





National Bridging Workshop on the International Health Regulations (IHR) and the Performance of Veterinary Services (PVS) Pathway

09-11 December 2019 Abuja, Nigeria



Organized by the Ministry of Health, Federal Ministry of Agriculture and Rural Development, Nigeria Center for Disease Control (NCDC), WHO and OIE

Acknowledgments

The organizers of the workshop would like to express their sincere gratitude to the authorities of the Federal Republic of Nigeria for their support in preparation and conduction of the meeting, and to **Dr Chikwe IHEKWEAZU**, Director General, Nigeria Centre for Disease Control (NCDC), participants from NCDC, Ministry of Health, Ministry of Agriculture and Rural Development, Ministry of Environment, Public Health England, FAO, World Bank, and WAHO.

Organizers and participants would also like to acknowledge the Department for International Development (DFID) for funding this workshop through the project called Tackling Deadly Diseases in Africa Programme (TDDAP) and the World Bank through the REDISSE project coordinated by the West African Health Organization (WAHO) for sponsoring this National Bridging Workshop. Finally, special thanks to the WHO Country Office in Nigeria for coordinating all the efforts throughout the process.

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ABBREVIATIONS & ACRONYMS

AAR	After Action Review
AH	Animal Health
AI	Avian Influenza
AMR	Antimicrobial Resistance
CDC	Centers for Disease Control and Prevention (USA)
ССМ	Chemicals Control and Management
CME	Country Monitoring and Evaluation, WHO Health Emergency programme
EOC	Emergency Operating Center
FAO	Food and Agriculture Organization of the United Nations
FMARD	Federal Minister of Agriculture & Rural Department
FMEnv	Federal Minister of Environment
FP	Focal Point
GHSA	Global Health Security Agenda
HQ	Headquarters
НРСО	Health Promotion/Communication Officer
IFRC	International Federation of Red Cross and Red Crescent Societies
IHR	International Health Regulations (2005)
JEE	Joint External Evaluation
MOA	Ministry of Agriculture
MEF	Monitoring and Evaluation Framework
МОН	Ministry of Health
MOU	Memorandum of Understanding
NAPHS	National Action Plan for Health Security
NCDC	Nigeria Centre for Disease Control
NFP	National Focal Point
NOHSP	National One Health Strategic Plan
NOHSC	National One Health Steering Committee
ОН	One Health
OIE	World Organisation for Animal Health
ONSA	Office of the National Security Adviser
PAVA	Plant/Animal (Veterinary Services, Agriculture
РН	Public Health
PVS	Performance of Veterinary Services
REDISSE	Regional Disease Surveillance Systems Enhancement
SOP	Standard Operating Procedures
SON	Standard Organisation of Nigeria
ToR	Terms of Reference
TWG	Technical Working Group
USAID	United States Agency for International Development
WAHO	West African Health Organisation
WASH	Water Sanitation and Hygiene
WHO	World Health Organization

INTRODUCTION

BACKGROUND

The World Health Organization (WHO) and the World Organisation for Animal Health (OIE) are the two main international organizations responsible for proposing standards and guidance for the public health and animal health sectors respectively. WHO and OIE have been active promoters and implementers of an intersectoral collaborative approach between institutions and systems to prevent, detect, and control diseases among animals and humans. They have developed various frameworks, tools and guidance materials to strengthen capacities at the national, regional and global levels.

WHO Member States adopted a legally binding instrument, the International Health Regulations (IHR, 2005), for the prevention and control of events that may constitute a public health emergency of international concern. Through these regulations, countries are required to develop, strengthen and maintain minimum national core public health capacities to detect, assess, notify and respond to public health threats and as such, should implement plans of action to develop and ensure that the core capacities required by the IHR are present and functioning throughout their territories. Various assessment and monitoring tools have been developed by WHO such as the IHR Monitoring and Evaluation Framework (MEF), which includes *inter alia* the Annual Reporting Questionnaire for Monitoring Progress and the Joint External Evaluation (JEE) Tool.

The OIE is the intergovernmental organization responsible for developing standards, guidelines and recommendations for animal health and zoonoses; these are laid down in the OIE Terrestrial and Aquatic Animal Codes and Manuals. In order to achieve the sustainable improvement of national Veterinary Services' compliance with these standards, in particular on the quality of Veterinary Services, the OIE has developed the Performance of Veterinary Services (PVS) Pathway, which is composed of a range of tools to assist countries to objectively assess and address the main weaknesses of their Veterinary Services.



These support tools shift away from externally driven, short-term, emergency response type 'vertical' approaches addressing only specific diseases, and contribute to a more sustainable, long term 'horizontal' strengthening of public and animal health systems. The WHO IHR MEF and the OIE PVS Pathway approaches enable countries to determine strengths and weaknesses in their respective functions and activities and promote prioritization and pathways for improvement. Furthermore, they engage countries in a routine monitoring and follow up mechanism on their overall level of performance and help to determine their needs for compliance with internationally adopted references and standards.

The use of the WHO IHR monitoring tools and OIE PVS Pathway results in a detailed assessment of existing weaknesses and gaps, with the better alignment of a capacity building approach and strategies at country level between the human and animal health sectors. The two organizations have developed a workshop format (the IHR-PVS National Bridging Workshops) that enables countries to further explore possible overlapping areas addressed in their PVS and IHR capacity frameworks and develop, where relevant, appropriate bridges to facilitate coordination. A structured approach using user-friendly materials enables the identification of synergies, reviews gaps and defines the operational strategies to be used by policy makers for concerted corrective measures and strategic investments in national action plans for improved health security.

In Nigeria:

- a PVS Evaluation Follow-Up Mission was conducted in January-February 2019;
- Country-led mid-term Joint external evaluation of IHR core capacities on November 18-22, 2019
- a Joint External Evaluation (JEE) mission was conducted on June 11-20, 2017

OBJECTIVES OF THE WORKSHOP AND EXPECTED OUTCOMES

The main objective of the IHR-PVS Pathway National Bridging Workshop (IHR-PVS NBW) is to provide an opportunity to the human and animal health services of hosting countries to build on the reviews of performance, gaps and discussions for improvement conducted in their respective sectors, and to explore options for improved coordination between the sectors, to jointly strengthen their preparedness for, and control of, the spread of zoonotic diseases.

The IHR-PVS NBWs focus on the following strategic objectives:

- **Brainstorming:** discuss the outcomes of IHR and PVS Pathway country assessments and identify ways to use the outputs;
- Advancing One Health: improve dialogue, coordination and collaboration between animal and human health sectors to strategically plan areas for joint actions and a synergistic approach;
- **Building Sustainable Networks:** contribute to strengthening the inter-sectoral collaboration through improved understanding of respective roles and mandates;
- **Strategic planning**: inform planning and investments (including the National Action Plan for Health Security) based on the structured and agreed identification of needs and options for improvement.

Expected **outcomes** of the workshop include:

- 1. Increased awareness and understanding on the IHR (2005) and the role of WHO, the mandate of the OIE, the IHRMEF and the OIE PVS Pathway, their differences and connections.
- 2. Understanding of the contribution of the Veterinary Services in the implementation of the IHR (2005) and how the results of the PVS Pathway and IHRMEF can be used to explore **strategic planning** and capacity building needs.
- 3. A **diagnosis** of current **strengths and weaknesses of the collaboration** between the animal health and public health services.
- 4. Identification of practical next steps and activities for the development and implementation of **joint national roadmap** to strengthen collaboration and coordination.

The agenda of the Workshop is available at <u>Annex 1</u>. It was attended by 81 participants (22 staff from the Federal Ministry of Health (FMoH) and the Nigeria Centre for Disease Control, 24 staff from the Federal Ministry of Agriculture and Rural Development (FMARD), 6 staff from the Federal Ministry of Environment (FMoEnv), 1 WHO national technical staff, and 6 representatives from partner organizations (<u>Annex 2</u>). Majority of the participants were from the animal and human health sectors mainly from Abuja State.

REPORT ON THE SESSIONS

The workshop used an interactive methodology and a structured approach with user-friendly materials, case studies, videos and facilitation tools. All participants received a *Participant Handbook, One Health Strategic Plan 2019-2023 and USB memory sticks* which comprised all necessary information such as the objectives of the workshop, instructions for working groups, expected outcomes of each session etc. Sessions were structured in a step-by-step process as follows:

OPENING SESSION

The workshop begun with the National Anthem and prayer followed by the introduction of participants and facilitators, a series of presentations and movie about the Tripartite One Health collaboration and vision before the opening ceremony by high level national representatives from Human, Animal and Environment Ministries.

The welcome remarks from Dr. Susanne Munstermann on behalf of the World Organisation for Animal Health (OIE), Dr Ibrahim Mamadu, Emergency Preparedness and Response (EPR) Office, WHO Nigeria Office, Dr Chika Okpala, representing the Ministry of Environment (MoEnv) were followed by the official opening remarks delivered by Dr Chikwe IHEKWEAZU, Director General, Nigeria Centre for Disease Control (NCDC). In his welcome remarks, Dr IHEKWEAZU reminded the participants of the importance of the linkages of the IHR (2005) and the OIE PVS Pathway to strengthen the ongoing collaboration and other One Health initiatives in Nigeria. Dr IHEKWEAZU, the representatives on the high table and all participants were invited to take a group photo.

SESSION 1: THE ONE HEALTH CONCEPT AND NATIONAL PERSPECTIVES

The workshop objectives and expected outcomes were presented by Mrs Elsie ILORI on behalf of NCDC. This presentation was followed by a brief introduction about the approach, methodology and the importance of referring to the participant handbook during each of session. A documentary video initiated the first technical session with a description of the One Health (OH) Concept, its history, rationale and purpose and how it became an international paradigm. The video also introduced the workshop in the global and national context by providing high level background information on the collaboration between WHO, OIE and FAO, globally and at the regional level. Following the first video, Dr James I. BALAMI gave a presentation reviewing the mandate, mission, key functions, organisational structure, disease reporting channel and the recent One Health activities of the Federal Ministry of Agriculture and Rural Development (FMARD). The key challenges to effectively operationalize One Health approach were presented.

On behalf of the Ministry of Health, presentations were made by NCDC experts Drs Adesola Yinka-OGUNLEYE and Oyeladun OKUNROMADE. Their presentations covered the brief background of NCDC, disease reporting systems, collaborating partners, response activities and successes and achievements. It was clear from their presentation that in recent years, Nigeria has made a substantial progress to implement some key One Health activities including the prioritization of zoonotic disease (rabies, avian influenza, Ebola, swine influenza, anthrax, bovine tuberculosis, Lassa fever, Escherichia Coli 0157, brucellosis, monkeypox and yellow fever), capacity building of one health workforce, AMR Action plan, OH Rapid Response Team, disease specific OH – TWG, Joint integrated zoonotic research plan, the development of the National OH Strategic Plan (OHNSP) 2019 - 2023 and the Country-led mid-term Joint external evaluation of IHR core capacities.

The One Health coordination mechanism which comprised of the National One Health Steering Committee (NOHSC), National One Health Technical Committee (NOHTC), National One Health Coordination Unit (NOHCU) was presented and participants were briefed about the launch of the Strategic One Health plan.

Dr Oyeladun OKUNROMADE presented the preliminary results of the mid-term JEE of IHR capacities. Although, that there is a slight improvement in few IHR core capacities, substantial financial and human resources are still needed, to improve the multisectoral, One Health approach.

Dr Columba T. VAKURU from the FMARD and the OIE delegate presented on the Performance of Veterinary Services (PVS) and One Health approach. In his presentation he briefed the participants of the previous PVS evaluations and the recently conducted PVS follow mission on 14th January to 1st February 2019, where various Veterinary establishments, institutions, associations and facilities were visited by external certified PVS experts. Dr VAKURU presented the key recommendations relevant to One health and drawn from the recent PVS document. These recommendations included the establishment of formal agreement for collaboration with FMOH, NAFDAC, NCDC and SON, advocacy to encourage increased financial support for NFELTP and other field based trainings, provision of training for Veterinary Staff on risk assessment analysis as a tool for border control, disease surveillance and development of emergency response plans, improving the inter-sectoral, inter-disciplinary coordination and information sharing on food safety and food borne diseases, protecting of Public Health by reducing zoonoses, food borne diseases, compliance with international standards among others. Dr VAKURU noted in his presentation that harmonization of the JEE and PVS recommendations will substantially improve the intra-, inter-sectoral collaboration to tackling endemic, emerging and re-emerging zoonotic diseases in Nigeria. The second documentary video provided participants with concrete worldwide examples of intersectoral collaboration in addressing health issues at the human-animal interface, focusing on several key technical areas such as surveillance, response operations, risk communication etc.

Outcomes of Session 1:

At the end of the session, the audience agreed that:

- Intersectoral collaboration between animal and human health sectors happens, but mainly during outbreaks; with a better preparedness, much more could be done at the human-animal interface.
- The two sectors have common concerns and challenges and conduct similar activities. Competencies exist and can be pooled. This needs to be organized through a collaborative approach;
- WHO, OIE and FAO are active promoters of One Health and can provide technical assistance to countries to help enhance inter-sectoral collaboration at the central, local and technical levels.

SESSION 2: NAVIGATING THE ROAD TO ONE HEALTH – COLLABORATION GAPS

Participants were divided into five working groups of approximately 10 to 15 mixed participants from three sectors (Ministry of Health, Ministry of Agriculture & Rural Development, Ministry of Environment) and from different levels (Federal, State, and Local Government). Groups were provided with one of five case study scenarios (Table 1) based on diseases relevant to the Nigeria context (rabies, avian influenza, monkeypox, Lassa fever, and anthrax) developed in collaboration with representatives from NCDC and relevant ministries during the pre-meeting session in Abuja.

Table 1: Scenarios used for the different case studies

Rabies (note: this case is entirely fictitious) - A stray dog which was known to have bitten two sheep and was behaving aggressively towards people was reported to have bitten some children in the same neighbourhood. It was killed by the community in Kebbi State two days later. The carcass of the dog was disposed of and cannot be located to facilitate veterinary investigation.

Avian Influenza (note: this case is entirely fictitious) - Two persons were admitted at Eti-Osa General Hospital, Lagos State, with Pneumonia. Laboratory testing by RT-PCR revealed positive for H5N1 subtype of Avian Influenza with reported mortality in chickens. One of the patients is a commercial broiler producer who sells his birds two times a week at the local market. The other patient reported having visited the same market a week prior to the disease onset and having bought four (4) ducks

Monkeypox (note: this case is entirely fictitious) - In 2017 a 26-year-old male presented to University of Calabar Teaching Hospital, Cross-river state with vesiculopustular rash on face, palms, soles of the feet and fever. Symptoms are consistent with monkeypox disease. Patient came from a border community with Cameroun mainly engaged in farming and fishing in however patient has no history of contact with any form of wildlife. Cameroun reported an outbreak of Monkeypox in wildlife in 2016. Patient had history of contact with a friend with similar symptoms who has travelled to the UK.

Lassa fever (note: this case is entirely fictitious) - Two persons were admitted at the Toro Government Hospital with haemorrhagic symptoms. These persons came from a rural farming area in Toro Local Government during the harvest season. There was known to be a significant increase in rodent number in houses in the area. The first person was tested PCR positive for Lassa fever virus, few weeks later he died. The death of this person generated panic in the community. Case two was taken back to the community by family members against medical advice. This action by the family generated fear and panic in the community.

Anthrax (disclaimer: this case is entirely fictitious) - Nine (9) people from a pastoralist community showing identical anthrax-like lesions reported to a General Hospital close to a border. One of these people is a meat-seller at the village market. There were reports of dead cattle carcasses within the village. The area is known to have security concerns due to herder-farmer clashes.

Using experience from previous outbreaks of zoonotic diseases, the groups discussed how they would have

realistically managed these events, and evaluated the level of collaboration between the Veterinary and the Public Health Services for 15 key technical areas: Coordination at high Level, Coordination at local Level, Coordination at technical Level, Legislation/Regulation, Finance, Communication with media, Communication with stakeholders, Field investigation, Risk assessment, Joint surveillance, Laboratory, Response, Education and training, Emergency funding, and Human resources. The status of the level of collaboration was represented by color-coded *technical area cards*: green for "good collaboration", yellow for "some collaboration", and red for "collaboration needing improvement" (Figure 1).



<u>Figure 1a</u>: Results of the evaluation made by a group of participants, of the level of collaboration between the two sectors for 15 key technical areas from a case study scenario on Rabies before plenary session to reach consensus on the level of collaboration.



Figure 1.b: Participant justifying the choice of the colour coding while assessing the level of collaboration between the relevant sectors for 15 key technical areas from one of the Rabies case study scenario.

During an ensuing plenary session, each group presented and justified the results of their work. <u>Output 1</u> summarizes the results from the five groups with the contributions of all the participants.

Each group also amended the report sheet to be used for road-planning accordingly (session 5).

Outcomes of Session 2:

- Areas of collaboration are identified, and joint activities discussed.
- Level of collaboration between the two sectors for 15 key technical areas is assessed.
- Strengths and weaknesses in the intersectoral collaboration are identified.

SESSION 3: BRIDGES ALONG THE ROAD TO ONE HEALTH

Documentary videos introduced the international legal frameworks followed by human health (<u>IHR 2005</u>) and animal health (<u>OIE standards</u>) as well as the tools available to assess the country's capacities: the annual reporting and JEE tools for public health services and OIE PVS Pathway for Veterinary Services.

The differences and connections between these tools were explained. A large matrix (IHR-PVS matrix), crossconnecting the indicators of the IHR MEF (in rows) and the indicators of the PVS Evaluation (in columns) was set-up and introduced to the participants. Through an interactive approach, working groups were invited to plot their *technical area cards* onto the matrix by matching them to their corresponding indicators (Figure 2). A plenary analysis of the outcomes showed clear gap clusters and illustrated that most gaps were not diseasespecific but systemic.



Figure 2: Participants mapping the collaborative strengths and weaknesses on the IHR-PVS matrix.

The main gaps (clusters) identified were discussed and it was agreed that the rest of the workshop would focus on the following priorities:

- Coordination at national, state and local government levels
- Laboratory
- Response
- Surveillance
- Risk Assessment

Outcomes of Session 3:

- Understanding that tools are available to explore operational capacities in each of the sectors.
- Understanding of the contribution of the veterinary sector to the IHR.
- Understanding of the bridges between the IHR MEF and the PVS Pathway. Reviewing together the results of capacities assessment may help in identifying synergies and optimize collaboration.
- Understanding that most gaps identified are not disease-specific but systemic.
- Identification of the technical areas to focus on during the next sessions.

SESSION 4: CROSSROADS - PVS PATHWAY AND IHR MEF REPORTS

New working groups with representation from all previous groups were organized for each of the five priority technical areas.

The matrix was used to link the identified gaps to their relevant indicators in the IHR MEF and in the PVS Pathway. Each working group then opened the assessment reports (JEE, PVS Evaluation and PVS Gap Analysis) and extracted the main findings and recommendations relevant to their technical area (Figure 3).



Figure 3: The group working on technical area 'Surveillance' extracted the main weaknesses and recommendations from *PVS* and *JEE* reports.

Outcomes of Session 4:

- Good understanding of the assessment reports for both sectors, their purpose and their structure.
- Main gaps relevant to each technical area have been extracted.
- Main recommendations from existing reports have been extracted.
- A common understanding of the effort needed starts to emerge.

SESSION 5: ROAD PLANNING

Using the same working groups as for the previous session, participants were asked to identify, for each technical area, up to three joint objectives to improve their collaboration. For each objective, they filled *Activity Cards*, detailing the activities, their dates of expected implementation, difficulty of implementation and the expected impact, the focal points responsible, and the implementation process (Figure 4).



<u>Figure 4</u>: The group working on the technical area "Response" identified three objectives and practical activities to improve the collaboration between the human and animal health sectors.

The difficulty (relating to the cost) of implementation and the expected impact of each activity were evaluated using red and blue stickers respectively and a semi-quantitative scale (1 to 3).

Outcomes of Session 5:

- Clear and achievable objectives and activities were identified to improve intersectoral collaboration between the two sectors for all technical areas selected.
- For each activity, a desired completion date, focal points, required support and measurable indicators have been identified.
- The impact and the difficulty of implementation of all proposed activities have been estimated.

SESSION 6: FINE-TUNING THE ROAD-MAP

In-between Sessions 5 and 6, the team of external experts and facilitators circulated through the different panels to discuss about the results at this stage. When there was a need for further clarification or for discussion on the objectives and activities identified by participants, suggestions and comments were made for consideration. At the beginning of Session 6, participants were given approximately two hours to address the comments made with the assistance of the external experts and facilitators.

A World Café exercise was then organized to enable participants to contribute to the action points of all technical areas. Each group nominated a rapporteur whose duty was to summarize the results of their work rather than to explain their results to the other groups. Each group rotated between the different boards to contribute and provide feedback on all technical areas by noting down their suggestions or comments on post-it notes (Figure 5). At the end of the cycle, each group returned to their original board and addressed all changes or additions suggested by the other participants. Objectives and activities were fine-tuned accordingly.



<u>Figure 5</u>: World café exercise: participants are reviewing the objectives and activities developed by the groups working on the technical areas "Response" and "Surveillance".

The final joint roadmap is fully detailed in <u>Output 2</u>.

Prioritization of Objectives

A total of 11 objectives were identified. To prioritize them, participants were given five stickers and asked to select the five objectives they considered as of highest priority.



<u>Figure 6</u>: Prioritization of the three Objectives provided by participants to improve collaboration between animal and human health sectors in the technical area 'Laboratory'

Outcomes of Session 6:

- Harmonized, concrete and achievable joint roadmap to improve the collaboration between the animal, environmental, and human health sectors in the prevention, detection and response to zoonotic disease outbreaks.
- Buy-in and ownership of all participants who contributed to all areas of the roadmap.
- Prioritization of the objectives and activities.

SESSION 7: WAY FORWARD

Results of the prioritization vote were presented and discussed. A total of 58 of participants voted, results can be found in <u>Output 3</u>.

Dr Oyeladun OKUNRUMADE the One Health Focal Point at the NCDC, presented the results of the prioritization vote and way forward on how intersectoral collaboration could be improved using the results of the IHR-PVS National Bridging Workshop. Prior to the launch of the National One Health Strategic Plan 2019-2023 and the closing, Mrs Elsie ILORI from NCDC begun a presentation which covered the risk of emerging re-emerging zoonotic diseases in Nigeria, the need and history of One Health approach, the National One Health Strategic Plan 2019-2023, its structure approach, purpose and key thematic areas.

The presentation was paused at the arrival of Dr Chikwe IHEKWEAZU, Director General NCDC for the closing remarks of the workshop and the launch of the National One Health Strategic Plan (NOHSP) 2019-2023.

Outcomes of Session 7:

- Linkages between the joint roadmap and Nigeria's National Action Plan for Health Security.
- Linkages between the joint roadmap and Nigeria's One Health Strategic Plan.
- Identification of opportunities to improve collaboration in the other remaining technical areas.
- Discussion on the way forward.

CLOSING SESSION AND THE LAUNCH OF THE NATIONAL ONE HEALTH STRATEGIC PLAN 2019-2023

The workshop ended with the official launch of the National One Health Strategic Plan 2019-2023 in the presence of representative of WHO, OIE, FAO, WAHO, and PHE. In his welcoming remark to the launch of the NOHSP, Dr Chikwe IHEKWEAZU, Director General NCDC, highlighted the crucial role of the strong collaboration among the MoH, and Ministries of Environment and Agriculture that has led to the development of the NOHSP which is critical for the country. He acknowledged academics, colleagues from States and partners who have contributed to this critical document for the operationalization of One Health in Nigeria. He addressed his special acknowledgement to his NCDC colleagues who have collaboratively worked to put together the NOHSP, which was signed by the Honourable Ministers of Health, Agriculture and Rural Development, and Environment.

The NCDC Director General noted that the official launch of the NOHSP is the beginning of the stronger collaboration for improved health. In addition, he reminded the participants about the recent successful outputs of collaboration during the outbreak responses for Lassa fever, monkeypox diseases and influenza in the country. However, he highlighted the need of further stronger collaboration in the areas of prevention and detection. He noted that Nigeria has made a significant high political commitment to One Health approach. In his closing remarks, he announced the arrival of the Honourable Minister of Health to launch the NOHSP and the commitment of NCDC to serve the Secretariat for the National One Health platform. Up on the arrival of the Honourable Minister of Health, Dr (Sen) Olorunnimbe MAMORA, and the national anthem, the NCDC DG invited Mrs Elsie ILORI to continue the presentation on the perspectives of One Health approach in Nigeria. In her presentation, Mrs ILORI highlighted the commitment made by the Ministers during the Regional One Health Meeting in Dakar in November 2016, to dedicate budget line for the implementation of One Health approach. She also outlined the most significant progress and challenges identified to operationalize One Health approach in Nigeria. The implementation of One Health approach appears to be hampered by poor coordination and institutionalization, inadequate funding especially for animal and environmental health activities compared to human health, weak laboratory diagnostic capacity, weak disease surveillance information sharing between the human and animal health sectors. Furthermore, the lack of dedicated budget line for One Health, and strong political support were among the majors concerns to be considered. In her presentation, it was concluded that despite the progress made to implement various One Health initiatives, including the development of the NOHSP which focused on five key strategic goals, substantial political and financial support are still needed to strengthen the operationalization of One Health in Nigeria.

The NCDC DG was kindly requested to convene the participants' prayer to the Government and the Ministers for their support and commitment to One Health approach.

To operationalize the One Health approach in Nigeria, strong political and financial supports are needed in addition to the commitment of staff from all sectors. In this respect, the outputs of the workshop were considered in line with the goals set in the National One Health Strategic Plan (NOHSP) 2019-2023 which was launched by the Honourable Minister of State for Health Dr (Sen) Olorunnimbe MAMORA and key representatives from Ministry of Environment and the Ministry of Agriculture & Rural Development, Dr Chika OKPALA, and Dr Dooshima KWANGE, respectively. The designated high-level representative of the Minister of Environment and the North Manual Development, and the Honourable Minister of Health have expressed to full support to implement the NOHSP 2019-2023

WHO and OIE reiterated their full continuous commitment to support the country in improving the multisectoral collaboration to address zoonotic diseases and other public health events at the human-animalenvironment interface. Nigeria was strongly encouraged to reproduce the bridging workshops at the State level.

All the materials used during the workshop, including movies, presentations, documents of references, and results from the working groups were copied on USB memory sticks and distributed to all participants. In addition, each participant was provided with a copy of the NOHSP 2019-2023.



OUTPUT 1: ASSESSMENT OF LEVELS OF COLLABORATION FOR 15 KEY TECHNICAL AREAS

Technical area (cards)	Card No	Rabies	Avian Influenza	Monkeypox	Lassa Fever	Anthrax	Score
Coordination at high Level	1			•			5
Coordination at local Level	2						8
Coordination at technical Level	3						2
Legislation / Regulation	4						7
Finance	5						9
Communication w/ media	6						6
Communication w/ stakeholders	7						6
Field investigation	8						4
Risk assessment	9						6
Joint surveillance	10						9
Laboratory	11						6
Response	12						5
Education and training	13						5
Emergency funding	14						9
Human resources	15						2

For each disease, the performance of the collaboration between the human health and the animal health sectors is color-coded: green for "good collaboration", yellow for "some collaboration", and red for "collaboration needing improvement". The score uses a semi-quantitative scale (2 points for a red card, 1 for a yellow card and 0 for a green card). Technical areas marked in bold were selected and addressed in-depth throughout the rest of the workshop.

OUTPUT 2: OBJECTIVES AND ACTIONS IDENTIFIED PER TECHNICAL AREA

Difficulty of implementation in relation to cost: Low +, Moderate ++, Very high costs +++ **Impact:** Low impact +, Moderate impact ++, High impact +++

Activities		Cost	Impact	Responsible	Process
COORDIN	ATION				
Objective 1: Ensure efficient coordination at national, State and local governme	ent leve	ls			
1.1. Set up One Health platform at national and subnational levels including sub- committees	31/03/ 2020	+	+++	Minister of Health, Minister of Agriculture, Minister of Environment, DG NCDC	 Identify members of the interministerial One Health Platform (1 national and 36 states) Leadership of the One Health Platform should be at the highest level of government (Presidency at National, Governors of State), Chairmen of Local Government Areas
1.2. Develop MOUs/SOPs and guidelines for the operationalisation of One Health Platform at all levels		+	+++	DG NCDC CVO (FMARD) Director Pest Control and Environmental Health (FME)	 Convene a meeting of stakeholders (inter-ministerial) to draft MOUs/SOPs/guidelines for operationalisation of One Health Review draft MOUs/SOPs by inter- ministerial legal and technical teams Validation and adoption of MOUs/SOPs
Objective 2: To create awareness of One Health at all levels of Government					
2.1. Sensitisation of all relevant stakeholders on One Health at all levels		+	+++	IHR NFP	 Advocacy visits and sensitisation meetings with key stakeholders: Senate leadership/senate committees on Health/Agriculture/Environment House of Representatives The Presidency/Governors/Chairmen and other executives
Objective 3: Ensure availability of funds for One Health activities					
3.1. Establish an emergency fund for One Health	31/12/ 2020	+++	+++	National/Sub- national OH platforms	One Health (inter-ministerial) platforms to advocate to minister and Commissioners of Finance to create Emergency Fund

3.2. Advocacy to relevant stakeholders on release of funds from statutory budgets for One Health activities	30/09/ 2020	+	+++	NCDC, FMARD, FEnV, National OHTWG, Ministry of Finance, Ministry of Information/Comm unication	 Develop advocacy brief for One Health Identify routine One Health activities captured in statutory budgets Advocate for timely release of budgeted funds Create budget lines at national level and all states for novel One Health activities (e.g. One Health platforms) 	
LABORA	TORY					
Objective 4: To build sustainable and effective collaboration and information sl sectors	haring /	data exc	hange am	ong human, anii	mal & environmental health	
4.1. To develop a SOP for laboratory information sharing/data exchange and sharing of reagents between human, animal and environmental health sectors	Q2 (May) 2020	++	++	NCDC/NVRI	 Advocacy, developing and signing of MoU by management of various laboratories To organise three national One health technical committee meeting to develop integrated SOP for information sharing/data exchange for 30-40 persons across the sectors at national levels. Validation/adoption of SOP by relevant stakeholders 	
Objective 5: To build capacity of personnel on advanced laboratory techniques for effective diagnosis of priority zoonotic diseases						
5.1. To train laboratory personnel on diagnostic methods for prioritized zoonotic diseases	Q3 (July) 2020	+	+++	NCDC/NVRI	 Conduct needs assessment and train personnel to use effectively the advanced laboratory techniques (NCCD lab, NVRI, NPHL, NIMR etc). To train selected laboratory personnel for fourteen days on advanced laboratory techniques for diagnosis of key priority zoonoses. Evaluate capacity after training. 	
• Evaluate capacity after training.						

6.1. To develop joint and integrated SOPs for sample transportation for priority zoonotic diseases	Q4 (Oct) 2020	+++	+++	NCDC/NVRI	 To organise 2- to 3-day- workshop to develop SOPs To collaborate with subject matter experts to validate SOPs To print and distribute /disseminate SOPs to all sector laboratories To have harmonized system of sample transportation.
RESPC	NSE				
Objective 7: To upgrade emergency response capabilities of all OH sectors					
7.1. To conduct infrastructural needs assessment and facilitate upgrading of all sectors (human, animal and environment) in order to respond to emergencies	Dec 2020	+++	+++	NCDC -lead FMARD, FMOH, FMEnv and other relevant stakeholders	 Joint infrastructural needs assessment across sectors using pre-determined tool Meeting of relevant stakeholders to harmonise their findings Upgrade facilities as required
Objective 8: To strengthen multi-sectoral collaboration for response activities					
8.1. Set up a joint technical working group on priority zoonotic diseases at the national level for outbreak investigations and response	June 2020	+	+++	FMOH, FMARD, relevant stakeholders and partners NCDC FMEnv	 Request nominations from relevant stakeholders Develop and adopt ToR Draft a MOU Inaugurate the TWG Monthly meetings of the inaugurated TWG to develop plans and response activities Annual AAR meetings
Objective 9: To develop and disseminate standard joint national response fram	nework a	cceptable	by all sta	keholders	
9.1. Develop a joint multi-hazard response plan involving all relevant sectors	June 2020	++	+++	NCDC, FMOH, FMARD, FMEnv, relevant stakeholders	 Stakeholders meeting to adopt/harmonise relevant resources Engage consultant to develop the plan Meeting to adopt the plan Conduct joint stimulation exercise to test the plans Conduct training at national and sub- National levels on joint multi-hazard response
SURVEILLANCE					
Objective 10: To develop a data sharing management system between human	and anir	nal health	surveilla	nce	

10.1. Develop an operational plan for integration of zoonotic disease surveillance system using IDSR/NADIS/ARIS platform to improve surveillance data sharing		+++	+++	One Health Ministers FMARD, NCDC, FMEnv	 NCDC to coordinate activity One Health Ministers/MDAs/Partners to develop TOR for consultants who would be engaged for activities (including development of data platform system for environmental surveillance) Consultants to have one-on-one interactions with relevant stakeholders for both platforms. Harmonization of inputs from above interactions Validation of adoption of operational plan by stakeholders
RISK ASSE	SSMEN	г			
Objective 11: To understand, develop & undertake joint Risk Assessment betw	een hum	an, anim	al & envir	onmental sector	S
11.1. Organise a 5-day workshop of all relevant stakeholders to agree processes and develop joint guidelines for risk assessment for priority zoonotic, emerging and re- emerging diseases including for the importation animals and animal products at Points of Entry (PoEs)) ++	+++	NCDC, FMARD, MIN. OF ENVIRON, Food safety unit of Min.of Health	 Mapping out of stakeholders Identifying relevant documents and resource materials Identifying relevant subject matter experts to help develop the draft Validate and adopt the draft during the workshop
11.2. Organise a 5-day workshop to train all relevant stakeholders to conduct risk analysis for priority zoonotic, emerging and remerging diseases including for the importation of live animals and animal products at PoEs	Q4 2020) +	++	FMARD, NCDC, MIN OF ENVIRON	 Map out relevant stakeholders Review of relevant documents and resource materials Identify relevant subject matter experts to develop training manuals Conduct simulation exercises
11.3. Conduct joint risk assessment for priority zoonoses to ensure all stakeholders are involved in the decision-making process and implementation of appropriate interventions.	Q4 2020) ++	+++	FMARD, NCDC, MIN. OF ENVIRON	 Review and discuss current efforts, challenges in controlling zoonoses Undertake JRA according to the protocol Develop way-forward for corrective measures

NB: Participants have made progress to identify the key objectives and their corresponding activities to be achieved in order to improve the collaboration between public health and veterinary sectors, little emphasis was made to document the level of difficulty and or impact of each activity.

OUTPUT 3: PRIORITIZATION RESULTS

All participants were asked to select which five of the 11 objectives they considered as of highest priority. Total of 58 participants contributed to the vote.



WORKSHOP EVALUATION

An evaluation questionnaire was completed by 60 participants (Figure 8) in order to collect feedback on the relevance and utility of the workshop. National experts rated the workshop highly, being for the most part "fully satisfied or satisfied". Over 90% of respondents answered that they were "satisfied" or "fully satisfied" with the content, the structure, the facilitation and the organization of the workshop (Tables 2-5).



Figure 8: Answers to the questions "which sector are you from" and "which level; of the health structure are you from?"

Workshop evaluation	Satisfied' or 'Fully satisfied'	Average rating (/4)			
Overall assessment	97%	3.3			
Content	95%	3.4			
Structure / format	98%	3.4			
Facilitators	93%	3.3			
Organization (venue, logistics)	93%	3.3			
Participants had to choose between 1=Hiahly unsatisfied – 2=Unsatisfied – 3=Satisfied – 4=Hiahly satisfied					

Tables 2-5: Results of the evaluation of the event by participants (66 respondents)

Participants had to choose between 1=Highly unsatisfied – 2=Unsatisfied – 3=Satisfied – 4=Highly satisfied

Impact on	High' or 'Very High' impact	Average rating (/4)
Your technical knowledge	93%	3.2
The work of your unit	92%	3.3
AH-PH collaboration in country	79%	3.1

Participants had to select between 1=No impact at all – 2=Minor impact – 3=Significant impact – 4=Major impact

		Average	e score for each	session (/4)		
Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7
3.3	3.3	3.6	3.4	3.5	3.3	3.1

Would you recommend this workshop to other countries?					
Absolutely	83%				
Probably	8%				
Likely not	0%				
No	0%				
Unknown	8%				

APPENDIX

ANNEX 1: WORKSHOP AGENDA

	DAY 1
08:30 - 09.00	Registration of participants
09.00 – 10.00	 Opening Ceremony National Anthem/Prayer Introduction of facilitators (PHE, WHO AFRO, FAO, OIE) Introduction of participants (10') Representative of the Ministries (20') Representative of Partners (20') Opening remarks
10:00 - 12:00	 Group Picture (10') Session 1: Workshop Objectives and National Perspectives Workshop objectives MOVIE 1: Tripartite One Health collaboration and vision (15') Coffee break (20') Veterinary services and One Health – PPT (10') Public health and One Health – PPT (10') One Health In Nigeria – PPT (10') Workshop approach and methodology – PPT (10') MOVIE 2: Driving successful interactions - Movie (25') Session 2: Navigating the road to One Health (Working Groups) Presentation and organization of the working group exercise – PPT (15') Case study - Working groups by disease (60')
	 Case study - Working groups by disease (30') Plenary/Feedback session (75')
	DAY 2
08:45 - 9:00	Day one recap
9:00 – 12:00	 Session 3: Bridges along the road to One Health MOVIE 3: IHR Monitoring and Evaluation Framework (25') Presentation of JEE Scores MOVIE 4: PVS Pathway (25') Presentation on PVS results
	 MOVIE 5: IHR-PVS Bridging (10') Coffee break (20') Mapping gaps on the IHR/PVS matrix (30') Discussion – Plenary (30') Session 4: Crossroads - IHR MEF, JEE and PVS Pathway reports (Working groups)

	• Presentation and organization of the working group exercise (15')				
	• Extract main results from the PVS and IHR reports (including the JEE), in relation to gaps identified on the matrix and review what has been proposed in the NAPHS (75')				
	Lunch (1:30-2:30)				
	Session 5: Vision and strategic actions (Working groups)				
14:30 - 17:00	Presentation and organization of the working group exercise (15') Objectives and Activities (Working groups by technical topic) (120')				
	Closing				
17:00-17:15					
	DAY 3				
08:45 - 9:00	Day 2 recap				
	Session 6 :Fine tuning the Roadmap				
	• Fine tuning after facilitator's comments (60')				
	• World Café (70')				
9:00 - 12:00	• Coffee Break (20')				
,	• Finalization (20')				
	• Plenary discussion on the Roadmap (60')				
	• Presentation of the priotization tool (10')				
13:00 - 14:00	Launch of National One Health Strategic Plan				
13.00 - 14.00					
	Lunch (14:00-15:00)				
	Session 7: Roadmap - Reaching consensus				
	 Collective assessment of priority and feasibility levels (10') Prioritization of actions points (10') 				
15:00 - 16:00	 Next steps (integrating the action points into the IHR-MEF process) (20') 				
	 Possible contributions of international partners 				
	Closing Session				
16:00 - 17:00	• Presentation of the final roadmap (15')				
	• Evaluation of the workshop (10')				
	Closing ceremony (5')				

ANNEX 2: LIST OF PARTICIPANTS: VENUE: ST. PETER CLAVER PARISH HALL, GRAND BASSA COUNTY				
Name	Agency/ From where ?		Telephone	E-mail
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