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# SOON SOON OILMILLS TECHNICAL BULLETIN

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## Recommendations On How To Avoid Avian Influenza / Foot and Mouth Disease



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# RECOMMENDATIONS ON HOW TO AVOID AVIAN INFLUENZA/FOOT AND MOUTH DISEASE

## How to safe guard your livestock against Avian Influenza/Foot and Mouth Disease

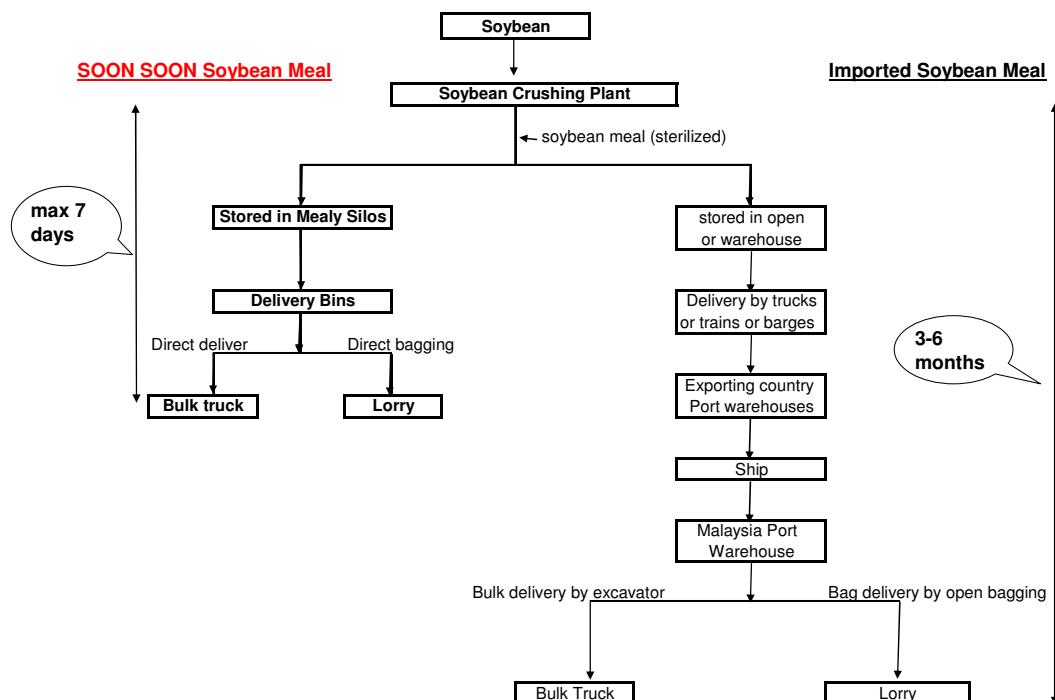
1. Ensure that wild birds, dogs, cats and other animals have no direct contact to your livestock and poultry.
2. Ensure that the feed ingredients and feed are fresh and not contaminated with birds/animal feces or other body secretions.
3. Ensure that all visitors/vehicles/workers are discouraged from entering your farm and when they have to, they should undergo thoroughly disinfection procedure before entering the farm.
4. Ensure that all farm equipments are disinfected and water treated before used.

## How to ensure Feed Ingredient Safety

1. Buy only feed ingredients that have not been exposed to or contaminated with birds and animal feces or other body secretions.
2. Corn should be sieved to separate out the fines that are < 1-2mm. This will remove fungus spores and fine particles of broken corn which may carry high levels of mycotoxins, dried animal feces or other body secretions.
3. For mealy products like soybean meal, it is not possible to separate the fines through sieving, hence it is better to buy fresh from a reliable local source such as Soon Soon Oilmills.
4. Fresh wheat pollard/bran is generally safe as it is always bagged directly from the plant and is usually not exposed to animals/birds. However, if the product is not fresh, improperly stored and exposed to birds or rodents or infested with weevils, then it could be a potential source of infection.

**Soon Soon Soybean Meal is freshly produced and stored in mealy silos. Loading is directly from silo onto lorry. There is little or no contact with the workers during the transfer.**

## COMPARING THE STORAGE AND TRANSPORTATION OF SOON SOON VS IMPORTED SOYBEAN MEAL



*\* Enclosed an example of precaution taken by Thai farmer during the AI outbreak in 2003*

# Chuaynarong Farm keeps bird flu at bay



Thailand's Chuaynarong Farm survived the bird flu outbreak that hit the country early this year. CHAKRIT RIDMONTRI writes that the clue to its survival was effective management of its 250,000 commercial layer flock against disease.

Chuaynarong Farm's survival offers hope for the sustainable recovery of numerous layer farms in Thailand and other parts of Asia, especially farms that rear the hens in open sheds.

Thailand's layer industry was badly hit by the bird flu outbreak that destroyed about 1.5 million laying hens or half of the country's stock.

In Bangkok's neighbouring province of Chacheongsao, which is the country's largest layer farming hub with over seven million laying hens, only seven out of 180 layer farms survived the outbreak. About six million hens were destroyed here.

Among the survivors, all but Chuaynarong Farm raise the hens in closed sheds.

## The fight

The highly pathogenic H5N1 virus first hit a few layer farms in Nakhon Sawan province, about 200km north of Bangkok, in November 2003. It then spread haphazardly throughout the country, affecting mainly layer farms.

The indiscriminate spread of the virus led many farmers to believe that it was airborne. Many gave up, as they found no way to protect their layer flocks against the flu.

Chockchai Chuaynarong, owner of Chuaynarong Farm however, felt that regardless of how it was carried, the virus could not affect the birds if they were healthy and well protected.

"In the past, the view was that if the birds were vaccinated they would be protected against disease. But this was not the case with the bird flu," he said.

Vaccination against the bird flu is banned in Thailand for fear that this would affect broiler exports.

"Since vaccination is not allowed, the key to control should be sound management," he said.

Mr Chockchai insisted on keeping his layer flocks when the outbreak sparked in his neighbourhood and tried his best to protect them.

Many farms decided to cull their layers to cushion themselves from inevitable loss when egg prices plunged during the crisis.

Mr Chockchai went through the crisis without losing a single layer to the bird flu.

"All we did was take stock of our management and plug loopholes that could expose us to the disease," said Mr Chockchai, who is also President of The Poultry Promotion Association of Thailand, under the Patronage of His Majesty the King.

## Biosecurity

Mr Chockchai believed that the virus spread faster by land, rather than by the air. As a result, he said, the layer farms were worse hit because there are so many things coming in and going out all the



Chockchai Chuaynarong

time. Farm owners overlooked this, as it did not create a problem in the past.

"I can say that most layer farms in Thailand lack measures to prevent disease carriers," he said.

When he heard of the first outbreak, Mr Chockchai immediately revised his list of risk factors. He found that he too missed many things.

For example, raw materials, egg trays and even water could be disease carriers in addition to vehicles, visitors and workers who are normally subjected to disinfection or showering.

"In the past, we didn't pay much attention to raw materials either. When the disease broke out, we began to check their source and even fumigate them to make sure they were free from the virus."

"Similarly, we cleaned and disinfected all the trays and farm equipment, and treated the water before using it on the farm," he said.



## ◀ Environment

Layer farms with open sheds were singled out as the breeding ground of the bird flu in Thailand as the disease affected them all.

The government allocated a budget for both layer and broiler farms with open sheds to switch to closed housing in the interest of biosecurity.

But for Mr Chockchai, housing is not as important as disease control and management. His view is that vigilant disease prevention works well even with open sheds.

"Just by setting nets on the sides of open sheds, you can keep away other birds. This is similar to what is done in closed sheds," said Mr Chockchai. Of his 250,000 layers, 70% are farmed in open sheds.

In open sheds, he contends that health is more important than biosecurity. Temperature fluctuation and poor ventilation can adversely affect the birds' health.

He has overcome this by building high roofed sheds and installing fans to aid natural ventilation. He also believes that a lower density promotes comfort and health.

"If the birds live well they will be strong, regardless of whether they are in open or closed sheds," he said.

Mr Chockchai said a distinct advantage of open sheds is that sick birds can be easily observed. Once spotted, he immediately culls them.

"Early detection and culling of sick birds effectively cuts the disease before it spreads throughout the farm," he said.

### Shielding

However, he said, no matter how good the disease prevention program is, diseases can still plague the birds. Thus, it is important to develop their ability to fight disease.

To do so, he increases the inclusion rate of vitamins and minerals in the feed to enhance the bird's immune system.

When the outbreak hit Thailand, Mr Chockchai increased the level of premixes in the feed from 2.5kg/t to 3kg/t and regularly added toxin binders in the feed. Some herbs were also used.

"In the past we used toxin binders during the rainy season only, but now it is a permanent feature in

our formulation. To shield the birds from disease, you also have to prevent toxins from destroying their immune system," he said.

### Workers

Working in poultry farms is no longer attractive in Thailand since the bird flu claimed human lives as well.

Many workers in poultry farms quit their jobs and recruiting new workers has been difficult.

The best thing is to attempt to keep the existing workers for as long as possible, said Mr Chockchai.

He trains all his workers on basics

in layer production and explains to them the rationale behind their responsibility.

Since the bird flu outbreak, discussions on the disease were added to their routines.

The result: no one left the farm and they supported him in implementing all the programs to fight the bird flu.

"A top-down approach caused many farms with good management systems to fail simply because their workers didn't collaborate. They're your business partners," he said. ■

## Thailand's layer industry in transition

The bird flu outbreak has changed the face of Thailand's layer industry, says Chockchai Chuaynarong, President of The Poultry Promotion Association of Thailand.

He said 50% of commercial layers in Thailand were killed or culled to contain the outbreak, between November 2003 and February 2004. Thailand had about 30 million commercial layers.

The situation could result in the collapse of all small-scale layer farms with an average flock size of 10,000-20,000.

This is because breeder farms were also affected by the outbreak. They in turn would keep the chicks and pullets for their commercial farms and contract farms before considering commercial sales.

The other reason is that the government still has a ban on vaccination against the bird flu. So, the small-scale farms dare not restock for fear that they would suffer again if the bird flu returns in winter.

Mr Chockchai envisages that there will be only two groups remaining in the business. The first would be corporate farms that own breeder farms and feedmills and their alliances or contract farms. The second is independent large-scale farms such as Mr Chockchai's farm, which has a flock size of 250,000 layers.

They can return to normal business because they can afford to improve management to better protect their flocks against the bird flu.

However, he said, both groups would only be able to produce 70-80% of what they used to produce before the outbreak. Again, a shortage of layer chicks and pullets is the major constraint.

Mr Chockchai said an absence of small-scale layer farms and the closure of some independent medium and large-scale layer farms is changing the industry structure.

In the past, these three sizes had equal shares in production. After the outbreak, the number of commercial layers in the hands of corporate farms and their alliance has increased to 70%, leaving the balance to independent large-scale farms.

Therefore, he said, the corporate farms will be able to dictate the egg price. Previously, corporate farms, egg traders and independent, large-scale farms determined the egg price.

Mr Chockchai predicts that a shortage of laying hens would send the egg price to 2.5-3 baht, up from around 2.0 baht before the outbreak. However, the cost of production has also increased from 1.6-1.7 baht/egg to around 1.9 baht/egg due to the feed price hike.

Normally, Thailand produces 25 million eggs/day, 23 million of which are consumed in the country and the remaining exported.

Since the bird flu, production has dropped to only 10 million eggs/day.