

# Behavioral obstacles to vaccinations in livestock— examples from sub-Saharan Africa

Michel Dione Animal Health Scientist Animal and Human Health Program

Uppsala health Summit Webinar, Uppsala 15-18 March 2021











## Roles of livestock









**ENVIRONMENT** 





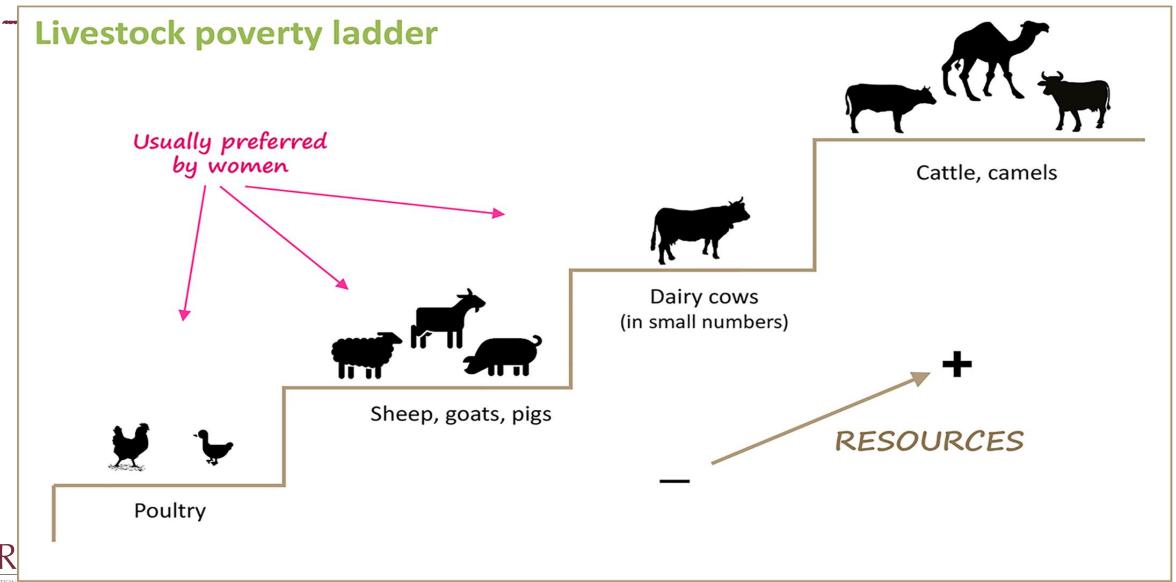




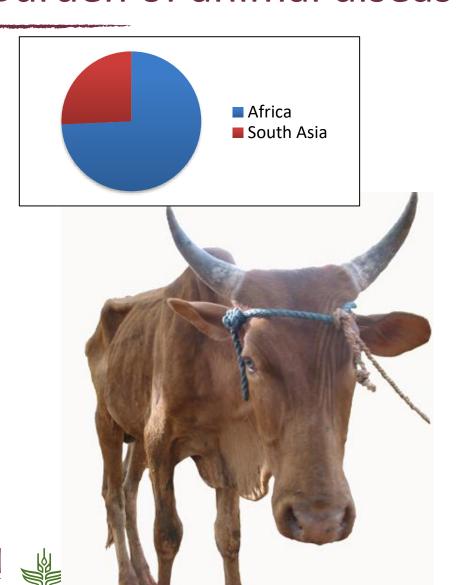




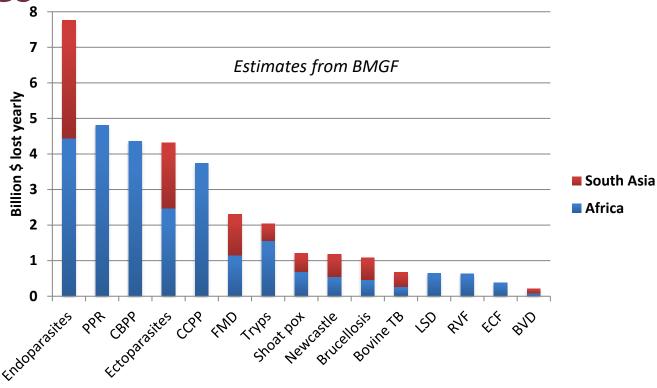
# The livestock poverty ladder



#### Burden of animal diseases



**CGIAR** 



#### **Annual mortality of African livestock**

	Young	Adult
Cattle	22%	6%
Shoat	28%	11%
Poultry	70%	30%

Source: Otte & Chilonda; IAEA



Access to veterinary inputs (ex. drugs and vaccines)

Most of the livestock keepers have small scale enterprises

 These people are poor and, in many situations, have poor access to veterinary services and veterinary technologies

 The inadequate distribution of animal health systems is a market failure which needs societal intervention

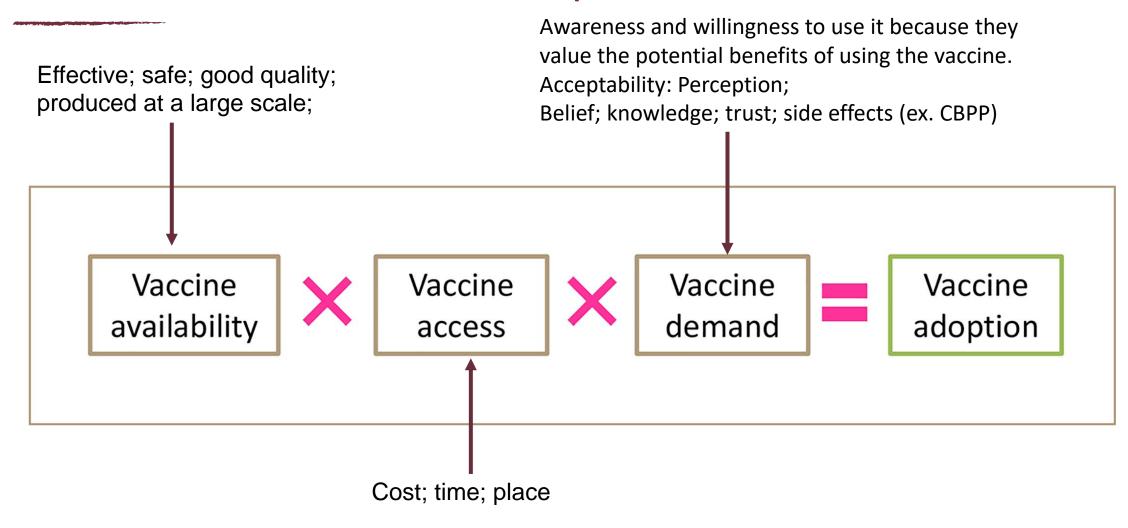








## Determinants of vaccine adoption









Understanding the importance of people

#### The People

their decisions and trade offs how do we align the decision

#### Livestock owners

Why is this important for disease management and build back better?

- Low input production system
- Limited political power
- Often a woman (for small livestock)









# Behavioral challenges to vaccination

#### Awareness and knowledge

 Willingness to vaccinate study in Mali (304 cattle and small ruminant farmers interviewed)

#### **✓** Positive factors

- Information on the campaign calendar (faster if from places of worship)
- Awareness of the benefits of vaccination.
- A recognition of the vital importance of vaccines
- Farmer able to recognize a vaccine of good quality





## Behavioral challenges to vaccination

#### Awareness and knowledge (Cont.)

Willingness to vaccinate (Mali- n = 304 cattle and SR farmers), 89% of respondents vaccinated their herds during official vaccination campaigns.

# ✓ Negative factors

- Ignorance of roles of vaccination
- Concerns about vaccine side-effects.





## Behavioral challenges to vaccination

#### **Beliefs and perceptions**

"Before livestock keeping provided social status, it was necessary to have as many heads as possible but was not profitable. The tendency was to buy more heads, without even worrying about the health of the animals, ttoday it is no longer important to have so much, it is no longer the quantity that counts, but the quality."



(Farmer in Farakala, Sikasso, Mali)





#### The gender dimension in livestock keeping

#### Division of roles

- ✓ In mixed crop-livestock systems of Ethiopia, women are dominant in livestock management and husbandry practices compared to men and other household members
- ✓ Men tend to have a larger role in activities related to animal health.
- Decision making
- Livestock ownership



# **Communication and transparency**

"We cannot declare the number of livestock we own because the government will impose taxation on us and we don't know where the money go" (Farmer, Sikasso, Mali).

"Why should we pay the same price to vaccine shoats and cattle?" (Farmer, Mopti, Mali).







#### **Trust between parties**

"Veterinarians have lost credibility and their service is no more respected by the farmers; the vets have no authority nowadays, compared to before privatization of the veterinary profession" (Farmer in Mopti, Mali)









#### **Policy enforcement**

"If the animal keeper is intimidated or threaten by the vaccination controller of the area, then he/she can comply with vaccination easily" (Veterinarian, Sikasso, Mali).







#### Perception of disease risk and their impact

What is important to the farmer?

Which disease is a priority to the farmer?

How is the disease affecting livelihood



Value of small ruminant versus cattle

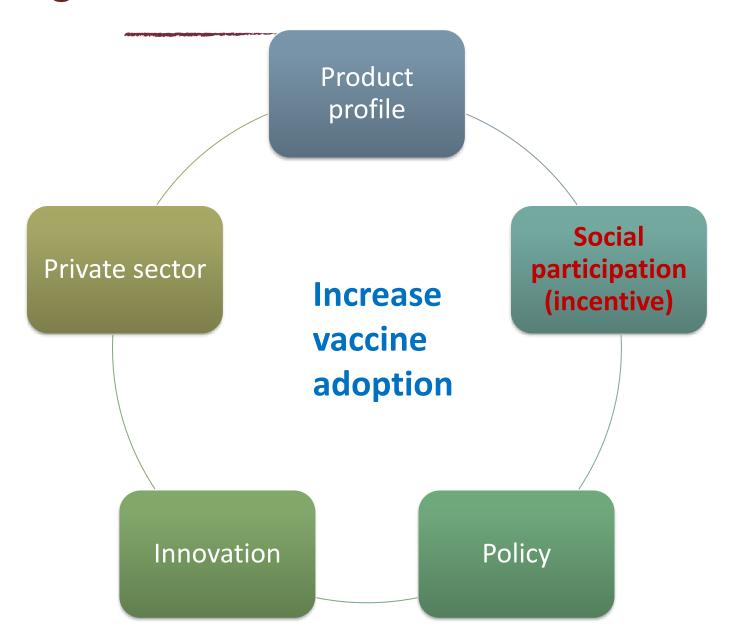








# Final thoughts













The International Livestock Research Institute (ILRI) is a non-profit institution helping people in low- and middle-income countries to improve their lives, livelihoods and lands through the animals that remain the backbone of small-scale agriculture and enterprise across the developing world. ILRI belongs to CGIAR, a global research-for-development partnership working for a food-secure future. ILRI's funders, through the <u>CGIAR Trust Fund</u>, and its many partners make ILRI's work possible and its mission a reality. Australian animal scientist and Nobel Laureate Peter Doherty serves as ILRI's patron. You are free to use and share this material under the Creative Commons Attribution 4.0 International Licence © ①.

better lives through livestock

ilri.org