



LD4D
LIVESTOCK
DATA FOR
DECISIONS

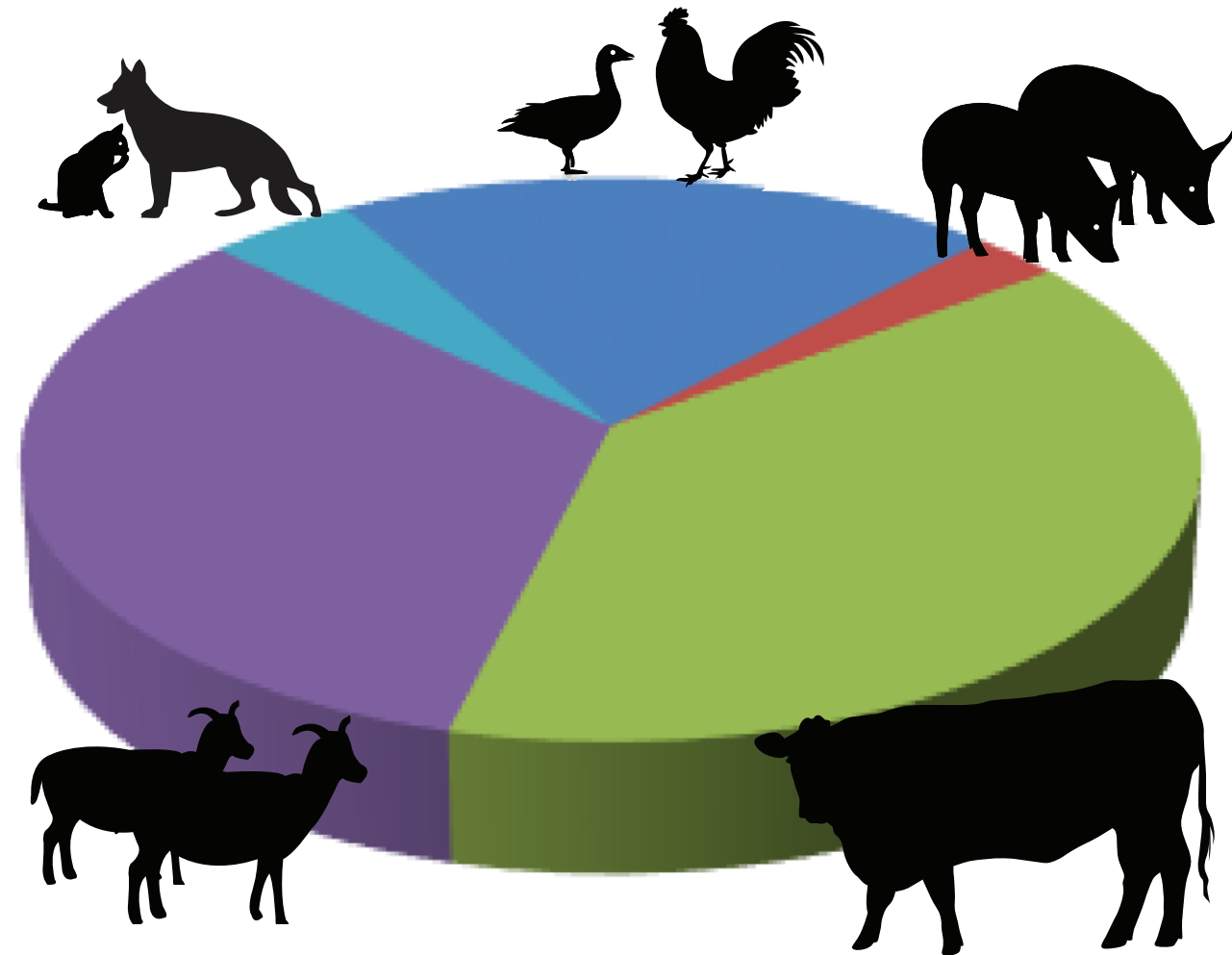
Developing a Model to estimate the AH Market

Rome – February 04, 2020

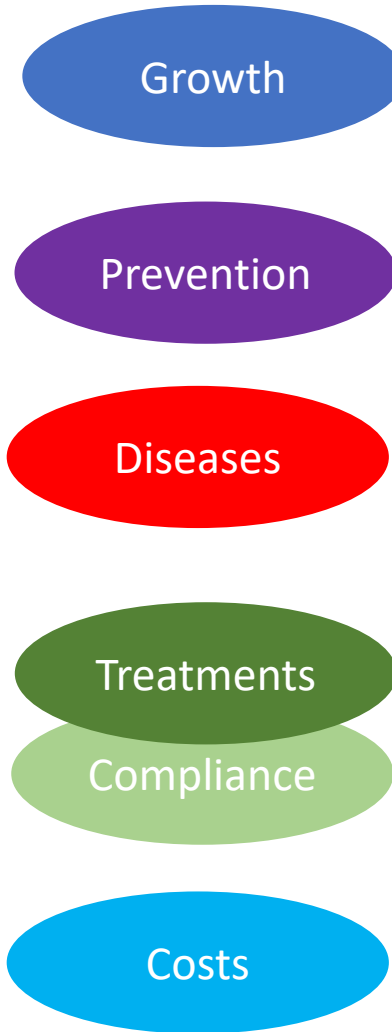
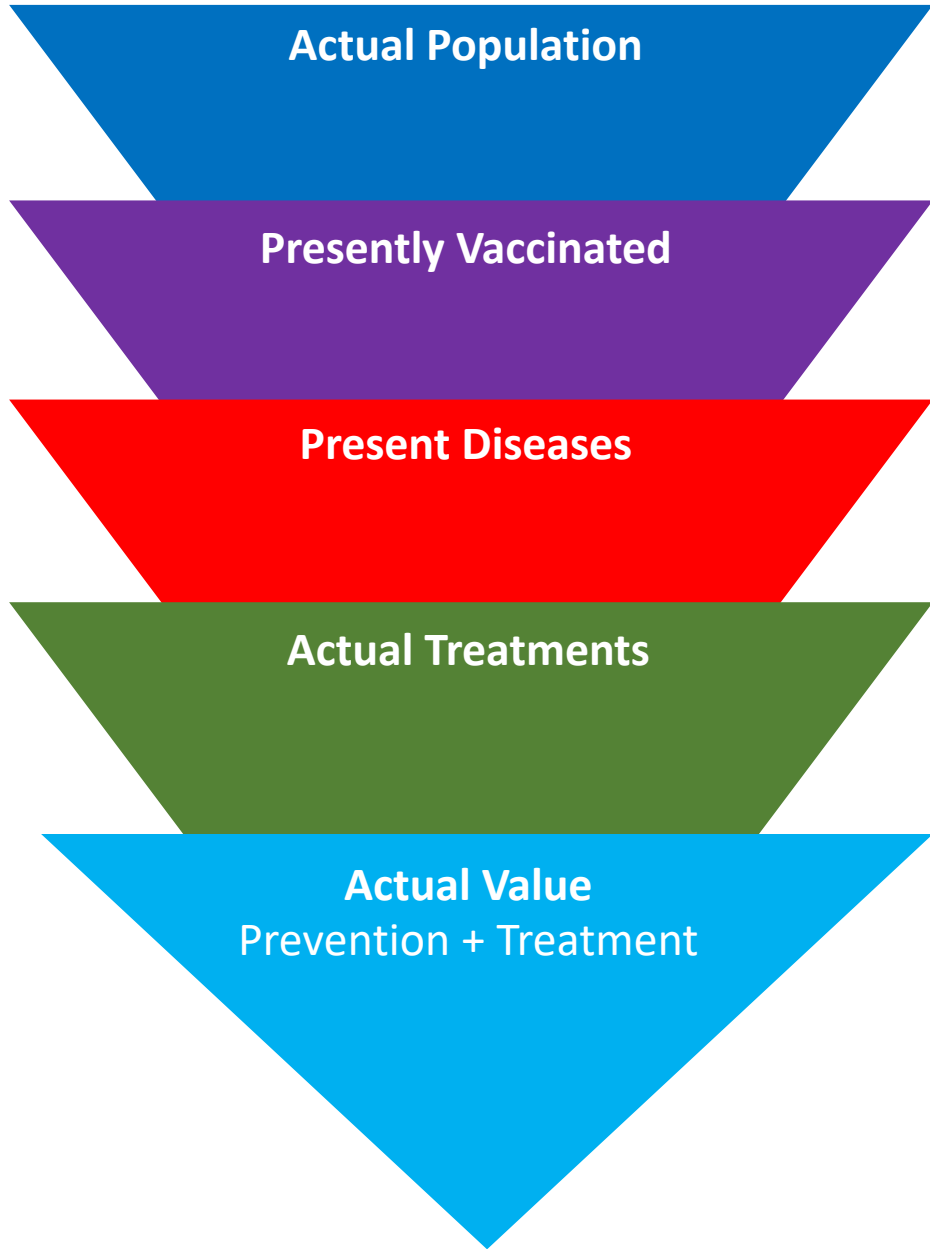


THE UNIVERSITY of EDINBURGH
Royal (Dick) School of
Veterinary Studies

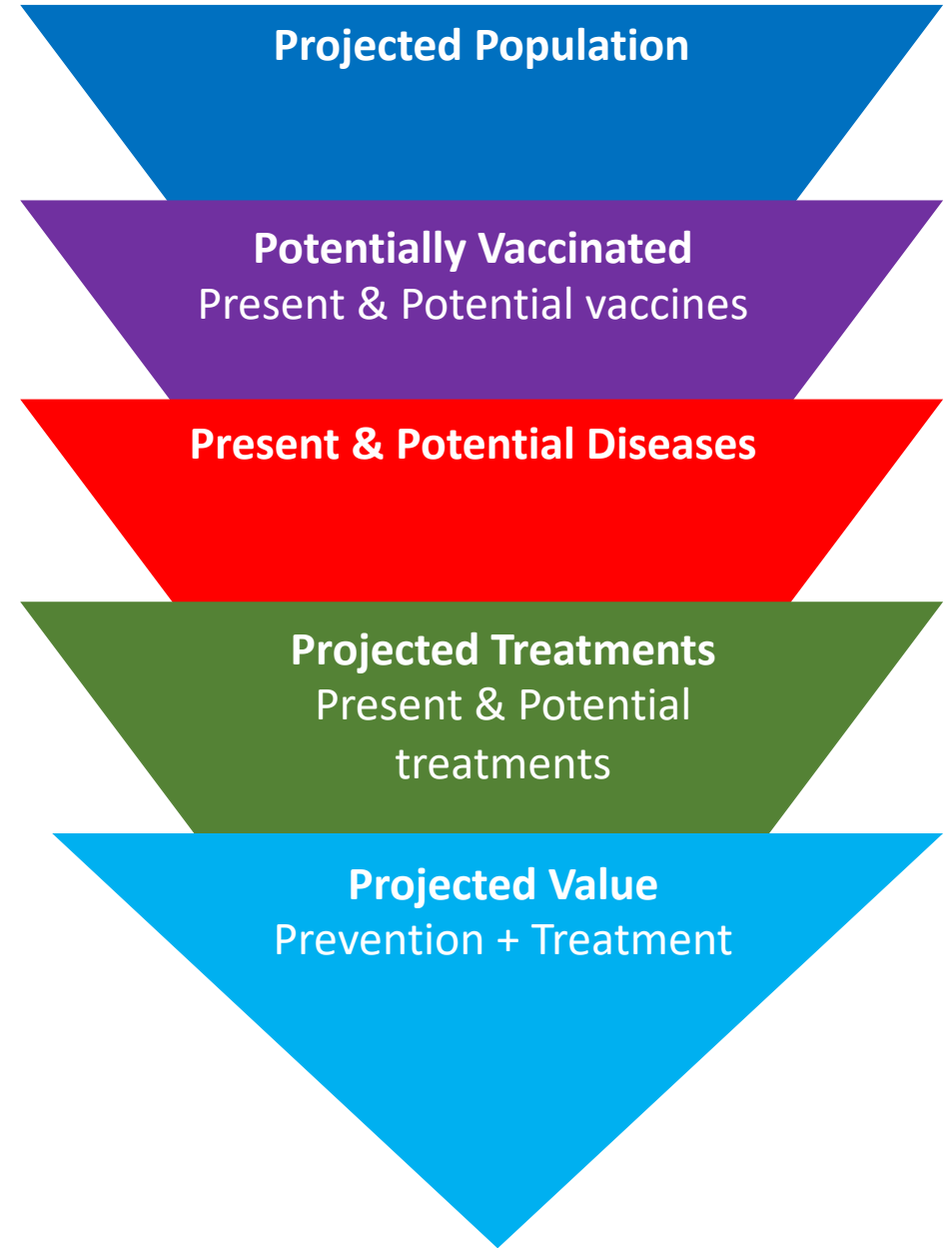
Supporting
Evidence-based
Interventions

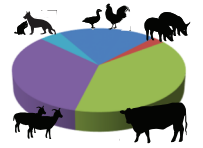


ESTIMATED ACTUAL MARKET



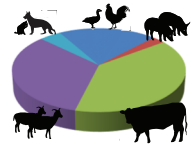
PROJECTED MARKET





Goals

- To define for each specie a model to estimate
 - The Actual AH Market size (and hence its potential size)
 - To focus on the most relevant diseases/conditions affecting the specie
 - To use the AH Products available in the country to control / prevent them
 - To include products available elsewhere & future products in the pipeline
 - To take into account in each country the different production schemes
- Each model shall be applicable at least to ET, TZ, NG
& ideally to any Emerging Market lacking official AH data.
- To populate each model by country with best available data.



Production schemes & Species

Aim is to minimize as much as possible the number of **animals types** to be considered per production scheme, while reflecting the reality, to keep the model relevant.

Pastoral

Sedentary

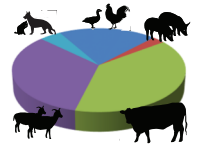
Urban
Peri-Urban

Small Holder
Farmers

Mixed Crop
Livestock Producers

Intensive/commercial
Producers

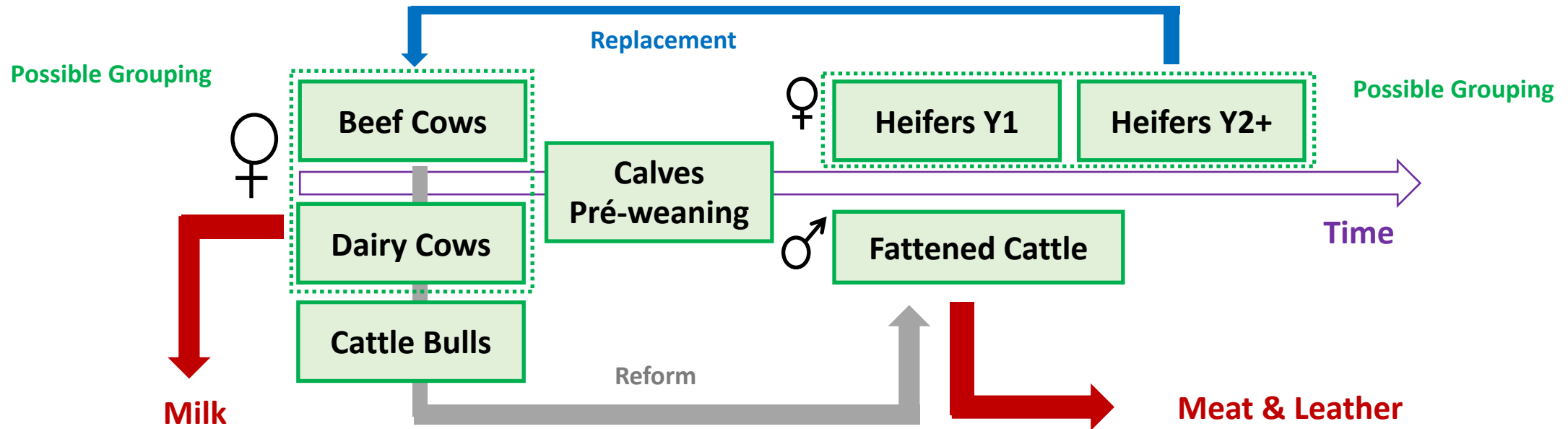
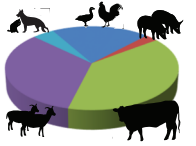
Cattle & Water Buffaloes	Dual	Dual, Dairy	Dual	Dairy / Beef
Sheep	Dual	Dual	Dual	Dairy / Meat
Goats	Dual	Dual	Dual	Dairy / Meat
Swine		Meat	Meat	Meat
Chicken		Dual	Dual	Breeders, Broilers, Layers
Horses & Donkeys	Dual	Dual	Dual	Dual, Sport
Camels	Dual	Dual	Dual	Dual, Dairy, Sport
Dogs	Guard	Companion	Companion	Companion
Cats		Companion	Companion	Companion



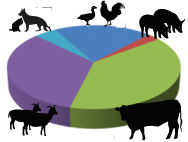
Segmentation of food animal species : a Must

- Animal Population is a picture taken at the time of the census
- It does not reflect the number of animals produced according to production cycle
 - life cycle in different species varies greatly : Cattle in Years, Broiler in Weeks
 - Within the same specie segments have a very different life span
- Individuals will be subjected to different health risks during their life
- To estimate the value of the market you need to assess **the total number of animals produced** during a given time period.
- In each food animal specie we estimate by segment the number of animals produced during a given time period (= 1 Year).

A simple segmentation of Cattle



A simple segmentation of Poultry



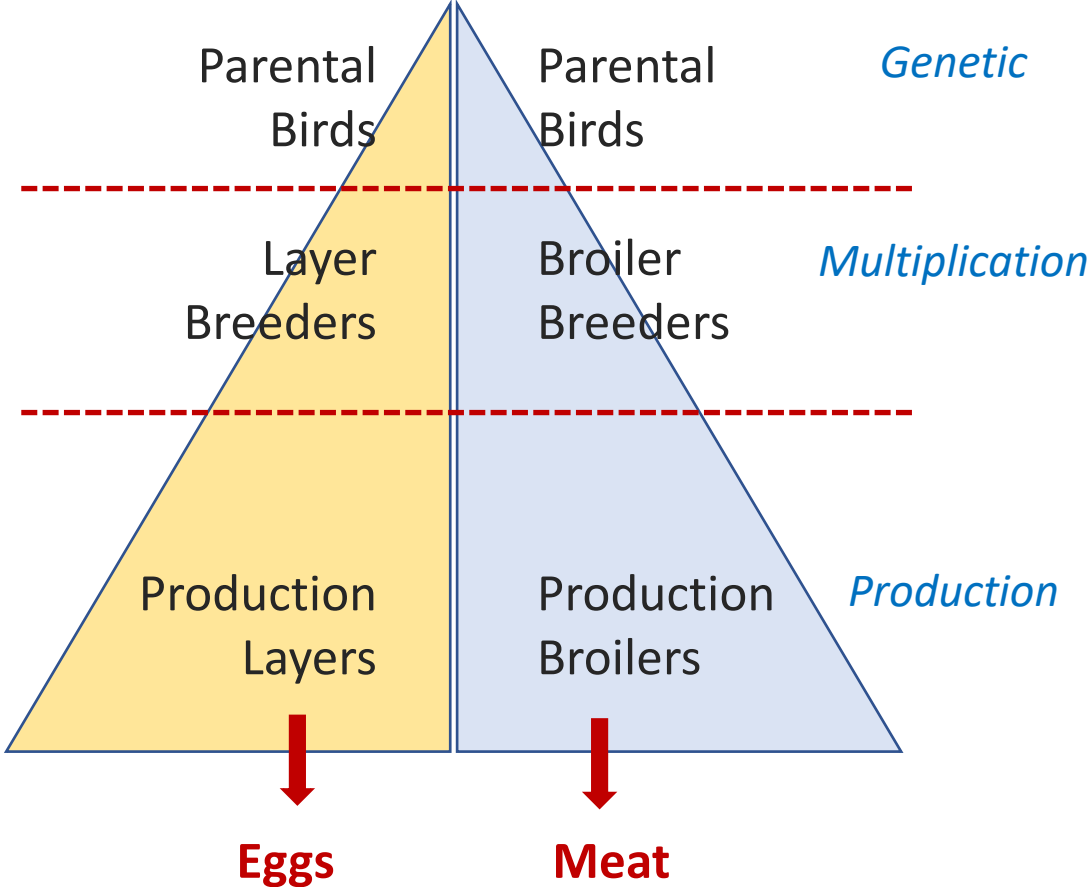
Layer Breeders in Rearing

Layer Breeders in Production

Layer Pullets in Rearing

Layers in Production

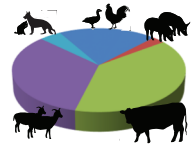
Dual purpose birds considered as layers



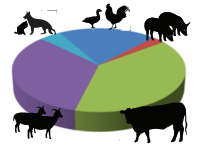
Broiler Breeders in Rearing

Broiler Breeders in Production

Broilers

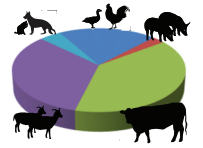


Diseases & Conditions

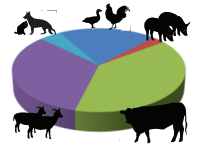


Which Diseases & Conditions to consider ?

- Diseases & Conditions encountered covering > 90% of the cases requiring the use of AH products for treatment or prevention,
- Diseases having a major economical impact
- Zoonotic Diseases because of potential impact on Human Health,
- Emerging Diseases with a trend representing a significant threat
- Time Frame to be considered : 10 years
- Key point is to get an reasonable picture of the market size in order to be able to rank the segments and prioritize the opportunities
- Consistency is the most important...



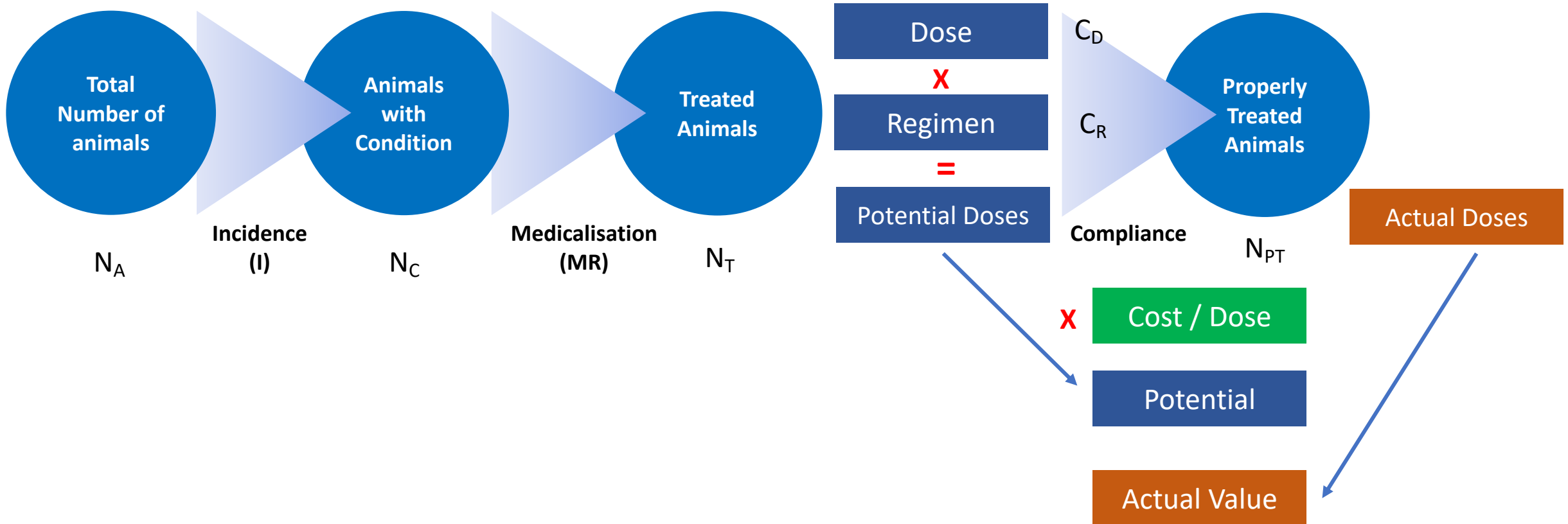
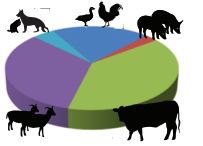
Market Valuation



Which Treatments to consider ?

- For each disease :
 - Using the reference treatment (Max two products, i.e Antibio + NSAID)
 - Using the common name of the active ingredient (neutrality)
 - In its most common formulation & strength available in the market
 - Used at the officially approved/recommended dose & regimen
 - Actual Compliance Rate to be used to estimate actual market value
 - 100% Compliance Rate to be used to estimate potential market value
- Valuation of products
 - Using product local purchase cost in LC (paid by the animal owner)
 - Price collected in LC and converted to USD @ Actual ROE to allow aggregation

Market valuation by Segment



At which Price level to value the Dose ?



Distributor Market

Market with Direct Presence

