

PVS Pathway

A photograph of three fishermen in traditional orange clothing and conical hats on a boat in a pond with lily pads. They are using large circular nets to catch fish. The scene is reflected in the water.

Valentyna Sharandak
Capacity Building Department

Performance of Veterinary Services (PVS) Pathway



*A continuous process aiming to **sustainably** improve compliance of Veterinary Services and Aquatic Animal Health Services with international standards*

The WOAAH Standards

CODES



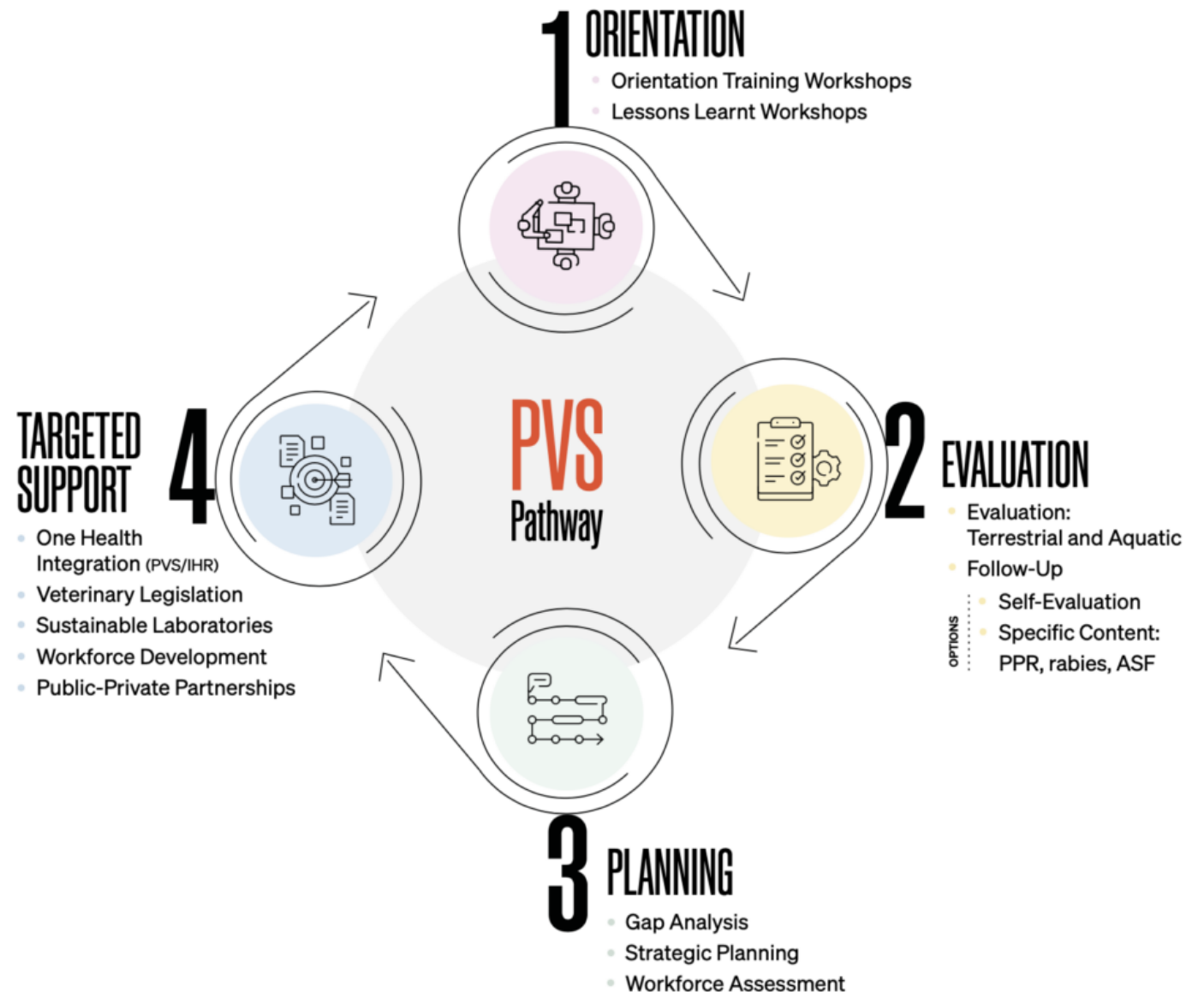
MANUALS



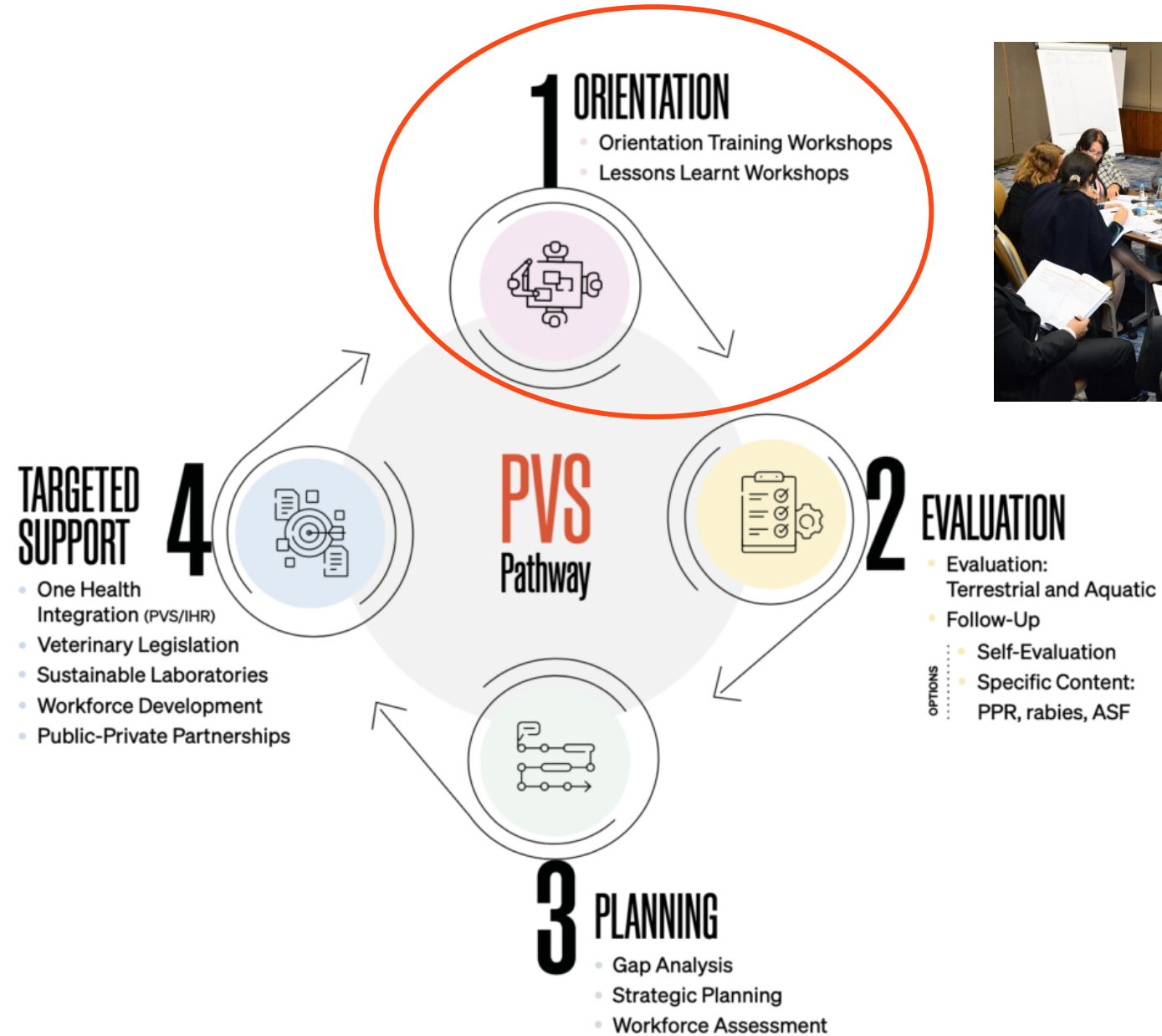
Standards to improve animal health and welfare
and veterinary public health

Performance of Veterinary Services (PVS) Pathway

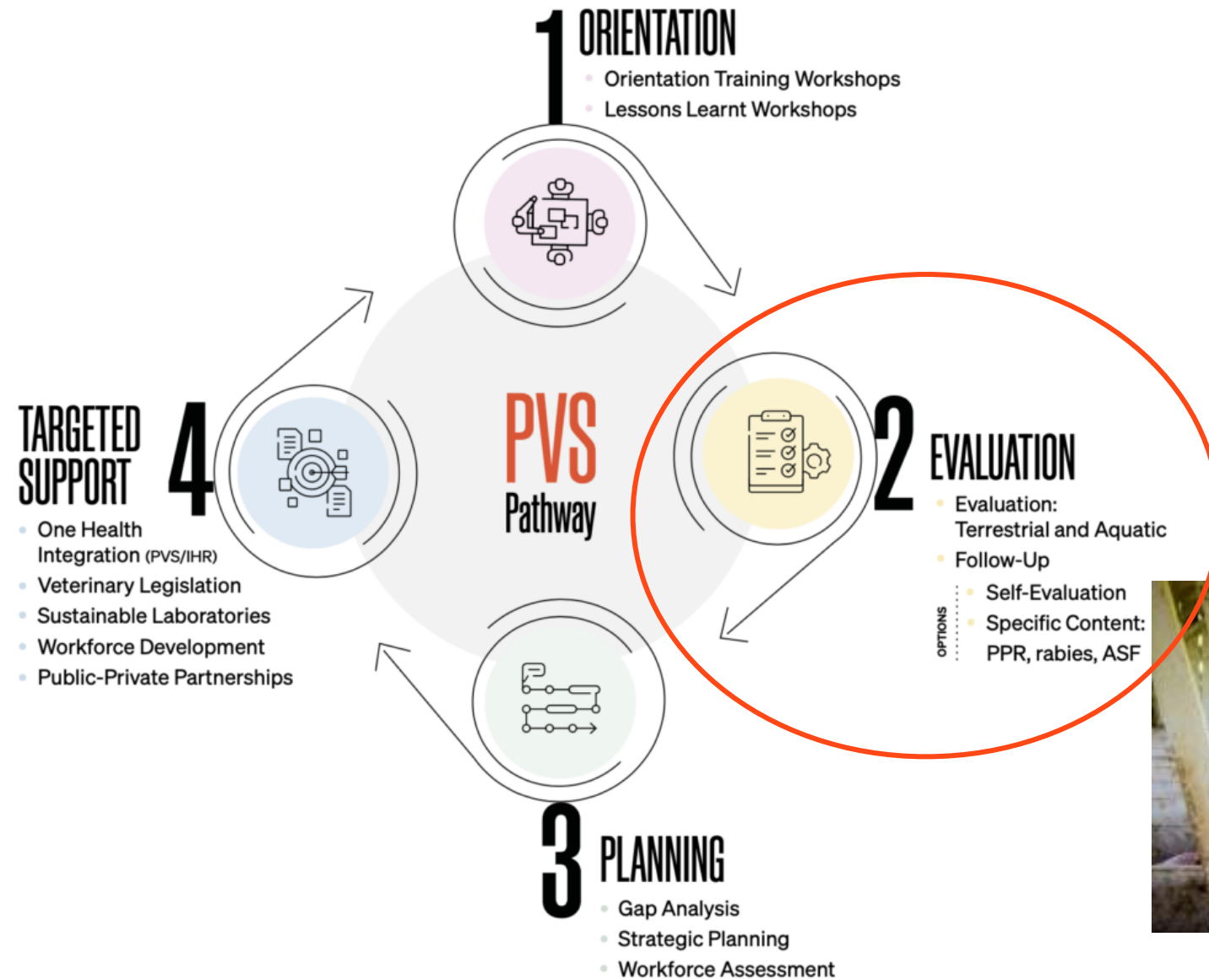
- Comprehensive, multi-staged process for **sustainable planning** and **improvement** of Veterinary Services' (VS) capacities
- Supports greater **compliance** with WOAHA International **Standards for** animal health and welfare
- Each step corresponds to specific **capacity-building** activities
- **Voluntary, country driven** process targeting internal systems and resources for sustainability
- **Strong uptake** – 142 countries, more than 500 reports



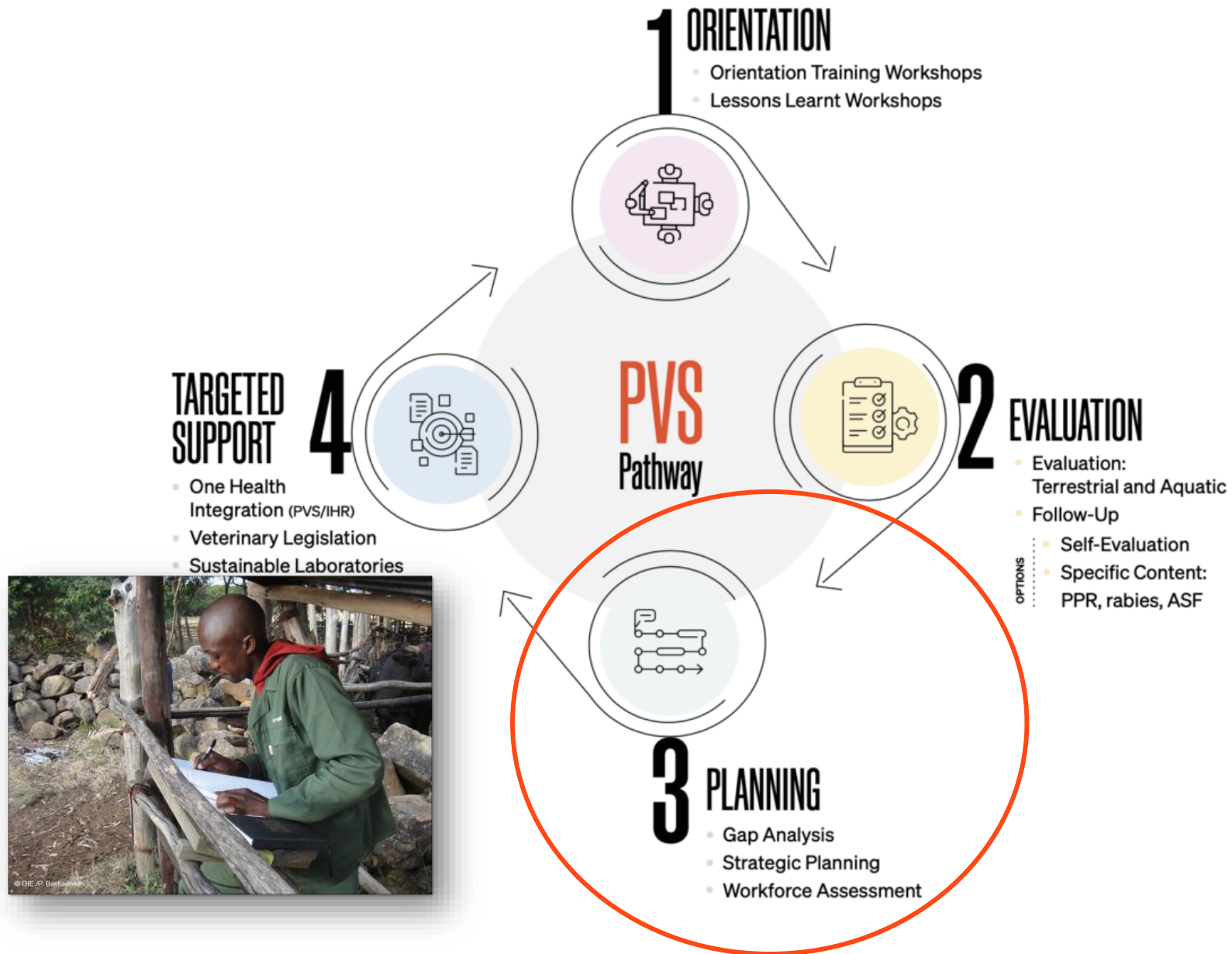
1. ORIENTATION



2. PVS EVALUATION

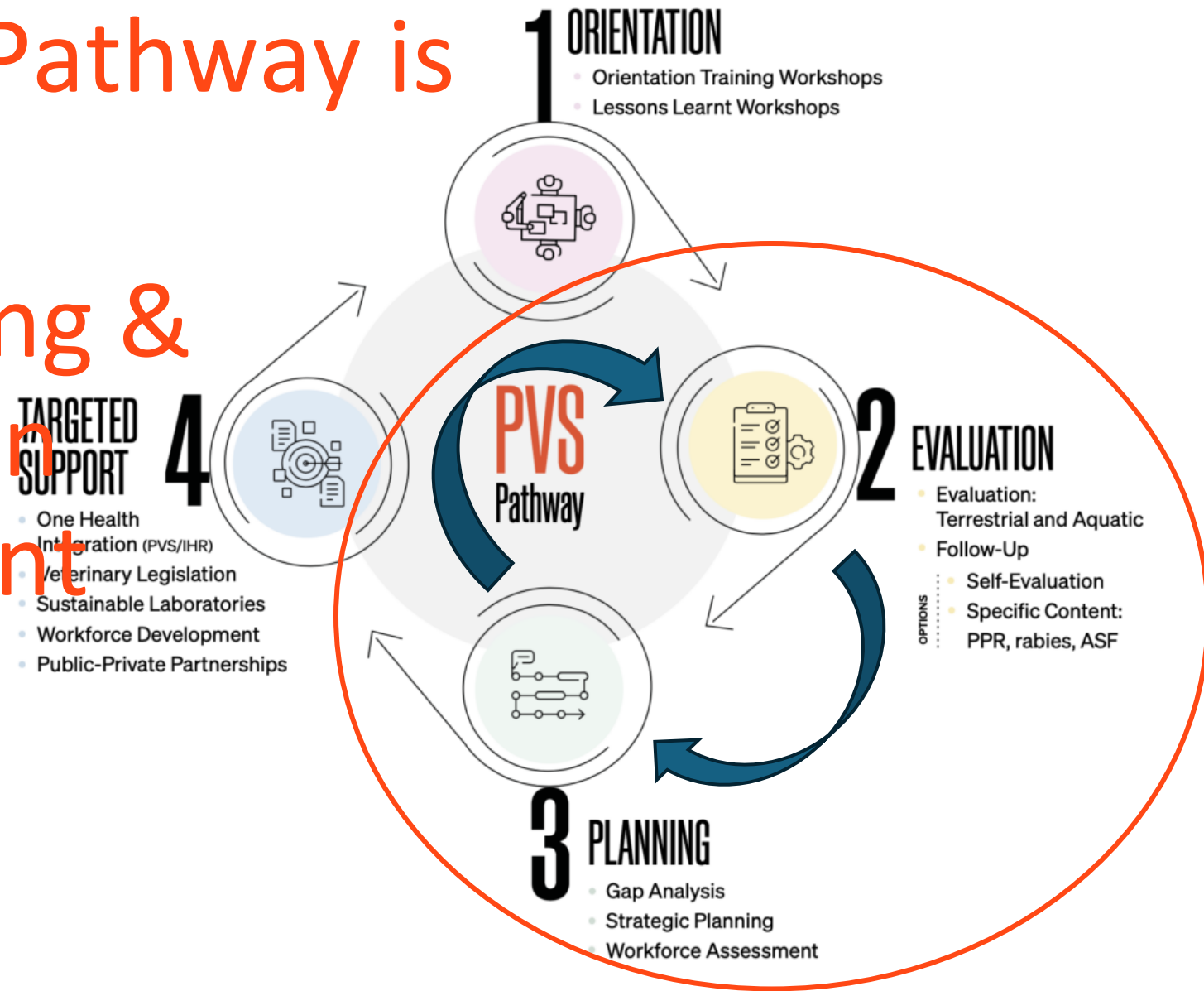


3. PLANNING

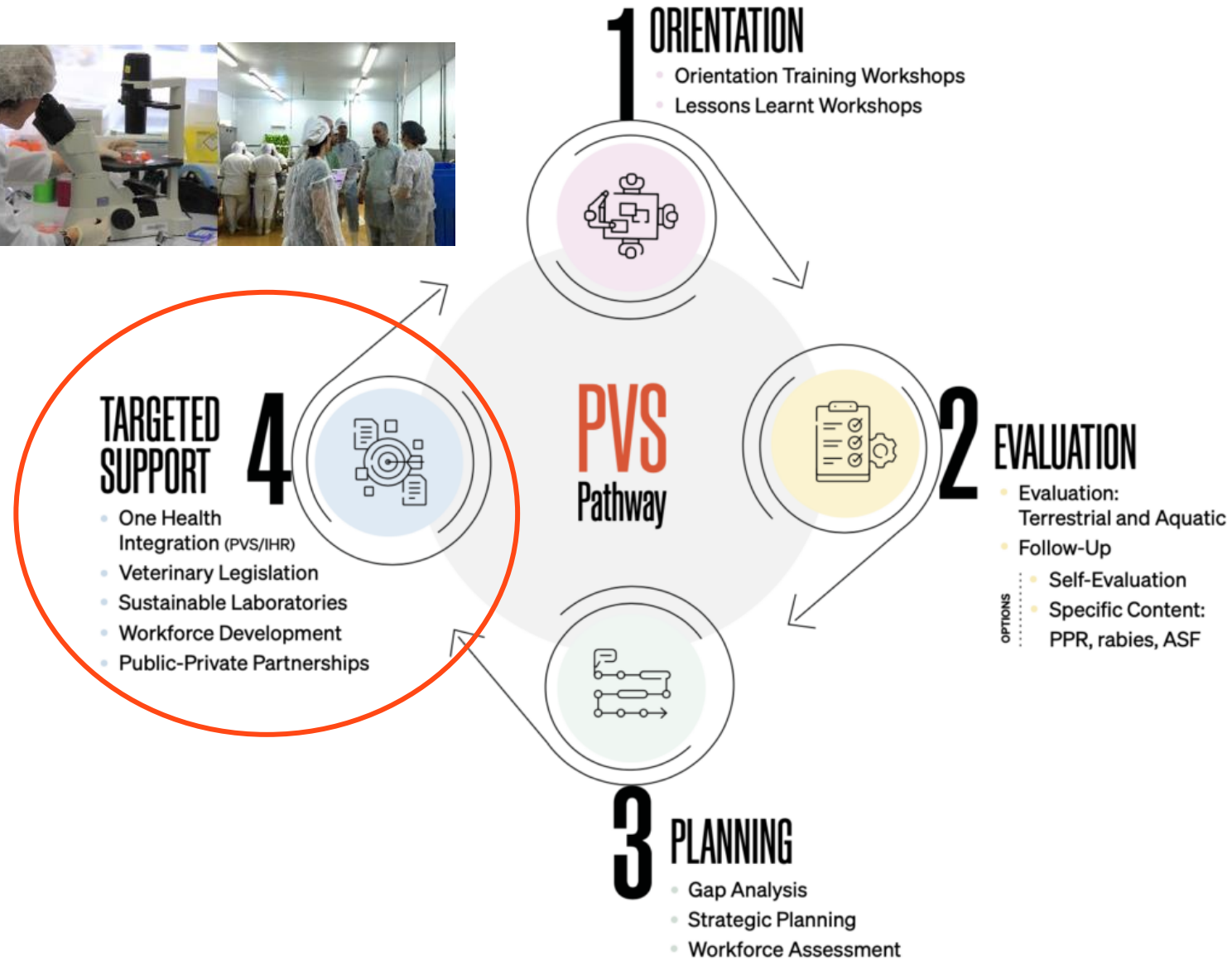


3. PLANNING

The PVS Pathway is also a Monitoring & Evaluation Instrument



4. TARGETED SUPPORT



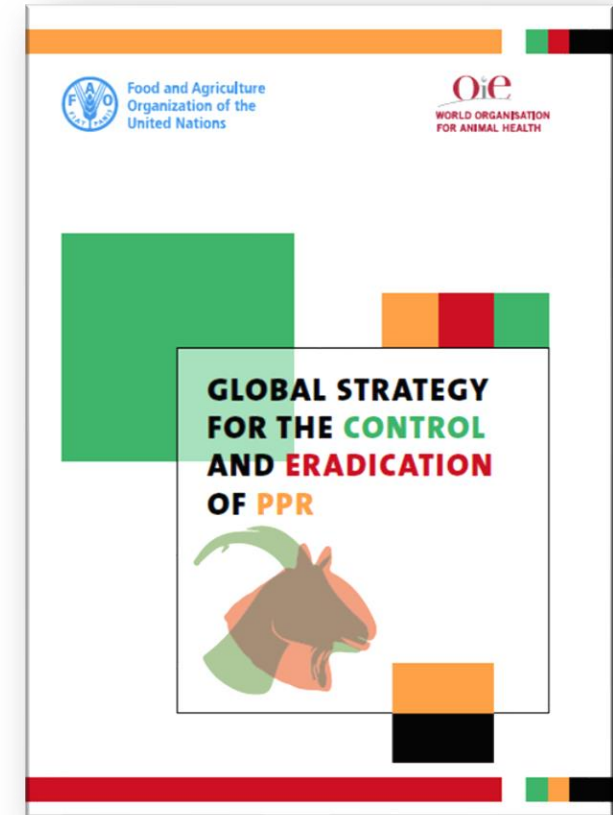
PPR Specific content

PVS Pathway



Global Strategy for the control and eradication of PPR (GCES)

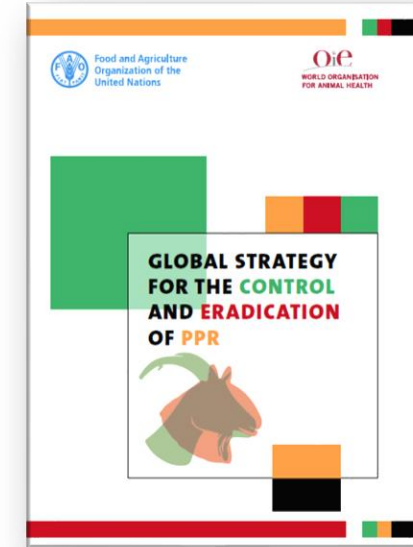
- A strategy was established in 2015:
- Control towards eradication of PPR by 2030
- **Reinforcing Veterinary Services**
- Improving animal health globally by reducing the impact of other major infectious diseases of Small ruminants.



Global Strategy for the control and eradication of PPR (GCES)

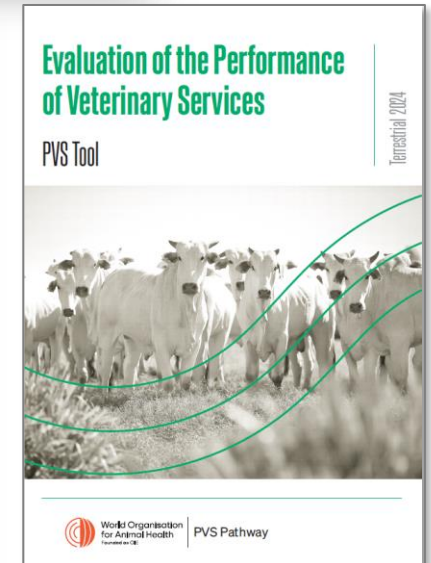
The GCES has three components:

- Component 1: PPR control and eradication
- Component 2: **Strengthening Veterinary Services**
- Component 3: Prevention and control of other major diseases of small ruminants



Five-year programme to:

- ❑ Foundation for the eradication of PPR by reducing its prevalence in currently infected countries
- ❑ Capacity development in non-infected countries and application for PPR free status by WOAHA
- ❑ **Strengthening national VS and their systems**
- ❑ Reducing the prevalence of other priority small ruminant diseases where appropriate



“**Specific content**” approach focused on a **priority disease** - positive feed-back from WOAAH Member via many consultations

PVS-PPR

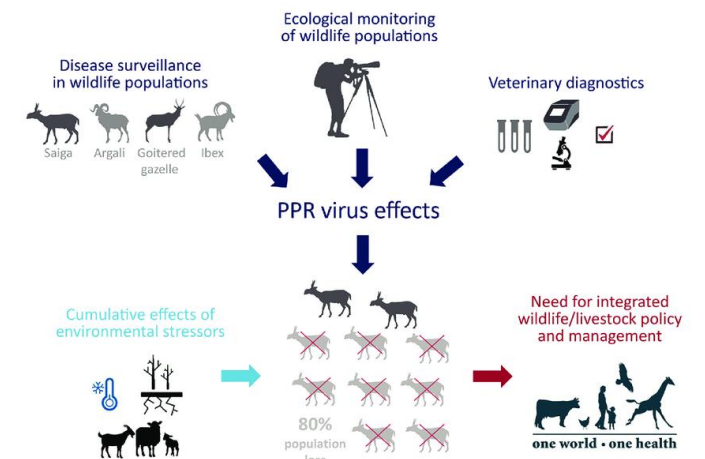
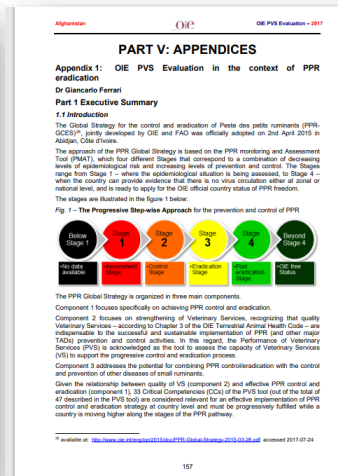
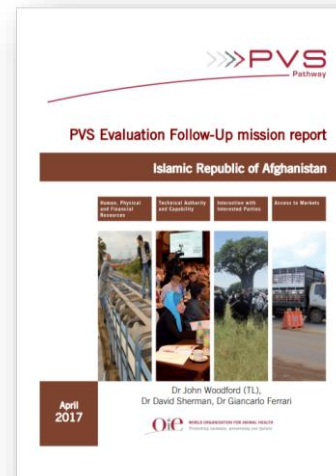
Objective: helping countries improve their PPR prevention and control programmes via a **systems approach**

- ✓ to support the implementation of the PPR national strategic plans
- ✓ to invite i Members to assess the capacity of the national Veterinary Services to control and eradicate PPR through participation in a specialized PVS Evaluation, focused on PPR

“Classic” PVS Evaluation/Follow Up (covering all areas of the veterinary domain and all diseases)

+

Specific assessment on PPR control and/or eradication



PVS-PPR



- Methodology developed with FAO and PVS experts:
- PVS Tool/usual report + **Guiding Principles document/PPR Annex template**
- Includes a **PPR specialist** (good knowledge of new PMAT2 tool, the GCES and the current Global Eradication Programme (GEP) for 2022 – 2027)+ other PVS experts
- Field visits + PPR specific day/s to make sure key stakeholders can be interviewed

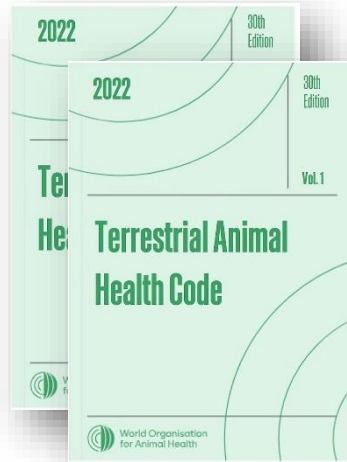
Missions implemented (as of February 2025)

- ✓ Afghanistan – 2017, web
- ✓ Turkey – 2017, web
- ✓ Chad – 2019, web
- ✓ Nigeria – 2019, web
- ✓ Burundi – 2019
- ✓ Iran – 2019
- ✓ Liberia – 2019, P&D
- ✓ Mongolia – 2019, P&D
- ✓ Cote d'Ivoire – 2022
- ✓ Sierra Leone – 2022
- ✓ Cameroun – 2022
- ✓ Zambia – 2023
- ✓ Nepal – 2023
- ✓ Tanzania – 2024 (Report under finalisation stage)
- ✓ UAE – 2024
- ✓ Uzbekistan – 2025

Updated PVS Tools

- Supports greater compliance with WOAH international animal health standards
- Assessment covers the broad veterinary domain
- Robust methodology based on the systematic review of 45 Critical Competencies (CC)
- In-country mission (2-6 weeks)
- Performed by WOAH external experts in a collaborative way

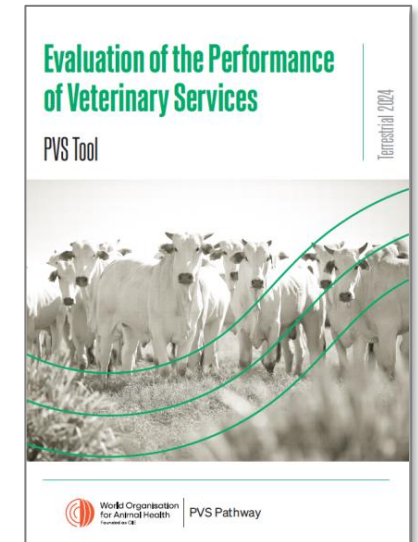
A tool for the Good Governance of Veterinary Services

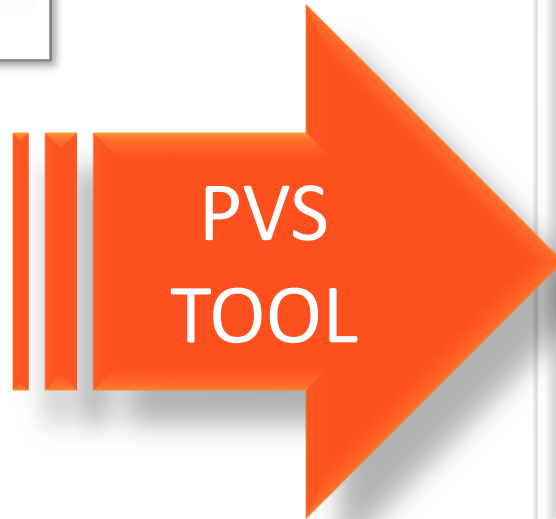
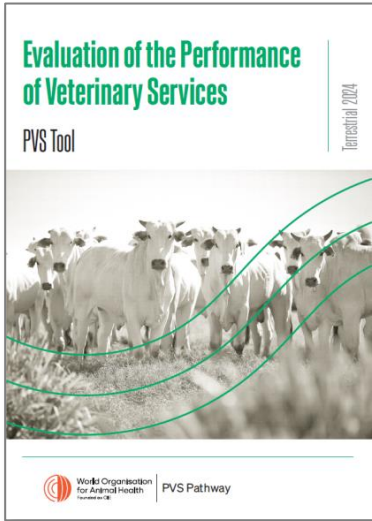


Section 3 of Codes

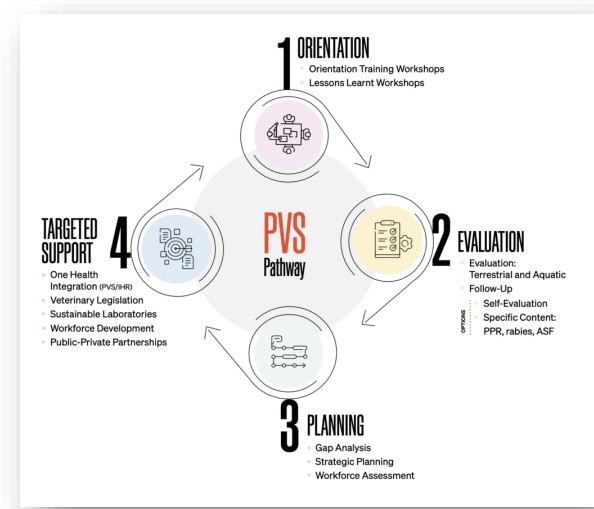
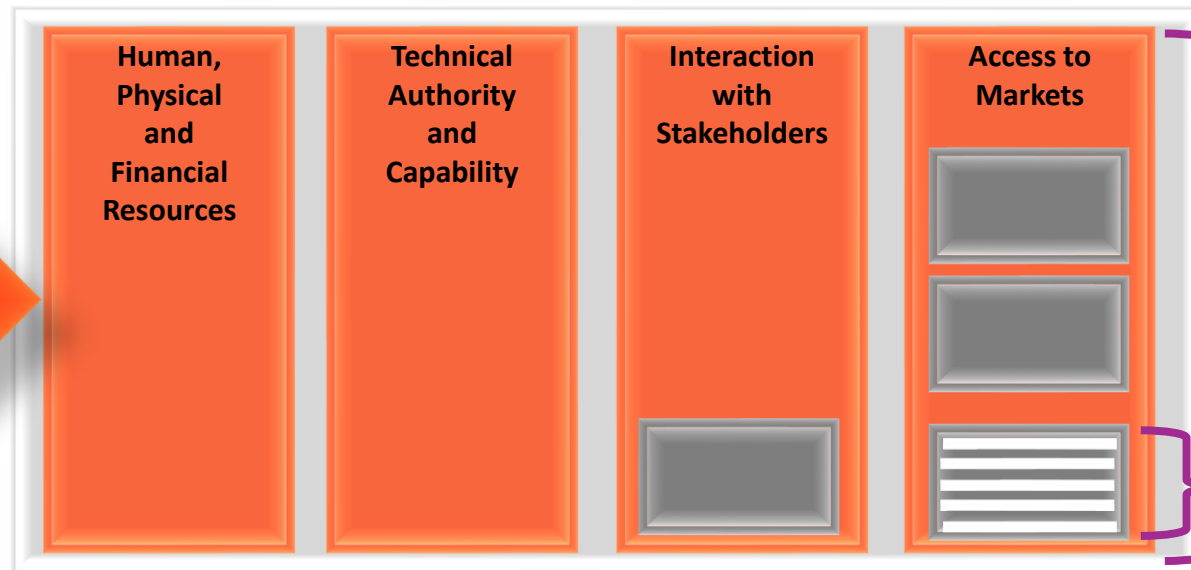
Quality of Veterinary Services

Quality of Aquatic Animal Health Services





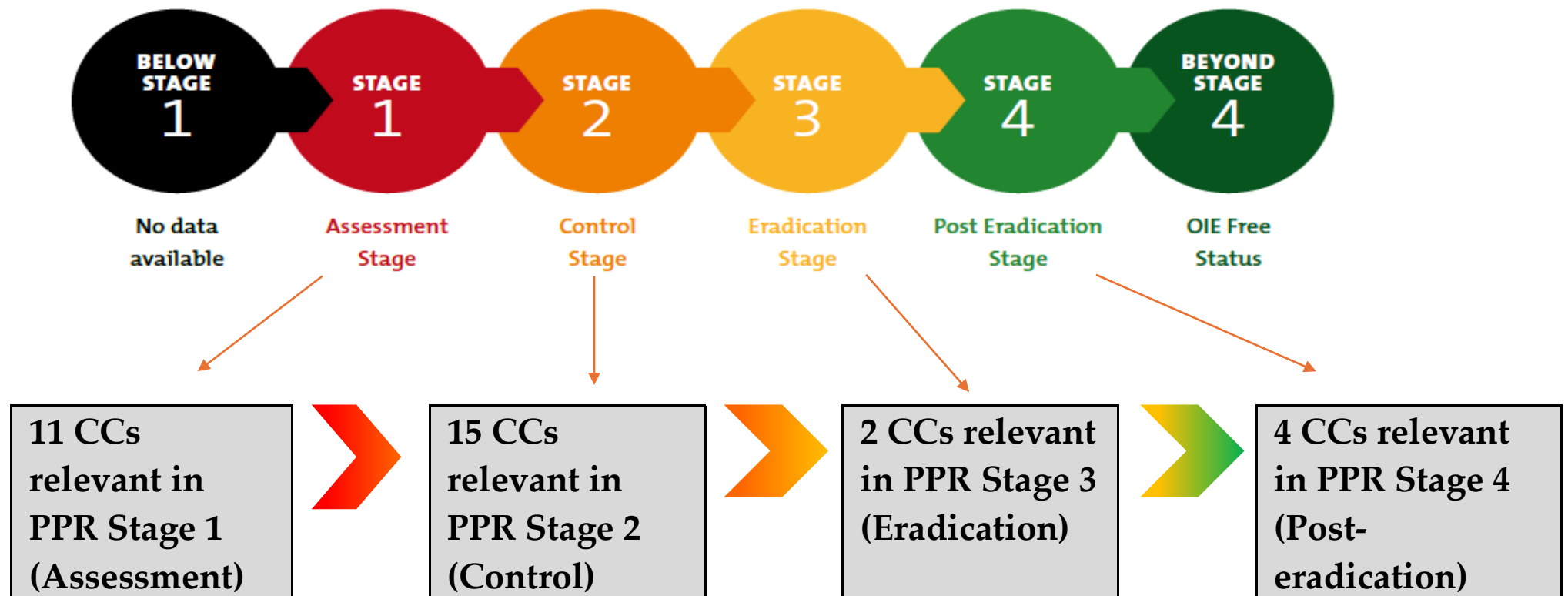
4 Fundamental Components



45 Critical Competencies (CCs)

5 Levels of Advancement

- **PVS report – covers the 45 Critical Competencies (CCs)**
- **PPR Annex: 32/45 CCs relevant for PPR**
- **For each of the GCES Stages a certain set of CCs are relevant and for most of them, a minimum of LoA of 3 is required.**



(Generic) definition of the CC according to the WOAH PVS Tool

(Contextualized) definition of the CC in the context of the PVS-PPR

'Generic' level of advancement granted in the framework of the OIE PVS mission (March 2017)

CC 1.1.A	The appropriate staffing of the VS to allow <u>for veterinary and technical functions</u> to be undertaken efficiently and effectively	3
	The appropriate staffing of the VS to allow for <u>PPR prevention and control</u> to be undertaken efficiently and effectively	-
	Level 3 [The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at local (field) levels (<u>for appropriate PPR prevention and control activities</u>)] is required for Stage 2	X

Required Level of advancement for this CC, to ensure minimum/sufficient capacity to prevent and control PPR, as stated in the GCES

Appreciation of the 'contextualized' level of advancement in the context of the PVS-PPR

Indication if the required level is reached

- → the PPR LoA is less than the Generic LoA
- = → the PPR LoA is similar to the Generic LoA
- + → the PPR LoA is better than the Generic LoA

✓ reached

✗ not reached (in this case, recommendations provided should be implemented)



PVS-PPR

- **Questions for consideration that may assist** (for guidance only - not to be included in report):
- *Is there sufficient veterinary staffing at national level, including for planning, management and supervision, to undertake PPR activities?*
- *Is there is a dedicated PPR National Control or Eradication Committee or equivalent, comprised mostly of veterinarians or other professionals?*
- *Is work on PPR specified in veterinarian job descriptions?*



PVS-PPR mission

Guiding Principles of an OIE PVS Evaluation mission (with PPR Global Eradication Programme Supplement)

Developed by the PVS/PPR Specific Content Methods Task Group comprising: J Stratton, D Sherman, N LeBoucq, G Ferrari, J Soula, B Diop, and L Cameroun/C Loi (Secretariat), reviewed by S. Münstermann incorporating the experience of eight PVS/PPR specific content pilot missions undertaken during the period March 2017 to October 2019.

General

- An OIE PVS Evaluation (with PPR Global Eradication Programme Supplement) mission is an OIE PVS Evaluation mission that includes specific content or a dedicated focus on national PPR control and eradication.
- The OIE PVS Evaluation (or Follow Up) mission (PPR-specific) is reported on as a mission covering the entire veterinary field and diseases.
- The PPR specific aspect is not the main focus of the mission report, which must be completed in addition to the generic mission and report, which must be completed.

The OIE PVS Team and the PPR Specialist Role

- OIE PVS Evaluation (PPR-GEP) missions will generally include a PPR Specialist, the "PPR Specialist" to the standard mission team. The same as for a normal PVS Evaluation or Evaluation Follow Up, the lengths for previous PVS Evaluations can be referred to as normal.
- Where a country accepts to host an OIE PVS Evaluation (PI) as designated by the OIE, will be responsible for leading and coordinating aspects of the mission preparations, conduct and report. The PPR specialist will be responsible for leading the generic whole-of-system PVS mission, this PPR specialist will be responsible for leading the PPR specific mission.
- The PPR Specialist will be supported by a "PPR secondary" nominated by the PVS Team Leader in consultation with the PPR Specialist.
- The involvement of the PPR Specialist and Secondary in assigning drafting of CCs, is still required, but should be given lower priority, noting the PPR Specialist has primary responsibility for the PPR specific mission. Experience has shown that the PPR Specialist can usefully contribute to the PPR specific mission, such as sun focus on these elements of VS capacity.
- Other members of the PVS team, including the Team Leader on the mission as per a normal PVS Evaluation mission, are relevant to PPR are sought by the PPR specialist (e.g. PPR site visit the PPR specialist is unable to attend, or provision of PPR specific content). General contributions on the PPR element should be included in the PPR specific mission report.

Mission Preparations and Conduct



APPENDIX [X]

Specific Content on Peste des Petits Ruminants (PPR) in relation to the PPR Global Eradication Programme¹

Executive Summary

Introduction

The OIE has decided to offer PVS Evaluation or PVS Follow-Up Evaluation missions with specific content to its Member Countries, with the initial priority topic selected as PPR. This concept has received positive feedback from OIE Member Countries and key partners including at the OIE PVS Pathway Think Tank Forum of April 2017, and via many consultations since, including at the OIE General Sessions of 2017 and 2018, and at OIE Regional Commission Conferences around the world over this period.

This new approach aims at further enhancing the profile and impact of the PVS Pathway, as well as helping countries better manage their PPR control/eradication programmes via a systems approach. It also brings full consistency among OIE global high-level strategic priorities, including the declaration of PPR global eradication by 2030 supported by the adoption of the FAO-OIE Global Strategy for the Control and Eradication of PPR (GCES) in April 2015. The need to reinforce national Veterinary Services, in line with OIE standards on the quality of Veterinary Services, is an indispensable condition to the efficient and sustainable control of PPR and other small ruminant diseases, and this is well reflected in the GCES and the PPR Global Eradication Programme (PPR GEP), which serves as the first five-year implementation plan of the 15-year GCES.

The PVS/PPR specific content is based on 32 of the 45 Critical Competences in the PVS 7th edition which have been identified as particularly relevant to PPR control and eradication efforts (PPR-related CCs). These 32 PPR-related CCs are linked to different Stages of the GCES as shown in the table below. They also form part of the revised PMAT tool (PMAT 2). It is recommended to carry out a PMAT exercise during the PVS - PPR evaluation to complement and strengthen the evaluation.

CC relevant in PPR Stage 1 - Assessment (11)	CC relevant in PPR Stage 2 - Control (15)	CC relevant in PPR Stage 3 - Eradication (2)	CC relevant in PPR Stage 4 - Post-Eradication (4)
I.2.A; I.3; II.1.A; II.1.B; II.2; II.4.B; III.2; III.3; III.4; III.5.*; IV.1.A***	I.1.A; I.1.B; I.2.B; I.5**; I.6.A; I.6.B; I.7; I.8; II.4.A; II.6; II.7.B; III.1; III.6; IV.1.B***; IV.6	II.1C; II.12.A	I.9; II.3; II.5; IV.5

¹ Following feedback from OIE members, partners and experts, the full integrity of the PVS Evaluation or Evaluation Follow-Up mission and report, as well as the full integrity of the PPR specific mission report, should be maintained.

Recommendations

- *Countries should carry out PMAT exercises to show progression in the levels of achievement of PPR relevant critical competencies of the Veterinary Services;*
- *Requesting WOAHA for a PVS – PPR evaluation mission will enrich the mission team by a PPR expert and be a stimulus to the ongoing PPR activities and the staff carrying them out and will raise their importance within the Veterinary Services;*
- *Applying the PMAT with the available technical experts in-country should be an essential component of the PVS – PPR mission activities;*
- *Improving communication between those attending Regional Roadmap meetings and the national PPR team would lead to a better understanding of the regional context by the national PPR team.*



Conclusions: PVS-PPR



- Benefits of the **whole-of-system approach** - system strengthening for greater sustainability
 - Detailed **PPR-specific** recommendations – enabling environment, drivers/barriers for national strategies...
 - **Raise the profile** of PPR as a key priority (voluntary focus of PPR)
 - Complement **PMAT assessments**
-
- ❑ *Countries should be made aware that ultimately component 2 of the GCES, the performance of Veterinary Services, will need to be assessed and improved continuously in support of PPR control and eradication.*

 - ❑ *A PVS-PPR mission can assist in this endeavor and boost capacity towards PPR eradication and support **better implementation of the PPR National Strategic Plans.***

CONCLUSION



PVS Evaluation/Follow-Up missions with PPR specific content

State of play in the region

✓ Uzbekistan – 2025

Planned in 2025-2026

✓ Tajikistan

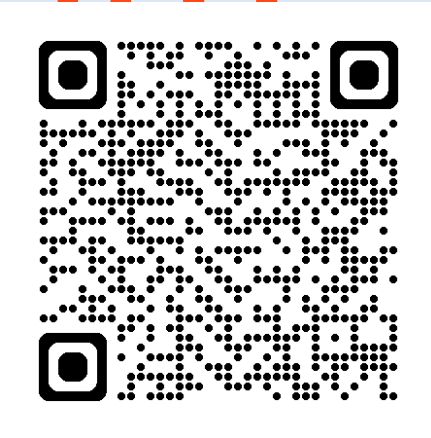
✓ Kyrgyzstan

✓ Mongolia – 2nd

✓ Kazakhstan

✓ Turkmenistan

What's new? PVS Pathway Information System



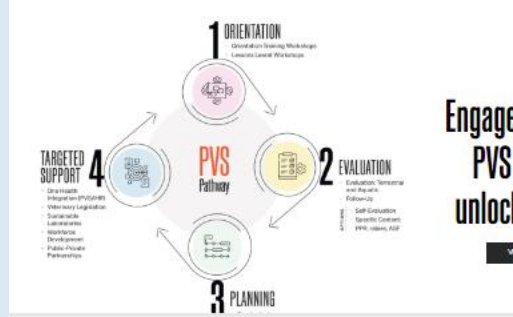
Digital transformation of the PVS Pathway

The Performance of Veterinary Services (PVS) Pathway, WHO's flagship capacity building programme for the sustainable improvement of national Veterinary Services and Aquatic Animal Health Services, has transformed into the PVS Information System. Through the PVSIS, WHO has unlocked the data and insights contained in PVS Reports to allow more effective advocacy efforts for investment and sustainable funding and a deeper understanding of performance trends towards compliance with WHO's International Standards.

143 Countries Participating in the PVS Pathway

9675 Critical Competencies analysed across **215 Evaluations**

26443 Reports made across **45 Countries**



PVS Pathway Insights

Members' PVS Achievement
Percent of Critical Competencies where Member reports at Level of Achievement 3, 4, or 5

Average PVS Achievement by Year
Line chart showing PVS Achievement from 2005 to 2015. Values: 2005 (35%), 2006 (45%), 2007 (40%), 2008 (35%), 2009 (40%), 2010 (45%), 2011 (50%), 2012 (55%), 2013 (60%), 2014 (65%), 2015 (70%).

PVS Achievement by Evaluation Component
Bar chart showing PVS Achievement by component: 1 Human, physical and financial resources (25%), 2 Technical expertise and capability (35%), 3 Interaction with interested parties (45%), 4 Access to markets (55%).

My Requests

Report Type	Date	Language	Comments	Status	Actions
No rows					

My Reports

Country	Year	Document Type	Document Name	Language	Confidentiality Status	Actions
Vietnam	2016	Aquatic Follow-up	PVS Evaluation Report Aquatic	English	Confidential	...
Vietnam	2010	Follow Up	Tool for the evaluation of Performance of Veterinary Services	English	Public	...
Vietnam	2010	Gap Analysis	PVS Gap Analysis Report	English	Public	...
Vietnam	2009	Aquatic Evaluation	Tool for the evaluation of Performance of Veterinary Services	English	Confidential	...
Vietnam	2009	VLP Identification Mission	Assessment Mission of veterinary legislation	English	Confidential	...
Vietnam	2009	VLP Identification Mission	Assessment Mission of veterinary legislation Hanoi 01 to 05 August 2009 Mission Report	English	Confidential	...
Vietnam	2008	Evaluation	Performance, Vision and Strategy	English	Public	...

My Missions

Mission Code	Region	Country	Language	Type	Start Date	End Date	Start Year	Report Year	Status	Report Date	Actions
PVS0109	Asia Pacific	Vietnam	English	Bridging Workshop	10-Aug-2003	17-Aug-2003	2003	2003	In-Active	Completed	...
PVS0204	Asia Pacific	Vietnam	English	Follow Up	23-Nov-2006	04-Dec-2006	2006	2006	In-Active	Completed	...
PVS0106	Asia Pacific	Vietnam	English	Gap Analysis	25-Jun-2010	29-Jun-2010	2010	2010	In-Active	Completed	...
PVS0207	Asia Pacific	Vietnam	English	Follow Up	04-Mar-2010	14-Mar-2010	2010	2010	In-Active	Completed	...
PVS0110	Asia Pacific	Vietnam	English	Aquatic Evaluation	09-Nov-2009	22-Nov-2009	2009	2009	In-Active	Completed	...
PVS0104	Asia Pacific	Vietnam	French	VLP Identification Mission	05-Aug-2008	05-Aug-2008	2008	2008	In-Active	Completed	...
PVS0104	Asia Pacific	Vietnam	English	Evaluation	09-Oct-2008	29-Oct-2008	2008	2008	In-Active	Completed	...

Engage
PVS P
unlock!

Log on to discover unlocked
insights on global Veterinary
Services' Performance

GLOBAL LAUNCH

PVS Pathway

Information

System



pvs.woah.org

Digital transformation of the PVS Pathway

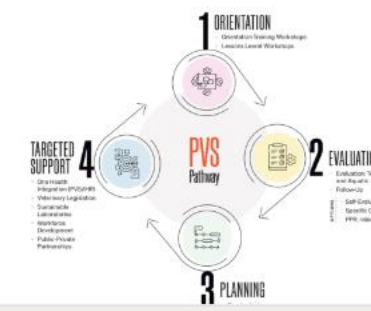
The Performance of Veterinary Services (PVS) Pathway (PVS Pathway) is a digital programme for the sustainable improvement of national Veterinary Services and Aquatic Animal Health Services, transformed into the PVS Information System. Through the PVSIS, OIE has unlocked the data and insights contained in PVS Reports to allow more effective advocacy efforts for investment and sustainable funding, as well as a deeper understanding of performance trends towards compliance with OIE's International Standards.



- 143 Countries** Participating in the PVS Pathway
- 9675 Critical Competencies** analysed across **215 Evaluations**
- 26443** made across **45**



Improving Veterinary Services performance through enhanced access to data and insights.



Engage PVS & unlock

PVS Pathway Insights

PVS Activities Insights

23 Countries with a PVS Report

665 Recommendations

142 Key Phrases

78% Critical Competencies

8 Count of Action Words

Bar charts showing PVS Activities by Month, Region, and Year (2018-2023).

Latest Public PVS Reports

- National Bridging Workshop Targeted Support Lebanon** (18-Sep-23 to 20-Sep-23)
- National Bridging Workshop Targeted Support Ghana** (04-Aug-23 to 11-Aug-23)
- Sustainable Laboratories Targeted Support Nigeria** (08-Nov-23 to 26-Nov-23)
- National Bridging Workshop Targeted Support Ghana** (08-Nov-23 to 16-Nov-23)
- Sustainable Labor Support Nigeria** (08-Nov-23 to 26-Nov-23)
- VLSPI Identification Support Togo** (08-Mar-23 to 24-Jul-23)

Latest PVS Missions

The latest PVS missions appear here. If the reports are declared public by the OIE/Catag, they will be posted on the PVSIS.

- National Bridging Workshop Nepal** (08-Mar-23 to 24-Jul-23)
- Follow Up Ethiopia** (08-Mar-23 to 24-Jul-23)

Upcoming PVSIS Developments

- June 2024:** Seamless automated mission management
- July 2024:** Past Baseline Documents Integration

PVS Reports

A major output of many PVS activities is a report containing rich data and insights, presenting an objective evaluation of the performance of the Veterinary Services, depending on a particular topic of interest. The findings are endorsed by the country and the report may be made publicly available depending on the country's preference.

PVS Pathway Reports are used to:

- Enhance Veterinary Services and public health by implementing its recommendations and provide Veterinary Services strengthened capacity
- Capacity building performance at the regional and national level to address common challenges and achieve common goals
- Develop projects for capacity building initiatives to obtain financial resources and grants and measure progress and trends over time
- Justify advocacy and shape policy and strategy at the ministerial level to change legislation, policy and regulations
- Increase visibility and reporting to partners and investors
- Support internal auditing, quality management, and a risk tool for inspections
- Aid in formation of trade partners & agreements

The PVS Reports Repository can be used to easily access any PVS Report, according to the confidentiality status assigned to it and select several filters, such as region, country, level of advancement, and Critical Competency, among others. Additional documents will be added to the repository in the upcoming stages of the PVSIS development.

Search and View

The PVS Document Repository contains all PVS Reports designated as Public, Confidential and For Partners and Consolates. It would like to request a For Partners and Consolates (Confidential) PVS Report, please use the "Request a Report".

Filters: Region, All Report Year, All Report Type

#	Country	Year	Document Type	Document Status
1	St Lucia	2023	National Bridging Workshop	Public
2	Hong Kong	2023	National Bridging Workshop	Public
3	Thailand	2023	National Bridging Workshop	Public
4	Bahrain	2023	National Bridging Workshop	Public
5	Philippines	2023	National Bridging Workshop	Public
6	Green	2023	National Bridging Workshop	Public
7	Dominica	2023	National Bridging Workshop	Public
8	Spain	2023	National Bridging Workshop	Public
9	San Marino	2023	National Bridging Workshop	Public
10	Nigeria	2023	Sustainable Laboratories	Public
11	Togo	2023	VLSPI Identification Support	Public
12	Uganda	2023	National Bridging Workshop	Public
13	China/Taiwan	2023	National Bridging Workshop	Public
14	Chad	2023	National Bridging Workshop	Public
15	Chad/Taiwan	2023	National Bridging Workshop	Public
16	Chad/Taiwan	2023	National Bridging Workshop	Public
17	Chad/Taiwan	2023	National Bridging Workshop	Public
18	Chad/Taiwan	2023	National Bridging Workshop	Public
19	Chad/Taiwan	2023	National Bridging Workshop	Public
20	Chad/Taiwan	2023	National Bridging Workshop	Public
21	Chad/Taiwan	2023	National Bridging Workshop	Public
22	Chad/Taiwan	2023	National Bridging Workshop	Public
23	Chad/Taiwan	2023	National Bridging Workshop	Public
24	Chad/Taiwan	2023	National Bridging Workshop	Public
25	Chad/Taiwan	2023	National Bridging Workshop	Public
26	Chad/Taiwan	2023	National Bridging Workshop	Public
27	Chad/Taiwan	2023	National Bridging Workshop	Public
28	Chad/Taiwan	2023	National Bridging Workshop	Public
29	Chad/Taiwan	2023	National Bridging Workshop	Public
30	Chad/Taiwan	2023	National Bridging Workshop	Public

Global Performance Insights

Regional Qualitative Analysis

Africa | Americas | Asia Pacific | Europe | Middle East | Report Language: All | Clear all filters

2608 Key Recommendations

9863 Recommendations

32795 Count of Key Phrases

5897 Count of Top

613 Count of Action Words

Key Recommendations by Fundamental Component:

- 1. Human, physical and financial resources: 1100
- 2. Technical authority and capability: 1555
- 3. Interaction with interested parties: 606
- 4. Access to markets: 676

Count of Key Recommendations by Fundamental Component:

- 1. Human, physical and financial resources: 32.34%
- 2. Technical authority and capability: 39.71%
- 3. Interaction with interested parties: 13.50%
- 4. Access to markets: 14.61%

Ten most frequent Key Recommendations by Critical Competency:

- Veterinary Services Capacity and Resources: 41
- Veterinary Services Strengthening: 29
- Workforce Development and Capacity Building: 24
- Veterinary Training and Workforce Development: 16
- Vigilance & notification de épidémies: 10
- Veterinary Services Communication and Collaboration: 8
- Vigilance y control epidemiologicos: 7
- World Organisation for Animal Health Delegation: 3

Data Extraction and Analysis

OIE aims to extract a maximum amount of insights from each PVS Evaluation Report (i.e. Evaluation, Performance, Specific Content, Aquatic Evaluation and Aquatic Performance) from the report extracted and forward it to Members and PVS Database 2023 to improve the quality of PVS Pathway activities and the development of each PVS Report.

Concept/Theme Mapping:

CC Legislation → Country Report 1, Country Report 2, Country Report 3

Strengths → Lack of legal framework, Legislation does not yet exist, No existing law

Weaknesses → Lack of legal framework

Recommendations → Lack of legal framework

Results of Evaluation and General Recommendations:

110,056

100% Positive, 0% Recommendations, 0% Strengths

Data Confidentiality

In the development of the PVS Information System (PVSIS), OIE has been in agreement to declassification of PVS reports and data very actively. Given that the agreement in the PVS Pathway is voluntary and continued engagement is important to Members, OIE has taken special care to ensure the confidentiality status assigned by Countries to every PVS Report.

Trust, Engagement Preservation and Data Confidentiality Framework:

- Member's trust of handling of past data
- OIE's ability to process it
- WGA's Data Stewardship Focus on Insight Sharing
- Added value of PVSIS to encourage engagement/management
- Partner's need for insight

Confidentiality of PVS Reports:

Confidentiality status can be changed by Delegate

Data contained in PVS reports may be used in:

- Individual Country Reports (only by the Member)
- Global and Regional Performance Comparison
- While maintaining strict confidentiality of identifiable data

Key Phrases:

- Confidence in the quality of services
- Consideration of the needs
- Ensure public health
- Assess performance

Tags:

- Strategy Plan
- Workforce
- Infrastructure
- Education Plan
- Regulatory Plan
- Professional Practice

Public PVS Reports: Published by OIE/Catag

PVS Reports for partners and Consolates: Determined by OIE/Partner/Consolates

Confidential PVS Reports: OIE/Catag confidential

PVS Pathway

Thank you

12, rue de Prony, 75017 Paris, France

T. +33 (0)1 44 15 19 49

F. +33 (0)1 42 67 09 87

woah@woah.org

www.woah.org

[Facebook](#)

[Twitter](#)

[Instagram](#)

[LinkedIn](#)

[YouTube](#)

[Flickr](#)

