

# One Health: Seeing around corners

A regional communication strategy framework against  
infectious diseases In Asia and the Pacific 2011-2016



Source: FAO ECTAD Cambodia



Cambodian poultry farmers at a community meeting .

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infectious diseases in Asia and the Pacific 2011-2016

August 2011



*One Health: Seeing around corners, the regional communication strategy framework against infectious diseases in Asia and the Pacific 2011-2016, has been developed through a collaborative process led by the Food and Agriculture Organization of the United Nations, with major inputs from United Nations Childrens Fund, the United Nations System Influenza Coordination and the erstwhile Academy for Educational Development, as well as feedback from the World Health Organization South East Asia Regional Office. The primary technical and strategic framework was developed by FAO, and vetted and modified after inputs by collaborating partners.*

*The development of the document has been supported by funds from the United States Agency for International Development, the European Union and the Asian Development Bank.*

# Abbreviations

AED	Academy for Educational Development
ASEAN	Association of Southeast Asian Nations
CAHW	Community animal health worker
CBO	Community-based organization
ECTAD	Emergency Centre for Transboundary Animal Disease Operations (FAO)
EIDs	Emerging infectious diseases
EU	European Union
FAO	Food and Agricultural Organization of the United Nations
H1N1	Sub-type of influenza A virus
H5N1	Sub-type of influenza A virus
HPAI	Highly pathogenic avian influenza
KAP	Knowledge-Attitude-Practice
MOA	Ministry of Agriculture
MOH	Ministry of Health
NGO	Non-governmental organization
OH	One Health
OIE	World Organization for Animal Health (Office International des Epizooties)
RAP	Regional office for Asia and the Pacific (FAO)
SAARC	South Asian Association for Regional Cooperation
SEARO	South East Asia Regional Office (WHO)
TADs	Transboundary animal diseases
USAID	United States Agency for International Development
UNICEF	United Nations Children's Fund
UNDP	United Nations Development Programme
UNSIC	United Nations System Influenza Coordination
WB	World Bank
WHO	World Health Organization

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Photo: C Y Gopinath



*Vaccination of poultry against avian influenza is one method of mitigating the impact of the disease. In some countries, farmers have improved their livelihoods by following the proper schedules for vaccination.*

# Foreword

**THE FOOD AND AGRICULTURE ORGANIZATION** of the United Nations (FAO) has instinctively understood the concept of One Health and the need to reach out across sectoral and disciplinary divides in order to effectively combat diseases that have their origins in animals but hold the potential to devastate local and national economies and populations, both of humans and animals. Along this trajectory, livelihoods and threats to human health are major concerns.

In 2011, FAO's animal health service adopted One Health as integral to its approach, an important step that however brings with it new challenges. This is most evident in the area of communication. Past efforts at communication, national, regionally and internationally, have been driven by emergencies and the need for rapid results and response, often with a strong single disease focus. One Health calls for communication strategies for preventing emerging diseases that may not yet be posing a health threat.

FAO's Emergency Centre for Transboundary Animal Diseases (ECTAD) has had a worldwide focus on building capacity within regions to fight highly pathogenic avian influenza (HPAI) H5N1 and other high impact diseases, developing networks of surveillance and diagnosis, improving coordination, and undertaking measures for improved policy and regional engagement in preventing and responding to pathogens that move from animals to humans or animals to animals or across distant borders. By turning its attention to the important area of strategic communication against emerging infectious diseases, FAO is bringing its core strengths in coordination, collaboration and ground level understanding of communities to the important dimension of the role of communication in staying ahead of emerging infectious pathogens.

One Health, with its focus on anticipating emerging animal and human health threats and tackling existing ones through better use of preemergence surveillance and detection science, calls for far-sighted strategies in every sphere, communication included. Through a series of consultations in mid-2010, ECTAD's Regional office for Asia and the Pacific (RAP) identified a regional need for a harmonized strategic approach to communication. The European Union's draft *Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis* also identified several factors that had worked against effective communication in earlier campaigns.

The Action Plan developed by FAO's animal health service under ECTAD, entitled *Sustainable Animal Health and Contained Animal-Related Human Health Risk: In Support of the One Health Agenda* has as its strategic vision "a world in which risks to animal and animal-related human health due to a wide range of high-impact emerging and reemerging zoonotic and non-zoonotic diseases, and their associated impacts on food security, livelihoods, trade and economic

development, are minimized through prevention, early detection, rapid response, containment and elimination". The strategy aims to establish a robust global animal health system that effectively manages major animal health risks, paying particular attention to the human-animal-ecosystem interface and placing disease dynamics into the broader context of agriculture and socioeconomic development and environmental sustainability. Communication is a recognized key element in the Action Plan that requires further investments.

This document, entitled *One Health: Seeing around corners*, takes FAO's emerging vision a step forward, and reflects the need to root future communication in prevention strategies in addition to emergency response, basing interventions on community ownership and engagement, understanding that changes in behaviour and practices will arise from appreciating the long-term benefits in protecting livelihoods and health that accrue from mitigating the emergence of new diseases or recurrence of old ones. *One Health: Seeing around corners* is the result of an FAO-led collaboration which has included working closely with the United Nations Children's Fund (UNICEF), the erstwhile Academy for Educational Development (AED), and with inputs from the World Health Organization's (WHO) Southeast Asia Regional Office (SEARO) among others.

With *One Health: Seeing around corners*, FAO's leadership has brought the best of guidelines together in a regional strategic framework that can guide and harmonize the development of One Health-driven communication efforts in the Asia-Pacific region, and lead to more effective action.



Juan Lubroth  
Chief Veterinary Officer, FAO

*August 2011*

# Executive summary

*ONE HEALTH: SEEING AROUND CORNERS* is primarily a response to a perceived regional need for a broad guiding framework on communication which could serve communication professionals, as well as those from other disciplines who deploy communication budgets, and plan and implement national and local communication strategies to combat emerging infectious diseases (EIDs) – including H5N1 highly pathogenic avian influenza (HPAI) H5N1. It proposes strategic guidelines for communication which are harmonized with the One Health approach.

The data and research on which this document is based include two consultations and a literature review. The first consultation was held at the office of the Food and Agriculture Organization of the United Nations (FAO) in Bangkok, from 23 to 25 June 2010. This meeting convened country Team Leaders from FAO's Emergency Centre for Transboundary Animal Diseases Regional Office for Asia and the Pacific (ECTAD RAP) to share regional experiences of issues and gaps in communication related to H5N1 HPAI since 2003, and also identify upcoming challenges and key themes which would inform the regional communication strategy framework.

The four regional themes identified through this process were —

1. Moving to One Health
2. Enhancing multidisciplinary, multisectoral collaboration
3. Addressing high-impact animal diseases which affect human communities
4. Addressing established and emerging zoonotic diseases

The recommendations from this consultation were supplemented by a literature review of available evaluations of communication against H5N1 HPAI in recent years, the most substantive of which was the European Union's (EU) draft *Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis*. In addition, there are analytical sections on communication within other studies, such as Dr. Benjamin Hickler's *Bridging the gap between HPAI awareness and practice in Cambodia*.

The main findings of communication assessments were:

1. Increased knowledge and awareness have not translated into changes in behaviour or biosecure farming practices.

2. Low perception of risk from HPAI and other EIDs.
3. Poor community-level understanding of transmission, infection and disease emergence.
4. Community perceptions of illness, risk and security are poorly understood.
5. Communication is perceived by the community as prescriptive and top down.
6. Capacity building approaches and curricula for non-technical audiences do not reflect a multidisciplinary approach.
7. One Health issues and implications are not well understood.

The findings from the literature review, together with recommendations from the first consultation, were compiled and presented at a regional multisectoral and multidisciplinary meeting in Bangkok, Thailand from 29 to 30 July 2010. Participants included representatives from FAO, the United Nations Children's Fund (UNICEF), the World Organisation for Animal Health (OIE), the United Nations System Influenza Coordination (UNSIC), the erstwhile Academy for Educational Development (AED), CARE, and also senior veterinarians and livestock officers from Ministries of Agriculture and Departments of Livestock Development from Cambodia, India, Indonesia, Nepal, Philippines, Thailand and Viet Nam. The regional consultation had the following outcomes:

1. There was broad agreement with the findings of the literature review.
2. It was agreed that there was need for a regional framework that could harmonize strategic communication approaches across the region and be utilized by non-communication professionals, including ministry officials, who deploy large communication budgets.
3. It was agreed that international agencies and NGOs with communication expertise such as FAO, UNICEF and AED should work together on a regional communication strategy framework, and that FAO should lead the collaboration to produce a first draft for review and feedback.
4. A core group was formed including representatives of FAO, UNICEF, AED and UNSIC. The World Health Organization (WHO) Southeast Asia Regional Office (SEARO) region joined the group later and provided inputs.

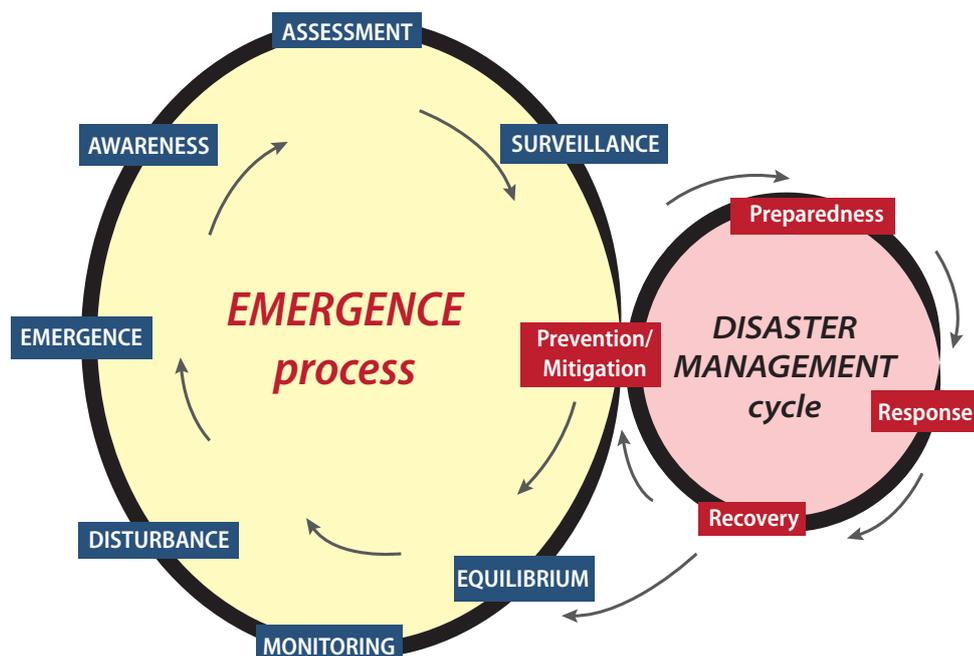
### Framework for communication

As a way of identifying gaps in and opportunities for communication under the One Health approach, an analytical framework for communication (see Diagram 1) was developed at FAO, depicting a simplified process of pathogenic emergence and growth into a disease threat, as well as the human responses to it.

Based on this analysis, three areas of opportunity for One Health-driven communication were identified:

1. Long term prevention at the human-animal-ecosystem interface, specifically in the pre-emergence stages of Monitoring and Disturbance.
2. Increased communication between technical and non-technical audiences, particularly at the stages of Awareness, Assessment and Surveillance.

3. Greater community engagement in disaster preparedness and management, particularly in the stages of the Disaster Management cycle.



*Diagram 1*  
Pathogen  
emergence and  
disease threats  
Source: FAO

Five guiding principles were proposed for communication:

1. Use processes driven by greater community participation, dialogue and critical reflection.
2. Develop a regional One Health curriculum for lay audiences which consolidates all knowledge on the human-animal-ecosystem interface, including the drivers of disease emergence and prevention, should be consolidated in a.
3. Enhance the capacity of audiences at risk to understand and explain the link between human, animal and ecosystem health, as well as the emergence, transmission and prevention of diseases.
4. Establish a regional network of coaches/mentors with knowledge and skills to train non-technical audiences about all aspects of the human-animal-ecosystem interface and disease drivers, as well as risk, prevention, preparedness and response.
5. Develop community-based communication networks for sharing and disseminating information on EIDs and events at the human-animal-ecosystem interface between communities and field and laboratory networks.

In addition, specific guidelines were developed for interpersonal communication, mid-media communication and mass media communication.

A table of illustrative goals, objectives, outcomes and outputs was developed in five areas related to communication and derived from the guidelines, namely strategy, content, capacity, research, and monitoring and evaluation (M&E). These were translated into a table of detailed indicators for each output.

Photo: C Y Gopinath



*Foot and mouth disease continues to be a major problem in South Asia, seriously impacting livestock health and the livelihoods of poor farmers of countries in this region.*

# Introduction

**IN THE LAST FEW DECADES**, a number of emerging and reemerging infectious diseases have threatened the health of humans or animals, and sometimes both: the human immunodeficiency virus (HIV), severe acute respiratory syndrome (SARS), H5N1 HPAI, H1N1, and more recently, foot-and-mouth disease (FMD). Not only have the diseases become more frequent, but their impact has been widespread, affecting many societies. About 75 percent of new human diseases are zoonotic: emerging or reemerging in animals before crossing over to human beings. The threat of any one of these becoming a pandemic or epizootic has kept governments, international agencies and donors continuously engaged.

Since 2003, when H5N1 HPAI emerged globally, there has been a steady evolution in the understanding of and response to emerging and reemerging zoonoses. For example, the insight that the Asian region is characterized by zones of endemic risk for H5N1 HPAI, as well as areas which have remained infection-free has profoundly influenced both the dynamics of response and interventions and also the thrust of donor support. It is clear from recent experiences and lessons learned from H5N1 HPAI and H1N1, that effective prevention and control of EIDs depends on being able to take a broad view.

There is also a better understanding of how epizootics such as FMD indirectly affect human well-being: by destroying livelihoods and income, reducing food production and nutrition and rendering entire populations susceptible to infections and ill-health.

There has also been a growing awareness of the need to act together strategically and with synergy across disciplines, geographies, and human health, animal health and wildlife sectors. For instance, early identification and reporting of outbreaks benefits when epidemiologists work in harmony with animal and human health specialists as well as wildlife experts at the field level. Rapid diagnosis requires efficient networks of laboratories sharing information across countries and regions. Similarly, the need to mount an effective response at the national level is pushing ministries of agriculture and health to find new ways to communicate and work together. The new global imperative calls for collaborative, holistic strategies, mechanisms and approaches for anticipating and pre-empting potentially devastating EIDs.

## One Health

The principles of intersectoral and multidisciplinary collaboration were laid out in the One Health approach, enshrined in the Manhattan Principles which were articulated in 2004

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at a meeting in New York hosted by the Rockefeller University. One Health recognizes that the health and well-being of humans, animals and ecosystems are intimately linked, and when human health and veterinary disciplines work in isolation from each other, their lack of communication compromises effective control and prevention of EIDs. One Health envisions a global partnership for minimizing the impact of epizootics and pandemics due to EIDs, thereby improving public health, food safety and security, as well as the livelihoods of poor farming communities, while protecting ecosystems.

There is currently a global convergence around the need for greater intersectoral and multidisciplinary collaboration in addressing threats and reducing the risks of EIDs at the human-animal-ecosystem interface. In line with this, FAO, OIE and WHO have developed a tripartite concept note entitled *FAO-OIE-WHO Collaboration — Sharing responsibilities and coordinating global activities to address health risks at the human-animal-ecosystem interface*. This note sets a strategic direction for FAO-OIE-WHO to take together and proposes a long-term basis for international collaboration aimed at coordinating global activities to address health risks at the human-animal-ecosystem interface.

In 2008, an interagency consultation document titled *Contributing to One World, One Health: A Strategic Framework for Reducing Risks of Infectious Diseases at the Animal-Human-Ecosystems Interface* was developed by FAO, OIE, WHO, the United Nations Children's Fund (UNICEF), UNSIC and the World Bank (WB). The document emphasized the need for comprehensive and coherent communication strategies at the regional and national levels to support the One Health approach and operationalize its precepts in the area of communication. One Health offers a uniquely appropriate opportunity to review, re-articulate and re-organize the approach towards communication and advocacy at the human-animal-ecosystem interface in a more synergistic, integrated and holistic way.

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### Seeing around corners

*One Health: Seeing around corners* is a response to a perceived regional need for a guiding framework on communication which could serve communication professionals and those from other disciplines who deploy communication budgets, and plan and implement national and local communication strategies to combat EIDs, including H5N1 HPAI. The issues, challenges, good practices and analyses upon which it is based have evolved out of consultations between government representatives, international agencies and NGOs at the regional and national levels, and supplemented by a desk review of the latest evaluations of recent communication work.

*One Health: Seeing around corners* provides regional guidelines on communication within a rationally derived framework of strategic approaches, goals, interventions, objectives and indicators. These respond to issues, gaps and needs in areas of communication which have been identified through a regional consultative process and desk research, and reflect four regionally pertinent themes identified through the consultative process. *One Health: Seeing around corners* addresses communication needs which will arise as the focus expands to include EIDs and moves towards the increased collaboration across multiple sectors and disciplines called for in the One Health approach.

*One Health: Seeing around corners* is best utilized as a template: the addition of local data, insights and issues, as well as the expansion of the goals and objectives to meet national, institutional or agency requirements will yield a localized communication strategy. While

the framework by its regional nature precludes an activity plan or audience specifications, localized strategies would be expected to include detailed activity plans, audiences and specific performance indicators.

### **Focus on communication**

*One Health: Seeing around corners* focuses on harmonized strategic communication from a regional perspective. Communication here refers to processes, campaigns and interventions which address issues related to changes in behaviour, practices or norms among groups, communities and populations. These would include mass media communication (television, radio, print), interpersonal communication (community theatre, local radio, dialogue groups), and mid-media (modern media such as mobile phones, SMS, Facebook and the internet).

Regional advocacy needs are not addressed here. However, as advocacy and communication often mutually subserve and strengthen each other's goals, it is recommended that advocacy and communication strategies be developed together and synergistically at national and sub-regional levels.

Source: FAO ECTAD Cambodia



Communication outreach in Cambodia. An important finding from evaluations was that increased knowledge and awareness of avian influenza did not necessarily translate into changes in behaviour and biosecure farming practices.

# Findings

**THE DATA AND RESEARCH ON** which *One Health: Seeing around corners* is based includes two consultations and a literature review. The first consultation was held at the FAO office in Bangkok from 23 to 25 June 2010, and convened ECTAD RAP country Team Leaders to share their experiences of issues and gaps in the area of communication since 2003, and also identify upcoming challenges and key themes which should inform the regional communication strategy framework.

The four themes identified through this process were —

1. Moving to One Health
2. Enhancing multidisciplinary, multisectoral collaboration
3. Addressing high-impact animal diseases which affect human communities
4. Addressing established and emerging zoonotic diseases

The recommendations from this consultation were supplemented by a review of available evaluations of communication against H5N1 HPAI over recent years. The available literature in this area is meagre. The most substantive document was the EU's draft *Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis*. In addition, there are analytical sections about communication within other studies such as Dr. Benjamin Hickler's *Bridging the gap between HPAI awareness and practice in Cambodia*. These references are listed in Annex 1.

The main findings of communication assessments were —

1. Increased knowledge and awareness have not translated into changes in behaviour or biosecure farming practices
2. Low perception of risk from HPAI and other EIDs
3. Poor community level understanding of transmission, infection and disease emergence
4. Community perceptions of illness, risk and security are poorly understood.
5. Communication is perceived by the community as prescriptive and top down

The findings from the literature review, together with recommendations from the first consultation were compiled and presented at a regional multisectoral and multidisciplinary meeting in Bangkok, Thailand from 29 to 30 July 2010. Participants included representatives from FAO, OIE, UNICEF, UNSIC, AED, CARE, and also senior veterinarians and livestock officers from Ministries of Agriculture and Departments of Livestock Development from Cambodia, India, Indonesia, Nepal, Philippines, Thailand and Viet Nam.

There was broad agreement with the findings of the literature review, although some participants pointed out a few communication practices which had been effective. In particular, there was reference to how much better communities responded when the messages had been about the economic benefits of adopting biosecurity measures.

1. Two additional findings were identified and accepted —
  - Capacity building approaches and curricula for non-technical audiences do not reflect a multidisciplinary approach.
  - One Health issues and implications are not very well understood at country levels.
2. It was agreed that there was need for a regional communication strategy framework which harmonized strategic communication approaches across the region, and could be utilized by non-communication professionals including ministry officials who deploy large communication budgets. It was agreed that international agencies and NGOs with communication expertise such as FAO, UNICEF and AED FAO should work together on a regional framework, and that FAO should lead the collaboration to produce a first draft for review and comments.
3. A core group was formed comprising representatives from FAO, UNICEF, UNSIC and AED. WHO SEARO joined the core group later, and gave some inputs into the final document.

*Factors discouraging reporting were: low risk perception; fear of the economic consequences of reporting; lack of clear information about follow-up actions; negative perception of post-reporting experiences; and a strong distrust of authorities.*

### Detailed findings on communication

**Increased knowledge and awareness have not translated into changes in behaviour or biosecure farming practices.** Studies on the effectiveness of messages and Knowledge, Attitude and Practice (KAP) surveys carried out by AED and UNICEF showed that messages (easily recited by backyard poultry farmers) which have increased knowledge and awareness have had little effect in reducing risks or changing methods of poultry management in the backyard and village production sectors, as the messages were often aimed more at educating about H5N1 HPAI than promoting behavioural changes.

Low levels of biosecure farming and disease reporting were recorded in all surveyed countries. Factors discouraging reporting were: low risk perception; fear of the economic consequences of reporting; lack of clear information about follow-up actions; negative perception of post-reporting experiences; and a strong distrust of authorities.

**Low perception of risk from HPAI and other EIDs.** An assessment of UNICEF-supported communication initiatives for the prevention and control of H5N1 HPAI (Waisbord, 2008) notes that even when awareness increases, the majority of people do not have either an increased sense of urgency about prevention or higher risk perception about the impact of

avian influenza on humans or poultry. This was observed even in countries that had seen large numbers of infected and dead birds as well as several human fatalities.

**Poor community level understanding of transmission, infection and disease emergence.** A recent workshop among poultry farmers in Bangladesh showed that sociocultural frames of reference that dominate in communities do not help better understanding of scientific information about disease emergence, transmissions and spread, which call for comprehending the action of invisible pathogens. Many KAP studies found low levels of knowledge about viral transmission among birds and from birds to humans (Waisbord, 2008). Studies also demonstrated that an increase in knowledge does not necessarily translate into effective behavioural changes due to a host of social, economic and political reasons.

Sowath et al (2007) commented that behaviour change involves a comprehensive and multidisciplinary intervention which combines risk communication with feasible and practical recommendations, including economic considerations. Because lack of knowledge does not appear to be a factor, intervention programmes must include feasible options for resource-poor settings that have limited materials for personal protection (water, soap, rubber gloves, masks) and must offer farmers alternative methods to safely work with poultry on a daily basis.

Waisbord (2008) also remarked that messages should clearly tell people what benefits they would reap if they were to practice healthy behaviours. Benefits should not be limited to conventional public health goals such as 'achieving healthy communities' or 'preventing disease'. They should also consider a host of social and economic rewards that might be associated with specific behaviours.

**Community perceptions of illness, risk and security are poorly understood.** A perceptual and comprehension gap exists between the frames of reference of animal and human health specialists on the one hand, and the communities with whom they communicate on the other hand. This has impeded credibility and created confusion and mistrust in some cases, leading to poor understanding and ownership of risk-related issues and prevention. The community perceives risk of disease among livestock and humans through filters of socioeconomics, livelihood concerns and long-standing sociocultural beliefs.

Although some of these perceptions may be identified through KAP studies, they have generally been viewed as barriers to be overcome while ensuring the smooth dissemination of technically accurate biomedical information. Even fundamental problem definitions may differ radically — for example, health specialists have the goal of eliminating the pathogen, while backyard farmers may feel the problem is over when the symptoms disappear.

In the absence of perspectives from other disciplines such as anthropology, sociology and economics, communication interventions have been guided mainly by the biomedical perspective.

A study of the gap between H5N1 HPAI awareness and practice in Cambodia (Hickler, 2008) notes that even when a rationale is provided to farmers it is often technical rather than one that they can reconcile within their sociocultural belief system. Hickler recommends that communication strategies, and not only in Cambodia, need to promote an additional awareness of why a practice or investment makes sense from the point of view of the audience. Perhaps most importantly, messages regarding animal-to-animal and animal-to-human transmission need to connect with local values and priorities.

*A perceptual and comprehension gap exists between the frames of reference of animal and human health specialists on the one hand, and the communities with whom they communicate on the other.*

*Communication campaigns have not created the space for audiences to have dialogue, debate and critical reflection around meanings, predicaments, priorities and values regarding issues related to health, livelihood, and human actions at the human-animal-ecosystem interface*

**Communication is perceived by the community as prescriptive and top down.** Hickler's study (2008) in Cambodia has shown that backyard farmers perceive priority messages — handwashing; thorough cooking; separation of poultry; and prompt reporting — as a set of imperatives. Even when a rationale was provided, it was a technical one. Hickler mentions that a technical rationale is good for identifying practices to promote, discourage or target through communication but that it will never be able to convince anyone why, from his or her point of view, it makes sense to do things differently from what they have done for years or even generations.

Communication campaigns have not created the space for audiences to have dialogue, debate and critical reflection around meanings, predicaments, priorities and values regarding issues related to health, livelihood, and human actions at the human-animal-ecosystem interface, relying instead on messages that directly prescribed specific actions.

**Capacity building approaches and curricula for non-technical audiences do not reflect a multidisciplinary approach.** The fight against H5N1 HPAI called not only for rapid development of technical infrastructure and capacity in epidemiology, surveillance and diagnosis but also substantial capacity building of non-technical audiences at the level of farmers, community animal health workers (CAHWs), district officials, government officials and others. The training focussed on H5N1 HPAI and aimed to make available technically correct, up-to-date scientific information about the disease and its symptoms, and clear guidelines for preventive actions such as biosecurity. Participants at the regional consultation held in July 2010 in Bangkok pointed out that in the absence of national level guidance on content or pedagogic approaches for communicating technical information to non-technical audiences, individual implementing agencies generally followed their own curricular models and formats, resulting in diverse approaches to capacity building of non-technical audiences.

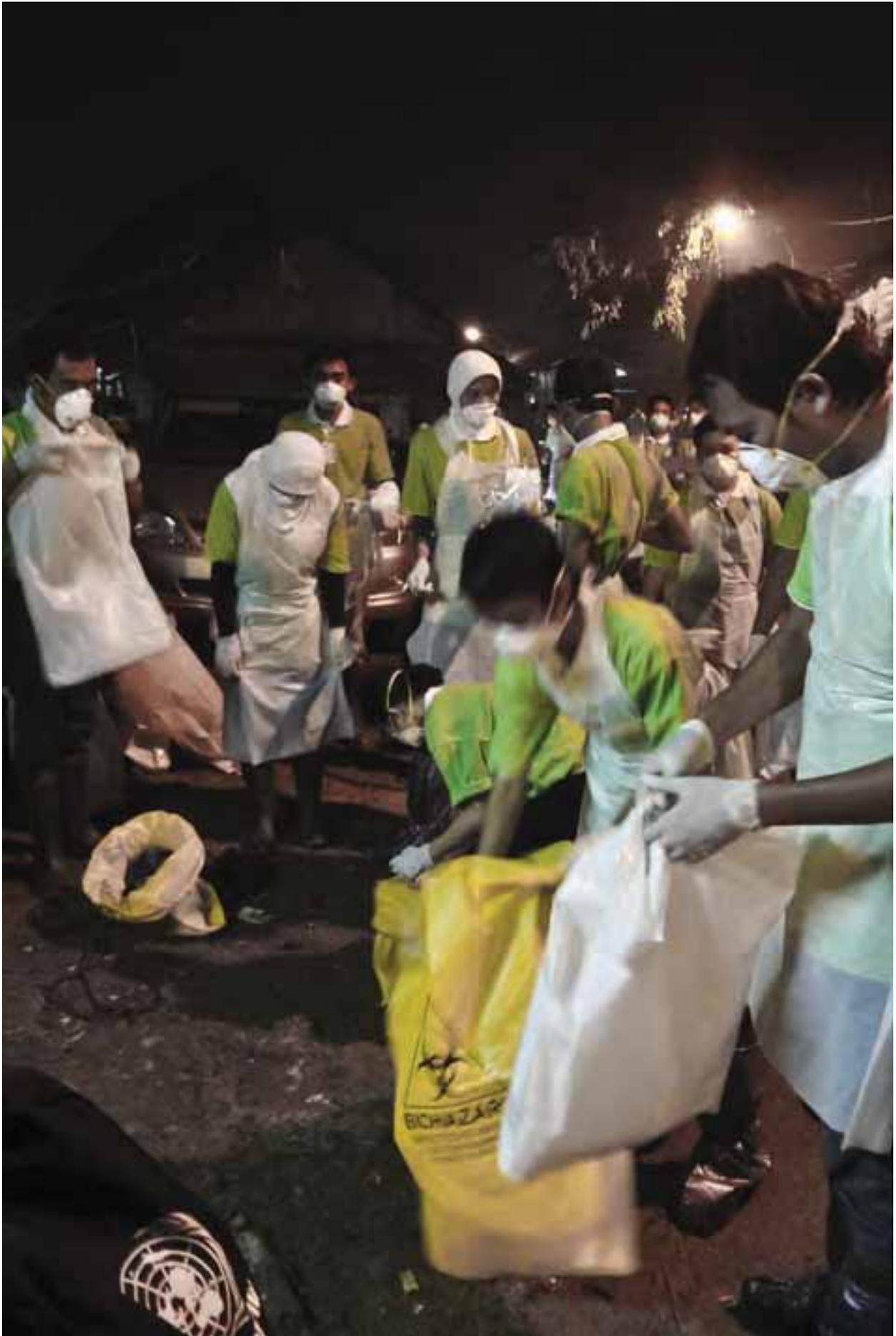
Communication assessments reviewed as part of the development of this document indicate that although such capacity building efforts resulted in high awareness of correct information, risk perception remained low and there was little sustained change in biosecurity practices.

Adopting One Health calls for moving away from a single disease focus towards the prevention of emerging and reemerging infectious disease threats. Coupled with the need for more credible and socioculturally meaningful ways of delivering technical content to non-technical audiences, there is a case for updating existing curricula so that they reflect the One Health approach, are based on multidisciplinary and multisectoral inputs and include field-tested tools and processes that help non-technical audiences better understand how their actions can help or hinder pathogens from emerging or reemerging as threats to animal and human health. As the world moves towards a broader perspective based on EIDs and a deeper understanding of the human-animal-ecosystem interface, there is a need for both curricula and capacity building approaches to be more integrated and multidisciplinary at both the national and the regional levels.

**One Health issues and implications are not very well understood at country levels.** FAO, OIE and WHO have proposed strategic directions in working together and a long-term basis for international collaboration aimed at coordinating global activities in a tripartite concept note entitled *FAO-OIE-WHO Collaboration — Sharing responsibilities and coordinating global activities to address health risks at the human-animal-ecosystem interface*. While this

provides a broad basis for interagency collaboration, much remains to be understood, discussed and resolved, particularly in terms of operationalizing One Health and working out the mechanisms for greater collaboration between disciplines, ministries and sectors at the national and regional levels. There is need for strategic advocacy to help increase political will and commitment to adopting the integrated One Health approach.

Source: FAO ECTAD Indonesia



An outbreak site being disinfected by health workers in Indonesia.

# Technical framework

**IN THE AREA OF HEALTH** interventions, human choices of action, even the decision to do nothing, can be said to have been determined by two factors — the *perceived risk from the pathogen* and the *priority placed on health*. With few exceptions, these two factors operate across sectors, from governments and donors to communities whose health and livelihoods are at risk. The more active that pathogens are in causing visible or measurable disease and the closer they are perceived to be to infecting human beings, the more vigorous and urgent the response has been at all levels, including communication.

An example is the period since 2003, when the threat of an H5N1 HPAI pandemic became imminent and real to the biomedical community, including epidemiologists, veterinarians and human health professionals. Presented with credible data about an aggressive, dangerous, rapidly mutating target, donors reacted with strong support and funding, leading to concerted action by governments, international agencies and NGOs across a broad range of interventions, including research, technical, cross-border, advocacy and communication.

However, many directly affected audiences have not shared the high risk perception of health professionals and governments. Either the risk was dismissed as theoretical and non-existent or else the symptoms were treated as familiar, innocuous and not a threat at all. These audiences continued to perceive the disease as distant despite the information they received, or perhaps placed a lower priority on health compared to other pressing issues such as livelihood.

## Biomedical vs sociocultural framework

The presence or absence of a scientific temperament is an important trait that differentiates medical and human health specialists from community audiences such as farmers in poor communities. Scientists follow a biomedical framework based on the collection and assessment of data from monitoring, surveillance and laboratory tests, and a strong sense of conviction driven by proven facts. Based on their analyses, animal and human health specialists help define the problem, its risks and health implications for animal or human populations, and the required interventions in scientific terms, referring to invisible pathogens whose existence is fact for them. An important goal of all interventions is the elimination of the pathogen. The problem is officially over when surveillance cannot detect the pathogen.

Governments and donors, who respond to data from scientists, are next in line to perceive the pathogen's proximity. Although public health in general may have high importance

*Human choices of action, even the decision to do nothing, seem to be determined by two factors — the perceived risk from the pathogen and the priority placed on health.*

for governments, the priority accorded to a specific health condition is likely to depend on credible evidence of mounting harm, donor pressure, political will and the existence of an appropriate infrastructure and policies.

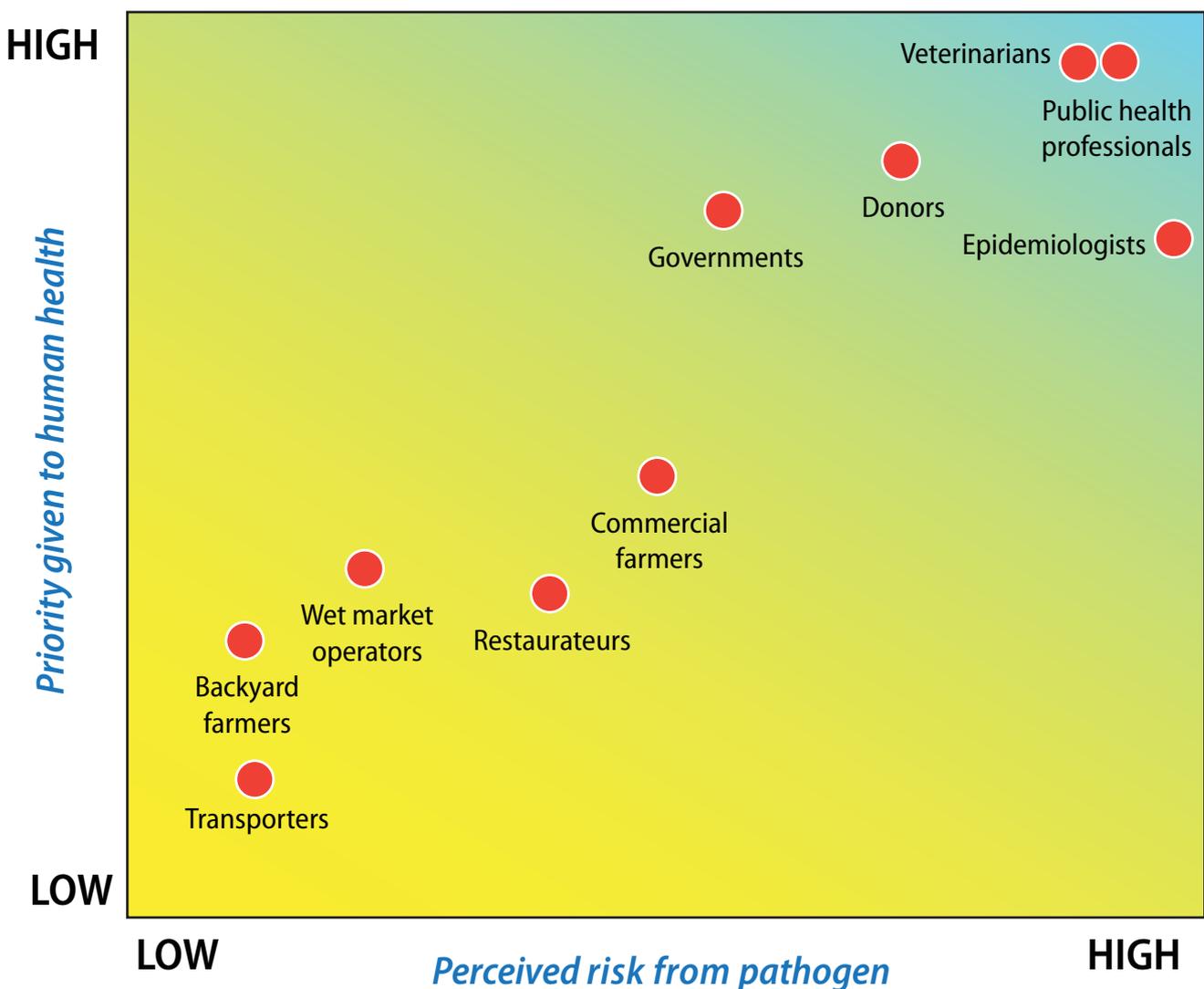
In contrast, audiences at direct risk at the community level, including backyard farmers, commercial farmers, transporters, slaughterers, restaurant owners and wet market operators, view disease through a sociocultural framework that is quite different from the scientific, data-driven perspective of scientists. Farmers directly detect only symptoms (or their absence) rather than the pathogen itself. Most of them are unfamiliar with germ theory and do not have a scientific framework for apprehending threats that are invisible to the eye. Their descriptions of disease and perceptions of risk tend to be shaped by socioeconomic factors, cultural beliefs and community values rather than biomedicine or science.

This could lead to problem definitions and risk perceptions that differ significantly from those of medical experts. Eliminating the symptoms rather than the pathogen may be the primary goal for them, and preserving animal health may be linked more to economic stability and food stability than to avoiding sickness. The problem may be judged to be over when the symptoms are no longer visible.

All these may dilute their ability to respond to the risk of EIDs in a sustained manner and with the same urgency as biomedical professionals. There is a need for communication to

*Diagram 2*  
Perceived pathogen risk vs priority given to health

Source: FAO



include tools and processes that can create a culturally acceptable, non-technical understanding of microorganisms and the role pathogens play in animal and human health, to help lay audiences understand and respond to health threats in the way that health professionals and communicators would hope for.

Diagram 2 is roughly illustrative of the approximate positions of key groups towards both the pathogen and health. The data points are not numeric but reflect the observation made in several evaluations, including the EU's draft *Outcome and impact assessment of the global response to the avian influenza crisis*, as well as in the consultations that led to this document, that there were significant differences in risk perception between medical professionals and lay audiences.

### Human role in pathogen evolution

*Note: In this section, a simplified model is presented of pathogen emergence and the range of human actions that drive emergence and constitute the response to the threats posed by it. In reality, emergence is a significantly more complex, nuanced and non-linear process. This simplified framework has been developed primarily for lay audiences and its use lies in helping identify communication intervention opportunities within the One Health approach.*

When humans and animals live in endemic stability with the pathogens in their environment, they may be described as existing in a state of *equilibrium*. Forest dwelling communities who have found their niche within the ecosystem and co-exist with other life forms and pathogens are an example of such equilibrium at the human-animal-ecosystem interface. Other examples are host species such as bats, ducks, geese, terns and gulls, which harbour reservoirs of influenza strains and have learned to co-exist with them without suffering sickness. However, as these host species carry their pathogens across the globe in their migrations, they shed them through feces into the environment, including lakes, rivers and ponds, where humans and livestock could come into contact with them.

The state of equilibrium can be disturbed by external events which impose man-made processes on existing natural systems, such as intensive livestock farming or deforestation to make way for industries. This creates a *disturbance* of the equilibrium, providing the pathogen with an opportunity to jump to another animal species or directly to humans. The flourishing trade in bush meat which brings humans into regular intimate contact with forest animals, and wild duck farming as practiced in some Asian countries are other examples of human interventions that can disturb the state of equilibrium and create the conditions for a pathogen to jump species. Such a crossover is known as *emergence*. For example, a pathogen existing in equilibrium within the wild duck population could jump species and infect chickens in a farm where wild ducks get the opportunity to intermingle with domestic poultry.

The preemergence *monitoring* of communities and pathogens at the human-animal-ecosystem interface while they are in equilibrium to better understand how human activities drive the evolution of disease-causing pathogens, is at the core of anticipating and preventing EIDs. Prevention at this level lies at the heart of the One Health approach. Understanding human behaviours at this interface, identifying hazards, developing communication strategies and interventions for engaging audiences in long-term preventive behavior and practices are important interventions for preventing the emergence and reemergence of new disease threats.

### The human response

Human **awareness** of an emerging or reemerging pathogen begins in the laboratory when an outbreak report is received and testing reveals that emergence has taken place. This leads to an initial **assessment** of the data. If the threat is judged as nominal, this could lead to a decision to continue monitoring the situation. If it is assessed as more serious, then active **surveillance** could begin to identify the extent of spread. If a pandemic is judged to be imminent, then interventions move into the disaster management cycle, which includes four stages —prevention/mitigation, preparedness, response and recovery.

The goal of prevention or mitigation is to minimize the effect of the disaster through measures such as culling to contain H5N1 HPAI and slow down or halt its spread. Simultaneously, measures are taken to increase the level of **preparedness** within society at large and communities at risk in particular to deal with the imminent disease threat by developing prevention plans and building capacity for prompt reporting of symptoms and improving biosecurity. Should the outbreaks increase in frequency and severity, turning into a full scale epidemic, then interventions switch to **response** mode to cope with the disaster. If the response is effective in halting or subduing the disease threat, then the society enters **recovery** mode, though surveillance might continue for the early detection of new outbreaks.

*Diagram 3*  
Pathogen emergence and disease threats  
Source: FAO

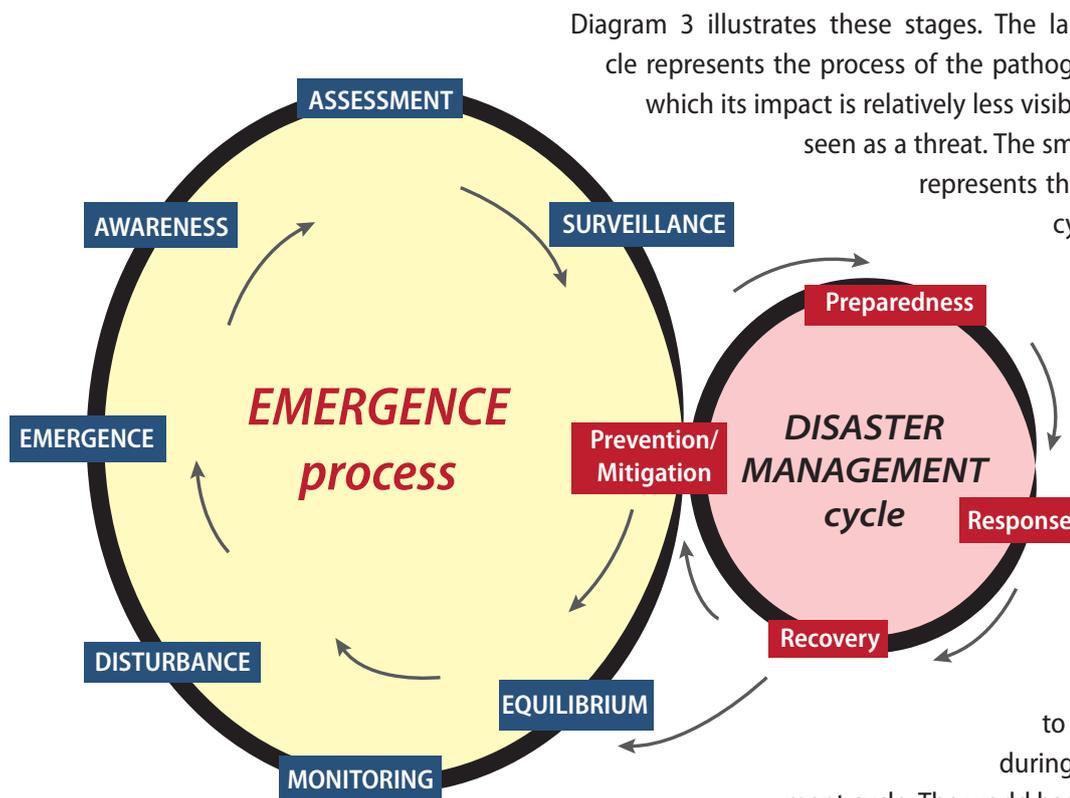


Diagram 3 illustrates these stages. The larger yellow-shaded circle represents the process of the pathogen’s Emergence, during which its impact is relatively less visible and it may not yet be seen as a threat. The smaller, pink-shaded circle represents the Disaster Management cycle and shows the progression of human response to a pandemic threat. The representation yields useful observations —

Communication is focussed sharply on a single pathogen that has become a threat to animal or human life, during the Disaster Management cycle. The world has largely remained in the Disaster Management cycle since 2003, driven predominantly by H5N1 HPAI. When H1N1 emerged, it similarly drew the attention of governments, international agencies and communicators seeking to ward off yet another pandemic. It is much easier to communicate about risk in this phase, since infection is manifesting itself as disease, making the threat more ‘visible’. However, the broader focus of One Health asks for action at the human-animal-ecosystem interface to prevent such pathogens from emerging or reemerging at all.

Communication during the Disaster Management cycle is driven by urgency and the need

for effective and high impact. The tone is concise and directive, requiring behavior change through clear, authoritative messages rather than discussion and persuasion. To some extent, this has made messages feel prescriptive and unilateral, a sentiment reflected in the EU's draft *Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis*, where community members said they found communication to be top down and imperative. The One Health approach specifically calls for greater community engagement in communication as well as respect for their existing ways of perceiving illness and health. The emphasis shifts to communication for the long-term prevention of EIDs.

Communication about risk is particularly challenging before emergence since there is no visible threat. This could engender a false sense of security even among communities whose activities may be driving emergence. Even when the pathogen manifests itself through infection and symptoms at the community level, they may be ignored as familiar and commonplace. One Health draws attention to the need for developing tools and processes that can be effective in bringing about behavioural change in the seemingly threat-free environments where new diseases emerge.

The foregoing analysis provides a basis for identifying gaps and opportunities for communication in both the Emergence process and the Disaster Management cycle.

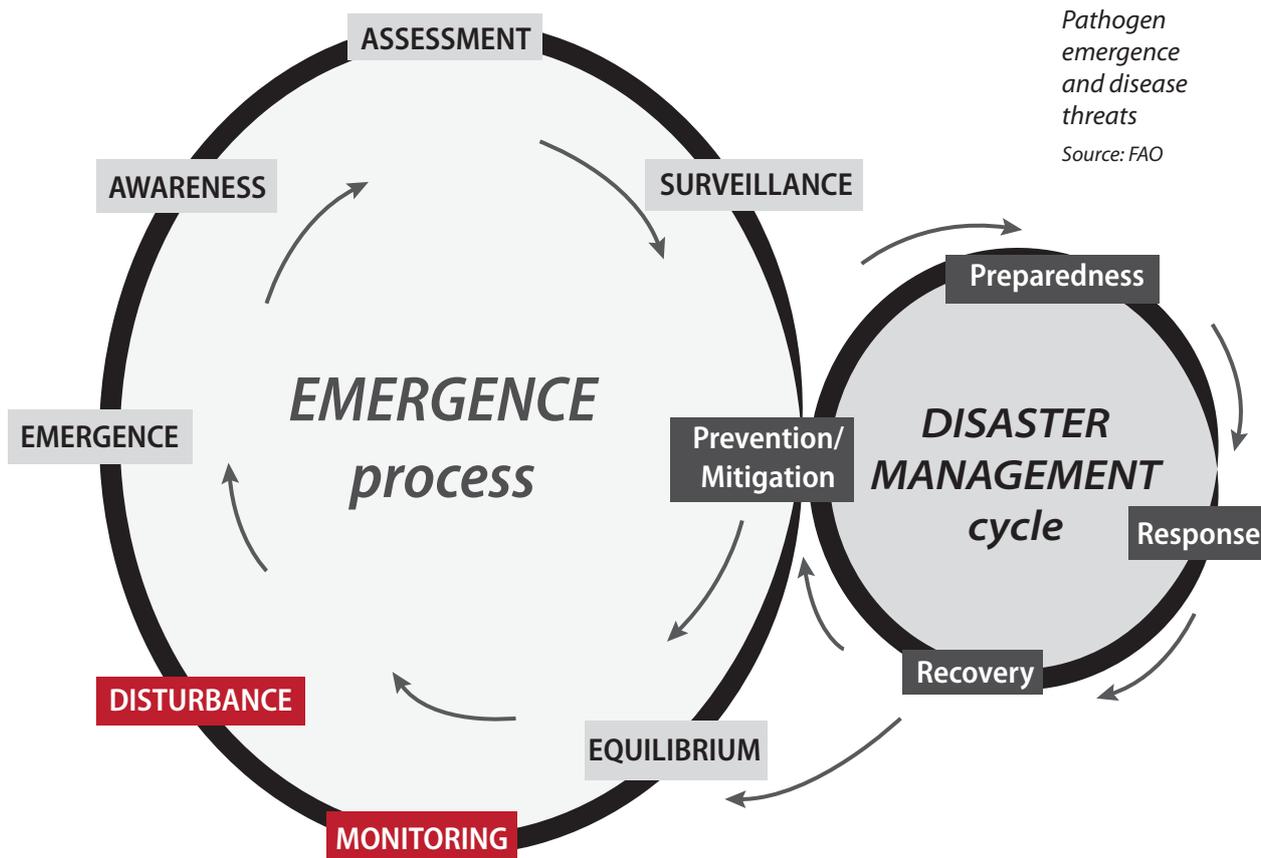


Diagram 4  
Pathogen emergence and disease threats  
Source: FAO

### 1. Long term prevention at the human-animal-ecosystem interface

The preemergence monitoring of communities, animals and pathogens at the human-animal-ecosystem interface is recognised now as one of the most important activities for preventing or mitigating the emergence or reemergence of pathogens. Research, data gathering and analysis to understand the dynamics of the movement of pathogens, hu-

man behaviours that drive emergence, the socioeconomic pressures that underlie human encroachment of nature, and strategic communication to communities at this interface to deepen their understanding of the benefits of changing their behavior are all precursor activities that could prevent the disturbances that lead to emergence (see Diagram 4).

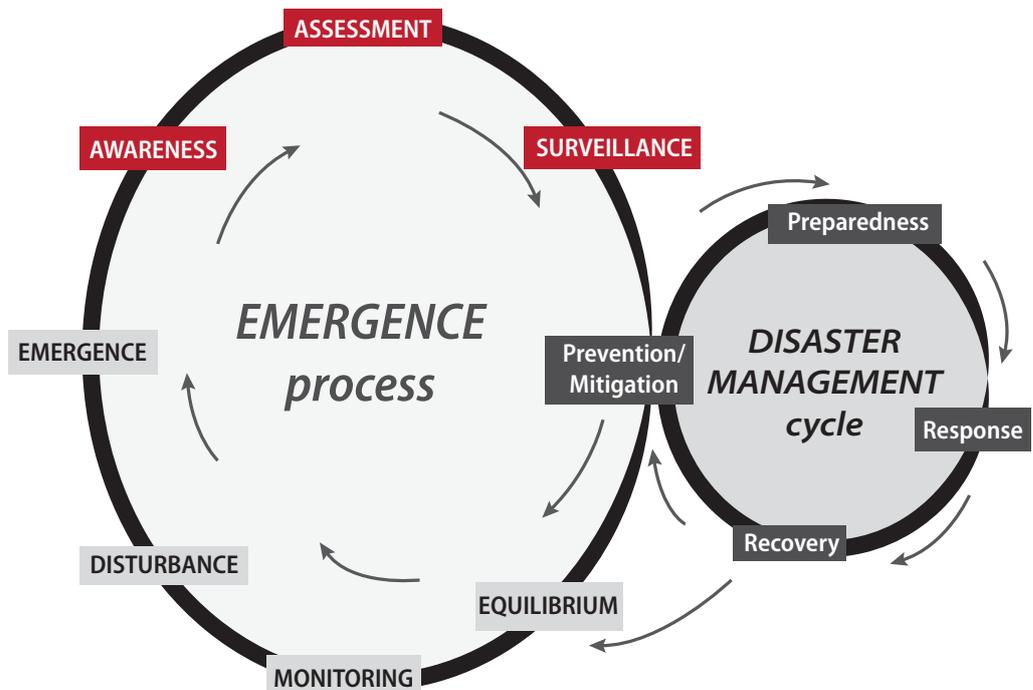
Where human activities have already begun disturbing nature’s equilibrium, there are opportunities for strategic communication, the development of new tools, processes and curricula for promoting reflection and making new choices that preserve nature’s equilibrium rather than disturb it.

**2. Increased communication between technical and non-technical audiences**

Implicit in adopting the One Health approach is the need for sharing disease information more widely and more frequently with audiences at risk and society at large, compared to the intense communication campaigns with a single-disease focus that characterized communication against H5N1 HPAI. Audiences at risk were generally brought into communication only when there was an imminent threat and their cooperation was required.

Preventing new diseases emerging or reemerging at the human-animal-ecosystem interface calls for continuous long-term dialogue between technical communities and lay affected communities to create an ambience where information and understanding of emerging or receding disease threats becomes as commonplace as weather information, and communities are stakeholders in every stage of the Emergence process. For this to be effective, new tools, processes and skills will be needed for communicating technical information to lay audiences in terms that are socioculturally appropriate and credible, and creating an adequate appreciation of the human-animal-ecosystem interface, including biological processes and systems that can affect both animal and human health, food security, income and livelihoods.

*Diagram 5*  
Pathogen emergence and disease threats  
Source: FAO



The communication implied here affects the stages of Awareness, Assessment and Surveillance (see Diagram 5), where the nature and extent of emergence becomes clearer to scientists in laboratories. It requires the development not only of new channels for dia-

logue between scientists in laboratories and communities at the frontline but also effective processes for parlaying technical knowledge into lay language, and building the technical communication capacity of animal and human health specialists.

### 3. Greater community engagement in disaster preparedness and management

The need for disaster preparedness and management will remain as persistent diseases such as H5N1 HPAI or H1N1 reemerge, or mutate into new forms of influenza. The evaluation of past communication points to the need for more engaging and collaborative processes of communication that empower communities and societies to understand, reflect and make behavior choices that help keep animals and humans safe from infections. Opportunities for new dialogue tools, discussion processes and curricular models exist in the four phases of the Disaster Management cycle (see Diagram 6).

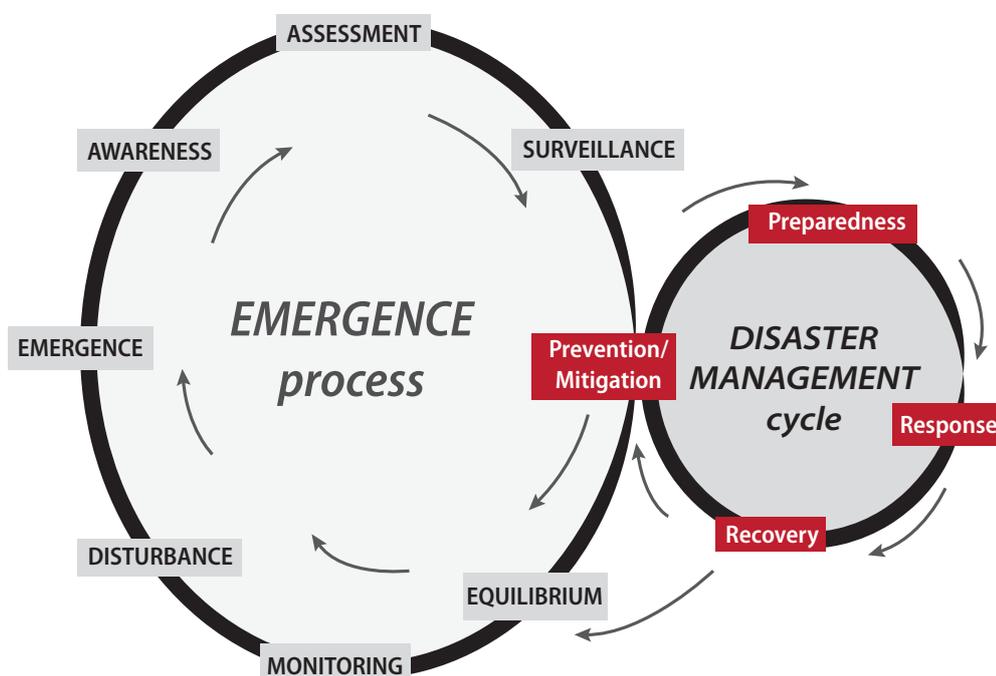


Diagram 6  
Pathogen emergence and disease threats  
Source: FAO

There is also opportunity to build capacity for technical communication in existing community resources such as CAHWs to foster greater regular exchange of information between key stakeholders and affected community audiences on the one hand, and animal and human health professionals on the other, regarding events at the human-animal-ecosystem interface, as well as emerging, reemerging or receding disease threats. This could ensure continuous audience involvement rather than sporadic engagement driven by crises.

Photo: Shane Heath, USGS



*The satellite transmitter fitted on this gadwall in India will reveal its migratory movements. Preventing and mitigating the emergence of new pathogens requires new levels of monitoring, surveillance and research.*

# Guiding principles

**THE GUIDING PRINCIPLES PROPOSED IN *One Health: Seeing around corners*** are rationally inferred from the foregoing analysis and framework for communication. They describe broad approaches rather than specific interventions and are relevant to aspects of communication such as strategy design, content, capacity, research and monitoring, and monitoring and evaluation (M&E). In brief, these guiding principles are —

1. Use processes driven by greater community participation, dialogue and critical reflection.
2. Develop a regional One Health curriculum for lay audiences which consolidates all knowledge on the human-animal-ecosystem interface, including the drivers of disease emergence and prevention.
3. Enhance the capacity of audiences at risk to understand and explain the link between human, animal and ecosystem health, as well as the emergence, transmission and prevention of diseases.
4. Establish a regional network of coaches/mentors with knowledge and skills to train non-technical audiences about all aspects of the human-animal-ecosystem interface and disease drivers, as well as risk, prevention, preparedness and response.
5. Develop community-based communication networks for sharing and disseminating information on EIDs and events at the human-animal-ecosystem interface between communities and field and laboratory networks.

Each of these guidelines is elaborated upon below.

## **1. Use processes driven by greater community participation, dialogue and critical reflection.**

Prescriptive and top down message delivery has been cited in evaluations as a possible reason why earlier campaigns that raised awareness fell short on increasing risk perception and bringing about change in behaviour and farming practices. The available evidence is strongly against the unilateral delivery of prescriptive messages as a way to induce change.

Given how difficult it has been to bring about a sense of urgency and behaviour change

when the disease threat was fully present and 'visible' in the community, one should not underestimate the enormous challenges ahead as the focus broadens to EIDs, which are essentially 'invisible' either because they are still evolving or exist in limited pockets of wildlife or livestock.

*One Health: Seeing around corners* calls for a firm commitment to moving towards more collaborative and participatory communication processes that treat audiences as equal partners in disease prevention and promote dialogue, critical reflection and making informed choices. Making such a change calls for broad intersectoral collaboration between players in communication to assess past successes and lessons and take the steps necessary to introduce new communication processes, tools and approaches and developing the skills they call for.

A dialogue-based approach calls for intervention tools which enable iterative processes of opinion formation and decision-making within communities, based on sharing of experiences, the identification of conflicts and convergence towards a shared opinion. A dialogue is defined as a conversation in which a process of turn-taking occurs as each participant seeks to clarify what others believe and understand and reconcile them with his or her own understanding and beliefs.

Dialogue-based interpersonal communication (IPC) can also build important community engagement platforms in which dialogue group members become catalysts in inspiring change in their personal and peer networks through sharing their own experiences of change. Dialogue processes are consistent with the Communication for Social Change model, in which community dialogue and collective action work together to produce social change. This model posits that once a new idea, opinion, behaviour, or innovation has been introduced by a change agent through a mass-media platform, it is through dialogue-based IPC that this information is most credibly diffused through communities (Rogers, 1995).

The EU's draft *Outcome and Impact Assessment of the Global Response to the Avian Influenza Crisis* also refers to a growing trend towards tailoring communication programmes to the profiles and needs of specific audiences rather than following a one-size-fits-all approach. In 2009, the notion emerged that target groups need to be addressed with more or less tailor-made communication and training programmes, such as those carried out by certain USAID-funded programmes in Bangladesh, where vendors, transporters, slaughterers and consumers receive their own specific messages and training.

Such new approaches call for developing new multidisciplinary research protocols to gain a more multidimensional understanding of community audiences. Conventional KAP studies typically identify community beliefs that conflict with biomedical knowledge and tend to regard the community's sociocultural perceptions as barriers to be overcome. Understanding the community's health concerns and priorities through filters of anthropology, sociology and economics would create a more enriched knowledge base and pave the way for more nuanced communication and conversations.

## **2. Develop a regional One Health curriculum for lay audiences which consolidates all knowledge on the human-animal-ecosystem interface, including the drivers of disease emergence and prevention.**

As the focus expands to underlying drivers and causes of EIDs, there will be need for a comprehensive multidisciplinary regional One Health curriculum for non-technical audi-

*It has been difficult enough to bring about behaviour change when the disease threat was fully present and 'visible', as with avian influenza. There will even greater challenges ahead as the focus broadens to EIDs, which are 'invisible' either because they are still evolving or exist in limited pockets of wildlife or livestock*

ences. This would capture available knowledge of EIDS and the human-animal-ecosystem interface, including emergence, risk assessment, prevention and disaster management, as well as facilitation tools and processes, and be made available to all facilitators and teachers of non-technical or low literacy audiences, including many farmers, community leaders, public officials, private sector representatives, teachers, schoolgoing audiences and others. Since it would most likely be used in non-classroom settings, the curriculum would need an innovative design that allows users to tailor learning to their needs. Such a curriculum would ensure broad harmony between different players in communication in what they teach and also how they teach it.

The One Health curriculum should be developed with appropriate technical guidance and the involvement of all concerned disciplines and sectors, ministries of health, agriculture and education, and other key stakeholders. Once available regionally, it would need to be localized to meet national needs through translation and adaptation. The regional curriculum should be reviewed periodically and kept updated with the latest knowledge.

### **3. Enhance the capacity of audiences at risk to understand and explain the link between human, animal and ecosystem health, as well as the emergence, transmission and prevention of diseases.**

Differing frames of reference between the technical specialists on the one hand and communities and audiences at risk on the other hand have impeded proper understanding and ownership of risk-related issues and prevention. There has been discord between the community's long-standing sociocultural understanding of diseases and the technically accurate biomedical information which is communicated to them by specialists. Lay audiences at risk have found the scientific information baffling because it did not correspond to their beliefs or observed realities.

A recent community workshop in Bangladesh also indicated that low-literacy communities may repeat scientific terms they hear being used, such as virus, without necessarily understanding what they mean.

Building community capacity to understand and interpret technical information requires effective tools and processes for translating scientific knowledge into terms comprehensible to lay persons. More importantly, communities' sociocultural perceptions of disease need to be better understood and accommodated in the discourse instead of being regarded as barriers to scientific understanding. The One Health approach explicitly recommends that "different perceptions on disease must be respected, especially those of the frontline players: farmers, traders, public and animal health extension workers, and the private sector". While new tools and processes for communicating technical information are developed, it becomes particularly important to reconcile the technical framework for disease emergence and transmission with the communities' sociocultural understanding of illness. Such a reconciliation can only come about through better research and dialogue.

In the long-term, behaviour change will come from increased ownership, empowerment and immersive participation of communities in their own improved livelihoods, health and welfare. Acknowledging their right to a better understanding of information about the human-animal-ecosystem interface that impinges on their health and livelihoods is a key first step.

*A recent community workshop in Bangladesh also indicated that low-literacy communities may repeat scientific terms they hear being used, such as virus, without necessarily understanding what they mean.*

#### **4. Establish a regional network of coaches/mentors with knowledge and skills to train non-technical audiences about all aspects of the human-animal-ecosystem interface and disease drivers, as well as risk, prevention, preparedness and response.**

The move towards One Health will greatly increase needs for more broad-based structures for building technical capacity of district-level staff and non-technical community audiences including CAHWs, district level veterinary officers, farmers, transporters, wet market operators, consumers and others. Their high awareness of issues related to a single disease, H5N1 HPAI, will need to be broadened to embrace an understanding of the dynamics of disease emergence, transmission and persistence at the human-animal-ecosystem interface. The difficulty of achieving this re-orientation should not be underestimated. There will be great need for a structured regional and national approach to capacity development, something that may not have seemed imperative in the years of combating H5N1 HPAI.

There already exists a large pool of competent facilitators among NGOs, CBOs, agencies and institutions, with the skills for administering a curriculum to an audience. Re-orienting them with knowledge on EIDs and the human-animal-ecosystem interface, and new facilitation skills to administer non-didactic, dialogue-based and interactive training processes will call for the establishment of a regional network of master coaches with mentoring skills at both the regional and national levels.

The structure and effectiveness of such a coaching/mentoring network was documented in *Malaria Community Competence: A Midterm Evaluation of the Malaria Community Competence Process In Nine African Countries*, an evaluation of a project implemented in east and west Africa by a Belgian NGO called The Constellation.

The Constellation developed a regional guild of about 50 master coaches in 2004, persuading CBOs, NGOs and INGOs working in malaria to donate 20 percent of their senior facilitators' time. These master coaches were further equipped with a curriculum, tools and skills in participatory, community-engaging methodologies, and were available on demand regionally at nominal fees to organizations for building capacity to fight malaria.

Such a regional guild of volunteer master coaches administering a One Health curriculum, with their time donated by their parent CBOs, NGOs and INGOs, could represent a viable model for regional and national capacity building in the region of Asia and the Pacific in the next five years.

#### **5. Develop community-based communication networks for sharing and disseminating information on EIDs and events at the human-animal-ecosystem interface between communities and field and laboratory networks.**

The EU's assessment cites "a strong distrust of the authorities" as one of the reasons for the low level of reporting. Government authorities and experts are perceived as having undisclosed agendas not always in the best interests of farming communities. Within communities, volunteer CAHWs have played an important bridging role, providing information to affected audiences but also helping authorities identify outbreaks. Livestock farmers have mostly been viewed as sources of information about disease outbreaks, and targets of specialised communication messages during times of imminent or actual pandemic threat. There has been an underlying perception of the community as having low absorptive capacity for knowledge, despite the fact that it is their livelihoods, health and well-being that

*The existing pool of competent facilitators who can be re-oriented with knowledge on EIDs and the human-animal-ecosystem interface, and new facilitation skills to administer non-didactic, dialogue-based and interactive training processes*

are most directly affected by diseases. This has resulted in a schism between experts and laypersons.

The heartfelt engagement of affected communities in the prevention and mitigation of EIDs requires that they be seen as legitimate and rightful recipients of early warning information and distant developments that could have a bearing on their livelihoods, health and well-being. When communities receive a clear, non-technical understanding of pathogens and invisible life forms; when they understand viral transmission, mutation, reservoirs and persistence; when they understand disease drivers; and when they can link human actions to human consequences — all these have the potential to profoundly alter the quality and substance of community engagement and actions. Providing such information on EIDs requires that a system be put in place, similar to that of weather information, which makes information about emerging and other diseases accessible to general audiences without filtering.

A key implication of this is to develop communication mechanisms which improve communication between experts and laymen. *One Health: Seeing around corners* recommends developing communication focal points at the community level with the skills and capacity to understand and explain emerging disease threats and the role of human actions at the human-animal-ecosystem interface. Such capacity could be built into existing volunteer structures such as CAHWs, or among new volunteers identified by the community leadership.

Such communication focal points, trained to understand and interpret scientific information to their communities, could function as a bridge between the technical fraternity and the community, conveying and interpreting information and developments from the field and laboratories and helping communities make sense of the human-animal-ecosystem interface. Information would include the status of transboundary animal disease outbreaks in other parts of the world and the country; evidence of the emergence of new pathogens; new understanding of human actions that can set the stage for emergence by disturbing the state of equilibrium in the ecosystem.

The above guidelines apply to communication campaigns of three kinds —

**Interpersonal communication (IPC)**, characterized by face-to-face communication between facilitators and small groups of the selected audience. Examples of IPC include **community theatre, dialogue groups, radio listening groups** and **traditional media such as puppets**. A significant proportion of IPC interventions and budgets are allocated to training of facilitators and development of communication materials and messages.

**Mass media**, in which campaigns of messages are disseminated using **print, national radio, and television**, reaching large audiences in targeted areas. Mass media also includes local radio stations with limited reach. The absence of face-to-face contact is a distinguishing difference between IPC and Mass media.

**Mid-media** includes recent communication technologies such as **SMS, mobile phones, social media and online communication**. Mid-media can have characteristics of IPC or Mass media, and sometimes both together. An SMS message can pass between just two individuals, which would qualify it as IPC, though it is not a face-to-face medium. It could equally be adapted to reach tens of thousands of people, which would qualify it as mass media. Other examples of mid-media are **leaflets, flyers, posters, and fact sheets**.

*There has been an underlying perception of the community as having low absorptive capacity for knowledge, despite the fact that it is their livelihoods, health and well-being that are most directly affected by diseases. This has resulted in a schism between experts and laypersons.*

Photo: C Y Gopinath



At this Farmers Club in Viet Nam, poultry farmers meet regularly to share experiences about their practices and listen to invited experts. This has resulted in a dramatic improvement in both biosecurity and livelihoods.

# Guidelines for interpersonal communication

THE FOLLOWING APPROACHES TO INTERPERSONAL communication (IPC) are recommended here, and align with the guiding principles laid out in the previous chapter —

## Community theatre

### 1. Increase audience engagement through enactments based on real-life predicaments and dilemmas of audiences.

Community theatre performances should incorporate slots for audience members to share real life questions, experiences (see #8 below) and predicaments around health, livelihoods and well-being, and those experiences should be used to generate new stories for enactments. This would go a long way towards ensuring that content was more relevant and accorded with their real life experiences of the community.

### 2. Stimulate audience participation through half-told stories that require the audience to complete them.

Complete enactments with clear unmistakable messages can make it difficult for audiences to participate since the stories are close-ended. Theatre processes such as Forum Theatre and Magnet Theatre have great success using half-told stories based on real-life dilemmas and predicaments. The actors stop at a critical decision point and the audience is invited to suggest options for how the story should develop.

### 3. Develop innovative skits that use dramatic performance to create a community level understanding of the science behind pathogens, emergence, transmission, infections and prevention.

Poor understanding of germs and the science behind transmission and infection was a finding of the evaluations. *One Health: Seeing around corners* recommends creating socioculturally compatible explanations of technical and scientific information, specifically regarding EIDs, the human-animal-ecosystem interface, transmission, infection and prevention. Characterizing invisible organisms (pathogens) and their ability to jump species and helping audiences to visualize them is a key aspect of the communication. This can be done memorably and effectively using theatre and song.

**4. Promote critical thinking and reflection by involving members of the audience in developing behaviour options to address dilemmas presented in the enactment.**

Using half-told stories (see #2 above) to provoke involvement, enactments should engage audience members in developing multiple endings to the stories, and inviting them to act them out. This would bring the audience into the performance as actors. This method, common in Forum Theatre and Magnet Theatre, demystifies the theatre process, takes advantage of native role play skills of audiences and helps their immersion into the story. Deeper engagement and ownership of the behaviour options presented is one outcome of this.

**5. Promote voluntary attendance among audiences by selecting venues which require interested spectators to walk a little bit to attend.**

Community theatre performances are typically conducted in crowded areas, which provide readymade audiences. However, such audiences watch the show not out of choice but because their space has been invaded by a performance with entertainment value. To attract an inherently interested audience, it is useful for community performances to choose venues which require audience members to walk a small distance to reach it. The small investment of time made to walk up to a performance turns it into a voluntary choice and increases ownership and engagement. The success of such processes of audience self-selection has been demonstrated in Magnet Theatre in Africa and India.

**6. Promote enquiry and reward good questions from audiences.**

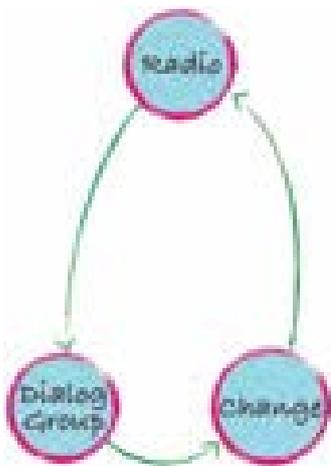
Community questions, especially the ones which immediately follow in the first few minutes after an intense discussion, have great value in revealing gaps in knowledge and community concerns. These could then be used to inform future scripts, radio shows and media campaigns. Harvesting questions immediately at the end of a discussion should be a standard practice within communication processes such as community theatre enactments. The harvested questions should be processed, shared with other interventions, and used in future communication and content planning. To encourage enquiry, it has been found useful to reward questions with practical gifts such as toothpaste, soap, slippers and so on.

**7. Leave discussions open-ended.**

A useful way for discussions from community theatre performances to diffuse into homes is by avoiding closure and conclusions at the end of the discussion. Withholding judgement as to which behaviours or outcomes are appropriate or “correct” creates the impetus for the discussion to continue in the home, around the dinner table, at school and in the workplace. In the short run, this may result in incorrect information being held by some participants for short periods but over the medium term, there is a balancing out as the correct information bubbles up through future dialogues and other media.

**8. Promote sharing of real life experiences, success stories and behaviour change.**

The goal of each community theatre session is to link with the audience’s reality by using the enactment to create a safe space for exploring controversial issues. Participants should be encouraged to share their real life success stories, concerns and experiences as well as real life solutions to predicaments like the one enacted. Stories of change in behaviour or practices that emerge should be documented and broadcast over mass media.



*Stories of change emerging from IPC processes such as dialogue groups of community theatre should be taken to mass media like radio, where they may influence large populations.*

**9. Document and magnify success stories and behaviour change stories that emerge from community theatre.**

Stories of real-life behaviour change and improved biosecurity practices or hygiene, or better reporting, and so on, should be documented thoroughly and disseminated widely on mass media. Such exemplars are wonderfully convincing as change agents and endorsers since their words are unscripted and their experiences heartfelt. As community spokesmen, they make powerful promoters of the best changes in behaviour and practices.

**10. Retrain theatre professionals to shift away from message dissemination to facilitated open-ended discussions.**

Encouraging community participation in theatre calls for significant shifts in the approach of the performers towards the performance. For instance, too professional or polished a performance might intimidate audience members and make them feel incompetent to step up to role-play. Similarly, moving away from storytelling and message delivery to half-told stories and facilitated discussions requires changes in the performance and facilitation style. The retraining of theatre groups is an important part of shifting the community theatre paradigm.

**11. Develop messages by working with groups of practitioners of new behaviour and practices.**

New messages for use in mass media and other media should be developed through community workshops that bring together articulate community members and practitioners of new behaviour. The messages emerging from these workshops carry the stamp of authenticity, since they come from individuals who are already demonstrating new behaviour and also speak the language of their communities.

## Dialogue groups

**1. Increase audience engagement by introducing open-ended explorations of real-life dilemmas.**

Dialogue Groups should incorporate slots for audience members to share real life experiences (see #8 below) and predicaments around health, livelihood, and well-being. Those experiences should be used to generate new dilemmas for exploration through discussion processes.

**2. Stimulate audience participation through half-told stories which require the audience to complete them.**

Dialogue Groups should explore real-life predicaments of community members around health, livelihoods and well-being through the use of dilemmas in the form of half-told stories that invite the group members to propose alternative solutions or endings to the story. Methods such as Figureheads use role play to help create a safe space within which community members use role play to explore fictional situations based on real life as a prelude to sharing their own experiences and solutions.

**3. Promote critical thinking and reflection by involving members of the audience in developing behaviour options to address dilemmas presented in the role-play.**

Engage members of Dialogue Groups in developing alternative solutions to the dilemma or predicament being analysed. This introduces new behaviour and practice options in a non-prescriptive manner and leaves room for participants to reflect upon the pros and the cons before making their own choices.

**4. Develop innovative games and role plays that create understanding of the science behind pathogens, emergence, transmission, infections and prevention.**

*One Health: Seeing around corners* recommends helping create socioculturally compatible explanations of technical and scientific information, specifically regarding EIDs, the human-animal-ecosystem interface, transmission, infection and prevention. Characterizing invisible organisms (pathogens) and their ability to jump species is a key aspect of the communication. This can be done memorably and effectively using role play and game simulations that engage members of the Dialogue Group.

**5. Cultivate immersion in discussions by negotiating long-term engagement by members of Dialogue Groups for at least a year.**

To achieve immersion in the discussion and provide the space and time needed for changes in behaviour and practices, the same participants must attend meetings of the Dialogue Group over time, preferably a year at least. This needs to be negotiated in advance in a socially supported manner. It is important that attendance is voluntary and not done for economic incentives.

**6. Promote enquiry and reward good questions from audiences.**

Community questions, especially the ones that follow a discussion, have great value in revealing gaps in knowledge and community concerns, which could then be used to design future dialogue group meetings, radio shows and media campaigns. Harvesting questions immediately at the end of a discussion should be a standard practice within Dialogue Group meetings. The harvested questions should be processed, shared with other interventions, and used in future communication and content planning. It has been found useful to reward questions with practical gifts such as toothpaste, soap and slippers as a way of improving the quality of enquiry.

**7. Avoid delivering pre-crafted messages and leave discussions open-ended.**

A useful way for discussions from the Dialogue Group to diffuse into homes is by avoiding closure and conclusions at the end of the discussion. Withholding judgement as to which behaviours or outcomes are appropriate or 'correct' creates the impetus for the discussion to continue in the home, around the dinner table, at school and in the workplace. In the short run, this may result in incorrect information being held by some participants for a short period, but over the medium term there is a balancing out as the correct information bubbles up through the dialogue process and other media.

**8. Promote sharing of real life experiences, success stories and behaviour change.**

The goal of each Dialogue Group session is to link with audiences' reality by using the dilemma-based discussion to create a safe space for sharing. Participants should be encouraged to share their real life success stories and experiences as well as real life solutions to



*Harvesting questions immediately at the end of a discussion should be a standard practice within Dialogue Group meetings. It has been found useful to reward questions with practical gifts such as toothpaste, soap and slippers as a way of improving the quality of enquiry.*

the predicament that was analysed. Stories of change in behaviour or practices will emerge through this process and should be documented and disseminated through mass media.

**9. Document and magnify success stories and behaviour change stories which emerge from community theatre.**

Stories of real life behaviour change and improved biosecurity practices or hygiene, better reporting and so on that emerge from the Dialogue Group meetings should be documented thoroughly and disseminated widely on mass media. Such early adopters are wonderfully convincing as endorsers since their words are unscripted and their experiences heartfelt. These spokespersons make powerful promoters of the best changes in behaviour and practices.

**10. Retrain facilitators to shift away from message dissemination to provocative open-ended discussions.**

Encouraging participation in Dialogue Groups calls for significant shifts in the approach towards facilitation. For instance, resisting the urge to step in and correct erroneous understanding and myths as soon as they are expressed, and not delivering new information until it is asked for requires a move from didactic to more participatory methods. The retraining of facilitators is an important part of shifting the discussion paradigm.

**11. Develop messages by working with groups of practitioners of new behaviour and practices.**

New messages for use in mass media and other media should be developed through community workshops that bring together articulate community members and adopters of new behaviour. The messages emerging from these workshops carry the stamp of authenticity, since they come from individuals who are already demonstrating new behaviour and speak the language of their communities.

Photo: C Y Gopinath



*The SMS Gateway technology has harnessed the power of the cell phone to dramatically increase the speed of reporting and response in Bangladesh. This Community Animal Health Worker, suspecting an outbreak of avian influenza in the commercial farm facing him, sends a coded text message to the computer at the FAO office in Dhaka.*

# Guidelines for mid-media

**THERE HAVE BEEN ONLY A** few documented cases of interventions against H5N1 HPAI that made use of mid-media such as SMS, Facebook, and the Internet. SMS-based reporting of outbreaks has been cited as a success story in Bangladesh but is not a communication intervention. However, the production and widespread dissemination of communication materials has been a feature of nearly every intervention against pandemic influenzas. The following approaches to the use of mid-media are recommended here, and align with the guiding principles laid out earlier. They apply to leaflets, flyers, posters, handbooks, billboards, and similar mid-media materials.

## **1. Engage members of audiences in developing the main messages of materials.**

Individuals who have adopted new behaviours and biosecure practices, either on their own or as a result of effective communication interventions are excellent spokespersons and role models for others in their communities. Messages for communication materials are specially credible when developed with the participation of such community members. Messages should be developed with members of community theatre audiences or dialogue groups who are exemplars of new behaviour and have shared their experiences of behavior change.

## **2. Promote participation by replacing direct messages with content which invites a response wherever possible.**

Communication materials that pose questions, share stories of successes and behaviour change and invite participation extend the life of communication materials and convert them into gateways for continuing dialogue. Communication materials should display questions and callback channels such as phone numbers, hotline numbers, SMS numbers, email addresses, Post Box numbers and Internet URLs.

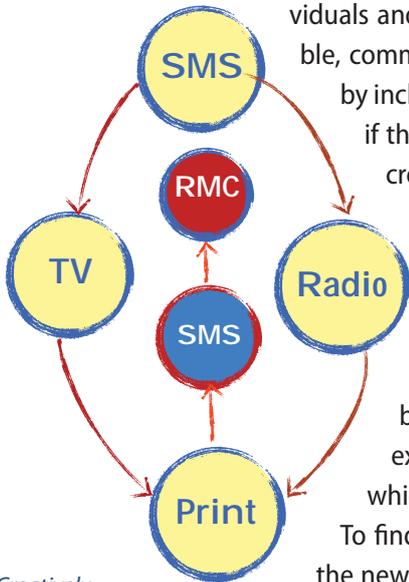
## **3. Set up a response management unit to handle communication from the audience.**

Promoting participation requires a centralized infrastructure for receiving, collating, analysing and replying to such responses generated by both mass media and mid-media campaigns. Setting up a response management unit would help foster dialogue between institutions and individuals, and develop a useful database of interested respondees.

*Individuals who have adopted new behaviours and biosecure practices, either on their own or as a result of effective communication interventions are excellent spokespersons and role models for others in their communities.*

**4. Make communication materials available on request rather than aim for blanket coverage.**

Blanketing audiences with communication materials risks outreach to uninterested individuals and poor ownership of materials received and information shared. Where possible, communication materials should be made available on demand. This can be done by including a mechanism which invites audiences to phone in, send an SMS or email if they would like to receive additional material. The act of requesting material increases the duration of interaction as well as raises interest in reading what is received later.



**5. Link communication materials with other media interventions.**

Creatively linking different media to increase the duration of interaction can be an effective way to enhance involvement in and ownership of knowledge. An example would be an SMS-based quiz competition on a topic linked to EIDs, in which each new question is delivered by SMS when the previous one is answered. To find the answers to the questions, participants have to read a certain column in the newspaper and listen to a particular radio show, and collect certain booklets from the shops. Such linkages, choreographed through the mass media and mid-media, could make information gathering into a treasure hunt with attractive prizes at the end.

*Creatively linking different media to increase the duration of interaction can be an effective way to enhance involvement in and ownership of knowledge. The figure shows a contest in which SMS messages direct audience members to TV, radio and print in search of answer, which they SMS back. The responses are analysed by a Response Management Cell (RMC).*

**6. Encourage audience members to distribute communication materials to people in their network.**

In addition to distributing communication materials at Dialogue Group meetings and Community Theatre sessions, encourage members to list individuals who they believe might find the materials interesting too, and pass copies to them. Rather than provide materials to each person, ask them to make lists of specific individuals for whom they'd like to take copies.

**7. Match local design standards and styles where possible so the materials feel familiar.**

Many communication materials embody high standards of production values, paper, colour, reproductions and so on, which can set them apart from local materials, production standards and graphic styles. This can have an unintended alienating effect on viewers, who may see the materials as 'foreign'. Using local graphic styles, production methods and materials makes it easier for communication materials to feel familiar and thus easier to 'own'.

# Guidelines for mass media

**MASS MEDIA CAMPAIGNS USING PRINT,** radio and television have been a dominant aspect of communication to prevent and mitigate an HPAI pandemic. Containing the spread of outbreaks, bringing about rapid, almost overnight changes in behaviour and biosecurity and biosafety practices, and raising awareness on a massive scale were high priorities in communication. Meanwhile advocacy interventions focused on bringing about changes in policy, infrastructure and laws to facilitate rapid action to prevent a pandemic. Sometimes the urgent need for policy and legal changes may have distorted the risk communication process. Thomas Abraham, Director of the School of Media Studies in Hong Kong University, made the following analysis —

*Risk communication to create a public dialogue on the risks of a pandemic, rather than advocacy based on appeals to fear, would have been the correct approach to have used in the pre-pandemic phase. . . As a landmark study by the US National Research Council in 1989 put it, the aim of risk communication is not for the audience to accept the views or arguments of the communicator but to raise the level of understanding so that all those who are involved are adequately informed within the limits of available knowledge.*

*The experience of pre-pandemic risk communication shows why risk communication should be limited to providing information about risk, rather than attempting advocacy.*

*In the continuous building up of the scenario of a dangerous pandemic the scientific uncertainty that surrounded these predictions was never adequately conveyed. This was not because the scientists and policy makers were unaware of the uncertainty, but because they tended to downplay uncertainties for fear that advocacy for actions like pandemic preparedness would be compromised. A conflict existed between the needs of advocacy and the needs for transparent risk communications.*

## Researching the audiences

Two factors which have been stressed in the EU's draft *Outcome and impact assessment of the global response to the avian influenza crisis* are the need for a more multidisciplinary understanding of audiences at risk; and the need to tailor strategies and communication campaigns to reflect local circumstances rather than follow a broad national strategy. The primary tools for gathering information on intended audiences of communication have been focus group discussions and KAP studies. These generally reveal community myths and misconceptions and gaps in their knowledge — in other words, what they do not know.

The One Health approach calls for deeper understanding of audiences' diverse ways of understanding health and livelihoods, their priorities, their needs, and their experiences. It specifically asks for strategies to make room for sociocultural understanding of disease in addition to the biomedical one.

There is need for a research protocol that defines which anthropological, sociocultural, economic and other studies are necessary as a prelude to a communication campaign aimed at a designated audience.

The following guidelines for mass media campaigns respond to assessment findings that raised awareness did not lead to changes in behaviour or biosecurity practices, did not raise risk perception levels, and that messages were considered irrelevant and too prescriptive and top-down.

As the emphasis shifts away from specific zoonoses to EIDs, it will be useful to think of two kinds of mass media communication campaigns —

**Mass media during the Disaster Management cycle:** This is mass communication in a time of emergency response to a specific pandemic threat. Whether the threat is the result of an epizootic that now threatens humans, or whether the pathogen has emerged directly among humans, such mass media communication is characterized by a single-disease focus and pressure for rapid, measurable results within tight timelines.

**Mass media EID communication:** This is mass communication used in a non-emergency mode to build understanding and awareness of the threats posed to humans by EIDs and the enabling role played by human actions that disturb the equilibrium at the human-animal-ecosystem interface. EID communication focuses on emerging and currently active pathogens, whether they infect animals or humans, and promotes change in behaviour and practices which lead to preventing pathogenic emergence through changes in behavior and practices at the human-animal-ecosystem interface.

The guidelines below address each of these categories individually.

### Strategic guidelines for mass media during the Disaster Management cycle

#### 1. Engage members of audiences in developing the main messages of Mass media campaigns.

Individuals who have adopted new behaviours and biosecure practices, either on their own or as a result of effective communication interventions, are excellent spokespersons and role models for others in their communities. Messages for communication materials are specially credible when developed with the participation of such community members. Message development sessions could be done with members of community theatre audiences or dialogue groups who have shared their experiences with change of behaviours and practices.

#### 2. Promote behaviour change by showcasing early adopters of new behaviour and biosecure practices in Mass media campaigns.

In addition to disseminating key messages calling for behaviour change, mass media campaigns should serve as platforms for showcasing cases of behaviour change and shift to more biosecure practices. These cases should be identified through community theatre and dialogue group interventions, which are better placed to find such cases and individuals.

*In addition to disseminating key messages calling for behaviour change, mass media campaigns should serve as platforms for showcasing cases of behaviour change and shift to more biosecure practices.*

Disseminated nationwide, these stories constitute powerful and credible messages that change is happening. As such, they would be considerably more persuasive as well as socioculturally acceptable. This recommendation also builds on the proven precepts of the Theory of Diffusion of Innovations.

### **3. Foster immersion by strategically interlinking mass, mid- and IPC media interventions.**

A stronger link between IPC and mass media, especially with community theatre and dialogue groups focused on reflective processes, questions, success stories and example of change, could lead to energised and dynamic mass media campaigns that respond to emerging concerns from the audiences and disseminate their stories of change. This would result in a loop of shared information and outcomes between the different media, greater synergy between campaigns and interventions, and harmonized outcomes.

### **4. Develop engagement for regular updates on the status of outbreaks in the country and the region.**

New formats should be developed for displaying regularly updated disease information at the community level so that audiences do not feel that they are addressed only in times of emergency. These should include newspapers, public counters, and at the village level, market displays of current and emerging outbreak information from the district and environs. The displays could also include positive information such as number of farms that are practicing better biosecurity and biosafety, number of individuals who have taken steps to prevent new outbreaks, number of birds vaccinated, and others.

### **5. Set up hotlines for round-the-clock and up-to-date information on developing situations and updates.**

Hotlines, internet and SMS-based information services should be part of the response mechanism in times of pandemic threat and should be advertised widely so that citizens seeking information may get it instantly.

## **Strategic guidelines for mass media EID communication**

### **1. Promote participation by replacing direct or prescriptive messages with content which invites a response.**

A paradigm shift is necessary in the way mass media is deployed in future pandemics. In non-emergency periods, there is room for campaigns which pose questions, share stories of successes and behaviour change, and invite audience participation and convert the campaigns into gateways for dialogue. This is significantly easier during non-emergency periods, when a greater process orientation is possible. However, it is recommended that as a rule, all campaigns should display call-back channels such as phone numbers, hotline numbers, SMS numbers, email addresses, post box numbers and internet URLs, even in non-emergency communication.

### **2. Set up a response management unit to handle communication from the audience.**

Promoting participation requires a centralized infrastructure for receiving, collating, analysing and replying to responses generated by mass media and mid-media campaigns and IPC interventions. Setting up a response management unit would help foster a dialogue

*A paradigm shift is necessary in the way mass media is deployed in future pandemics. In non-emergency periods, there is room for campaigns which pose questions, share stories of successes and behaviour change, and invite audience participation and convert the campaigns into gateways for dialogue.*

Photo: FAO ECTAD Cambodia



*Dressed to the hilt in 'IEC material', these Cambodian children watch the exploits of Super Kai, the super chicken shown on their caps, with rapt attention, at a community event.*

between institutions and individuals, and result in a useful knowledge base of respondents who represent a deeper level of personal interest than others.

### **3. Set up stronger links between IPC, mass media and mid-media, letting the outputs of one influence the content of the others.**

A stronger link between IPC and mass media, especially with community theatre and dialogue groups focused on reflective processes, questions, success stories and example of change, could lead to energised and dynamic mass media campaigns that respond to emerging concerns from the audiences and disseminate their stories of change. This would result in a loop of shared information and outcomes between the different media, greater synergy between campaigns and interventions, and harmonized outcomes.

### **4. Promote behaviour change by showcasing early adopters of new behaviour and biosecure practices.**

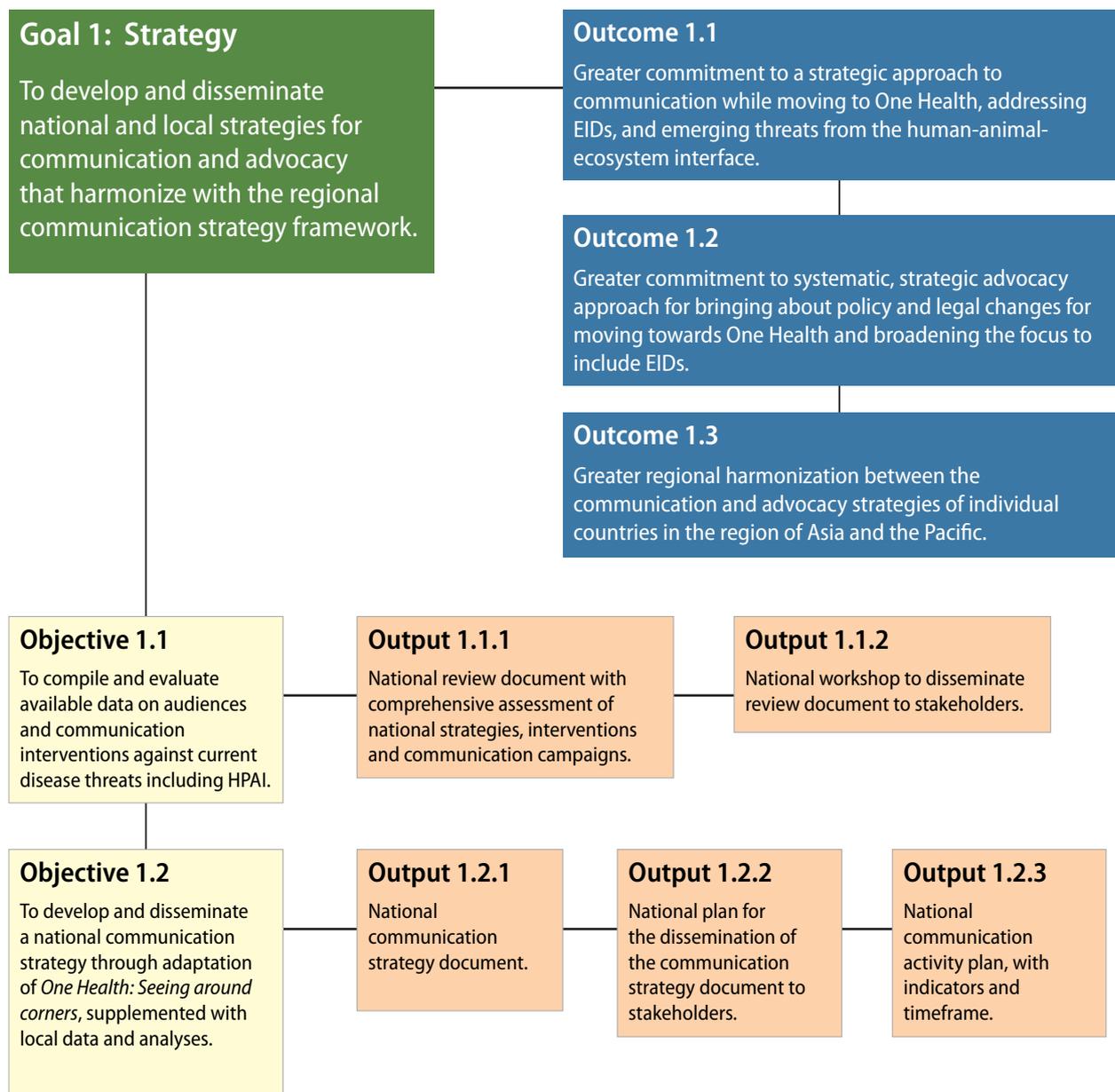
In addition to disseminating key messages calling for behaviour change, mass media campaigns should serve as platforms for showcasing behaviour change and shifts to more biosecure practices. These cases should be identified through community theatre and dialogue group interventions, which are better placed to find them. Disseminated nationwide, these stories constitute powerful and credible messages that change is possible and is happening. As such, they would be considerably more persuasive as well as socioculturally acceptable. This recommendation also builds on the proven precepts of the Theory of Diffusion of Innovations.

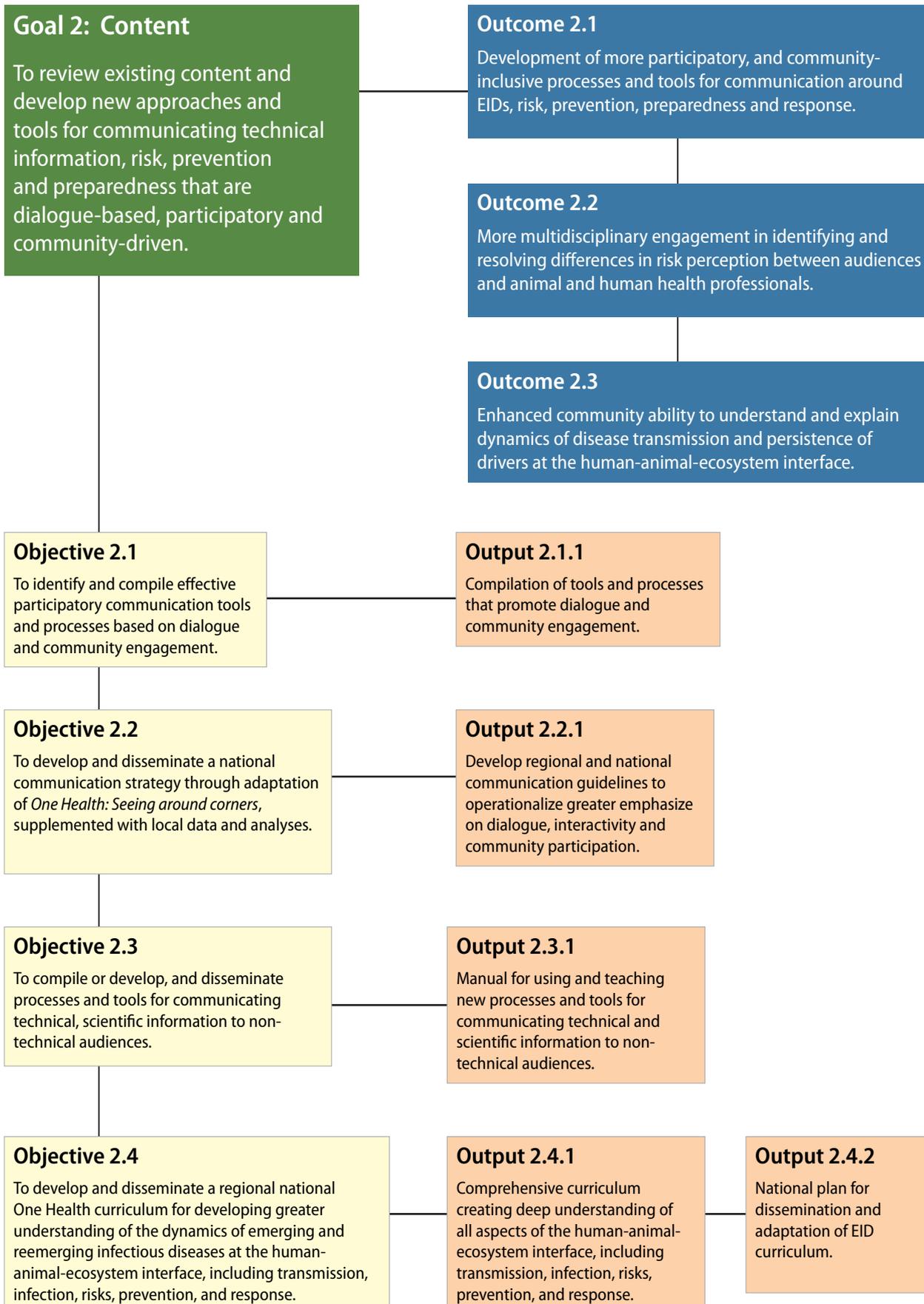
### **5. Develop formats for regular updates on the status of EIDs in the country and the region.**

New generic formats for sharing developing information about EID threats, both affecting animals and humans, need to be developed. Similar to weather information, which is available as a public good, such information about outbreaks needs to be made available nationally and regionally as part of regional, national and local preparedness for pandemic threats. With the discussion shifting to greater information sharing between human and animal health sectors, as well as interest in greater sharing of technical information to non-technical audiences, such information will be more easily available, and there will be greater interest in sharing it. The graphic display of outbreak information should become as commonplace as weather information.

# Goals, objectives, outcomes, outputs

The goals, objectives, outcomes and outputs proposed in this chapter are illustrative and directly derived from the guiding principles outlined earlier, as well as the specific guidelines provided for interpersonal, mid-media and mass media communication. They encompass five categories of communication activities, covering Strategy, Content, Capacity, Research, and Monitoring and Evaluation. While any or all of them may be retained in a national communication strategy document, it is expected that they would be adapted and expanded based on the national situation and needs.





### Goal 3: Capacity

To build regional and national capacity in understanding and implementing dialogue-based and community-participatory approaches to communication at all levels, including government, civil society, affected communities, technical officers.

#### Outcome 3.1

Increased community capacity to understand technical information about EIDs and the human-animal-ecosystem interface.

#### Outcome 3.2

Increased integration and sharing of laboratory and field data from animal, human and environmental health sectors.

#### Outcome 3.3

Increased and regular communication between animal, human and environmental health professionals and communities and audiences at risk, on topics of data, events and trends from the human-animal-ecosystem interface.

#### Objective 3.1

To create a regional level cadre of voluntary master coaches drawing on the best facilitation talent available in the public and private sectors, civil society and the community.

#### Output 3.1.1

National multisectoral pool of voluntary master coaches created.

#### Objective 3.2

To build capacity of master coaches to develop and mentor capacity at government, civil society and institutional levels.

#### Output 3.2.1

National level training process to build capacity of master coaches, using the national EID curriculum (Output 2.4.1).

#### Objective 3.3

To identify and train a network of community communication agents to serve as a bridge between the community and animal, human and environmental health specialists.

#### Output 3.3.1

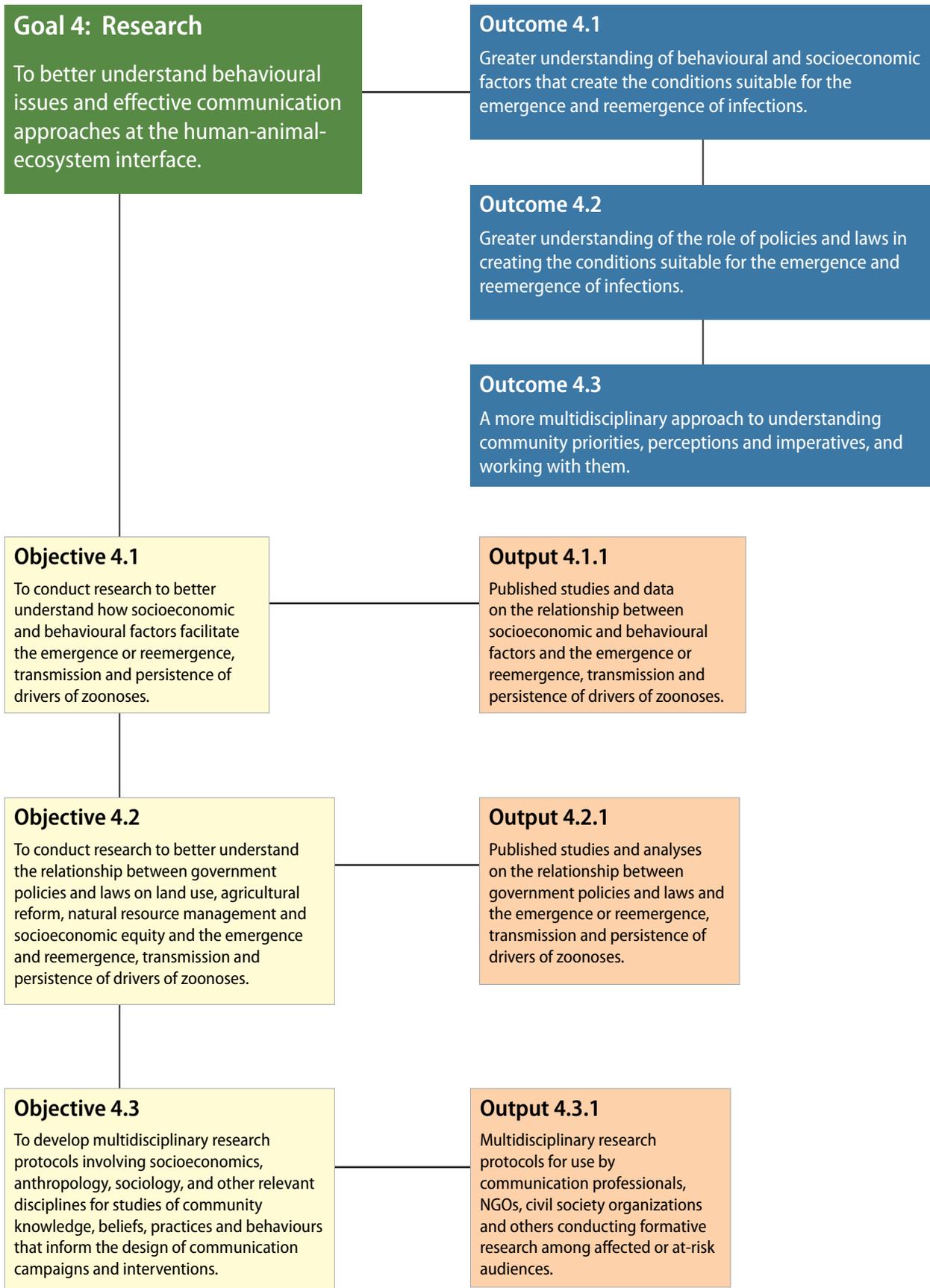
District level training process to build communication capacity of volunteer communication agents to understand and communicate with audiences on all developments regarding EIDs and the human-animal-ecosystem interface.

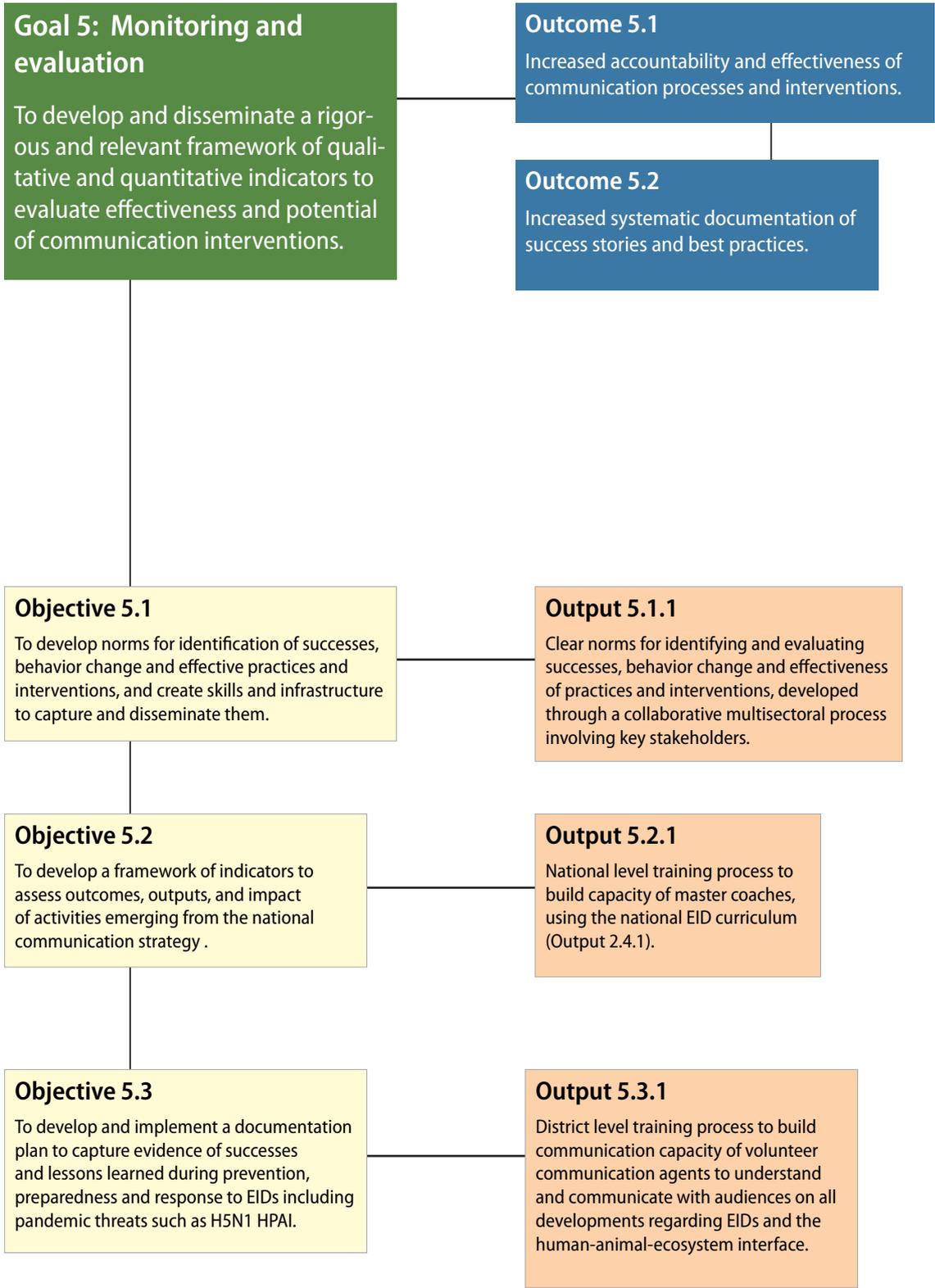
#### Objective 3.4

To establish and implement mechanisms for regular two-way communication and information-sharing between human and animal health professionals from the field and laboratories, and community members, to maintain awareness and understanding of emerging threats and the role of human actions.

#### Output 3.4.1

Mechanisms and protocols for regular meeting and sharing of information between field, laboratory and volunteer communication agents.





# Monitoring and evaluation

The monitoring and evaluation (M&E) framework that is provided here should be used as a broad guideline while developing a more detailed plan linked to specific activities and interventions develop for country-specific communication strategies. The M&E framework suggests illustrative indicators for gauging process, output and outcomes, based on the goals and objectives listed in the preceding chapter.

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
<b>Goal 1: Strategy</b>				
To develop and disseminate national and local strategies for communication and advocacy that harmonize with the regional communication strategy framework.				
<b>Objective 1.1</b>	<i>To compile and evaluate available data on audiences and communication interventions against HPAI.</i>			
	<b>Output 1.1.1</b> National communication review document with comprehensive assessment of national strategies, interventions and communication campaigns	TORs for national communication review team drawn up Multisectoral communication review team established Communication strategy documents, evaluations, assessments compiled and collated # of Interviews and desk review conducted National communication review document draft reviewed National communication review document disseminated	Draft national communication review document completed Final national communication review document completed	Greater commitment to systematic, strategic advocacy approach for bringing about policy and legal changes for moving towards One Health and broadening the focus to include EIDs.
	<b>Output 1.1.2</b> National workshop to disseminate review document to stakeholders.	# of people in dissemination list	National dissemination meeting conducted # stakeholders attending national dissemination meeting	
<b>Objective 1.2</b>	<i>To develop and disseminate a national communication strategy through adaptation of the regional communication strategy framework, supplemented with local data and analyses.</i>			
	<b>Output 1.2.1</b> National communication strategy document.	Consultant to develop national communication strategy appointed Desk review completed #of stakeholder consultation workshops completed	Draft national communication strategy developed Final national communication strategy developed	Greater commitment to a strategic approach to communication while moving to One Health, addressing EIDs, and emerging threats from the human-animal-ecosystem interface.  Greater regional harmonization between communication strategies of individual countries in the region of Asia and the Pacific.
	<b>Output 1.2.2</b> National plan for the dissemination of the communication strategy document to stakeholders.	# of stakeholders in the dissemination list # of stakeholders attending the dissemination workshop	National communication strategy disseminated to all relevant stakeholders	

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
	<b>Output 1.2.3</b> National communication activity plan, with indicators and timeframe.	Consultant to develop M&E indicators appointed # multisectoral participants at national communication strategy activity planning meeting	National communication activity plan developed M&E indicators developed	
<b>Goal 2: Content</b>				
To review existing content and develop new approaches and tools for communicating technical information, risk, prevention and preparedness that are dialogue-based, participatory and community-driven.				
<b>Objective 2.1</b>	<i>To identify and compile effective participatory communication tools and processes based on dialogue and community engagement.</i>			
	<b>Output 2.1.1</b> Compilation of tools and processes that promote dialogue and community engagement.	Existing and effective dialogue-based, participatory and community-driven tools and processes compiled		Development of more participatory, and community-inclusive processes and tools for communication around EIDs, risk, prevention, preparedness and response.
<b>Objective 2.2</b>	<i>Develop regional and national communication guidelines to operationalize greater emphasis on dialogue, interactivity and community participation.</i>			
	<b>Output 2.2.1</b> National communication guidelines document.	Multisectoral and inter-agency working group set up to develop or adapt recommendations and guidelines for communication  Communication guidelines shared for review with stakeholders	Communication guidelines developed  #of stakeholders who receive the communication guidelines	
<b>Objective 2.3</b>	<i>To compile or develop, and disseminate processes and tools for communicating technical, scientific information to non-technical audiences.</i>			
	<b>Output 2.3.1</b> Manual for using and teaching new processes and tools for communicating technical and scientific information to non-technical audiences.	Available tools and guidelines for technical communication are compiled.  # of community workshops conducted to develop new processes and guidelines for technical communication	Tools, process and guidelines for technical communication developed	Enhanced community ability to understand and explain dynamics of disease transmission and persistence of drivers at the human-animal-ecosystem interface.

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
		<p>Tools and processes guidelines published</p> <p># of stakeholders who receive new tools, processes and guidelines for technical communication</p> <p># of stakeholders who implement new technical communication guidelines</p>		
<b>Objective 2.4</b>	<i>To develop and disseminate a regional One Health curriculum for developing greater understanding of the dynamics of emerging and re-emerging infectious diseases at the human-animal-ecosystem interface, including transmission, infection, risks, prevention, and response.</i>			
	<p><b>Output 2.4.1</b></p> <p>Comprehensive One Health curriculum creating deep understanding of all aspects of the EIDs and the human-animal-ecosystem interface, including transmission, infection, risks, prevention, and response.</p>	<p>Regional curriculum dealing with EIDs, including transmission, infection, risks, prevention and response compiled and analysed.</p> <p>Curriculum specialists and designers for developing regional curriculum contracted as consultants.</p> <p>Draft regional curriculum developed.</p> <p># of people who receive draft regional curriculum for peer review.</p> <p>Final regional curriculum completed.</p> <p># of attendees at regional meeting to present and disseminate regional EID/human-animal-ecosystem curriculum convened.</p> <p># of countries developing national EID/human-animal-ecosystem curricula through localization and translation of regional curriculum</p>	<p>Draft regional EID/human-animal-ecosystem curriculum developed.</p> <p>Final regional EID/human-animal-ecosystem curriculum developed.</p> <p>National curricula developed through adapting and localizing the regional curriculum.</p>	<p>Development of more participatory, and community-inclusive processes and tools for communication around EIDs, risk, prevention, preparedness and response.</p> <p>Enhanced community ability to understand and explain dynamics of disease transmission and persistence of drivers at the human-animal-ecosystem interface.</p>

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
	<b>Output 2.4.2</b> National plan for dissemination and adaptation of EID/human-animal-ecosystem curriculum.	Dissemination list of stakeholders for EID/human-animal-ecosystem curriculum developed.  # of stakeholders (including NGOs, donors, INGOs, CBOs and persons) included in national dissemination.  # of Stakeholders attending meeting to launch and disseminate national EID/human-animal-ecosystem curriculum.	Curriculum dissemination meeting held.	More multidisciplinary engagement in identifying and resolving differences in risk perception between audiences and animal and human health professionals.
<b>Goal 3: Capacity</b>				
To build regional and national capacity in understanding and implementing dialogue-based and community-participatory approaches to communication at all levels, including government, civil society, affected communities, technical officers.				
<b>Objective 3.1</b>	<i>To create a regional level cadre of voluntary master coaches drawing on the best facilitation talent available in the public and private sectors, civil society and the community.</i>			
	<b>Output 3.1.1</b> Regional multisectoral pool of voluntary master coaches created.	Regional organizations (ASEAN, SAARC) engaged in developing regional capacity building structure.  Criteria for selection of coaches drawn up.  Regional NGOs, INGOs, and agencies convened to agree on criteria and capacity building structure.  # of regional organizations who attend meeting  Master coaches nominated to regional pool from national level organizations.  #of master coaches nominated.	Meeting of regional NGOs, INGOs and agencies to agree on criteria for coaches and capacity building structure.  Regional pool of nominated coaches from national NGOs, INGOs, and CBOs formed.	Increased community capacity to understand technical information about EIDs and the human-animal-ecosystem interface.
<b>Objective 3.2</b>	<i>To build capacity of master coaches to develop and mentor capacity at government, civil society and institutional levels.</i>			
	<b>Output 3.2.1</b> Regional training process to build capacity of master coaches, using the national EID/human-animal-ecosystem curriculum	Master coaches training workshop convened.  # of master coaches who attend training workshop.	Master coaches training workshop convened.  Increase in knowledge, attitudes and facilitation skills of master coaches.	Increased community capacity to understand technical information about the human-animal-ecosystem interface.

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
<b>Objective 3.3</b>	<i>To identify and train community volunteers as communication agents to serve as a bridge between the community and human, animal and ecosystem health specialists.</i>			
	<p><b>Output 3.3.1</b></p> <p>District level training process to build communication capacity of volunteer communication agents to understand and communicate with audiences on all developments regarding EIDs and the human-animal-ecosystem interface.</p>	<p>MoH, DLD, MoA, and MoE officials reach consensus on plan to build community volunteers' communication capacity.</p> <p>Plan to train communication volunteers' communication capacity developed.</p> <p># of training workshops at district levels to build communication volunteers' communication capacity.</p>	<p>Communication volunteers' training workshops conducted.</p>	<p>Increased community capacity to understand technical information about the human-animal-ecosystem interface.</p>
<b>Objective 3.4</b>	<i>To establish and implement mechanisms for regular communication and information-sharing between profession from the field and laboratories, and community members, to maintain awareness and understanding of emerging threats and the role of human actions.</i>			
	<p><b>Output 3.4.1</b></p> <p>Mechanisms and protocols for regular meeting and sharing of information between field, laboratory and volunteer communication agents.</p>		<p>Formats and processes for information sharing between field, laboratory and volunteer communication agents developed.</p>	<p>Increased integration and sharing of laboratory and field data from animal, human and environmental health sectors.</p> <p>Increased and regular communication between animal, human and environmental health professionals and communities and audiences at risk, on topics of data, events and trends from the human-animal-ecosystem interface.</p>

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
<b>Goal 4: Research</b>				
To better understand behavioural issues and effective communication approaches at the human-animal-ecosystem interface.				
<b>Objective 4.1</b>	<i>To conduct research to better understand how socioeconomic and behavioural factors facilitate the emergence or reemergence, transmission and persistence of drivers of zoonoses.</i>			
	<p><b>Output 4.1.1</b></p> <p>Published studies and data on the relationship between socioeconomic and behavioural factors and the emergence or reemergence, transmission and persistence of drivers of zoonoses.</p>	<p>Research agenda developed to assess impact on health security and socioeconomic well-being of new and old human and animal diseases.</p> <p>Research agenda developed to identify the core drivers of disease emergence.</p> <p>Research agenda to identify Hazard Analysis Critical Control Points.</p> <p>Research agenda developed to better understand behavioural factors that drive disease emergence and spread.</p> <p># of research papers published.</p>	<p>Published studies and papers on socioeconomic and health security impact, drivers of disease emergence, and behavioural factors that influence disease emergence.</p>	<p>Greater understanding of behavioural, socioeconomic factors that create the conditions suitable for the emergence and reemergence of infections, and their impact.</p>
<b>Objective 4.2</b>	<i>To conduct research to better understand the relationship between government policies and laws on land use, agricultural reform, natural resource management and socioeconomic equity and the emergence and reemergence, transmission and persistence of drivers of zoonoses.</i>			
	<p><b>Output 4.2.1</b></p> <p>Published studies and analyses on the relationship between government policies and laws and the emergence or reemergence, transmission and persistence of drivers of zoonoses.</p>	<p>Regional consultant identified to study the role of government policy in disease emergence.</p> <p># of stakeholders interviewed.</p> <p>Study published on role of government policy in disease emergence.</p>	<p>Study published on role of government policy in disease emergence.</p>	<p>Greater understanding of the role of policies and laws in creating the conditions suitable for the emergence and reemergence of infections</p>

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
<b>Objective 4.3</b>	<i>To develop multidisciplinary research protocols involving socioeconomics, anthropology, sociology, and other relevant disciplines for studies of community knowledge, beliefs, practices and behaviours that inform the design of communication campaigns and interventions.</i>			
	<p><b>Output 4.3.1</b></p> <p>Multidisciplinary research protocols for use by communication professionals, NGOs, civil society organizations and others conducting formative research among affected or at-risk audiences.</p>	<p>Regional meeting of NGOs, INGOs, CBOs and experts in communication and socioeconomics.</p> <p>Development of a research protocol to supplement traditional KAP studies for in-depth understanding of community culture, and socioeconomics.</p> <p># of stakeholders in the regional who receive the community research protocol .</p> <p>Community research protocol disseminated.</p>	Community research protocol disseminated.	A more multidisciplinary approach to understanding community priorities, perceptions and imperatives, and working with them.
<b>Goal 5: Monitoring and evaluation</b>				
To develop and disseminate a rigorous and relevant framework of qualitative and quantitative indicators to evaluate effectiveness and potential of communication interventions.				
<b>Objective 5.1</b>	<i>To develop norms for identification of successes, behavior change and effective practices and interventions, and create skills and infrastructure to capture and disseminate them.</i>			
	<p><b>Output 5.1.1</b></p> <p>Evaluative norms for identifying successes, best practices and lessons learned in behavior change and communication interventions.</p>	<p>Existing norms, criteria and formats for identifying successes, best practices and lessons learned compiled.</p> <p>Multisectoral working group to develop norms, criteria and formats for identifying successes, best practices and lessons learned.</p>	Norms, criteria and formats for identifying successes, best practices and lessons learned	Increased systematic documentation of success stories and best practices.
<b>Objective 5.2</b>	<i>To develop a framework of indicators to assess outcomes, outputs, and impact of activities emerging from the national communication strategy</i>			
	<p><b>Output 5.2.1</b></p> <p>Communication M&amp;E framework of indicators for assessing process, outputs and outcomes of communication interventions.</p>	<p>Consultant to develop a national M&amp;E framework for communication appointed.</p> <p>Regional Communication M&amp;E working group of agencies, NGOs, and so on, set up.</p> <p>Draft communication M&amp;E framework developed</p>	<p>Draft Communication M&amp;E framework of indicators</p> <p>Final Communication M&amp;E framework of indicators</p>	Increased accountability and effectiveness of communication processes and interventions.

	Outputs	Process Indicators	Output Indicators	Outcomes Indicators
<b>Objective 5.3</b>	<i>To develop and implement a documentation plan to capture evidence of successes and lessons learned during prevention, preparedness and response to EIDs including pandemic threats such as H5N1 HPAI.</i>			
	<b>Output 5.3.1</b> Video, print and other documentation of identified success stories and best practices.	Stories, lessons, practices compiled using the agreed norms and formats Video shooting unit contracted	# of success stories, best practices, lessons learned identified # of video films made # of stories, lesson and practices documented	Increased systematic documentation of success stories and best practices.

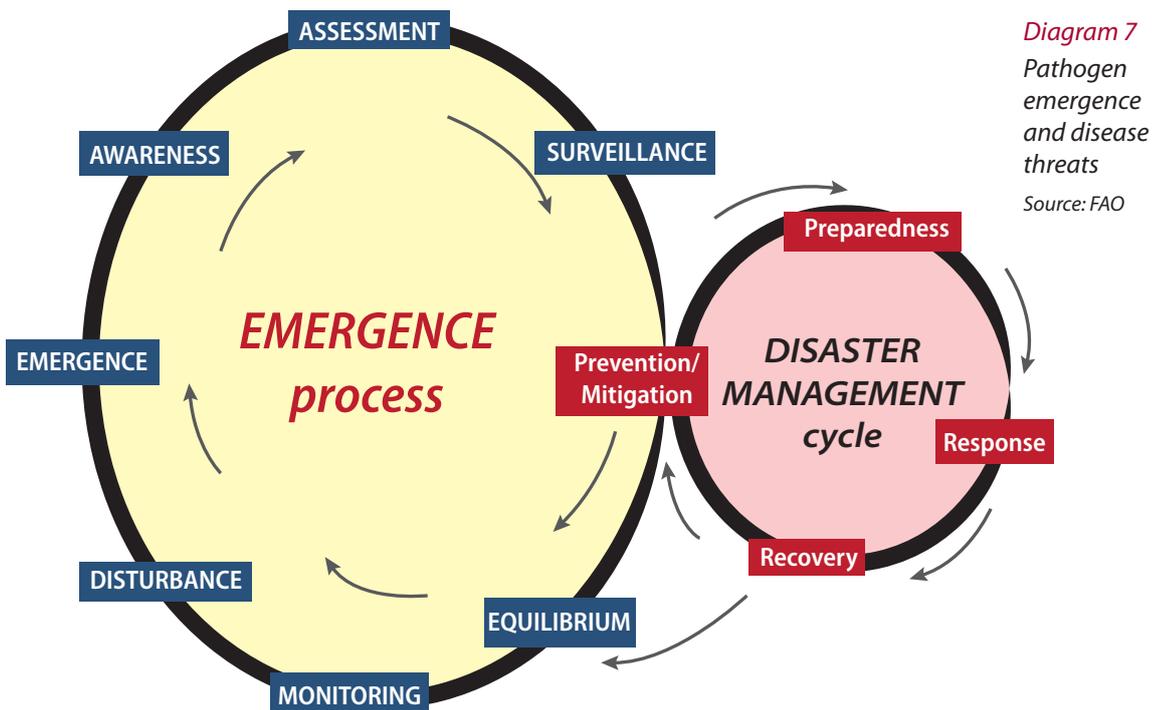
Source: FAO ECTAD Cambodia



Communication materials such as posters, and speeches at a Cambodia community meeting illustrate the dangers of H5N1 HPAI.

# Illustrative activities

**SPECIFIC ACTIVITIES WOULD BE EXPECTED** to emerge as *One Health: Seeing around corners* is localized to respond to national concerns and situations. The list of activities below should be seen as illustrative of how the regional communication goals and objectives recommended here could translate into specific activities that respond to the four broad One Health related themes that guide this strategy framework. The activities are also linked to specific phases identified as opportunities in the diagrammatic representation of the Emergence process–Disaster Management cycle (see Diagram 7).



1. **Pandemic preparedness.** New communication processes which are more community-driven, participatory and based on promoting critical reflection are needed to increase the effectiveness and persuasiveness of risk communication in the Disaster Management cycle.

- Develop community-driven and dialogue-based tools and processes to communicate information about risk, emergence and response.

*Develop new tools and processes to explain the human-animal-ecosystem interface and emergence to communities, drawing analogies from existing culture to perpetuate deeper understanding of the relationships and the implications of emergence.*

- Build capacity of communication partners, performing arts professionals, media, facilitators and the private sector to implement community-driven and dialogue-based interventions.
- Develop tools and processes to enhance community and private sector participation in understanding and assessing threats to animal and human health.
- Collaborate with communities to help them develop appropriate biosecurity and biosafety messages and practices.
- Develop community-based mechanisms to facilitate up-to-date local, national and global communication from government to community about outbreaks, spread and impact of emerging pandemics.

- 2. Communication during the Emergence process.** Addressing EIDs must include strategies, tools and processes which aim to bring about changes in behaviour, social norms and practices that help prevent or mitigate pathogenic emergence. This calls for communication interventions which target human behaviour at the human-animal-ecosystem interface, and which create enabling conditions for the drivers of disease emergence.
  - Research to better understand socioeconomic, anthropological and sociocultural factors which underlie human disturbance of the balance at the human-animal-ecosystem interface.
  - Develop new tools and processes to explain the human-animal-ecosystem interface and emergence to communities, drawing analogies from existing culture to perpetuate deeper understanding of the relationships and the implications of emergence.
  - Build local capacity to understand and explain emergence and disease in non-technical and culturally familiar terms.
  - Increase awareness of events at the human-animal-ecosystem interface, surveillance data, emergence events among audiences at potential risk, communities, local technical officials, media and private sector.
  - Build capacity of community leaders, religious leaders, stakeholders and other authority figures to understand disturbance, as well as the norms and practices that promote it or prevent it.
  - Build capacity of private sector to understand disturbance, as well as the industrial and commercial practices to address and prevent it.
  - Help communities and affected audiences develop biosafety and biosecurity practices for the Emergency cycle, independent of outbreaks.
- 3. Technical communication.** New communication tools and processes must be developed for communicating information and knowledge from the field and laboratories to non-scientific audiences and communities, and creating an adequate appreciation of the human-animal-ecosystem interface, including

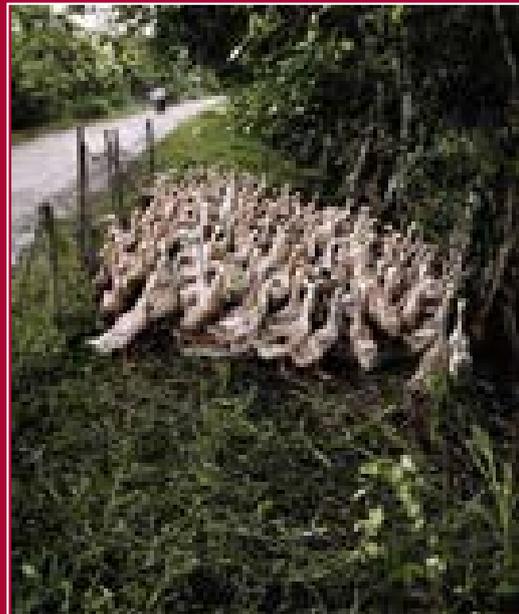
biological processes and systems which can affect both animal and human health, food security, income and livelihoods.

- Develop communication tools and processes that explain pathogens, inter-species dependencies and interactions, and their consequences in non-technical and culturally appropriate terms.
- Develop communication tools and processes for deepening socioeconomic analyses and understanding at the community levels.
- Expand school curricula to include interactions and events at the human-animal-ecosystem interface and their implications for animal and human well being, including health.
- Build capacity of teachers, facilitators, trainers, designers and performing arts professionals to communicate technical information in culturally comprehensible ways.
- Build capacity of the private sector to understand and communicate technical information to non-technical audiences.
- Communicate outside the Disaster Management cycle. New formats and networks for communicating continuously with all key stakeholders, including affected audiences, on the status of disturbances, emerging infectious diseases, and results of surveillance, to ensure engagement of affected communities.
- Develop technical communication capacity among selected audiences, including CAHWs, village leaders, livestock officers, and others.
- Where CAHWs are not available, develop cadres of community communication agents to help keep their communities abreast of developments and findings at the human-animal-ecosystem interface.
- Set up specialist-community networks for sharing of information about events and developments at the human-animal-ecosystem interfaces between laboratory and field officials, animal and human health specialists, and communities. These would include community leaders, farmers' representatives, epidemiologists, veterinarians, human health specialists and wildlife experts.

*Build capacity of teachers, facilitators, designers and theatre professionals to communicate technical information in culturally relevant ways.*

# Annex 1: References

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*BACK COVER*

*Many farmers in southern Viet Nam are now fencing in their ducks, improving biosecurity and nutrition, and growing their livelihoods through communication interventions that introduced them to the power of dialogue.*

*Photo: C Y Gopinath*

