

ONE HEALTH ROADMAP (MYANMAR – IHR-PVS NATIONAL BRIDGING WORKSHOP – SEPTEMBER 2019)

Action	Timeline	Difficulty (1-0 scale)	Impact (1-0 scale)	Responsibility	Process
ONE HEALTH COORDINATION					
Objective 1: Establish One Health multisectoral mechanisms at all levels					
1.1 Seek endorsement and approval of Myanmar One Health Strategic Framework	December 2019	++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Convene meeting to finalize Myanmar One Health Strategic Framework 2) Seek approval from the Cabinet 3) Print and circulate the framework for implementation
1.2 Sign Memorandum of Understanding for multisectoral collaboration on One Health amongst key stakeholders (MoHS, MoALI, CDC, MONREC, MoPF, MoHA, MoC, etc)	August 2020	+++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Organize consultative meeting and draft MoU 2) Circulate draft MoU to all the relevant agencies for feedback and comments and endorsement 3) Finalize the MoU 4) Organize stakeholder meeting to sign the MoU by all stakeholders 5) Circulated signed MoU for its implementation
1.3 Institute a National Multisectoral Coordination Committee (NMCC) for One Health	November 2020	+	++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) As per the signed MoU, identify and designate members for NMCC for One Health 2) Develop ToR of the committee including meeting procedures and decision making 3) Notify the establishment of the Committee to all stakeholders 4) Use this Committee for making policy decisions on One Health activities
1.4 Institute Regional (15), District (66) and Township (330) One Health Committees at subnational level	January 2021	+	++	DoPH and LBVD	<ol style="list-style-type: none"> 1) As per the signed MoU, identify and designate members for these subnational One Health Committees 2) Develop ToR of the committees including meeting procedures and decision making 3) Notify the establishment of the Committee to all stakeholders 4) Use these committees for making policy decisions and implementation of One Health activities at subnational level

Objective 2: Enhance operationalization of formal One Health coordination through structures and enabling instruments

<p>2.1 Review and harmonize existing legislations related to zoonoses, AMR and biosecurity for coordinated implementation of One Health activities</p>	<p>August 2021</p>	<p>+++</p>	<p>+++</p>	<p>Technical and legal experts from DoPH and LBVD and MONREC</p>	<ol style="list-style-type: none"> 1) The national One Health Committee will establish working group (both technical and legal members) 2) Develop ToR of the working group 3) Conduct review of relevant legislations and other legal documents 4) Present proposals for harmonization of the legislations and other legal instruments for smooth coordination and implementation of One Health activities 5) Report to NMCZ periodically 6) Final report and recommendations are presented to appropriate authorities or bodies for approval
<p>2.2 Appoint sectoral focal points for specific disease/technical areas (zoonoses, AMR, food safety, etc) at all levels (national, regional, district/township levels)</p>	<p>March 2021</p>	<p>+</p>	<p>++</p>	<p>DoPH and LBVD and MONREC</p>	<ol style="list-style-type: none"> 1) Identify specific disease or technical areas of One Health activities 2) Nominate focal points at national and subnational levels 3) Develop ToR and meeting procedures of the focal points 4) Corresponding Focal points become the secretaries of the National and subnational One Health committees
<p>2.3 Develop Standard Operating Procedures (SOPs) for One Health multisectoral coordination and collaboration on specific diseases or technical areas (e.g. zoonoses, AMR, Food safety, etc)</p>	<p>August 2021</p>	<p>+</p>	<p>++</p>		<ol style="list-style-type: none"> 1) Hire consultants to develop SOPs 2) Conduct consultative meetings to collect information for developing SOPs 3) Conduct workshop for finalization and endorsement of SOPs 4) Seek approval of SOPs from the National One Health Committee 5) Print and circulate SOPs to all relevant sectors for implementation

SURVEILLANCE

Objective 3: Enhance coordinated surveillance for zoonoses and AMR pathogens

<p>3.1 Prioritize zoonotic diseases and AMR pathogens for implementing coordinated surveillance</p>	<p>March 2020</p>	<p>++</p>	<p>++</p>	<p>CEU, NHL, VMDCDC</p>	<ol style="list-style-type: none"> 1) Conduct consultative workshop amongst stakeholders for prioritization of zoonotic diseases and AMR pathogens 2) Issue executive order for coordinated surveillance of priority zoonotic diseases and AMR pathogen 3) Notify and publish list of priority zoonotic diseases and AMR pathogens
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3.2 Designate TWG for implementing coordinated and/or joint surveillance for the priority zoonotic diseases and AMR pathogens	May 2020	++	++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Nominate and designate TWG members 2) Conduct consultative meeting to develop ToR including meeting procedures 3) Issue executive order formalizing the TWG
3.3 Develop SOPs and guidelines for coordinated and/or joint surveillance of priority zoonotic diseases and AMR pathogens	July 2020	+	+++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Hire consultant for developing SOPs and guidelines for coordinated and/or joint surveillance 2) Conduct consultative workshop to draft the SOPs 3) Seek approval of the SOPs from the National One Health Committee 4) Print and circulate SOPs to all stakeholders
Objective 4: Strengthen human resource technical capacity for surveillance					
4.1 Conduct training on implementation and use of SOPs and guidelines for coordinate surveillance of priority zoonotic diseases and AMR pathogens	October 2020	+	+++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Draft agenda for the training 2) Send official invitation to nominate surveillance officials for the training 3) Conduct trainings for the surveillance officials at national and sub-national levels 4) Draft and submit training report to the National One Health Committee
4.2 Conduct training on joint risk assessment for zoonotic diseases at the national levels	November 2019	+	+++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Mobilize fund and expertise for conducting training on joint risk assessment of zoonotic diseases 2) Draft agenda of the training 3) Send official invitation to nominate surveillance officials for the training 4) Conduct training 5) Draft and submit training report to the National One Health Committee
4.3 Conduct TOT training to surveillance officials on principles and application of surveillance, and analysis and interpretation of surveillance data	January 2021	+	+++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Mobilize fund and expertise to conduct training 2) Draft agenda of the training 3) Send official invitation to nominate surveillance officials for the training 4) Conduct training 5) Draft and submit training report
4.4 Conduct cascade trainings to the surveillance officials at subnational levels on principles and application of surveillance, and analysis and interpretation of surveillance data	May-October 2021	+	+++	CEU, NHL, VMDCDC	<ol style="list-style-type: none"> 1) Draft agenda of the training 2) Send official invitation to nominate surveillance officials for the training 3) Conduct training 4) Draft and submit training reports

Objective 5: Strengthen surveillance information systems						
5.1 Develop web-based database for reporting and collection of information on priority zoonotic diseases and AMR pathogens	September 2020	+++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Hire consultant to review and design coordinated surveillance system for priority zoonotic diseases and AMR pathogen 2) Conduct consultative meetings and workshop to design the surveillance system 3) Contract software developer to develop database for the surveillance system 4) Pilot test and finalize the database and surveillance system 	
5.2 Install the surveillance database in all relevant units of national and subnational agencies	March 2021	++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Install the database 	
5.3 Train database manager and surveillance officials on new database use and management at national and subnational level	May-July 2021	++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Develop the database training manual 2) Conduct trainings 	
5.4 Develop sector-specific web-based database for notifiable human and animal diseases including SMS notification feature (there is no web-based database for notification of animal and human disease outbreaks (including event-based and indicator-based surveillance))	March 2021	++	+++	DoPH and LBVD and MONREC	<ol style="list-style-type: none"> 1) Hire consultant to review and design coordinated surveillance system for priority zoonotic diseases and AMR pathogen 2) Conduct consultative meetings and workshop to design the surveillance system 3) Contract software developer to develop database for the surveillance system 4) Pilot test and finalize the database and surveillance system 	
LABORATORY						
Objective 6: Enhance laboratory information systems and information and resource sharing mechanisms						
6.1 Sign MoU for laboratory resource and information sharing between relevant sectors	January 2021	++	+++	NHL, LBVD, Ministry of Defence, DMR	<ol style="list-style-type: none"> 1) Organize consultative meeting and draft MoU 2) Circulate draft MoU to all the relevant agencies for feedback and comments and endorsement 3) Finalize the MoU 4) Organize MoU signing ceremony 5) Circulated signed MoU for its implementation 	
6.2 Conduct laboratory resource and capacity mapping (diagnostic capacity, laboratory experts, equipment, facility, etc) to identify resource and information sharing	March 2021	++	++	NHL, LBVD, Ministry of Defence, DMR	<ol style="list-style-type: none"> 1) Identify national experts for resource mapping 2) Develop template for resource mapping and sharing 3) Visit relevant laboratories 4) Organize consultative meetings to finalize resource and capacity for sharing and exchange 5) Submit findings to National OH committee 	

6.3 Develop electronic laboratory information system in each sector	October-December 2020	+++	+++	NHL and LBVD	1) Hire consultants to design and develop architecture of laboratory information system for NHL and LBVD 2) Contract for software development 3) Procure necessary IT equipment 4) Install software
6.4 Conduct trainings for laboratory officials to use new laboratory information management system in each sector	January – March 2021	+	++	NHL and LBVD	1) Develop training manuals 2) Conduct trainings
6.5 Develop SOPs and guidelines to enhance data sharing and collaboration within each sector	September 2020	+	+++	NHL and LBVD	1) Identify experts to develop SOPs and guidelines 2) Organize consultative meetings to develop and endorse SOPs and guidelines 3) Sign agreements or issue executive order to implement the SOPs and guidelines
Objective 7: Enhance laboratory diagnostic capacity					
7.1 Conduct joint training on identification and antimicrobial sensitivity testing for prioritized AMR pathogens	April-June 2020	++	+++	NHL and LBVD	1) Hire international experts for the training 2) Develop curriculum 3) Conduct training
7.2 Conduct joint training on laboratory quality assurance	July-August 2020	+	+++	NHL and LBVD	1) Hire international experts for the training 2) Develop training curriculum 3) Conduct training
7.3 Conduct joint training for biosafety and biosecurity	October-December 2020	+	+++	NHL and LBVD	1) Hire international experts for the training 2) Develop training curriculum 3) Conduct training
7.4 Develop inventory and procure laboratory equipment and reagents required for AMR surveillance	Annual procurement cycle	+	+++	NHL and LBVD	4) List laboratory equipment (blood culture machine, etc) and reagents for AMR testing 5) Tender for procurement 6) Procure the equipment and reagents
Objective 8: Enhance laboratory biosafety and biosecurity systems					
8.1 Develop comprehensive national biosafety and biosecurity legislation	October-December 2020	++	+++	NHL and LBVD	1) Hire international consultants for developing the legislation 2) Organize meetings and consultative workshop for developing the legislation 3) Seek approval from the parliament
8.2 Develop comprehensive national biosafety and biosecurity guidelines and SOPs	October-December 2020	++	+++	NHL and LBVD	4) Hire international consultants for developing guidelines and SOPs 5) Organize meetings and consultative workshop for developing these documents 6) Seek approval from relevant authorities for implementation of these guidelines and SOPs

8.3 Establish mechanism and plans for regular maintenance, validation, and calibration of laboratory equipment	Annually	+	+++	NHL and LBVD	<ol style="list-style-type: none"> 1) Secure tripartite support for fielding consultants for developing schedule and plans for regular maintenance and plans for calibration 2) Organize consultative workshop to endorse the plan 3) Print and circulate the schedule and plans for implementation
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EMERGENCY PREPAREDNESS AND RESPONSE

Objective 9. Establish joint Incident Management structures for emergency preparedness and response for zoonoses

9.1 Institute National Steering Committee for joint emergency preparedness and response for zoonoses	November 2019- January 2020	++	+++	MOHS, MOALI, MONREC	<ol style="list-style-type: none"> 1) Organize consultative meetings with stakeholders to establish the national steering committee and its structure 2) Develop TORs and meeting procedures 3) Issue executive order of formation of the National Steering Committee
9.2 Institute subnational level Joint Committee for emergency preparedness and response for zoonoses	May-July 2020	++	+++	MOHS, MOALI, MONREC	<ol style="list-style-type: none"> 1) Organize consultative meetings with stakeholders to establish the subnational level joint committees for emergency preparedness and response for zoonoses 2) Develop TOR and meeting procedures 3) Issue executive order of formation of the subnational joint committees
9.3 Establish Joint Rapid Response team for emergency response to outbreaks of zoonoses at national level	January-March 2020	++	++	MOHS, MOALI, MONREC	<ol style="list-style-type: none"> 1) Identify and nominate officials for joint rapid response team 2) Develop TOR and meeting procedures 3) Organize consultative meetings endorsement of the members 4) Formalize through executive order issuance from National OH Committee
9.4 Establish Joint Rapid Response teams for emergency response to outbreaks of zoonoses at subnational level (regional, district/township levels, whichever is relevant)	April-June 2020	++	++	MOHS, MOALI, MONREC	<ol style="list-style-type: none"> 1) Identify and nominate officials for joint rapid response teams at subnational level 2) Develop TOR and meeting procedures 3) Organize consultative meetings to endorse members and TOR 4) Formalize through executive order issuance from National OH Committee

Objective 10. Develop enabling instruments (guidelines, SOPs) for emergency preparedness and response for zoonoses						
10.1 Develop joint guidelines and SOPs for emergency preparedness and response for priority zoonotic diseases	August 2020	++	+++	DOPH, LBVD, MONREC, CDC	<ol style="list-style-type: none"> 1) Hire international consultants for developing guidelines and SOPs 2) Organize series of consultative meetings to develop the joint guidelines and SOPs for priority zoonotic diseases 3) Finalize and seek approval of the joint guidelines and SOPs 	
10.2 Conduct National One Health Committee or senior level meetings to discuss and approve joint guidelines and SOPs	October - December 2020	++	++	DOPH, LBVD, MONREC, CDC	<ol style="list-style-type: none"> 1) Develop agenda of the meeting 2) Circulate invitation for the meeting 3) Conduct meetings 4) Publish and circulate guidelines and SOPs for implementation 	
10.3 Conduct workshop to train relevant officials on joint guidelines and SOPs for emergency preparedness and response for zoonoses	January-March 2021	+++	+	DOPH, LBVD, MONREC, CDC	<ol style="list-style-type: none"> 1) Develop agenda for the training 2) Send official invitation letter 3) Conduct training 	
Objective 11. Enhance technical capacity for emergency preparedness and response for zoonoses						
11.1 Conduct TOT at national level for joint outbreak investigation and response for zoonoses taking a One Health approach	October-December 2020	++	+++	DOPH, LBVD, MONREC	<ol style="list-style-type: none"> 1) Hire international and national experts for developing training module 2) Develop training module 3) Identify TOT members 4) Conduct training to TOT members 	
11.2 Conduct cascade trainings on joint outbreak investigation and response for zoonoses taking One Health approach at regional and district levels (3-5 trainings per region annually)	Starting January 2021	++	+++	DOPH, LBVD, MONREC	<ol style="list-style-type: none"> 1) Plan regional training schedules 2) Send official invitation letters 3) Conduct trainings 	
11.3 Conduct joint field simulation exercise on zoonotic influenza at national level	June-August 2021	++	+++	DOPH, LBVD, MONREC	<ol style="list-style-type: none"> 1) Hire international consultant to conduct joint field simulation exercises 2) Plan the field simulation exercise 3) Conduct the field simulation exercise 	
11.4 Conduct table top simulation exercise on one priority zoonotic disease	October-December 2021	++	+++	DOPH, LBVD, MONREC	<ol style="list-style-type: none"> 1) Hire international or national consultant to develop scenarios to conduct joint table top simulation exercises 2) Plan the table top simulation exercise 3) Conduct the table top simulation exercise 	
11.5 Develop proposal and plan for securing funding for emergency response to zoonotic diseases	July-August 2020	+	+	DOPH, LBVD, MONREC	<ol style="list-style-type: none"> 1) Identify experts 2) Organize consultative workshop to develop the proposal and plan for emergency fund 3) Submit proposal to higher authority for approval 	

COMMUNICATION

Objective 12: Institutionalize and strengthen One Health communication mechanisms amongst stakeholders

12.1 Develop joint risk communication framework for One Health	January-March 2020	+	+++	DoPH, ECD, LBVD	<ol style="list-style-type: none"> 1) Hire international expert to develop joint risk communication framework 2) Conduct consultative meetings to develop the communication framework 3) Seek approval for the joint communication framework 4) Publish and circulate the framework for implementation
12.2 Sign MoU for implementation of joint communication framework and information sharing	April-June 2020	+	+++	DoPH, ECD, LBVD	<ol style="list-style-type: none"> 1) Develop MoU based on the joint communication framework 2) Convene meeting for signing MoU 3) Publish and circulate the signed MoU for implementation
12.3 Develop SOPs for One Health communication mechanism	July-September 2020	+	+++	DoPH, ECD, LBVD	<ol style="list-style-type: none"> 1) Hire national or international consultant 2) Organize consultative workshop to develop the SOPs 3) Seek approval of the SOPs 4) Publish and circulate SOPs for implementation
12.4 Develop Myanmar One Health website to provide platform for sharing information	April-June 2020	+++	+++	CEU, HMIS, VMDCD, CDC	<ol style="list-style-type: none"> 1) Identify where to host the website 2) Identify working group for development of the website 3) Organize workshop to develop website requirements 4) Develop website by IT officials, communication specialists and technical focal point officers of One Health

Objective 13: Establish Public-Private Partnership (PPP) Communication mechanisms

13.1 Develop public-private partnership communication framework or guidelines and SOP	December 2020	++	+++	LBVD, DOPH, CEU, ECD	<ol style="list-style-type: none"> 1) Hire consultant to develop the framework or guideline and SOPs for PPP Communication 2) Organize consultative meeting to develop PPP framework or guideline and SOPs 3) Seek approval of the framework or guideline and SOP
13.2 Sign MOU for PPP communication framework or guidelines and SOPs amongst public and private sectors	April-June 2021	++	+++	LBVD, DOPH, CEU, ECD	<ol style="list-style-type: none"> 1) Develop MoU based on the approved PPP framework 2) Conduct meeting for signing of the MoU 3) Circulate signed MoU to all the stakeholders

13.3 Develop IEC materials, video/TV spots, leaflets and pamphlets on One Health activities, and on priority zoonotic diseases prevention and control in Myanmar	July-September 2021	++	+++	LBVD, DOPH, CEU, ECD	<ol style="list-style-type: none"> 1) Identify communication materials needed 2) Develop the communication materials and tools jointly by all stakeholders through series of meetings and workshops
13.4 Conduct awareness and education, advocacy on One Health approach and for prevention and control of priority zoonotic diseases	July-December 2021 and thereafter as and when required	+++	+++	LBVD, DOPH, CEU, ECD	<ol style="list-style-type: none"> 1) Develop schedules for awareness and education campaign 2) Identify target groups 3) Conduct the campaigns using suitable communication materials and platforms
Objective 14: Enhance the communication skills of national, regional and district/township communication officials					
14.1 Conduct TOT on risk communication for communication officials at national level	January 2020	+++	+++	CEU, ECD, DOPH, LBVD	<ol style="list-style-type: none"> 1) Hire consultant to develop the training module and conduct TOT 2) Identify key TOT members 3) Conduct TOT
14.2 Conduct cascade trainings on risk communication for communication officials at subnational levels (3-5 regional trainings per year)	Starting July-September 2020	++	+++	CEU, ECD, DOPH, LBVD	<ol style="list-style-type: none"> 1) Develop schedule of the trainings to be conducted at the national levels 2) Identify the participants for each region 3) Conduct the trainings as per the schedules
14.3 Develop dedicate risk communication component and link in One Health webpage for risk communication and awareness and education materials	October-December 2020	++	+++	CEU, ECD, DOPH, LBVD	<ol style="list-style-type: none"> 1) Develop webpage link for communication in One Health website 2) Develop risk communication and other educational and awareness materials 3) Upload them on the webpage 4) Disseminate and share the links using social media and other platforms for accessing these awareness and educational materials

Difficulty of implementation: Low +, Moderate ++, Very difficult +++

Impact: Low impact +, Moderate impact ++, High impact +++

PRIORITIZATION RESULTS

All participants were asked to vote five priority objectives they considered as highest priority by placing white sticker on each objective. A total of 51 participants participated in the voting. The results are shown below. The top three selected objectives are: establishing One Health multisectoral coordination mechanisms at all levels, enhancing laboratory information systems and information and resource sharing mechanisms, and strengthening human resource technical capacity for surveillance.

