

# Progressive Control Pathway for Foot-and-Mouth Disease (PCP-FMD)

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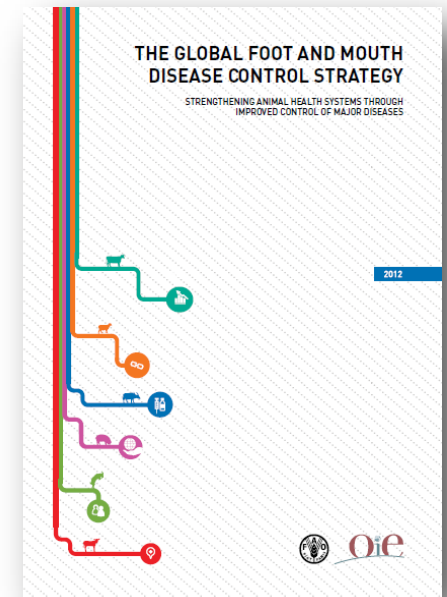
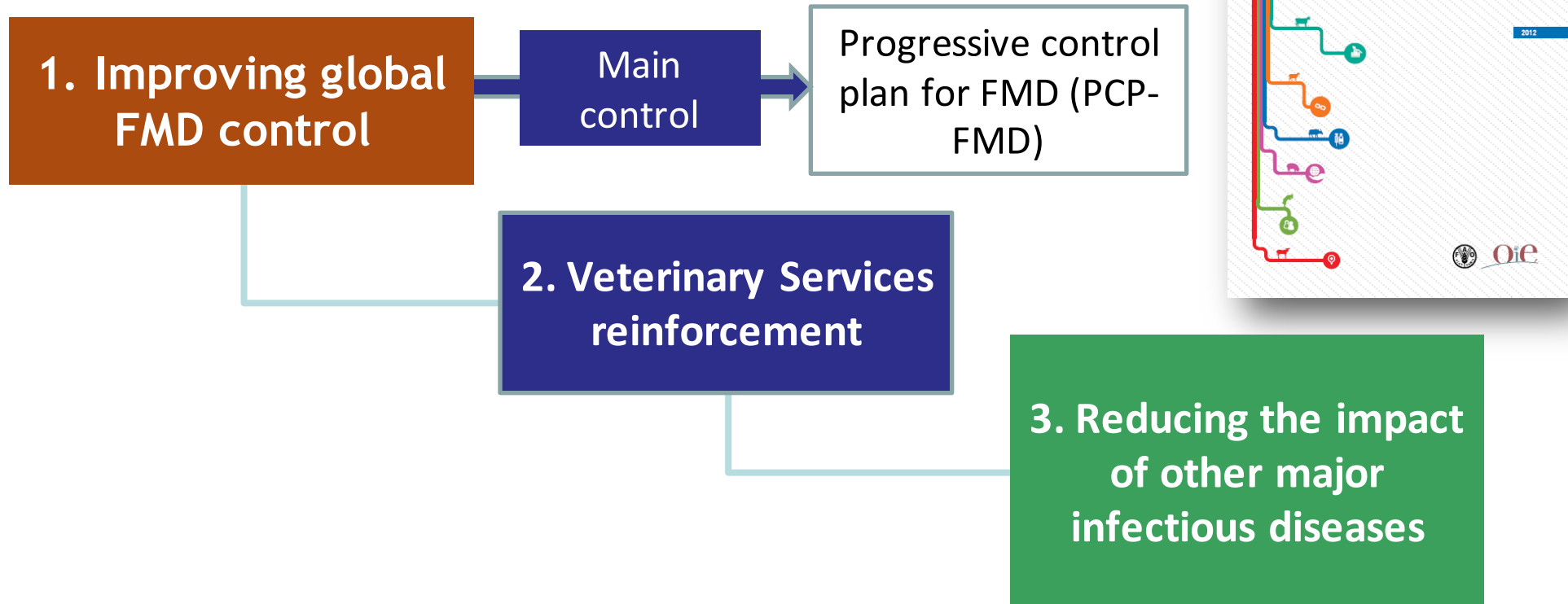
*EuFMD*

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# Outline of the presentation

1. Global FMD control strategy
2. An overview of PCP-FMD
3. Objectives and principles
4. PCP-FMD and national strategic plans
5. Regional initiatives
6. Costs and benefits
7. Public-Private Partnerships
8. Summary

# Global FMD Control Strategy



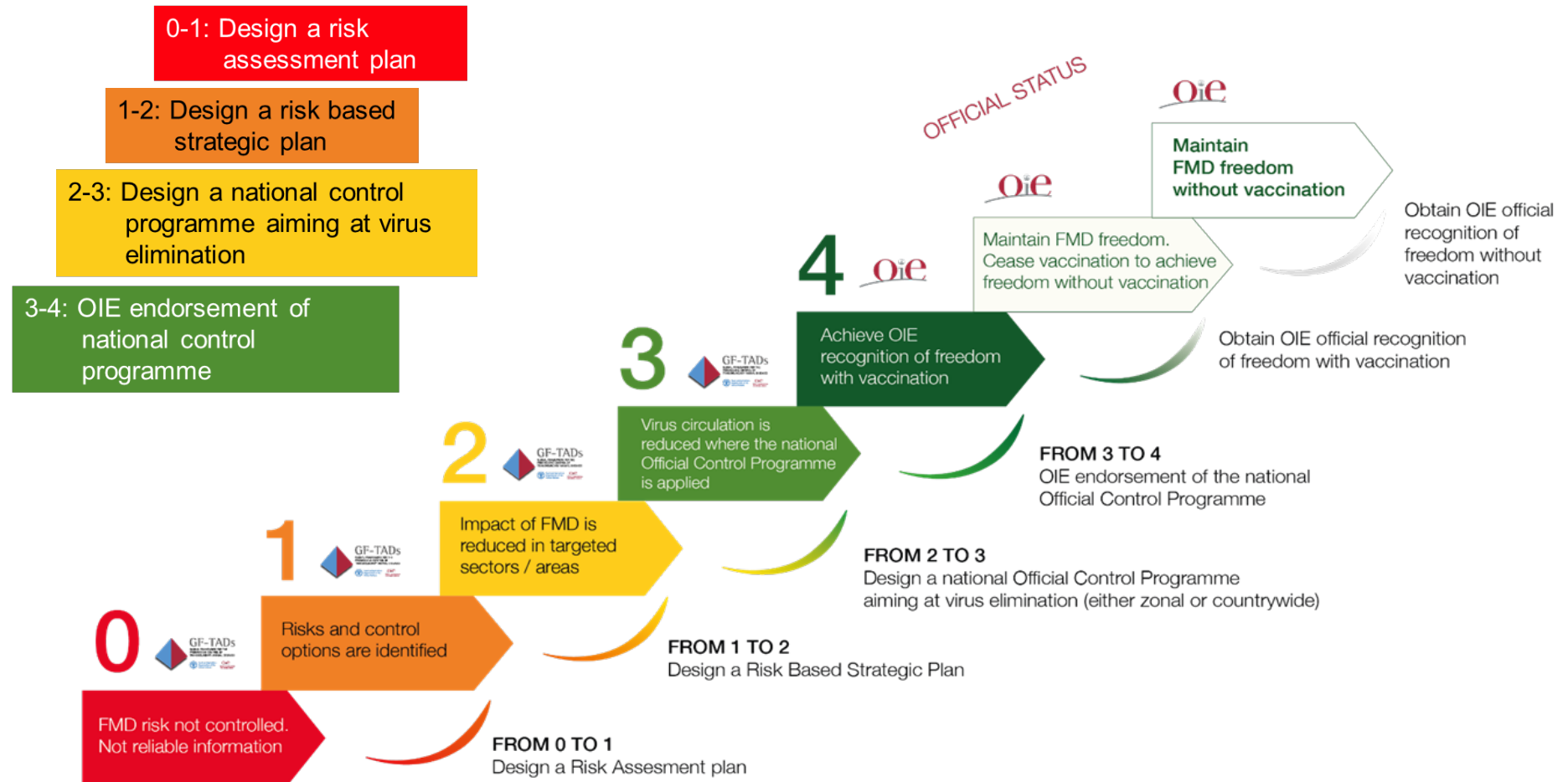
# What is a Progressive Control Pathway (PCP)?

- Step-wise approaches are increasingly used for the reduction, elimination and eradication of a range of major livestock and zoonotic diseases including: FMD, PPR, Rabies, AAT
- PCPs provide systemic frameworks for planning and evaluating field interventions and enable realistic disease control objectives to be defined and achieved
- PCPs have been used since 2008 by FAO and become adopted as joint tools with the OIE (FMD, PPR) , or developed/owned by global alliances (rabies, AAT)


# PCP-FMD

- Developed by FAO and EuFMD, firstly launched in Shiraz, Iran back in 2008
- The PCP-FMD consists of Stages that progressively increase the level of FMD control
- Consist of set of activities focused on identifying and addressing the risk for FMD introduction and spread
- Intended to assist FMD-endemic countries to progressively reduce the impact and burden of FMD

# PCP-FMD stages and domains



# Minimum requirements & progress indicators

	Minimum stage compliance requirements	Outcome indicator to be achieved
<b>Stage 1</b>	Measures to understand the risk of FMD	Risk assessment plan
<b>Stage 2</b>	Risk-based measures are implemented and monitored	Risk-based strategic plan
<b>Stage 3</b>	Early detection and quick response to all outbreaks of foot and mouth disease	Official control programme
<b>Stage 4</b>	The approved National Official Control Program is implemented and monitored	OIE Approval of the Official Control Programme
<b>Status</b>		OIE free status with vaccination
<b>Status</b>		OIE free status without vaccination

# Principles of PCP-FMD

- Applied in achievable steps
- Non prescriptive; focused on results
- Prioritizes risk “hotspots” using risk analysis
- Economic efficiency in using limited resources
- Evidence based by monitoring and evaluation
- Not for free countries want to regain FMD freedom



# West Eurasia Regional Roadmap

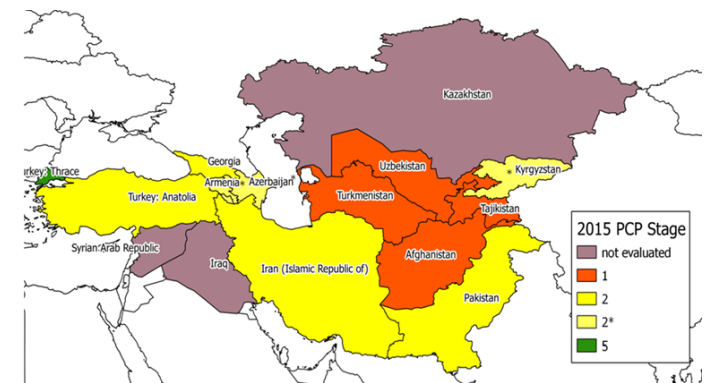
## ■ Early stage 2008-14

Regional cooperation among Eurasian countries for the progressive control of FMD through *public and private partnerships* leading towards freedom of clinical disease by 2020 for regional economic development, food security, and poverty alleviation.



## ■ Later on 2015

Regional cooperation among Eurasian countries for the progressive control of FMD leading towards freedom of clinical disease by 2025 for regional economic development, food security, and poverty alleviation



# Evaluation of PCP progress: national vs regional

Annual roadmap  
meetings

Multi-disease approach  
Other stepwise approaches  
developed (e.g. PPR,  
brucellosis, rabies)

Epi and Lab  
Networks

Remaining in early  
stages

Analyse reasons  
of lack of  
progress

Guidance/mentoring  
between countries or by  
FAO/OIE

National PCP focal  
points and national  
consultants



# PCP stage acceptance

## ■ Until 2009

Governance Working Group: OIE, FAO, EuFMD, EC, 1 CVO

## ■ After 2010

Roadmap/Regional Advisory Group (key body in the acceptance process); currently consist of:

- 3 CVOs
- heads of the regional epidemiology and laboratory networks
- members of the GF-TADS FMD Working Group, regional/sub-regional FAO and OIE regional offices, PCP and PVS experts and a representative from a regional organization



## WE PCP-FMD regional experience

- Successful in making the West Eurasia roadmap countries united
- Successful in improving PCP-FMD stages of countries
- Built trust and commitments among the countries to a shared goal
- Promoted development and enhancing the Epi and Lab networks
- Promoted data and information sharing on:
  - Outbreaks
  - Vaccination campaigns
  - Animal movements
  - Market prices and economic data
- Promoting bilateral/multilateral agreements between the countries



## WE 8<sup>th</sup> Roadmap Recommendations

- The participants of the Roadmap to continue to work towards freedom from clinical FMD in West Eurasia by 2025
- Sub-regional FMD meetings be organized among neighboring countries to ensure (i) harmonization of vaccination strategies; (ii) information sharing on outbreaks, animal movements and hot spots, market prices
- To share and update information on FMD virus serotypes and topotypes both circulating and threatening the region, and on vaccines used
- To establish reasonable timeframe to submit documentation and receive feedback from the FMD Working Group and the RAG

# Overall cost and benefits

## Costs

- Resource expenditures for research, design and investment in measures for surveillance and control measures (e.g. vaccination), and their implementation by qualified personnel
- Opportunity costs, the benefits foregone

## Benefits

- Reduce disease and losses, achieved by surveillance and control
- International trade and access to markets
- Improving/controlling other diseases
- Improved reputation



# Cost and benefits of PCP Stage 2

## ■ Costs

- Vaccination
- Monitoring mechanism (relatively small)
- Revenue forgone
  - ✓ Clinical impacts in small ruminants and non-vaccinated animals
  - ✓ Limited trade and exports

## ■ Benefits

- Information valuable to risk assessment and to support potential trade/export via compartments
- Economic baseline for move to PCP stage 3 and higher

# Cost and benefits of PCP Stage 3

## ■ Costs

- Likely to rise more than benefits unless:

## ■ Benefits

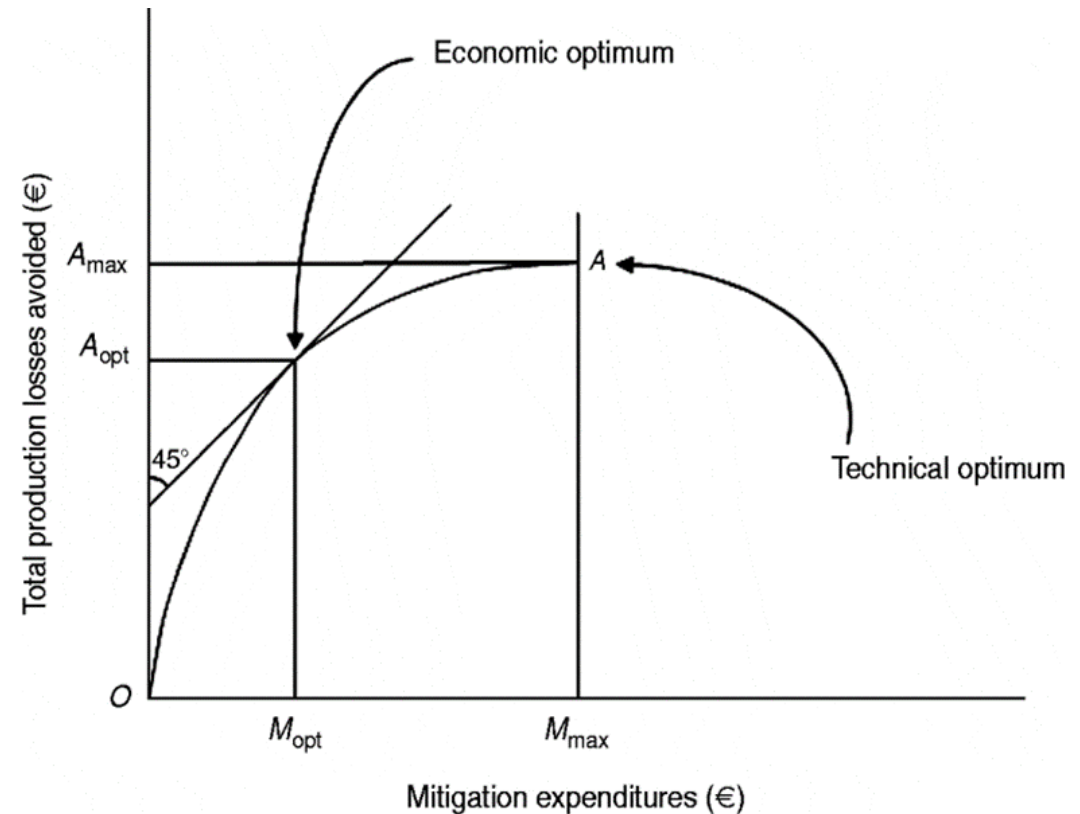
- Export compartments are planned based on quality monitoring system and controlled virus circulation
- Lower risk zones where costs to prevent entry of animals/infection are lower
- It is a step in the direction of Stage 4 and benefits of OIE recognized zones



# Economic optimum

## Optimum depends on:

1. Technical production function relating production losses avoided to mitigation effort
2. Monetary expenditure for a unit of mitigation resources
3. Monetary benefit from avoiding a unit of production losses
4. Resource efficiency (e.g. by public-private partnerships)



Reference: Howe et al, 2012

# Public-private partnership (PPP)

- PPPs are working arrangements based on a mutual commitment, over and above that implied in any contract, between a public sector organization with any other organization outside the public sector
- PPPs create: stronger national economy, greater trust between stakeholders, improved public health, enhanced societal issues
- PPPs require: Lawful and aligns with Government policy; relevant legislations; agreement on roles and responsibilities; assessment of the costs and benefits
- PPP types in veterinary domain: transactional, collaborative, and transformative

# Summary

- PCP-FMD provides a systemic framework for planning and evaluating interventions and realistic disease control objectives
- Regional agreements and collaborations such the WE roadmap provides a mechanism to create benefits for the countries involved by mitigating the risk of TADs
- PCP makes the risk associated with live animal movements (cross borders trade) are given priority e.g. in vaccination policy
- Optimum PCP position will be different for various countries depending on their risk profile, economy etc. hence thorough socioeconomic analyses are needed at national and regional levels
- Public-private partnerships provide a platform for recourse efficiency in achieving mutual goals

# Vision for Regional Roadmaps!

