Disasters and Vulnerable Population

« Health in Uncertain Situations »

Panel 18 – WHS Regional Meeting

29-30 April 2019 – KISH ISLAND- IRAN

FONDATION MÉRIEUX

What kind of disasters ?

- Natural disasters

- Man made disasters

International crisis and refugees

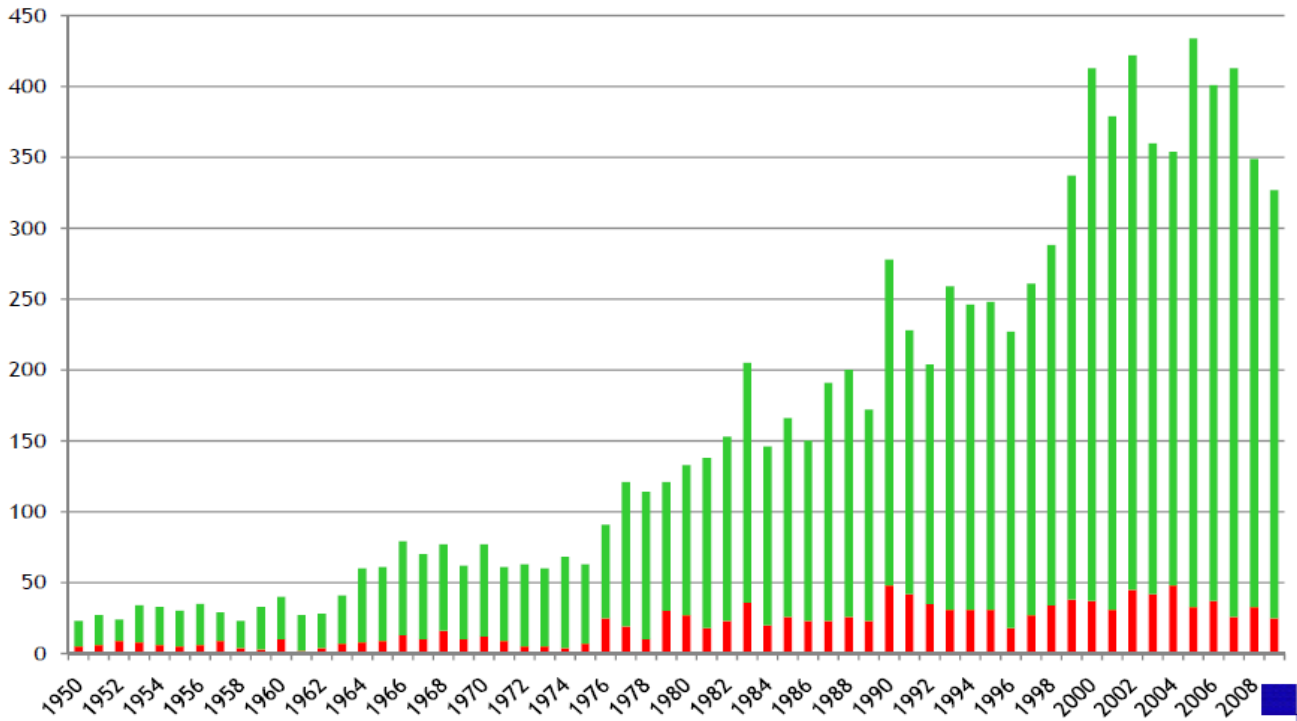
- An unprecedented **65.3 million** people around the world have been forced from home. Among them are nearly **21.3 million refugees**, over half of whom are **under the age of 18.**

- **There are also 10 million stateless people** who have been denied a nationality and access to basic rights such as education, healthcare, employment and freedom of movement.

- In a world where nearly **34,000 people are forcibly displaced every day** as a result of conflict or persecution.

- **4,8 million** registered Syrian Refugees and more than **800 000** Rohingyas refugees around Cox Bazar area in Bangladesh

NATURAL DISASTERS* TREND 1950-2009



World Health Organization

Debarati Guha-Sapir

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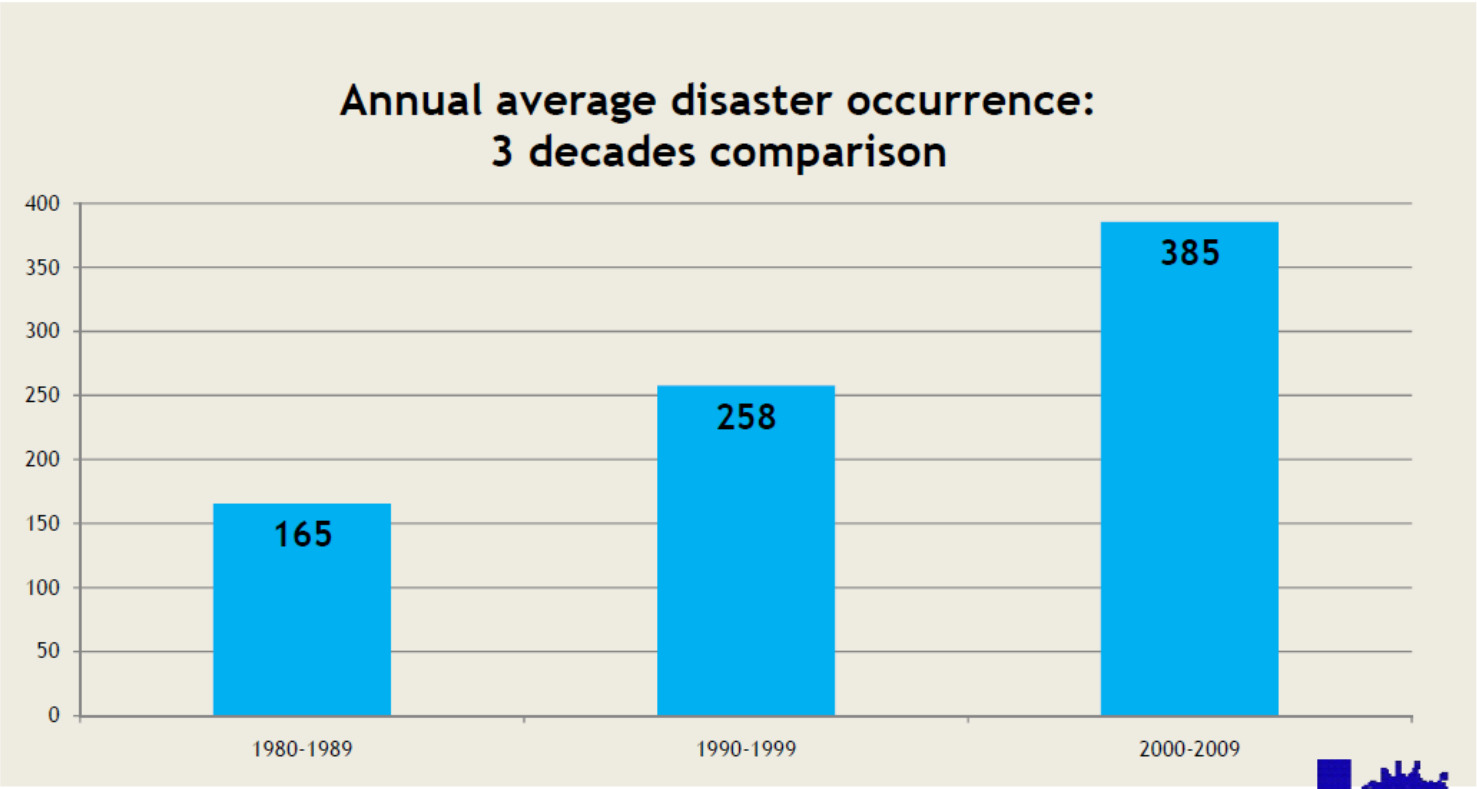
133% more events in 2000-2009 than in 1980-1989



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FACTS AND FIGURES FOR THE DECADE : 2000-2009

- 60% people died because of earthquakes in the last decade, followed by storms (22%) and extreme temperatures (11%)
- 85% of fatalities were in Asia
- Average total affected people follow the same trend as previous decades; mainly due to climate-related events
- Total economic losses vary from one decade to the other; but are mainly due to floods and storms

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Natural Disasters 2018 (Nov)

(CRED data base)

- **Week 48-2018: November 26 - December 02**

Earthquake; Alaska, United States

- **Week 47-2018: November 19 - November 25**

Earthquake; Kermanshah province, Iran (Islam Rep)
Floods; Salaheddine and Ninive provinces, Irak
Floods; Paraguay
Snow and sand storm; Mongolia

- **Week 46-2018: November 12 - November 18**

Cyclone Gaja; India
Floods; Argentina

- **Week 45-2018: November 05 - November 11**

Wildfire; North California, United States
Floods; Jordan
Landslide; Niteroi, Brazil

- **Week 43-2018: October 22 - October 28**

Floods; Jordan
Earthquake; Zante Isl., Greece
Hurricane Willa; Mexico
Floods and storms; Krasnodar Krai, Russia

C.R.E.D .

- In 1988, the **Centre for Research on the Epidemiology of Disasters (CRED)** launched the Emergency Events Database (EM-DAT). EM-DAT was created with the initial support of the **World Health Organisation (WHO)** and the **Belgian Government**.

- The main objective of the database is to serve the purposes of **humanitarian action at national and international levels**. The initiative aims to rationalize decision making for **disaster preparedness**, as well as provide an objective base for **vulnerability assessment and priority setting**.

- **In 2017, 335 natural disasters affected over 95.6 million people**, killing an additional 9,697 and costing a total of US $335 billion.

- Asia seemed to be the most vulnerable continent for floods and storms, with 44% of all disaster events, 58% of the total deaths, and 70% of the total people affected.

www.emdat.be

World Humanitarian Summit 2016 (Istanbul)

CHAPTER 5: CREATE CERTAINTY IN RESPONDING TO DISASTERS

A shift to a collective approach to crisis management. It will require a strong emphasis on planning beforehand, securing firm political and financial commitments to respond, managing disaster risk, and reducing vulnerability to humanitarian stress.

The consultations issued a strong call to:

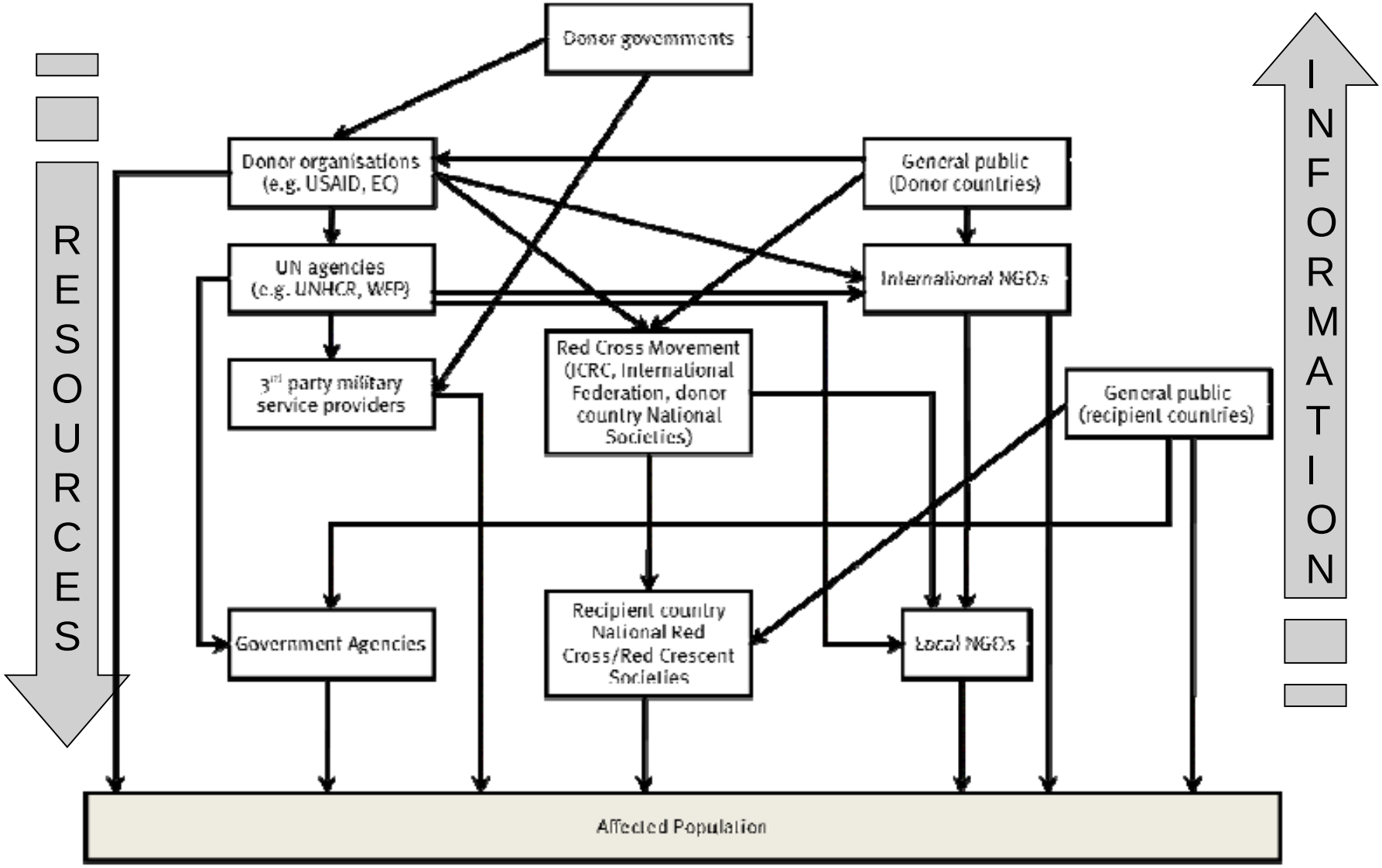
✓ increase investment in preparedness, risk reduction, and predictable response arrangements in advance of shocks;

✓ agree on cooperation arrangements in advance for a more predictable, inclusive and disciplined approach to disaster response;

✓ scale-up and sustain social protection measures to provide an essential package of support to the most vulnerable people as a norm for the longer-term provision of assistance;

✓ build best practice on how to manage and respond to disaster risk

The system is made up of multiple actors, relationships, resource and information flows



(ANALP)

INCLUSIVE HEALTH

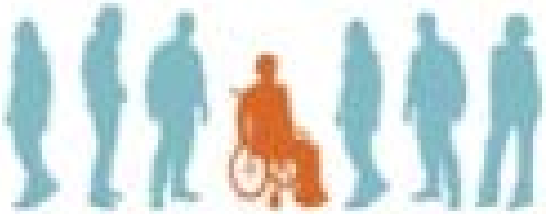
The approach of “Humanity and Inclusion” a transnational NGO’s located in Lyon - France

humanity &inclusion

Over

1 BILLION

people globally experience disability



1 in 7 people

People with disabilities have the same general health care needs as others

But they are:

2x more likely to find health care providers' skills and facilities inadequate

3x more likely to be denied health care

4x more likely to be treated badly in the health care system

1/2 of people with disabilities cannot afford health care

They are:

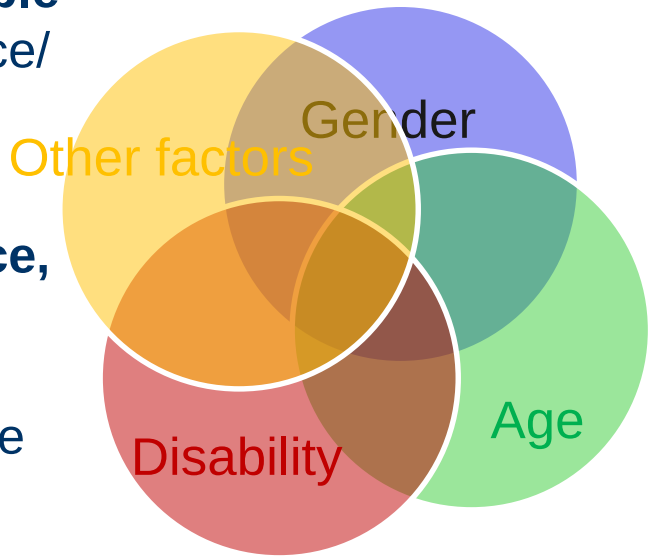
50% more likely to suffer catastrophic health expenditure

These out-of-pocket health care payments can push a family into poverty

Rehabilitation and assistive devices can enable people with disabilities to be independent

Challenges faced by persons with disabilities in humanitarian emergencies

- **Disproportionately** affected and **face multiple barriers** in accessing humanitarian assistance/ services
- Exposed to several threats: **targeted violence, exploitation, abuse**, including sexual and gender-based violence, **discrimination** and **restricted access** to humanitarian assistance
- Multiple and intersecting forms of discrimination based on their **age, gender**, **disability**, other factors **further exacerbates exclusion** and often leads to **further impairment**



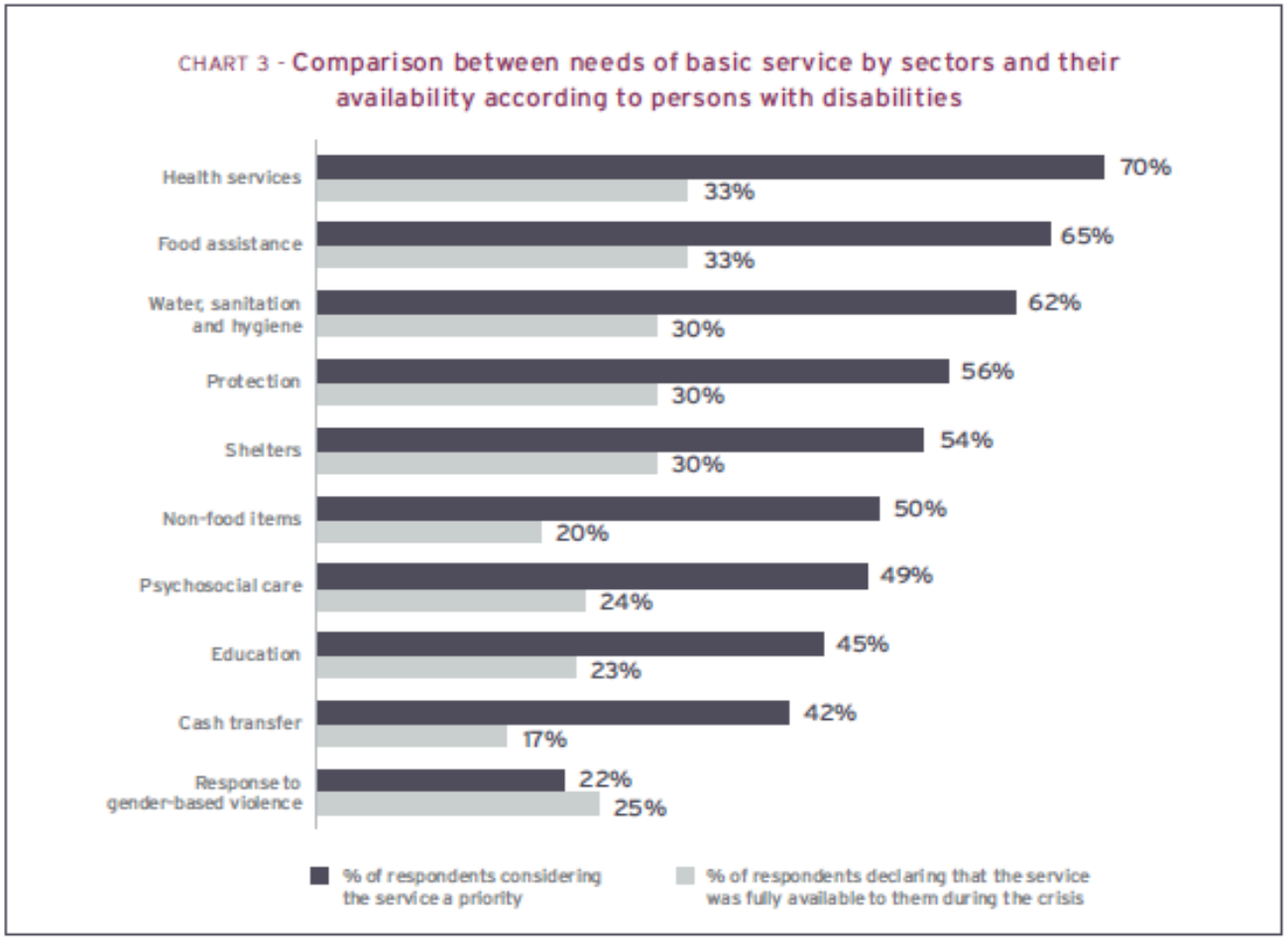
humanity &inclusion

People with disabilities: Gaps in access to services in humanitarian response

75% of people with disabilities believe they are excluded from humanitarian responses to emergencies like natural disasters and conflict

Comparison:

- People who considered the service a priority (VS)
- People who had access to the service



(International survey of people with disabilities, disabled people's organizations and humanitarian actors, Handicap International, 2015)

Factors that lead to Exclusion

- **Poor or lack of Identification** of persons with disabilities and their specific needs (lack of disaggregated data on Sex, Age, Disability)
- **Lack of consultation or participation** of persons with disabilities and their representatives in assessments and throughout program cycle
- **Limited knowledge and capacity of actors** to deliver inclusive services at the organizational, programmatic and service delivery levels
- **Lack of staff capacity, knowledge and skills** to communicate with and adapt their practices for persons with disabilities
- **Lack of coordination among humanitarian actors** and local skills and expertise
- Poor or lack of identification of **numerous barriers to access** and actions to reduce them

© Help Age International

© Frederik Buyckx / Handicap International

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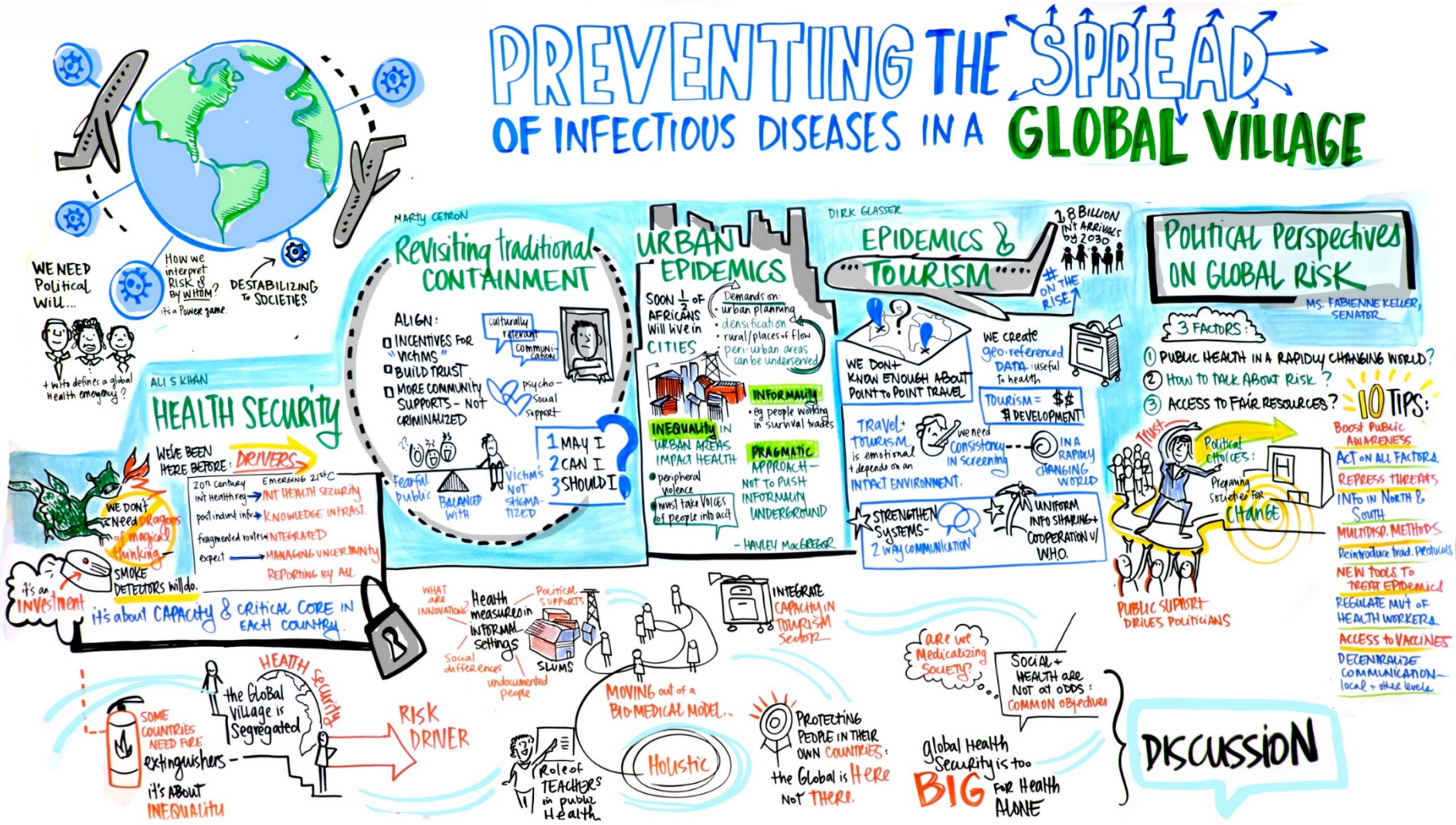
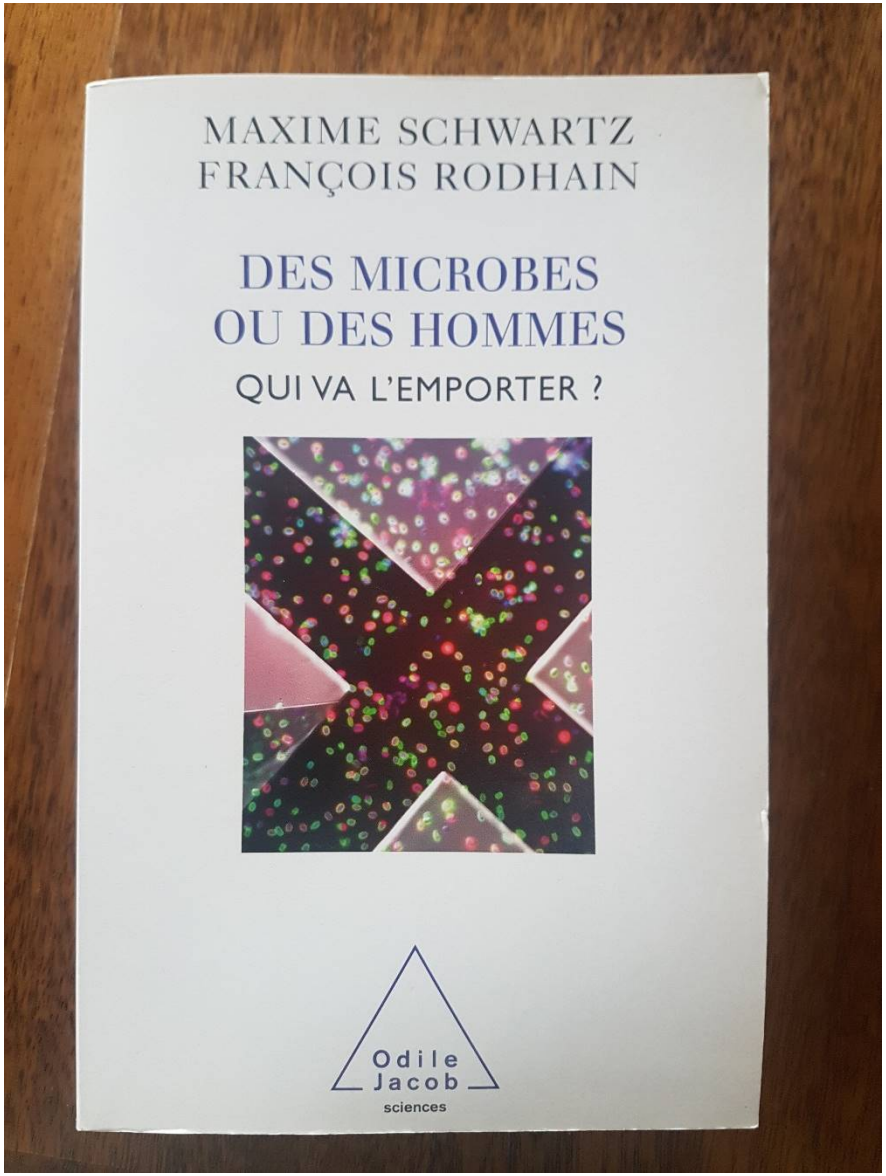


World Health Organization

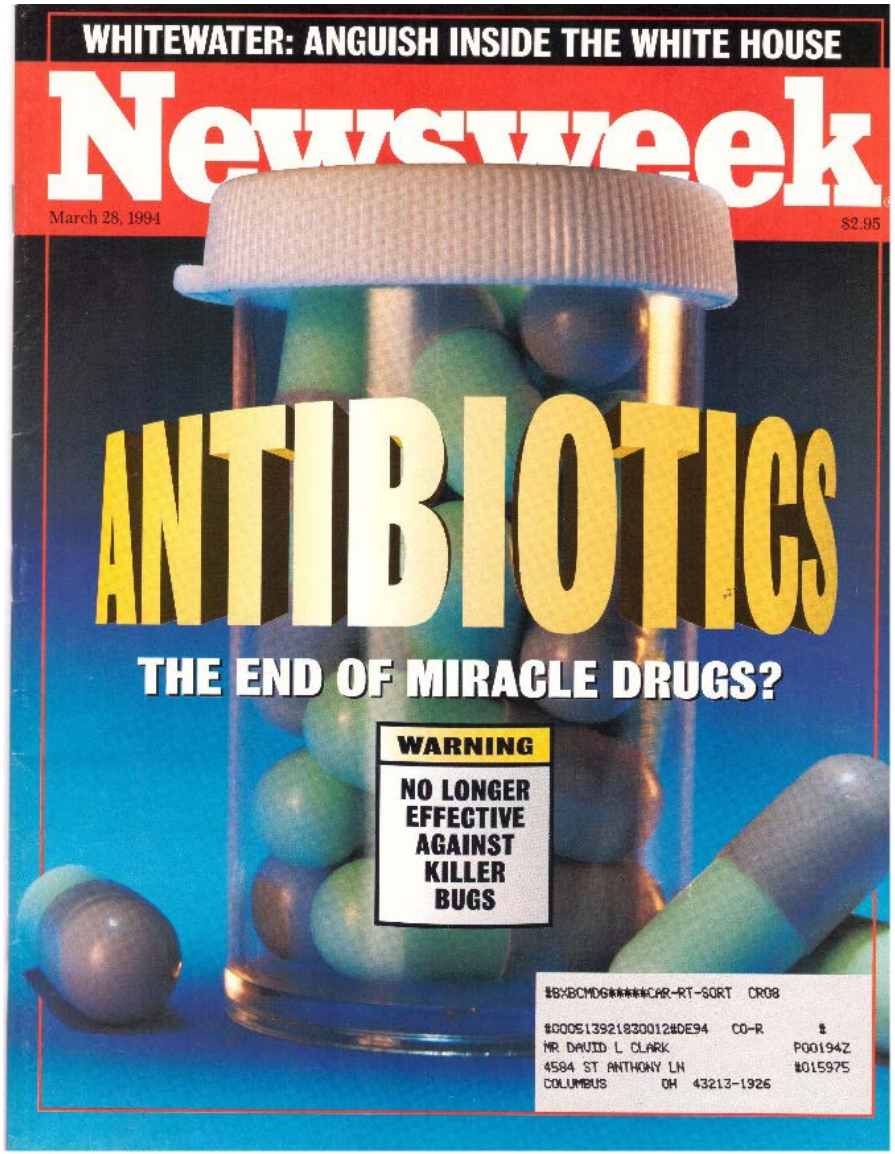
Anticipating emerging infectious disease epidemics: an informal consultation
1-2 December 2015, Geneva

drawn live graphic recording | Drawing Change



2008

Time (15 Mai 2017)



The End of Antibiotics

SCIENCE THOUGHT IT HAD VANQUISHED INFECTIOUS DISEASES. BUT NOW THE BUGS ARE FIGHTING BACK.

BY SHARON BEGLEY

NOTHING WORKED. FOR NINE MONTHS DR. CYNthia Gibert desperately tried one antibiotic after another on her 57-year-old kidney patient, but no matter which tablets, capsules or even IVs she gave him—from plain-vanilla ampicillin to fancy experimental teicoplanin—the man's blood was still flooded with enterococcus bacteria, which were slowly poisoning his red blood cells. "We tried six or seven different medications. Some alone. Some in combination. Some we didn't think would work. But we had nothing else to try," says Gibert, an infectious-disease specialist at the Veterans Affairs Medical Center in Washington. Sometimes her patient's blood tested clean, but within days the infection came roaring back: a few rogue bacteria, no more threatened by the antibiotics than an urban gang by a pop gun, bided their time until their more vulnerable cousins had been killed. Then they multiplied by the billions. So one morning last year, Gibert gathered her courage and walked softly into the man's room. "I guess you're coming to tell me I'm dying," he said. Nothing had worked, she explained; they had run out of options. Antibiotics, the miracle drugs of the 20th century, had been bested by bacteria, the most primitive organisms on earth. Several days later the man died of a massive bacterial infection of the blood and heart.

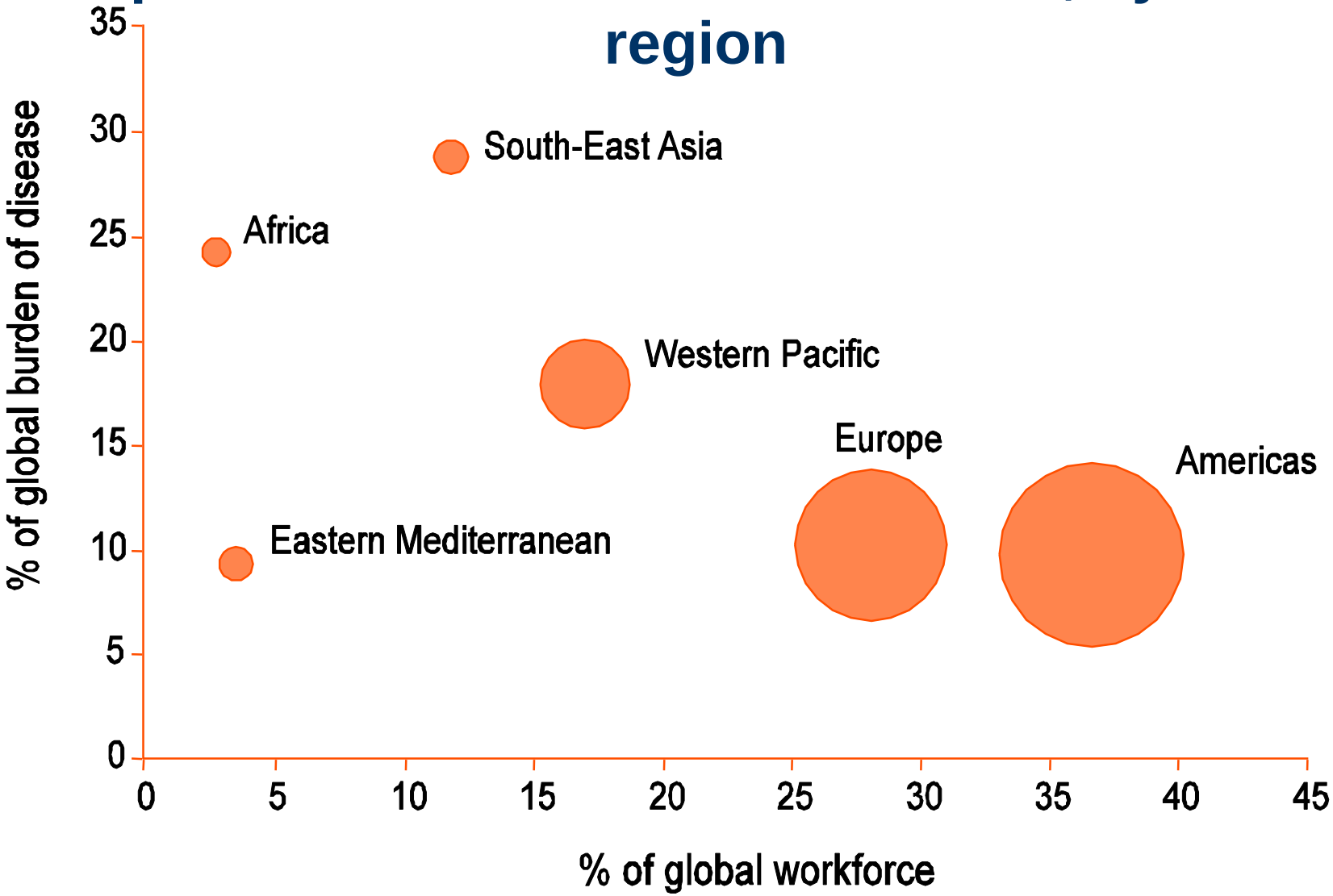
Ever since 1928, when Alexander Fleming serendipitously discovered penicillin oozing out of mold in a laboratory dish, "man and microbe have been in a footrace," says Dr. Richard Wenzel of the University of Iowa. It's a race in which the lead keeps changing. In 1946, just five years after penicillin came into wide use with World War II, doctors discovered staphylococcus that was invulnerable to the drug. No problem: smart pharmacologists invented or discovered (often in samples of soil they collected like souvenirs whenever they visited exotic locales) new antibiotics. The drugs pounded the microbes into submission once again. But the bacteria regrouped, and mutants capable of fending off the latest drugs appeared. New drugs, newer mutants. And so it went. Overall the drugs retained a slight lead and, slowly, scourges such as tuberculosis, bacterial pneumonia, septicemia (blood poisoning), syphilis, gonorrhea and other bacterial infections that hark back to a time of high-button shoes were vanquished. Yes, people died—and still die—from these ills, but not so many, and not those who began antibiotics before the microbes wrecked some vital system. "The perception [in the 1980s] was that we had conquered almost every infectious disease," says Dr. Thomas Beam of the Buffalo, N.Y., VA Medical Center. Science was sure the real challenges would lie in the conquest of cancer, heart disease and other chronic ailments. Instead, "medicine's purported triumph over infectious disease has become an illusion," writes Dr. Sherwin Nuland in his best-selling "How We Die."

Indeed, it looks like medicine declared victory and went home too soon. Every disease-causing bacterium now has versions that resist at least one of medicine's 100-plus antibiotics. Some resist all but one (chart, page 48). Drug-resistant tuberculosis now accounts for one in seven new cases; 5 percent of those patients are dying. Several resistant strains of pneumococcus, the microbe responsible for infected surgical wounds and some children's ear infections and meningitis, appeared in South Africa in the 1970s, spread to Europe and now are turning up in the United States. In January the federal Centers for Disease Control and Prevention (CDC) reported an epidemic of resistant pneumococcus in rural Kentucky and in Memphis. The bugs had spread through day-care centers like a chain letter, leaving toddlers with ear infections, pneumonia and, in six cases, meningitis. In 1992, 13,300 hospital patients died of bacterial infections that resisted the antibiotics doctors fired at them, says the CDC. It was not that they had infections immune to every single drug but rather that, by the time doctors found an antibiotic that worked, the rampaging bacteria had poisoned the patient's blood, scarred the lungs or crippled some other vital organ.

The financial toll is steep, too. Because the first antibiotic prescribed often fails, the patient has to try several; this adds some $100 million to $200 million to the nation's health-care tab. "Right now the microorganisms are winning," says Iowa's Wenzel. "They're so much older than we are . . . and wiser."

They are indeed wise, especially in the ways of evolution. Bacteria

Distribution of health workers by level of health expenditure and burden of disease, by WHO region



Source: WHO, World Health Statistics, 2006

A Family Foundation Serving Public Health

- Created 45 years ago (1967)
- Official public interest status

1897: Marcel Mérieux founds Institut Mérieux after working with Louis Pasteur

1975: Dr. Charles Mérieux, 103 million meningitis vaccines for Brazil

Today: Alain and Alexandre Mérieux

FONDATION MÉRIEUX

“Without diagnostics, medicine is blind”

- An essential step in patient care
  - Prescribing the right treatment depends on identifying the cause of disease
- A decisive tool in disease surveillance and control
  - Reliable laboratory testing data is needed for outbreak alert and response and to control the spread of antimicrobial resistance
- In developing countries, it is often difficult to gain access to diagnostic testing
  - Strengthening clinical biology capacities drives the Mérieux Foundation’s work in the field

Providing Quality Infrastructure

- Renovating and strengthening public hospital laboratories in developing countries
  - 37 laboratories renovated (2003 - 2018)

Madagascar laboratory before and after renovation

Rodolphe Mérieux Laboratories

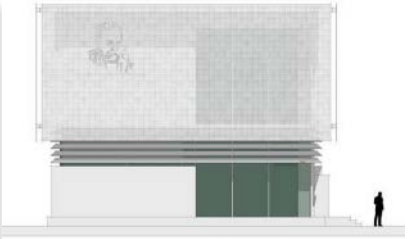
Mali (2005)

Haiti (2009)

Madagascar (2010)

Bangladesh (2015)

Tunis (2018)



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018

Cambodia (2005)

Laos (2009)

Lebanon (2011)

Brazil (2016)

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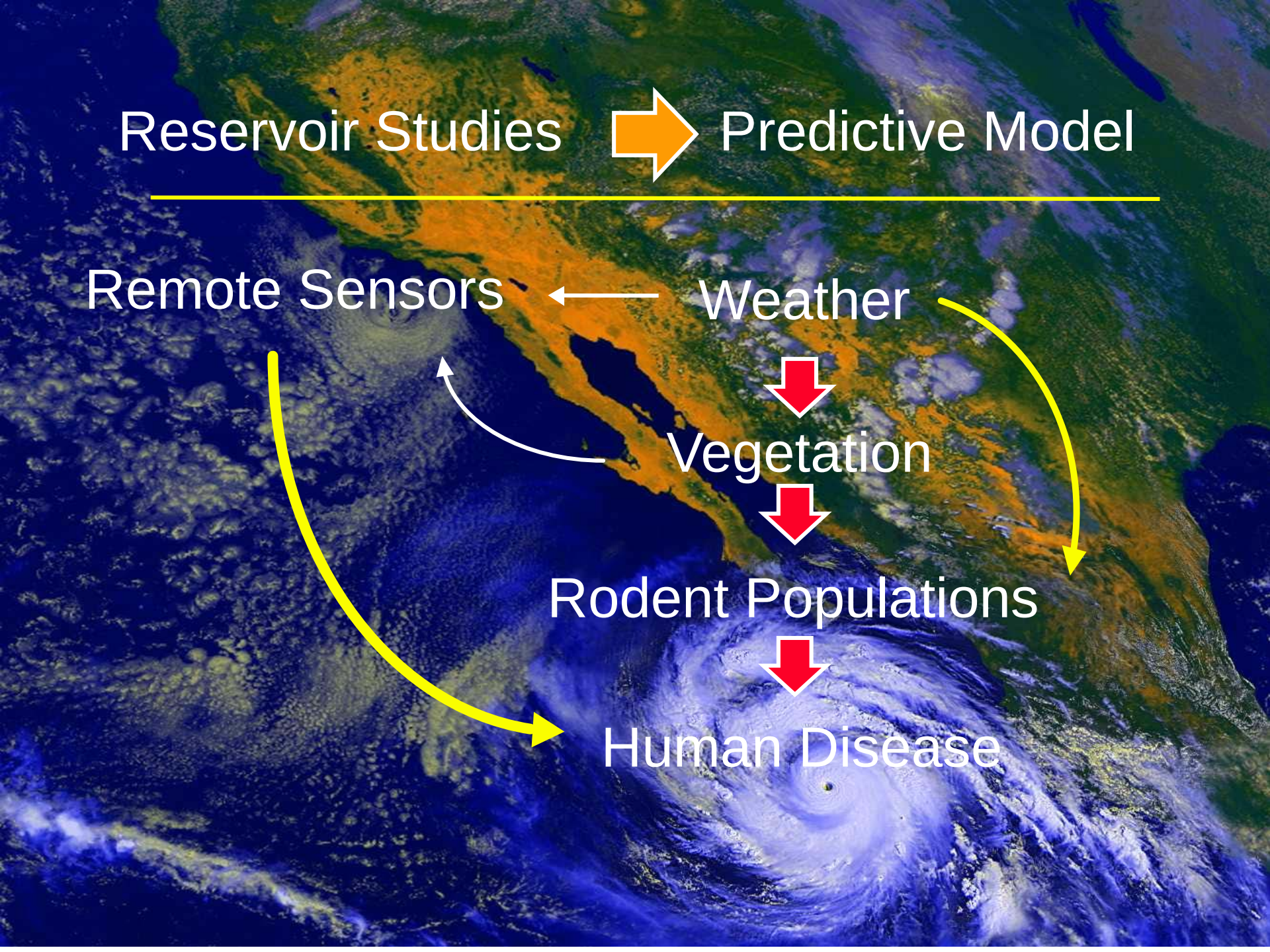
Enhancing Local Applied Research Capabilities

- Implement **innovative and collaborative research projects** on relevant themes associated with high morbidity and/or mortality
- Develop **scientific training for young researchers** linked to priority research programs
- Develop and conduct **clinical and epidemiological studies** within the framework of the GABRIEL network
- **Support and train public health actors** to develop, produce and validate rapid diagnostic tests for neglected tropical diseases

GABRIEL Network

- **GABRIEL:** Global Approach to Biological Research, Infectious diseases and Epidemics in Low-income countries
- Federating **19 research labs** from academic and private institutions


Reservoir Studies
Predictive Model
Remote Sensors
Weather
Vegetation
Rodent Populations
Human Disease


SUSTAINABLE DEVELOPMENT GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS


LABORATOIRES
LABORATOIRES
MICRO
CREDITS
innovative solutions
vaccinology
DIAGNOSTICS
MADAGASCAR
Roots for life
SENTINEL
Treatment centers
HAITI • LAOS
FONDATION
MÉRIEUX