One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART™)

Supporting multi-sectoral health systems strengthening

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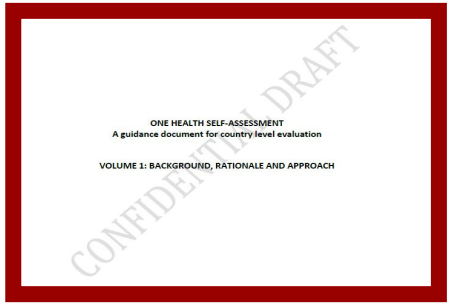
AHEAD
تقویت تحصیلات عالی برای انکشاف افغانستان
Advancing Higher Education for Afghanistan's Development

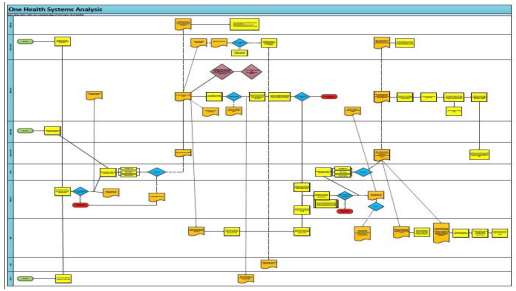
USAID
FROM THE AMERICAN PEOPLE

One Health
WORKFORCE

Background: OH-SMART™

- Co-developed by USDA & University of Minnesota
- Adapted from business process improvement and political science methodologies
- Used to support multi-sectoral stakeholders in analyzing their own system of connections among & between sectors and facilitate health systems improvement
- Train local implementers and then support them to implement tool





MANAGING INFECTIOUS DISEASE OUTBREAKS

A look at the agencies and organizations that responded to Minnesota's 2015 highly pathogenic avian influenza outbreak.

University of Minnesota
- Research
- Analysis
- Training

MN Board of Animal Health
- Animal Disease Management
- Business Continuity

MN Department of Health
- Farm Worker Protection and Monitoring

MN Department of Natural Resources
- Wildlife Surveillance

MN Pollution Control Agency
- Composting
- Carcass Management

Industry
- Partner in Response
- Business Continuity

MN Department of Agriculture
- Incident Command System Management
- Joint Command with USDA

US Department of Agriculture
- Expertise in Disease Control and Response
- Joint Command of Response with MN

MN Homeland Security and Emergency Management
- Emergency Operations Coordination and Support

US Centers for Disease Control and Prevention
- Expertise to Protect Workers

Avian Influenza

OUTBREAK RESPONSE

Coordination

The 2015 HPAI outbreak in MN affected about

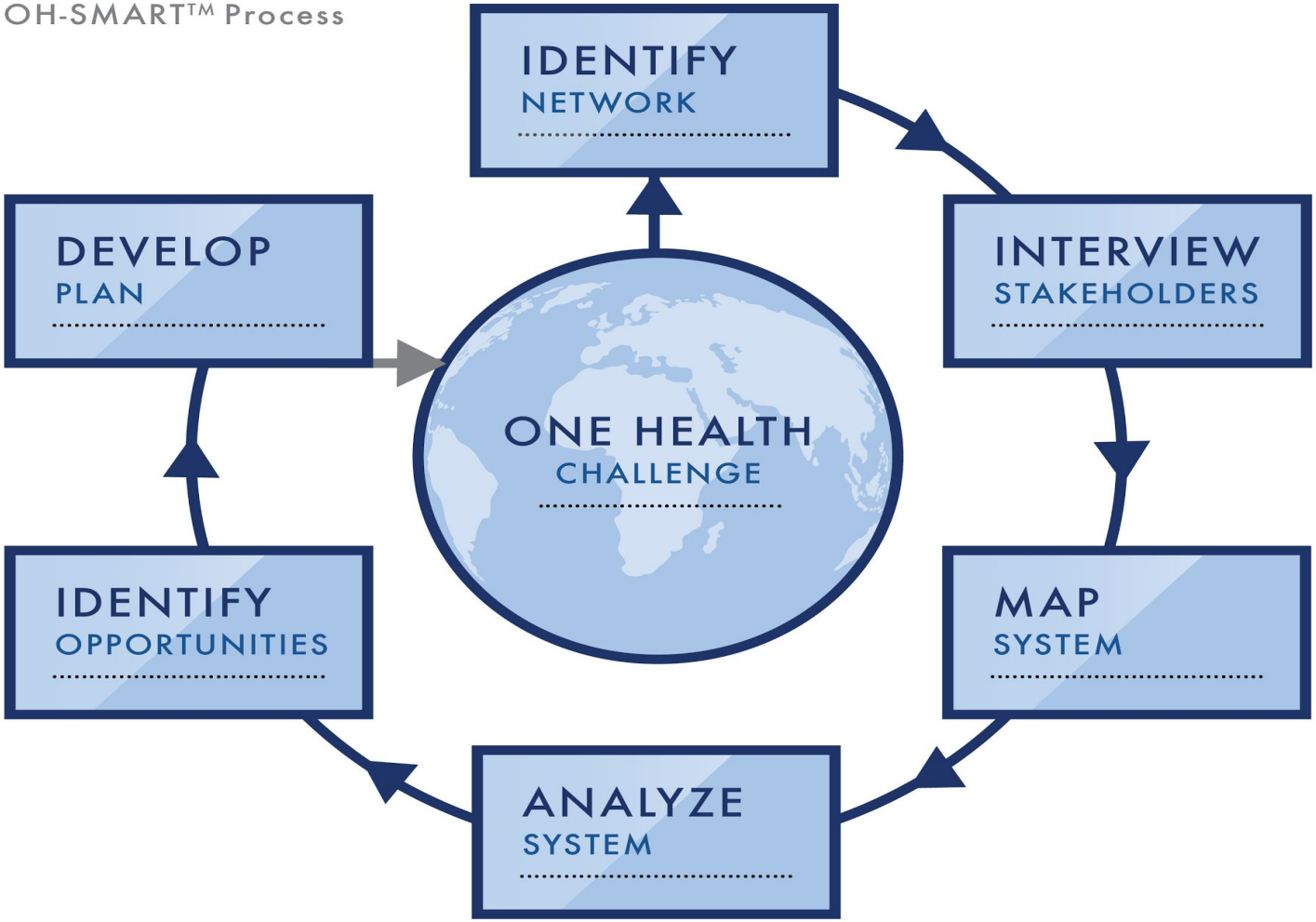
9,000,000 Birds,

110 Flocks,

and caused almost

$650,000,000 in economic losses.

OH-SMART™ Process

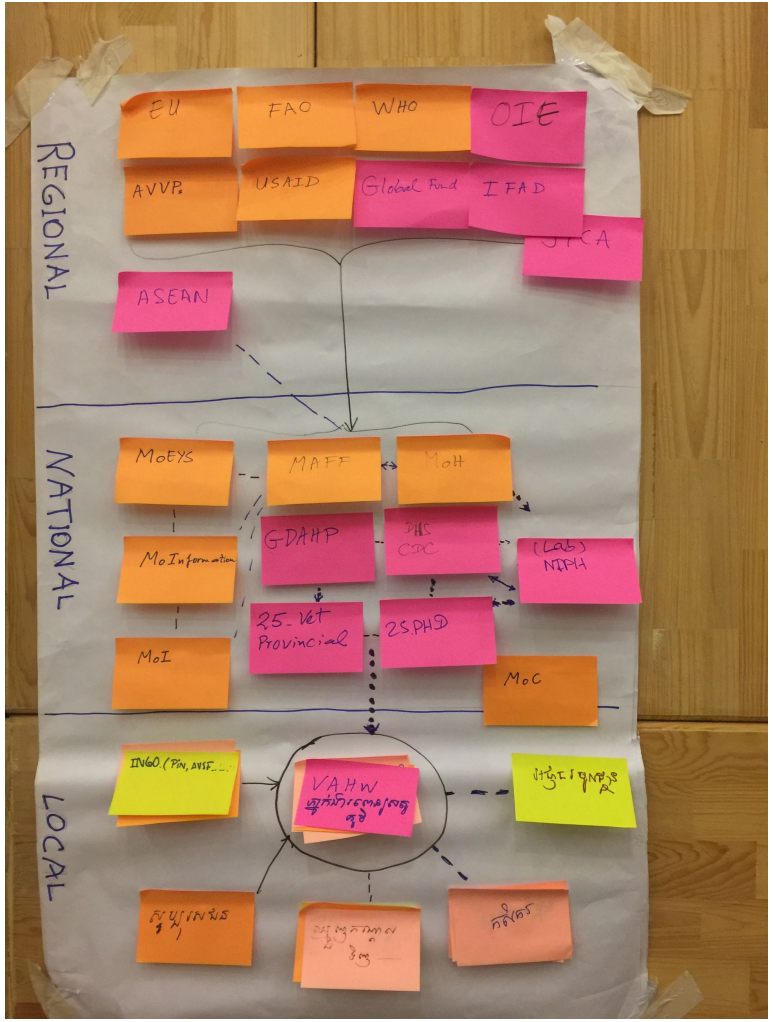


IDENTIFY NETWORK

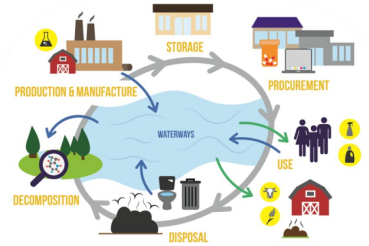
- Identify stakeholders at regional, national, local level

- Analyze influence & funding in the health system

(adapted from Policy Field Analysis, Dr. Jodi Sandfort)



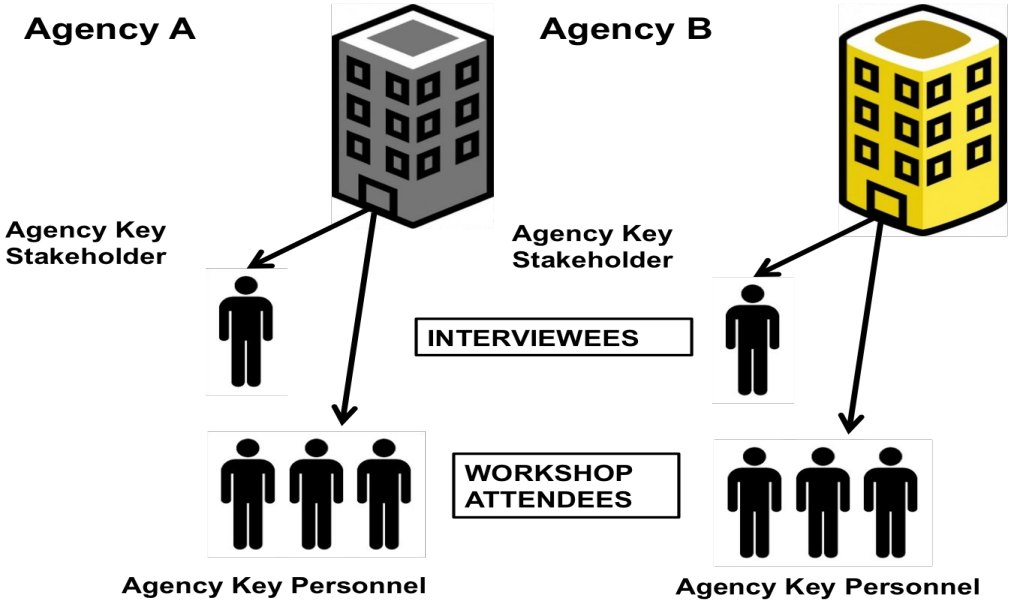
Antimicrobial Resistance



	Production	Storage/ Distribution	Procurement	Use	Fate
Stakeholders					
Where are antibiotics?					

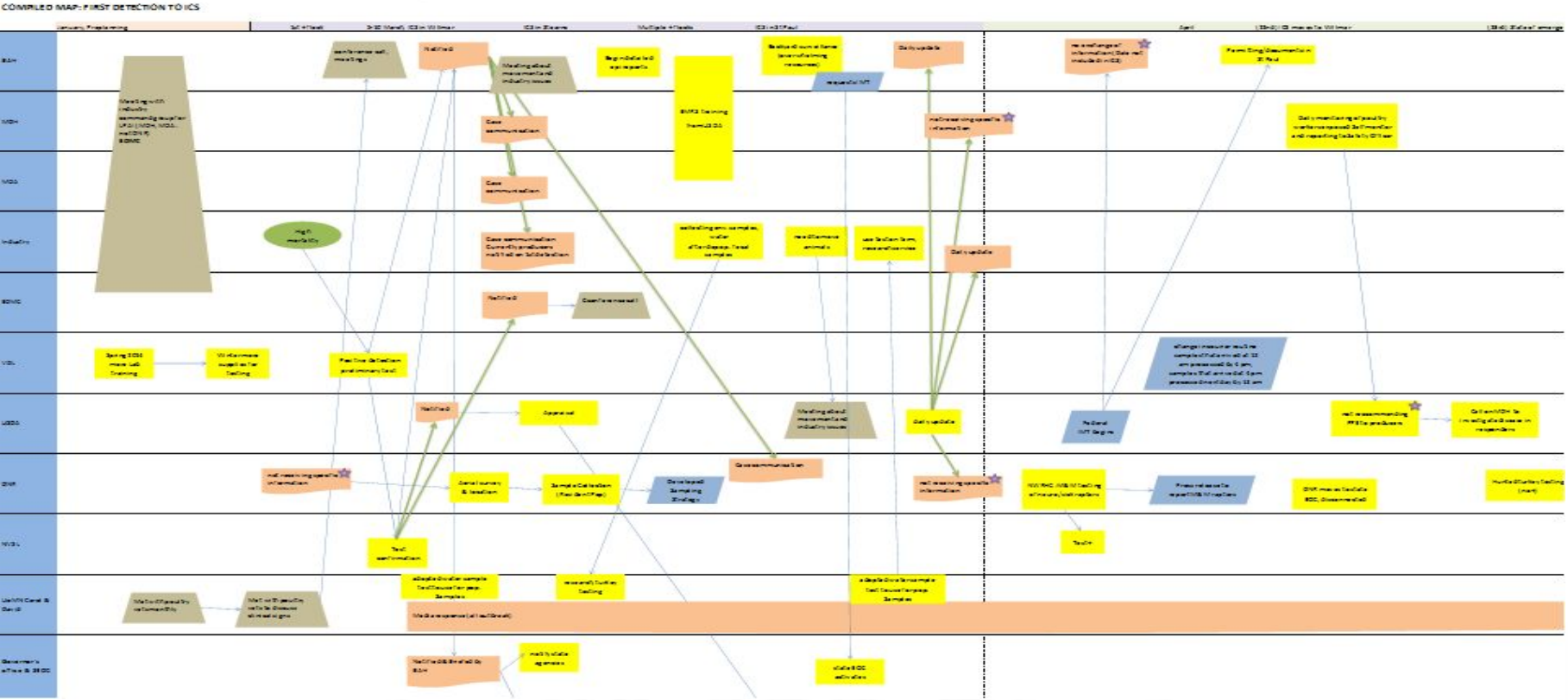
INTERVIEW STAKEHOLDERS

- Conduct 'key stakeholder' interviews
- Can be done one on one or as a focus group during workshop.
- Also use field notes
- Identify themes
- Focus on:
  - understanding knowledge, attitudes and practices for key agencies
  - What collaborations already exist and with whom
  - What is working/not working



MAP
SYSTEM

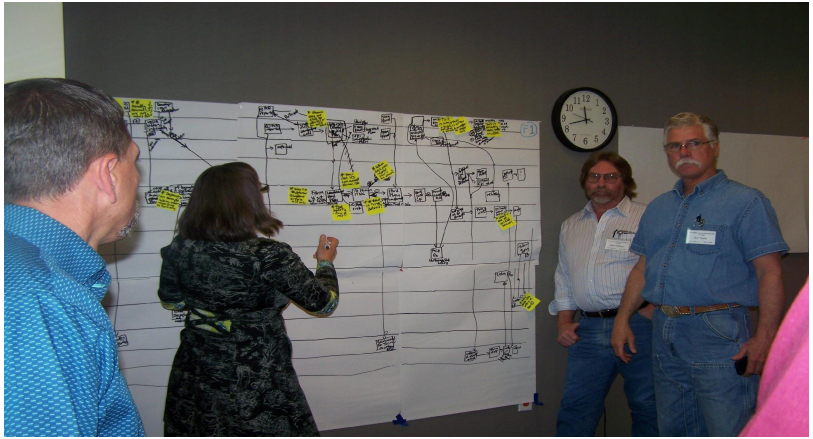
- Choose a complex scenario to map (interaction)
- Multi-sectoral groups map the scenario using process mapping

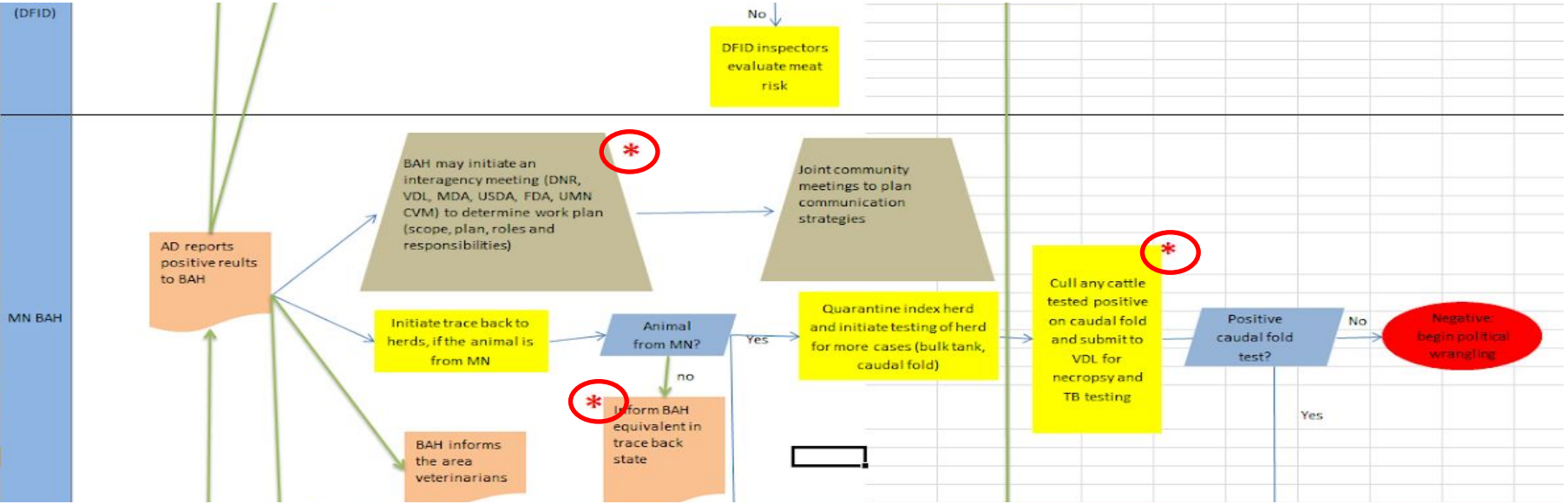


HPAI Response – MN 2015

ANALYZE SYSTEM

- Participants review and discuss the combined map
  - Identify discrepancies in responses or areas where steps are not known or unclear
  - Identify where interactions work & how they might be strengthened

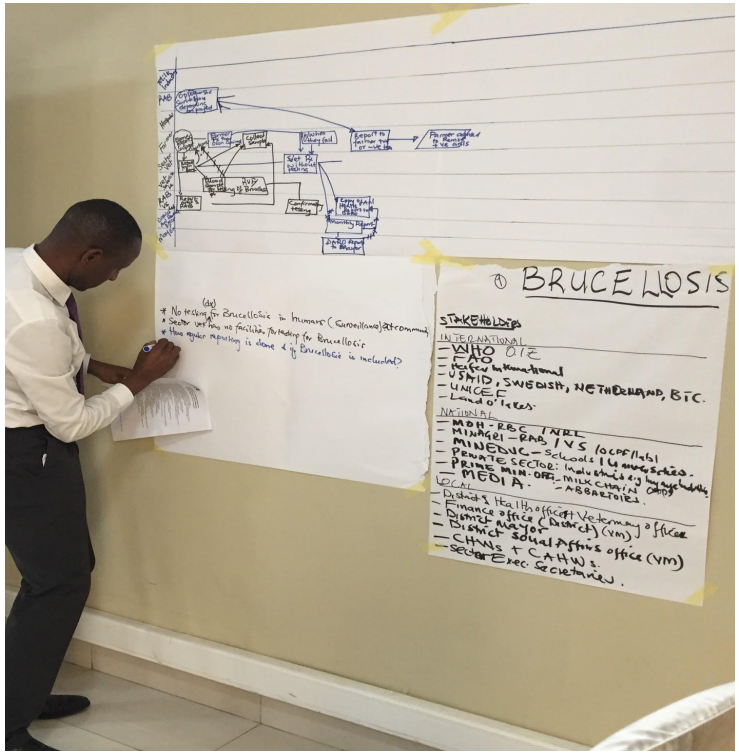



(DFID)
MN BAH
No
DFID inspectors evaluate meat risk
AD reports positive reults to BAH
BAH may initiate an interagency meeting (DNR, VDL, MDA, USDA, FDA, UMN CVM) to determine work plan (scope, plan, roles and responsibilities)
Joint community meetings to plan communication strategies
Initiate trace back to herds, if the animal is from MN
Animal from MN?
Yes
no
Quarantine index herd and initiate testing of herd for more cases (bulk tank, caudal fold)
Cull any cattle tested positive on caudal fold and submit to VDL for necropsy and TB testing
Positive caudal fold test?
No
Negative: begin political wrangling
Yes
BAH informs the area veterinarians
Inform BAH equivalent in trace back state

IDENTIFY OPPORTUNITIES

- As a group decide on resolutions to each discrepancy identified:
  - Multi-agency consensus on what ***should*** occur during each discrepancy
  - Agree on how a discrepancy should be resolved
  - Also decide how best practices can be institutionalized

DEVELOP PLAN



- Attendees develop actionable steps to achieve the resolutions and develop an implementation plan
  - Details the consensus reached on discrepancies and resolutions
  - Identifies specific action steps to address the needs and/or institutionalize the best practices.
  - Prioritize resources within an agency to achieve the ideal communication

Step6- Action Plan for Brucellosis

Resolution*	Action Step identified*	Resources needed*	Responsible entity*	Time frame*	Point Person*
Develop communication and policy advocacy plan for zoonotic diseases including brucellosis.	1- Hire consultant to draft comm. plan	Consultant fee	P&R	Q4 2017	Kinani
	2- Workshop for discussion and validation of the comm. plan	Per diem, transport refund, Accommodation, conference facilities	P&R	Q4 2017	Kinani
	3- Dissemination of the comm. plan to different sectors for buy-in	Per diem, transport refund, Accommodation, conference facilities	P&R	Q 4 2017	Kinani
Communication mechanism between sector and reporting system that is accessed as soon as the information is available	1- Set up of cross- sectoral TWG on zoonoses including brucellosis	Workshop facilities	R-OHSC	Q1 2018	Chair ROHSC
	2- Streamlined cross-sectoral reporting platforms	Workshop facilities	R-OHSC	Q1 2018	Chair ROHSC
Develop brucellosis guideline for prevention, surveillance,	1 Technical working groups develops guidelines including developing standard		R OHSC		

Applied in 30 US states and 18 countries

Planning:

- AMR National Action Planning (Govt-led with FAO) - Cambodia, Laos
- One Health Implementation Planning (Govt-led with P&R, FAO) - Ethiopia, Uzbekistan
- Zoonotic Disease planning (with USDA, CDC- ZDPT)- Pakistan, US
- Zoonotic Disease Workforce Planning (OHW: OHCEA-led, P&R, FAO) - Rwanda, Uganda, Senegal, Cameroon, Tanzania, Ethiopia
- Petting zoo zoonotic disease risk (State gov't led, with USDA)-US
- Climate change- related emergency planning (with USDA, Arctic Council-led)- Circumpolar countries, Alaska
- Select agent planning (Govt-led, with DTRA, USDA)- Turkey
- Rabies National Action Plan development (INDOHUN-led on own) - Indonesia
- Operationalizing OH at provincial level (INDOHUN-led) - Indonesia
- Climate change disease risk (USDA-led) - US
- Food-borne illness rapid response planning (State Gov't led, with USDA)- US
- Indiginous community-driven planning - Alaska, Minnesota

Analysis:

- AI After Action Review (with USDA)- US

Just in time:

- Ebola response (State Govt-led on own), Texas, US
- Chronic Wasting Disease coordination and collaboration (State-led, with USDA) - US

Applied at Different Levels of Government

Intergovernmental

- Climate change- related emergency planning (with USDA, Arctic Council-led)- Circumpolar countries, Alaska

National

- AMR National Action Planning (Govt-led with FAO) - Cambodia, Laos
- National One Health Implementation Planning (Govt-led with P&R, FAO) - Ethiopia, Uzbekistan
- Prioritized Zoonotic Disease planning (with USDA, CDC- ZDPT)- Pakistan, US
- National Zoonotic Disease Workforce Planning (OHW: OHCEA-led, P&R, FAO) - Rwanda, Uganda, Senegal, Cameroon, Tanzania, Ethiopia
- Select agent planning (Govt-led, with DTRA, USDA)- Turkey
- Climate change disease risk (USDA-led) - US
- Rabies National Action Plan development (INDOHUN-led on own) - Indonesia, Finland

Sub-National

- Petting zoo zoonotic disease risk (State gov't led, with USDA)-US
- Operationalizing OH at provincial level (INDOHUN-led) - Indonesia
- Food-borne illness rapid response planning (State Gov't led, with USDA)- US
- AI After Action Review at state and county level (with USDA)- US
- Ebola response (State Govt-led on own), Texas, US
- Chronic Wasting Disease coordination and collaboration (State-led, with USDA) - US

Community

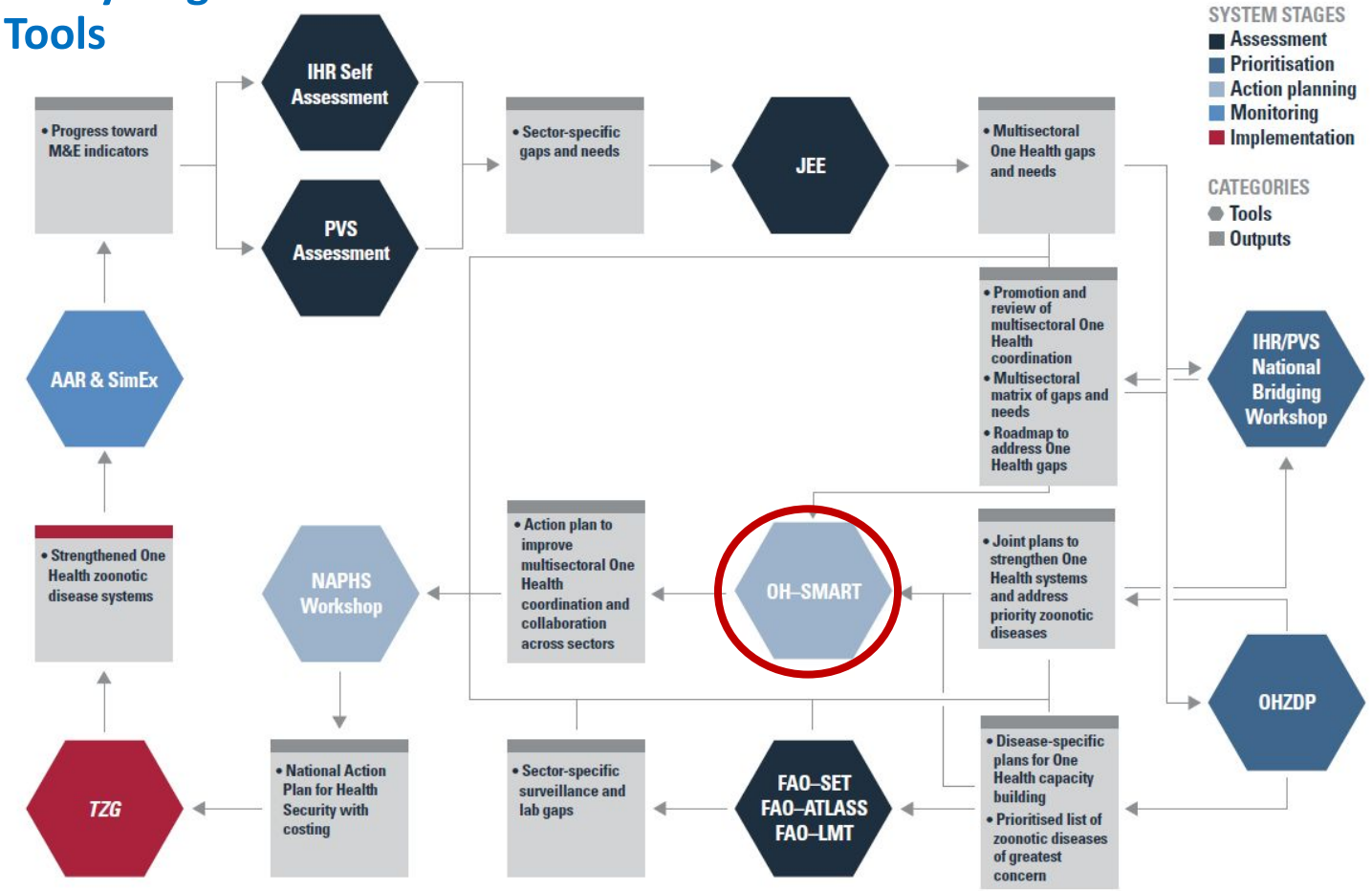
- University of Alaska Student Community engagement projects
- Tribal Food Sovereignty Action Planning

An example of Links and Synergies between One Health Tools

Conceptual model shows how tools and their outputs link together

Proposes sequence for use

Each tool informs and strengthens use of other tools



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