PPR pathway

PPR Global Strategy

- The Global Strategy is structured into three main components:
  - Component 1 – PPR specific
  - Component 2 – Strengthening Veterinary Services
  - Component 3 – Combining PPR control with other small ruminants diseases

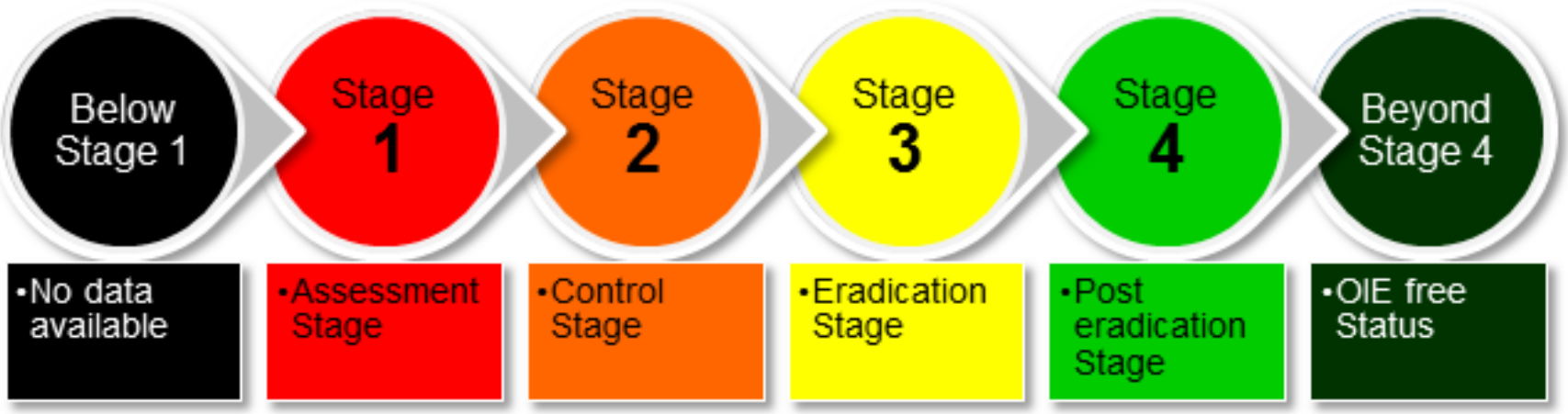
- The target for the Global Strategy is to achieve cessation of PPRV circulation worldwide by 2030

PPR Strategic approach

- The approach proposed in the Global Strategy to progressively control and eradicate PPR is based on a stepwise pathway structured in four different Stages;

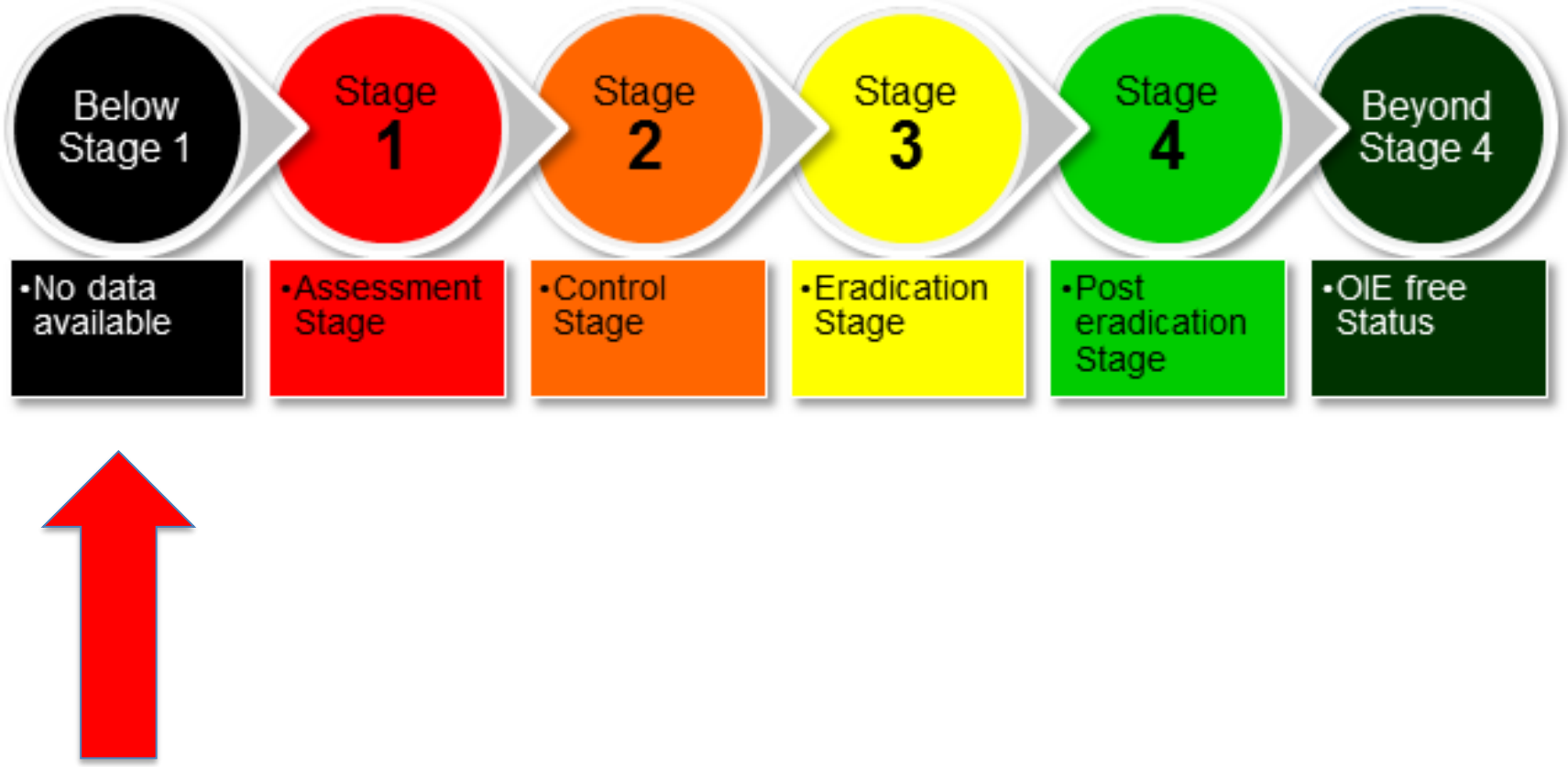
- These four stages correspond to a combination of **decreasing** levels of epidemiological **risk** and **increasing** levels of **prevention** and **control**.

PPR Stepwise approach



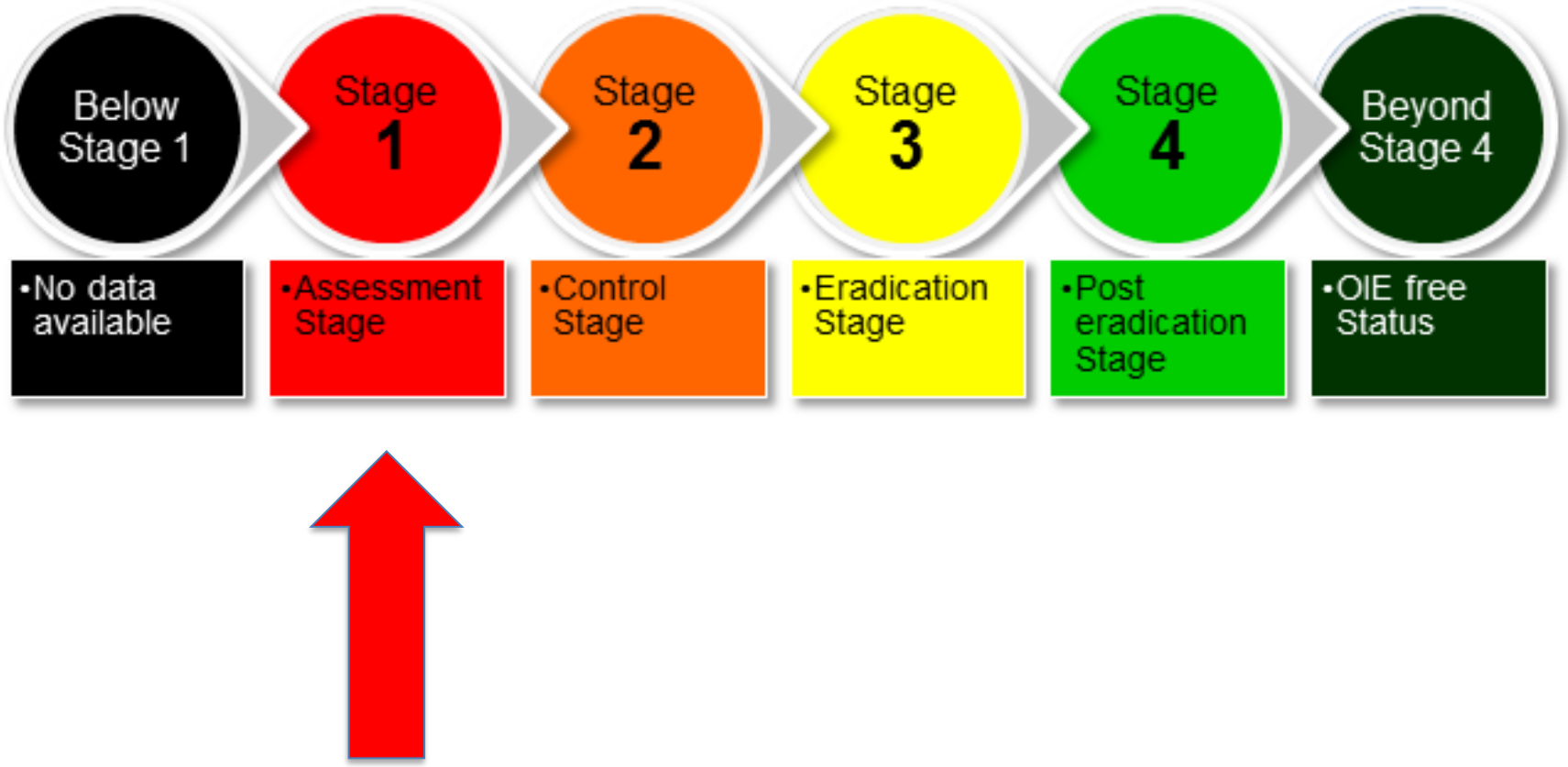
Graph 1 – **The Progressive Stepwise Approach** for the prevention and control of PPR

PPR Stepwise approach



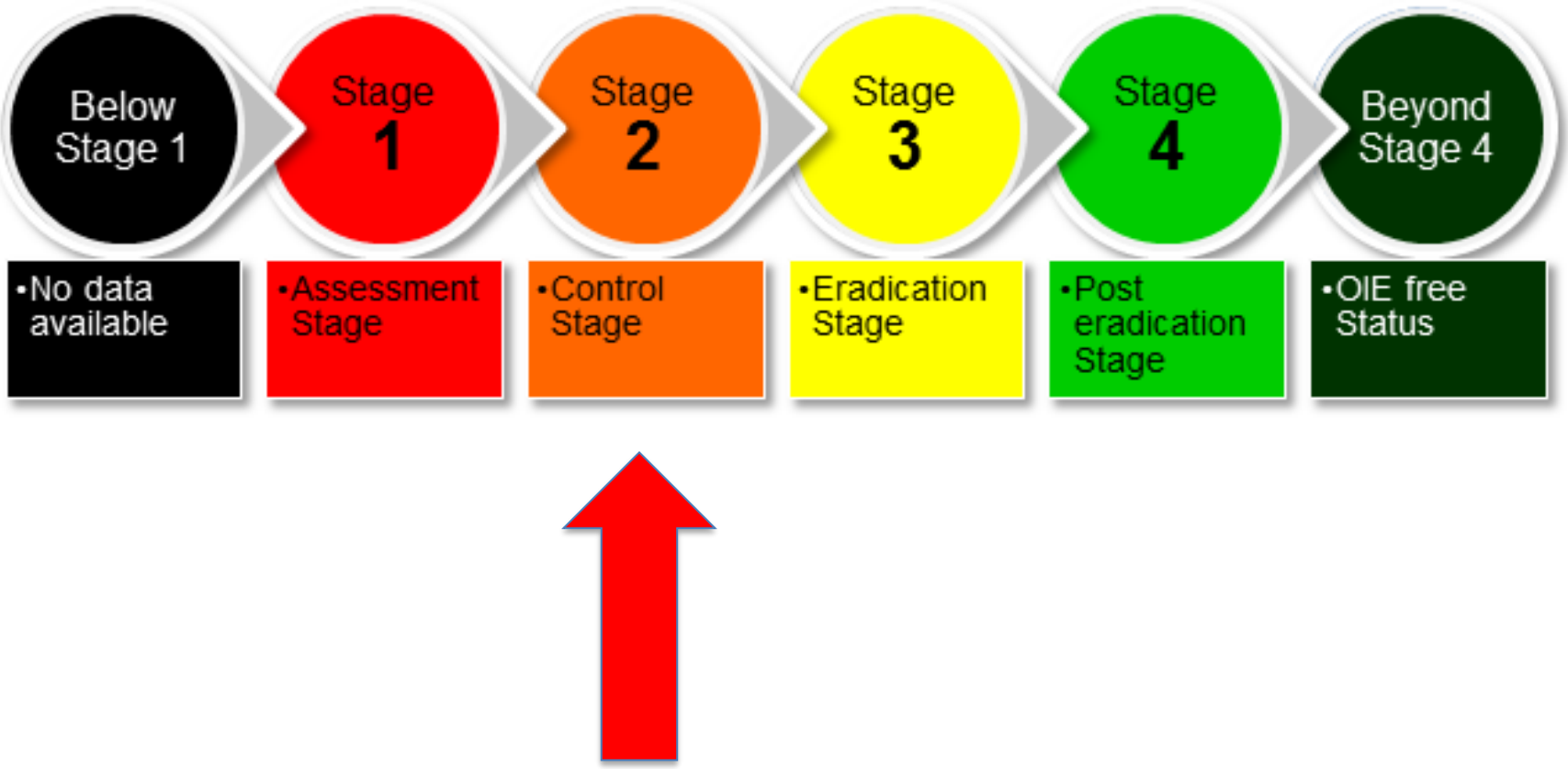
A country where there are insufficient and unstructured data to understand the true risk for PPR and where no appropriate epidemiological investigations are undertaken and where no prevention and control programme is present, cannot be categorised in any of the 4 Stages (i.e. is 'below Stage 1')

PPR Stepwise approach



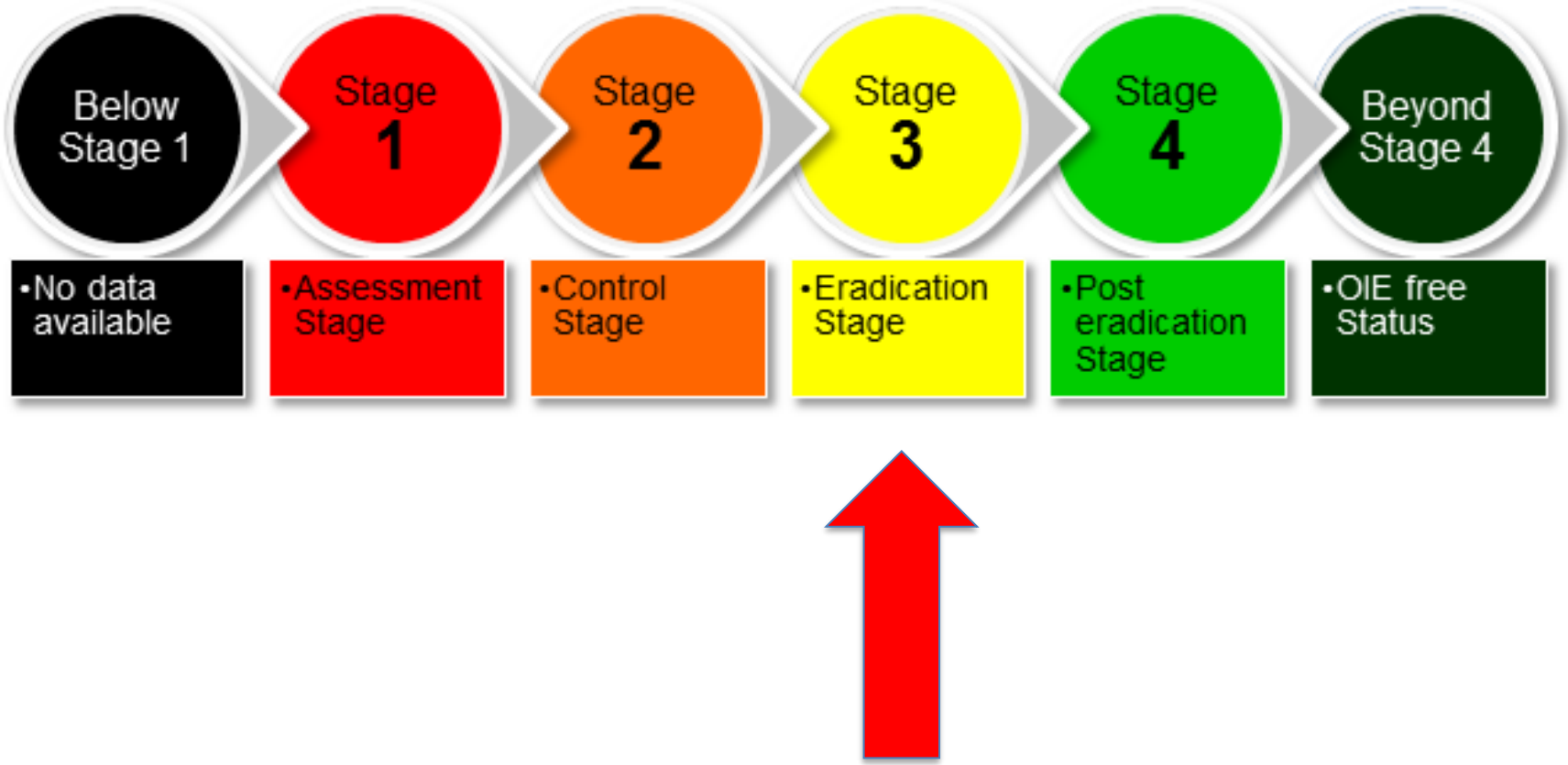
Stage 1 Focus: **TO GAIN A BETTER EPIDEMIOLOGICAL UNDERSTANDING OF THE PRESENCE OF PPR**

PPR Stepwise approach



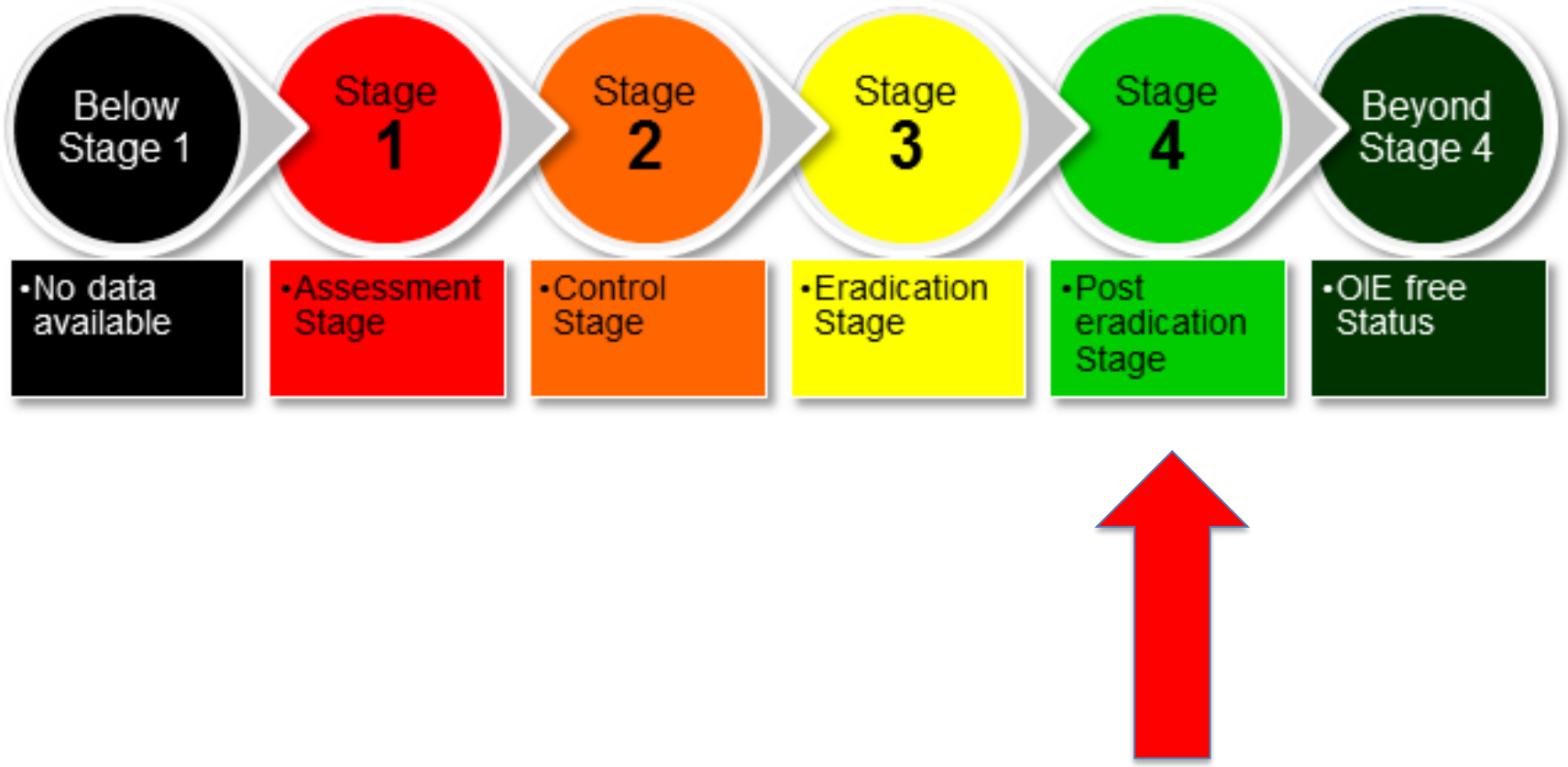
Stage 2 Focus: **TO CONTROL BOTH PPR CLINICAL DISEASE AND INFECTION IN A SPECIFIC AREA OR PRODUCTION SYSTEM**

PPR Stepwise approach



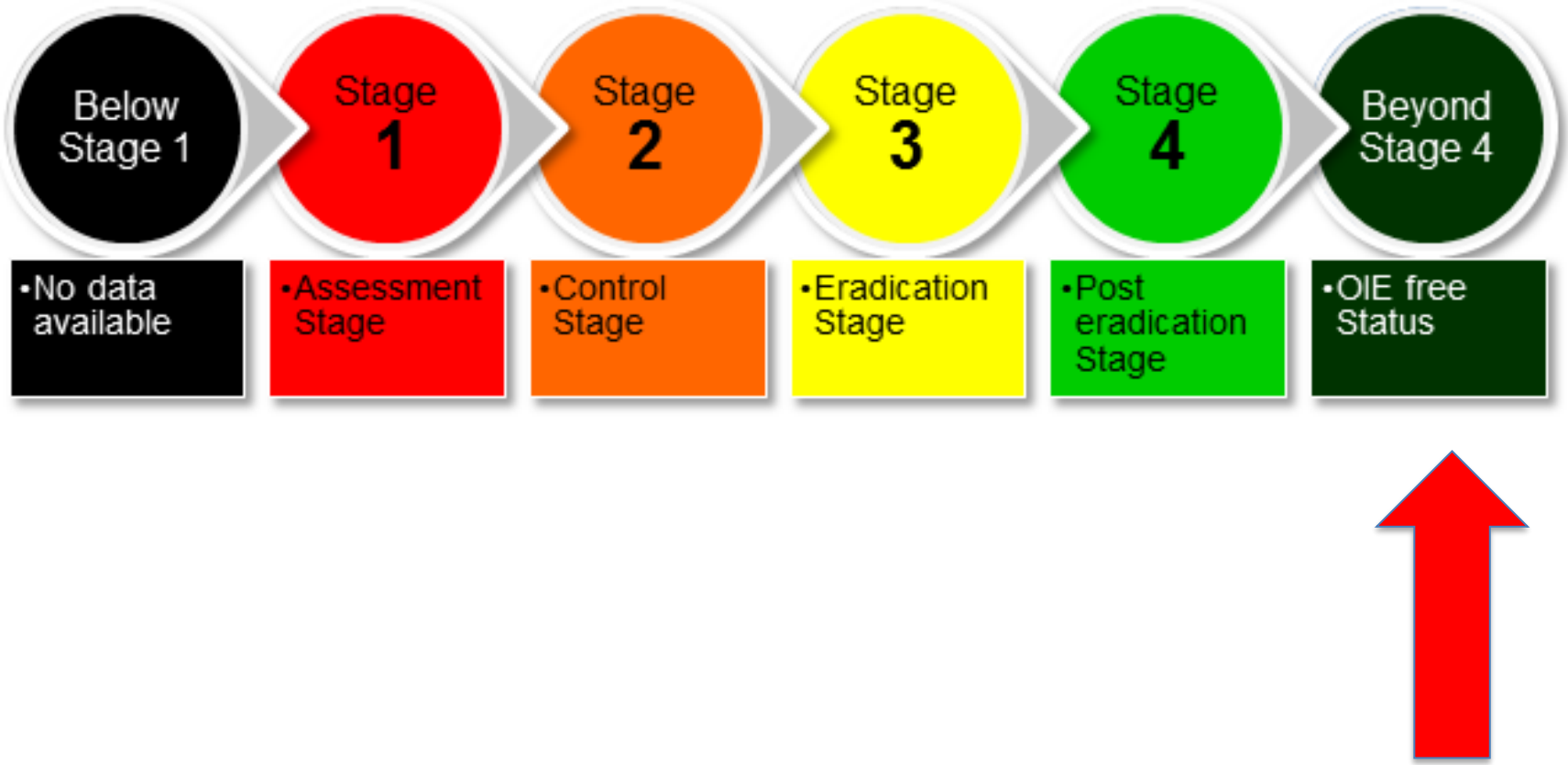
Stage 3 Focus: **TO ACHIEVE THE ERADICATION OF PPR FROM THE NATIONAL TERRITORY OF THE COUNTRY**

PPR Stepwise approach



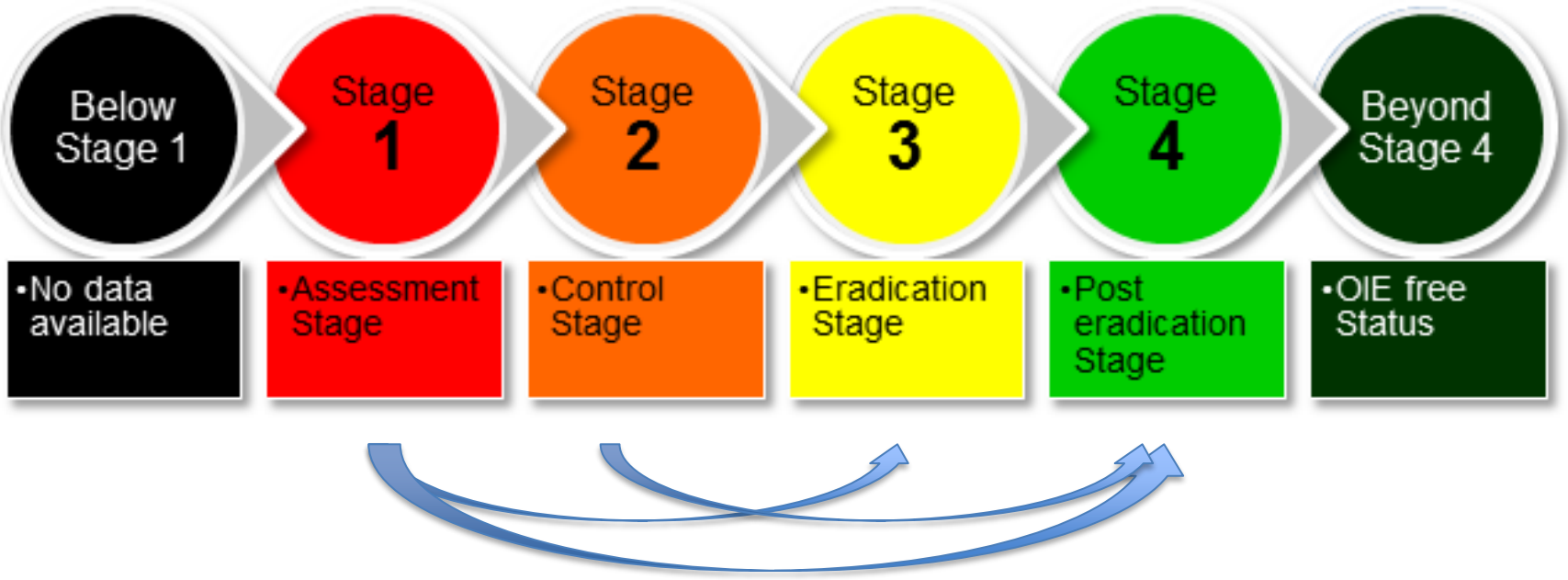
Stage 4 Focus: **TO BUILD EVIDENCE THAT, AFTER SUSPENSION OF VACCINATION, THERE IS NO CLINICAL DISEASE AND NO VIRUS CIRCULATION**

PPR Stepwise approach



A country with an official OIE country status cannot be categorised in any of the 4 Stages (i.e. is 'beyond Stage 4'). A country is entitled to apply to the OIE for such an official free status at the end of Stage 4

PPR Stepwise approach

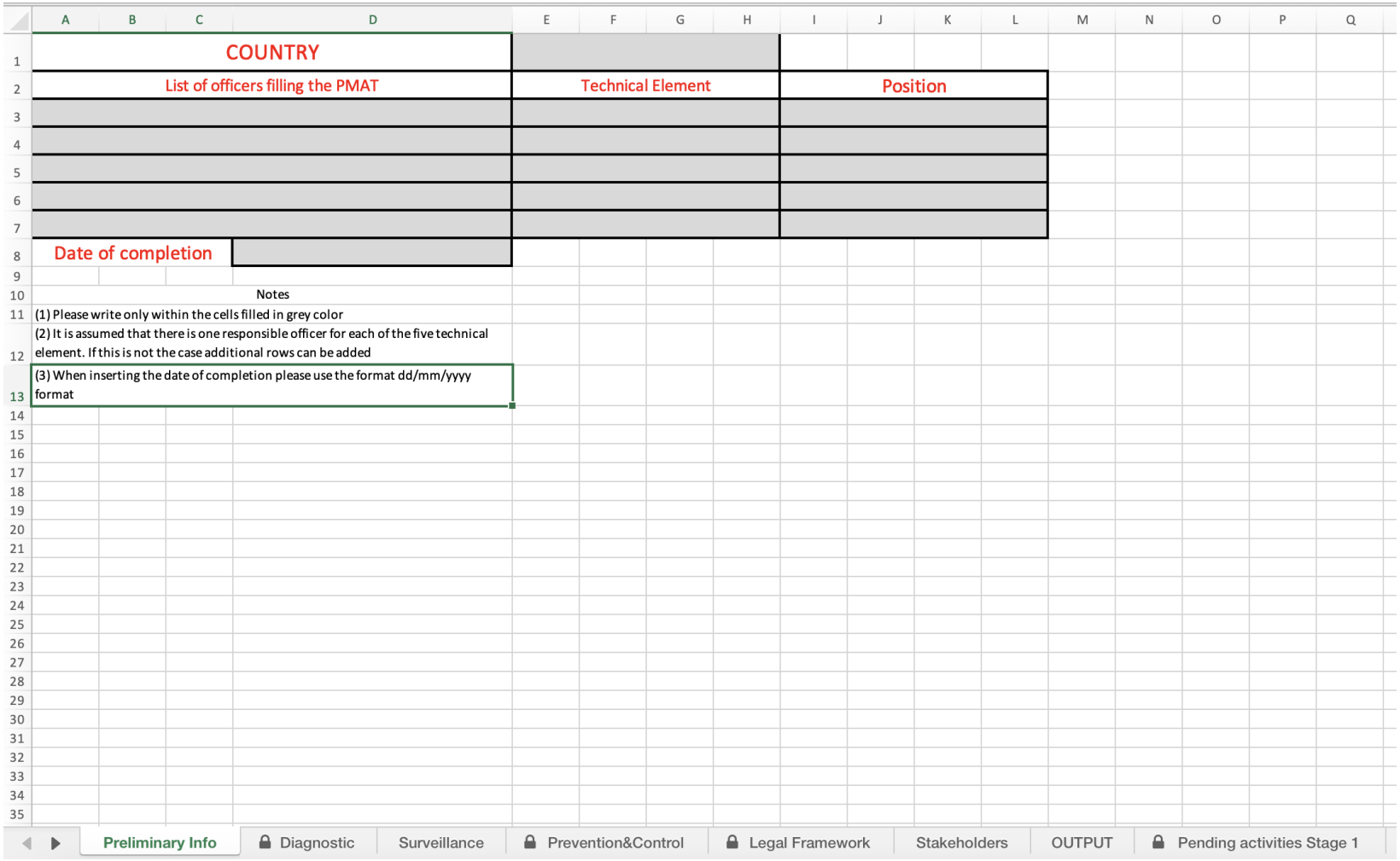


Fast-track procedure: the diagram shows the progression across the four Stages and illustrates the possibility, when appropriate investment is made, to move directly forward two or even three Stages.

PPR Stepwise approach

- The categorization for any specific country in a given Stage (= to a specific level of risk) is the result of a combination of the following five technical elements:
  - **PPR diagnostic system(s);**
  - **PPR surveillance system(s);**
  - **PPR prevention and control system(s) with vaccination playing a major role;**
  - **Legal framework in place to support PPR prevention and control;**
  - **Stakeholders' involvement on PPR**

PMAT



	COUNTRY		
	List of officers filling the PMAT	Technical Element	Position
	Date of completion		

Notes

(1) Please write only within the cells filled in grey color

(2) It is assumed that there is one responsible officer for each of the five technical element. If this is not the case additional rows can be added

(3) When inserting the date of completion please use the format dd/mm/yyyy format

Preliminary Info | Diagnostic | Surveillance | Prevention&Control | Legal Framework | Stakeholders | OUTPUT | Pending activities Stage 1

PMAT

	A	B	C	D	E	F	G	H
1			Diagnostic system - Component 1					
2	Stage	Question	STATEMENT	QUESTION	Level of Achievement** (please see the footnote)	Comments on achievements to date	Activities to be completed	Timeline
3	STAGE 1	Q1	Diagnosis is the first step in the management of any disease. Throughout the implementation of the national PPR control and eradication activities, samples must be collected for laboratory testing in order to confirm or rule-out PPR virus infection.	Has the National Veterinary diagnostic capacity been assessed and is there EITHER at least one national laboratory designated for PPR diagnostic activities OR an agreement in place with at least one laboratory abroad to carry out this service?	Diagnostic services outsourced abroad			
4		Q2	Currently, in accordance with the WOAH Terrestrial Manual, the basic technique for PPR diagnosis is the ELISA for both the antibody and antigen detection.	Are staff trained to perform ELISA tests?	Not Applicable (Diagnostic services outsourced abroad)			
5		Q3	Because PPR virus is highly infectious, early detection using diagnostic tests, and early response are key elements in the management of PPR. The diagnostic system in place must provide diagnostic test results in a timely manner.	Is (are) the designated national veterinary laboratory (laboratories) capable of analysing diagnostic samples from a representative proportion of PPR suspected outbreaks?	Not Applicable (Diagnostic services outsourced abroad)			
6		Q4	Stage 1 is the stage during which the country's PPR epidemiologcial situation is assessed, this implies that all regions are targeted for serum sampling of small ruminants (to determine sero-prevalence of anti-PPR antobodies).	Have representative sets of serum samples from all regions of the country where small ruminants are present been tested for PPR antibodies?	Yes			
7		Q5	Test results depend on the quality of the submitted samples. It is important that samples are collected appropriately into the correct transport containers, maintained at the appropriate temperature and therefore arrive in the laboratory (either national or outsourced) in good conditions in accordance with the WOAH Terrestrial Manual.	Is there capacity to ensure proper handling of field diagnostic samples?	Yes			
8								
9	STAGE 2	Q6	Field veterinary service personnel (veterinarian and veterinary paraprofessionals) are at the forefront of the animal disease diagnostic system. Therefore, they should have training and basic knowledge about PPR clinical signs and which samples should be taken for diagnostic testing.	Have field veterinarians received sufficient training in order to possess knowledge of the sample types and sample collection/transport requirements for PPR diagnostic testing?	Yes			
10		Q7	Nucleic acid amplification techniques, for example PCR, are powerful, robust, and very sensitive techniques for pathogen identification. Increasingly, such molecular-based techniques are used routinely in diagnostic laboratories and, in this stage, more than one technique should be available in the designated laboratory (or laboratories) to assist in testing samples for PPR virus.	Is at least one of the designated laboratories for national PPR eradication activities, either in-country or outsourced, able to perform basic molecular-based diagnostic tests, for example conventional reverse transcription (RT)-PCR?	Yes			
11								
12		Q8	Reliability of test results is ensured through the implementation of quality assurance and quality control (QA/QC) system in diagnostic laboratories.	Is a QA/QC system for PPR diagnostic activities in place in the designated laboratory (or laboratories)?	Yes			
			Participation in interlaboratory proficiency testing (PT) is an important element of the QA/QC system. There are	Is the laboratory (or laboratories) designated for PPR diagnosis and eradication activities participating in				

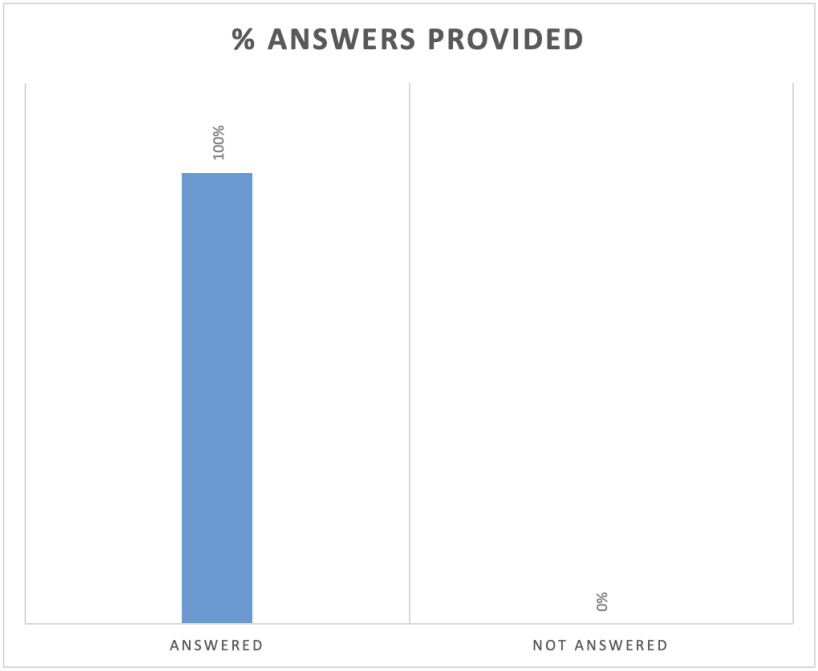
Preliminary Info | Diagnostic | Surveillance | Prevention&Control | Legal Framework | Stakeholders | OUTPUT | Pending activitie

PMAT

	Stage	PVS CC	STATEMENT	WOAH minimum level of achievemt required	Country level of achievement	Comments on achievements to date
20			**Critical Competencies related to Diagnostic - Component 2**			
21						
22	STAGE 1	CC II.1.A	The veterinary services (VS) has access to and uses laboratory tests to confirm PPR diagnosis.	Level 2	<Select an option>	
23		CC II.1.B	The national laboratory system generally meets the needs of the VS PPR activities. Resources and organisation appear to be managed effectively and efficiently, but funding is insufficient for a sustainable system, and limits throughput. Some laboratory biosafety and biosecurity measures have been put in place.	Level 3	<Select an option>	
24	STAGE 3	CC II.1.C	One or more laboratories servicing the public sector VS for PPR diagnostic services and post vaccination evaluation (PVE) including the major national animal health reference laboratory, are using formal QA/QC systems.	Level 2	<Select an option>	
25						
26			**Other small ruminant diseases (country specific) - Component 3**			
27			**STATEMENT**	**QUESTION**	**Level of Achievement**	**Comments on achievements to date**
28		Q14	Priority infectious diseases of small ruminants should be identified for control along with the specific PPR eradication activities.	Has (have) the laboratory (ies) capacity for diagnosis of other priority small ruminant diseases present in the country?	<Select an option>	
29		Q15	Field veterinarians are a crucial part of the national animal disease diagnostic system and should be able to recognize the clinical signs of the major small ruminant diseases present in the country.	Have field veterinary service personnel been trained to recognize and differentially diagnose priority infectious diseases of small ruminants present in the country?	<Select an option>	
			In the PPR eradication phase (Stage 3), active disease search is an important activity. All outbreaks with PPR-like	Does the designated laboratory (or laboratories) for PPR eradication activities have the capacity for		

Preliminary Info | Diagnostic | Surveillance | Prevention&Control | Legal Framework | Stakeholders | OUTPUT | Pending activities Stage 1

PMAT



Overall level of achievement by Stage and Technical element in %

Technical element	Stage 1	Stage 2	Stage 3	Stage 4	Averages across stages
Diagnostic	100,00	100,00	100,00	33,33	83,33
Surveillance	91,67	50,00	40,00	37,50	54,79
Prevention&Control	100,00	57,14	50,00	20,00	56,79
Legal Framework	90,00	58,33	16,67	-	41,25
Stakeholders	93,32	53,57	8,33	-	38,81
Averages within stages	**95,00**	**63,81**	**43,00**	**18,17**	