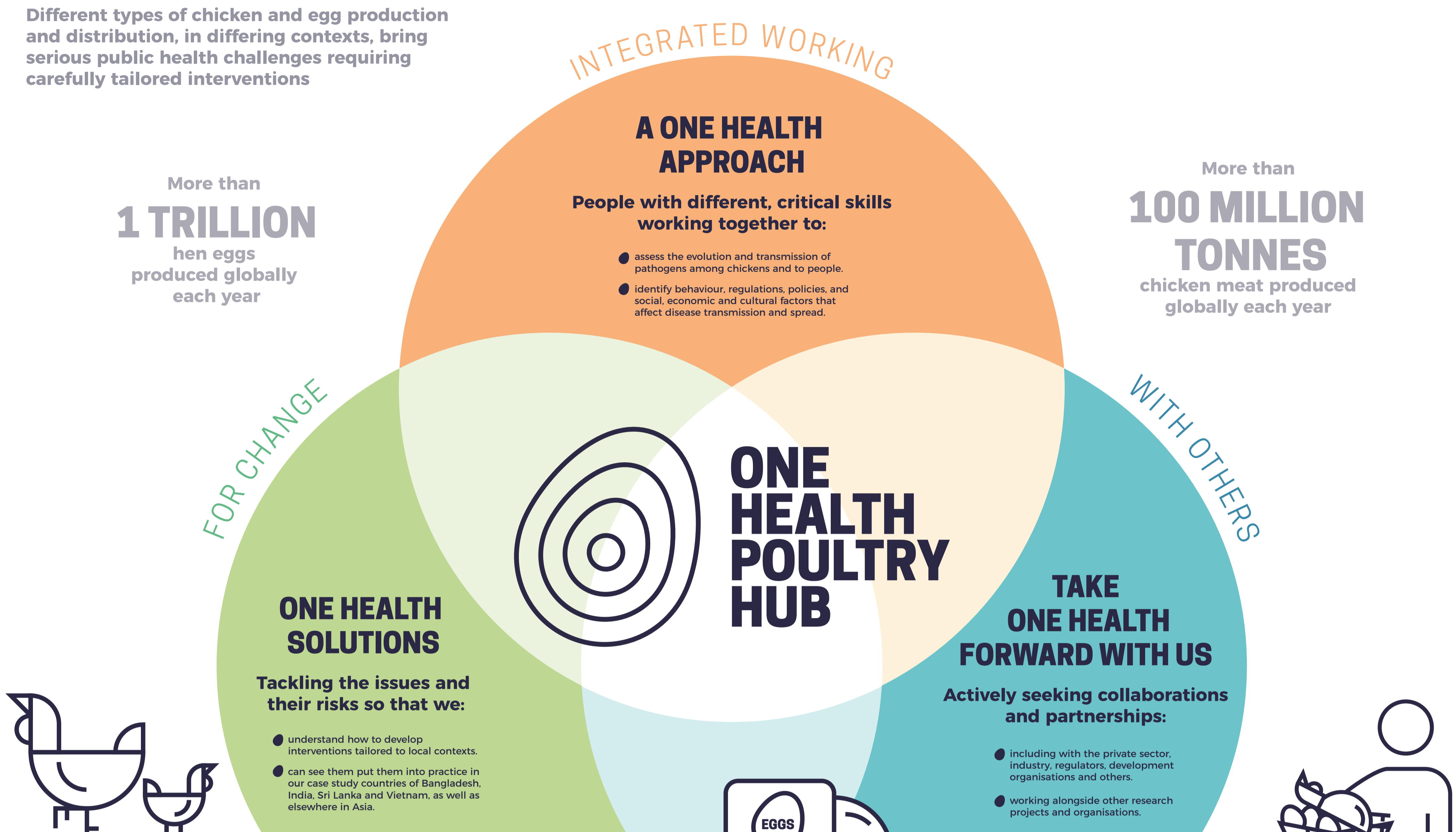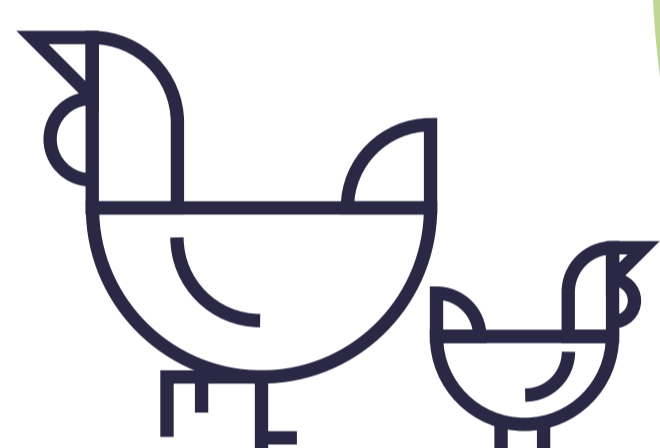# TOWARDS SAFER AND MORE SUSTAINABLE POULTRY PRODUCTION

Different types of chicken and egg production and distribution, in differing contexts, bring serious public health challenges requiring carefully tailored interventions

INTEGRATED WORKING

A ONE HEALTH APPROACH

People with different, critical skills working together to:

- assess the evolution and transmission of pathogens among chickens and to people.
- identify behaviour, regulations, policies, and social, economic and cultural factors that affect disease transmission and spread.

More than
1 TRILLION
hen eggs produced globally each year

More than
100 MILLION TONNES
chicken meat produced globally each year

FOR CHANGE

ONE HEALTH SOLUTIONS

Tackling the issues and their risks so that we:

- understand how to develop interventions tailored to local contexts.
- can see them put them into practice in our case study countries of Bangladesh, India, Sri Lanka and Vietnam, as well as elsewhere in Asia.

ONE HEALTH POULTRY HUB

WITH OTHERS

TAKE ONE HEALTH FORWARD WITH US

Actively seeking collaborations and partnerships:

- including with the private sector, industry, regulators, development organisations and others.
- working alongside other research projects and organisations.

PRODUCTION ···· **DISTRIBUTION** -- EGGS -- **CONSUMPTION** ——

48%
PREDICTED INCREASE IN WORLD CHICKEN PRODUCTION 2017-2050

71%
FRACTION OF PRODUCTION GROWTH EXPECTED FROM ASIA

WE ARE CURRENTLY WORKING IN BANGLADESH, INDIA, SRI LANKA AND VIETNAM

FOUR-FOLD EGG PRODUCTION INCREASE IN ASIA OVER PAST 30 YEARS

RISK FACTORS:
Complex farm-to-plate chains
Poorly regulated antibiotic use
Low biosecurity
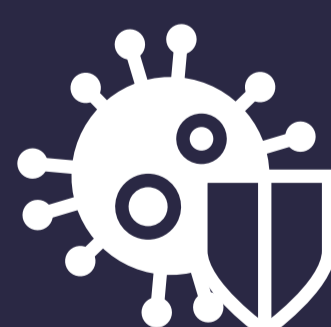**Behaviours**

BACTERIAL FOOD POISONING

Bacteria from chickens and chicken products easily transmit to people. Everybody in the food supply chain is vulnerable, from farmers to traders to consumers – even when on the other side of the world. Foodborne disease places a burden on healthcare systems, harms trade and hinders development.

Salmonella and *Campylobacter*
TWO KEY CAUSES OF DIARRHOEAL DISEASES
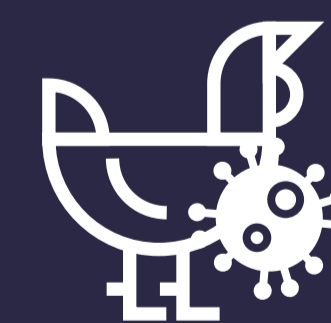both carried by chicken and chicken products

ANTIMICROBIAL RESISTANCE
(AMR)

The causes of antimicrobial resistance are complex. A significant proportion is thought to stem from inappropriate antimicrobial drug use in animal production for food. AMR is a threat to people's health everywhere.

10 MILLION DEATHS
from AMR expected annually by 2050

UNLESS URGENT ACTION IS TAKEN

AVIAN INFLUENZA

Avian influenza ('bird flu') viruses circulate naturally among wild aquatic birds. When they affect farmed chickens they can cause major production losses, with severe impacts for farmers' livelihoods and national economies. Avian influenza viruses can also mutate and evolve rapidly, potentially into new, pandemic human strains.

63 COUNTRIES
in Asia, Europe, Africa and the Middle East affected by the highly pathogenic avian influenza virus (H5N1) since 2003