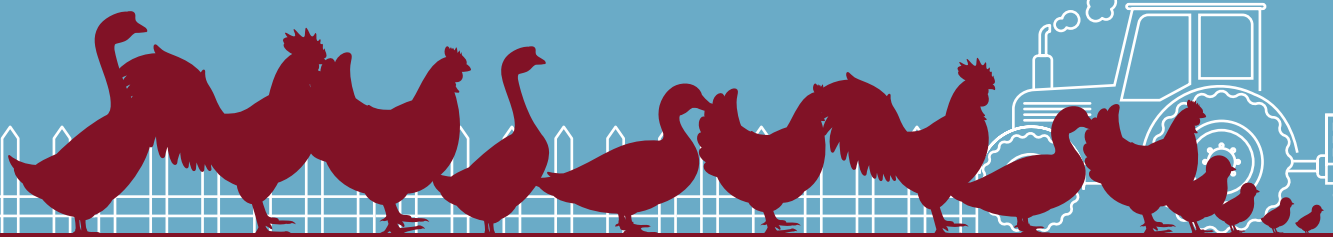




Food and Agriculture
Organization of the
United Nations

EVIDENCE-BASED RISK MANAGEMENT ALONG THE LIVESTOCK PRODUCTION AND MARKET CHAIN



GENDER ASSESSMENT ALONG THE POULTRY VALUE CHAIN



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Gender Assessment along Poultry Value Chain

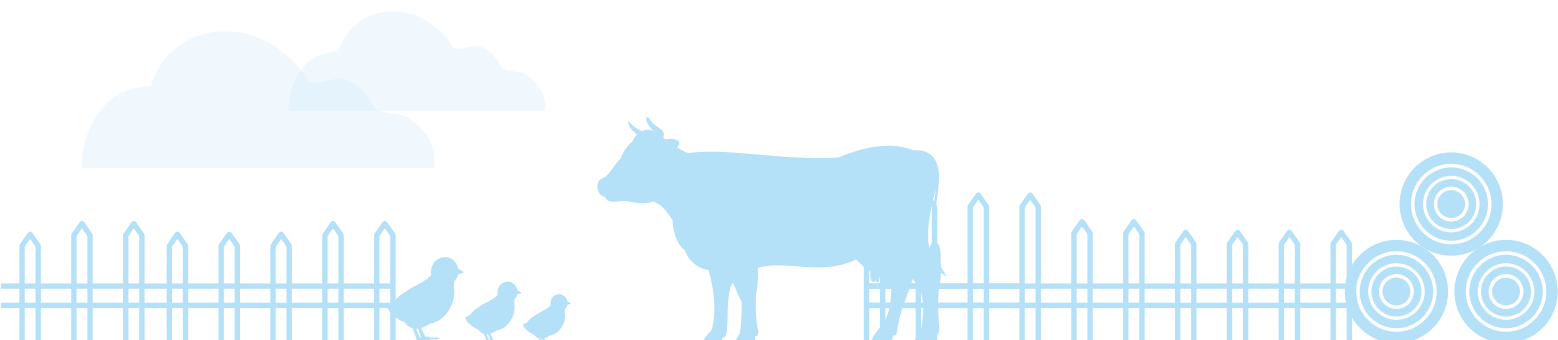


INTRODUCTION

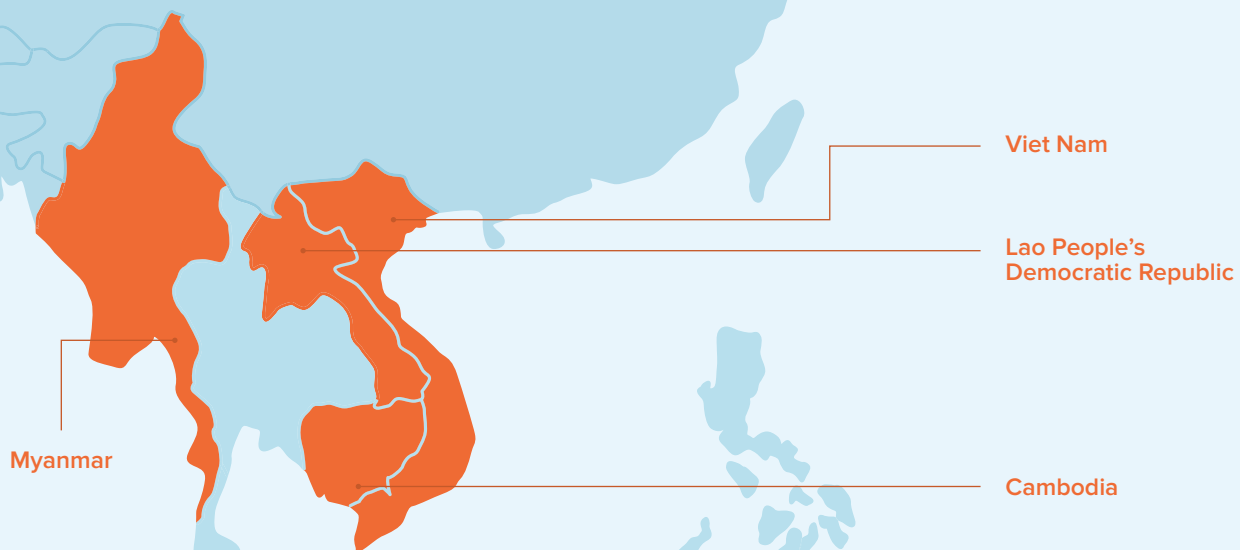
Southeast Asia continuously faces challenges and threats of Highly Pathogenic Avian Influenza (HPAI). While the number of outbreaks has gradually declined, there has been rapid evolution and emergence of new HPAI virus strains and clades, accompanied with wider geographical spread. During the past several years, lessons have been learned with respect to HPAI risk pathways and challenges in control, allowing us to collectively gather evidence to be able to formulate and pilot possible approaches for Avian Influenza (AI) risk mitigation. In response to the need of using and applying the collective evidence of the past years, the United States Agency for International Development (USAID) and Australia's Department of Foreign Affairs and Trade (DFAT) supported the Food and Agriculture Organization of the United Nation's (FAO) efforts towards risk management with the project "Evidence-based risk management along the livestock production and market chain".

The project focuses its activities in the following areas: 1) strengthening multi-sectoral coordination for effective management and control of HPAI and other emerging zoonotic influenzas and transboundary animal diseases (TADs); 2) strengthening epidemiology capacities and networking at regional level; and 3) strengthening evidence-based risk management along the livestock production and market chain.

While the project supports various regional activities, the activities relevant to risk management along the poultry production chain are carried out in four targeted countries - Cambodia, Lao People's Democratic Republic, Myanmar and Viet Nam. As one of the key stakeholders, women play an important role in risk mitigation efforts. Women are the custodians of traditional small-scale backyard poultry production and marketing, and gaps in their role in this operation often results in personal economic loss. In the case of managing HPAI and other diseases in general, it may also lead to greater communal loss caused by unmitigated disease spread. As custodians, women have a critical role to play, which is not always recognized and seldom drawn upon. This represents a missed opportunity. As a component of the implementation, a rapid assessment of gender roles was conducted in the project areas within the four countries to identify the role of women in poultry value chains and provide recommendations on strengthening their role in sustainable risk management initiatives.



Where we work



Map source: ©Shutterstock

This map is based on UN map no. 4170 rev. 17 February 2019

WOMEN'S ROLE IN THE DAUNKEO LBM VALUE CHAIN IN TAKEO, CAMBODIA

Main findings



Map source: ©Shutterstock

This map is based on UN map no. 4170 rev.
17 February 2019

Key findings

- The Daunkeo Live Bird Market (DLBM) sells two types of products, one is the poultry from small local Takeo farmers and the other is hybrid chickens from Kampong Speu large farms.
- Most of the poultry produced in Takeo are shipped to Phnom Penh while the remaining are sold in the DLBM. As Phnom Penh buyers reject sick birds, the collectors and traders only send healthy birds and the sick birds are sold in the DLBM.
- The women collectors and traders are particularly good at identifying sick birds, though they do not know what kind of illnesses the symptoms represent.
- The vendors are assisted by their family members to perform the slaughtering if the women are busy dealing with other customers.

- The vendors at the market are all women and they slaughter the Kampong Speu hybrid birds at the traders' facilities in town each morning before bringing them to the market. They buy the local poultry from the collectors and slaughter them on the spot upon the request of the customers.

Key players

- The key players in the Live Bird Market include the collectors who sell to the market vendors and the vendors who occupy the rented vending stations. Another associated player is the traders who sell Kampong Speu chickens to the vendors and provide free slaughtering facilities to them.

Behavioural drivers of risky attitudes/actions

- The traders who take the Takeo poultry to sell in Phnom Penh reject any sick birds. Thus, the collectors sell the sick birds to the vendors in the Daunkeo Live Bird Market, and to the street food vendors who look for bargains in sick birds.

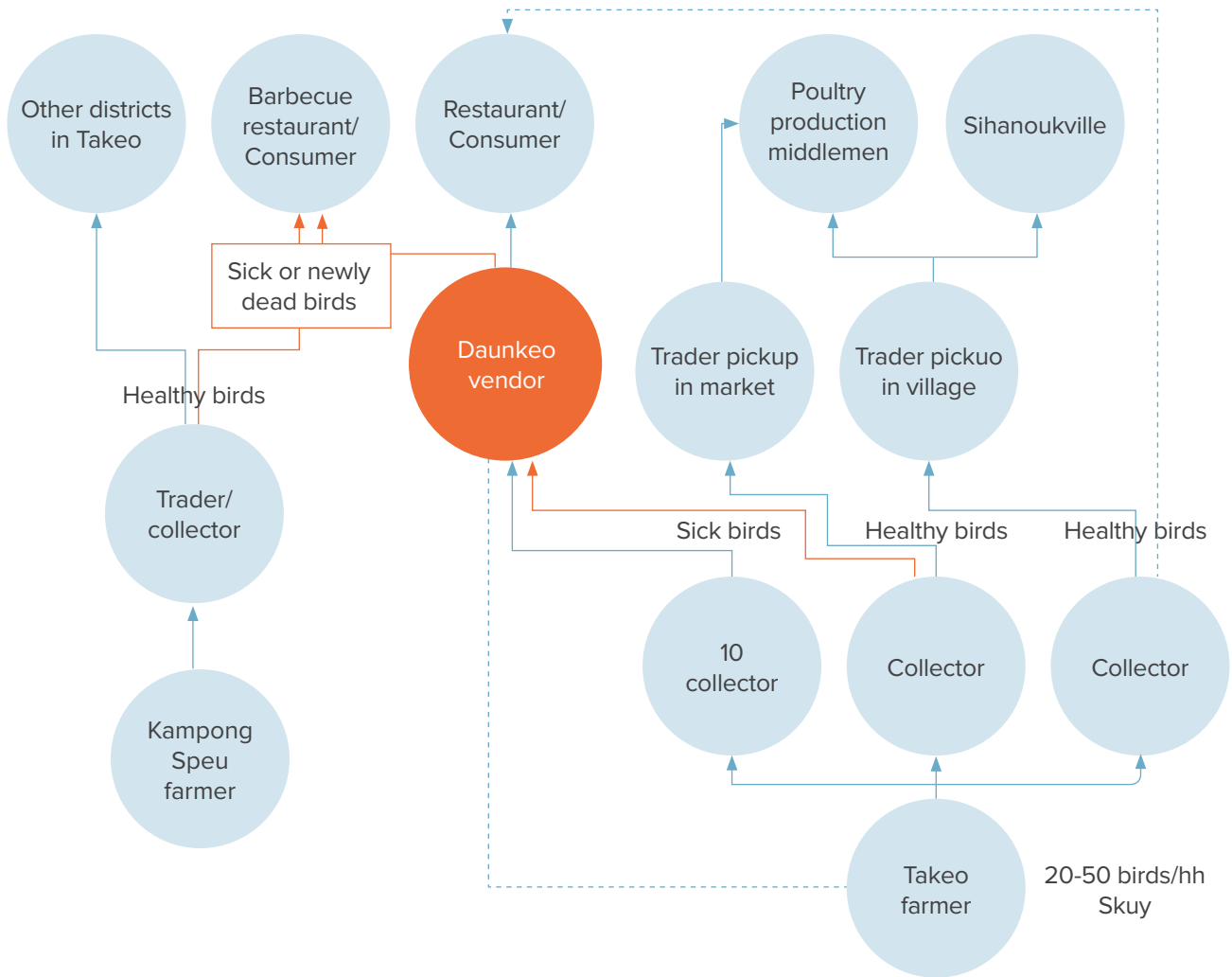
Challenges

- To identify the collectors who purchase sick birds and to sell to the vendors at the market in order to prevent disease transmission in the market.
- The need to harmonize vendors' current slaughter practices at the trader's facilities and at the DLBM with the Standard Operating Procedures (SOPs) for biosecurity practices that will be established for the DLBM.

Constraints

- The women vendors at the market spend all day at their individual station and have not had the time to participate in the discussions of the design of the restructured live bird market which is to be designed to suit their needs.

Figure 1: The DLBM-centered chicken value chain



Note: Dashed lines represent small volumes



The women vendors at the Daunkeo Live Bird Market sell poultry from local Takeo farmers and large farms from Kampong Speu. The local production system is highly traditional with mainly small-scale women producing pure local breeds. The majority, mostly healthy, birds are sold to Phnom Penh; while the minority, some diseased, are slaughtered and sold in the local Daunkeo market. The vendors also purchase hybrid birds from Kampong Speu from the traders and slaughter them at trader facilities.



Recommendations

The proposed activities for the collectors aim to fulfil two objectives: 1) to put a stop to sick birds trading in the DLBM, 2) to enlist the women collectors as a vanguard of AI containment.

- Select a female project trainer with good knowledge of poultry diseases and identify women collectors, particularly those who bring sick birds to sell to the vendors in the market, as trainees. Organize training sessions between 10.00 a.m. and 15.00 p.m. to accommodate the collectors' schedule. The immediate task is to ensure that the collectors properly identify, record and report disease in a timely manner, and that they learn the protocols on dealing with sick birds.

The proposed activities for all the female stakeholders aim to encourage their full participation and to solicit their opinions and feedback on the construction of the slaughter house.

- To set up a subcommittee/group of vendors and slaughterers represented by a strong spokeswoman who sits on the Live Bird Market Committee (LBMC). She should be tasked to solicit inputs and opinions from the vendors at their convenience and to present them to the LBMC and lobbies for their interests, as well as to present back to the vendors any updates, progress, alterations and discussions.

Progress

- Two local female trainers have been selected in the project to provide trainings to vendors and slaughterers on cleaning, disinfecting and good market hygiene practices. The trainings will be conducted in the recommended time frame during the day (between 10.00 a.m. and 15.00 p.m.) to ensure maximum participation of women from DLBM.
- An informal women's group of vendors and slaughter operators of DLBM has been formed to provide inputs on market design and the restructuring of the market.



©FAO/Mr. Chea Chenda

Meeting of women's group of vendors and slaughterers to provide inputs on Takeo LBM restructuring

WOMEN'S ROLE ALONG POULTRY VALUE CHAIN IN LUANGPRABANG, LAO PEOPLE'S DEMOCRATIC REPUBLIC

Main findings



Map source: ©Shutterstock

This map is based on UN map no. 4170 rev.

17 February 2019

Key findings

- Traditional practices of backyard chicken and duck production are the norm, with farmers raising few hens and cocks, hatching their own chicks, and then raising these chicks as broiler chickens mainly for home consumption while selling the excess for cash.
- The preference is to raise pure local breeds, feed mainly crop feed, and rarely vaccinate or administer any type of drugs. As it takes six months for each household to raise a small flock of local chickens to maturity, the small number and long rotation period have low investments and result in limited profits from poultry.
- Women play a major role as actors in this traditional small-scale value chain, from farmers to traders, retailers and input suppliers.

Key players

- There are only a few actors within the value chain. Farmers sell birds to either the retailers in the market or directly to the Chinese or Vietnamese consumers in the vicinity.
- Occasionally farmers may sell to traders for a lower price.

Behavioural drivers of risky attitudes/actions

- General lack of management for disease prevention and protection of chicks results in farmers facing seasonally high mortality rates, especially in the rainy season.
- Lack of knowledge of vaccination, good management and biosecurity practices contributes to low productivity.

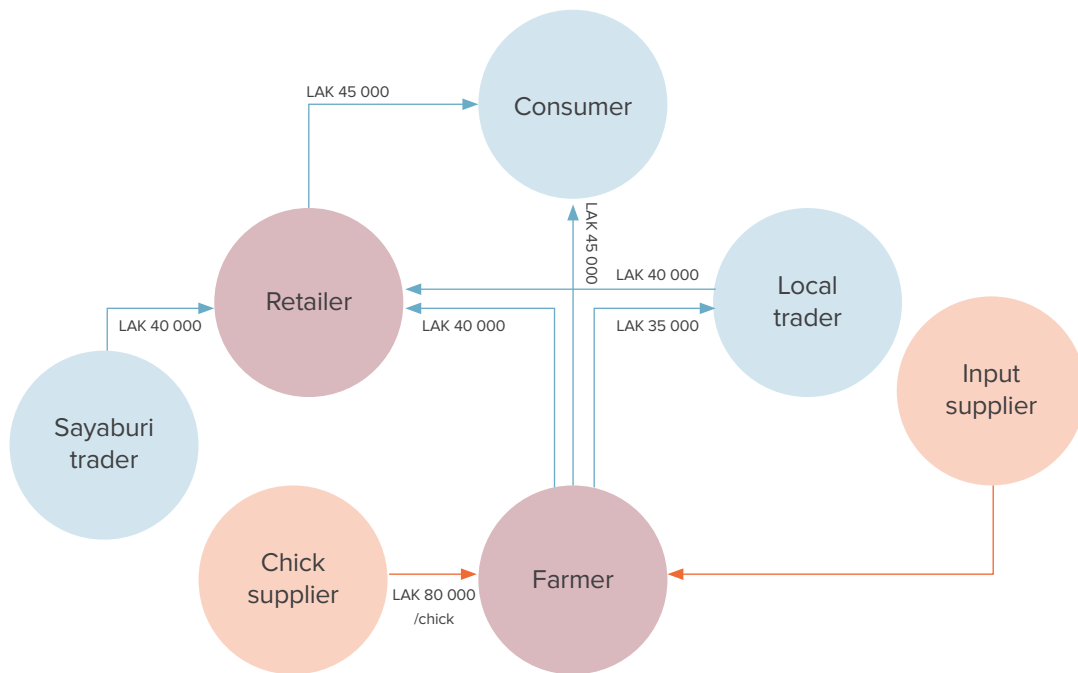
Challenges

- The local breeds have limited growth potential, along with a lack of disease control, erratic feeding practices and nutrient-poor crop feed, which contributes to slow growth and high mortality.
- The farmers do not perceive improved economic incentives from selling chickens and hence motivation to improve production and management practices is low.

Constraints

- Most Lao families, urban or rural, raise chickens for all the sociocultural and economic functions they fulfil. For this reason, the Lao families prefer to raise the traditional local breeds which have lower productivity.
- The multifaceted significance of chickens in Laos' culture makes it difficult to convert production to improved breeds with higher productivity. This fundamentally limits the economic potential and motivation to make enhancements in other areas to upgrade the overall production system.

Figure 2: Luangprabang chicken value chain



Note: Numbers refer to prices in Lao Kip (USD 1 = LAK 8 820)

Chickens have a unique socio-cultural role that is almost as important as their economic significance, especially for women.

- As a well-known Lao poem states, “one who has no chickens is a lazy person”
- As poultry raising is traditionally women’s responsibility, it implies that a woman without chickens is a lazy woman!



Training on cooking and processing various food items for ‘Luangprabang Native Chicken’ held for women poultry farmers and the Lao Women’s Union from Luangprabang

Recommendations

Draw on the potential linkage between the female input suppliers and the female farmers by training the input suppliers to provide vital information on feed, vaccination and disease control to the women farmers.

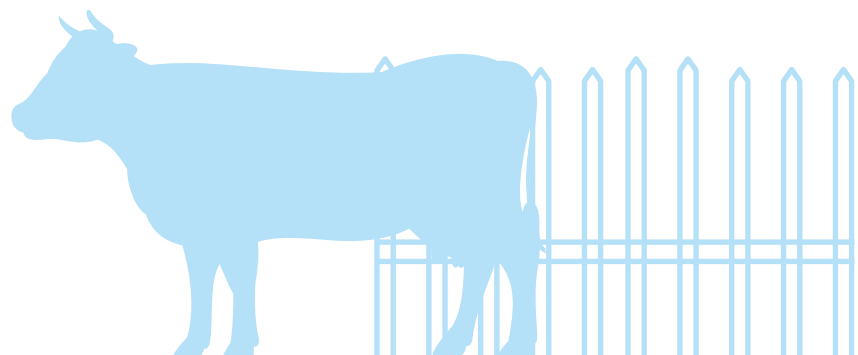
Lao Women's Union (LWU) to identify and select female attendees to attend trainings conducted by the female development officer of Northern Agriculture and Forestry College. Training topics include the potential of cross breeding, hatching practices and general management subjects.

Build relationships with the poultry input supplier who may provide first hand knowledge about good practices for vaccination, nutrition and feeding practices.

Create a vertical integration between farmers, input suppliers, traders and retail vendors, most of whom are women, to work together on disease prevention.

Progress

- Representatives from LWU, female development officers from the college and female input suppliers from the village feed shop have proactively participated in the training on good biosecurity practices conducted in Sakhon Nakhon, Thailand.
- These women in turn are training and disseminating information and knowledge to other poultry farmers in the project villages.
- LWU is spearheading efforts to promote the branding and marketing of the 'Luangprabang Native Chicken'. This aims to create a market for the native chicken brand and lead to economic gains.



GENDER ASSESSMENT IN POULTRY FARMS IN YANGON POULTRY PRODUCTION ZONES

Main findings



Map source: ©Shutterstock

This map is based on UN map no. 4170 rev.
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Key findings

- The Yangon Poultry Production Zone system
 - The older systems consist of smaller open sheds and the newer systems have sheds that tend to be larger and closed in order to eventually mechanize and rely less on manual labour while minimizing diseases.
 - The chicken-shed-over-fish-pond model tends to be a more stable production system than the chicken-only model.
 - The farms are managed as a business led by the owners, who are predominantly male, assisted by managers who oversee the workers. Women's role are limited to helping their male partners who are hired as primary workers.
 - Most farms are layer farms for egg production though some produce both eggs and broilers.
- The trend
 - Small farms are less competitive and many have shut down. Large farms continue to expand and are expected to become mechanized in order to remain competitive.
 - End-to-end services from producing day old chicks to producing feed is emerging to compete with large end-to-end companies.
- Biosecurity implementation
 - Some of the small farm workers may not always comply with the more tedious biosecurity measures due to low salaries, which may cause disease outbreak. The small farms have been less biosecurity compliant not due to lack of knowledge but due to lack of economic incentives.
 - The outbreak of disease affects the businesses of both large and small farms even if the large farms are unaffected due to consumers' lack of confidence in chicken products in general.
- Gender considerations
 - These are commercial farms where few women are in decision-making positions. The women are the wives or daughters of the family workers who are paid labourers.
 - The women are generally paid less than the men, but mainly due to the different nature of tasks. The men take on heavy labour while women are in charge of lighter labour, though each family, not the manager, determines division of labour.
 - Salary discrepancies that exist between men (the husbands) and women (the wives) are labour equity issues in nature (in Myanmar) and not considered as gender-specific issues relevant to the project.

Key players

- Farm owners are supported by managers and farm workers live on the farm with their families. Each farm maintains a relationship with a feed company which provides feed and veterinarian support as well as purchases eggs or chickens from the farms.

Behavioural drivers of risky attitudes/actions

- Some of the small-farm workers may not always comply with the more tedious biosecurity measures, which may cause disease outbreak.

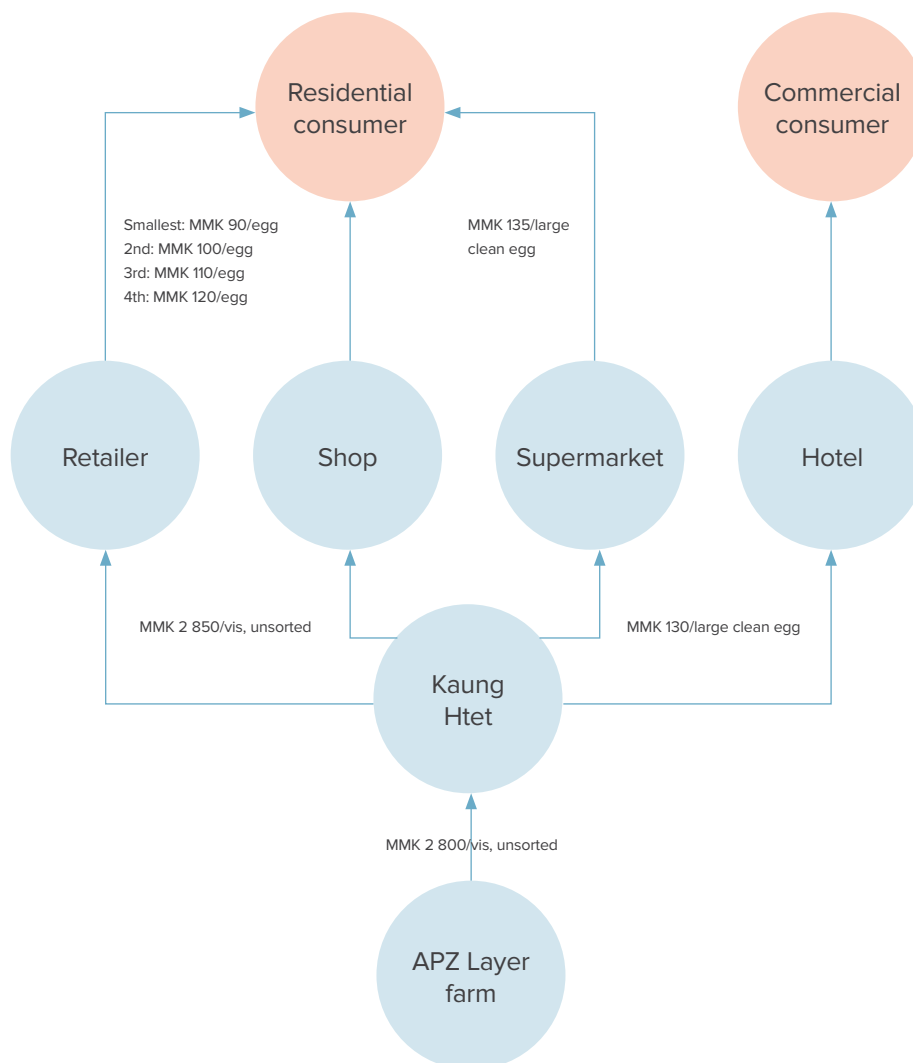
Challenges

- The biosecurity non-compliance is an economic issue, not a technical one, thus it is challenging for the project to introduce a mechanism to ensure total compliance.

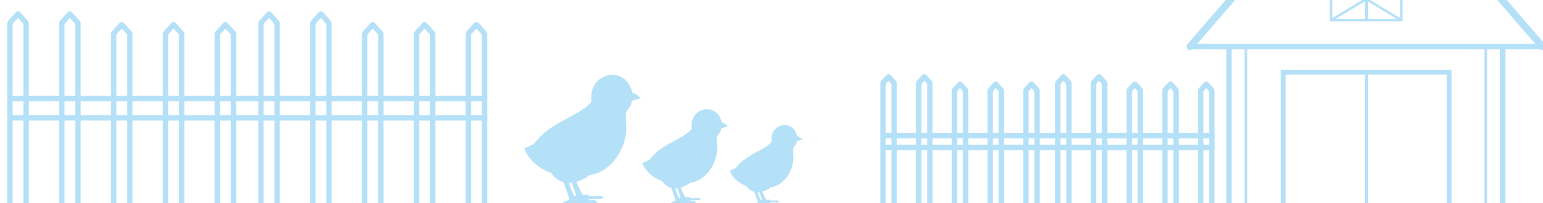
Constraints

- A technical project is not in a position to resolve economic considerations for either biosecurity implementation or possible salary discrepancies for women.

Figure 3: PPZ egg value chain, indicating a tight value chain with limited profit margins for the actors



Note: Numbers refer to prices in Myanmar Kip (USD 1 = MMK 1 531)





The commercial chicken farms in Yangon Poultry Production Zones are moving toward industrial scale in order to compete with larger companies such as the Charoen Pokphand Group (CP) that are beginning to enter into the market. Many aspects of the production system are expected to evolve with this shift in scale. One change is the shift from family-based workers to individual workers, which will have implications for the women who are engaged as farm workers. The gender considerations will thus also evolve in the future, though it is not yet clear how.

Recommendations

Considering the family employment situation stated above and the overall project objectives, the proposed interventions below target the improvement of the workers' family biosafety for potential zoonotic disease outbreaks in the future as the general biosecurity guidelines mainly concern the health of the chickens.

Training on good practices to reduce the risks of zoonotic disease transmission should be conducted. The proposed training for women should highlight the practices in enhancing the family wellbeing and the potential harm to family health if not followed properly.

Leaflets on good practices should be put up in the farms targeted at women so that as primary caregivers they can convey such practices to the rest of the members of the family to ensure the biosafety of the entire family.

Progress

The findings of the gender assessment may be used as a knowledge base in the future planning of intervention activities to empower women in implementing sustainable risk management initiatives. These findings have been disseminated in national and regional fora using advocacy materials (which includes this brochure).



Gender expert meets with women stakeholders from Yangon PPZ to understand gender roles and issues



Gender expert disseminates key findings to government stakeholders

GENDER ASSESSMENT IN POULTRY FARMS IN VIET NAM BAC GIANG PROVINCE

Main findings



Map source: ©Shutterstock

This map is based on UN map no. 4170 rev.

17 February 2019

Key findings

- Bac Giang hatchery farmers are facing a rapidly evolving hatching enterprise, for which they constantly need new information in order to keep up with latest practices. The access to, and knowledge of, the appropriate technologies for the best practices have serious implications on their profitability and disease management.
- In Bac Giang poultry sector, men have had multiple opportunities for training. In contrast, women receive comparatively less training and advice. The lack of training opportunity puts women in a disadvantaged position.

Behavioural drivers of risky attitudes/actions

- Lack of precise knowledge about the application of vaccinations, antibiotics and feed.
- The lack of a 'gold standard' for vaccination and antibiotic use in hatcheries and broiler farms.
- Input suppliers' aggressive campaign to push farmers to over administer drugs and feed.
- Lack of coherent understanding of disease prevention for the short-term, and long-term health impacts on poultry and humans.

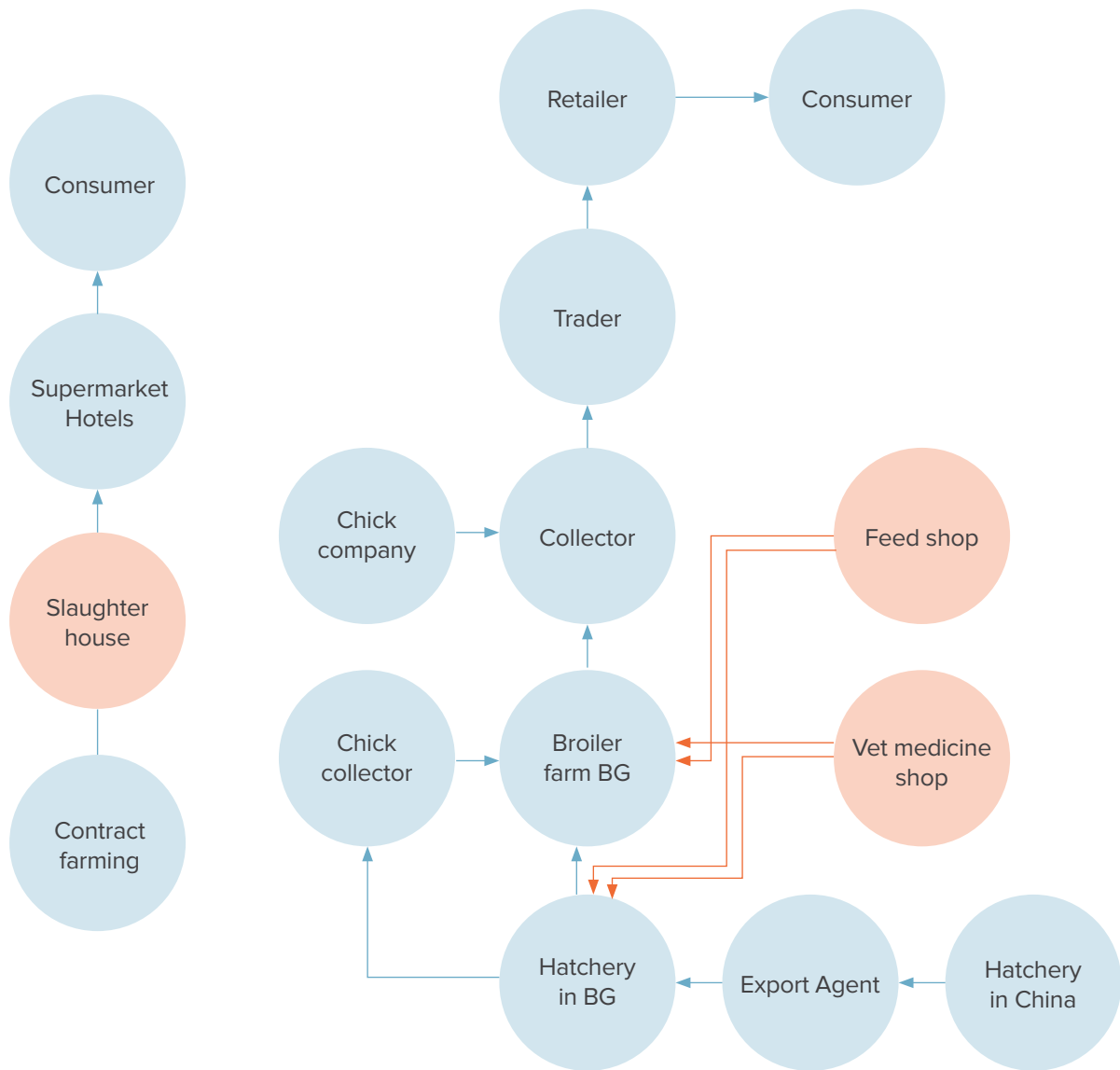
Challenges

- Traditional venues of information dissemination have not kept up with rapid growth of large-scale home-based chicken production, driven by increased demand for meat.
- Each producer follows different protocols for feeding, vaccination and antibiotic use despite animal health authority recommendations.
- Uniform, up-to-date and clear messaging on the control of HPAI and other zoonotic influenzas in poultry, and on minimizing risks to poultry and public health, is not available

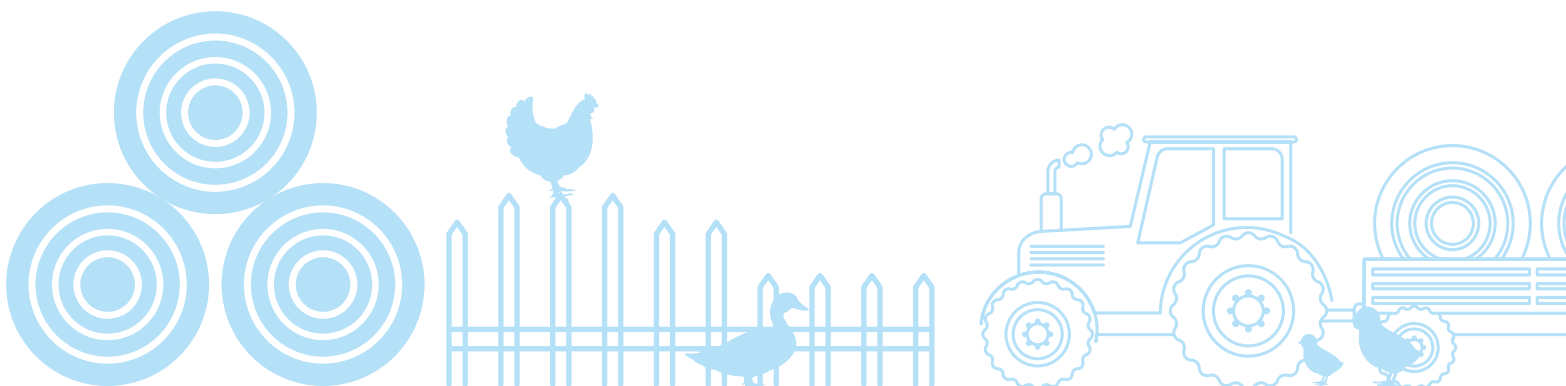
Constraints

- Effective management and control of HPAI requires periodically updated information for farmers.
- Information relating to general poultry production and disease management concerning use of vaccines and antibiotics also needs to be updated and disseminated on a regular basis.
- Rapid information required on the above is currently not being provided by the animal health authority or the input suppliers.

Figure 4: Chicken value chain in Bac Giang province



Hatcheries and broiler farms have become staggeringly profitable in Bac Giang. A woman hatcher, after receiving training from the project, now raises 3 000 hens in her backyard and made a handsome profit of USD 100 000 last year from selling day-old chicks each cycle of 14 months.





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Women hatchery owners in Bac Giang following good biosecurity practices.

Recommendations

Provide precise and real-time information for farmers to manage poultry production and diseases, taking into account the rapid changes in the poultry enterprise, to allow them to undertake healthy and profitable production practices.

Develop avenues to provide knowledge and information that is easily accessible to women as women play a large role in poultry rearing and face multiple constraints to access traditional information avenues.

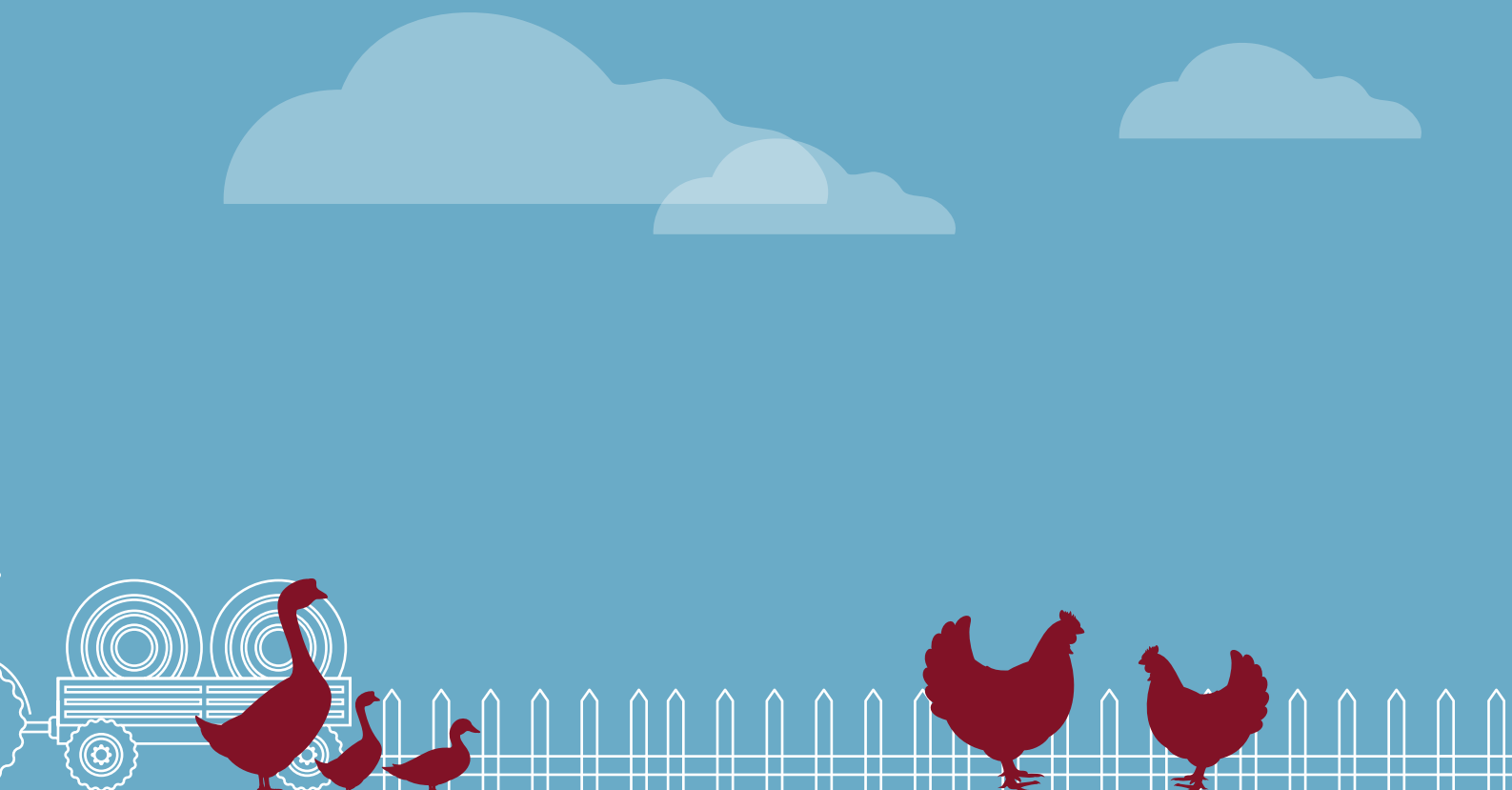
A smartphone application (APP) providing the most targeted and up-to-date information should be developed. This will assist in overcoming women's constraints for training and access to information.

As a short-term solution, an existing APP with the available information can be introduced.

As a long-term recommendation, the APP should be specifically designed to take into account local circumstances.

Progress

- The project has supported the active participation of women in the training programme on auditing and certification to ensure their equal opportunities for learning. However, developing an APP is a long term initiative which may be considered by future projects.



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