



African
Union



THE AFRICA-EU PARTNERSHIP
LE PARTENARIAT AFRIQUE-UE





Fourth **African Union - European Union** Agriculture Ministerial Conference

Partnership for sustainable agriculture and food system



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CURRENT STATUS OF FOOD SAFETY BIG DATA IN EUROPE & AFRICA

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WHO ARE WE?

CENTRE OF EXCELLENCE IN MYCOTOXICOLOGY & PUBLIC HEALTH
GLOBAL LEADING POSITION FOOD SAFETY-MYCOTOXIN RESEARCH

PRESIDENT INTERNATIONAL SOCIETY OF MYCOTOXICOLOGY
[MYTOX-SOUTH®](#) COORDINATORS

OUR STORY & PASSION: 'FOOD SAFETY AND MYCOTOXINS'





CHALLENGES REGARDING FOOD SAFETY BIG DATA IN EUROPE & AFRICA

1. SCATTERED AND POORLY-DESCRIBED FOOD SAFETY DATA

2. MISSING LINKS BETWEEN FOOD SAFETY AND DISEASE OUTCOMES: LACK OF ROBUST EPIDEMIOLOGIC STUDIES & MECHANISTIC DESIGNS



SUSTAINABLE PATHWAYS ^(1/4)

1. ACCESSIBILITY OF DATA

- ACCORDING TO THE FAIR-PRINCIPLE
- OPEN-ACCESS DATA: TO ALL STAKEHOLDERS
- EXISTING DATABASES EFSA - FAO GEMS: NEEDS OPTIMIZATION FOR AFRICA
- HARMONIZATION & STANDARDIZATION VIA AFRICAN FOOD SAFETY AUTHORITY
- *CF.* [FOODSAFETY4EU](#) - CONSTRUCTION OF A DIGITAL PLATFORM



**Food
Safety
4EU**



SUSTAINABLE PATHWAYS (2/4)

2. BUILDING EQUITABLE PARTNERSHIPS WITH FOCUS ON BREEDING YOUNG & GENDER-INCLUSIVE INNOVATORS

- BOTTOM-UP HUMAN CAPACITY BUILDING ON FOOD SAFETY - *CF.* [ACEMFS, NIGERIA](#)
- GENDER-INCLUSIVE PARTNERSHIPS: [AWARD](#) & [LADY-AGRI](#)
- 1ST EU JRC KNOWLEDGE CENTRE ON MYCOTOXINS
 - GAP & LANDSCAPE ANALYSES EU-AFRICA
 - TO FACILITATE DISSEMINATION & COLLECTION OF SCIENTIFIC-BASED DATA
 - TO IMPROVE DATA-USE FOR GLOBAL DECISION MAKING



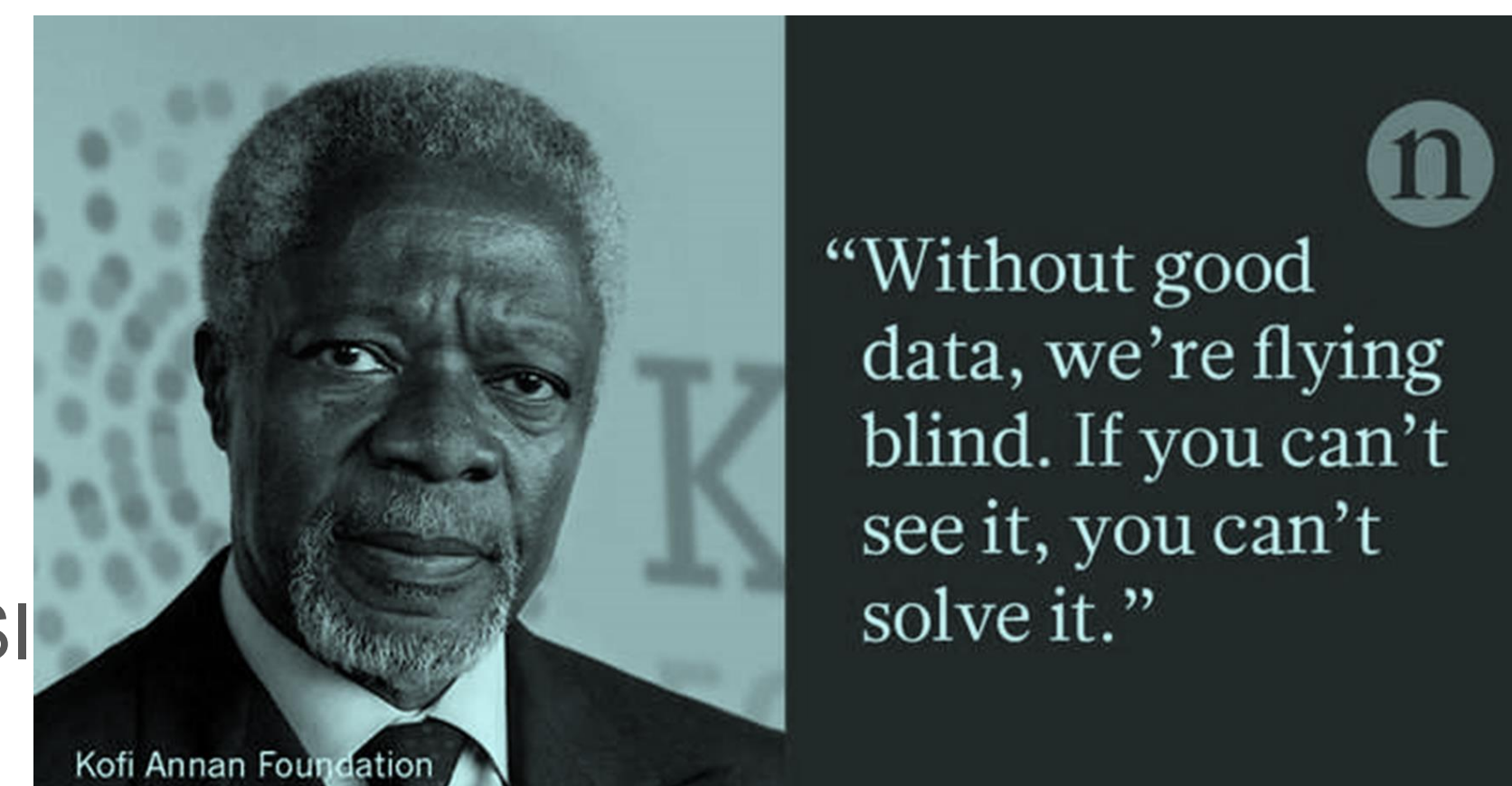
The European Commission's
Knowledge Centre for
Global Food and Nutrition Security



SUSTAINABLE PATHWAYS (3/4)

3. DATA VISUALIZATION FOR DECISION-MAKING

- IMPROVE COMMUNICATION
- SHARING FOOD SAFETY DATA - A SHARED CONCERN
- *CF.* FOOD SYSTEMS DASHBOARD JOHNS HOPKINS UNIVERSITY



FOOD SYSTEMS DASHBOARD

DESCRIBE. DIAGNOSE. DECIDE.

Food systems data for improving diets and nutrition



SUSTAINABLE PATHWAYS ^(4/4)

4. INVESTMENT IN HIGH-QUALITY FOOD SAFETY RESEARCH LINKING EXPOSURE TO DISEASE OUTCOMES

- COMBINING EPIDEMIOLOGIC & MECHANISTIC DESIGNS REGARDING FOOD SAFETY & HEALTH
- ERC STG PROJECT [HuMyco](#) (2020-2025): IMPACT OF MYCOTOXIN EXPOSURE ON HUMAN CANCER DEVELOPMENT

- TOWARDS INNOVATION: THE 'EXPOSOME' CONCEPT (WILD, 2005; MILLER & JONES, 2014)

‘THE CUMULATIVE MEASURE OF ENVIRONMENTAL INFLUENCES AND ASSOCIATED BIOLOGICAL RESPONSES THROUGHOUT LIFESPAN INCLUDING EXPOSURES FROM THE ENVIRONMENT, DIET, BEHAVIOUR AND ENDOGENOUS PROCESSES’.



European Research Council
Established by the European Commission

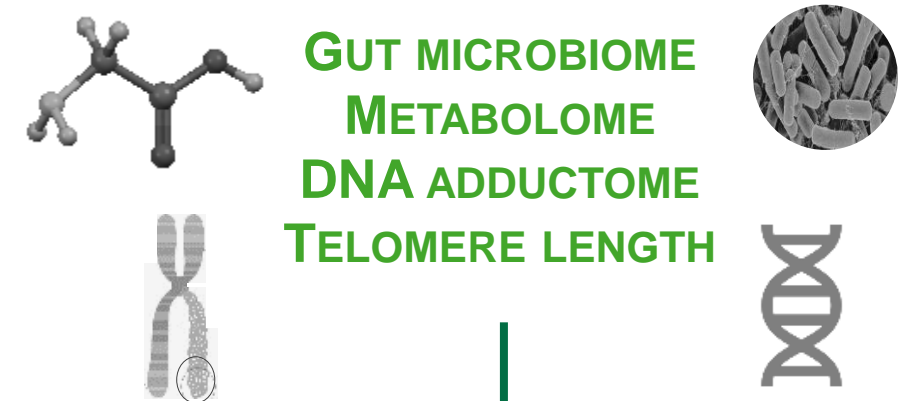


EXTERNAL EXPOSURES

CLIMATE, LAND USE, SOCIETAL FACTORS, AIR POLLUTION, EMERGING CHEMICALS, DIET, LIFESTYLE FACTORS...



INTERNAL RESPONSES



LARGE-SCALE EXPOSOME
PROJECTS IN EUROPE &
AFRICA:

- FLEX/GUT, BELGIUM
- MISAME-III, BURKINA FASO



CALL ON ACTION FOR HIGH-QUALITY, ACCESSIBLE FOOD SAFETY DATA & COMMUNICATION TOWARDS DECISION- MAKING PROCESSES IN AU-EU

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[PROF. DR. CARL LCHAT](#)

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