REPORT

ONE HEALTH APPROACH

Incubator event
with EAIDNet and SACIDS networks

29-30 September 2015
Entebbe, Uganda

London, 27th November 2015

CONTENTS

I. Executive Summary

The One Health approach requires the collaboration of different sectors and the aim of CORDS One Health incubator was to bring different sectors from different countries together to talk and work *with* each other. This incubator took place from 29th to 30th September 2015 in Entebbe, Uganda, and involved 20 participants from six countries (Burundi, Malawi, Kenya, Sierra Leone, Tanzania and Zambia) from two networks: EAIDSnet and SACIDS.

The overall aim was to enhance the trust and respect that enable true collaboration, share best practices within CORDS networks and contribute to a community of practice.

The specific objectives and priorities were to:

▪ Analyse multi-sectoral collaboration – in ideal setting and in reality in countries;

▪ Develop new thinking about better connecting sectors;

▪ Exercise and plan next steps

CORDS One health incubator applies a methodology that uses analytic tools in small, facilitated working groups and plenary discussions for group reflections. As an "incubator" this approach encourages holistic, analytic reflections (incubating) and new thinking put into practice to see the catalytic effects of this intense cross-fertilisation. By developing local solutions for better collaboration, these activities are more sustainable and longer-lasting: the incubator should serve as a springboard for activities. Participants leave the incubator with a set of actions they are committed to support.

A core theme was

Enabling factors

- STRUCTURES: political commitment and technical infrastructures

- People

- Coordination and networks

- Community engagement

Blocking factors

- STRUCTURES: political commitment and technical infrastructures

- Lack of motivation (people)

- Lack of funds (networks) and lack of coordination

- Community resilience

Group 1 suggested**:** Break down silos, build on existing infrastructures and create a OH coordination function across sectors;

Group 2: *Work together*, from the very beginning; and

Group 3: *Collaborate* - enable the flow of information and create a feedback as true collaboration

The participants reported an overwhelming increase of knowledge, skills and governance by taking part in this workshop and they particularly liked the interactive group work, the role-play and exercise scenarios and the opportunity to meet and build trust among different professional groups from different countries.

Dr Willy Abwoka Were, a Medical Epidemiologist from East Africa Public Health Laboratory Networking Project (EAPHLNP) in Tanzania:
 https://www.youtube.com/watch?v=5zELV2Xfjdo

Dr Poya Njoka from Ministry of Agriculture, Irrigation and Water and Development in Malawi:
https://www.youtube.com/watch?v=0iIRPeoy_3I

Dr Mohamed Barrie from Ministry of Agriculture, Forestry and Food Security in Sierra Leone shares his views on importance of One Health approach fighting against infectious diseases.
https://www.youtube.com/watch?v=EwptbCIvjp8

Dr Immaculate Nsamba from Ministry of Health in Uganda:
 https://www.youtube.com/watch?v=-4ls6frAN-0

Dr Spes Ndayishimiye from Ministry of Health in Burundi:
https://www.youtube.com/watch?v=NoX2coqIPFM

II. Background

One Health approach

The human-animal-ecosystem interface is of particular interest for limiting the spread of disease. The One Health approach aims to combine the forces in human and animal health sectors with industry and policy stakeholders. International organisations, in their *Strategic Framework,* conceptualise an intersectoral approach that brings together these different perspectives.[1] This One Health incubator uses diseases as examples to better understand the principles and requirements for inter-sectoral cross-border work.

The One Health approach is quite a new development:

- **2005 Manhattan Principles:** *One World, One Health:* Movement of diseases between animals (domestic, wildlife) and humans;

- **2007 Delhi conference:** Medium-term strategy to better address EID. Better understanding of the drivers and causes around the emergence and spread of infectious diseases is needed, under the broad perspective of the '***One World, One Health***' (OWOH) principles;

- **2008 Strategic Framework** *Contributing to One World, One Health* - A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal–Human–Ecosystems Interface (Strategic Framework[2]; WHO, OIE, FAO, UNICEF, World bank, UN Influenza)

One Health refers to "*the collaborative efforts of multiple disciplines working locally, nationally and globally to attain optimal health for people, animals and our environment.*" (2008).[3] The major aim of One Health approach is to eventually detect diseases earlier thus avoiding the exposure in humans and minimising the cost of outbreak control.

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[1] WHO;, OIE;, FAO;, Influenza; U, Unicef;, Bank W. Contributing to One World, One Health: A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface. 2008 ("Strategic Framework").

[2] Strategic framework 2008.

[3] Strategic framework 2008.
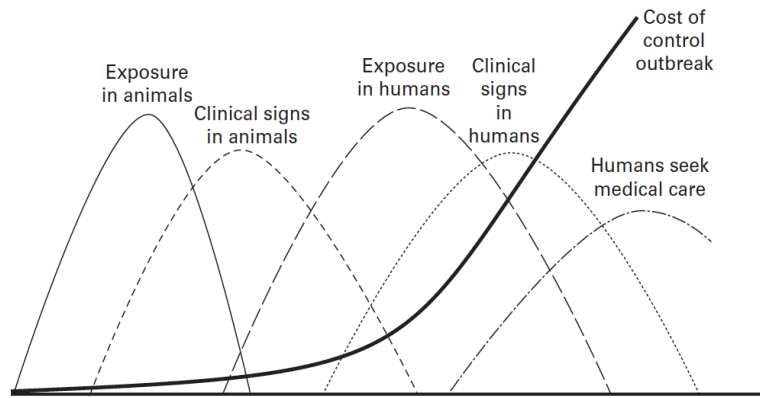
Source: Adapted from IOM (2009).

The five strategic elements of the One Health approach, as articulated in the strategic framework are:

- **Surveillance**: Building robust and well-governed public and animal health systems: **WHO** International Health Regulations (IHR 2005) and **OIE** Performance of Veterinary Services (PVS);
- **Response**: Improve national and international emergency response capabilities;
- **Integration**: Shift focus from potential to actual disease problems, and through a focus on the drivers of a broader range of locally important diseases;
- **Collaboration**: Promote wide-ranging collaboration across sectors and disciplines; and
- **Implementation**: Develop rational and targeted disease control programmes.[4]

CORDS One Health incubator

CORDS networks face the challenge of infectious disease surveillance and information sharing, communication and coordination across sectors not only in one country, but across several countries and across regions within the same country. Considering the unique nature of CORDS networks and the challenges they face in the surveillance of emerging and re-emerging diseases in an international cross-border setting, this One Health incubator uses disease as examples to elicit the principles of inter-sectoral collaboration across regions.

CORDS One health incubator applies a methodology that uses analytic tools in small, facilitated working groups and plenary discussing for group reflections. As an "incubator" this approach encourages holistic, analytic reflections (incubating) and new thinking put into practice to see the catalytic effects of this intense cross-fertilisation. By developing local

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[4] Strategic framework 2008.

solutions for better collaboration, these activities are more sustainable and longer-lasting: the incubator should serve as a springboard for activities. Participants leave the incubator with a set of actions they are committed to support. This incubator refers to a conceptual framework that is based on interactive, output-oriented and co-produced group work in a facilitated and safe environment. Facilitation is based on an '*enzymatic*' approach of facilitators to help structure the change progress in policy and practice.

III. Method

Aims and objectives

The overall aim was to enhance the trust and respect that enable true collaboration, share best practices within CORDS networks and contribute to a community of practice.

The specific objectives and priorities were to:

- Analyse multi-sectoral collaboration – in ideal setting and in reality in countries;
- Develop new thinking about better connecting sectors;
- Exercise and plan next steps

The workshop uses diseases as proxies and examples to elicit useful patterns of surveillance, detection and control in a multi-sectoral approach. The specific objectives and priorities were to

- Consolidate cooperation mechanisms;
- Improve routine information sharing and communication;
- Engage in joint risk assessment, and
- Participate in joint simulation and exercises.

Setting

Based on previous experiences with CORDS networks and other workshop settings, the workshop design was:

- Two-day workshop;
- 20 participants from six countries from two networks (EAIDSNet and SACIDS);
- Representatives from animal health, human health, wildlife, public policy-makers and research;
- Small interdisciplinary/intersectoral working groups with precise assignments; and

- Moderated plenary sessions to generate collaboration and agree on comprehensive and sustainable ways forward.

IV. Results

The One Health approach requires the collaboration of different sectors and the aim of CORDS One Health incubator was to bring different sectors from different countries together to talk and work *with* each other. This incubator took place from 29th to 30th September 2015 in Entebbe, Uganda, and involved 20 participants from six countries (Burundi, Malawi, Kenya, Sierra Leone, Tanzania and Zambia) from two networks: EAIDSnet and SACIDS. Participants were senior level professionals from public health, animal health, human health, wildlife, policymaking and research of the networks countries. They all had first hand experience in the management of emerging health threats and had the authority to induce change in their organisations (senior level, e.g. Director).
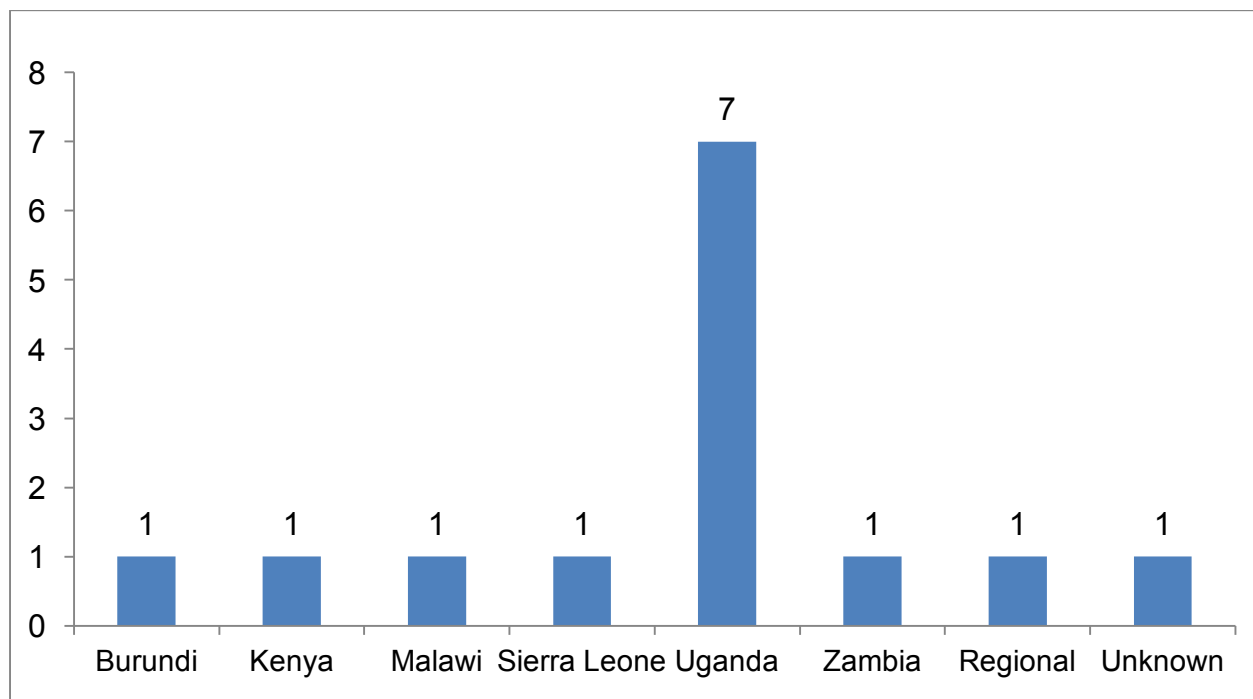
Countries

Figure 1: Country representation (particiapnts=16; respondents=14)

In total, 20 individuals attended the workshop. This was comprised of workshop participants 16 (4 SACIDS, 12 EAIDSNet countries); 2 EAIDSnet Secretariat, 2 CORDS HQ.

Figure 1 above illustrates the country profiles of the respondents that were actively involved

in providing data concerning their countries preparedness activities. Figure 2 displays the sector representation and figure 3 the seniority of the participants.
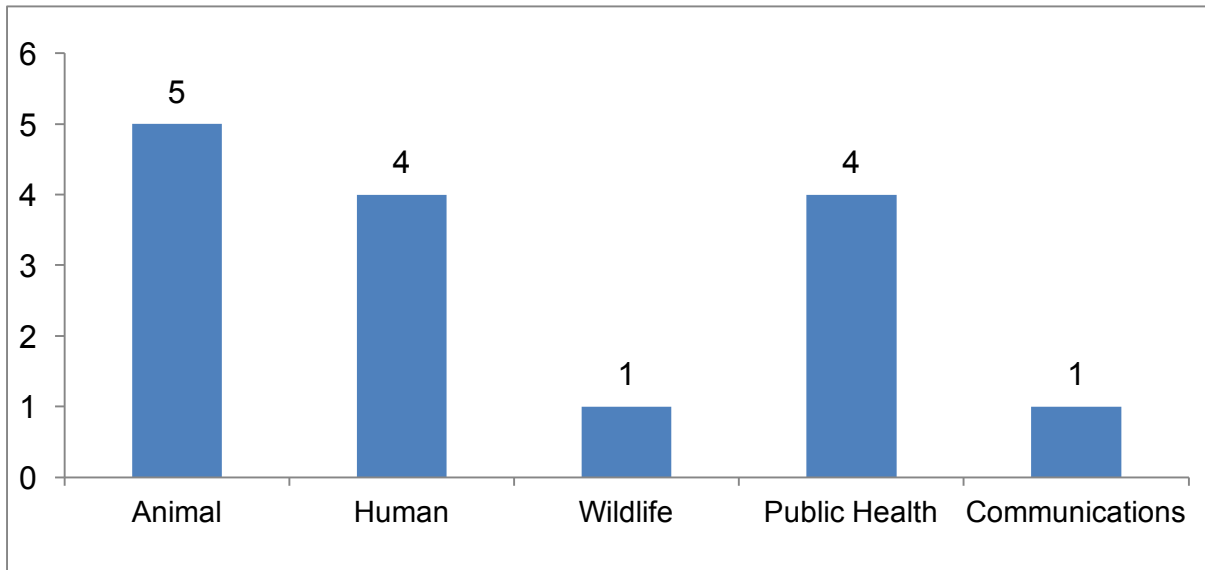
Sector

Figure 2: Sector representation

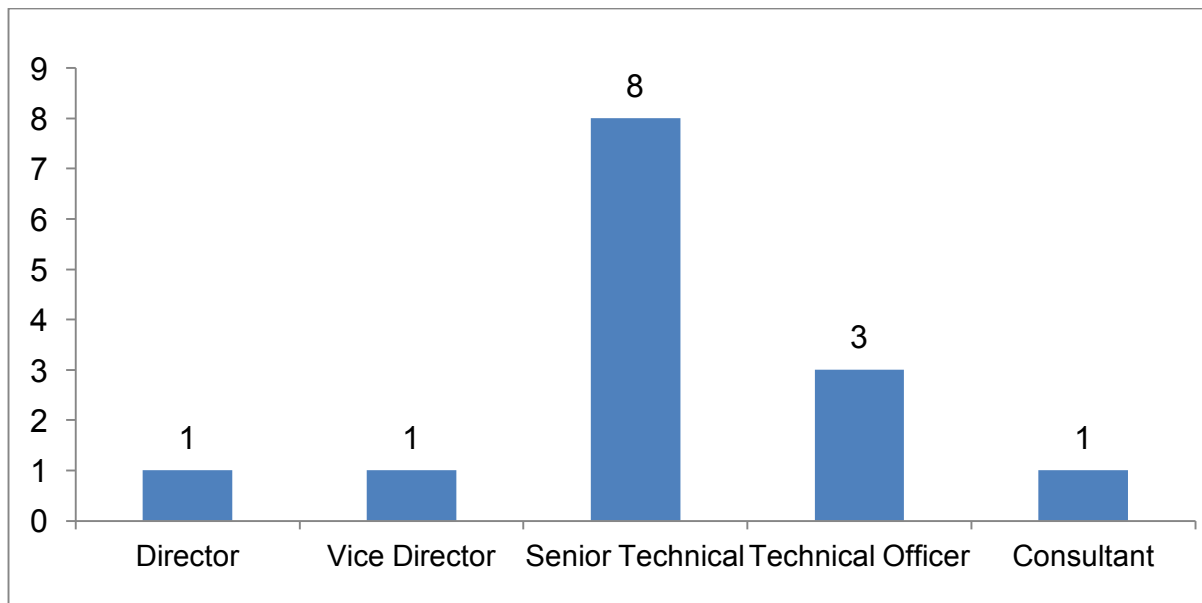*Level*

Figure 3: Seniority of participants

The overall principle was to work in small working groups and have moderated plenary sessions to discuss the results of the working groups. For the working groups, precise assignments with analysis and reflection tools were developed and provided to guarantee focused working sessions with clear outcomes. The moderated plenary sessions were used to

stimulate a debate and to agree on joint strategies. A role-play group exercise on the second day gave the opportunity to apply the insights and lessons of the previous days.

This workshop is understood as an enzymatic activity that brings people together and lowers the boundaries for collaborative actions and to induce and sustain change and progress.

Day 1: Analyse multi-sectoral collaboration – in ideal settings and in reality in countries

The starting point was to hear about the ideal and real situation of One Health in participating countries. For this purpose a first session started with small working groups to develop an *ideal* scenario for sector mechanisms including information, communication and coordination routines and the collaboration between sectors. Working in three parallel groups, each group had 'One Health' scenario to discuss:

Group 1: Your ideal country (country X) experiences an unusual outbreak of Malaria that is caused by a new mosquito strain due to changes in the environment.

Group 2: Your ideal country (country X) has experienced extraction industries activities; last week there was an unusual outbreak of a haemorrhagic fever in a group of workers after a joint barbecue.

Group 3: Your ideal country (country X) has a long tradition of poultry farming, both in bigger farms and small backyard farming; last months started an unusual outbreak of an avian influenza in people (H7N9).

All groups:

Please describe **country X** ideal surveillance and response mechanisms for involved sectors (human, animal/vectors, environment) and how they need to work together (using matrix 1) in

- Information (gathering, assessing and sharing)
- Communication (strategies, target groups, communications)
- Coordination (local, district, cross-border, national and international)

Matrix for Group work session 1 and 2

Country x/Real Countries		Human/ Public Health (Malaria outbreaks)	Animal health (Vector control)	Environment (Trade, Environment, Travel)	Collaboration between sectors
INFORMATION	*Gathering* From whom/where				
	Assessing				

10

	Who? How?				
	Sharing With whom? What sectors? Cross-border? International?				
COMMUNICATION	Strategy (Advocacy, sensitisation, etc.)				
	Target groups				
	Formats				
COORDINATION	Local				
	District				
	Cross-border				
	National				
	International				

Table 1: Ideal Country situation

Session 2 focused on the real situation in countries and asked the participants to use the same scenarios and matrix as in session 1, but also include insights about influencing (enabling and blocking) factors.

Country:		Human/ Public Health	Animal health	Environment	Collaboration between sectors	Influencing factors + Enabling - Blocking
INFORMATION	*Gathering* From whom/where					
	Assessing Who? How?					
	Sharing With whom?					
COMMUNICATION	Strategy (Advocacy, sensitisation, etc.)					

	Target groups					
	Formats					
COORDINATION	Local					
	District					
	Cross-border					
	National					
	International					

Table 2: Real Country situation with modifying factors

In the plenary discussion the groups summarised the factors into:

Enabling factors

- STRUCTURES: political commitment and technical infrastructures
- People
- Coordination and networks
- Community engagement

Blocking factors

- STRUCTURES: political commitment and technical infrastructures
- Lack of motivation (people)
- Lack of funds (networks) and lack of coordination
- Community resilience

The groups stressed the importance of a One Health approach that starts early in

- Planning
- Preparation and
- Preparedness

As a "motto" to encourage inter-sectoral collaboration,

Group 1 suggested**:** Break down silos, build on existing infrastructures and create a OH coordination function across sectors;

Group 2: *Work together*, from the very beginning; and

Group 3: *Collaborate* - enable the flow of information and create a feedback as true collaboration

Day 1 was to collect insights into how One Health should ideally work – and what the factors

were that enable or block multi-sectoral collaboration in the countries on local level. Using analytic templates and plenary discussion elicited important intelligence about the procedures and practices of collaboration on the local level in countries.

Day 2: Develop new thinking about better connecting sectors: lessons learned and steps forward

Day 2 started off with three parallel working groups using the same scenario as the day before, but this time in a role-play setting. Participants were divided into groups using the same scenarios of the previous day, but this time they were asked to play one of the sectors' representatives, e.g. a chicken farmer, a poultry company owner, a concerned relative, a community health worker, a neighbour, etc. While 2-3 people play, the group observes and structures their observation into

▪ What is needed to improve mutual ***understanding***?

▪ What is needed to improve mutual ***collaboration***?

This playful, emotional perspective was chosen to add another layer to the analytic approach of day 1. Participants felt that the role-play exercises were great opportunities to 'feel' the need for changes, widened their own perception and understanding of the complex situation of multisectoral collaboration and created a sense of responsibility to commit to long-term, sustainable progress.

In the afternoon, country groups reflected on (using the template below, table 3) and summarised the lessons learned from these working groups.

Current Situation	LESSONS LEARNED
Information Intelligence - Gathering - Assessment - Sharing	
Communication - Capacity - Skills	

Coordination	

Table 3: lessons learned

Building on lessons learned, participants planned actions using the template in table 4:

Current Situation	Desired Situation	Indicators of change	Interventions
Information Intelligence - Gathering - Assessment - Sharing			
Communication - Capacity - Skills			
Coordination			

Table 4: Action plans

Group 1:

ONE HEALTH APPROACH – lessons learned

Current Situation	Lesson Learnt
Information Intelligence - **Gathering** - **Assessment** - **Sharing**	• Availability of information • Information package for targeted audience • Trained personnel (additional) for effectively communication • Need for customize the existing technology • Need to have rapid diagnostic tools • Emphasis on need for awareness on the useful of early reporting of suspect outbreaks by the public • Building community trust that information availed while be useful to the concerned authorities
Communication - **Capacity** - **Skills**	• Organized leadership for effective communication • Communication experts e.g. artists, orators, journalist to be part of the team • Train relevant stakeholders I communication and leadership skills
Coordination	• Standby task force (in emergency / stable conditions) • Regional bodies / international bodies coordination • Integration of the different sectors / departments • Clear coordination SOPs at local, national, regional and international partners • Synchronization of the work place policies in the participating ministries

ONE-HEALTH APPROACHES – ACTION PLANS

Current Situation	Desired Situation	Indicators of change	Intervention
Information Intelligence	Gathered information should be shared as quickly as possible	Quick early information / effective responses	Creating rapid for quick response e.g. a web portal (integrated management system for one-health)
	Creation of awareness to be given priorities	Quick / effective / timely response	
Communication	Communication skills capacity building	Feedback mechanisms / channels implemented	Integrated systems for engaging stakeholders in matters of communication.
Coordination	Integrated approach	Joint activities	Have people participate in the simulation exercises for different situations e.g. cross-borders
	Have vaccine bank in the country. Production unit. Category of vaccines responsive to the existing circulating sero-type.	Contained outbreaks Export of different animals to the international trade market	Continued vaccination for a period 5-6 years
	Political will enhanced	Participation in outbreak management	Participate in the simulation exercises for different situation

Group 2:

Current situation	Lessons learnt
Information	• Needs for establishing structures where they don't exist. • Need to develop capacity IHR/LOGISTICS
Communication	• There is a need to harmonise Communication strategy and strengthen feed back systems • IHR FP can be a vehicle for strengthening communication and providing guideline for core capacities
Coordination	There is a need for strong multisectoral collaboration because most interventions are carried out in isolation.

Action plans

Current situation	Desired situation	Indicators of Change	interventions

Information	Established structures for gathering information in place	% of districts with surveillance staff -% of districts submitting timely and accurate reports.	Recruitment of surveillance officers support to surveillance staff to carry out work. Technological innovation to support surveillance.
	Sharing	No of reports shared between at one health platform	Mechanism for sharing information developed including feed back
Communication	One health Communication strategy put in place	# of IEC for OH developed % of health facilities using OH IEC materials # of OH meetings held	We need a plan for community engagement Having staff trained in one health communication Stakeholder analysis (skills/capacities)
Coordination	A well coordinated multisectoral onehealth framework in place	# of multisectoral meetings # cross border meeting and simulations held # of university institution curricular revised to include one health concept. # of advocacy meetings and	Conduct Multisectoral meeting Hold Crossborder meetings Carry out Simulations

	workshop	Inclusion one health is included in university curricular Advocacy individually and collectively as one health group

Summary of group 2: There are already interventions/activities in One Health but these need to be harmonised and coordinated in order to maximise resource use and early response to events of local and international concerns.

Group 3:

Information gathering:

▪ Information is collected, analyzed and kept in different places sectors

▪ When stakeholders are involved in time, they can gather relevant information easily

Communication

▪ Inadequate capacity (human and material)

▪ Inadequate skills (competencies)

▪ Different sectors use different channels of communication and also send different messages

Coordination

▪ Tools and structures were not harmonized

▪ Inadequate financial resources for implementation of OH

▪ Lack of integrated policies limit implementation of OH

Action plans:

CURRENT SITUATION	DESIRED SITUATION	INDICATORS OF CHANGE	INTERVENTIONS
Information	Harmonized system for information gathering and sharing	Proportion of cases that are promptly investigated Regular updates (bulletins) of surveillance data for priority diseases for humans and animals	Development of harmonized tools Collate, analyze data and prepare regular reports for dissemination
Communication	Capacity for effective communication developed Harmonized system of communication	# of trained personnel available All stakeholders using the same communication channel, format and sending similar messages	Recruit and train personnel Development of a harmonized communication protocol
COORDINATION	Integration of policies of relevant sectors into one health. Availability of adequate resources for OH implementation. Have harmonized tools and structures for OH.	No of sectors whose policies are integrated. Proportion of funds available for OH work. No. of organizations that participate in the harmonization process A harmonized OH structure No. of tools that are developed for OH	Meetings to integrate sector policies into OH. Protocol of integration.

V. Course assessment

This incubator was evaluated to improve the conceptual approach, actual agenda and exercise capabilities for future workshops.

Pre-course assessment

One Health approach

All participants have heard about the One Health approach, and all of them referred to the right definition of One Health.
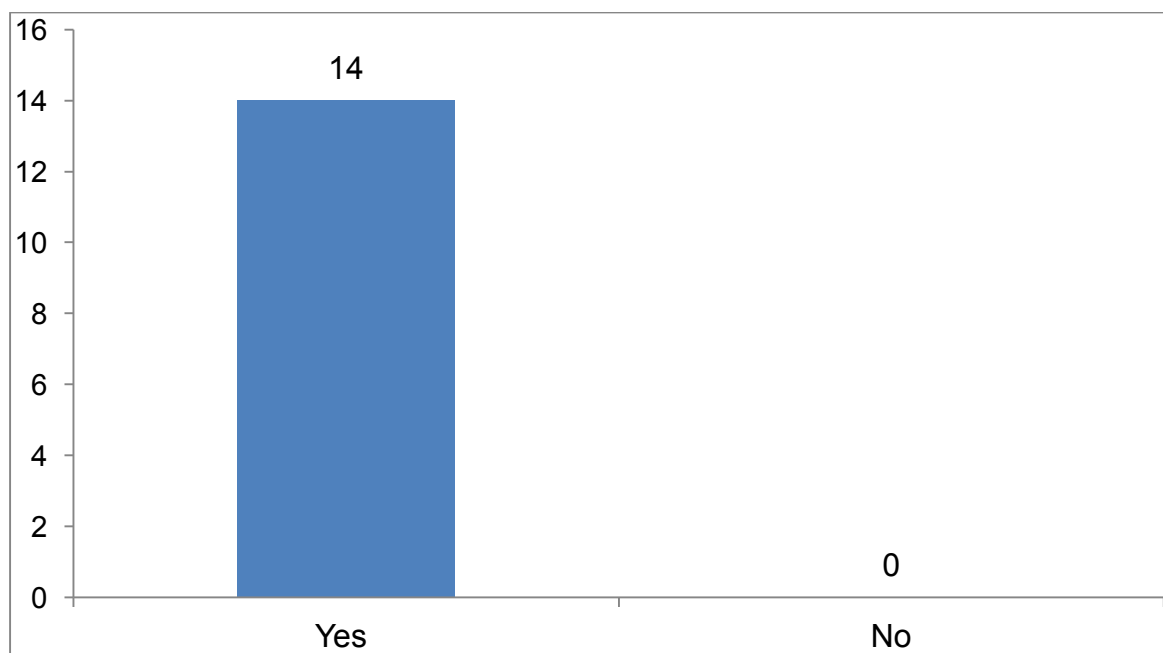
Have you heard about the One Health approach?

Figure 5 - awareness of the One Health approach

What sentence describes the One Health approach best?

1. The One Health refers to a policy and practice approach that calls for animal and human health to merge and work together as one health.

2. The One Health refers to the collaboration between developing and developed countries.

3.*The One Health refers to the collaborative efforts of multiple disciplines working locally, nationally and globally to attain optimal health for people, animals and the environment.* (correct) (14/0)

Assessment activities

The majority of countries conduct WHO International Health Regulation (IHR) assessments (12/15) and OIE Performance of Veterinary Service assessments (9/14).
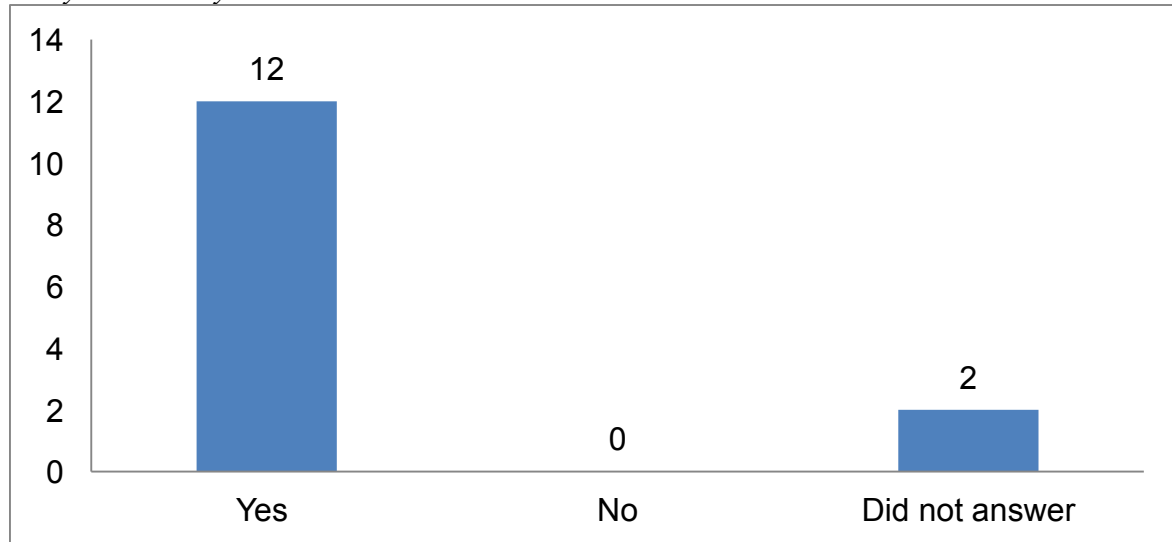
Does your country conduct WHO/IHR assessment?

Figure 6 – participants who reported their countries conduct WHO/IHR assessments
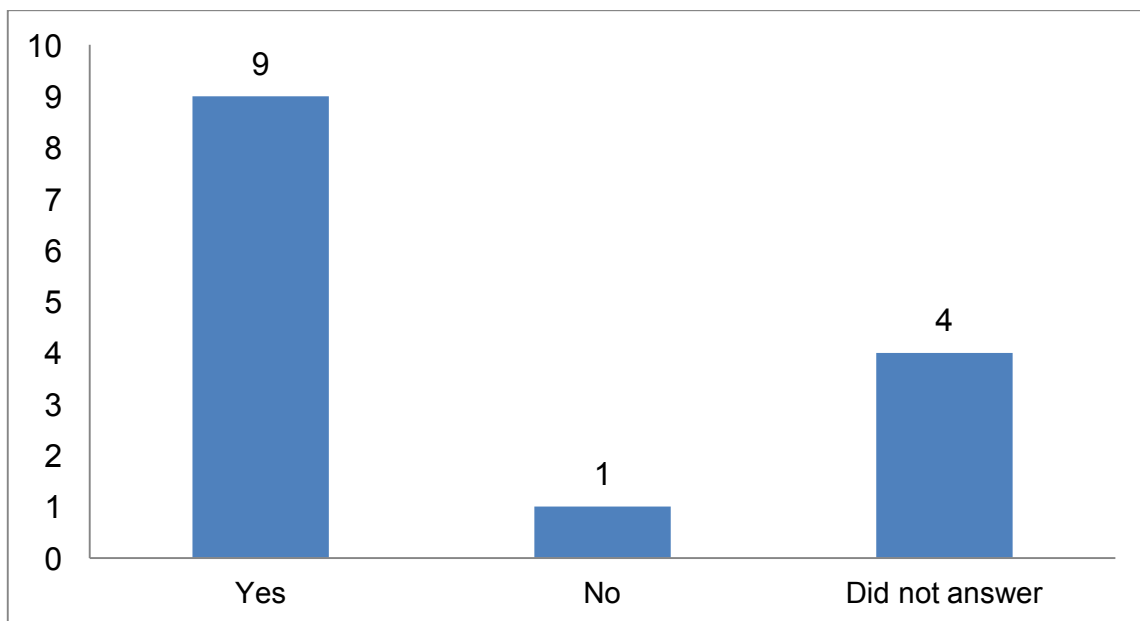
Does your country conduct OIE PVS assessment?

Figure 7 – participants who reported their countries conduct OIE PVS assessments

Information sharing

The information sharing habits differ across sectors and within sectors. In general, information sharing is good with daily (1/14), frequent (4/14) and once a week (1/14) sharing of information within the sector. Outside their own sector participants reported that they mainly share information once a month (7/14).

How often do you routinely share information within your sector and outside your sector?
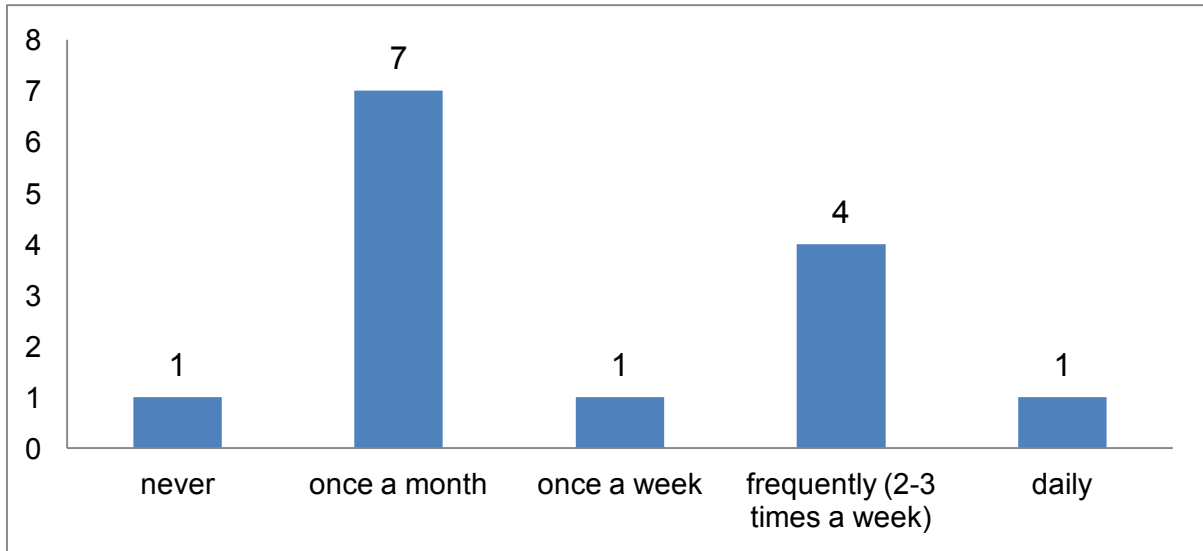*Within sector – all*

Figure 8 – frequency of sharing information within sector
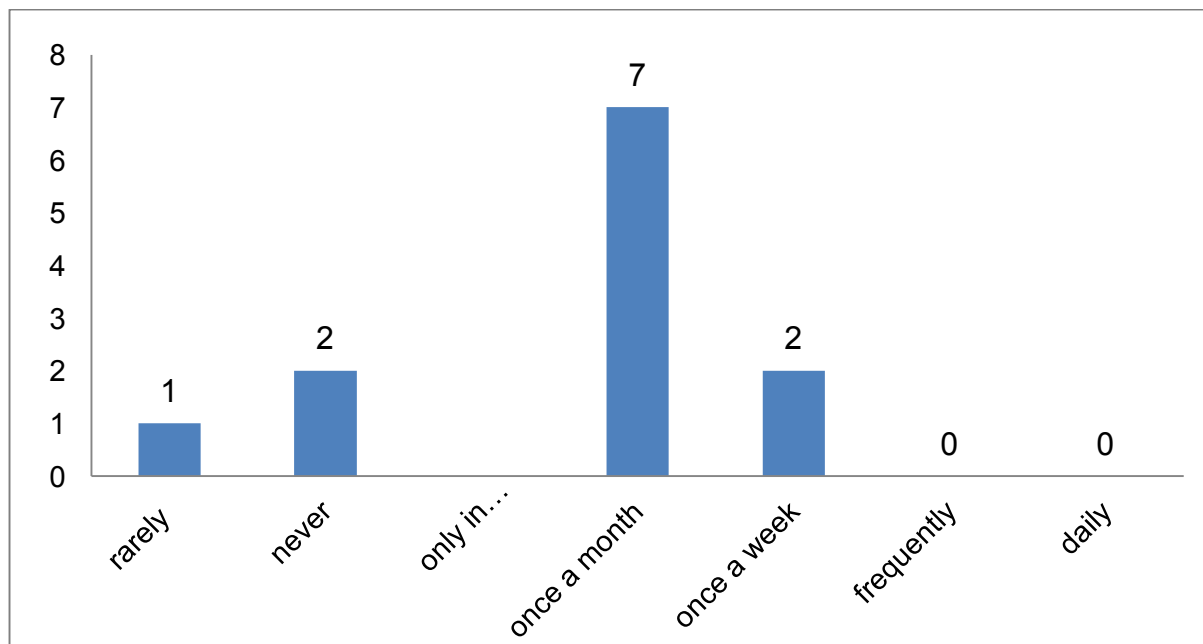
Outside own sector

Figure 9 – frequency of sharing information outside own sector

Communication

How often do you routinely communicate with the public?

The communication with the public is mainly in emergencies only. Some communicate once a month (2/14) and one institutions once a week.
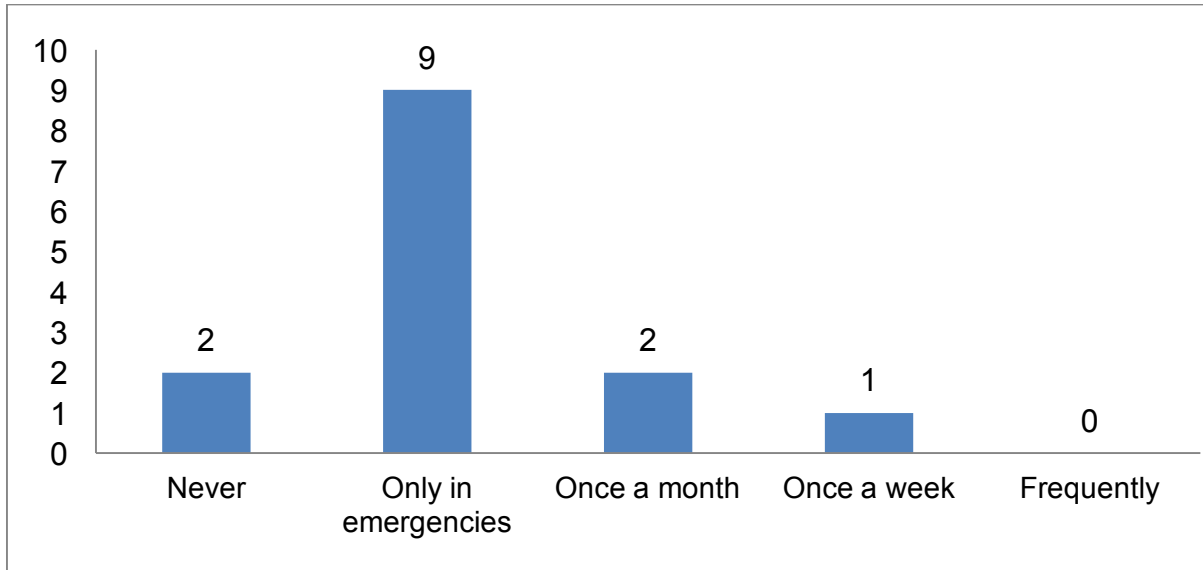

Figure 10 –frequency of communication with the public

Coordination

Most participants reported that they have established protocol for the collaboration between sectors (8/14).

Do you have established protocols for the collaboration between different sectors for the surveillance of animal or human health threats?
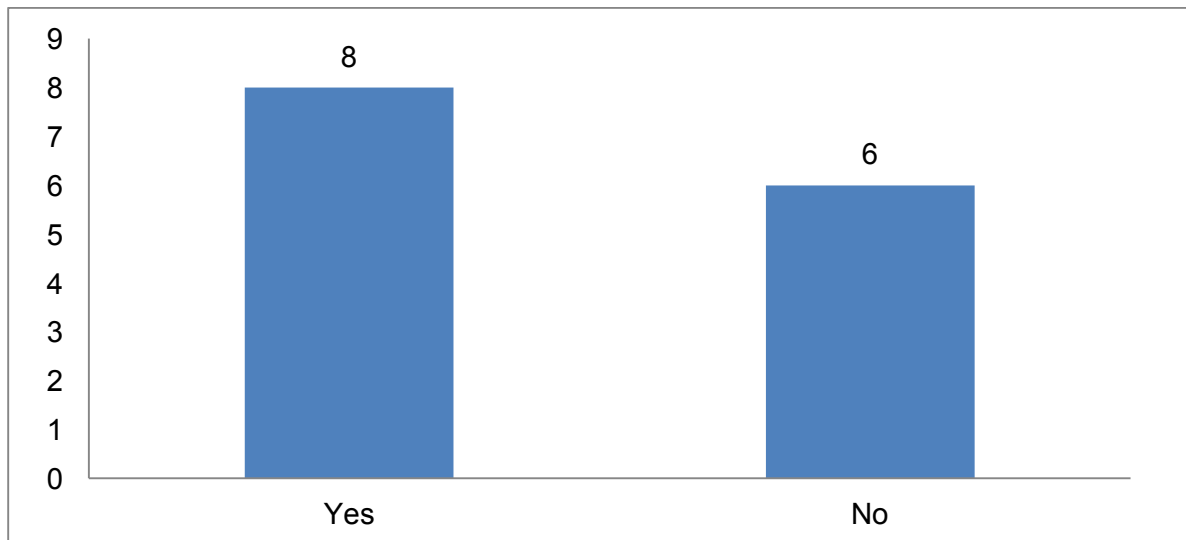

Figure 11 – Presence of protocols for collaboration between different sectors?

Post-course assessment

Participants reported that taking part in the workshop led to a good (6/14) and significant (7/14) increase of their knowledge.

Participation also led to good (7/14) and significant (6/14) clarification of their practice. They now know much better what they have to do in order improve their One Health approach.

This One Health workshop helped them to clarify the governance of One Health (good= 8/14; significant= 3/14).

How much has this workshop increased your knowledge, clarified a practice and a policy approach (governance)?
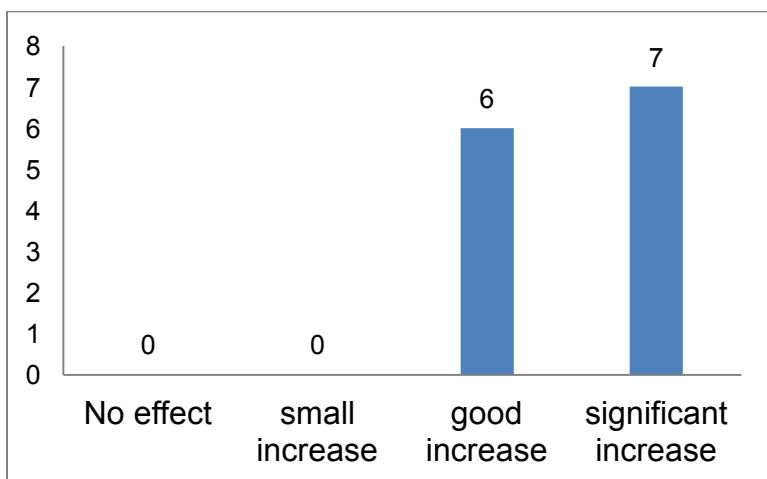
Knowledge

Figure 12 – Participants self-reported increase in knowledge as a result of attending incubator
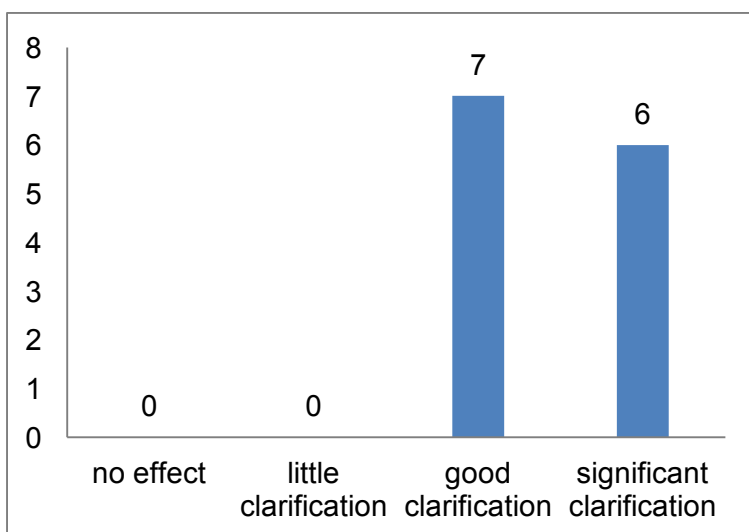
Practice

Figure 13 – Participants self-reported increase in practice as a result of attending incubator

Governance
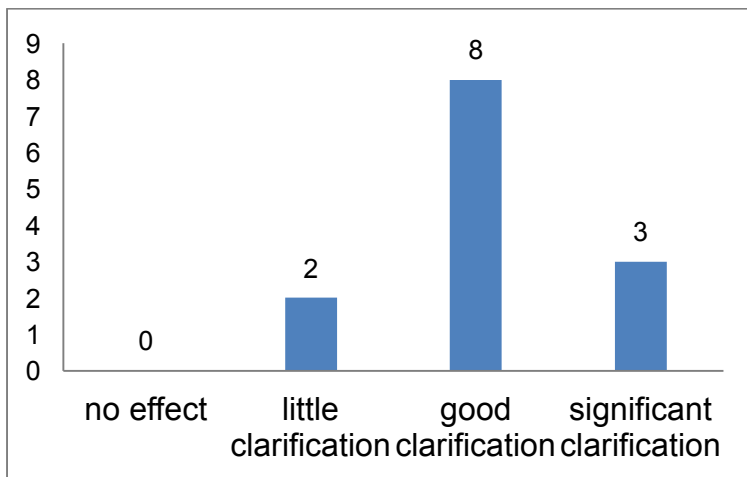
Figure 14 – Participants self-reported increase in governance as a result of attending incubator

One Health approach

The best parts of the One Health approach are

Key obstacles are seen in lack of funding, the ability to work across sectors and coordination.

Workshop

The most useful aspects of the workshop are seen in group discussions, the methodology and approach and the insights gained into the One Health theoretical approach.

The workshop could be strengthened by provision of case studies and preparatory material prior to the workshop, more time, site visits to be included and the inclusion of simulation exercises.

VI. Conclusion

The strategic objectives of the One Health workshop approach were to enhance awareness for the need for collaboration among stakeholders; encourage commitment and political will; and agree on targets of collaboration.

The specific objectives and priorities for this workshop were to

▪ Describe and consolidate cooperation mechanisms;

▪ Improve routine information sharing and communication;

▪ Engage in joint risk assessment, and

▪ Participate in joint simulation and exercises.

The results and feedback from participants in their statements, group work results and the survey results indicate that the set objectives were fully met. The participants reported an overwhelming increase of knowledge, skills and governance by taking part in the workshop and they particularly liked the methods applied, the interactive group work, role-play and scenario exercises. They highly valued the opportunity to meet and build trust among different professional groups from different countries.

CORDS One health incubator applied a methodology that uses analytic tools in small, facilitated working groups and plenary discussions for group reflections. As an "incubator" this approach encouraged holistic, analytic reflections (incubating) and new thinking put into practice to see the catalytic effects of this intense cross-fertilisation. By developing local solutions for better collaboration, these activities are more sustainable and longer-lasting: the incubator should serve as a springboard for activities. Participants leave the incubator with a set of actions they are committed to support.

Core themes were

Enabling factors

- STRUCTURES: political commitment and technical infrastructures
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- Community engagement

Blocking factors

- STRUCTURES: political commitment and technical infrastructures
- Lack of motivation (people)

- Lack of funds (networks) and lack of coordination
- Community resilience

Group 1 suggested**:** Break down silos, build on existing infrastructures and create a OH coordination function across sectors;

Group 2: *Work together*, from the very beginning; and

Group 3: *Collaborate* - enable the flow of information and create a feedback as true collaboration

Agenda

Day 1 Tues 29th Sept	RAISE AWARENESS – EXPLORE THE COMPLEXITY Analyse and reflect the starting points
09:00 – 9:45	**General Introduction: Participants, workshop method, One Health approach** *PRE-COURSE ASSESSMENT*
09:45 – 11:15	**Group work session 1: One Health scenario**: ideal mechanisms including information, communication and coordination routines
11:15 – 11:30	*Tea/Coffee break*
11:15 – 12:15	**Working group presentation**
12:15 – 12:45	**Moderated plenary discussion:** analysing differences and commonalities
12:45 – 14:00	LUNCH
14:00 – 15:30	**Group work session 2**: **One Health scenarios from countries' perspectives:** situation and influencing factors for emerging health threats
15:30 – 15:45	*Tea/Coffee break*
15:45 – 16:30	**Working group presentation**
16:30 – 17:00	**Moderated discussion**: analysis of facilitating and blocking factors of collaboration and information sharing
17:00	DAY 1 SUMMARY

Day 2 Wed 30th Sept	TRANSLATE INSIGHTS INTO ACTIONS Agree on joint ways forwards
09:00 – 9:15	**Recap of Day 1**
09:15 – 11:00	**Working group session 3:** Exercises of the scenario settings
11:00 – 11:15	*Tea/Coffee break*
11:15 – 12:45	**Working group debrief and moderated plenary discussion**
12:45 – 14:00	LUNCH
14:00 – 15:00	**Working group session 4**: **Lessons learned**
15:00 – 15:15	*Tea/Coffee break*

15:15 – 16:30	**Working group session 5: Actions for improvement**
16:30 – 17:15	**Working group presentations**
17:15 – 17:45	**Moderated discussion**: Lessons for actions and implications
18:00	DAY 2 SUMMARY
	POST-COURSE ASSESSMENT

List of participants

	NAME	INSTITUTION	FUNCTION	COUNTRY	Email address
1	Dr Willy Were Abokwa	EAIDSNET/East Central & Southern African Health Community	Epidemiologist	Tanzania	werew@ecsa.or.tz
2	Dr. Barrie Mohamed	Ministry of Agriculture Forestry & Food Security, Sierra Leone	Assistant Director, Head of Veterinary Services Laboratory	Sierra Leone	mlbarrie@yahoo.co.uk
3	Dr Erechu Sam Richard	Ministry of Agriculture, Animal Industry and Fisheries	Senor Veterinary Officer	Uganda	richardoerechu@yahoo.co.uk
4	Mr Joseph Sserugga	Ministry of Agriculture, Animal Industry and Fisheries	Data Management Officer	Uganda	jsserugga@yahoo.com
5	Ms. Jeniffer Bakyawa	Freelance	Journalist	Uganda	jfbakyawa@hotmail.com
6	Dr. immaculate Nsamba	MOH	Epidemiologist	Uganda	lennfaith@yahoo.com
7	Dr. Bernad Ssebide	PREDICT	Program Coordinator	Uganda	ssebide@gmail.com
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