses into existential human threats.

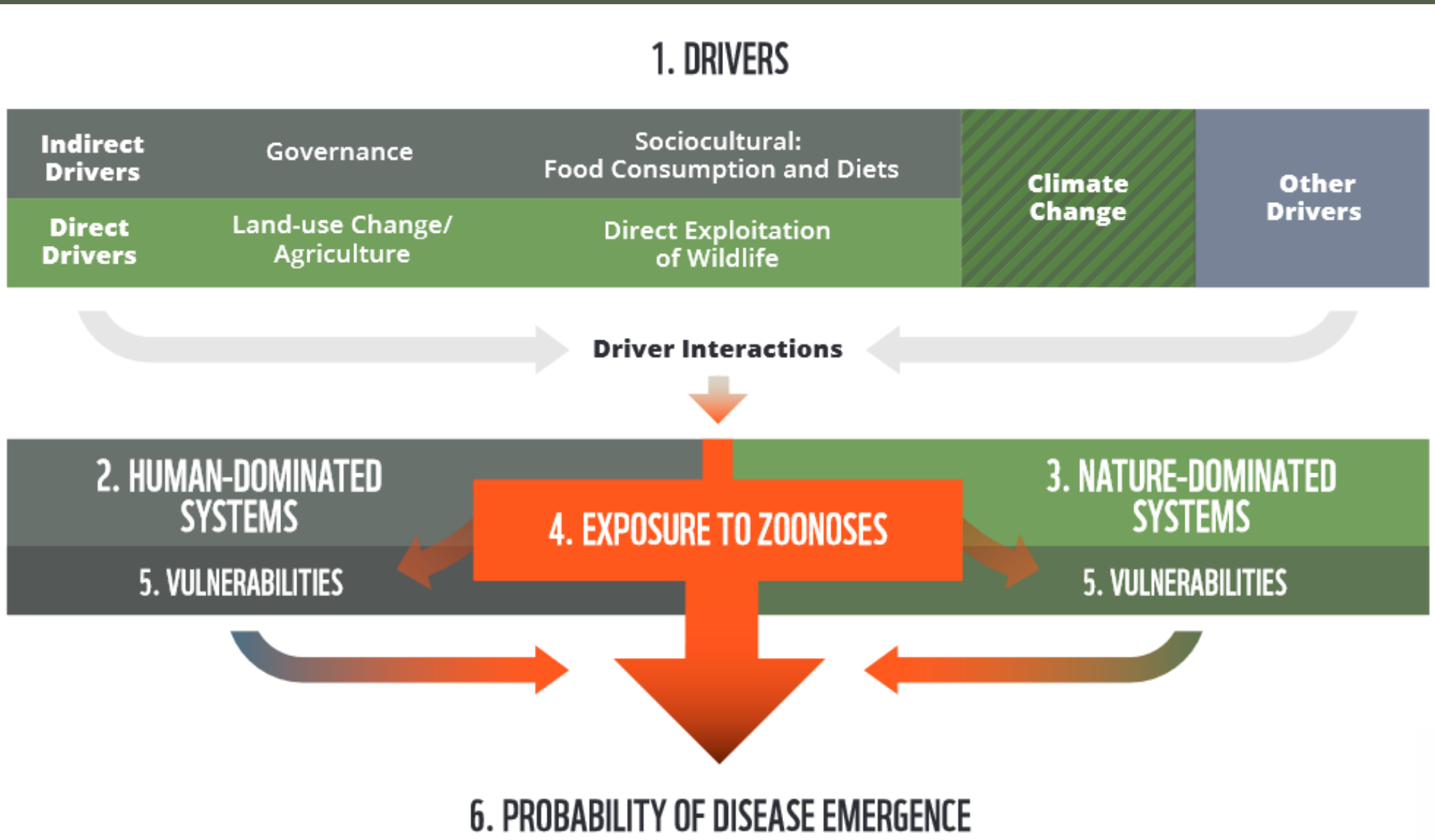
(Morens et al. 2020)

April 2020

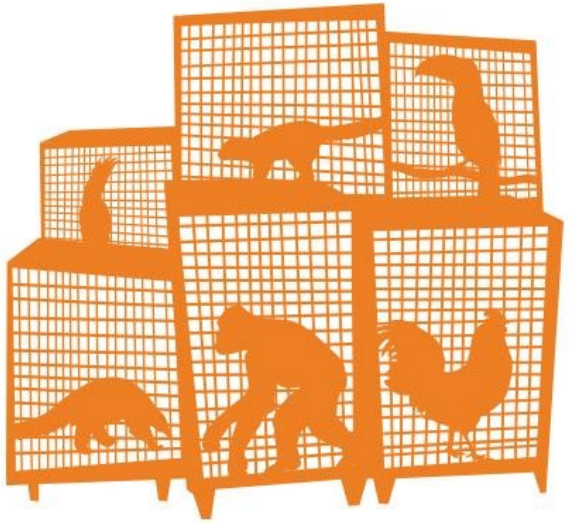
Rise of new emerging infectious diseases (EIDs)




Zoonotic Pathogen Types
Host/Reservoir
Vector/Intermediate Host
Human Infection
Direct Drivers
1. Vector-borne zoonotic
Example diseases: West Nile virus, Lyme disease
2. Vector-borne with zoonotic origin; now restricted to people
Example diseases: malaria, dengue fever
3. Direct transmission from animal host, no secondary transmission
Example disease: hantavirus pulmonary syndrome
4. Pathogens with reservoirs of both wild and domestic species
Example disease: avian influenza
Respiratory droplets
5. Paramyxoviruses
Example diseases: Hendra, Nipah
6. Filoviruses
Example diseases: Ebola, Marburg
Bodily fluids
7. Coronaviruses
Example diseases: SARS, MERS, COVID-19
Respiratory droplets
Land-use change
Agricultural intensification
Exploitation of wildlife
Climate change
Wild animal hunting, butchering, and consumption

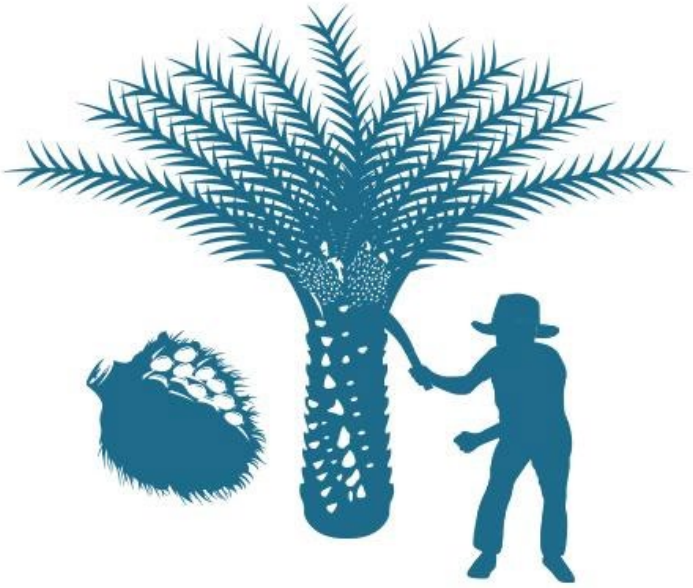

1. DRIVERS
Indirect Drivers
Governance
Sociocultural: Food Consumption and Diets
Direct Drivers
Land-use Change/ Agriculture
Direct Exploitation of Wildlife
Climate Change
Other Drivers
Driver Interactions
2. HUMAN-DOMINATED SYSTEMS
5. VULNERABILITIES
4. EXPOSURE TO ZOONOSES
3. NATURE-DOMINATED SYSTEMS
5. VULNERABILITIES
6. PROBABILITY OF DISEASE EMERGENCE

What drives novel emerging infectious diseases



Wildlife exploitation

Agricultural intensification



Land-use change

Leverage points for addressing Covid-19 and future zoonotic pandemics

Leverage Point 1: Limit potential for virus amplification and cross-species transmission in permanent live animal markets

Leverage Point 2: Reduce consumption of taxa with a high risk for transmitting zoonotic disease

Leverage Point 3: Strengthen early warning systems for emerging zoonotic disease

Leverage Point 4: Re-engineer production systems and supply chains

Leverage Point 5: Strengthen public trust in institutions

Leverage Point 6: Foster transparency and evidence-informed policy

Leverage Point 7: Re-examine major conservation interventions with a zoonotic EID lens

WWF

Taking a corruption lens: Examining potential risks and unintended consequences of rushed interventions

Risk 1: Legal closure of wildlife animal markets creates new illegal trade

Risk 2: Policy interventions to reduce wild meat consumption lead to rapid agricultural expansion

Risk 3: Rapid expansion of livestock production increases exposure to other novel or endemic zoonotic EIDs

Risk 4: Indiscriminate bans on wild meat trade and consumption reduce dietary protein to marginalized communities, leading to micronutrient deficiencies and growth disorders

Risk 5: Role of conservation interventions in preventing future zoonotic EIDs is simplified or exaggerated, alienating support among local communities

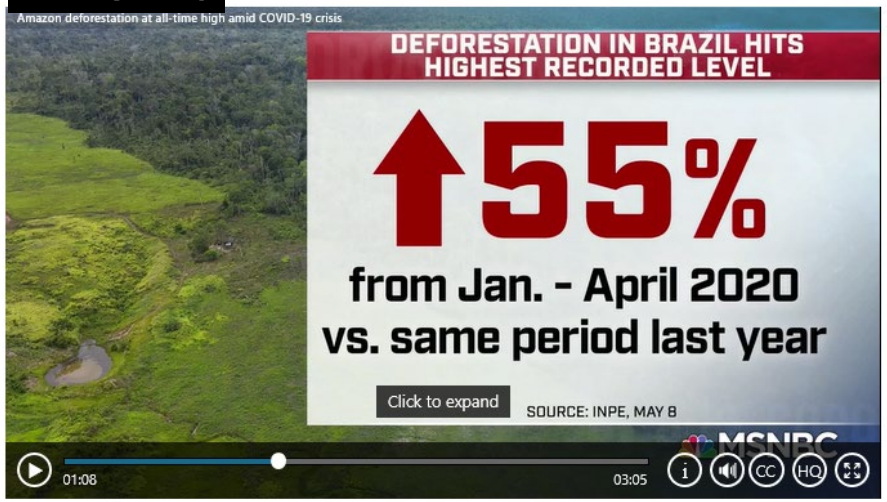
WWF

An estimated
$95 trillion
will be invested in
infrastructure
by 2030

Deforestation of the Amazon has soared under cover of the coronavirus

MSNBC

Jamie Roberton and Lorand Bodo 11/05/2020



Logging and mining operations have accelerated their destruction of sizable patches of the Amazon rainforest during the coronavirus pandemic, according to an NBC News analysis of satellite imagery captured by the European Space Agency.

The Rio Times

News in English for Rio de Janeiro and Brazil

Rio De Janeiro | São Paulo | Brazil | Going Out | Technology | Latin America | Miscellaneous | Sports | Op-Ed

Investigations of Covid-19 Related Corruption Point to R$1.07 Billion in Overspending

Seven state governments are affected. Since the end of April, there have been at least 18 operations throughout Brazil, five of which In the past week alone.

By **Arkady Petrov** - June 16, 2020

Understand the system within which decisions are made

Illegal wildlife markets, zoonotic disease transfer and corruption—Connections and what the global community must do about it

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The COVID-19 Pandemic Connects Human, Animal & Ecosystem Health

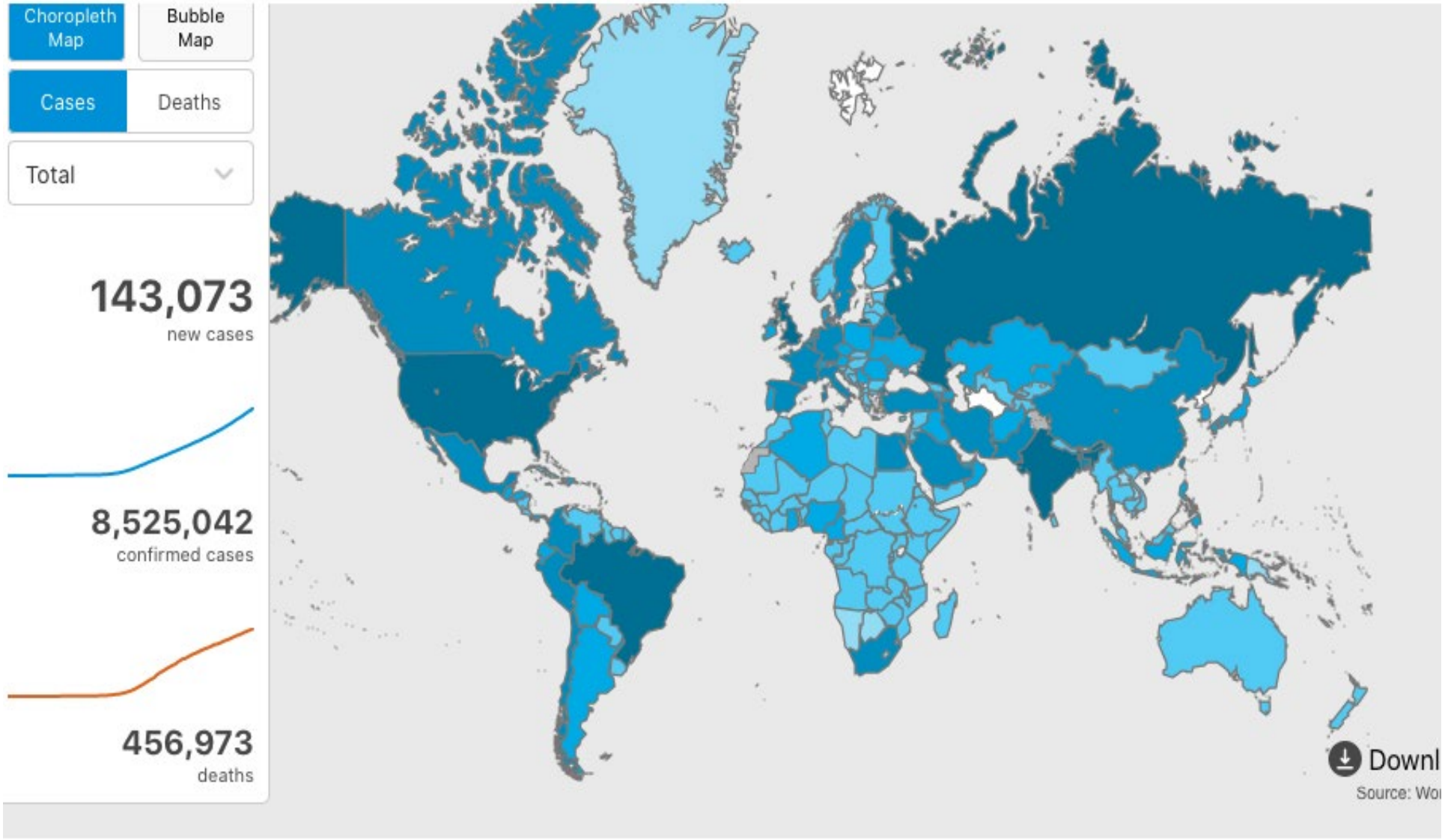


A. Alonso Aguirre, D.V.M., M.S., Ph.D.
Professor and Department Chair
Environmental Science and Policy
George Mason University

aaguirr3@gmu.edu


Health connects all species

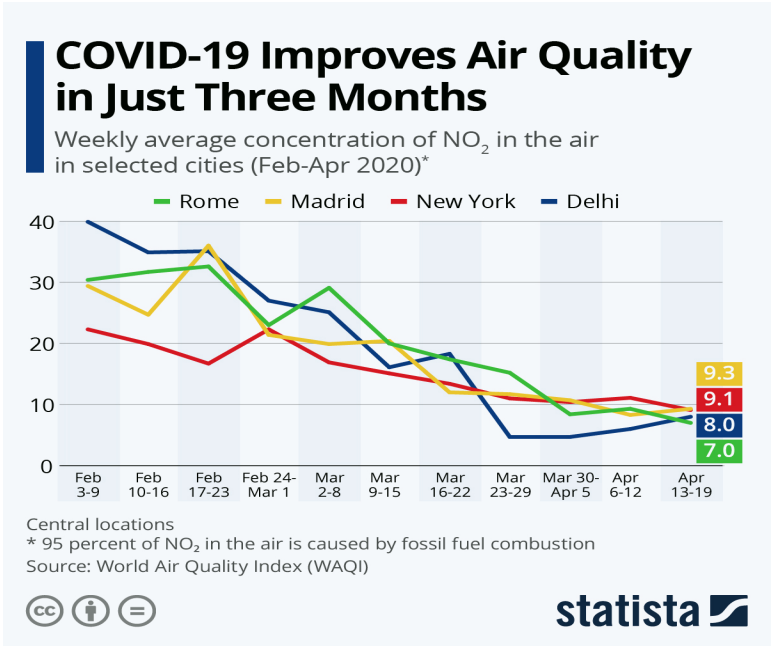
COVID19 PANDEMIC: UPDATE

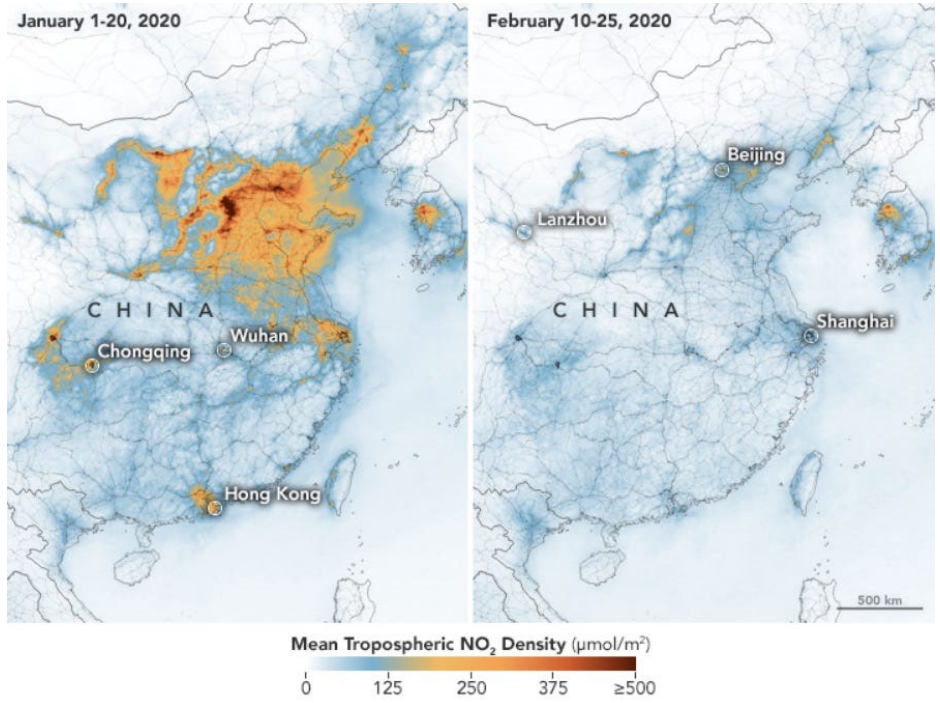


Globally, as of **1:38pm CEST, 20 June 2020**, there have been **8,525,042 confirmed cases** of COVID-19, including **456,973 deaths,** reported to WHO.

The Claim: Since COVID19, environmental impact has decreased

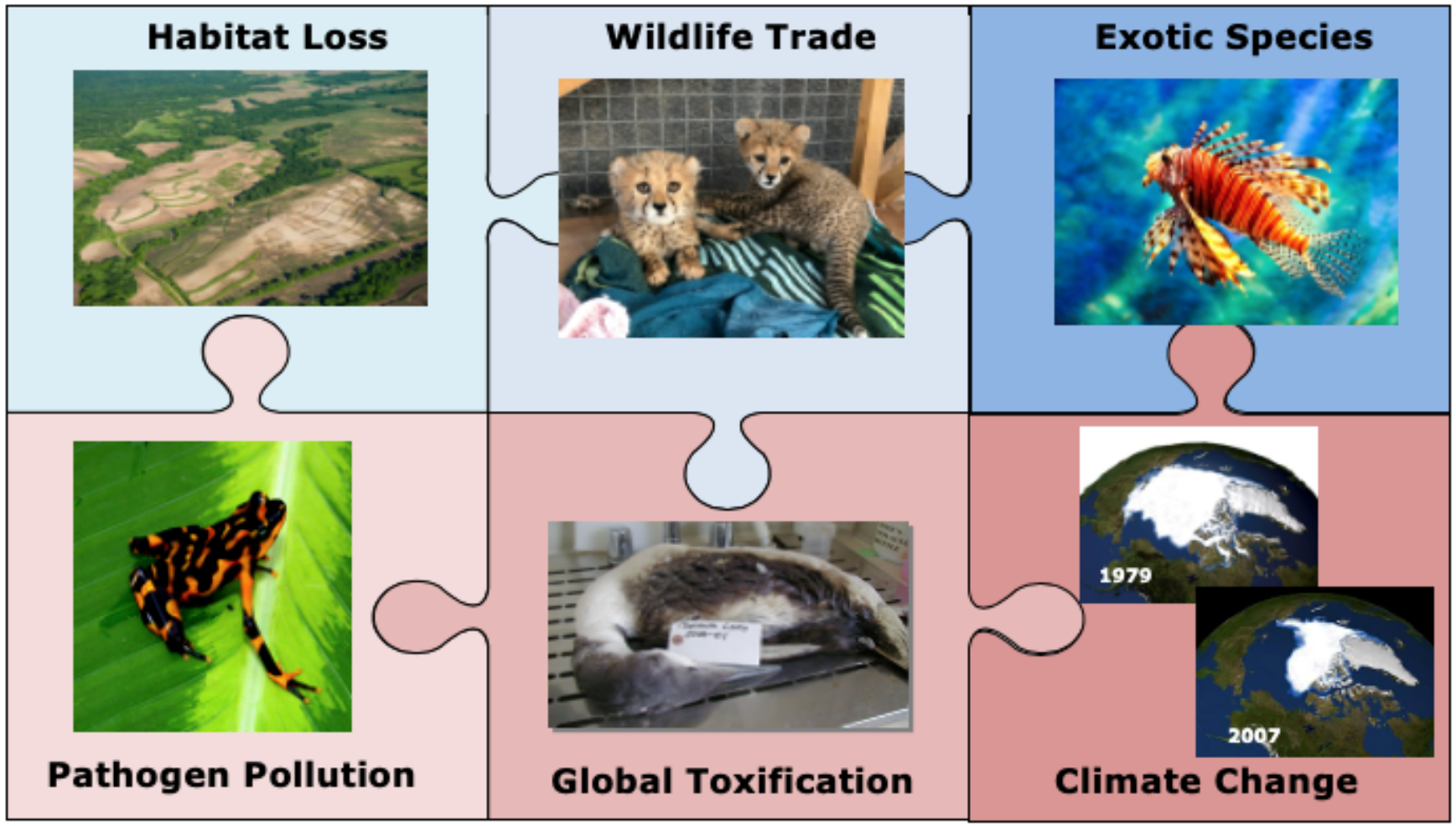
- Air quality will revert to previous state
- Decline to 1.5-5%
- We need 10% a year
- Ground-level ozone has increased in China



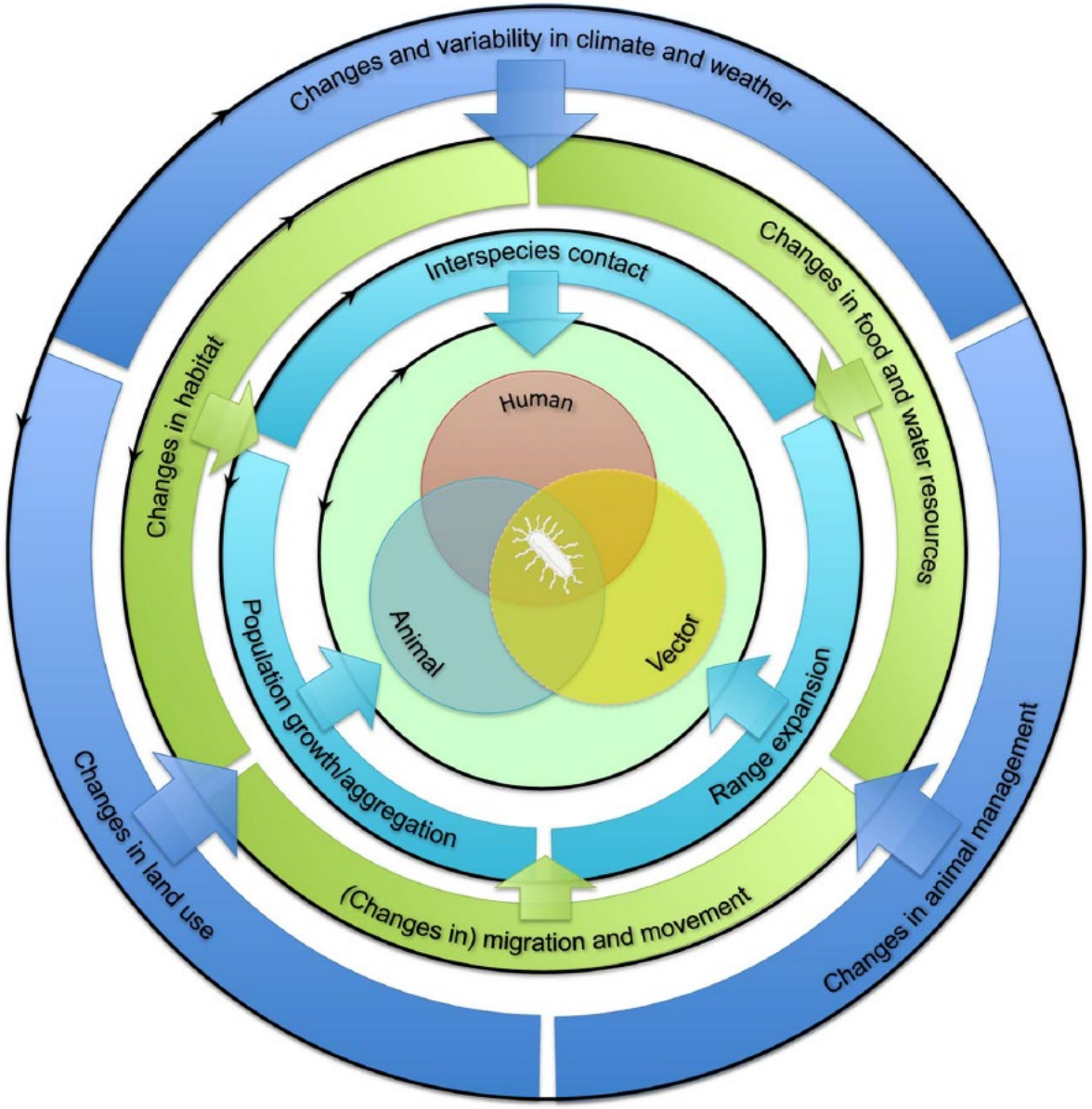



Coronavirus: Empty streets around the world are attracting wildlife

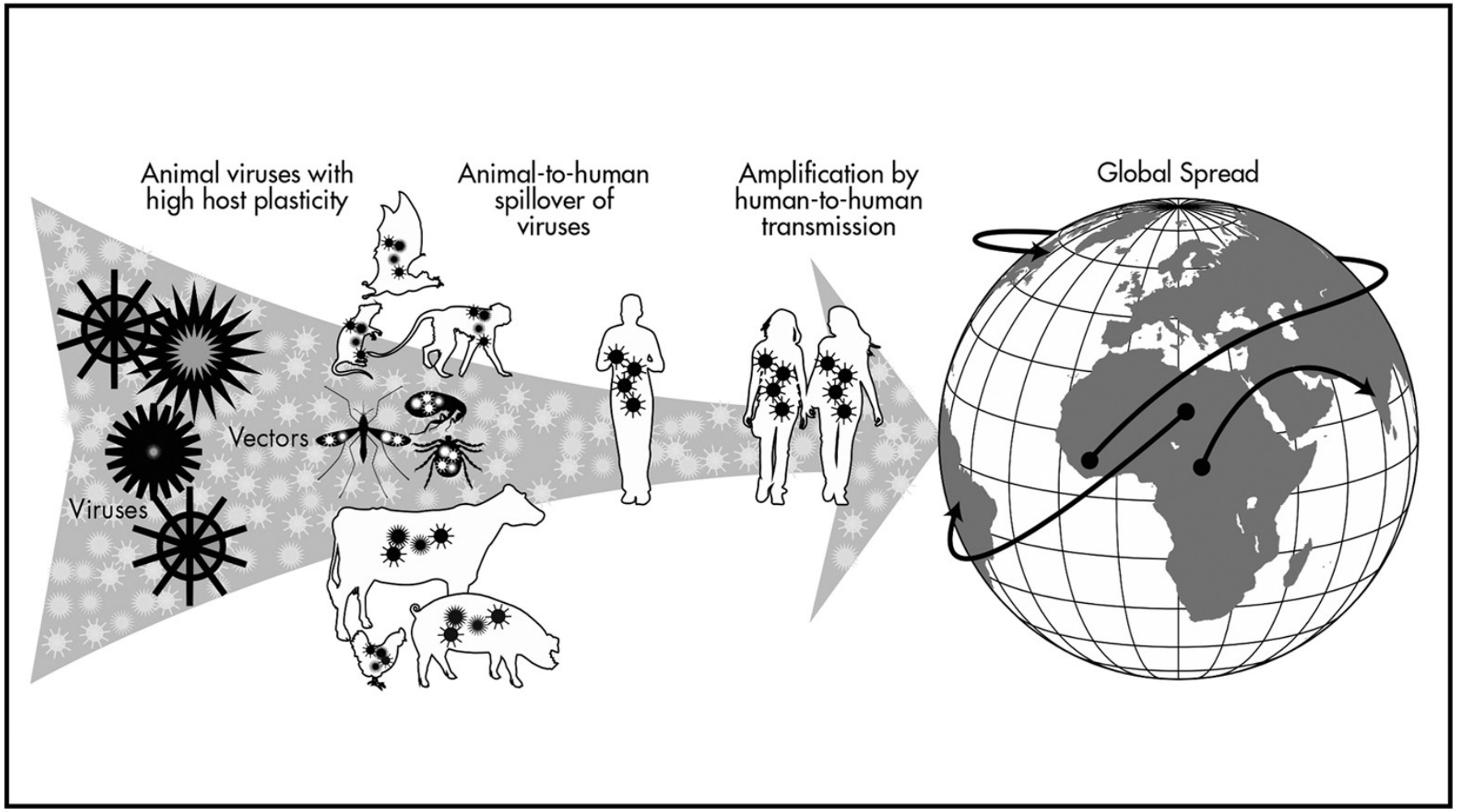
Drivers of Disease Emergence



The Interspecies Barrier



Gortázar et al. PLoS Pathogens, 2014



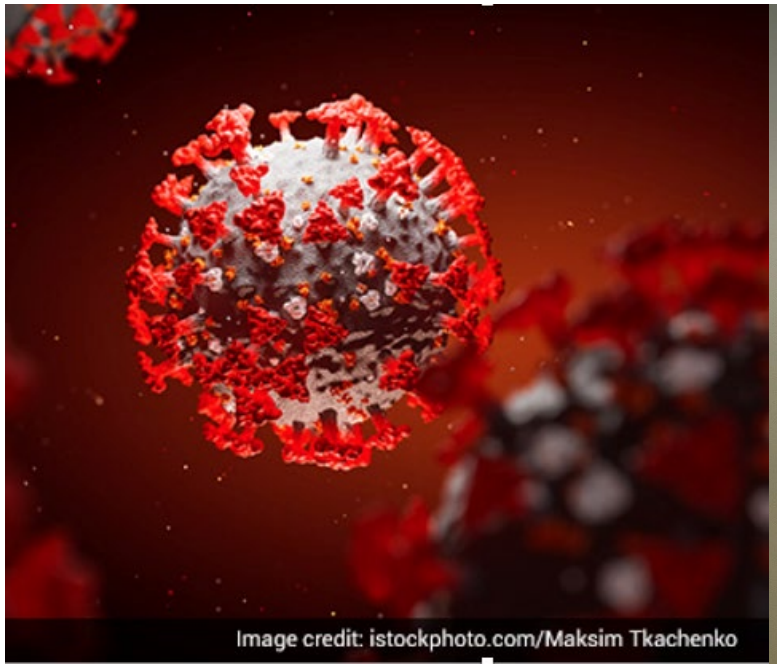
“Human practices promote transmission of mutation-prone RNA viruses able to infect ‘multiple’ hosts…synergistically facilitating viral emergence”

Kreuder Johnson et al. 2015

SARS CORONAVIRUS-2 CAUSATIVE AGENT OF COVID19

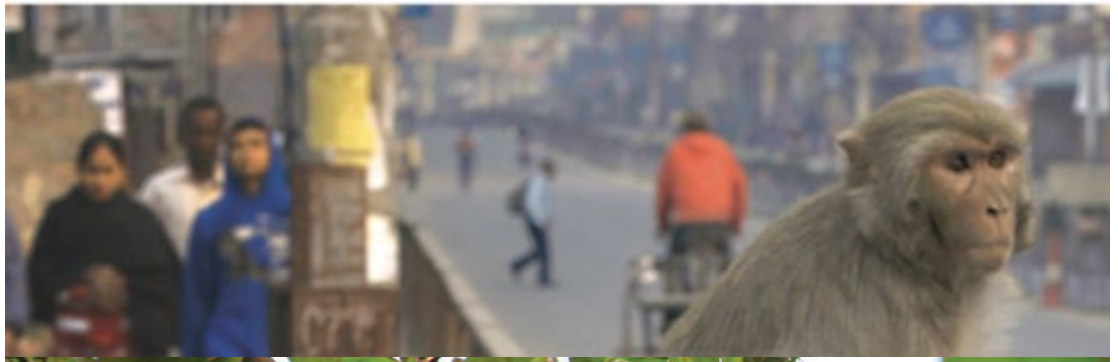
- 1.6M viruses, half with zoonotic potential
- 162 (94%) RNA viruses, 28 times higher
- 95 viruses by human activity
  - 86 from wildlife
  - 32 from domestic animals
- 19,000 mammals
- 20 countries over five years
- 100 different coronaviruses, mostly from bats

Kreuder Johnson et al. 2015
Anthony et al. 2017



USAID | PREDICT
FROM THE AMERICAN PEOPLE

- 217 known viruses
- 949 novel viruses detected (i.e. Bombali ebolavirus, Zaire ebolavirus, Marburg virus, and MERS- and SARS-related coronaviruses)
- 60% from Asia; 40% from Africa and 7% from Latin America
- Most of these viruses came from bats (43%), non-human primates (23%), and rodents (14%)



UC Davis One Health Institute

- COVID-19 is 79.5% to SARS-CoV
- 96% identical to a horseshoe bat coronavirus
- Bats, natural reservoir? 245/630 (39%) sequences
- Yunnan province, China -Myanmar, Lao PDR, Vietnam?

Latinne et al. 2020; Zhou et al. 2020

COVID19 in Other Species

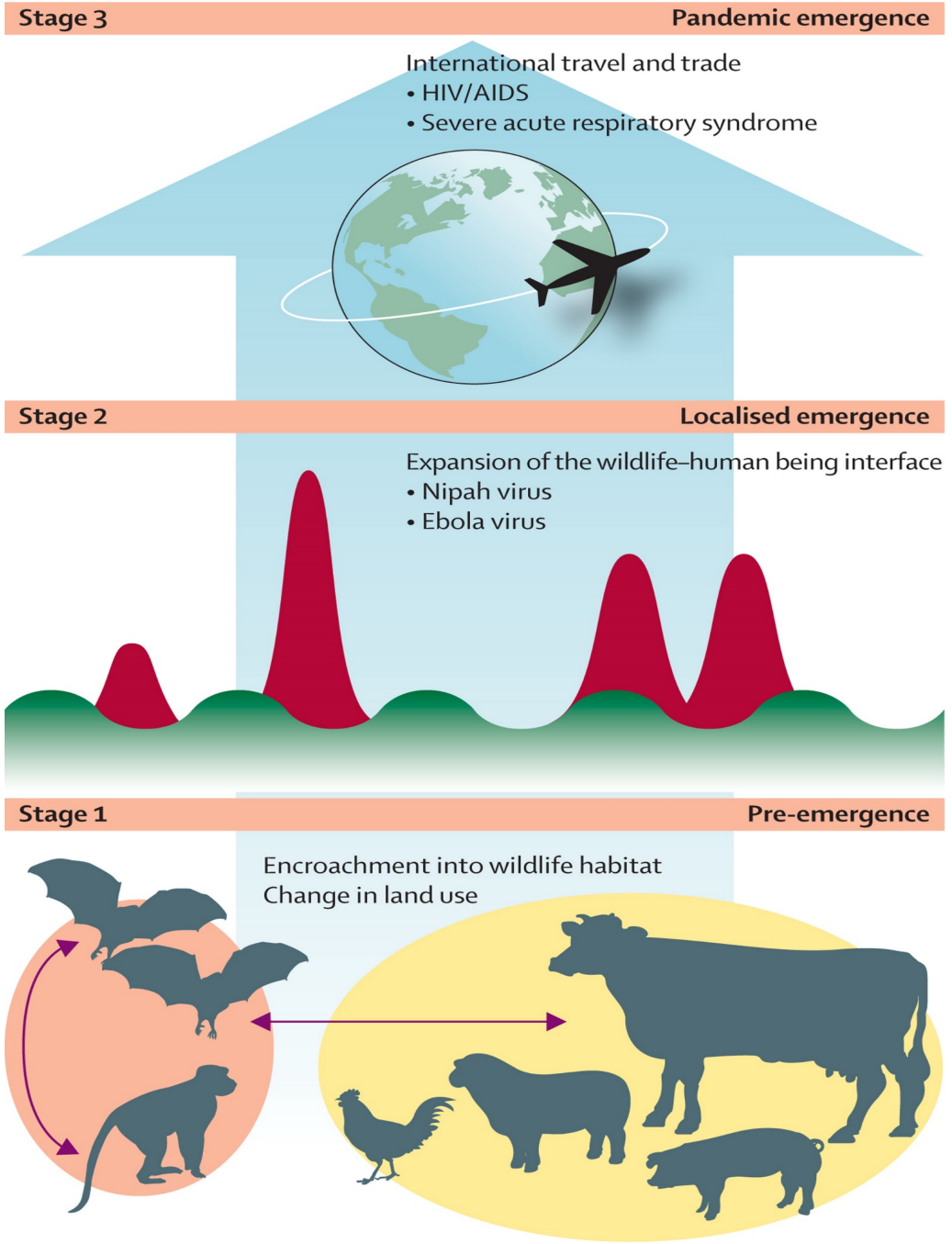
Credit: Carol Smiljan/NurPhoto/Getty

Cats, dogs, tigers, lions hamsters, ferrets, and macaques, rabbits, common marmosets

Reverse Zoonosis or Zooanthroponosis

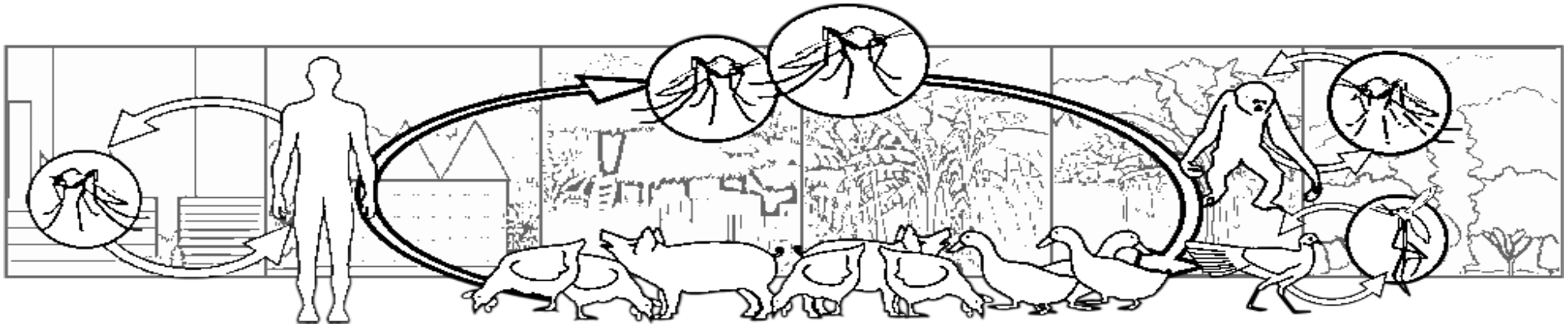
- Spillover & Spillback
- First case of reversed zoonosis: humans to animals
- Two farm workers infected by mink

- Response occurs *after* spillover has occurred
- *Gaps* in authority and weak institutional capacity
- Each discipline responds once outbreak is in *their* sector
- *Collaboration* across sectors can identify critical transmission risks and potential solutions



Morse et al. 2012

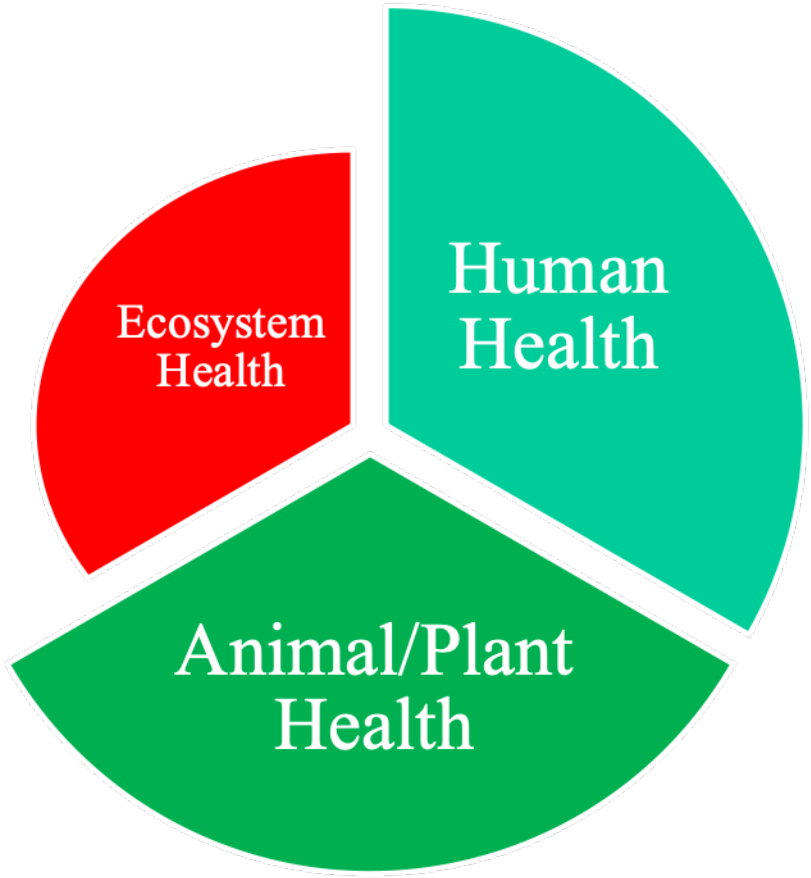
Towards Understanding EIDs



We Need to Move Beyond the Brand

- Conservation Medicine
- Ecological Medicine
- Environmental Medicine
- Medical Geology
- EcoHealth
- One Health
- Planetary Health
- GeoHealth…

The Least Understood 1/3 of the Pie



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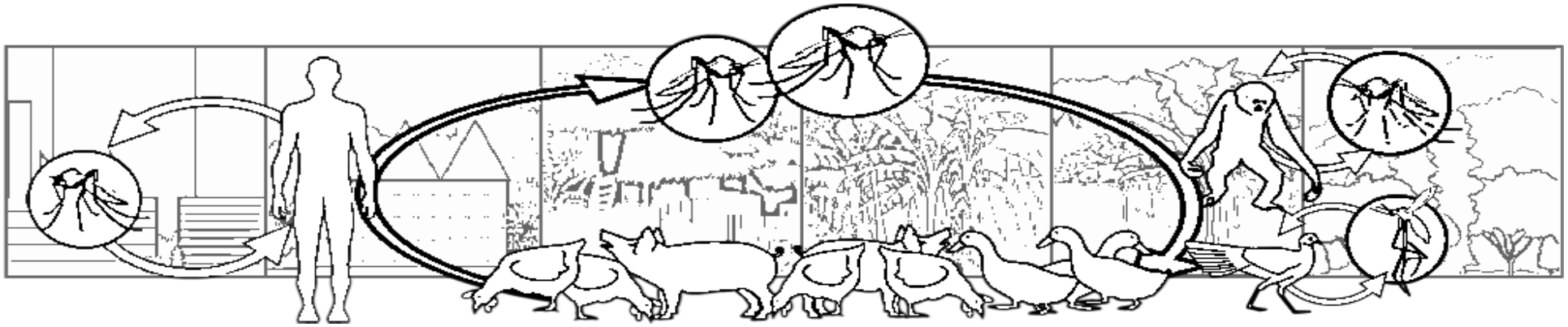
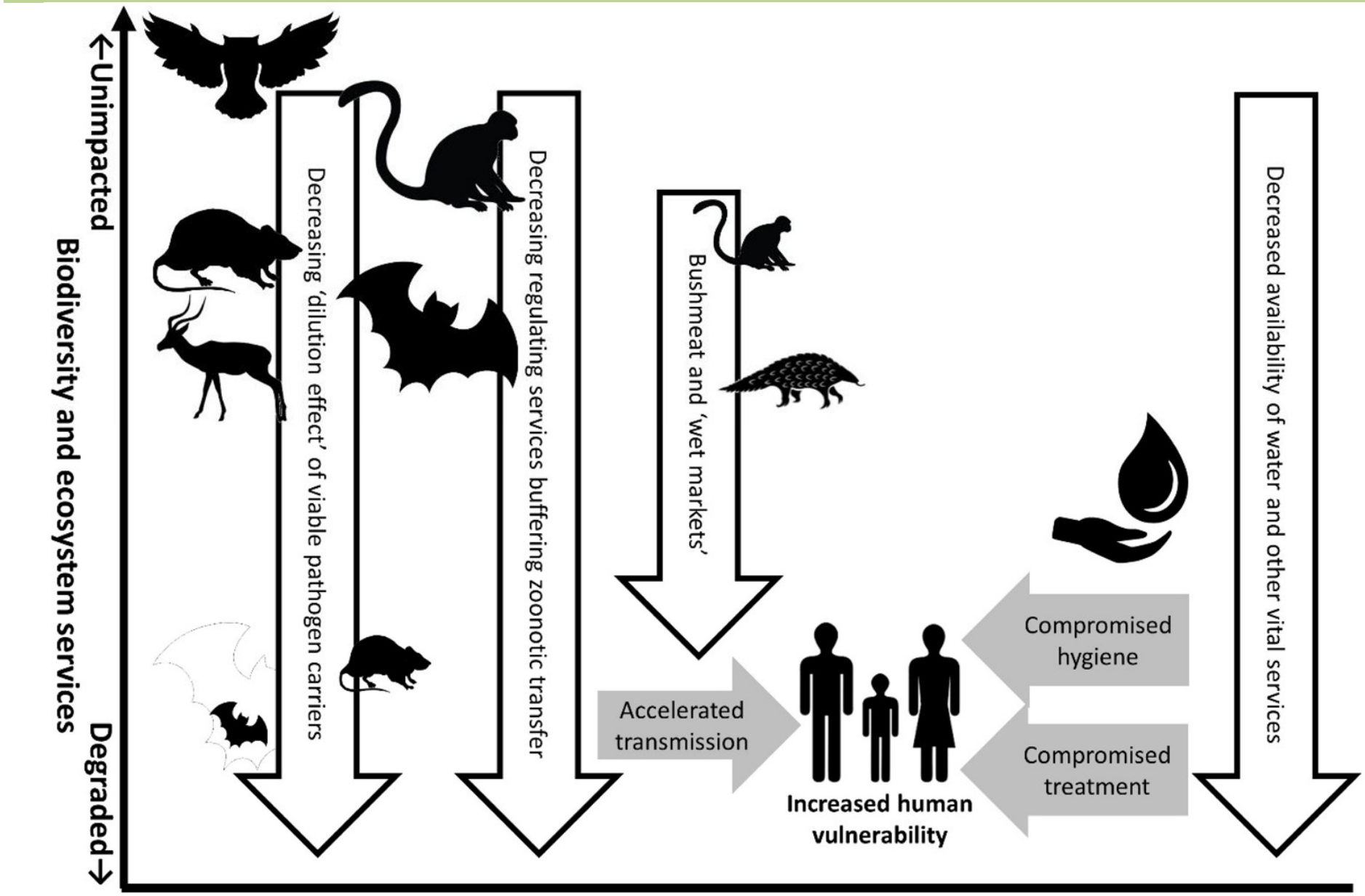
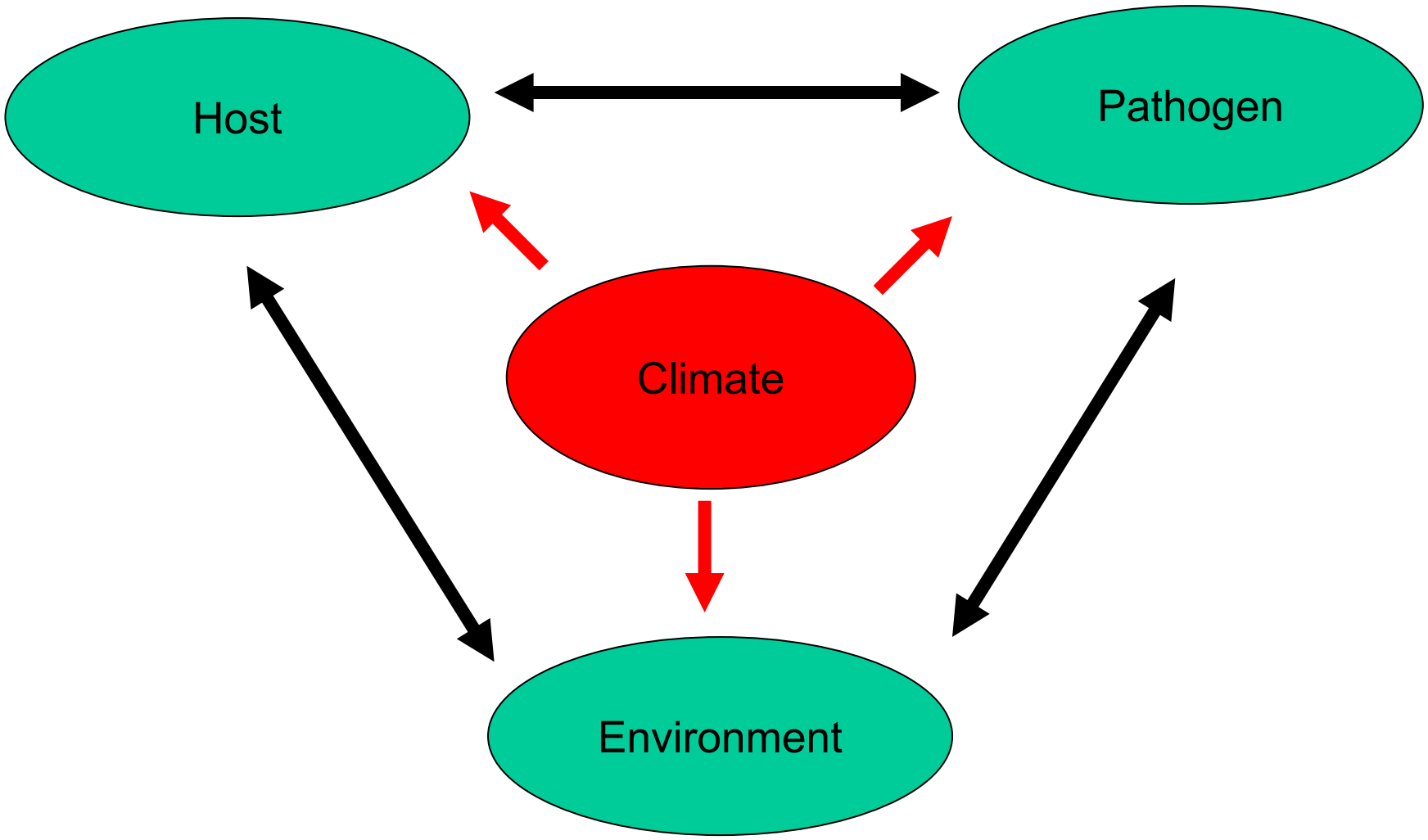


Zoonotic Diseases & Ecosystem Services



Everard et al. 2020

Climate Change and Disease



Future Trends: Expect More Pandemics

- Globalization
- Expansion into wildlife habitats
- Illegal wildlife trade
- Urbanization & agriculture
- Fisheries & fish farming
- New wildlife-human conflicts
- Climate Change

Zoonotic Diseases & Corruption

- We choose to avoid change
- Food supply, poverty & corruption must be addressed
- Some wildlife declines (hunting, habitat loss & disease) linked to lack of law enforcement and corruption
- Prevention is key by strengthening transdisciplinary collaborations, integrative research and capacity building

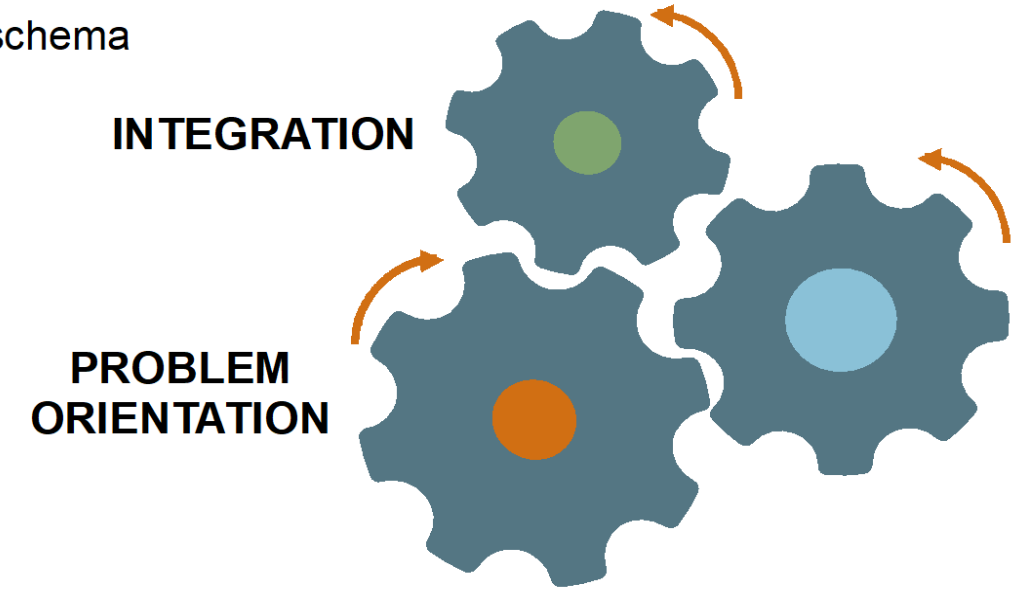

REUTERS/Nathalie van Vliet
CIFOR 2007

Monroe & Willcox 2006
NewsRx Health & Science; Atlanta 2015
Wilcox, Aguirre et al. 2019

Cusack, Financial Crime 2020

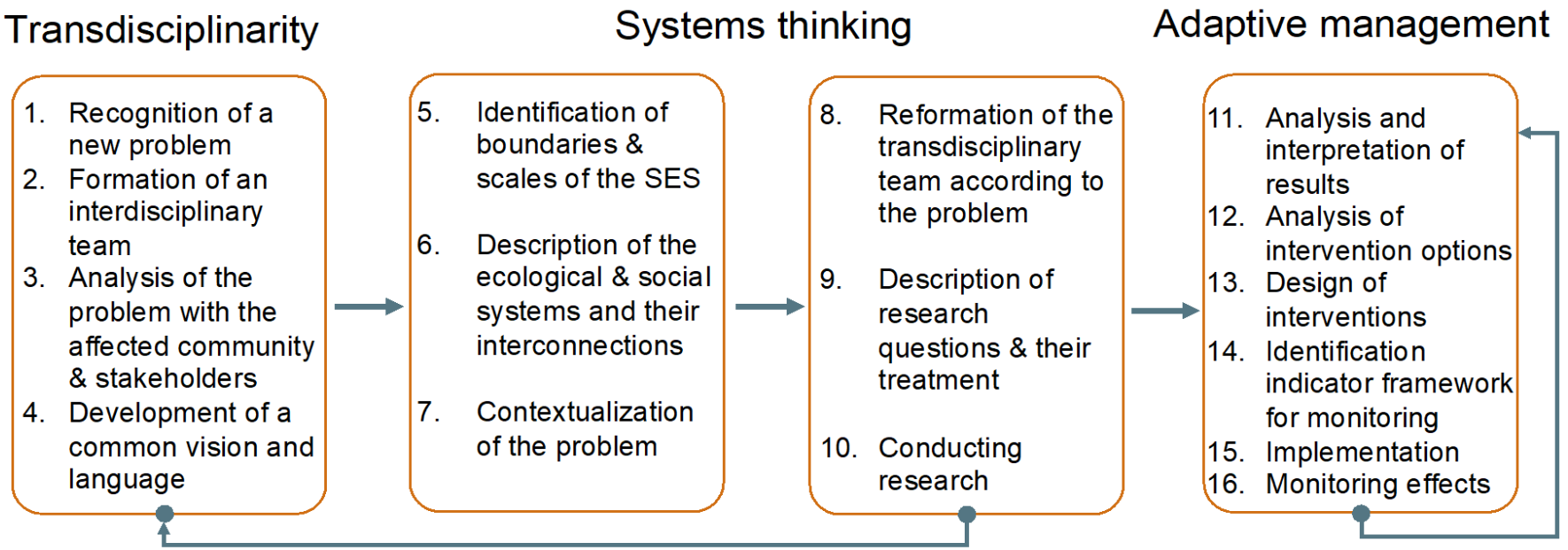
Transdisciplinary process for building adaptive capacity

a) General schema



Wilcox, Aguirre et al. 2019

b) Sequence of tasks



“MEDICS HAVE CONVINCED HALF OF THE POPULATION TO WEAR MASKS. NOW VETERINARIANS NEED TO CONVINCE THE OTHER HALF!”

Modified from Mafalda
(quino)

Illegal wildlife markets, zoonotic disease transfer and corruption—Connections and what the global community must do about it

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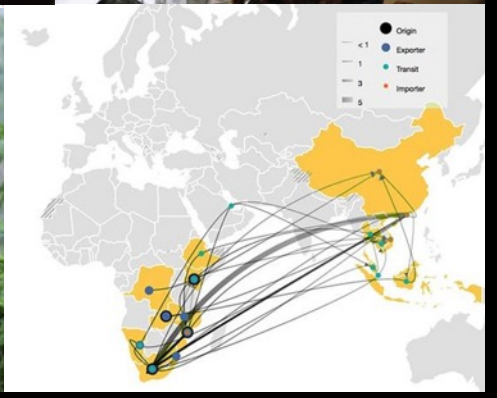
Illegal wildlife markets, zoonotic disease transfer and corruption—
Connections and what the global community must do about it

WILDLIFE TRADE AND ZOONOTIC DISEASE: THE PROBLEMS AND THE REMEDIES

Steven Broad
Executive Director, TRAFFIC

TRAFFIC

the wildlife trade monitoring network



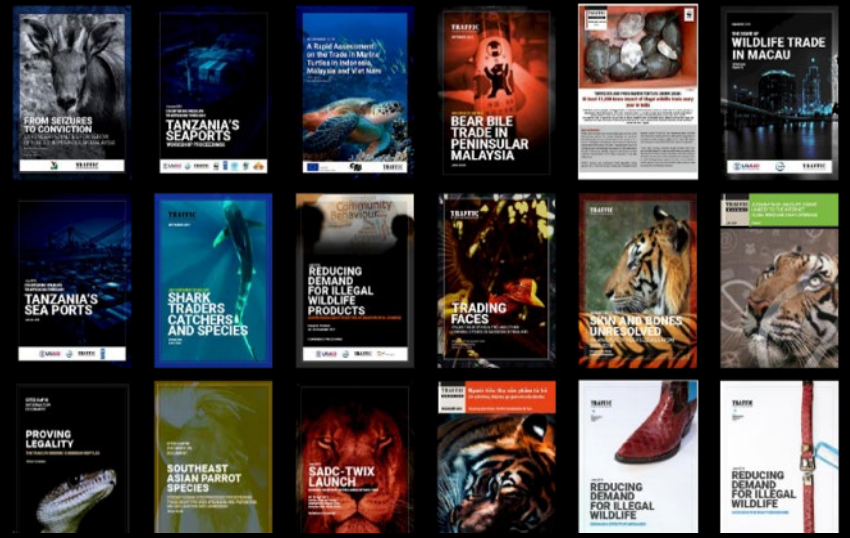
1 **RESEARCH**
market monitoring
legislative reviews
behavioural insights
investigations

2 **ANALYSIS**
data mapping
information systems
applying context
academic insights

3 **GUIDANCE**
early warning
threat assessments
setting standards
regulatory design

4 **ENGAGEMENT**
enforcement support
policy advice
communications
training

E V I D E N C E → I N F L U E N C E



Understanding wildlife trade

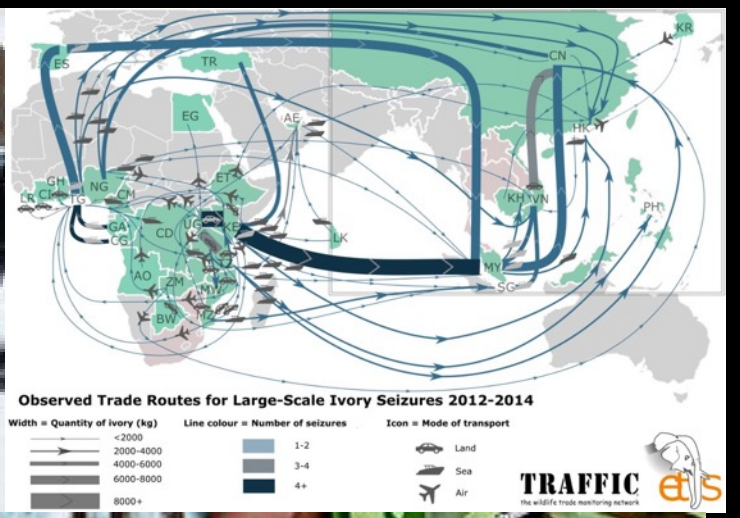
- Diverse global business: from forest and fisheries products to wild meat, live plants and animals and products such as skins, ivory and herbal medicines
- Complicated patterns of supply (wild and farmed) to local and international trade and markets – evolving with the globalized economy
- Most trade legal, but major problems of crime, corruption and illicit trade
- Main policy responses driven by conservation concerns about over-exploitation of species

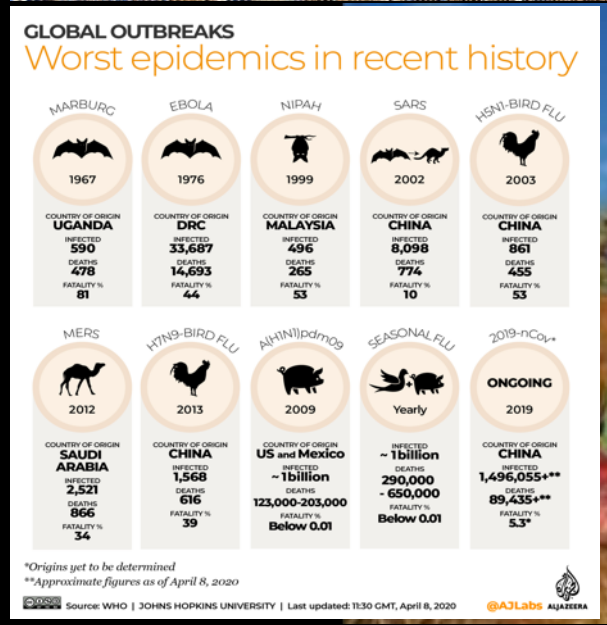
Wildlife trade regulation

- Extent and scope of regulation built up since 1960s, largely to address concerns of over-exploitation of wild animals and plants
- CITES provides a policy umbrella and a basis for international cooperation
- Legal measures under national jurisdiction
- Major constraints:
  - Conflicting policies
  - Low resource allocation
  - Weak compliance pressure
  - Inconsistent enforcement
  - Relatively low risk for offenders
  - Corruption

Illegal wildlife trade

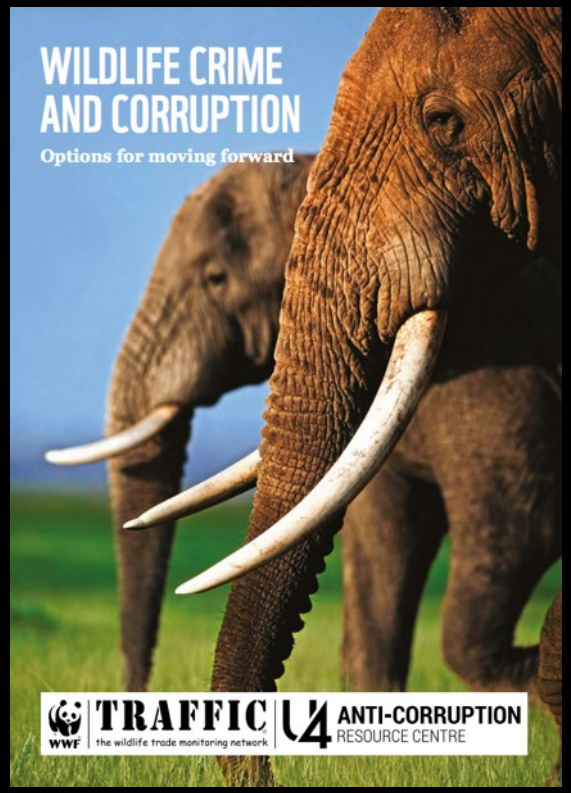
- **Wildlife commerce in contravention of some relevant legal provision.**
- **Such provisions could include legislation and/or regulations related to one or more policy concerns: e.g. resource ownership or access rights; nature conservation; human or animal health protection; animal welfare; taxation or other fiscal provisions.**
- **Some components, but by no means all, illegal wildlife trade is driven by organised crime**

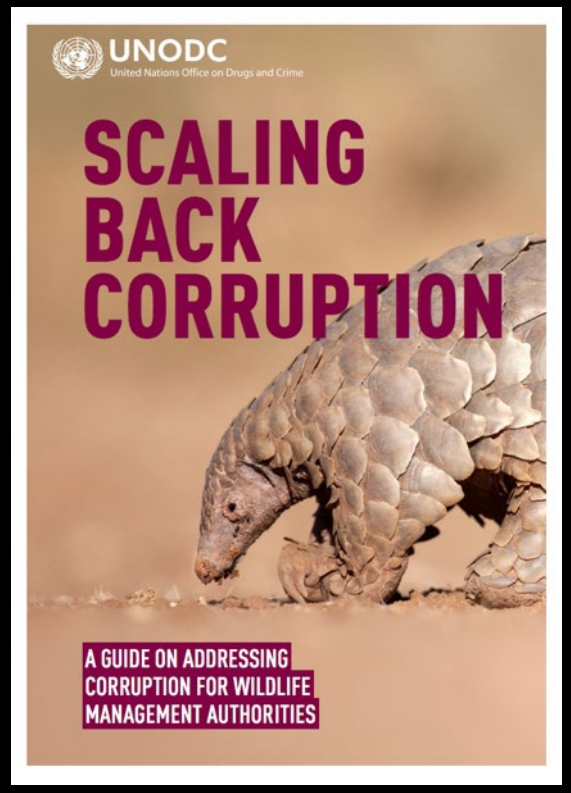


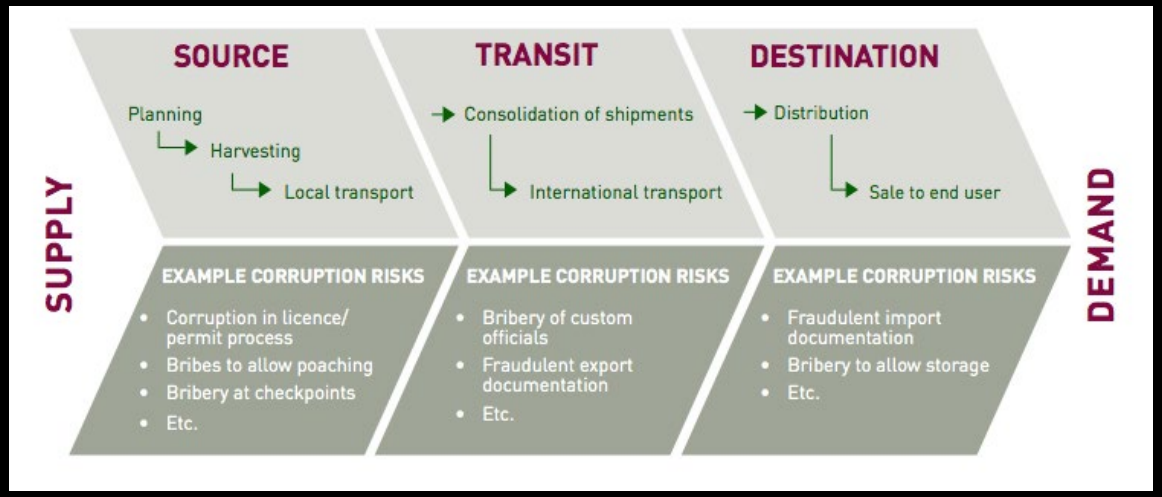


Wildlife trade and zoonotic disease

- Movement of live specimens, mixing in trade, transport and markets: wild animals, domesticated animals and people – consumption of meat and other products
- Disease risk of animals under stress
- Pathways could be legal or illegal – in fact past zoonotic disease outbreaks often derive from legal wildlife markets and farms
- Illegal trade brings additional risks of avoidance of health controls and inspection – trade out of sight







Why corruption matters

- **Both conservation and health concerns related to wildlife trade are addressed by a range of regulatory measures**
- **As for other regulated valuable trade sectors, illicit business thrives on the boundaries of and outside the law**
- **Corruption facilitates illegal wildlife trade and blurs the boundaries between legal and illegal markets**

Caviar trade example

Corruption undermines regulatory systems at every step along the trade chain

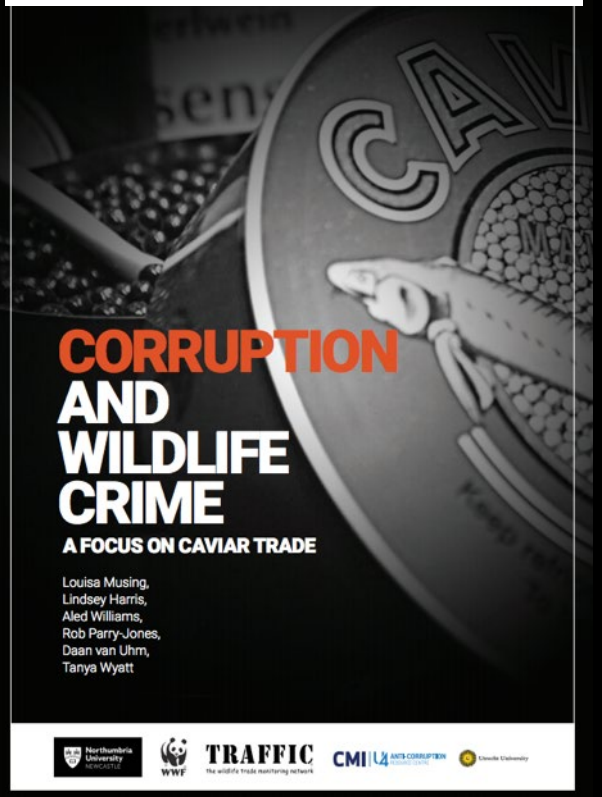


FIGURE 3

Caviar trade corruption typology based on literature review and refined during the discussion group with anti-corruption and wildlife conservation experts.

stages along the caviar "VALUE CHAIN"	poaching of sturgeon from the wild / captive breeding facilities	domestic transportation	caviar processing facilities	export/import	caviar repackaging facilities	sale of illegal caviar products
corresponding corrupt practice	1, 2, 3, 5	5	3, 4	3, 4, 6	5	1, 4, 5, 6
actors typically involved in CORRUPT PRACTICES	POACHERS, POLICE, MILITARY EMPLOYEES, COMPANY DIRECTORS, GOVERNMENT OFFICIALS	POLICE, TRANSPORTERS	EMPLOYEES, COMPANY DIRECTORS, GOVERNMENT OFFICIALS	CUSTOMS OFFICIALS, AIRLINE OR SHIPPING COMPANY EMPLOYEES, TRANSPORTERS	EMPLOYEES, COMPANY DIRECTORS, GOVERNMENT OFFICIALS	TRADERS (LEGAL AND ILLEGAL), POLICE, RESTAURANTS

CORRUPT PRACTICE

KEY

▲ petty corruption

● petty corruption but could potentially be linked to grand corruption if large payments are used to buy political cover

1 ●	2 ●	3 ▲	4 ▲	5 ▲	6 ●
illegal payments and coercion related to poaching e.g. fishing boats protected by corrupt militias to allow transfer of poached sturgeon to trucks. Lack of viable economic alternatives to poaching reinforces this corrupt practice	**bribery and collusion** with police and fisheries inspectors to facilitate poaching	**conflicts of interest** and collusion between state-owned aquaculture operations and enforcement officials to regulate sturgeon harvesting, licensing, employment, processing, exports, and inspections	**bribery and collusion** to launder caviar for sale in legal and illegal markets, e.g. the use of falsified documents, mislabelling, provision of false information or imitation of brands	**bribery and collusion** to facilitate transport of illegal caviar to domestic markets e.g. trucks transporting illegal caviar operate in convoy, bribing and / or avoiding police en route	**bribery and collusion** to facilitate export of illegal caviar across borders e.g. use of customs officials or air transport staff to avoid border controls

Conservation and health controls

- Many countries have live animal quarantine requirements and other rules governing the cross-border movement of meat, fish and other animal products.
- Production, trade and use of live animals and products are subject to animal and human health regulations within domestic markets of most countries.
- These measures are typically designed primarily to address trade and consumption of domesticated species, the volume and value of which vastly exceed wild animal business.
- They are seldom tailored to the specific dynamics and risks of the trade in wild animals.

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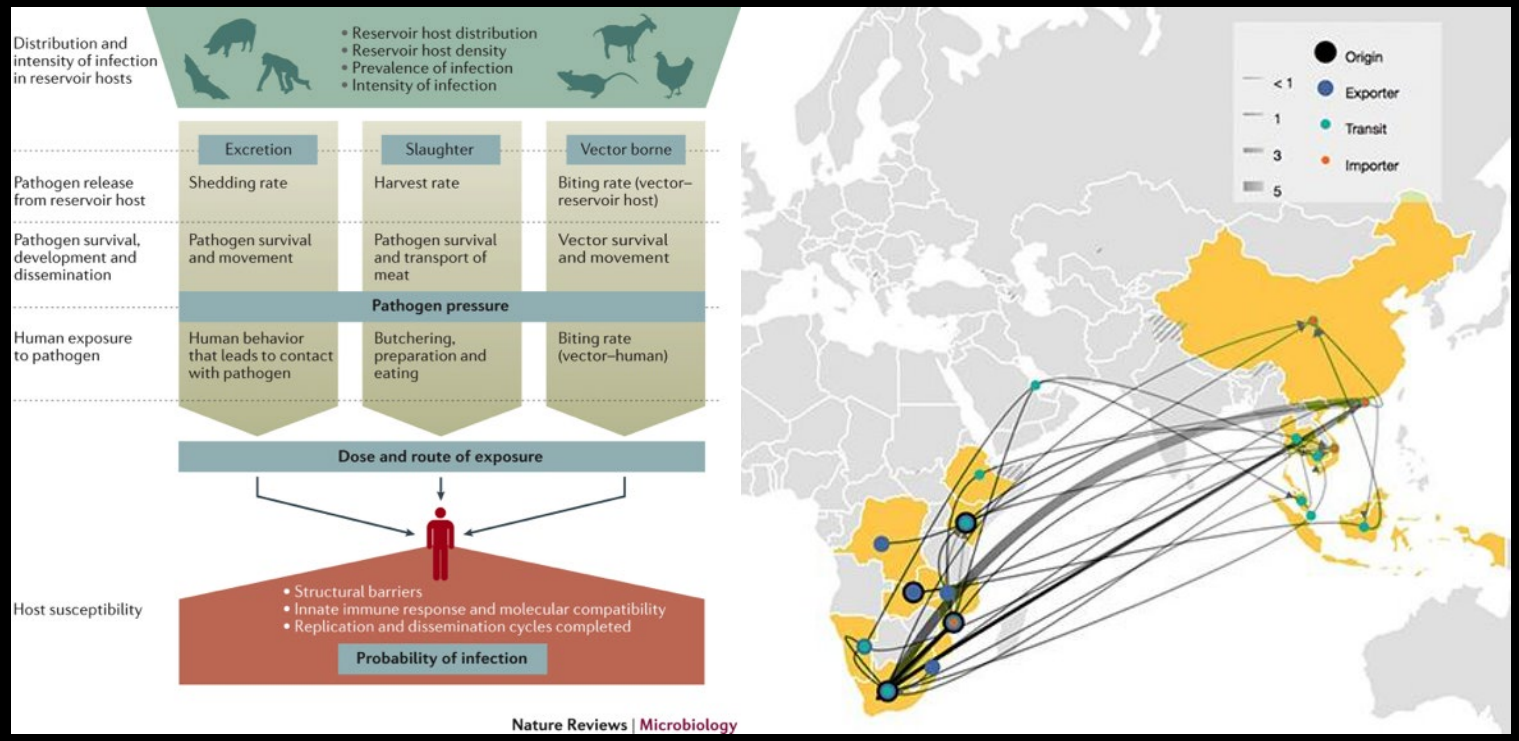
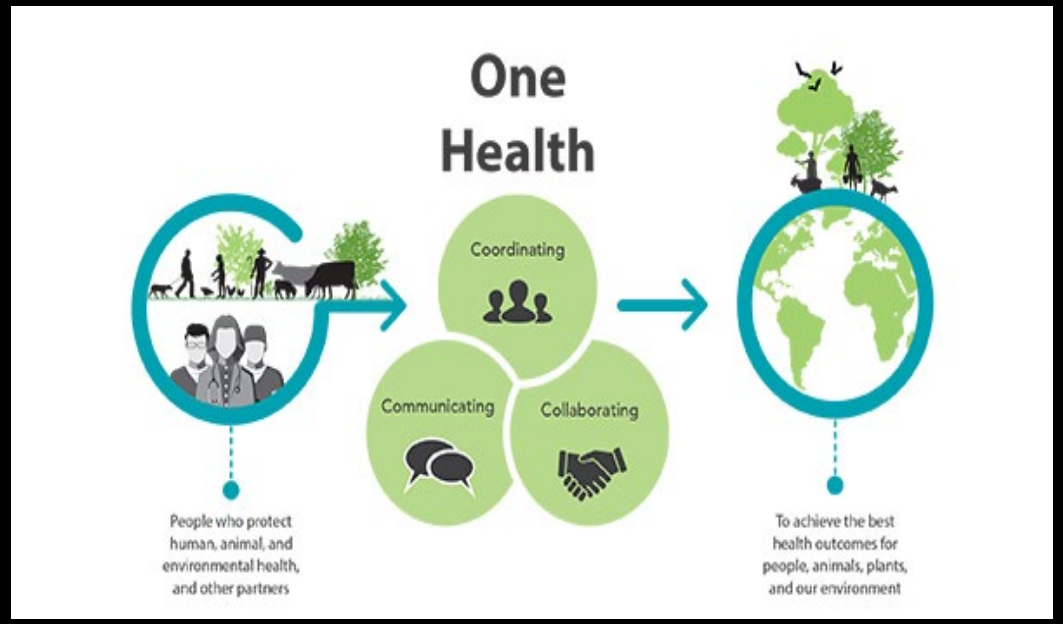
World Health Organization

OIE
WORLD ORGANISATION FOR ANIMAL HEALTH

OECD Study on the World Organisation for Animal Health (OIE) Observatory
STRENGTHENING THE IMPLEMENTATION OF INTERNATIONAL STANDARDS

OECD





Shaping a risk management response

1. **Understanding risks: what aspects of trade linked to zoonotic disease? local and international – and possible trends?**

2. **Mapping risks: species, markets, transport hubs, trade practices and illegal flows**

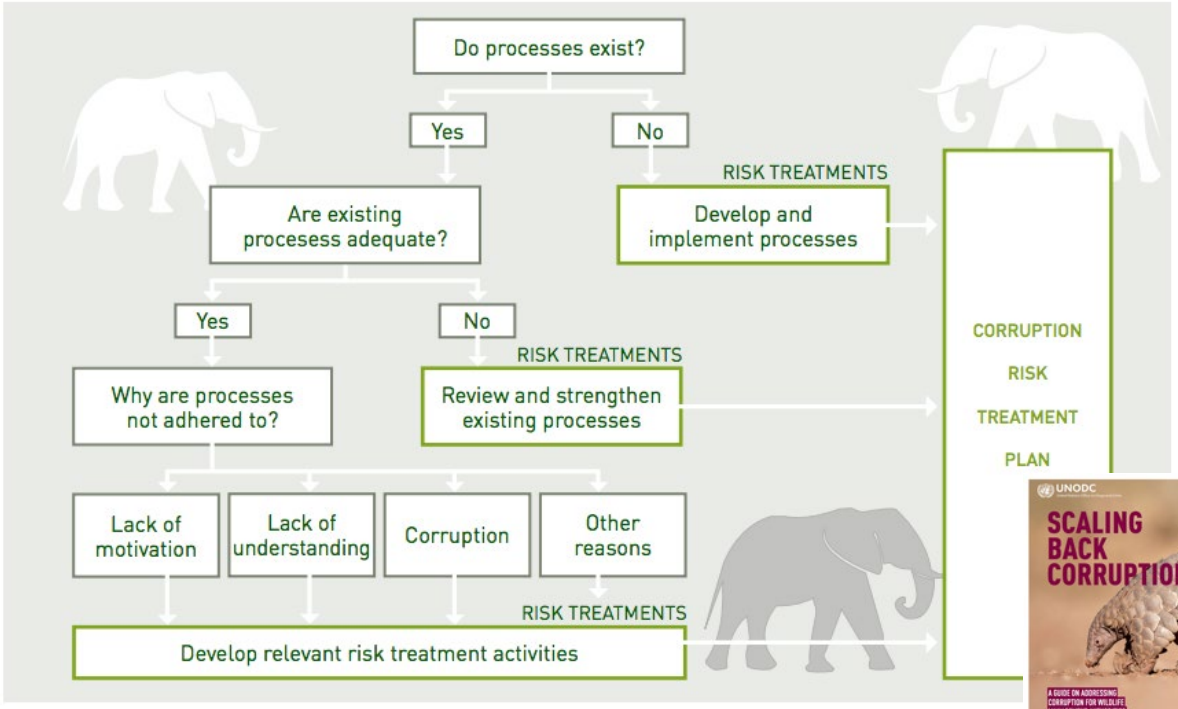
3. **Understanding risk management options: current conservation animal and public health regimes, gaps and opportunities**

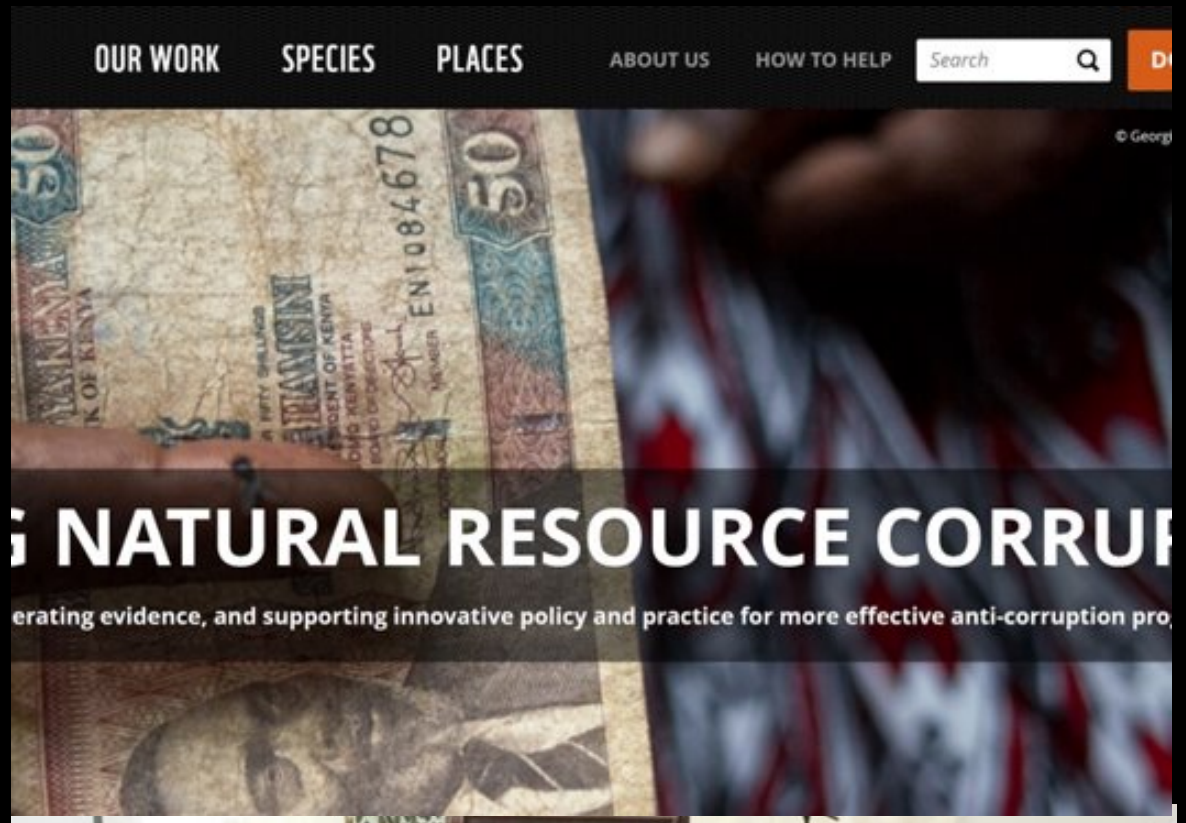
4. **Solutions: integrated approach: public health, animal health conservation: build on good practice such as seafood traceability and sanitary controls**

Integrating responses to corruption

- **If regulatory responses are to be effective, corruption vulnerability needs to be an overt consideration in risk assessment and mitigation**

- **A holistic view of risks and potential harms in relation to conservation and health will help demonstrate the case for action**





Illegal wildlife markets, zoonotic disease transfer and corruption—Connections and what the global community must do about it

John M. Sellar OBE
Anti-Smuggling, Fraud and Organized Crime Consultant

USAID FROM THE AMERICAN PEOPLE · WWF · CMI | U4 ANTI-CORRUPTION RESOURCE CENTRE · TraCCC · TRAFFIC the wildlife trade monitoring network

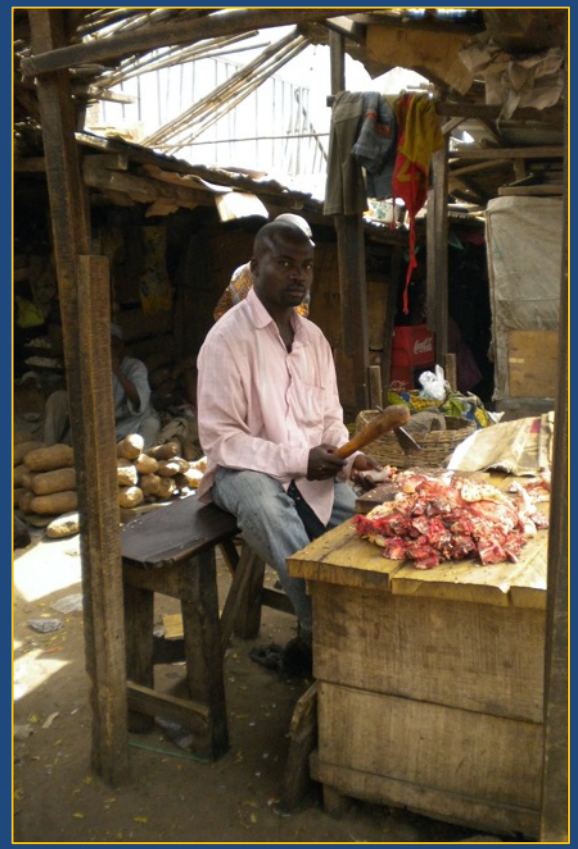
Post-Pandemic Policing

What are we expecting?

Who will do it?

Who will ‘police’ wildlife markets?

Who will ‘police’ food markets?



Border control limitations

- Customs already overwhelmed
- Half of all Customs agencies focussed on revenue-gathering
- What will post-pandemic targets be:
  - Health?
  - Smuggling?
  - Security/Terrorism?

What will be the legal basis?

- Requires Parties to penalize not *criminalize* violations
- Does not regulate domestic trade
- Does not address post-import use of App II fauna and flora
- Little relevance to animal health or welfare
- Is a trade treaty, with conservation as its goal
- Complex procedures to amend text of the Convention – one major amendment took 33 years to come into effect

UN Convention against Transnational Organized Crime

- Is there a desire for a 4th Protocol?
- What should it address?
- What would the added value be?
- How long would it take to come into effect?
- Is UNTOC's effectiveness already questionable?

Will COVID-19 make a difference?

- Tiger and rhino demand has never disappeared
- Rhino demand has increased and demand has diversified
- Pangolin demand ever-present
- Massive, long-held cultural and traditional influences upon demand
- Some wildlife consumption viewed as having positive benefits for human health

COVID and Crime

- Lockdowns have reduced some crime types
- Smuggling methods have adapted
- Public may have experienced and witnessed less crime, but ‘hidden’ crime is ongoing and perhaps increasing
- Pandemic circumstances and impacts readily-exploitable by Organized Crime Groups
- Public awareness of OCG involvement probably low
- ‘Black Lives Matter’ protests and concerns may inhibit some aspects of potential discussions on law enforcement

Target corruption more actively and innovatively…

Much of illicit trade, crime and trafficking is facilitated by corruption
Need to investigate such activities as crimes of corruption
Exploit anti-corruption legislation and its extensive powers for:

- accessing bank accounts and financial records
- intercepting communications
- surveillance – electronic and human
- ‘sting’ operations
- witness protection

Remember – corruption is not a one-way street. The corrupters deserve just as much attention as the corrupt.

Global perspectives, reactions and collaborations

- Intergovernmental organizations – positive
- Law enforcement - positive
- NGOs – positive
- Academia, researchers and scientists – positive
- Governments – very mixed
- Difficult to predict, post-pandemic

What should our focus be?

- Effectively-regulated, sustainable trade
- Conservation – of the planet and its species
- Human health
- Closing opportunities to OCGs
- Combating corruption
- A one-world approach – to a better world

Which of these deserves priority, if any?

Determining roles and priorities

- Law enforcement deals with crime *not* trade
- Law enforcement deals with humans *not* animals
- The primary role for law enforcers is to preserve human life
- The No. 1 priority for criminal investigators is human homicide
- Illicit wildlife trade destroys more than just fauna and flora species
- Illicit trade *kills* humans

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Dr. A. Alonso Aguirre
Chair and Professor
Department of Environmental Science and Policy
George Mason University

Steve Broad
Executive Director
TRAFFIC

Nik Sekhran
Chief Conservation Officer
World Wildlife Fund (WWF)

John M. Sellar OBE
Anti-Smuggling, Fraud and Organized Crime Consultant

Moderator

Dr. Louise Shelley
Director, Terrorism, Transnational Crime and Corruption Center
Professor, Schar School of Policy and Government
George Mason University

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Targeting Natural Resource Corruption

Harnessing knowledge, generating evidence, and supporting innovative policy and practice for more effective anti-corruption programming

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