Transboundary Animal Diseases

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Food and Agriculture Organization of the UN

- 192 member countries + EC
- Ministers of Agriculture
- HQ-Rome
- Mandate to assure food security and relief hunger

With the Agriculture Department

- FAO/WHO Codex Alimentarius secretariat
- Animal Production and Health Division
- Nutrition and Consumer Protection Division

Two families

<u>Germany:</u> The Melander family of Bargteheide
Food expenditure for one week:
375.39 Euros or $500.07

<u>Chad</u>: The Aboubakar family of Breidjing Camp
Food expenditure for one week:
685 CFA Francs or $1.23

http://www.humanespot.org/node/2885

Transboundary Animal Diseases (TADs)

- epidemic diseases,
- highly contagious or transmissible
- potential for very rapid spread, irrespective of national borders,
- causing serious socio-economic and possibly public health consequences

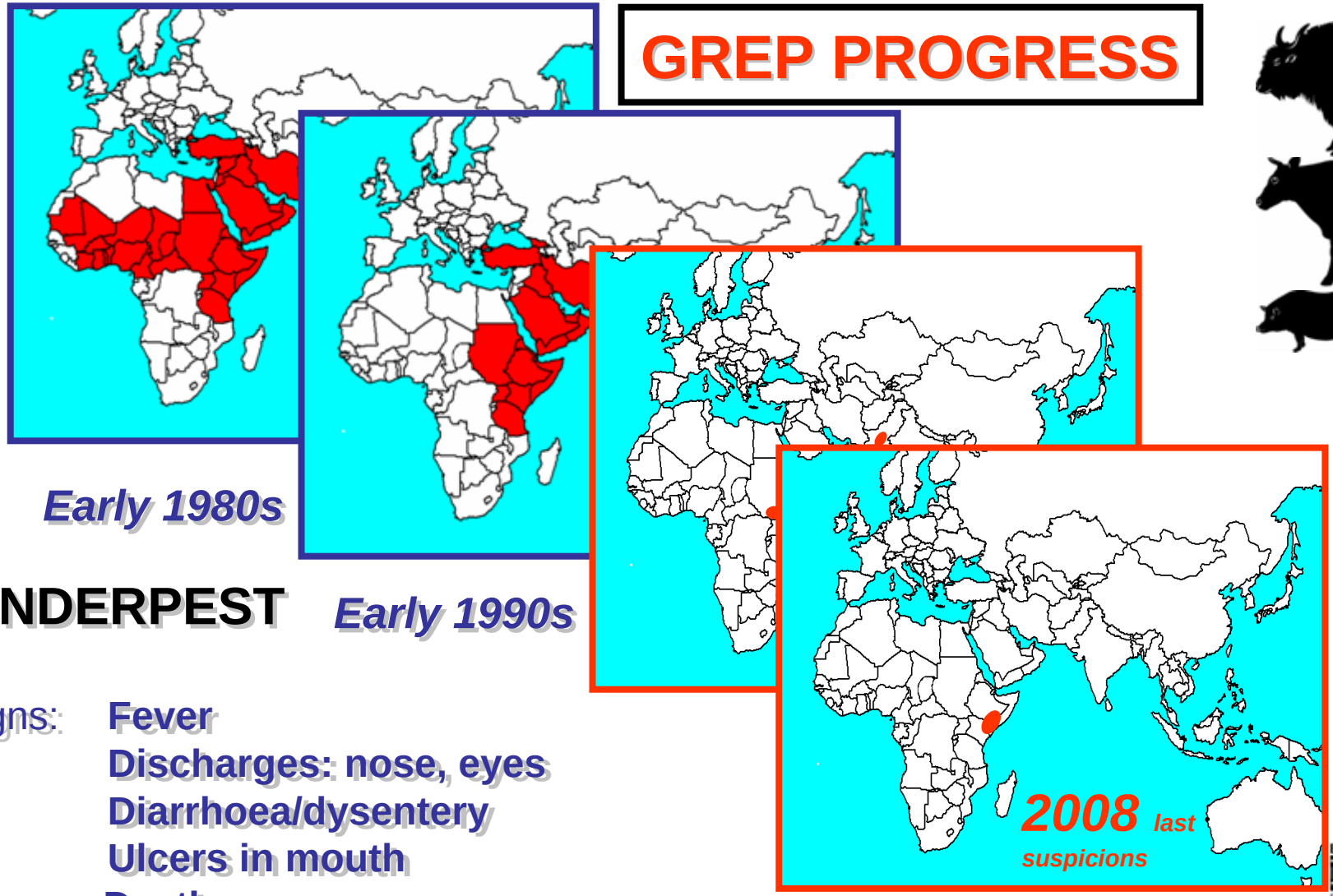
Transboundary Animal Diseases (TADs)

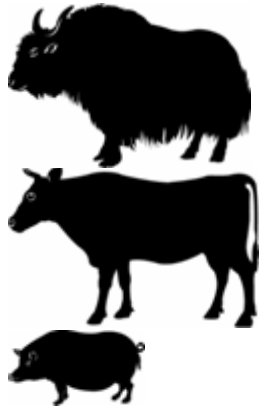
- Rinderpest
- Foot and Mouth Disease
- Classical Swine Fever
- African Swine Fever
- Peste des Petits Ruminants (PPR)
- Contagious bovine pleuropneumonia
- Newcastle Disease
- Rift Valley Fever
- Brucellosis
- Highly Pathogenic Avian Influenza
- (Rabies)

EMPRES
emergency prevention system

FAO/OIE
GF-TADs
GLOBAL FRAMEWORK FOR THE PROGRESSIVE CONTROL OF TRANSBOUNDARY ANIMAL DISEASES

GREP PROGRESS



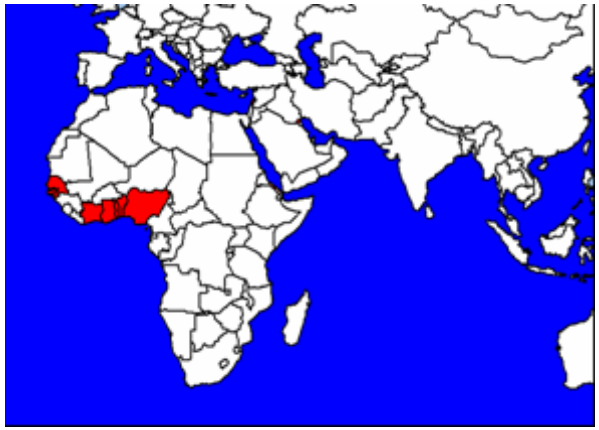


RINDERPEST

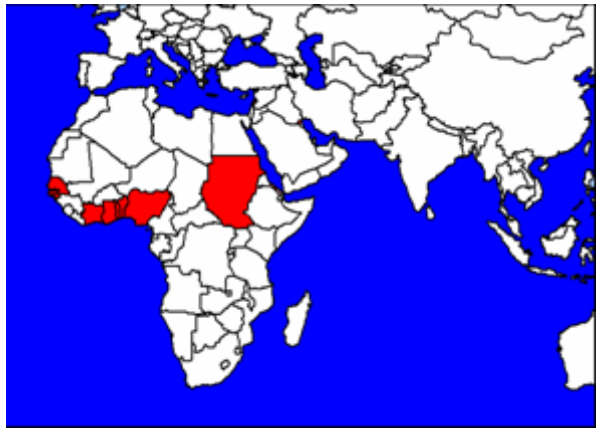
Signs:
- Fever
- Discharges: nose, eyes
- Diarrhoea/dysentery
- Ulcers in mouth
- Death (can exceed 90 %)

Distribution of Peste des Petits Ruminants in the world

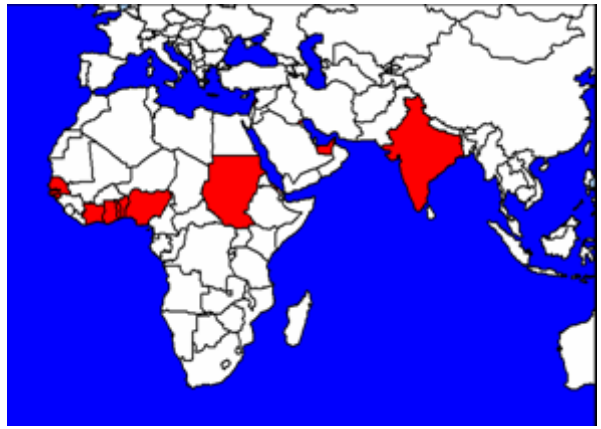
1942-1972



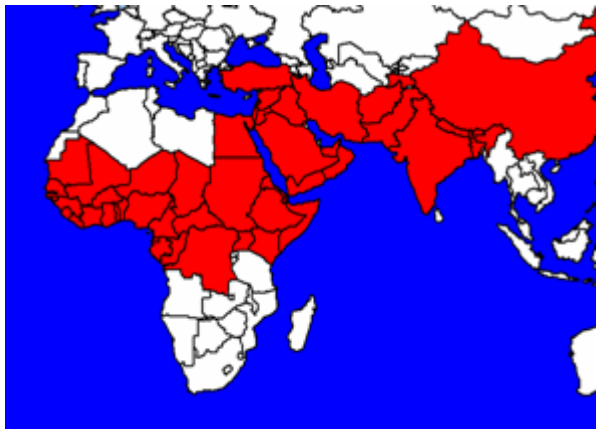
1980-1982



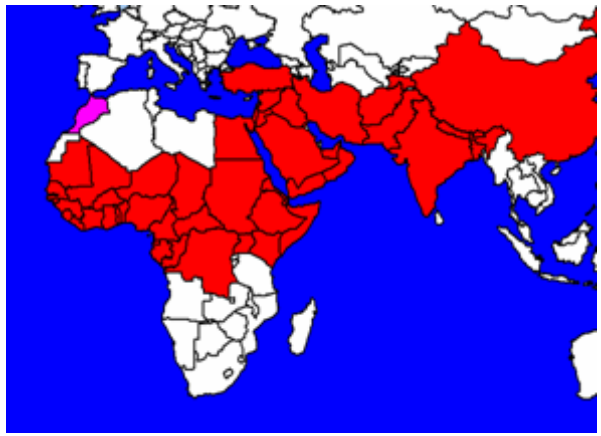
1987



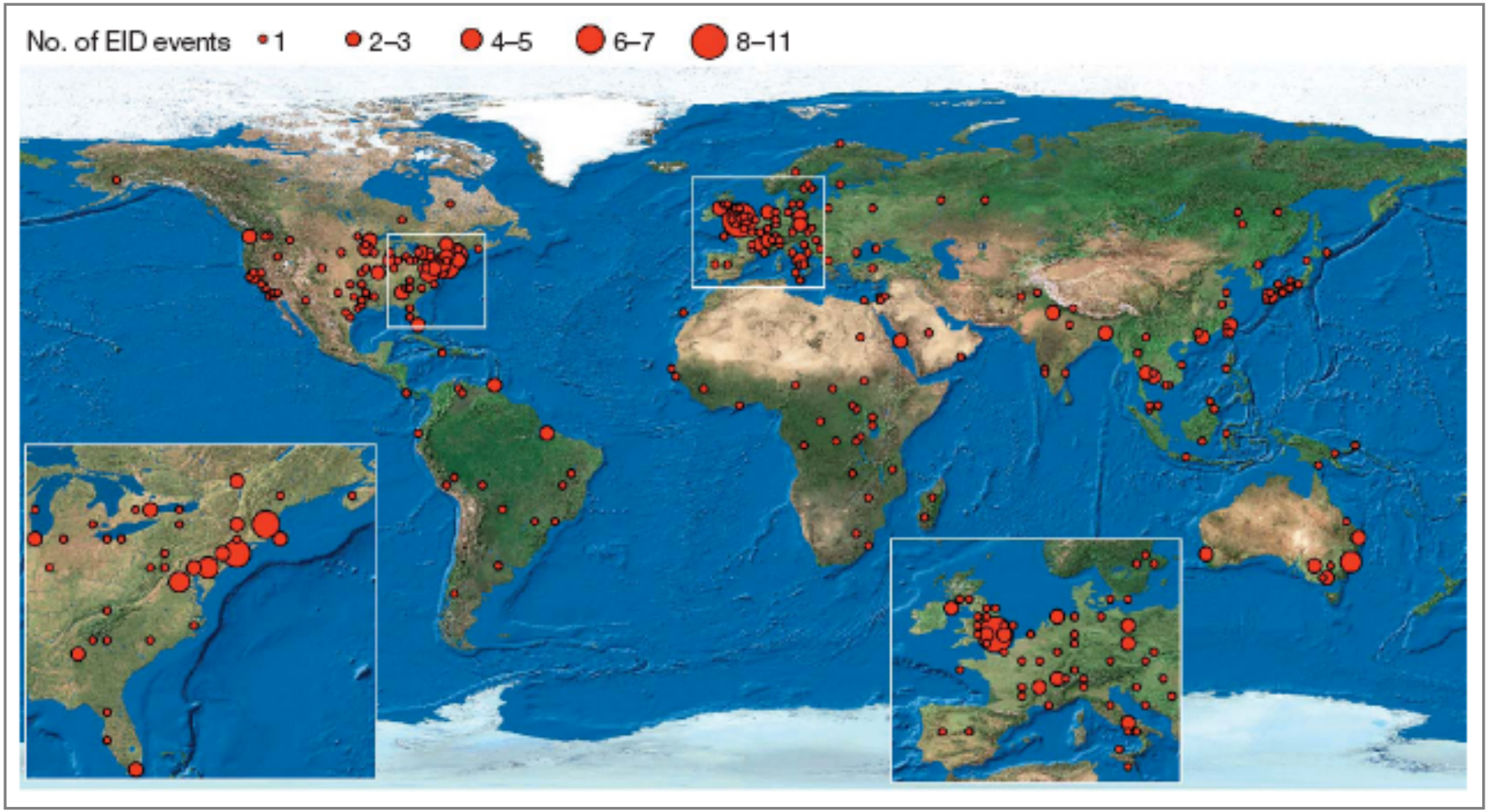
2007



2008

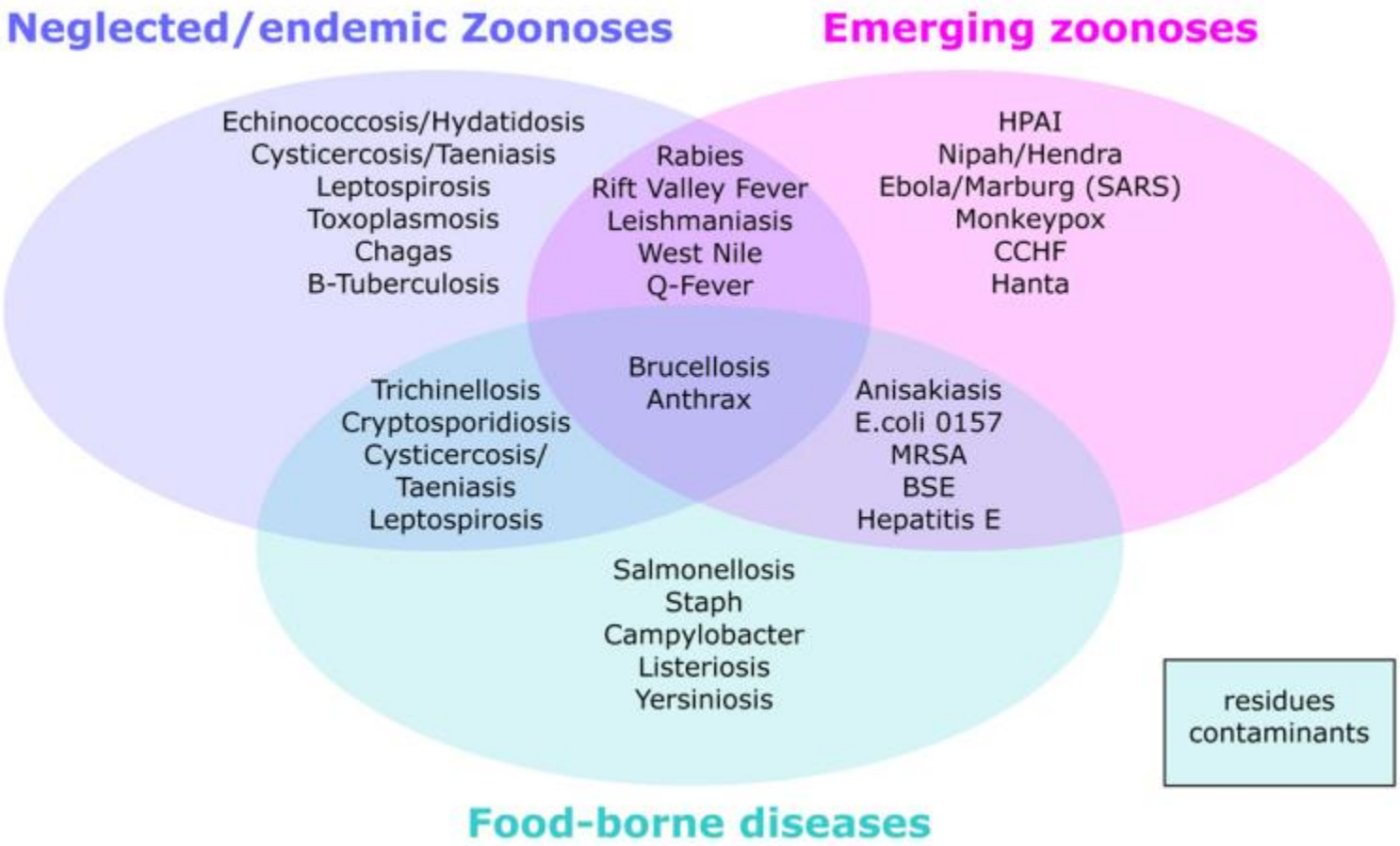


Emerging Infectious Disease events



Global trends in emerging infectious diseases. Jones, K.E., 2008 Nature

VPH

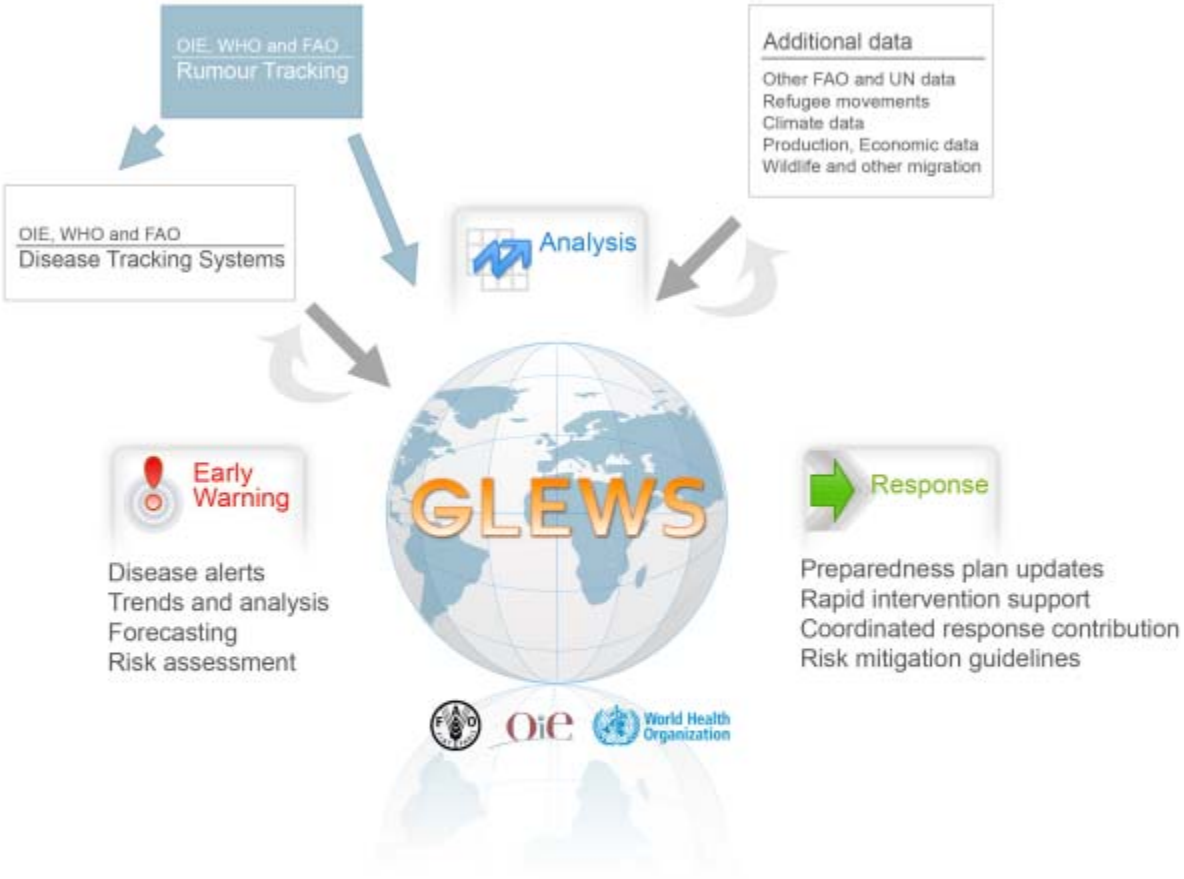

Neglected/endemic Zoonoses
Emerging zoonoses
Echinococcosis/Hydatidosis
Cysticercosis/Taeniasis
Leptospirosis
Toxoplasmosis
Chagas
B-Tuberculosis
Rabies
Rift Valley Fever
Leishmaniasis
West Nile
Q-Fever
HPAI
Nipah/Hendra
Ebola/Marburg (SARS)
Monkeypox
CCHF
Hanta
Brucellosis
Anthrax
Trichinellosis
Cryptosporidiosis
Cysticercosis/
Taeniasis
Leptospirosis
Anisakiasis
E.coli 0157
MRSA
BSE
Hepatitis E
Salmonellosis
Staph
Campylobacter
Listeriosis
Yersiniosis
residues
contaminants
Food-borne diseases

GLEWS

Global Early Warning System

→

Disease intelligence



Global Early Warning and Response System (GLEWS) for Major Animal Diseases, including Zoonoses

CMC-AH Crisis Management Centre Animal Health

Rapid response to transboundary and emerging animal diseases threats

Veterinary Education

- a way of thinking
- identification and problem solving
- practical skills
- research skills
- communication skills?
- role in public health?
- ethics?
- interdisciplinarity?
- cultural sensitivities?
- **global outlook??**

Profile of Veterinarians

- clinical care and prevention

- companion animal
- livestock
- exotic animals
- wildlife
- herd health

the private veterinarian =

first line of defense!

- suspicion
- reporting to vet authority
- adhere to and cooperate with control measures
- social responsibility

Profile of Veterinarians

- laboratory
- academia
- research
- (applied research??)

Emergency preparedness and response

- a continuous process
- contingency planning
- surveillance
- outbreak investigations
- implement emergency procedures
- (outbreak) communication

Profile of Veterinarians responds to the needs of society?

- protect human health and wellbeing

Additional skills needed

- management
- policy making
- communication
- extension
- training

Strengthening cooperation between developing and developed countries

Building bridges in veterinary education

SAPUVETNET III-Partners

Europe

- **Portugal**
- UK
- Netherlands
- Italy
- Spain

Latin-American

- Argentina
- Brazil
- Chile
- **Colombia**
- Costa Rica
- Cuba
- Mexico
- Nicaragua
- Uruguay

FAO associate member

Building bridges in veterinary education

- **Partnering of veterinary faculties**
- **Development of joint training modules**
- **e- conferences**
- **exchange of academicians**
- **exchange of students** for part of the academic year (international “ERASMUS”?)
- twinning students from different continents for assignments

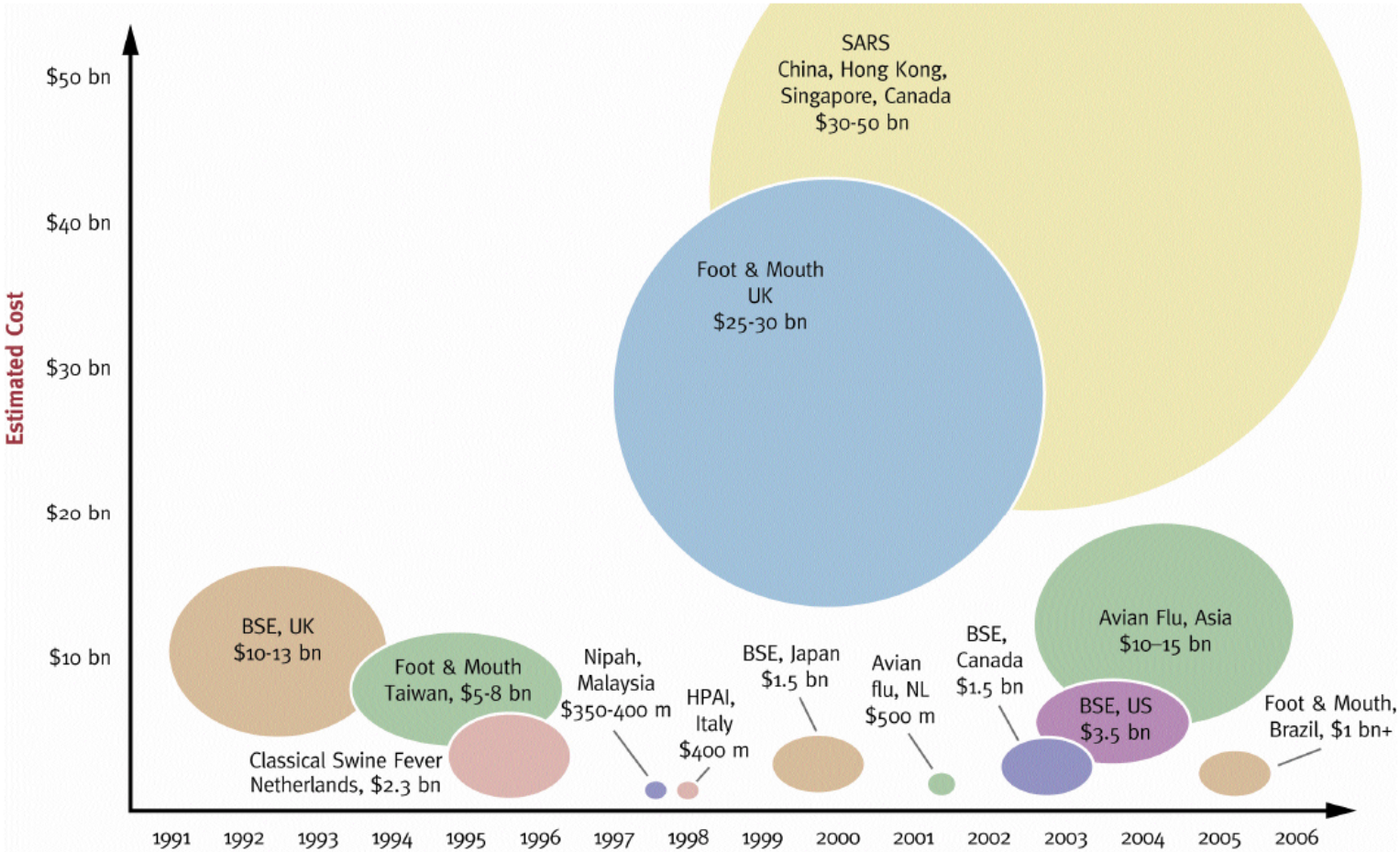
International organizations

- **student internship** at international organizations or in projects
- **sabbaticals for academicians** at OIE, FAO or WHO in relevant departments of mutual interest
- provide lectures (face to face or long distance)
- **provide networks, contacts, materials, etc**

preparing today
the veterinarians of tomorrow

Thank you!!!

FIGURE 1: Economic Impact of Selected Infectious Diseases: Recent Livestock Disease Outbreaks and SARS



Figures are estimates and are presented as relative size.