

# Avian Influenza Behaviour Change

## Cambodia, country report

### *Qualitative Findings*

Prepared for  
**AED**

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# Background



- The U.S. Agency for International Development has awarded AED a global Task Order to conduct behavior change communications activities on avian influenza prevention and containment as well as human pandemic. Target audiences of these communication activities are small rural backyard poultry farmers (Sector 4), small commercial poultry farmers (Sector 3), and commercial farmers and poultry processors (Sector 2), consumers of poultry, and business officials and other stakeholders, and health and veterinary staff
- TNS has been commissioned to conduct qualitative and quantitative research in three countries – Vietnam, Cambodia, and Lao – among rural and dense urban backyard farmers (sector 4); market vendors and poultry sellers and poultry growers (Sector 3); and stakeholders in the public and private sector; and NGO's and Media workers that are critical to the containment and prevention of HPAI (high pathogenic avian influenza)

- **Exploratory qualitative research was the most suitable research for this phase of the research**
  - Qualitative in-depth interviews
  - Conducted with specified farmers as well as the following stakeholders:
    - Central Government Officials (GO's)
    - Village / Opinion Leaders
    - Animal Health Worker (district level)
    - Animal Health Worker (local level)
    - Human Health Worker (district level)
    - Human Health Worker (local level)
    - NGO's / Media
  
- **The qualitative phase was conducted in all 3 countries in 3 different provinces (at the district and local level) per country**
  - Vietnam: Nam Dinh, Nghe An and Hau Giang
  - Cambodia: Kandal, Pursat, and Kampot
  - And Laos: Champasack, Savannakhet, and Vientiane

# Sample split – Cambodia

35 Qualitative IDIs in total

| Key Informants                        | PP       | KD        | KP        | PS        | Total     |
|---------------------------------------|----------|-----------|-----------|-----------|-----------|
| Backyard poultry farmers              |          | 3         | 3         | 3         | 9         |
| Small commercial poultry farmers      |          | 3         | 3         | 3         | 9         |
| Central government officials          | 3        |           |           |           | 3         |
| Village/opinion leaders               |          | 2         | 2         | 2         | 6         |
| Animal health worker (district level) |          |           |           | 1         | 1         |
| Animal health workers (local level)   |          | 1         | 1         |           | 2         |
| Human health worker (district level)  |          |           | 1         |           | 1         |
| Human health workers (local level)    |          | 1         |           | 1         | 2         |
| NGO                                   | 1        |           |           |           | 1         |
| Media                                 | 1        |           |           |           | 1         |
| <b>Total</b>                          | <b>5</b> | <b>10</b> | <b>10</b> | <b>10</b> | <b>35</b> |

# Summary

# Summary (1)

- There are some key differences between Backyard and Small Commercial Poultry Farmers to take note of.
  - Backyard farmers pay less attention to AI because they are only raising a few poultry.
  - Just for home use and don't care what's going on with their poultry
  - Perceived raising poultry is not their main occupation and therefore pay less attention to the poultry and hence, less attention to AI
  - While small commercial poultry farmers pay more attention to AI and this translates to action, such as disinfecting the cage or food for feeding the poultry. They worry about losing money (capital) if their poultry catch AI; they raise bigger amounts of poultry; it is their main income
  - Small commercial poultry farmers tend to raise poultry with some standards, such as building a separated cage for poultry from the house
  - On the other hand, backyard poultry farmers just let their poultry walk around anywhere they like so they can find their own food. It saves cost.
- There appear to be differences in reference to the uptake of or response to different preventative measures, thus a localized program at the grass roots level needs to be considered to influence behaviour according to local needs and barriers

## ■ Perceptions about AI

- People know about AI and has been exposed to some form of communication about it, but they have never seen any real AI situation in their community. They are able to talk about symptoms, the disease spreading, prevention and the result:
  - AI is a serious disease caught by poultry and spread from poultry to humans
  - AI cause poultry and humans to die
  - AI is preventable
- They talk about the impact to their life as being loss of money, income and time to take care of this problem rather than the fatality of AI

## ■ Current behaviour

- The majority of small commercial farmers are taking more care in raising their poultry and try to use the prevention methods recommended
- There are some backyard farmers who have not changed anything because fundamentally, they think there is no AI in their village thus they raise the poultry the way they have always done
- The most backyard farmers seem to have done is to make a slight change such as having more sanitation in the way they live and eat, yet they still let the chickens walk around in the house and village

## ■ Stakeholders/ NGOs and Media

- ❖ Play a role in providing information on AI and its prevention to the people
- ❖ Good cooperation through NGO's or other organizations who comes to help their people through providing information, equipment or training courses. NGO's help by providing information through ways of training people how to prevent AI
- ❖ Media can help people to deal with AI by broadcasting the information about AI and the prevention on television, radio and other media sources

## ■ Currently, the most preferred AI measures gaining the most uptake are:

- ❖ Washing hands before handling/preparing food for self or the family to eat because it is easy to apply and no need to spend money
- ❖ Not letting children come in to contact with birds (a habit anyway; makes sense)
- ❖ Washing hands with soap before and after taking care of poultry (ie. Handling birds or bird products)
- ❖ Not eating birds that fall dead or eating birds that are sick. There is still some beliefs that if you cook the birds at high enough temperatures, it's ok to eat dead or sick birds. In some cases people will do it anyway because they are desperate for food or income, thus importance to reinforce this and show that it is more serious

# Summary (4)

- In terms of what can help to prevent AI in the future it appears that the first thing is to challenge the lack of belief and to ensure people act to prevent AI. Concerns only come to the fore when people experience AI first hand in their village or commune, or they heard serious news about AI (eg. the result of humans catching AI).
- Broadcasting on television can have a broad impact and could be a way to show reality/AI happening
- People say they will practice prevention if they have free time, equipment and land or they are afraid of AI, thus there are a number of possible solutions in reaction to this:
  - Continue to work at raising awareness and the importance of preventing AI
  - Evaluate providing equipment to backyard farmers for free and encourage commercial farmers to ensure they are well- equipped
  - Reinforce the message as per above of the seriousness of AI, human fatality (not just getting sick) and make it as real as possible, eg. share statistics from other areas
- Suggested strongest/ best message to communicate about AI
  - ❖ No medicine to cure AI and that AI can spread to humans
  - ❖ Add in to current and future information the results of how many people have caught AI and died as a result
  - ❖ Do not eat dead or sick poultry because of AI

## **Additional suggestions to be considered:**

- Poultry raising is one of the sources of income for farmers and income is of key importance, so try to find ways to connect to this need through communication.
- Bring AI knowledge to schools will help as farmer's children can then transfer the knowledge to their parents
- Strongly communicate that AI has the potential to kill all their poultry → they could lose everything (because of AI)
- Combine AI with training programs tied to income generation for farmers to increase awareness and to emphasize the importance / serious level of AI
- Connect to food safety and hygiene which are already relevant needs. Raise the seriousness of eating dead or sick poultry (due to sickness); should not occur under any circumstance
- Clearly communicate the main symptoms of AI so that people can be more proactive in going to the hospital to check any suspect symptoms and to raise their understanding overall

# Main Findings



# Understanding the Target Audience

# Backyard and Small Commercial Poultry Farmers

## *Understanding their lives and their profiles*

### ■ **Multi-generation family structure**

- Normally grand-parents, parents and children
  - Around 6-7 people live in each household

### ■ **Farmers, thus mainly working in agriculture jobs such as growing rice and raising poultry**

- Beside chickens, farmers also raise ducks and geese (although few geese)
- Backyard poultry farmers can earn money from their poultry, but if they do, it is usually just a very small amount; mainly the poultry are for the family
- Small commercial poultry farmers have a relatively higher standard of living than backyard poultry farmers, ie. are 'better off' overall
  - **Commercial poultry farmers lives are not as much about day-to-day survival as backyard farmers**
    - **This is consistent across provinces**

## *Key understanding about their life and their profiles*

- They talk about paying high attention to take good care of their family ...
  - **Mainly focus on basic life conditions including**
    - **Food hygiene** (i.e. make sure food is clean before cooking... )
    - **Food safety** (i.e. try best to consume self-growing vegetable to avoid chemicals ... )
    - **Live hygienically** (i.e. cleaning the house, environment around the house and the poultry cage...)
    - **Report to local authority if there is any unclean water source around them**
    - **Open the door and windows to let the sun light into the house**
      - To have healthy and clean air / environment to stay away from petechial fever
    - **Make sure children are sleeping under a mosquito net**
      - To stay away from petechial fever
    - **Fill puddles around the house to destroy mosquitoes**
  - **More importantly, take good care of any family members if they are sick**
  - **Seems small commercial poultry farmers can take better care compared to backyard farmers**
    - Tend to store some medicine or Khmer traditional herbs at home
      - As a back up for any emergency case (i.e. get sick at night)
    - Store foods in case of emergency such as flood

# Overall Concerns in Life

# Farmers Overall Concerns

*Consistently ranked by farmers, stakeholders, media and NGO's*

## In order of ranking:

- Education of children
- Income
- Taking care of family's daily basic needs i.e. foods, clothes
- Health - Preventing illness in themselves or family
- Health - Making sure a sick person can be cared for
- Occupation
- Poultry raising
- Safety
- Social customs

- **The top concern of all farmers across all provinces is children's education**
  - All believe that with higher levels of education their children will have better lives
- **Beyond this comes 'the basics' of day to day survival, firstly income (*"without money we can do nothing"*), then the family's basic needs such as food and clothes**
  - Most strongly expressed by the backyard poultry farmers
- **Health concerns come after the basics,- however, these concerns are more expressed from an economic point of view**
  - i.e. Sickness = loss of money / loss of time

# Overall Concerns – As Expressed by Farmers (1)

| Rank | Overall concerns   | Reasons  | Key differences amongst   |  |
|------|--|--|---|--|
|      |  |  | Backyard poultry farmers  | Small commercial poultry farmers   |
| 1    | <b>Education of children</b>   | <p>Believe with good education, children will have a better life in the future</p> <p>People are willing to spend time and effort to support their kids to go to school</p>                                  | No difference   |  |
| 2    | <b>Income</b>  | Price for basic needs keeps increasing, therefore farmers need to be even more careful about earning enough money to fulfill their family's basic needs  | More priority, because they don't have much money saved and they have to earn money for basic daily needs | Less priority because they are relatively more stable and don't have to deal with so many daily issues relating to basic needs such as food or clothing... |
| 3    | <b>Taking care of family's daily basic needs i.e. foods, clothes</b> | <p>Humans cannot live without food. If farmers don't have enough food, clothing or shelter then their family's suffer.</p> <p>Moreover, they can easily get weak/sick and then cannot work to earn money</p> | No difference   |  |

# Overall Concerns – As Expressed by Farmers (2)

| Rank | Overall concerns   | Reasons   | Key differences amongst  |   |
|------|--|---|--|---|
|      |  |   | Backyard poultry farmers   | Small commercial poultry farmers  |
| 4    | <b>Health -<br/>Sickness prevention<br/>(for family members)</b> | Farmers are scared of getting sick → not because of the sickness but because they have to spend money for treatment and spend time to take care, so they try their best to prevent/avoid getting sick                               | No difference  |   |
| 5    | <b>Health -<br/>Making sure a sick person can be cared for</b>   | <p>Have to spend much money and time to take care of them → it's a must</p> <p>More importantly if they don't have enough money to pay for the hospital, then they have to bring the patient home and take care of them at home</p> | Higher concern because normally they don't have much money to pay for the hospital | In cases where they have much more money, then it is not a big concern (because they are able to pay for hospital fees), otherwise of a similar concern level |

# Overall Concerns – As Expressed by Farmers (3)

| Rank | Overall concerns       | Reasons  | Key differences amongst   |  |
|------|------------------------|--|---|--|
|      |                        |  | Backyard poultry farmers  | Small commercial poultry farmers                                 |
| 6    | <b>Occupation</b>      | Growing rice is not enough to take good care of the family. Thus farmers always try to look for other work that can help to earn more money (i.e. selling groceries, raising poultry or animals)                                       | No difference   |  |
| 7    | <b>Poultry raising</b> | Poultry easily die because of weather changes and the price of poultry feed is getting higher. Raising poultry also needs money to buy disinfectant, equipment and cages, whilst the income from selling the poultry is relatively low | It is important but not a higher concern because poultry raising is not their main income | More serious → It is a big source of income for the whole family |

# Overall Concerns – As Expressed by Farmers (4)

| Rank | Overall concerns      | Reasons  | Key differences amongst  |                                  |
|------|-----------------------|--|--------------------------|----------------------------------|
|      |                       |  | Backyard Poultry Farmers | Small Commercial Poultry Farmers |
| 8    | <b>Safety</b>         | <p>Apparently ‘gangsters, robbers and thieves’ are more common in the community → dangerous for them</p> <p>Furthermore, school is far away from home → not safe for their children because there are a lot of cars and motorbikes on the street</p>           | No difference            |                                  |
| 9    | <b>Social customs</b> | <p>Western customs are getting stronger and have higher impact to the community. Farmers are concerned that their children will follow and not follow traditional values → lose control/ or worry that children may suffer from ‘social evils’ (eg. drugs)</p> | No difference            |                                  |

# How Stakeholders are Addressing Farmers' Overall Concerns (1)

*As expressed by the stakeholders*

| Ranking | Overall concerns             | What do they do to help   |
|---------|------------------------------|---|
| 1       | <b>Education of children</b> | <p><b>GOs</b> → improve teacher's capacity, holding some programs to educate parents at home and provide information via television and radio</p> <p><b>Health workers</b> → give some consultancy about education to the parents whenever they visit the farmers</p> <p><b>Media and NGO's</b> → proactively communicate the benefits of having good education via TV, radio, newspapers</p> |
| 2       | <b>Income</b>                | <p>Consult to the farmers on how to earn more money and supplement their income (e.g fishing after a rice crop)</p> <p>GO's and NGO' → more proactive here because this is part of their jobs</p>   |

# How Stakeholders are Addressing Farmers' Overall Concerns (2)

*As expressed by the stakeholders*

| Rank | Health concerns   | What do they do to help   |
|------|---|---|
| 3    | <b>Taking care of family's daily needs for food, clothing</b> | <p>Set up some training programs training them how to earn more money</p> <p>Create more work/ jobs for people</p> <p>GO's → tend to wait for assignment from higher level or if the people in the community ask for</p> <p>Advise/ consult people on how to earn money (health workers)</p> <p>NGOs/ health workers → proactive in combination with their programs," however, <i>it is just advice / recommendations not create work/ jobs for people to do</i>"</p> |
| 4    | <b>Health - Sickness prevention (for family members)</b>      | <p>Provide information about how to prevent themselves from the diseases and on sanitized living (i.e. sending documents/ holding some short training courses, or face to face consultancy...)</p> <p>Are proactive as a result of being assigned a work period to do from the higher level, commune, district, province/city or NGOs</p>   |

# Health Concerns

# Farmers' Health Concerns

*Very consistent across stakeholders, media and NGO's*

■ **Ranking of health concerns by all stakeholder sectors completely consistent with farmers:**

1. Preventing illness in yourself or family/ Making sure a sick person can be cared for
2. Chemical elements on the food
3. General disease
4. Not clean water
5. Sanitation
6. Children with disabilities
7. Dengue fever
8. Typhoid
9. Weather change

■ **The top health concern of all farmers across the provinces is *“losing money, losing time when family members are sick”***

• **Following is the effect of being exposed to/consuming chemicals through daily foods, with the economic implications again being the underpinning concern expressed**

• *“We cannot see from our eyes, and chemicals will cause many diseases and it consumes much money to take care of sick people”*

• **AI does not register in the list spontaneously**

• The top concerns, like the overall concerns, centre around basic day-to-day needs and aspects of daily survival

• Specific diseases are mentioned towards the bottom of the priority list, these being dengue fever and typhoid

| Rank | Health concerns   | Reasons   | Key differences amongst                    |  |
|------|---|---|--|--|
|      |   |   | Backyard poultry farmers                   | Small commercial poultry farmers                                     |
| 1    | <b>Preventing illness in yourself or family/ Making sure a sick person can be cared for</b> | They have to take care of the sick patient in the family, losing time and money → affects their life  | High concern as they don't have much money | Less concern than backyard farmers because their life is more stable |
| 2    | <b>Chemical elements on food</b>  | There are many vegetables using chemicals to keep it fresher longer; cannot be seen → all aware that those foods are harmful to their health → high concern                   | No difference                              |  |
| 3    | <b>General disease</b>  | There are many everyday diseases happening on a regular basis such as headache, flu...etc that interrupt the people's work and the people may need to pay money for treatment | No difference                              |  |

| Rank | Health concerns                   | Reasons   | Key differences amongst  |   |
|------|-----------------------------------|---|--|---|
|      |                                   |   | Backyard poultry farmers   | Small commercial poultry farmers  |
| 4    | <b>Not clean water</b>            | People have to use hard water (from river/ well...) and there are some substances that can get in to the water and harm people's health → leads to sickness | They care more about their rice growing business because they just raise small amount of poultry (hard water is not good for growing rice) | Care more about their poultry, because they raise larger amounts of poultry; poultry get sick easily due to lack of clean water |
| 5    | <b>Sanitation</b>                 | Believe that if they do not take good care of their sanitation, people will easily get sick → lose money/ lose time to take care of them                    | No difference  |   |
| 6    | <b>Children with disabilities</b> | Children with disabilities cannot work/ cannot take care of themselves → parents have to spend time and money to take good care of them                     | No difference  |   |

| Rank | Health concerns       | Reasons  | Key differences amongst  |                                  |
|------|-----------------------|--|--------------------------|----------------------------------|
|      |                       |  | Backyard poultry farmers | Small commercial poultry farmers |
| 7    | <b>Dengue fever</b>   | Children can easily catch this disease and they can die if there is no treatment on time                 | No difference            |                                  |
| 8    | <b>Typhoid</b>        | Considered a dangerous disease; which happens when people pay less attention to good hygiene around food | No difference            |                                  |
| 9    | <b>Weather change</b> | The weather change from hot to cold suddenly makes the poultry die and the people get sick as well       | No difference            |                                  |

# AI Understanding

## ■ All farmers have heard about AI

### ■ Most feel they understand how to prevent AI

- Clean the cage, wash hands with soap or detergent, bury or burn birds feathers, use gloves or wear mask while touching the birds...etc

### ■ And feel they can identify the symptoms

- The majority of farmers mentioned sudden death and sleepiness of chickens as the main symptoms of AI
- Some mentioned other symptoms including loss of appetite, saliva flow, white faeces, dark faeces, ruffled feathers, diarrhea, pale face, swollen head and intestinal worms coming out from the eyes and mouth...

### ■ Only a few mentioned anything about the spread of AI to humans spontaneously, such as a human can die in 1 week if treatment not received (it seems there may be some confusion with their understanding of other diseases such as dengue fever, typhoid)

- Recently media has been very strong in broadcasting about AI

- **All farmers mentioned chickens and ducks are able to catch AI and then it can spread to geese, wild birds and ‘fly’ birds**
- **When prompted, farmers agree on the seriousness of the issue due to its impact on money and time**
  - *“It is a serious problem because the poultry will die and effect to the household's income and the time that the household spends on taking care of those poultry”*
- **... and their life**
  - *“It is a serious problem because humans can die because of AI and the family will spend much money and time to take care of that person”*
- **It must be noted however that none spontaneously rank AI at the top level of their concerns**
  - AI has not happened in their community so they seem distanced from it
  - Their experience of chickens and ducks dieing in large amounts has been because of the weather, especially in Kandal province

## ■ Some key differences among sector 3 and 4 farmers

- The small commercial farmers are more knowledgeable about poultry raising and AI; can show and tell they are more careful with their poultry than backyard farmers
- Small commercial farmers use medicine to disinfect the cage while the backyard farmers do not
- Small commercial farmers have applied treatment to their poultry, eg. mixed Paracetamol with water for their chickens, whilst the backyard farmers have not
- The small commercial poultry farmers have paid much attention to watching television or listening to the radio about AI. The animal health workers have also come to teach the small commercial poultry farmers (more often than the backyard poultry farmers) and they have paid attention to what they have been taught
- The backyard poultry farmers say they will not eat the dead chickens while the small commercial farmers try to sell out the sick or dead chicken to the market and roasted chicken sellers

## ■ No key differences among provinces

- There has been no AI outbreak in the target provinces covered
- It is the NGO's in this study who are aware of AI outbreaks in Cambodia:
  - *"there are some AI outbreaks happened that caused 7 Cambodian people to die- 4 in Kampong Speu, 1 in Kampong Cham, 1 in Prey Veng and another 1 in Kampot"*

- Ranking AI with other concerns (both overall and health concerns)

## General Concerns

1. Education of children
2. Income
3. Taking care of family's daily needs for food, clothing
4. Preventing illness in yourself or family
5. **Avian Influenza**
6. Making sure a sick person can be cared for
7. Occupation
8. Poultry raising

## Health Concerns

1. Preventing illness in yourself or family
2. **Avian Influenza**
3. Making sure a sick person can be cared for
4. Chemical elements on the food
5. General disease
6. Not clean water
7. Sanitation
8. Crippled children

■ **When ranking AI amongst overall general and health concerns, it is ranked under the top 4 overall concerns, whilst amongst health concerns it is ranked second place behind preventing illness in yourself or family**

# List of key reasons **to be concerned** and key reasons for not being concerned about AI

## ■ **Keys reasons to be concerned about AI**

- ❖ AI can cause poultry and humans to die
- ❖ AI can spread from one poultry to another
- ❖ No medicine to cure AI
- ❖ Humans will die after eating dead chicken (due to AI)
- ❖ AI spreads from poultry to poultry and from poultry to humans very fast
- ❖ AI will effect to the family's income and life

## ■ **Farmers can come up with few good reasons to be concerned about AI**

- **Primarily the economic impact but also the risk of becoming sick**

# List of reasons to be concerned and reasons for not being concerned about AI

## ■ Key reasons not to be concerned about AI

- ❖ Never seen AI happen in their area
- ❖ We can avoid AI by wearing gloves or mask
- ❖ Chickens dieing is natural; it is not a cause of AI
- ❖ AI does not spread to humans through touching poultry
- ❖ AI is preventable

■ **...fundamentally...they have not seen it to believe it and feel it is preventable and avoidable**

■ **Thus none of the messages about how serious it is, how fast it spreads or how quick death is can really convince them**

■ *“AI effects to the family's income and it spreads from poultry to poultry and from poultry to human both young and old very fast and cause to die after caught 1 week but it be able to prevent”.*

■ *“AI is a disease which is more serious than other diseases but it is preventable. If the family already has good income and prevention from the illness, we will not catch AI”*

# AI Understanding Amongst Stakeholders (1)

## *Endorsing the Stance of Farmers*

### ■ Similar feelings amongst...

#### ■ Central Government Officials

- *“AI is not a big concern in general but it is a great health concern”*
- *“People have never seen AI happen in their area”*
- *“They will not eat sick or dead chickens if they have enough food or proper income”*

#### ■ Village / Opinion Leaders

- AI is a medium concern amongst both general and health concerns
  - *“The people know that AI is a serious disease that is able to cause the humans to die but they are not care much about AI because they never seen any AI happen in their village or commune”*

# AI Understanding Amongst Stakeholders (2)

## Endorsing the Stance of Farmers

- **Human Health Worker (district level)**

- *“AI is at the 3rd concern under income in general concerns and at the 2nd concern under the dengue fever in health concerns because the people are afraid of AI coming to their area but AI has not yet happened in their area”*

- **Human Health Worker (local level)**

- *“AI is not a much concern in both general and health concerns. The people think that they will not catch AI if they already have a good health and sanitation because the prevention of AI is the way of living with sanitation such as washing hands with soap before eating, clean the cage, cleaning the cooking equipment after cooking the chicken...etc.”*

- **The human health workers are close to the reality of where farmers’ concerns are**
- **They note fear not being so tangible without the actual experience**
- **Likewise an interesting point is that the ‘normalcy’ of the AI preventative actions reinforces a lower level of concern**

# AI Understanding Amongst Stakeholders (3)

## Great Concern of Animal Health Workers

- **Animal Health Worker (district level)**

- *“AI is at the top of both general and health concerns because AI is a serious disease which spreads very fast, difficult in treatment and it causes people to die very fast”*

- **Animal Health Worker (local level)**

- *“AI is the top of both general and health concern because AI spreads from poultry to humans and the humans will die because of AI and the people have heard there are some people in other countries die because of AI”*

- **The thinking of animal health workers is clearly out of step with their beneficiaries**
- **Their concern is not translating in to real concern from the farmers**

# Prevention & Response

# Prevention

- **All agree they have to prevent AI, “because people in their family could die of AI”**
- **They are able to list out the following signs and symptoms of AI in humans**
  1. Cough
  2. Fever
  3. Tightness of chest
  4. Muscle ache
  5. Difficulty breathing
  6. Tiredness
  7. Pain (Headache)
  8. Like other flu
- **Main sources of information about AI prevention** (amongst stakeholders) are from the television, radio and workshop...
- **The farmers have heard about AI and the preventions of it through** Television, Radio, human health worker, animal health worker, village leader and word of mouth

- Tabulated in the appendix are the responses of farmers to the specific AI measures
- There were differences across provinces, thus these have been broken out

## **The common themes are:**

- Those measures related to basic hygiene such as washing hands or keeping children away from poultry (an existing practice anyway) are adopted or reinforced as beneficial to healthy living
- Those with a small amount of chickens do not believe AI can affect them and are thus less likely to act on preventative measures
- They are also less likely to have the physical space to accommodate some of the suggested measures, eg. penning
  - **Or the funds to do so**
- Lack of money, equipment, know how and being convinced as to the importance of the preventative measure is also a key theme
- When it comes to preventative measures such as changing clothes after handling chickens, or asking visitors to remove shoes etc, this is where barriers such as ingrained habits, it is too complicated to do so/they are too busy to do so come up as key reasons not to act
- This is consistent across the countries studied

# Understanding Stakeholder Roles

# Central Government Officials

## *Key understanding about their roles*

- **Deemed central government officials and village / opinion leaders take good care of their people in their community, and even moreso focus on health and health issues**
- **There are some key areas that they mainly focus on:**
  - **Raising awareness and knowledge about AI in general**
    - Providing information about AI
      - such as what is AI, the symptoms and prevention of AI
  - **Taking care of some serious issues relating to health for the community**
    - Providing information and consultation about Tuberculosis, Children's health and other diseases
    - Control and evaluate the performance on children's health, STD (Sexual Transmitted Disease) and Tuberculosis
    - **Solve all requests about health from people in community**
      - When people ask for vaccination (7 diseases), the people want to get information about Tuberculosis and other diseases. To cure children by preventative injections and distribute medicines from Ministry of Health (MoH) to the sick people plus free health checking
    - **Keep track of people's diseases then report to the government and health worker**
  - **Cooperate and support NGO's to perform any project in the community**
  - **And taking care of the education system and human resource in the community**
    - Managing and evaluating the performance
      - i.e. in case there is not enough teachers while the number of students keep increasing, the GO's have to swap teachers from other schools within the district to help and request to have more teachers in the district

# Village / Opinion Leaders

## *Key understanding about their roles*

- Seems village/ opinion leaders are closer to the community, they take care of the day-to-day activities of the community
  
- There are some key areas that they mainly focus on:
  - **Providing updated information to the people through the village meeting about health care**
    - i.e. how to prevent themselves from illness / inform people about government policy
  - **Recommend poor people to the hospital (for free of charge) whenever they have health issue/s**
    - Issuing health recommendation letter ...
  - **Consult people on how to earn more money and feed the family**
    - Guide people to raise animals for more income beside of growing rice
    - Advise people to get loan from NGO's with lowest interest rate to do business such as selling grocery, raising animals or growing vegetables.
    - Dig ponds for raising fish if have appropriate acreage of land and advise people to sell water lily from the river/lake or pond behind the village to sell
  - **Cooperate with the NGO's to come to educate the people on many topic such as HIV/AIDS, dengue fever, AI...etc**
  - **To cooperate with the local authority (policeman) to take care of security in the village**
  - **To solve any problems happen in the village such as land, animal raising...etc.**

# Health Workers / Animal Workers

## *Key understanding about their roles*

### Human Health Workers



- **Responsible to inject the vaccination (7 diseases) to the people, especially the poor people**
  - Provide medicine, injections
  - Physically do the vaccination
  - ... and free of charge (for poor people)
- **Educate people about Tuberculosis and other diseases such as (Avian Influenza...etc)**
  - Face to face training
- **Issues health recommendation letter for people (to go to the hospital)**
  - Just same as GO's
- **To do the health check for people in the community**

# Health Workers / Animal Workers

## *Key understanding about their roles*

### Animal Health Workers



- **Keep track of and solve any problem which happens to farmer's animals or poultry**
  - Do some treatment if disease happens to farmer's poultry
- **To inject the vaccination for the farmer's animal/poultry**
  - In case the farmers in community ask for (injection), farmers have to pay for the injection
  - And free of charge for poor people
- **Provide information about the animal/poultry disease and prevention to the farmers**
  - Face to face
  - They distribute leaflets, brochures, guideline tabloids and other small books related to animal diseases to the villagers.

# Further Understanding Animal Workers

## *Problems they face to and how they can help*

### Animal health Workers

#### Problems people usually face

- People do not have a standard of raising or feeding animal/poultry and always ask for training courses
- Many cows died because of variola and poultry chicken/hen/rooster and ducks died as well
- The farmers have no disinfectant medicine and equipment to disinfect the poultry's cages

#### What can animal workers do to help

- Raise the issues to the local authority to prepare and help farmers
- Provide ideas and consult the farmers for self-treatment
- Open some certain training courses (i.e. how to run their business in relation to raising poultry/ animal) - if people in the community request
- Advise the farmers to contact appropriate agriculture professional person as required
- Identify the disease of animal/poultry and help on treatment.

# Health Workers / Animal Workers

## Some key differences

### Human Health Workers

District level vs local level

- The local level human health workers are in charge of operations directly with the people in villages and communes while the central district level health workers are in charge of operations in the health center and go to the community on some occasions only
- The central district level human health workers respond to solve the problems which local level human health workers can't solve

Between provinces

- No cross differences between provinces

### Animal health Workers

- The central district level takes a more overall role compared to local level i.e. provides updated information relating to the animal or poultry diseases while the local level actually operates directly to people in the community. The central district level animal health workers respond to solve the problems which local level animal health workers can't solve.

- Local level of animal health workers in Kandal are at lower knowledge of AI than the Pursat and Kampot
  - They are only aware of a few signs of AI, just heard AI when trained by FAO and CDSE organizations and just reiterate what told.

# Communication – Farmers

# Farmers Sources of Info

- Farmers have heard about AI through:
  - **television,**
  - **radio,**
  - **human health workers,**
  - **animal health workers and**
  - **word of mouth**
  
- **The source of information that is able to communicate to the most people about AI is Television (all have it/watch it)**
  
- **The most believable source of information for the people is animal health workers because they are specialized in animals, ie. experienced**

# Communication – Stakeholders

- **Stakeholders say there have been many campaigns dealing with AI: educating people about AI and its prevention from NGO's and government. The campaigns were:**
  - **Broadcasting about AI through television and radio**
  - **A car driving around the streets with speakers 'talking' about AI**
  - **The health workers of the health center doing a home visit to provide information about AI to people**
    - This is noted as a very effective media because *“people may have no time to come and join a meeting when they are busy doing their work”*. It is also mentioned that this activity provided a higher level of confidence to people because the person who is providing the information is a health worker and village leader that most of the people in the provinces are respect.
  - **NGO's** such as RACHA organization has come to educate and provide posters about AI
  - CEDAC organization has come to the village and asked the people come to join the meeting to talk about AI, providing posters and brochures about AI, and a VCD about AI that people can then play again at places where people gather, eg. at the pagoda. They have also provided a calendar about the prevention of AI and provided stickers about AI for people to stick on their bicycle or motorbike and even their homes. The campaign also educated the village leader and the village leader then spreads their knowledge to their people in the community

- **Through these campaigns people have understood what AI is and the prevention of AI**
- People have *“started to prevent themselves from AI by living in sanitation such as washing their hands with soap after touching the birds, bury or burn the bird's feathers and not eating sick or dead bird”*
  - However again it is noted that there are still some people raising poultry *“carelessly and eating sick or dead chickens because they don't believe that AI is a real disease”*
- **It should also be noted that some people say that the way of preventing AI is just similar to living in a sanitized way, such as washing hands with soap or cleaning the poultry's cage**
  - So they say they have decided to perform the prevention activities because *“at least those activities will help their family to live healthily even if no AI”*
    - So the *“people do not much believe in something that they never seen by their own eyes”*, yet this is evidence they see a relevance to their family's daily life
- **It is also noted that:**
  - Some people started to be afraid of AI when they heard that some humans died in Vietnam (the AI outbreak in Vietnam) because of AI

- **Some suggestions from Stakeholders that would make the campaigns more successful**
  - *“The campaign should start from schools to educate children about the prevention of AI and give them posters to bring back home for telling their family or neighbors. Through educating the children, we also dealing with parents as well by telling them to understand about AI”*
  - *“To have cooperation from government, NGOs and private sector because government has channels of distribution (village leader, local authority...etc) while NGO and private sector have money to support the activities”*
  - *“To educate and show the practice directly with the people in the community by animal health worker, NGO and local authority”*
  - *“Tell them in a ‘communistic’ way that: “you have a responsibility to other people's chickens if your chicken catches AI and spreads it to the others”*
  - *“To educate people with different activities according to the different kind of people they are. For commercial farmers, they need to be educated by the animal health workers on more detailed activities or prevention. For backyard poultry farmers they need to be educated about symptoms of AI and the basic preventions such as cleaning the cage, keeping the sick poultry away from healthy poultry...etc. And other people just provide them with information about an overview of AI through TV and Radio only”*

- **Suggested strongest/ best message to communicate about AI**
  - ❖ ***No medicine to cure AI***
  - ❖ ***AI can spread to humans***
  - ❖ ***Add in to current and future information the results of how many people have caught AI and death results***
  - ❖ ***Do not eat sick poultry because of AI***

# appendix

# AI Measures list- Farmers

# AI Measures list - Farmers

|                                     | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it   | What would help them to do it  |
|-------------------------------------|---|---|---|---|--|
| Never allowing poultry in the house | <p>Kandal: Most of people know and some not</p> <p>Pursat: Yes</p> <p>Kampot: Some people know and some are not</p> | <p>Kandal: Most of people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Kampot: Some people have done and Most are not</p> | <p>Kandal: broad land area, putting chicken away from children, enough tools and equipments to build cage. Can be transmitted disease throughout its dung</p> <p>Pursat: Enough large space to store ducks and chickens. being afraid of transmitted disease, keep chicken away as habitual because of smelling bad chicken dung. Easy to taking care of chicken and duck</p> <p>Kampot: bird is bird no need to stay with human and being afraid of disturb in the house</p> | <p>Kandal: Afraid of the thief, lack of money and there is only some poultry only</p> <p>Pursat: narrow space, chicken does not sleep in cage, they sleep on the top of tree. Need to spend money</p> <p>Kampot: Narrow space and the chicken has small amount which is easy to control and no need to have cage, lack of money</p> | <p>Kandal: To provide more information and equipment</p> <p>Pursat: To provide more information and equipment</p> <p>Kampot: To provide more information and equipment</p> |

# AI Measures list - Farmers

|   | Y/N aware of it  | Y/N do it  | Likely to do. Why?  | Barriers to do it   | What would help them to do it   |
|---|--|--|---|---|---|
| Penning/fencing to prevent the spread of AI | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Most of people know and some not</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Most of people have done and some not</b></p> <p><b>Pursat: Most of people have done and some not</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: easy to put their food and easy to clean</b></p> <p><b>Pursat: Being afraid of other chickens coming in causing transmitted diseases. Yes because it guarantees safety and easy to clean and easy to give poultry food</b></p> <p><b>Kampot: To protect the chickens entering and others going out; that is the way of spreading disease, because have seen plenty of TV and Radio broadcasting for fencing to prevent the spread of AI</b></p> | <p><b>Kandal: Raising small amount of chickens</b></p> <p><b>Pursat: have to spend money to buy materials such nails, palm leaves...etc.</b></p> <p><b>Kampot: no money and ability to do, already have cage and narrow space</b></p> | <p><b>Kandal: To advise people to do it even if they are raising small amounts of chicken, they also able to catch AI</b></p> <p><b>Pursat: To provide equipment for building the fencing</b></p> <p><b>Kampot: If any organization or people can help in fencing</b></p> |

# AI Measures list - Farmers

|                                 | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it   | What would help them to do it  |
|---------------------------------|---|---|--|---|--|
| Disinfecting the cage regularly | <p><b>Kandal:</b> Most of people know and some not</p> <p><b>Pursat:</b> Most of people know and some not</p> <p><b>Kampot:</b> Yes</p> | <p><b>Kandal:</b> Most of people have done and some not</p> <p><b>Pursat:</b> Some people have done and Some not</p> <p><b>Kampot:</b> Some people have done and Some not</p> | <p><b>Kandal:</b> can be transmitted disease throughout its dung and have enough equipment to kill virus and disease</p> <p><b>Pursat:</b> being afraid of transmitted disease to chickens and ducks and or humans and following the TV and Radio broadcasting, use the quick lime instead of medicine</p> <p><b>Kampot:</b> being afraid of illness or disease and unexpected events happening, eg. the lack of sanitation causing transmitted diseases</p> | <p><b>Kandal:</b> no medicine to disinfect</p> <p><b>Pursat:</b> difficulty in finding the medicine, and doctor is far away. No medicine, and do not know how to use it.</p> <p><b>Kampot:</b> no medicines, no money and especially do not know how to disinfect</p> | <p><b>Kandal:</b> donate the equipment and tools and medicine for disinfecting</p> <p><b>Pursat:</b> Provide equipment or medicine and training them in real work</p> <p><b>Kampot:</b> helping in additional training and providing equipment and tools</p> |

# AI Measures list - Farmers

|                                       | Y/N aware of it   | Y/N do it  | Likely to do. Why?  | Barriers to do it  | What would help them to do it   |
|---------------------------------------|---|--|---|--|---|
| Keeping ducks and chickens separately | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some people have done and Most are not</b></p> <p><b>Pursat: Some people have done and Most are not</b></p> <p><b>Kampot: Some people have done and Most are not</b></p> | <p><b>Kandal: broad land area, putting chickens away from children; enough tools and equipment to build cages. AI can be a transmitted disease throughout its dung</b></p> <p><b>Pursat: Easy to feed and take care; being afraid of transmitted diseases</b></p> <p><b>Kampot: duck should stay separately because it has a worse smell than chicken</b></p> | <p><b>Kandal: because narrow space and chicken always on the above cage, and duck always stay at the below cage</b></p> <p><b>Pursat: Narrow space, raising only chicken <u>or</u> duck</b></p> <p><b>Kampot: Do not have enough equipment, spend much money</b></p> | <p><b>Kandal: broad space and plenty of equipment and tools to separate</b></p> <p><b>Pursat: if having money to buy equipments and nails, it is easy to separate them</b></p> <p><b>Kampot: Provide more information and the equipment</b></p> |

# AI Measures list - Farmers

|   | Y/N aware of it   | Y/N do it  | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|---|---|--|--|--|--|
| Keeping new poultry away from old poultry for 2 weeks | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some people have done and Most are not</b></p> <p><b>Pursat: Some people have done and Most are not</b></p> <p><b>Kampot: Some people have done and Most are not</b></p> | <p><b>Kandal: new poultry is suspected of disease, they are so small so they have to stay in the cage, and avoid being bitten by the dog</b></p> <p><b>Pursat: not sure that new poultry has disease or not; being afraid of transmitted disease to the old poultry</b></p> <p><b>Kampot: because not sure that new poultry has disease or not</b></p> | <p><b>Kandal: very small amount of chicken feeding, lack of budget, still no safety, no new chickens coming in</b></p> <p><b>Pursat: never had new chickens coming in</b></p> <p><b>Kampot: never bought new poultry</b></p> | <p><b>Kandal: Provide more information and the equipment</b></p> <p><b>Pursat: Provide more information and the equipment</b></p> <p><b>Kampot: Provide more information and the equipment</b></p> |

# AI Measures list - Farmers

|   | Y/N aware of it | Y/N do it   | Likely to do. Why?   | Barriers to do it | What would help them to do it |
|---|-----------------|-------------|--|-------------------|-------------------------------|
| Washing hands with soap before and after taking care of poultry (i.e.. Handling birds or bird products) | Kandal: Yes     | Kandal: Yes | Kandal: Being afraid of transmitted disease and perfect sanitation kills the disease   | Kandal: None      | Kandal: None                  |
|   | Pursat: Yes     | Pursat: Yes |  | Pursat: None      | Pursat: None                  |
|   | Kampot: Yes     | Kampot: Yes | <p>Pursat: being afraid of transmitted diseases from chicken, being afraid of messiness of chicken dung and lice transmitting disease to their children</p> <p>Kampot: because need good sanitation, and being afraid of transmitted disease</p> | Kampot: None      | Kampot: None                  |

# AI Measures list - Farmers

|   | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it   |
|---|---|---|--|--|---|
| Using mask and gloves when handling poultry | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some have done and most are not</b></p> <p><b>Pursat: Most of people have done and some not</b></p> <p><b>Kampot: Most of people have done and some not</b></p> | <p><b>Kandal: Being afraid of messiness of chicken dung on the head, face and hands. Sometimes using scarf instead of mask</b></p> <p><b>Pursat: to protect our health, not to transmit disease through breathing</b></p> <p><b>Kampot: Following the advice of doctor and organization and especially veterinarian. Afraid of transmitted disease</b></p> | <p><b>Kandal: uncomfortable to breathe. If using scarf it can fall up and down</b></p> <p><b>Pursat: It is so complicated, never had AI before, habitually catching poultry with their hands; never had any problem</b></p> <p><b>Kampot: too lazy to do so; it is not a habit</b></p> | <p><b>Kandal: Provide more information about the advantage of this activity</b></p> <p><b>Pursat: To provide more information and material</b></p> <p><b>Kampot: To inform the dangers of not doing this activity</b></p> |

# AI Measures list - Farmers

|   | Y/N aware of it  | Y/N do it  | Likely to do. Why?   | Barriers to do it   | What would help them to do it   |
|---|--|--|--|---|---|
| Changing and washing clothes after taking care of poultry | <p><b>Kandal:</b> Most of people know and some not</p> <p><b>Pursat:</b> Most of people know and some not</p> <p><b>Kampot:</b> Most of people know and some not</p> | <p><b>Kandal:</b> Some people have done and Some not</p> <p><b>Pursat:</b> Some have done and most are not</p> <p><b>Kampot:</b> Most of people have done and some not</p> | <p><b>Kandal:</b> being afraid of messiness chicken dung on the head, face and hand which can be transmitted disease.</p> <p><b>Pursat:</b> being afraid of disease on the shirt</p> <p><b>Kampot:</b> being afraid of disease on the shirt and trousers. following the advice of doctor and organization and especially veterinarian.</p> | <p><b>Kandal:</b> as habit never changed, busy with business and give them the food as well.</p> <p><b>Pursat:</b> It is so complicated, spend time meanwhile having only a short touch or handling, no need to change.</p> <p><b>Kampot:</b> It is not habitual because so lazy.</p> | <p><b>Kandal:</b> Provide more information about the advantage of doing and disadvantage of not doing</p> <p><b>Pursat:</b> by using mask and glove instead of, people will do if AI outbreak</p> <p><b>Kampot:</b> Provide more information about the advantage of doing and disadvantage of not doing</p> |

# AI Measures list - Farmers

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it   | What would help them to do it   |
|--|---|---|--|---|---|
| Change clothes/shoes when coming from another farm or market | <p>Kandal: Most of people know and some not</p> <p>Pursat: Most of people know and some not</p> <p>Kampot: Most of people know and some not</p> | <p>Kandal: Most of people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Kampot: Some people have done and Some not</p> | <p>Kandal: being afraid of messiness chicken dung on the cloths from the market or farm.</p> <p>Pursat: It is habitual to change dress from market because being afraid of transmitted disease.</p> <p>Kampot: being afraid of transmitted AI disease.</p> | <p>Kandal: never had germ or any bacteria before, it is not habitual</p> <p>Pursat: because I never entered to chicken selling market, and chicken never got sick before,</p> <p>Kampot: It is so complicated</p> | <p>Kandal: Provide more detail on the indirect effect of AI through clothes</p> <p>Pursat: Provide more detail on the indirect effect of AI through clothes</p> <p>Kampot: Provide more detail on the indirect effect of AI through clothes</p> |

# AI Measures list - Farmers

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it  | What would help them to do it   |
|--|---|---|---|--|---|
| Having visitors who enter the farm clean soles of their shoes, bicycle tires before entering | <p><b>Kandal:</b> Most of people know and some not</p> <p><b>Pursat:</b> Some people know and some are not</p> <p><b>Kampot:</b> Most of people know and some not</p> | <p><b>Kandal:</b> Some have done and most are not</p> <p><b>Pursat:</b> No</p> <p><b>Kampot:</b> No</p> | <p><b>Kandal:</b> without visitor come nearby, nobody can enter except the owner, sometimes visitor only just quick visit. This to prevent of transmitted disease</p> <p><b>Pursat:</b> None</p> <p><b>Kampot:</b> None</p> | <p><b>Kandal:</b> It is so complicated, busy with doing business no time to tell visitor.</p> <p><b>Pursat:</b> never had visitor coming in nearby, as habit not to allow visitor coming in, and it is a family feeding, it is kind of discrimination and the visitor may not come again</p> <p><b>Kampot:</b> Never have visitor to come in the cage, have small amount of poultry and it looks discriminated</p> | <p><b>Kandal:</b> Broadcast more on TV and Radio about AI</p> <p><b>Pursat:</b> must be explained about dangerous event, and can be transmit disease to our chicken</p> <p><b>Kampot:</b> must be explained about dangerous event, and can be transmit disease to our chicken</p> |

# AI Measures list - Farmers

|  | Y/N aware of it   | Y/N do it  | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|--|---|--|--|--|--|
| Cleaning equipment, shoes, etc used for poultry management after every use | <p>Kandal: Most of people know and some not</p> <p>Pursat: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Most of people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Kampot: Yes</p> | <p>Kandal: not to have virus attack because being afraid of transmitted disease to chicken and human.</p> <p>Pursat: being afraid of transmitted virus, being afraid of messiness equipment that can have disease affected.</p> <p>Kampot: To protect disease and being afraid of transmitted disease.</p> | <p>Kandal: never had germ or any virus, and never had AI before, have no enough time to clean</p> <p>Pursat: before chicken never affected by AI disease</p> <p>Kampot: None</p> | <p>Kandal: Providing the soap</p> <p>Pursat: Broadcast more on TV and Radio about AI</p> <p>Kampot: None</p> |

# AI Measures list - Farmers

|  | Y/N aware of it | Y/N do it   | Likely to do. Why?  | Barriers to do it | What would help them to do it |
|--|-----------------|-------------|---|-------------------|-------------------------------|
| Not letting children come in to contact with birds | Kandal: Yes     | Kandal: Yes | Kandal: children listen to elder carefully, being afraid of transmitted virus according to the TV, radio and poster about AI  | Kandal: None      | Kandal: None                  |
|  | Pursat: Yes     | Pursat: Yes | Pursat: not to touch chicken because being afraid of AI, chicken has messiness body, having dust, dirty on body causing disease and following the TV and Radio broadcasting | Pursat: None      | Pursat: None                  |
|  | Kampot: Yes     | Kampot: Yes | Kampot: To protect disease because being afraid of transmitted disease.   | Kampot: None      | Kampot: None                  |

# AI Measures list - Farmers

|  | Y/N aware of it  | Y/N do it  | Likely to do. Why?   | Barriers to do it   | What would help them to do it                               |
|--|--|--|--|---|---|
| Washing hands before handling/preparing any food for self or the family to eat | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: To protect from transmitted disease, little revenue, children always listen to elder because being afraid of transmitted disease.</p> <p>Pursat: It is habitual to have good sanitation because being afraid of dirty on hand and foot causing disease.</p> <p>Kampot: In order to have good sanitation, and being afraid of transmitted AI</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: None</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: None</p> |

# AI Measures list - Farmers

|  | Y/N aware of it  | Y/N do it  | Likely to do. Why?  | Barriers to do it   | What would help them to do it                               |
|--|--|--|---|---|---|
| Not eating duck or geese blood pudding | <p>Kandal: Most of people know and some not</p> <p>Pursat: Most of people know and some not</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: being afraid of germ or virus can be caused illness because of children not to listen to elders.</p> <p>Pursat: being afraid of transmitted disease because of rare food still have germ or virus.</p> <p>Kampot: It has strong smell and it can have germ or virus transmitted to us.</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: None</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: None</p> |

# AI Measures list - Farmers

|                                 | Y/N aware of it | Y/N do it                                     | Likely to do. Why?   | Barriers to do it                          | What would help them to do it   |
|---------------------------------|-----------------|---|--|--|---|
| Not eating birds that fall dead | Kandal: Yes     | Kandal: Yes                                   | Kandal: being afraid of disease, because upon broadcasting not to eat dead chicken   | Kandal: None                               | Kandal: None  |
|                                 | Pursat: Yes     | Pursat: Yes                                   |  | Pursat: None                               | Pursat: None  |
|                                 | Kampot: Yes     | Kampot: Most of people have done and some not | <p>Pursat: being afraid of transmitted disease because died chicken can have virus. Not to spread virus or disease according to the TV broadcasting</p> <p>Kampot: being afraid of being sick chicken and sold to the grilled chicken sellers while it is sick or fall to death.</p> | Kampot: no problem if it is well-done food | Kampot: Provide more broadcasting about the disadvantage of eating and selling to other |

# AI Measures list - Farmers

|                                | Y/N aware of it  | Y/N do it  | Likely to do. Why?  | Barriers to do it   | What would help them to do it  |
|--------------------------------|--|--|---|---|--|
| Not eating birds that are sick | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Kampot: Most of people have done and some not</p> | <p>Kandal: being afraid of transmitted disease into the body</p> <p>Pursat: being afraid of transmitted virus, sick chicken can transmit disease to human, being afraid of AI transmitted causing human death according to the TV broadcasting</p> <p>Kampot: being afraid of disease transmitted from chicken and sold to the grilled chicken sellers while it is sick or fall to death.</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: no problem to eat because it is so well-done</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Kampot: Provide more broadcasting about the disadvantage of eating and selling to other</p> |

# AI Measures list - Farmers

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it   |
|--|---|---|--|--|---|
| Seeking care from proper health care within 48 hours for symptoms that match the formal definition for symptoms for AI in humans | <p>Kandal: Some people know and some are not</p> <p>Pursat: Most of people know and some not</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and Some not</p> <p>Pursat: No</p> <p>Kampot: No</p> | <p>Kandal: being afraid of uncured disease, and being afraid of serious disease.</p> <p>Pursat: None</p> <p>Kampot: None</p> | <p>Kandal: never had AI disease</p> <p>Pursat: lack of vehicle, never had AI disease, and difficulty in meeting doctor</p> <p>Kampot: Never had AI disease</p> | <p>Kandal: should be had a broadcasting service.</p> <p>Pursat: people will seek care from proper health care if AI outbreak</p> <p>Kampot: Provide more information about AI for pre-prepare</p> |

# AI Measures list - Farmers

|  | Y/N aware of it  | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it   |
|--|--|---|--|--|---|
| Reporting an event via proper communication channels that might indicate an outbreak of human AI infection | <p><b>Kandal: Most of people know and some not</b></p> <p><b>Pursat: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some have done and most are not</b></p> <p><b>Pursat: A few have done and most are not</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: being afraid of AI disease because it can cause people to die. It is very easy because it just only speak from one mouth to another.</b></p> <p><b>Pursat: Because of being afraid of transmitted disease to other human.</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: commune chief and village leader living so far distant and on the other hand, never had AI disease before.</b></p> <p><b>Pursat: just heard through TV and Radio broadcasting but before never had AI disease.</b></p> <p><b>Kampot: Never had AI outbreak</b></p> | <p><b>Kandal: must be provided the AI news broadcasting</b></p> <p><b>Pursat: Provide more information and the communication channel to the people</b></p> <p><b>Kampot: Provide more information and the communication channel to the people</b></p> |

# AI Measures list - Farmers

|   | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it   | What would help them to do it   |
|---|---|---|---|---|---|
| Reporting possible AI outbreaks amongst poultry via proper communication channels | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some have done and most are not</b></p> <p><b>Pursat: Some people have done and Most are not</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: being afraid of transmitted disease to human, and it is so dangerous. The village leader is very near, easy to inform him</b></p> <p><b>Pursat: being afraid of transmitted disease from poultry to human.</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: Never had AI before</b></p> <p><b>Pursat: just heard through TV and Radio broadcasting but before never had AI disease.</b></p> <p><b>Kampot: Never had AI outbreak</b></p> | <p><b>Kandal: if village leader and commune branch nearby</b></p> <p><b>Pursat: Provide more information and the communication channel to the people</b></p> <p><b>Kampot: Provide more information and the communication channel to the people</b></p> |

## AI Measures list- Stakeholders

the feedback from Stakeholders  
reinforces the farmers own response

# AI Measures list - Stakeholders

|                                     | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it  | What would help them to do it   |
|-------------------------------------|---|---|---|--|---|
| Never allowing poultry in the house | <p>Kandal: yes</p> <p>Pursat: Most of people know and some not</p> <p>Phnom Penh: Most of people know and some not</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Phnom Penh: Most of people have done and some not</p> <p>Kampot: No</p> | <p>Kandal: having a large space</p> <p>Pursat: because of having a large space, have ever put chicken and duck under the house and put them separately</p> <p>Phnom Penh: preventing of AI and being afraid of stealing</p> <p>Kampot: None</p> | <p>Kandal: Narrow space, have not seen AI</p> <p>Pursat: people have ever put under the house as habit, free chicken elsewhere, so complicated it can be spent much time, no space to raise poultry</p> <p>Phnom Penh: never practiced because nothing bad happened to people</p> <p>Kampot: People are so lazy because people did not see by eyes</p> | <p>Kandal: to provide additional education and broadcasting</p> <p>Pursat: advise to people who have chicken free elsewhere to understand how dangerous AI is, because chicken can transmit disease from one place to other place</p> <p>Phnom Penh: providing TV and radio broadcasting broadly, donate people equipment and tools to build cage far away from home</p> <p>Kampot: advise to people how good health and sanitation is.</p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|---|---|---|--|--|--|
| Penning/fencing to prevent the spread of AI | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Some people know and some are not</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: No</b></p> <p><b>Pursat: Most of people have done and some not</b></p> <p><b>Phnom Penh: Most of people have done and some not</b></p> <p><b>Kampot: Some people have done and some not</b></p> | <p><b>Kandal: None</b></p> <p><b>Pursat: Being afraid of chicken loss and afraid of chicken eating different food will cause transmitted disease, having strong net and a large space to feed</b></p> <p><b>Phnom Penh: preventing of AI and being afraid of stealing</b></p> <p><b>Kampot: to prevent chicken not to free outside</b></p> | <p><b>Kandal: Narrow space and never had AI</b></p> <p><b>Pursat: because have a small amount of chicken, never practice before because never had AI outbreak, being afraid of thief</b></p> <p><b>Phnom Penh: lack of budget, neglect to practice, and since so far people free their chicken elsewhere naturally because never had AI, AI had never occurred although people did not practice.</b></p> <p><b>Kampot: people are so lazy because people here did not have fencing</b></p> | <p><b>Kandal: providing TV and radio broadcasting broadly, donate people equipment and tools to build cage far away from home</b></p> <p><b>Pursat: provide more education how to prevent and provide them equipments and tools.</b></p> <p><b>Phnom Penh: explain directly to people at each family because there are least people who did not practice</b></p> <p><b>Kampot: people never seen AI by their eyes, and should educate more to them</b></p> |

# AI Measures list - Stakeholders

|                                 | Y/N aware of it  | Y/N do it  | Likely to do. Why?  | Barriers to do it  | What would help them to do it  |
|---------------------------------|--|--|---|--|--|
| Disinfecting the cage regularly | <p><b>Kandal:</b> Some people know and some are not</p> <p><b>Pursat:</b> Some people know and some are not</p> <p><b>Phnom Penh:</b> Most of people know and some not</p> <p><b>Kampot:</b> Some people know and some are not</p> | <p><b>Kandal:</b> No</p> <p><b>Pursat:</b> Most of people have done and some not</p> <p><b>Phnom Penh:</b> Some people have done and Most are not</p> <p><b>Kampot:</b> Some people have done and some not</p> | <p><b>Kandal:</b> None</p> <p><b>Pursat:</b> To disinfect some disease transmit to chicken and duck, this village has veterinarian explaining how to disinfect</p> <p><b>Phnom Penh:</b> AI expert to disinfect for them</p> <p><b>Kampot:</b> not to allow disease transmit to chicken</p> | <p><b>Kandal:</b> No enough equipments or medicine</p> <p><b>Pursat:</b> imitating to each other, if one practice the another one will follow, do not know where to buy medicine, and do not know to disinfect</p> <p><b>Phnom Penh:</b> Because never had any virus so far and no medicine to disinfect</p> <p><b>Kampot:</b> people did not understand clearly</p> | <p><b>Kandal:</b> encourage to them and provide them as model</p> <p><b>Pursat:</b> explain to people how to disinfect and how to use disinfected medicine, advise to people how dangerous not being disinfected is</p> <p><b>Phnom Penh:</b> provide them medicine, helping them to disinfect directly, especially should be experts disinfect directly at their home as like Ministry of Health make a campaign against Dengue</p> <p><b>Kampot:</b> advise more to them</p> |

# AI Measures list - Stakeholders

|                                       | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it  | What would help them to do it   |
|---------------------------------------|---|---|---|--|---|
| Keeping ducks and chickens separately | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Most of people have done and some not</b></p> <p><b>Pursat: Most of people have done and some not</b></p> <p><b>Phnom Penh: Some people have done and some not</b></p> <p><b>Kampot: Some people have done and some not</b></p> | <p><b>Kandal: A large space of land and being afraid of transmitted disease</b></p> <p><b>Pursat: being afraid of transmitted disease from one to another, and being afraid of chicken died</b></p> <p><b>Phnom Penh: being afraid of AI, and people killed suspicion chicken which can have AI</b></p> <p><b>Kampot: because chicken can be toxic with duck dung</b></p> | <p><b>Kandal: Narrow space and no enough equipment</b></p> <p><b>Pursat: before never had AI outbreak, never practiced although having TV and radio broadcasting</b></p> <p><b>Phnom Penh: it is habitual to free chicken elsewhere because never had any virus affected</b></p> <p><b>Kampot: it is difficult to build a few cage</b></p> | <p><b>Kandal: Provide plastic bags to put surrounding, and should have budget as well</b></p> <p><b>Pursat: Provide more education and additional broadcasting</b></p> <p><b>Phnom Penh: introduce them about AI, and show how to prevent and explain how good sanitation is</b></p> <p><b>Kampot: provide more education and equipment</b></p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it   |
|---|---|---|--|--|---|
| Keeping new poultry away from old poultry for 2 weeks | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: Some people have done and some not</p> <p>Phnom Penh: Some people have done and some not</p> <p>Kampot: Some people have done and some not</p> | <p>Kandal: being afraid of transmitted disease</p> <p>Pursat: being afraid of damaging other property because new chicken can have disease transmit to old chicken</p> <p>Phnom Penh: People think that new poultry can have disease, and being afraid of transmitted disease</p> <p>Kampot: Being afraid of disease transmit from new chicken</p> | <p>Kandal: Never have new poultry</p> <p>Pursat: in the past put new and old chicken together because never had AI outbreak</p> <p>Phnom Penh: it is habitual to put new and old chicken together because never had any virus, because of narrow space people can not separate those chicken</p> <p>Kampot: people are so lazy</p> | <p>Kandal: If there is new poultry</p> <p>Pursat: Explain and advise to people understanding the dangers of AI virus with new poultry</p> <p>Phnom Penh: in order to change old habit of people should be explained to people about how dangerous new poultry is, should have administration procedure for people to practice</p> <p>Kampot: educate and train them</p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it | Y/N do it   | Likely to do. Why?  | Barriers to do it  | What would help them to do it  |
|---|-----------------|---|---|--|--|
| Washing hands with soap before and after taking care of poultry (i.e.. Handling birds or bird products) | Kandal: Yes     | Kandal: Yes                                       | Kandal: practice because chicken is so dirty, so nauseated and being afraid of transmitted disease<br><br>Pursat: according to TV broadcasting, sometimes have no soap but use ash instead of, and of course there is a lot of TV broadcasting everyday how dangerous while we touch poultry and being afraid of transmitted disease to family<br><br>Phnom Penh: people understand about their own sanitation and being afraid of transmitted disease according to TV and radio show<br><br>Kampot: in order to kill virus | Kandal: None   | Kandal: None   |
|   | Pursat: Yes     | Pursat: Yes                                       |   | Pursat: None   | Pursat: None   |
|   | Phnom Penh: Yes | Phnom Penh: Most of people have done and some not |   | Phnom Penh: sometimes people are lazy so they use only water | Phnom Penh: should be explained to people about how brutal AI is, when they are scared of AI they will start to practice |
|   | Kampot: Yes     | Kampot: Yes                                       |   | Kampot: None   | Kampot: None   |

# AI Measures list - Stakeholders

|   | Y/N aware of it   | Y/N do it  | Likely to do. Why?  | Barriers to do it  | What would help them to do it  |
|---|---|--|---|--|--|
| Using mask and gloves when handling poultry | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: Some people have done and some not</p> <p>Phnom Penh: Most of people have done and some not</p> <p>Kampot: No</p> | <p>Kandal: Being afraid of transmitted AI</p> <p>Pursat: being afraid of transmitted disease as like TV show</p> <p>Phnom Penh: Being afraid of disease transmitted from chicken, preventing disease by breathing and people understand AI by TV and radio broadcasting</p> <p>Kampot: None</p> | <p>Kandal: people do not understand clearly, some people have only a few chickens</p> <p>Pursat: as habit never practiced because never had AI disease, it is so complicated and loses time also</p> <p>Phnom Penh: AI never occurred so far, only small amount of people did not practice because AI did not happen so far</p> <p>Kampot: because loss of money, time and lack of budget to buy mask and never seen by their eyes</p> | <p>Kandal: understanding through TV and radio, and explain how dangerous AI is</p> <p>Pursat: education, provide information through TV broadcasting and educate directly for each family</p> <p>Phnom Penh: should be explained for those people who do not understand about how dangerous AI is</p> <p>Kampot: provide them education and provide them equipment</p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it  | Y/N do it   | Likely to do. Why?  | Barriers to do it   | What would help them to do it  |
|---|--|---|---|---|--|
| Changing and washing clothes after taking care of poultry | <p>Kandal: Some people know and some are not</p> <p>Pursat: Yes</p> <p>Phnom Penh: Most of people know and some not</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Phnom Penh: Yes</p> <p>Kampot: No</p> | <p>Kandal: practice because of messiness and afraid of transmitted disease</p> <p>Pursat: Afraid of disease because of having something bad on the shirt after handling poultry</p> <p>Phnom Penh: being afraid of messiness chicken dung causing disease</p> <p>Kampot: None</p> | <p>Kandal: do not understand clearly</p> <p>Pursat: mostly people that do not practice is feeding as like backyard poultry farmers, as habit before never had AI outbreak</p> <p>Phnom Penh: without any barriers</p> <p>Kampot: because loss of money and time, and people feed chicken a small amount</p> | <p>Kandal: advise and broadcast through TV for them</p> <p>Pursat: education, provide information through TV broadcasting and educate directly for each family</p> <p>Phnom Penh: should be explained to people how to prevent disease and virus</p> <p>Kampot: should come to educate once every month in the village</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it  | Y/N do it   | Likely to do. Why?  | Barriers to do it  | What would help them to do it  |
|--|--|---|---|--|--|
| Change clothes/shoes when coming from another farm or market | <p>Kandal: Most of people know and some not</p> <p>Pursat: Yes</p> <p>Phnom Penh: Some people know and Most are not</p> <p>Kampot: Yes</p> | <p>Kandal: Most of people have done and some not</p> <p>Pursat: Most of people have done and some not</p> <p>Phnom Penh: Some people have done and some not</p> <p>Kampot: No</p> | <p>Kandal: practice because of messiness and being afraid of transmitted disease</p> <p>Pursat: Being afraid of transmitted virus through clothes</p> <p>Phnom Penh: being afraid of AI transmit to family member</p> <p>Kampot: None</p> | <p>Kandal: people do not understand clearly</p> <p>Pursat: Feeding small amount of poultry, busy with doing business, lazy, loss of time, complicated, never had AI since so far</p> <p>Phnom Penh: people never practiced because AI never happened so far</p> <p>Kampot: Because loss money and time</p> | <p>Kandal: All member in the family must be educated to change dress and shoes through TV broadcasting</p> <p>Pursat: Broadcasting, education and provide opinion directly to those people who do not practice, if those people are feeding for sale should be explained at the place of chicken and duck farming</p> <p>Phnom Penh: should be explained and broadcasted for those people who did not practice</p> <p>Kampot: should come to educate once every month in the village</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it  | Y/N do it  | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|--|--|--|--|--|--|
| Having visitors who enter the farm clean soles of their shoes, bicycle tires before entering | <p>Kandal: Some people know and some are not</p> <p>Pursat: Some people know and some are not</p> <p>Phnom Penh: Most of people know and some not</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: No</p> <p>Phnom Penh: Some people have done and some not</p> <p>Kampot: Yes</p> | <p>Kandal: being afraid of new disease coming in and there are variety of medicine available at drug store</p> <p>Pursat: None</p> <p>Phnom Penh: Prevent transmitted disease</p> <p>Kampot: being afraid of transmitted virus</p> | <p>Kandal: People did not understand clearly, it looks like we are discriminated to the visitor and complicated</p> <p>Pursat: as habit never practiced before because never had AI before and it looks like we are discriminated to the visitor</p> <p>Phnom Penh: being afraid of visitor unhappy, and so far people never practiced because AI never happened</p> <p>Kampot: None</p> | <p>Kandal: Giving advice and TV broadcasting</p> <p>Pursat: broadcasting through village leader and every family in the village</p> <p>Phnom Penh: should be explained to people more, and should be shown the way to practice</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|--|---|---|--|--|--|
| Cleaning equipment, shoes, etc used for poultry management after every use | <p>Kandal: Some people know and some are not</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Some people have done and some not</p> <p>Pursat: No</p> <p>Phnom Penh: Most of people have done and some not</p> <p>Kampot: Yes</p> | <p>Kandal: to prevent their poultry from transmitted disease or any virus, being afraid of virus on the shoes</p> <p>Pursat: None</p> <p>Phnom Penh: Prevent transmitted disease, being afraid of disease on the equipments</p> <p>Kampot: being afraid of transmitted virus</p> | <p>Kandal: It is spend time, money and too complicated. Never have AI before.</p> <p>Pursat: before never had AI outbreak and never had bad thing happening for those people, people are so lazy to pay attention because they are busy with doing business</p> <p>Phnom Penh: They have never been sick and never had AI affected</p> <p>Kampot: None</p> | <p>Kandal: broadcasting through TV</p> <p>Pursat: Education, broadcasting, and provide equipment to people to use</p> <p>Phnom Penh: enhance and strengthen explanation to people, should be persuaded them to create how to prevent disease and to have good sanitation for human and poultry</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?  | Barriers to do it   | What would help them to do it   |
|--|---|---|---|---|---|
| Not letting children come in to contact with birds | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: according to TV broadcasting, being afraid of transmitted disease</p> <p>Pursat: being afraid of chicken being bitten, being afraid of germs and bacteria on the children's body because children easily get disease rather than elders</p> <p>Phnom Penh: preventing the transmitted virus because of children easily to transmit disease, and young children listen to elders</p> <p>Kampot: being afraid of transmitted disease</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Phnom Penh: None</p> <p>Kampot: None</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Phnom Penh: None</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it   | What would help them to do it   |
|--|---|---|--|---|---|
| Washing hands before handling/preparing any food for self or the family to eat | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: because of understanding of AI, and being afraid of transmitted disease</p> <p>Pursat: It is habitual to have good sanitation, being afraid of dirtiness causing serious health issues</p> <p>Phnom Penh: it is a good sanitation practice so far, not to have bad smell and dust causing any disease, being afraid of virus or germs on the hand</p> <p>Kampot: It is habitual to have good sanitation</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Phnom Penh: None</p> <p>Kampot: None</p> | <p>Kandal: education about sanitation and fork and spoon must be cleaned carefully</p> <p>Pursat: spread information and educate more about sanitation and prevention of disease</p> <p>Phnom Penh: should be explained, educated and broadcasted how to prevent other diseases</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it   | What would help them to do it   |
|--|---|---|--|---|---|
| Not eating duck or geese blood pudding | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: practicing because being afraid of chicken revenged on which if chicken having disease can kill human, so they do not eat rare meat</p> <p>Pursat: habit to have well-done food, nauseated and dislike a strong taste</p> <p>Phnom Penh: because people have ever heard through TV and radio, and education not to eat rare meat, being afraid of AI</p> <p>Kampot: according to TV and radio broadcasting being afraid of transmitted AI, never ate because it is so messiness</p> | <p>Kandal: None</p> <p>Pursat: None</p> <p>Phnom Penh: None</p> <p>Kampot: None</p> | <p>Kandal: TV broadcasting</p> <p>Pursat: educate more and spread information by TV and radio</p> <p>Phnom Penh: should be broadcasted by TV and radio broadly about AI</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|                                 | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it  | What would help them to do it  |
|---------------------------------|---|---|--|--|--|
| Not eating birds that fall dead | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Yes</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some people have done and some not</b></p> <p><b>Pursat: Some people have done and some not</b></p> <p><b>Phnom Penh: Most of people have done and some not</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Afraid of AI and other transmitted disease</b></p> <p><b>Pursat: being afraid of chicken having disease depending on TV and radio news, being afraid of transmitted diseases generally</b></p> <p><b>Phnom Penh: most of people have ever practiced because being afraid of transmitted virus and children took AI lesson to practice at home</b></p> <p><b>Kampot: being afraid of transmitted AI depends on broadcasting</b></p> | <p><b>Kandal: The people regret their chicken and they think just cook it till 100 °C it is safe to eat</b></p> <p><b>Pursat: Never had AI affected</b></p> <p><b>Phnom Penh: least people did not practice because AI never occurred since so far, most people are so poor, little/limited understanding of AI</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: TV broadcasting</b></p> <p><b>Pursat: TV and radio broadcasting, giving advice and explaining directly to each family, ie. door to door</b></p> <p><b>Phnom Penh: should be explained to those who did not practice how dangerous AI is</b></p> <p><b>Kampot: None</b></p> |

# AI Measures list - Stakeholders

|                                | Y/N aware of it   | Y/N do it  | Likely to do. Why?  | Barriers to do it   | What would help them to do it  |
|--------------------------------|---|--|---|---|--|
| Not eating birds that are sick | <p>Kandal: Yes</p> <p>Pursat: Yes</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: Yes</p> <p>Pursat: Some people have done and some not</p> <p>Phnom Penh: Yes</p> <p>Kampot: Yes</p> | <p>Kandal: because it can cause terrible health to the people who eat</p> <p>Pursat: being afraid of chickens having AI in accordance with TV and radio; before ate sick chickens but now do not eat because being afraid of transmitted disease</p> <p>Phnom Penh: most of people have always practiced because being afraid of transmitted virus and children took AI lesson to practice at home</p> <p>Kampot: according to TV and radio broadcasting being afraid of transmitted AI</p> | <p>Kandal: None</p> <p>Pursat: for those who did not understand clearly mostly poor people because they are so busy with doing business, and lack of food to eat</p> <p>Phnom Penh: least people did not practice because AI never occurred since so far, most people are so poor, little/limited understanding of AI</p> <p>Kampot: None</p> | <p>Kandal: TV broadcasting</p> <p>Pursat: TV and radio broadcasting, give advice and explain directly to each family</p> <p>Phnom Penh: should be explained to those who do not know how dangerous AI is</p> <p>Kampot: None</p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it   | Y/N do it   | Likely to do. Why?   | Barriers to do it   | What would help them to do it  |
|---|---|---|--|---|--|
| Seeking care from proper health care within 48 hours for symptoms that match the formal definition for AI in humans | <p><b>Kandal: No</b></p> <p><b>Pursat: Most of people know and some not</b></p> <p><b>Phnom Penh: Some people know and some are not</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: No</b></p> <p><b>Pursat: Some people have done and some not</b></p> <p><b>Phnom Penh: Some people have done and some not</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: Because people can find doctor, medicine, and easy to call to doctor</b></p> <p><b>Pursat: According to TV and radio broadcasting being afraid of transmitted AI to human</b></p> <p><b>Phnom Penh: being afraid of AI, most of people understand of AI by participating in seminar or meeting and how to check the symptom of AI</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: Never had AI affected</b></p> <p><b>Pursat: without vehicle, without money, if having serious disease people will go to see doctor</b></p> <p><b>Phnom Penh: some people live in the remote area and they thought that they did not get serious illness</b></p> <p><b>Kampot: Never had AI affected</b></p> | <p><b>Kandal: doctor come to check and diagnose at home, and commune doctor come to check at home as well</b></p> <p><b>Pursat: provide information about AI broadly, and explain and educate directly to each family</b></p> <p><b>Phnom Penh: should be explained, educated and trained to people how dangerous AI is, and to check the suspicious disease symptoms</b></p> <p><b>Kampot: Provide more information for them to be pre-prepared for any situation</b></p> |

# AI Measures list - Stakeholders

|  | Y/N aware of it  | Y/N do it  | Likely to do. Why?  | Barriers to do it   | What would help them to do it   |
|--|--|--|---|---|---|
| Reporting an event via proper communication channels that might indicate an outbreak of human AI infection | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Most of people know and some not</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Some people have done and some not</b></p> <p><b>Pursat: Some people have done and some not</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: having understanding of AI</b></p> <p><b>Pursat: nowadays if people suspect AI affected, people will report to village leader, being afraid of transmitted disease because having TV broadcasting</b></p> <p><b>Phnom Penh: because people have always heard about AI through TV and radio so if people have seen any symptom similar to AI they will report to communication channels</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: Never had AI affected</b></p> <p><b>Pursat: Never had AI affected</b></p> <p><b>Phnom Penh: people did not have emergency phone number, and they live far away from authority</b></p> <p><b>Kampot: Never had AI affected</b></p> | <p><b>Kandal: TV broadcasting and give advice</b></p> <p><b>Pursat: spread information, educate and explain to people reporting the emergency danger of AI</b></p> <p><b>Phnom Penh: should be broadcasted and enhance education broadly</b></p> <p><b>Kampot: Provide more information for them to be pre-prepared for any situation</b></p> |

# AI Measures list - Stakeholders

|   | Y/N aware of it  | Y/N do it  | Likely to do. Why?   | Barriers to do it   | What would help them to do it   |
|---|--|--|--|---|---|
| Reporting possible AI outbreaks amongst poultry via proper communication channels | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Most of people know and some not</b></p> <p><b>Phnom Penh: Yes</b></p> <p><b>Kampot: Yes</b></p> | <p><b>Kandal: Yes</b></p> <p><b>Pursat: Some people have done and some not</b></p> <p><b>Phnom Penh: Some people have done and some not</b></p> <p><b>Kampot: No</b></p> | <p><b>Kandal: people will report if chicken can not walk normally and its face becomes red and bruised and they are afraid the other poultry will die</b></p> <p><b>Pursat: nowadays if people suspect AI affected, people will report to village leader, being afraid of transmitted disease because having TV broadcasting</b></p> <p><b>Phnom Penh: people need to prevent the spreading of AI</b></p> <p><b>Kampot: None</b></p> | <p><b>Kandal: Never had AI affected</b></p> <p><b>Pursat: Never had AI affected</b></p> <p><b>Phnom Penh: people did not have emergency phone number, and they live far away from authority</b></p> <p><b>Kampot: Never had AI affected</b></p> | <p><b>Kandal: TV broadcasting and give advice</b></p> <p><b>Pursat: spread information, educate and explain to people to report the emergency danger of AI</b></p> <p><b>Phnom Penh: should be told to motor taxi driver to report AI outbreak to channels at any area</b></p> <p><b>Kampot: Provide more information for them to be pre-prepared for any situation</b></p> |

Thank you

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