Wednesday 28 April 2021 ...

Animal Welfare Global Forum

"Animal welfare and UN-Sustainable Development Goals"

2 selected examples of linkage for **Pig production systems**

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PIG LINK : Global situation

from FAO and frontiers in Veterinary Science 2019 doi: 10.3389/fvets.2019.00336

Global animal protein production

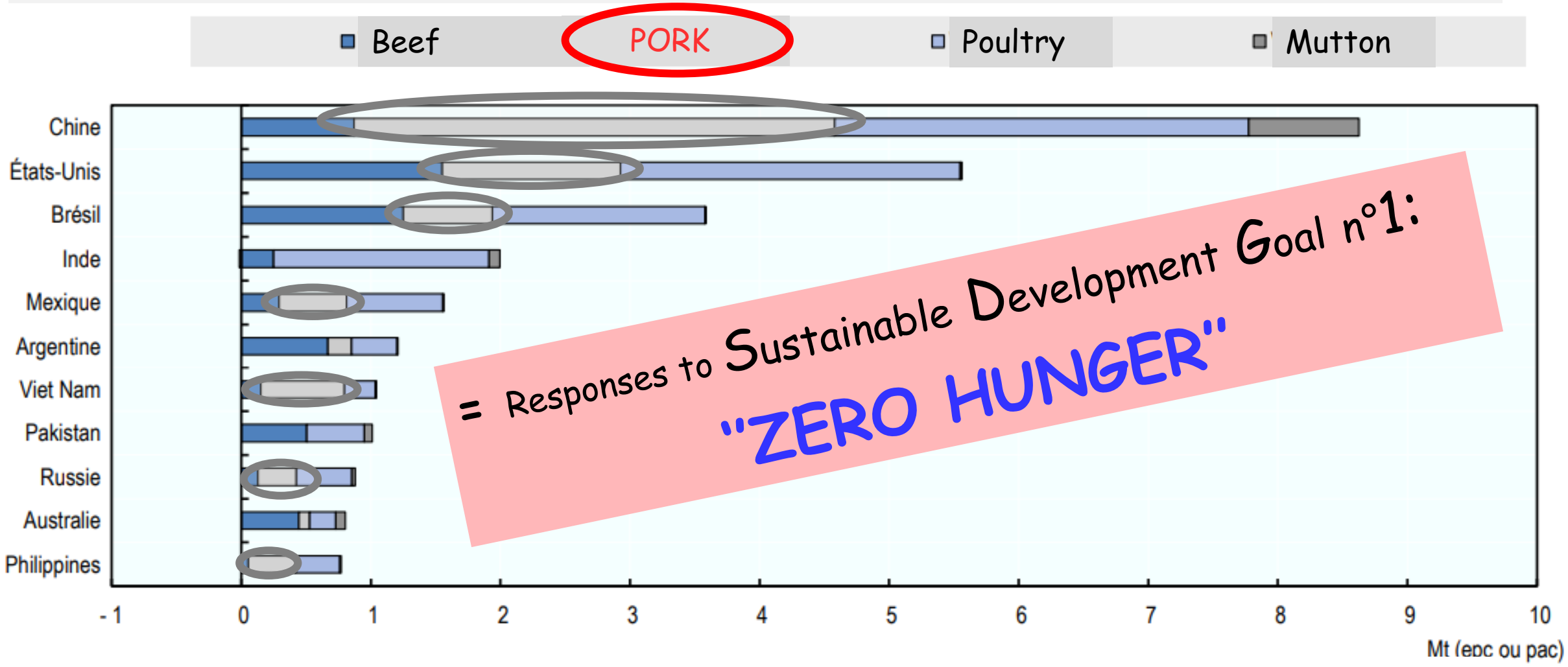
world animal protein needs

can be expressed in terms of "**market demand**"

(or 'trade' for Private sector)

PIG LINK : Global situation

Countries contributing most to the INCREASE in production (type of meat)



OCDE/FAO (2019) «OECD and FAO Agricultural Outlook", OECD Agricultural data Base

http://dx.doi.org/10.1787/agr-outl-data-fr

PIG LINK : Global AMR situation

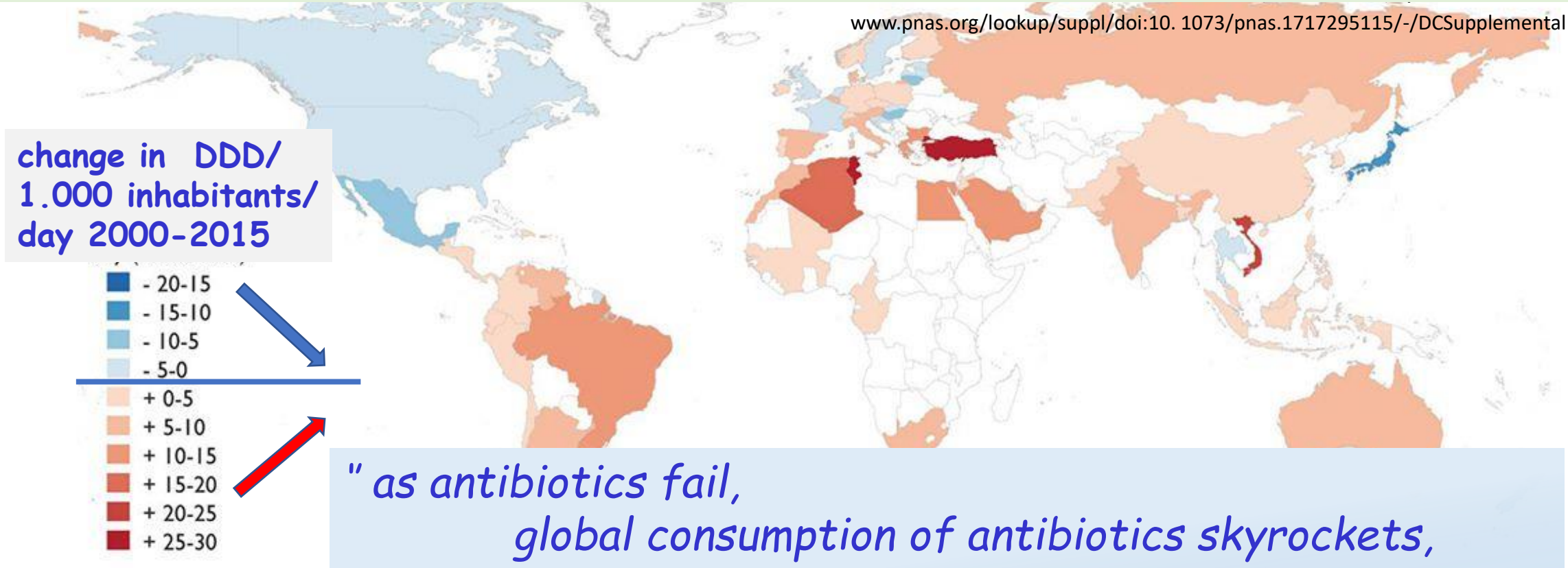
1st link: Pig Production

SDG 3 Good Health & WELFARE

GOOD HEALTH and WELL-BEING (mostly humans)

Good Health & WELFARE (animals)

www.pnas.org/lookup/suppl/doi:10. 1073/pnas.1717295115/-/DCSupplemental



" as antibiotics fail,
global consumption of antibiotics skyrockets,
further driving drug resistance ! "

PIG LINK : fighting AMR campaign

in France: 2 que ; called:

one exemple: in France

. national campaign to **reduce antibiotics consumption**: 017-2021)

- launched by Health authorities,
- implemented with the help of technical institutions, to
- with **active participation of the professionals** (farmers + private sector). s C3-G, C4-G)

use over the last 3 years.

with all species: exposure to last **Cephalosporins** generation

- globally **reduced by 94%** in 2019 as compared to 2013

with **Pigs**: exposure to **Colistine** (post-natal 7= piglet weaning)

- **reduced by 63%** between 2015-2018.

exposure to **Fluoroquinolones**

- **reduced between 3% to 0,5%** over 2013-2018,

a global decrease in exposure was observed for all species in 2018-2019.

N.B. levels of exposure are estimated and expressed according to **ALEA indicator** (**A**nimal **L**evel of **E**xposure to **A**ntimicrobials)

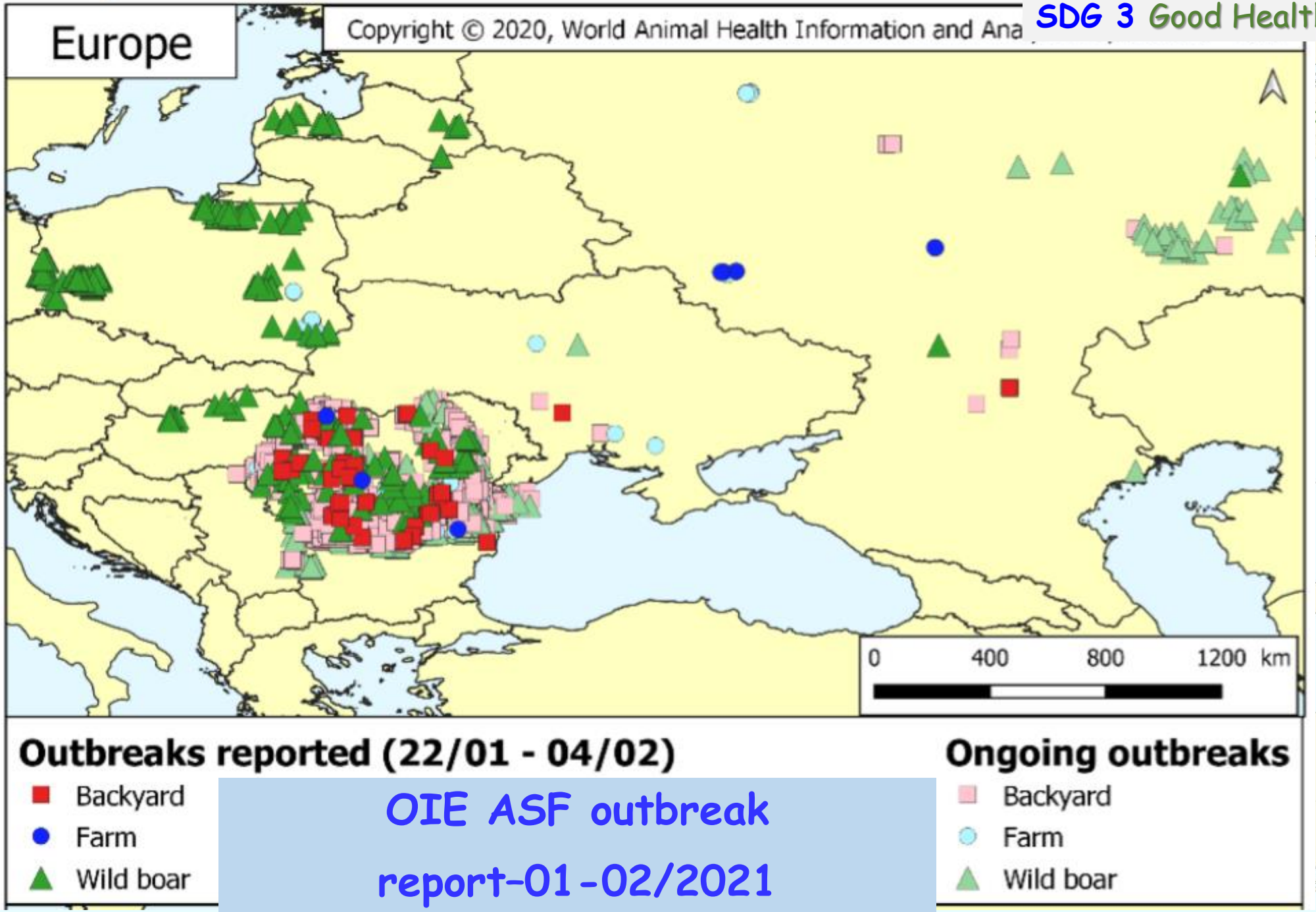
2nd case

fighting **A**frican **S**wine **F**ever (**ASF**)

- African swine fever (ASF) is a severe **viral disease** affecting domestic and (*uncontrolled*) wild pigs;
- this animal disease can be spread by live or dead pigs, domestic or wild, and pork products;
- transmission can also occur via contaminated feed and non-living objects due to the high environmental resistance of this virus.
- there is no approved vaccine against ASF
- responsible for serious production and economic losses;

PIG LINK : ASF OUTBREAKS

SDG 3 Good Health & WELFARE



OIE ASF outbreak

report–01-02/2021

ASF and Compartmentalisation concept

the **Key Point argument** is linked to differences in **concepts** and **practical implications** (implementation) between :

ZONING

a ZONE is part of a country defined by veterinary authorit containing an animal population with a specific health status (purposes of international trade or disease prevention)

COMPARTMENTALISATION

(*cf definitions* in **GUIDELINES**, ***p142***)

a COMPARTMENT is an animal-sub -population contained in one or more establishments, separated from other sub-populations by proactive biosecurity management systems and with a specific health status ...

ASF and Compartmentalisation

A successful application of the GUIDELINES can only be effective if partners (individual farmers, large breeding units) become responsible actors in biosafety guidelines implementation process and make efforts to reach a reciprocal recognised status by authorities in both partner countries.

This year, the process became effective allowing a new start for pork meat trade between countries with reciprocal ASF-free recognized Compartments (exchanges between: New Zealand and UK, several French production units and CHINA - some in CANADA and USA production units are under negociations).

cf article in OIE – PANORAMA 2020 n°1 :

« Role of swine interprofessional councils/organisations in efficient prevention and control of ASF, an exemple for on ground cooperative actions along Public-Private Partnership policy »

Exemple of on-farm actions against ASF by swine producers in implementation of zoning and compartimentation.

2nd link with Pig Production

SDG 13 CLIMATE ACTION

CLIMATE ACTION and WELL-BEING

(mostly for humans)

Livestock & Feeding regimen + Indirect GHG emissions (animals)

the concern. soja is used as main feeding component in pig breeding

according to the **EU Commission** (2019 report): 10% of **world deforestation** is linked to agricultural and forestry production and caused by EU consumption.

thus **deforestation embodied** in total consumption

(or «*imported deforestation*») is linked to:

soy palm-oil meat cocoa maize timber rubber **consumption**.

EU_{27} is consuming 10% of the global embodied deforestation

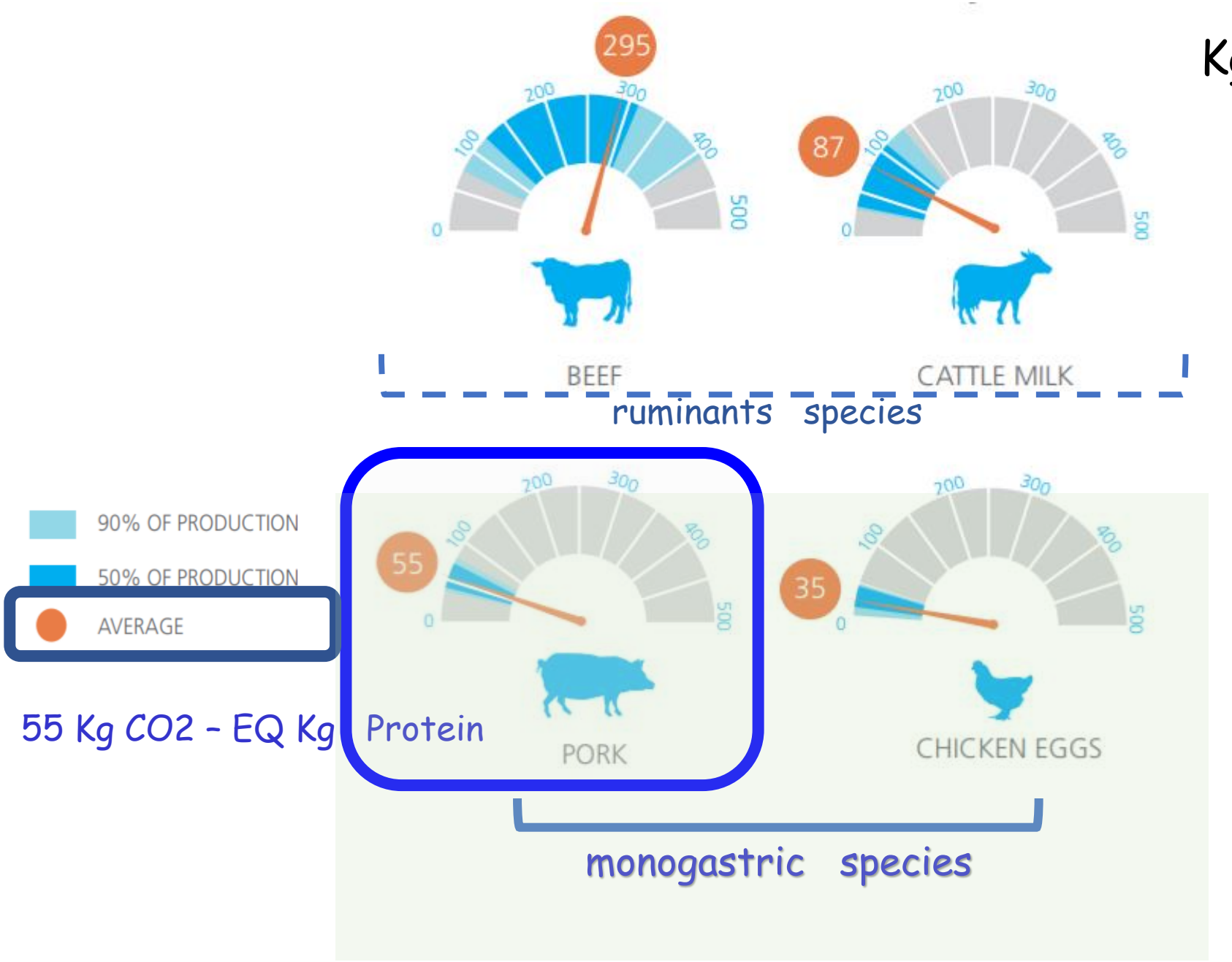
what is the share of responsibility of pork production ?

is it the same all over the planet ?

GLOBAL LIVESTOCK and GHG emissions

SDG 13 CLIMATE ACTION

Kg CO2 - EQ.KG

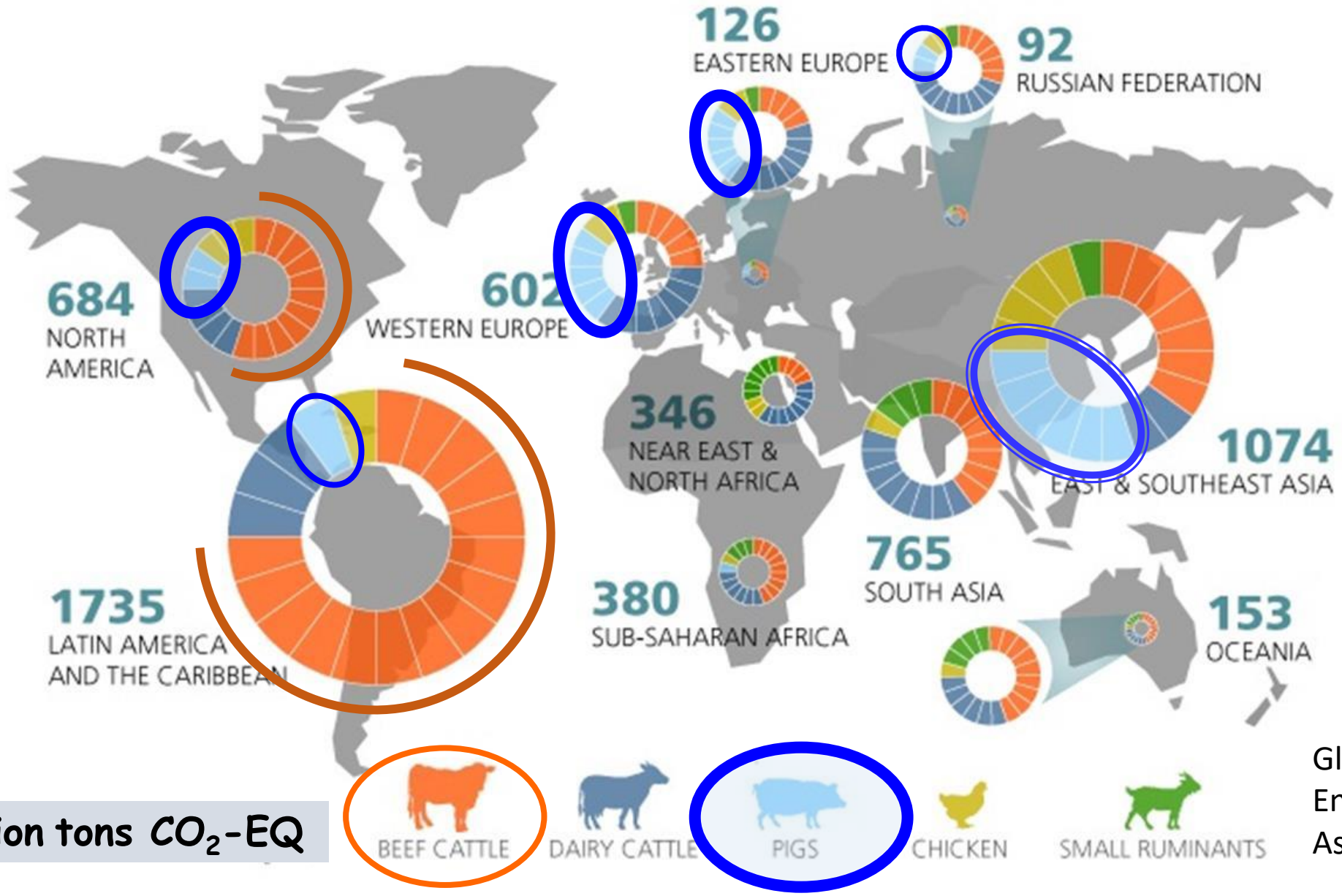


from **FAO** - Livestock Solutions for Climate change

GLEAM 2.0, **2010**
http://www.fao.org/gleam/results/en/

WHERE ? CO_2 emissions by livestock

SDG 13 CLIMATE ACTION



million tons CO_2-EQ

from FAO: Global Livestock Environmental Assessment Model (**GLEAM**) 2010

in many countries, **breeders make efforts to reduce the impact of cultures for animal feed on climate** :

- ➔ improving feed efficiency,
- ➔ reducing dependency to imported vegetal proteins (*like for soja*)
- ➔ progessive shifts towards protein crops (peas, feverfew, white lupin and local soya)

Thank you

for your attention