



Food and Agriculture  
Organization of the  
United Nations

SUSTAINABLE  
DEVELOPMENT  
GOALS

WHO Seminar Series on “tackling rural health inequities” | 29 Nov 2021

# One Health and poverty reduction

## *A livestock perspective*



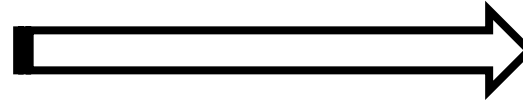
Ugo Pica-Ciamarra, FAO



## One Health and Poverty: broad linkages

### One Health approach

multiple sectors (individuals /  
communities / organizations)  
work together to achieve  
better public health outcomes



- *Zoonotic diseases* /  
- *NTDs* / + *food safety*  
/ - *AMR*

### Poverty

individual / community  
phenomenon (small income /  
poor education / short life  
expectancy / poor health / etc.)



## One Health and Poverty: (a poor) livestock keeper's perspective

### Poverty

individual / community  
phenomenon (small income /  
poor education / short life  
expectancy / poor health / etc.)

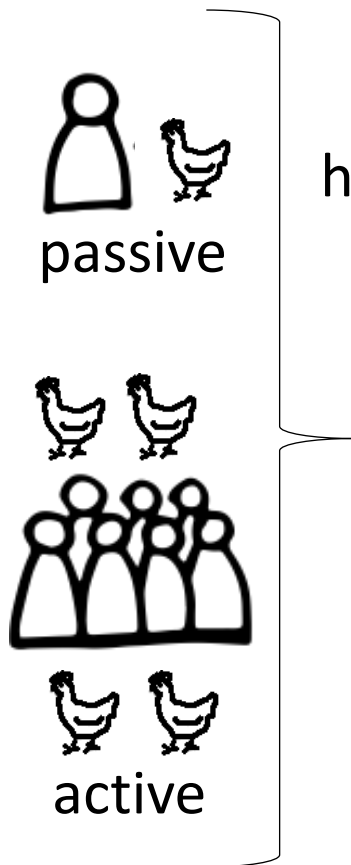


**“PASSIVE”** livestock keeper, who  
**does not contribute to One Health**  
with his/her actions

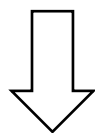


**“ACTIVE”** livestock keeper, who  
**does contribute to One Health**  
with his/her actions

## Livestock keeping households

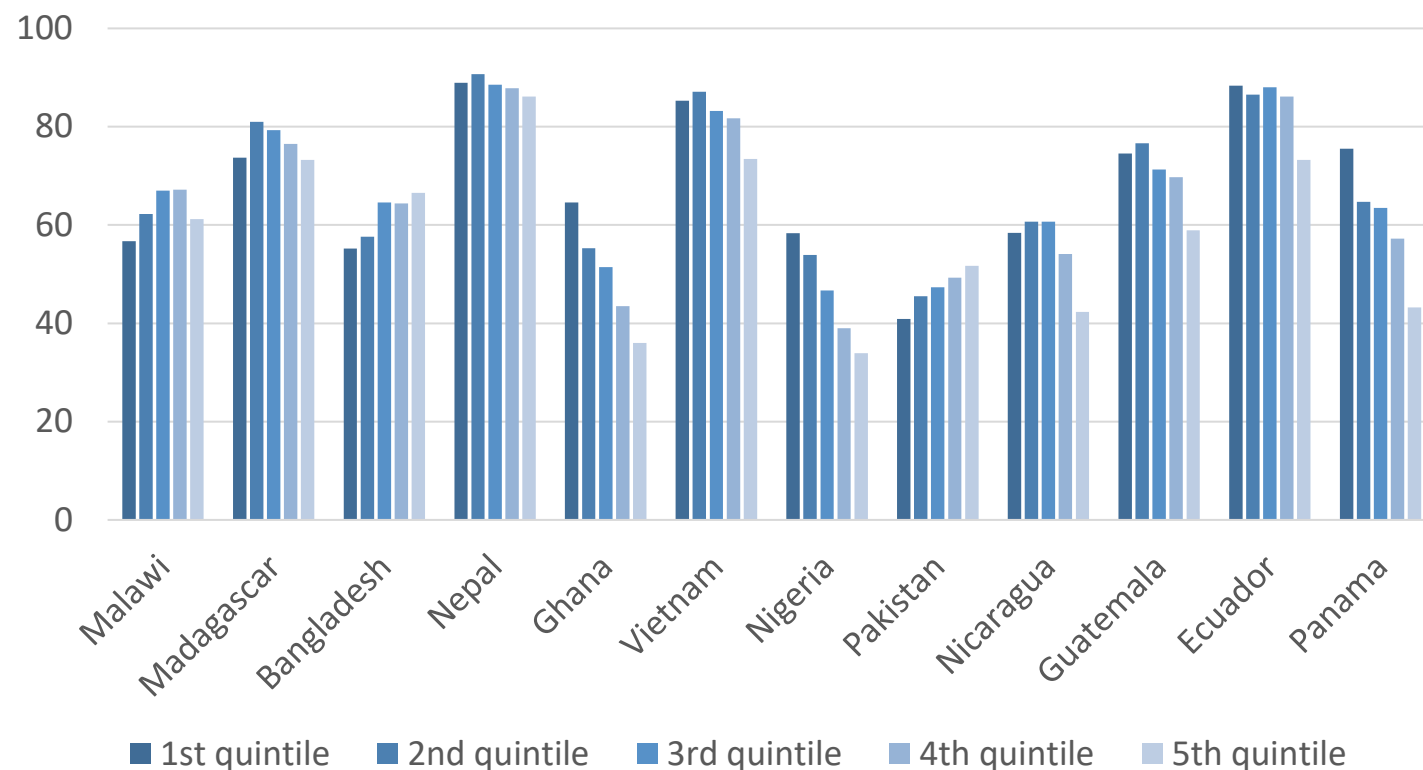


A large share of rural households keep livestock



About 68% of the poorest households keep some farm animal vis-a-vis 58-65% of the better off

% of rural households keeping livestock by expenditure quintile

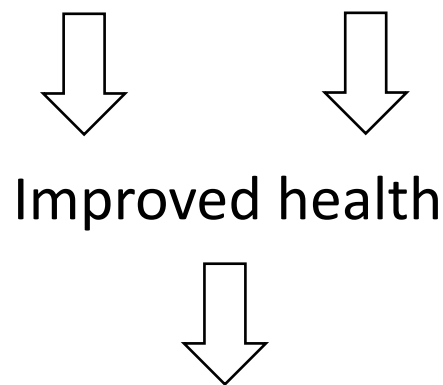


# One Health and the 'PASSIVE' livestock keeper



NO  
One  
Health  
actions

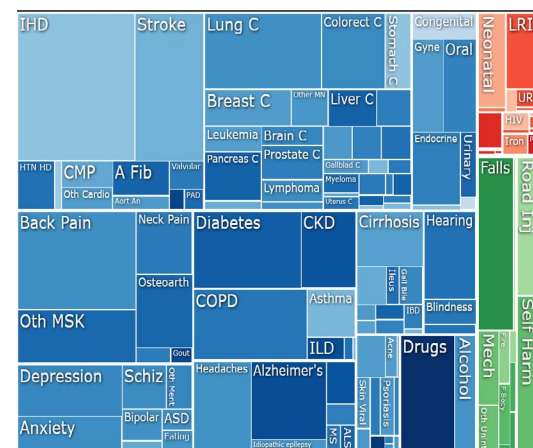
- Reduced risk of zoonotic diseases
- Reduced risk of NTDs
- Reduced risk of AMR
- Increased access to safe food



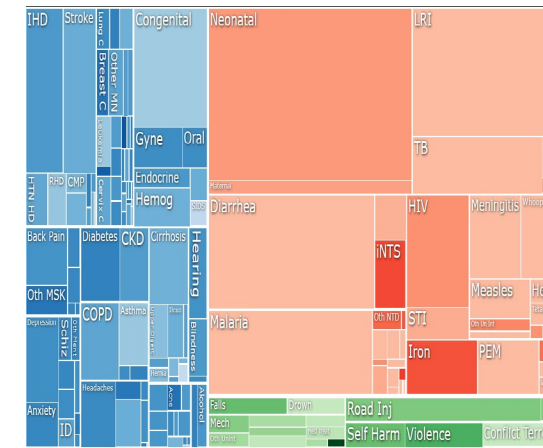
Break the disease-driven poverty trap

DALYs by cause (%)

High-income countries



Low-income countries



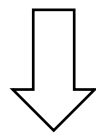
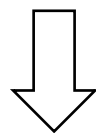
- Infectious, maternal, neonatal and nutritional diseases
- Non communicable diseases
- Injuries

# One Health and the ‘PASSIVE’ livestock keeper

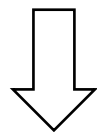


NO  
One  
Health  
actions

- Reduced risk of zoonotic diseases
- Reduced risk of NTDs
- Reduced risk of AMR
- Increased access to safe food



Improved health



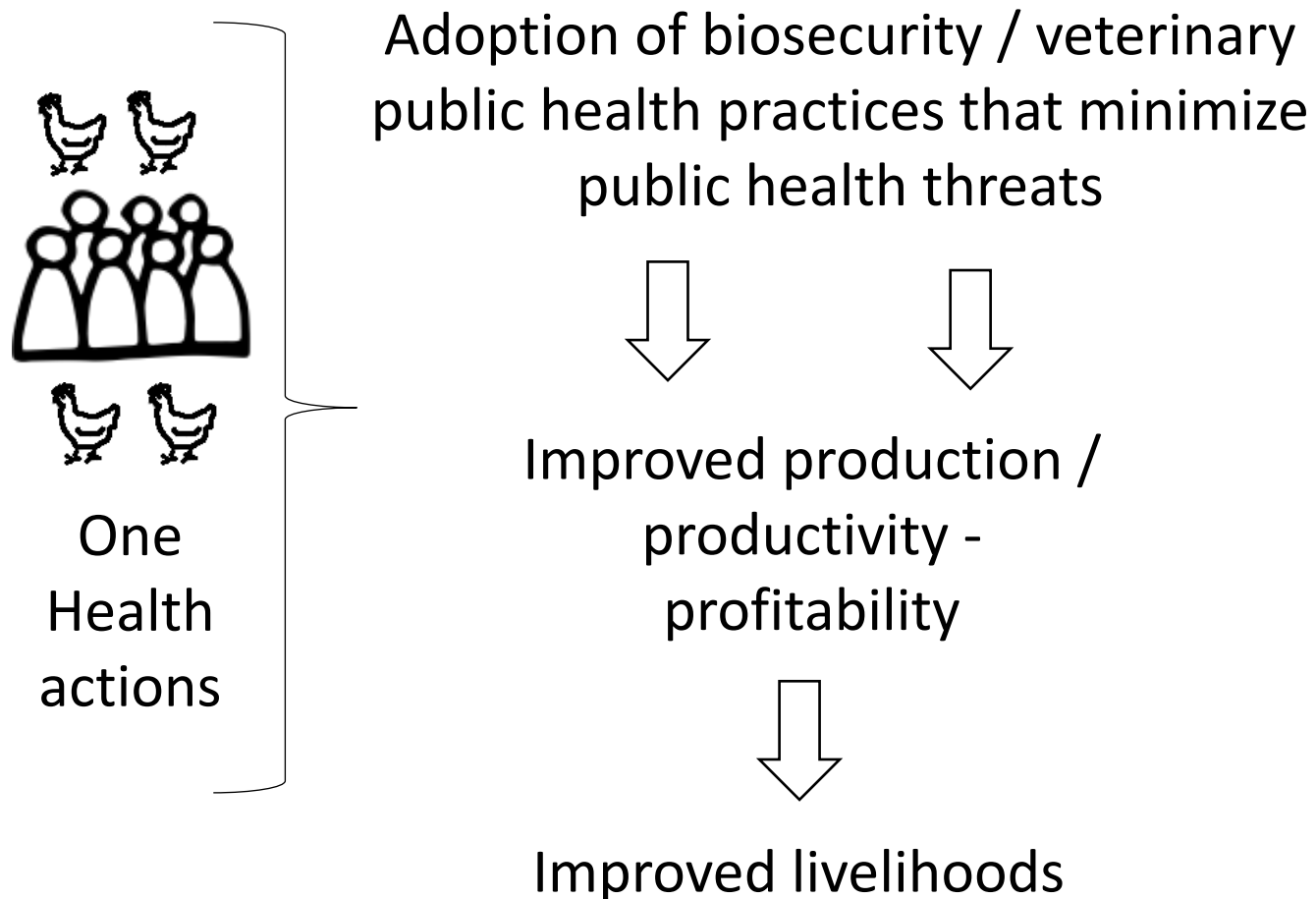
Poverty reduced

Up to what extent we can  
“measure” the causality  
between the One Health  
approach and poverty  
reduction?



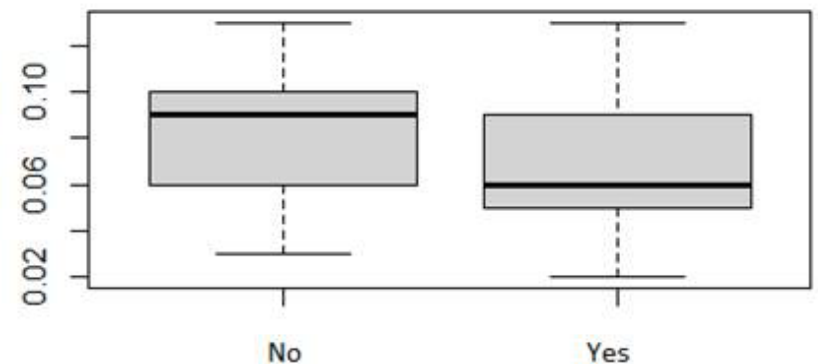


## One Health and the 'ACTIVE' livestock keeper



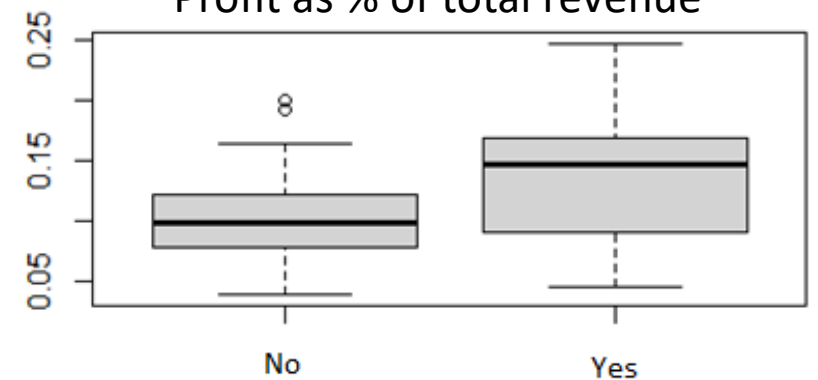
### Egypt, broiler producers

#### Bird mortality rate (%)



Adopters of selected biosecurity measures

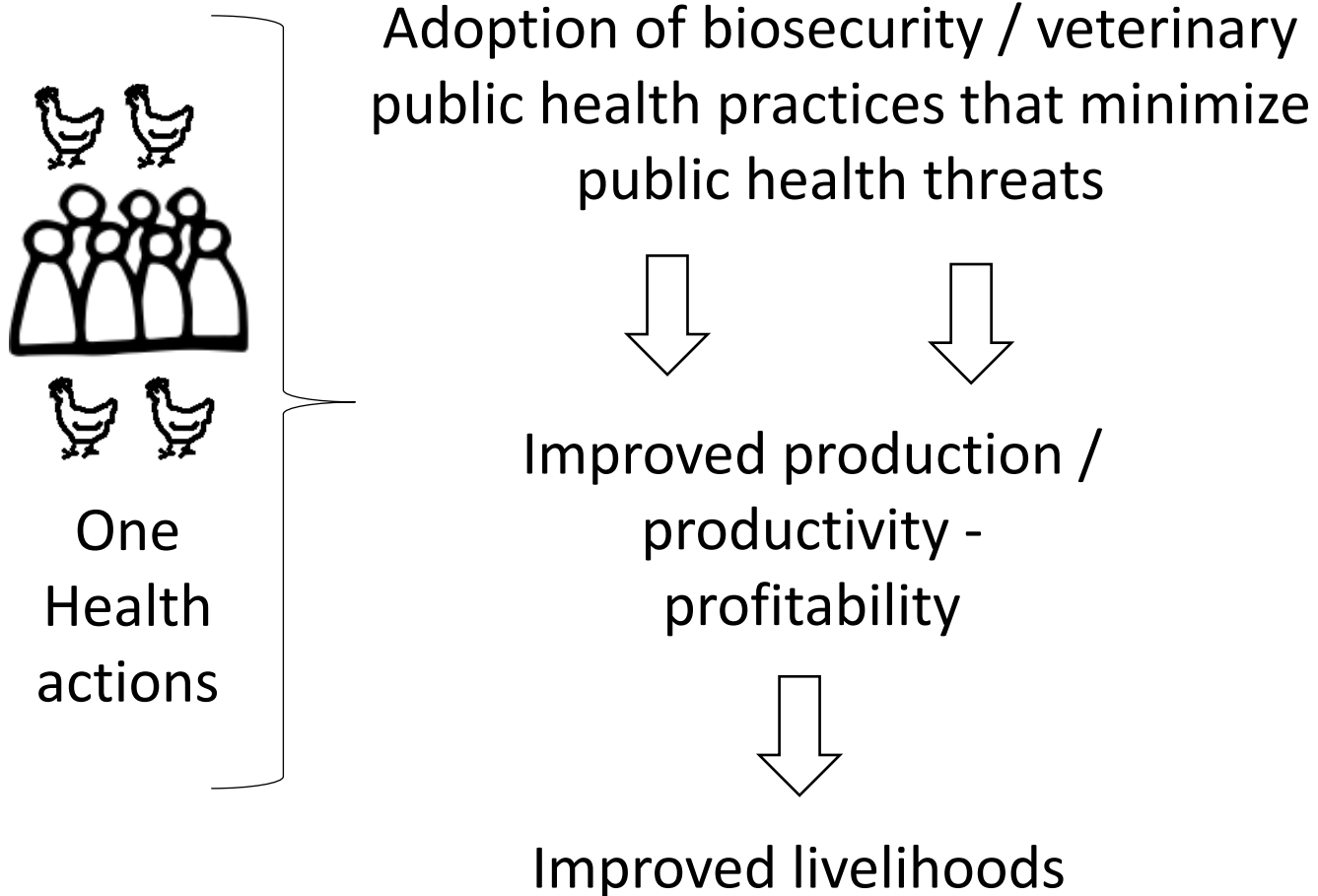
#### Profit as % of total revenue



Adopters of selected biosecurity measures



## One Health and the ‘ACTIVE’ livestock keeper



Can we effectively demonstrate that “active” livestock keepers are better-off than passive livestock keepers?

POSITIVE IMPACTS		NEGATIVE IMPACTS	
	unit of analysis		unit of analysis
Added returns		Added Costs	
Item 1	\$XXXX	Item 1	\$XXXX
Item 2	\$XXXX	Item 2	\$XXXX
Item 3	\$XXXX	Item 3	\$XXXX
Item 4	\$XXXX	Item 4	\$XXXX
Total added returns:	\$XXXX	Total added costs:	\$XXXX
Reduced costs		Reduced returns	
Item 1	\$XXXX	Item 1	\$XXXX
Item 2	\$XXXX	Item 2	\$XXXX
Item 3	\$XXXX	Item 3	\$XXXX
Item 4	\$XXXX	Item 4	\$XXXX
Total Reduced Costs:	\$XXXX	Total Reduced Returns:	\$XXXX
TOTAL POSITIVE IMPACTS	\$XXXX	TOTAL NEGATIVE IMPACTS	\$XXXX

Typical budget enterprise does not explicitly include “One Health-related expenditures





## Summary and conclusion

Indirect and direct linkages between One Health and poverty reduction from a livestock perspective

1. Improved health: breaking the disease-driven poverty trap among livestock keepers
2. Improved adoption of biosecurity / veterinary public health practices among livestock keepers: + productivity / + livelihoods

### Recommendation:

Make livestock keepers active players in One Health implementation

- Systematic data gathering on cost and revenue associated with adoption of “One Health” practices by livestock farmers
- Formulate and implement policies that make adoption of “One Health” practices cost-effective from a business perspective



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# Thank you



*Protecting people, animals, and the environment every day*