



# INTEGRATED RISK-BASED STRATEGIC PLANS FOR FIVE PRIORITY DISEASES IN THE PALESTINIAN AUTHORITY

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## Acknowledgements

- FAO West Bank and Gaza Strip
  - Khawla Alnjoum, Ludovic Plee, Coen VanKessel
- Palestine Veterinary Services





# Global FMD strategy

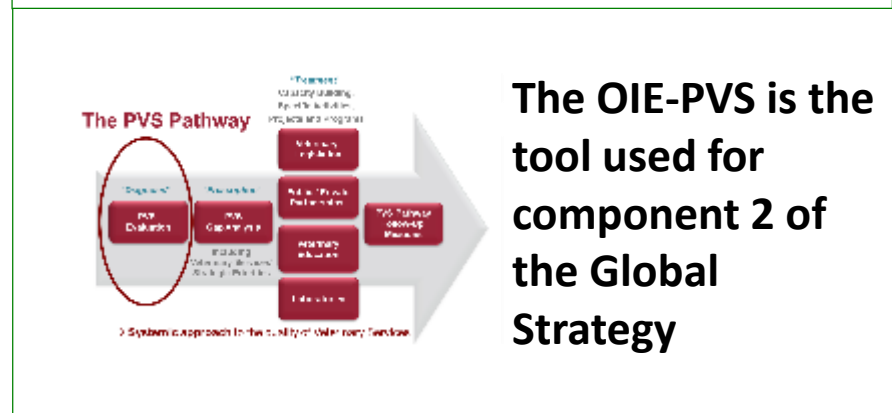
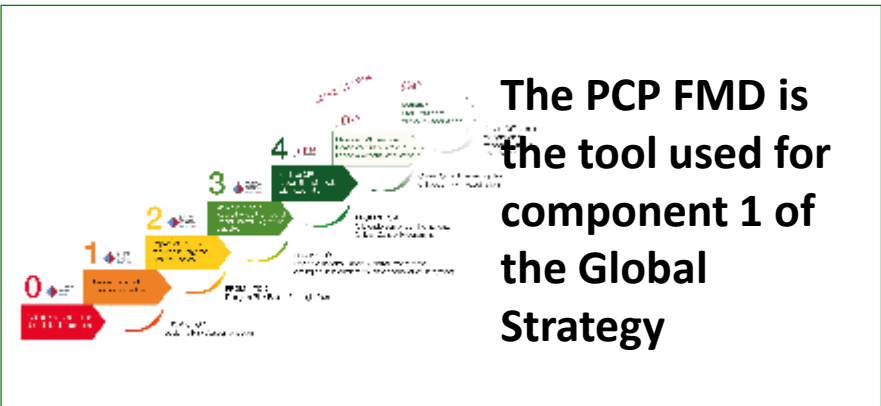
In 2012, FAO and OIE jointly presented the Global Strategy for FMD control.

The specific objective of the global strategy is to improve FMD and transboundary animal disease control in endemic regions.

The Global Strategy recognised that eradication of FMD is not immediately foreseen in many of these countries.

The global strategy has three components:

- 1) Control of FMD
- 2) Strengthening of veterinary services
- 3) Control of other infectious diseases simultaneously with the control of FMD



# I. Background

- Livestock considered part of Palestinian culture and heritage (Livestock Sector Strategy 2015-2019)
- PAT: Significant TADs and zoonoses include FMD, PPR, LSD, brucellosis and scrapie
- 2014-2016: Palestinian Vet Services developed a risk-based strategic plan (RBSP) for FMD control with support from EuFMD and FAO
- 2015: FAO project to apply RBSP approach to multiple zoonotic diseases





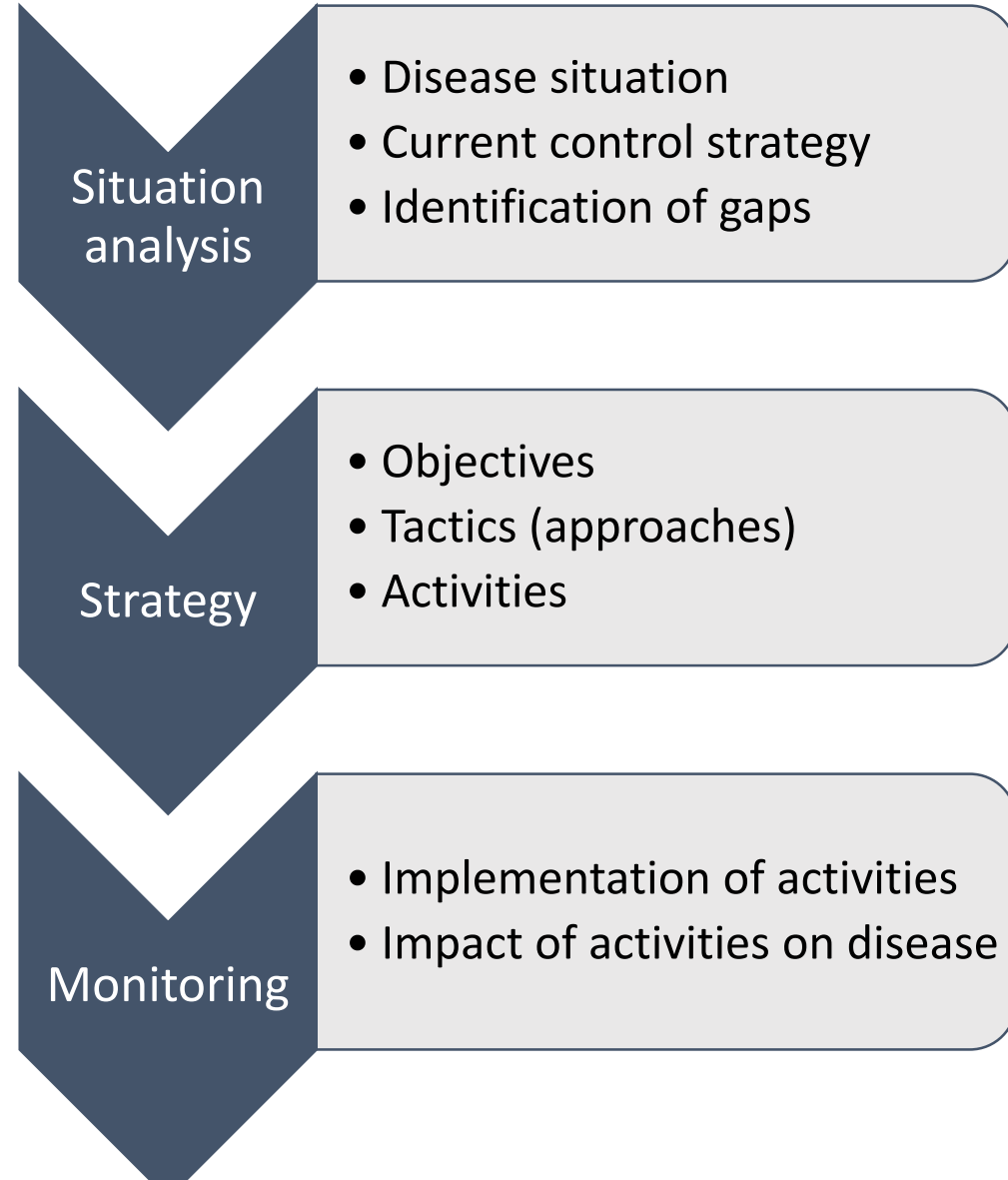
## II. Methods

1. Prioritize diseases: Participatory exercise
2. Teams of 2-3 persons lead strategy development for each disease
3. Training/capacity building on concepts of surveillance, risk analysis and epidemiology
4. Stakeholder meeting to disseminate results



## Strategy template

- Adapted from Risk Based Strategic Plan template for FMD control (available on EuFMD website)
- Overarching and disease specific chapters



## 3 areas of focus in each strategy:

### Surveillance

- Where/when are outbreak occurring?
- Need to target control efforts

### Prevention

- Most (cost) effective
- Eg border controls, vaccination

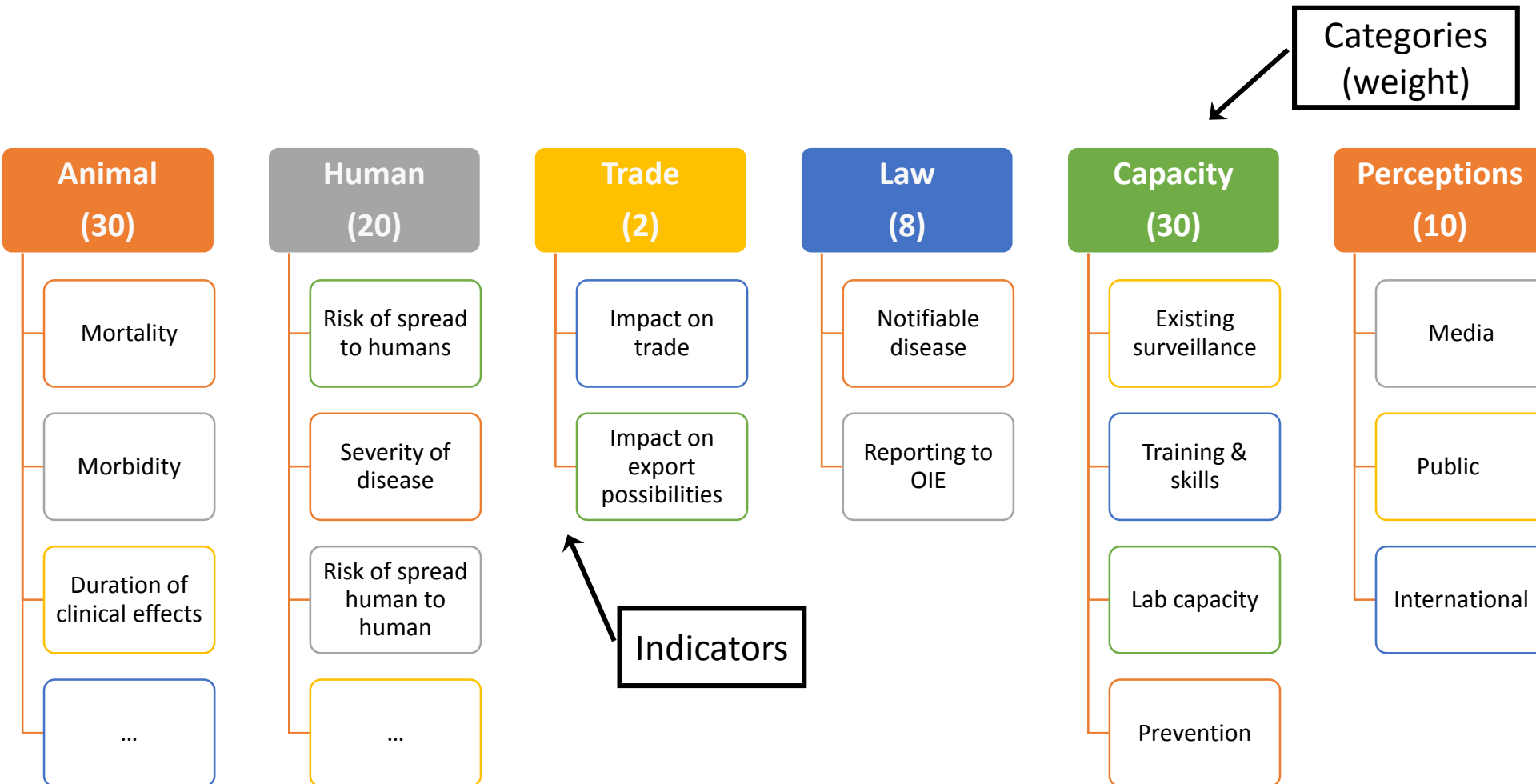
### Response

- Consistent, effective response to outbreaks
- Minimise onward spread



## III. Results: prioritization

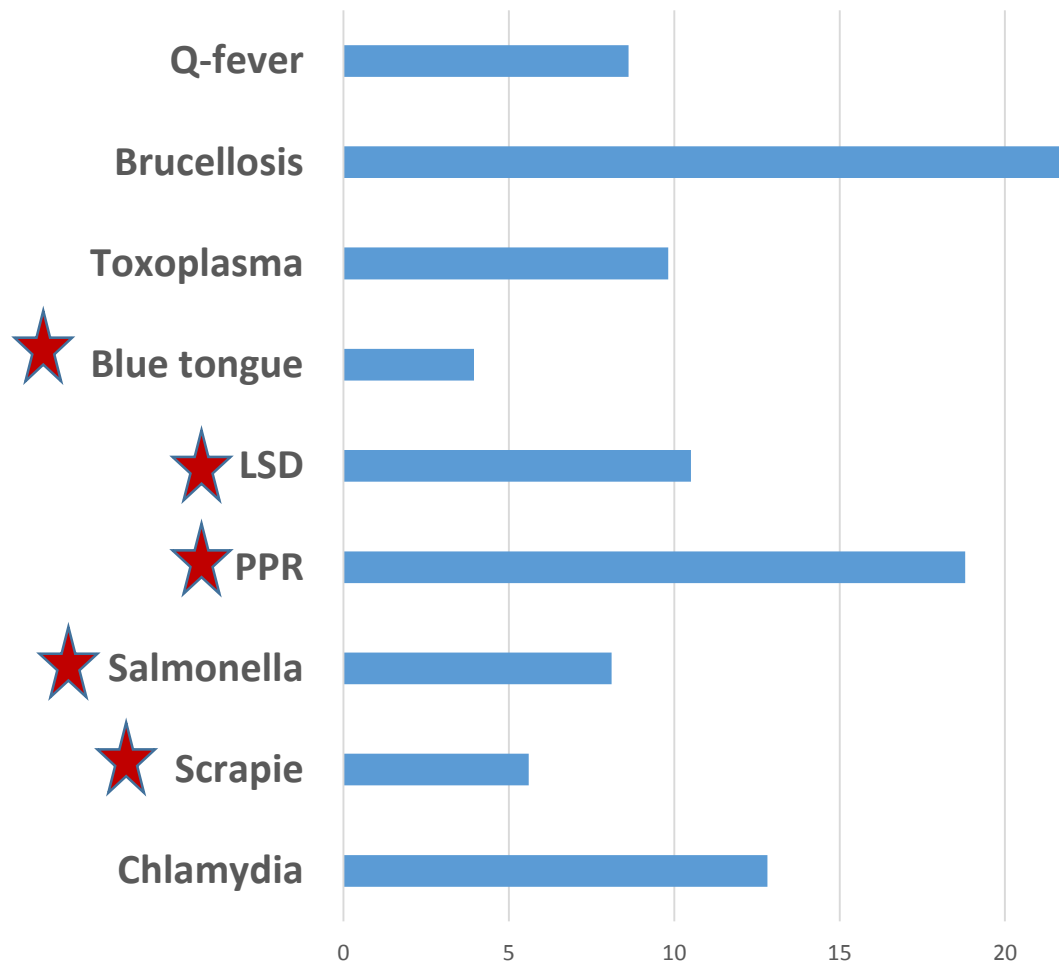
*Each category 100 points : assign points to each disease according to importance*







# III. Results: Prioritization



DISEASE PRIORITISATION - Group exercise																		
		Rate out of 100									TOTAL	WEIGHT	Proportion	Weight out of 100				
Area	INDICATOR	Chlamydia	Scrapie	Salmonella	PPR	LSD	Blue tongue	Toxoplasma	Brucellosis	Q-fever								
A. Animal	Severity of disease in animals (mortality, morbidity)											WEIGHT	0.3	30				
	Risk of spread to same animal species																	
	Risk of spread to other animal species																	
	Impact on production																	
	Species and production group affected																	
	Impact on animal welfare																	
	Overall ranking for category																	
	Weighted total (Multiply by weight value)	6.0	3.0	2.0	30.0	10.0	5.0	10.0	10.0	10.0	100							
		20.0	3.0	2.0	30.0	10.0	5.0	10.0	10.0	10.0	30							
B. Human	Pathogenicity to humans											WEIGHT	0.2	20				
	Risk of animal to human transmission																	
	Risk of spread from human to human																	
	Risk of spread from animal products to humans																	
	Impact on society; disturbing routine life																	
	Impact on food security																	
	Overall ranking for category																	
	Weighted total (Multiply by weight value)	3.0	0.0	4.0	0.0	0.0	0.0	3.0	8.0	2.0	20							
		15.0	0.0	20.0	0.0	0.0	0.0	15.0	40.0	10.0	100							
C. Trade	Impact on export currently											WEIGHT	0.02	2				
	Impact on export in the future																	
	Impact on trade within region																	
	Overall ranking for category																	
		Weighted total (Multiply by weight value)	0.2	0.2	0.2	0.2	0.4	0.0	0.2	0.6	0.0				2.00			
			8	10	10	10	20	2	8	30	2				100			
			0.2	0.2	0.2	0.2	0.4	0.0	0.2	0.6	0.0				2.00			
D. Law & Regulation	Notifiable disease according to national laws											WEIGHT	0.08	8				
	Notifiable disease according to OIE																	
	Regulations on compensation																	
	Overall ranking for category																	
		Weighted total (Multiply by weight value)	0.2	2.0	0.8	1.6	1.6	0.4	0.2	1.2	0.1				8.0			
			2.0	25.0	10.0	20.0	20.0	5.0	2.0	15.0	1.0				100.0			
			0.2	2.0	0.8	1.6	1.6	0.4	0.2	1.2	0.1				8.0			
E. Tools & Capacity	Existing surveillance program											WEIGHT	0.3	30				
	Training and capacity on disease																	
	Laboratory capacity to detect disease																	
	Availability of preventive measures (e.g. vaccines)																	
	Capacity to compensate																	
	Overall ranking for category																	
		Weighted total (Multiply by weight value)	3.0	1.5	1.5	6.0	4.5	1.5	3.0	6.0	3.0				30.0			
		10.0	5.0	5.0	20.0	15.0	5.0	10.0	20.0	10.0	100.0							
F. Perceptions	Consumers											WEIGHT	0.1	10				
	Media																	
	Farmers																	
	Vet Services																	
	Ministry of Agriculture																	
	Overall ranking for category																	
		Weighted total (Multiply by weight value)	0.50	1.00	1.00	2.00	1.00	0.50	0.50	3.00	0.50				10.00			
		10	9	10	17	13	4	8	24	6	100		1	100				
	unweighted	10	9	10	17	13	4	8	24	6	100							
	weighted	13	6	8	19	11	4	10	22	9	100							



## III Results: Situation analysis

### Agent and Mode of Transmission

- Vector borne: **Bluetongue**, **LSD**
- Direct contact: **Salmonella**, **PPR**, **FMD**
- Environmental: **Scrapie**

### Current Status

- Endemic: **PPR**, **FMD**, **Bluetongue**
- Sporadic/emerging: **Scrapie**, **LSD**
- Uncharacterized: **Salmonella** in poultry

### Control: Current and international standard

- Vaccination: **PPR**, **FMD**, **Bluetongue**, **LSD**
- Vector control: **Bluetongue**, **LSD**
- Biosecurity: **Scrapie**, **PPR**, **FMD**, **BT**, **LSD**, **Salmonella**
- Other: **Scrapie**

### Hotspots/ Gaps / Areas for improvement

- Define disease priorities
- Improve flow of information regarding disease reporting
- Raise awareness, improve biosecurity
- ....



## III Results: Strategic objectives

- ***Overarching: “Improve understanding of disease epidemiology to maximize effectiveness of limited resources available for control in order to reduce the impact of the diseases”***
- “Complete assessment of the **PPR** situation (Stage 1 of PPR Pathway) and to have **no more clinical PPR** (Stage 2) by 2022.”
- “Increase confidence in absence, **maintain freedom** from clinical **LSD** and **minimize impact** of any outbreak”
- “Measure, monitor and **reduce impact** of clinical **Bluetongue** by 2022”
- “**Reduce impact** of **Scrapie** and limit further spread by 2022”
- “**Determine the importance** of **Salmonella Pullorum** and *S. Gallinarum* and, if ...having an important impact ..., implement control measures to reduce the impact”

Understand  
epidemiology and  
impact

- **Bluetongue**, Salmonella,  
**PPR**, **FMD**

Reduce Impact

- **Scrapie**, **PPR**, **FMD**, **BT**, **LSD**,  
Salmonella

Achieve or maintain  
Freedom

- **PPR** **LSD**

# III Results: Component objectives

## Surveillance

- Improved monitoring/surveillance to
- 1) better understand disease situation and
- 2) detect outbreaks to facilitate effective response:

## Prevention

- Improved prevention through proactive measures to reduce circulation and increase resistance

## Response

- Improved outbreak response to minimize impact and prevent further spread from known foci

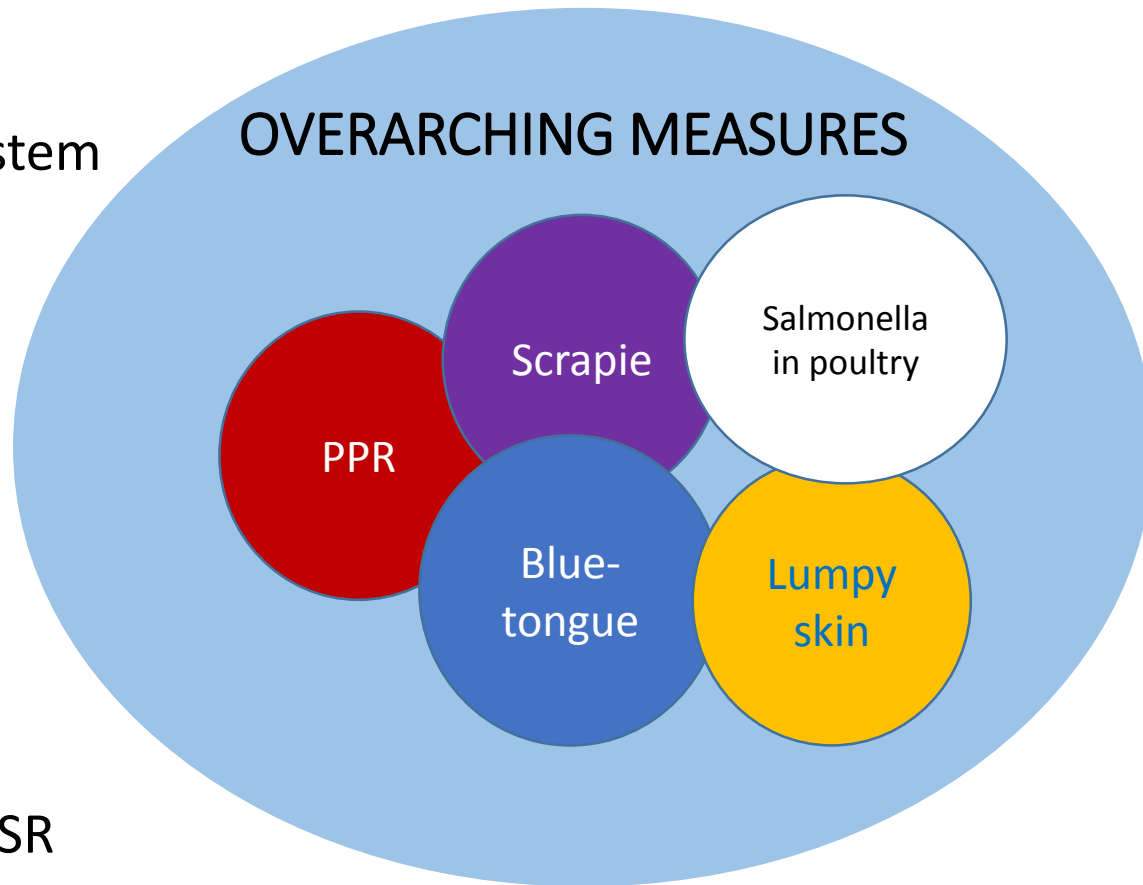
## III Results: Tactics and Activities

### Overarching:

- Identify priorities
- Improve surveillance system
- Raise awareness
- ...

### Disease-specific

- Zero-reporting (LSD)
- Reduce exposure to Culicoides (BT)
- Promote use of scrapie resistant rams
- Vaccination of high-risk SR (PPR)
- ....



# III Results: Monitoring

## Implementation

	Task	Target
<b>Surveillance</b>		
1.1	<b>Lists of reportable and notifiable diseases are created</b> and disseminated	
1.2	<b>Disease fact sheets</b> for reportable diseases created and disseminated to farmers and veterinarians	
1.3	<b>Protocols created</b> for private veterinarians on procedures to report disease, and training provided	
...	etc	
<b>Prevention</b>		
2.1	<b>Biosecurity fact sheets developed</b> and disseminated	
...		

## Impact

	Description	Indicator	Target	Means of verification
<b>Surveillance</b>				
1.2	<b>Timely reporting</b> of suspect cases	Days from 1st visit to report to district	1 day	case forms
1.3				
1.4	<b>Reliable and consistent information</b> about cases	Complete forms entirely	75 % of outbreaks within 1 year	case forms
....		etc		
<b>Prevention</b>				
2.3	<b>Compliance</b> with health certificates	TBD	TBD	Checks
....				



# IV Discussion

The MoA/ VS appreciated the participatory approach

- Enhanced capacity and ownership; planning, science- and risk-based measures

## Lessons Learned and recommendations:

- “The prioritization exercise should be respected and followed”
- Lack of information impacted ability to develop some strategies
- Language is critical issue, consider early translation of overarching chapter, have it approved, then continue with others
- Immediate development of operational documents (SOPs)
- Simulation exercise for plans and SoPs



Overarching



PPR



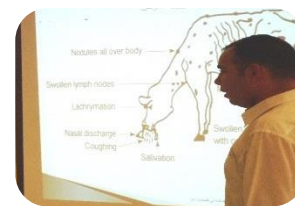
LSD



Salmonella



Bluetongue



Scrapie

## Key messages

### Strategies to achieve Progressive Control of priority diseases should be integrated

- More effective use of resources
  - Similar routes of transmission
  - Strengthening surveillance
  - Combine vaccine delivery when possible
- More likely to be embraced by VS and other stakeholders
  - Who are concerned about/responsible for multiple diseases



**Overarching**



**PPR**



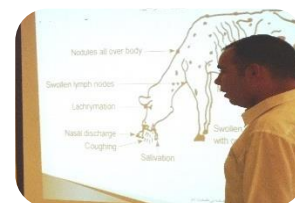
**LSD**



**Salmonella**



**Bluetongue**



**Scrapie**





# *Thank You* for your Attention

