

Report

Myanmar poultry expert visit 15 -19 March 2015

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Myanmar poultry expert visit

Introduction

Myanmar

Myanmar is an emerging market with a relatively young, fast growing and increasingly urban population of **approximately 52 million**. With an expanding middle class, due to strong economic growth, there is an increasing demand for sustainable, locally produced & safe poultry products (**annual growth >15%**).

Current consumption (2014) of poultry meat (6kg/head) and eggs (40 pcs/head) are relatively low compared to other countries in South East Asia. To fulfil the **growing local demand**, productivity will have to increase significantly by introducing improved (knowledge-intensive) production systems.

Netherlands poultry expertise

The Netherlands is internationally renowned for responsible production of poultry products. Policies & processes applied in the Netherlands regarding food quality, product safety and hygiene are considered as the highest international standards.

The Dutch poultry sector (knowledge institutes, government agencies and private sector) could add significant value in developing a more competitive and responsible poultry sector in Myanmar through intensive **exchange of knowledge**, joint applied research & training and demonstrating best practices in Myanmar with local public and private stakeholders. Furthermore, the Myanmar poultry sector offers **business opportunities for Dutch companies**.





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Myanmar poultry expert visit: 15-19 March

Background & goals

Expert visit Myanmar: 15-19 March

Larive is an international business development firm specialized in assisting companies in entering and expanding their business activities in emerging markets. From 15 – 19 March 2015 Larive organized an **expert visit to Myanmar** for Dutch stakeholders active in the poultry value chain.

In total **12 organizations** were represented from knowledge institutes and the private sector.

This visit has been organized in close cooperation with the Netherlands Economic Mission in Myanmar and Netherlands Ministry of Foreign Affairs.

Goals of the visit

- Facilitate knowledge transfer towards public & private stakeholders in Myanmar, by organizing a number of dedicated **workshops and training events** by poultry sector specialists from the Netherlands.
- Jointly **identify the main bottlenecks** withholding further growth of the Myanmar poultry sector which could be overcome by applying (public) knowledge and solutions from the Netherlands.
- **Share information** on the Netherlands poultry sector and the **experiences** of companies from the Netherlands in relevant markets in South East Asia.
- Position the Netherlands as a **reliable poultry expert partner** in Myanmar.
- Provide an overview of the potential business opportunities in Myanmar for companies from the Netherlands active in the poultry value chain and **introduce them to local stakeholders**.



Program

15 – 19 March 2015

Sunday 15

Yangon

- Dinner with Netherlands Business Community and representatives of the Netherlands Economic Mission in Myanmar (Yangon).

Monday 16

Yangon

- Opening of expert visit & kick-off meeting with Myanmar Livestock Federation:
 - Presentation Introduction to Myanmar's poultry industry by Myanmar Livestock Federation.
 - Presentation Netherlands poultry experts delegation members.
 - Presentation "Vision Myanmar poultry sector 2025" by Larive.
 - Presentation "Doing business in Myanmar" by Myanmar Investment Committee.
 - Panel and plenary discussion.
- Field visits:
 - Medium sized broiler farm (Yangon Area).
 - Medium sized layer farm (Yangon Area).



Program

15 – 19 March 2015

Tuesday 17

Yangon

- Field visits:
 - Feed mill Japfa Comfeed Myanmar Pte. Ltd.
 - Medium sized closed-house broiler farm, under construction (Yangon Area).
 - Poultry wet market Yangon.



Wednesday 18

Yangon

- Meeting Myanmar Minister of Livestock.
- Workshops (parallel sessions) by Netherlands experts:
 - Group 1: DOC and hatchery management.
 - Group 2: Broiler farm management (animal health, equipment, diseases).
 - Group 3: Feed production (equipment, techniques, composition).
 - Group 4: International best practices in slaughtering practices.
- Field visit Sunjin Myanmar Co. Ltd.

Thursday 19

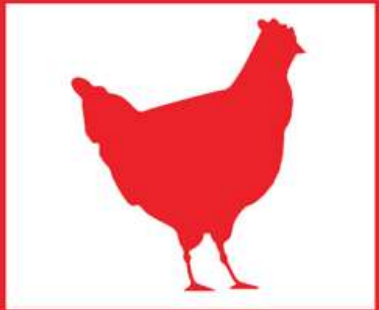
Naw Pyi Taw

- Meeting Ministry of Livestock.
- Meeting Yezin University – Veterinary Sciences.
- Field visit demonstration layer & broiler farms at Yezin University.
- Evaluation and wrap-up meeting with Dutch poultry experts.



Netherlands private sector participants

Leading companies active in the poultry value chain



Hendrix Genetics - Poultry genetics and breeding.



Van Aarsen - Feed mill design, machinery and construction technology.



De Heus - Producer of animal feed. Ambition to invest in feed production in Myanmar.



Pas Reform - Hatchery technologies & automated systems.



VDL Agrotech - Feeding & drinking systems, climate control and cooling and drying systems.



Moba - Manufacturer of egg grading, packing and processing machines.



Marel Stork – Innovative food processing solutions for the poultry, fish, meat and (further) processing industry.



GD Animal Health – Providing animal health programmes and laboratory diagnostic services.



Larive – Business development advisory & coordinator of the Netherlands poultry expert visit.



Dutch Ministry of Economic Affairs & Dutch Economic Mission Yangon – linking public & private partners.

Netherlands knowledge institutes participants

Represented by CAH Vilentum, PTC+ and HAS Den Bosch



Universities of Applied Sciences:



Practical Training centre:



Universities 2:



Vocational institutes: 13

Myanmar

Country & economy

Myanmar

- Myanmar is an emerging market with a population of approximately 52 million people. Largest urban agglomerations include Yangon (7.3 mln), Mandalay (5.9 mln), Bagan (4.8 mln) and Naw Pyi Taw (1.2 mln).

Economic developments

- Until 2012, it was nearly impossible for Western companies to do business with Myanmar due to sanctions and reputational risks. International isolation discouraged (foreign) investments and hindered trade and the exchange of technology and know-how. However, the country is now **rapidly opening** for both private and the public sector cooperation.
- Drivers of growth:
 - Exports of natural resources: minerals, natural gas and timber.
 - Foreign **investments** (mainly from Asia): oil & gas, energy, power, telecom and real estate.
 - Increasing private consumption, **tourism**, development of modern retail.
 - Further integration in **ASEAN** (cum. pop. >700 mln and GDP of >US\$ 3,600 bln).
- Myanmar is a (US) dollar market, though recently banks also start accepting Euros and Singapore dollars. The exchange rate of the country's currency Kyat depreciated last year, on the unofficial market, to around Kt950 : US\$1, driven by strong import growth.

Retail developments

- Domestic retail expanding:
 1. City Mart / Ocean
 2. Sein Gay Har
- Foreign retail chains moving in:
 1. CP Fresh Mart (2006)
 2. Lotteria (2013)
 3. KFC (2014)
 4. BBQ Chicken (2014)

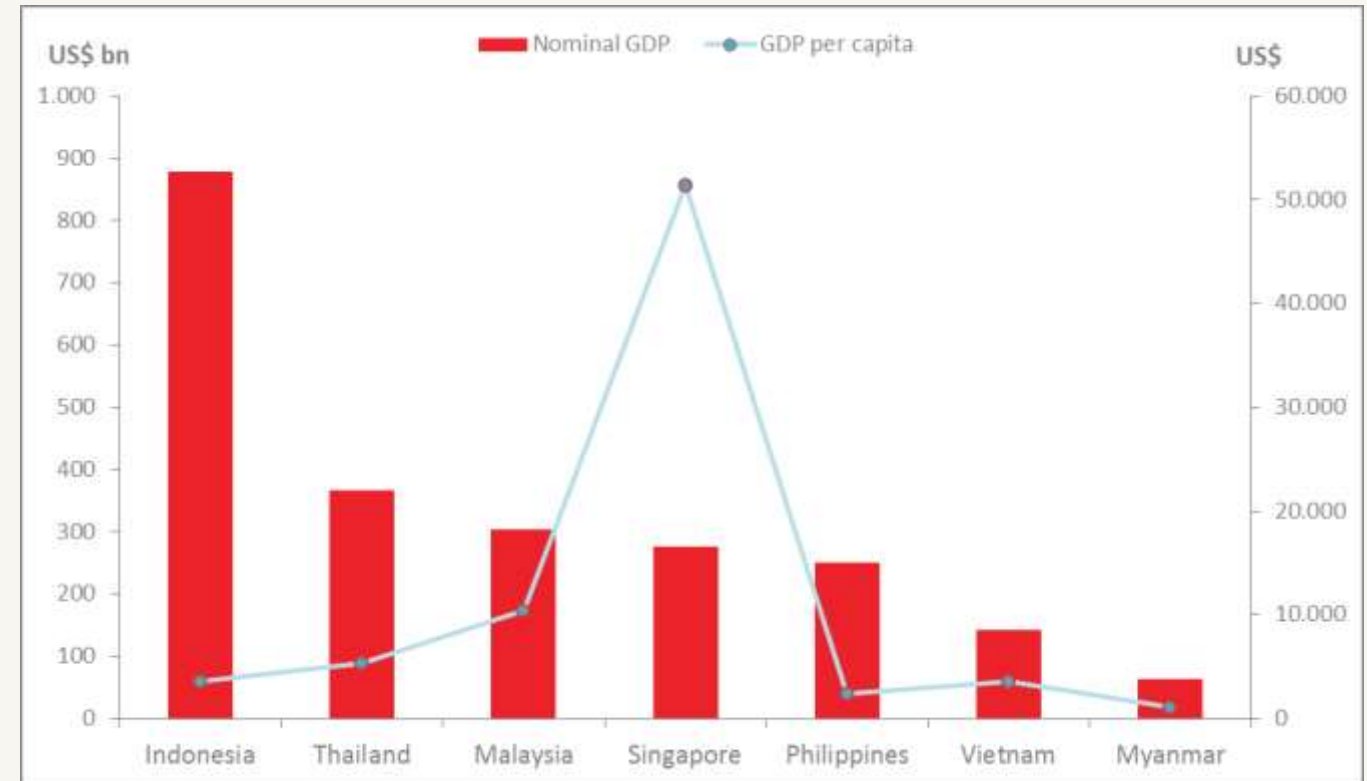


Indicator (2014)	
Population	52 mln
Nominal GDP (US\$)	44.8 bln
GDP per capita (US\$)	1,300
Consumer/middle class	9 mln (15% of population)
Real GDP growth	7.5%
Foreign Direct Investments (US\$)	2.7 bln
Capital city	Nay Pyi Taw (since 2006)
Area	675,578 km ² (second largest country in South East Asia)
Currency	Kyat
Exchange rate (Kt : US\$)	948 (average free-market rate)
Time zone	GMT + 6.5 hours

Myanmar's economy in regional context

ASEAN integration

- The Association of Southeast Asian Nations (ASEAN) is a political and economic organization comprising 10 members countries, including Myanmar.
- Indonesia is by far the largest economy in ASEAN (almost US\$ 900 bln) followed by Thailand and Malaysia.
- Myanmar is among the smaller economies in the economic bloc, its economy representing about US\$ 63 bln (2014).
- Singapore outcompetes all other countries in terms of income per capita (>US\$ 55,000/capita/year).
- Myanmar's per capita income is about **half of that in the Philippines** and 40% of the income in Vietnam or Indonesia.
- Singapore is considered as one of the most competitive locations in the world. Myanmar is among the least competitive countries (#134 out of 178).
- Foreign investors find **Myanmar not an easy market** to do business, even compared to regional players.



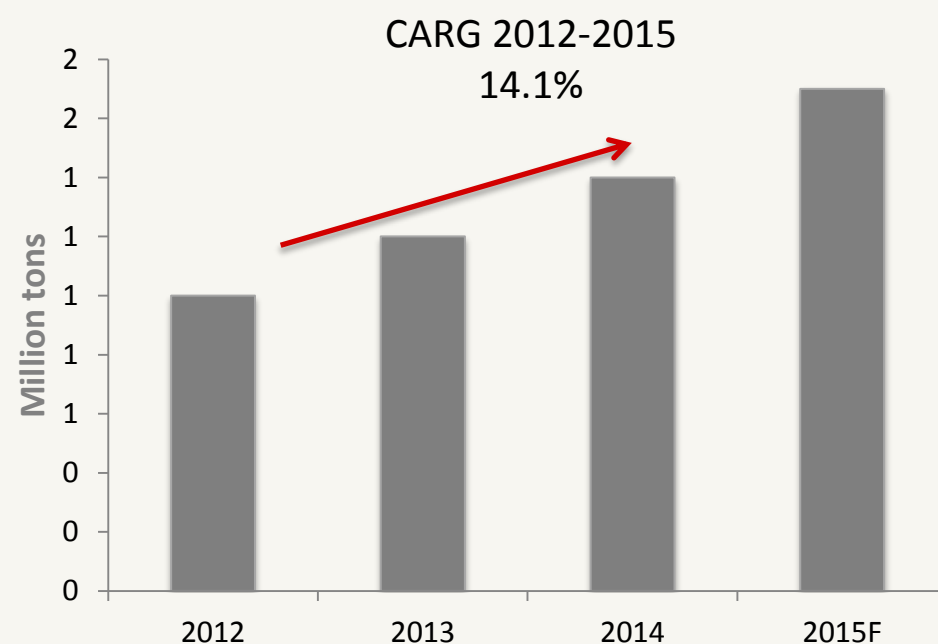
Myanmar's poultry sector

Market trends & developments

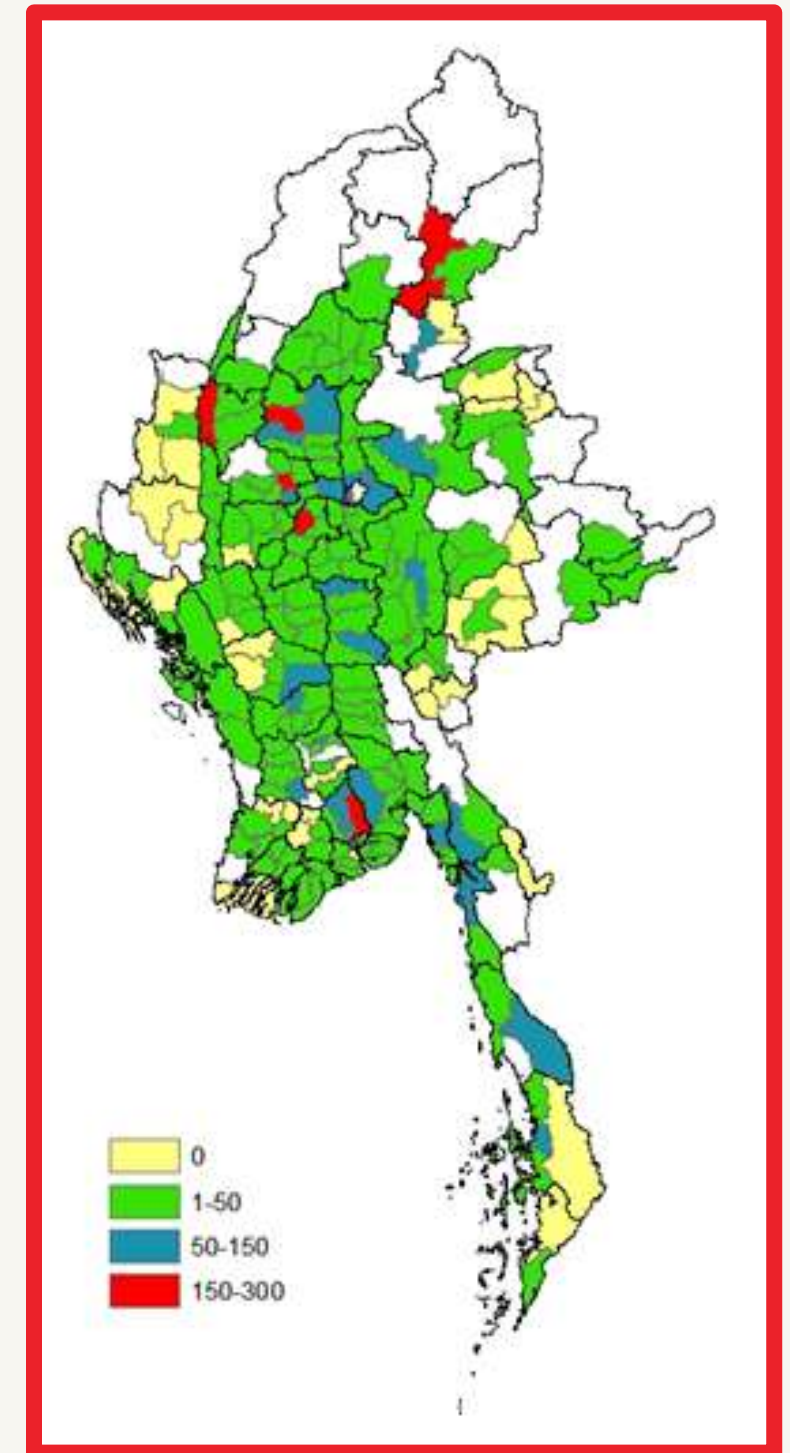
Poultry feed

- Total feed production accounted for 1.7 mln tons in 2014. With **new (foreign) players entering the market** (such as De Heus, New Hope and Sunjin) and established players investing in new mills (such as Japfa, 2014) and expansion of existing facilities, domestic capacity will increase rapidly.
- Main ingredients for feed are corn, soy and wheat. A significant share of these ingredients is currently sourced internationally (imports from US, Argentina, Brazil, Australia, South Africa).
- As logistics are challenging in Myanmar, new feed mills will be increasingly located near international seaports.
- **Importing costs** of feed ingredients are substantially higher than in nearby markets such as Vietnam (+25-40%).
- However, Myanmar would have the potential to produce a significant share of the required raw materials domestically. It could therefore be considered to set up a dedicated program to **stimulate local production of feed ingredients**.

2012-2015 Feed production



Source: FAO, 2015



Geographical distribution of commercial broiler and layer farms in Myanmar (MLF, 2012).

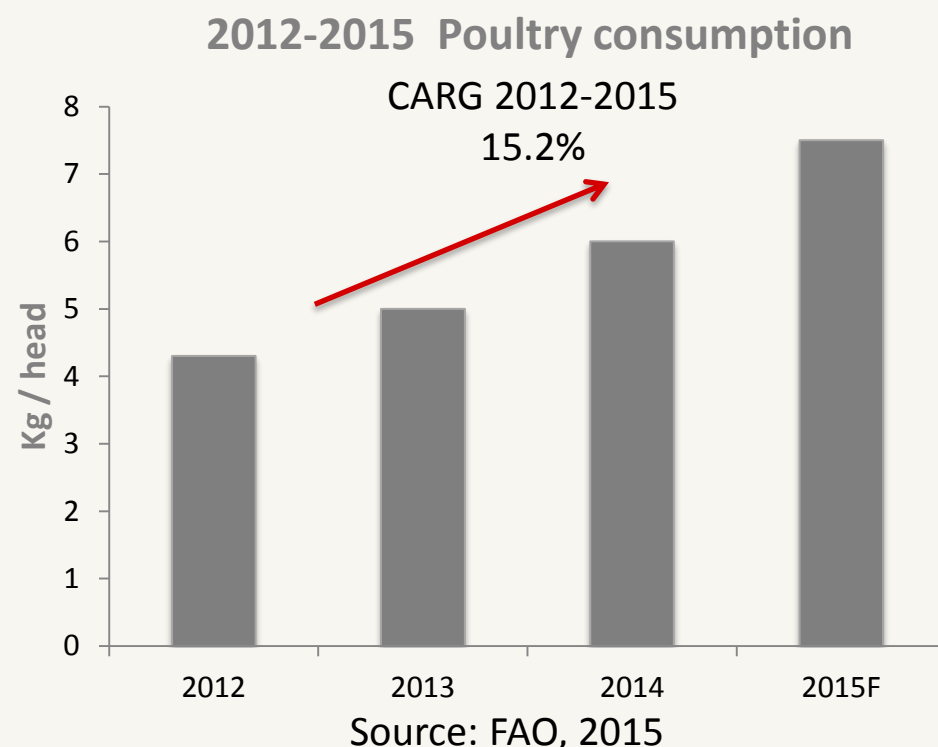
Myanmar's poultry sector

Market trends & developments

Poultry products

- Consumption of poultry products grew rapidly with a compound annual growth rate of 15% between 2012 and 2014.
- However, current consumption of poultry meat (6.0kg/head/year) and eggs (40pcs/head/year) are still relatively low compared to other countries in South East Asia (Thailand: 20kg/160pcs; Malaysia: 32kg/240pcs).
- Inefficient production methods and high costs feed and Day Old Chicks (“DOC”) – mainly a consequent of lack of competition – result in relatively **high consumer prices** of both poultry meat and eggs, compared to other markets in South East Asia.
- Sources of chicken meat include broilers (~75%), (native) village chickens (~10%) and (semi-) post-layers (~15%).
- **Demand for poultry meat is expected to double** within the next 3-5 years, which will require significant investments in hatcheries, farming and (further) processing capacity.
- Furthermore, it require more efficient (re)usage of inputs such as energy, (waste) water and residuals (manure).

Indicator (2014)	
Poultry broiler population	144 mln birds
Poultry broiler consumption	171 mln birds
Average meat consumption	6.0 kg / head
Daily slaughtering	500.000 birds
Average weight birds	1.8 – 2.0 kg
Poultry layer population	8 mln birds
Egg consumption	5.3 mln (day)
Feed production	1.7 mln tons
Average retail price poultry meat	MMK 5,000 – 7,000 (US\$ 5 -7) / kg



Myanmar's poultry sector

Market trends & developments

Slaughtering & processing

- Currently, there is only 1 slaughterhouse operational in Myanmar, operated by CP Myanmar (capacity 1,500 birds/h). Most birds are slaughtered manually at wet markets.
- Myanmar's largest urban area, Yangon, operates 3 poultry wet markets, where live birds (chickens, ducks) are traded, sold & slaughtered.
- Yangon's largest wet market handles over 100,000 birds/day. Over 50,000 birds/day are manually slaughtered at site (during 6-8h/day).
- Average trading prices:
 - Live chicken: US\$ 6/bird.
 - Live duck: US\$ 4.5./bird.



Myanmar's poultry sector

Market structure & players

Market structure

- 70% of Myanmar's poultry sector (feed, DOC) is in hands of foreign-based poultry companies:
 - Myanmar CP (part of Thailand-headquartered CP Group) – present since 1995.
 - Japfa Maykha (part of Indonesia-headquartered Japfa Group) – present since 1996.

Foreign players

Myanmar CP



- Vertically integrated operator. Activities:
 - Compound feed manufacturing: 4 feed mills: Yangon, Mandalay, Kyaut Me and Taung Gyi.
 - Breeder farms: Bago, Ye' Mon, Thar Yar Gone, Inta Gaw and Sint Kine.
 - Hatcheries: Yangon and Mandalay.
 - 1 Slaughterhouse: Yangon (capacity: 1.500/h).
- Total market share: 40 - 45%.

Japfa Maykha



- Vertically integrated operator. Activities:
 - Compound feed manufacturing: 2 poultry feed mills:
 - Yangon (2014): Capacity 20, 000 MT/month.
 - Mandalay (1997): Capacity 5,00 MT/month.
 - 3rd feed mill to be operational in 2016.
 - Broiler & Layer breeding: Hmawbi Township, (Yangon area). Breed: Lohmann Indian River (LIR).
 - Hatchery & DOC production.
 - Commercial broiler farming: Yangon, Mawlamyine, Pyay, Pakokku, Nay Pyi Taw, Meiktila and Mandalay.
- Total market share: 20 - 25%.

Myanmar's poultry sector

Market structure & players

Domestic players



Crystel Diamond

- Vertically integrated operator, distributor of veterinary products (part of Sein Wutt Hmon Group).
- 2 feed mills: Mandalay (2006) and Yangon (2010).
- Total market share: 10 - 12%.

Tet Chaung

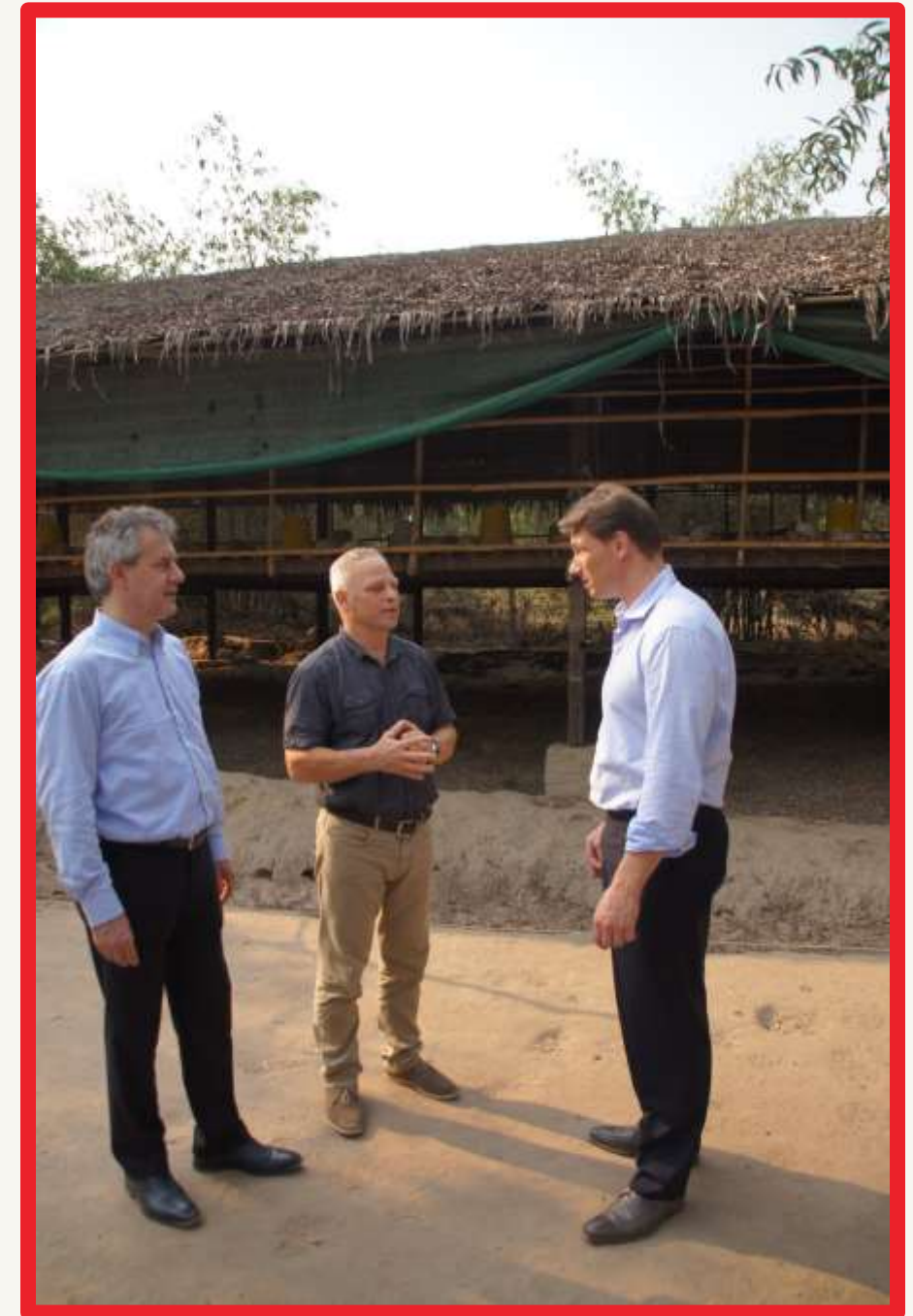
- Feed mill in Taung Gyi.
- Strong presence in Shan State.
- Total market share: 6 - 8%.

MRC

- Total market share <5%.

Others players: 10 – 15% of the market.

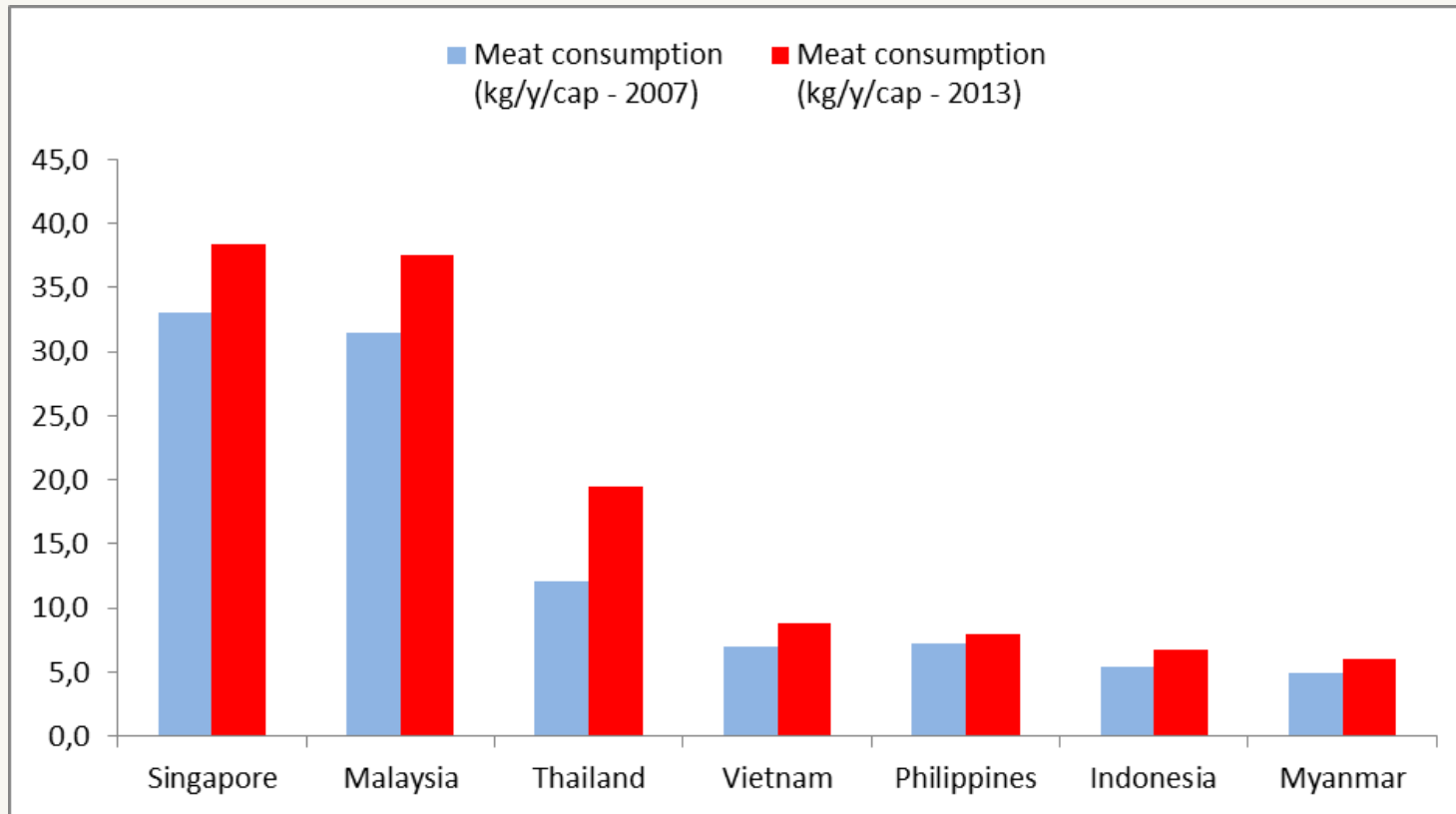
New foreign players entering the market



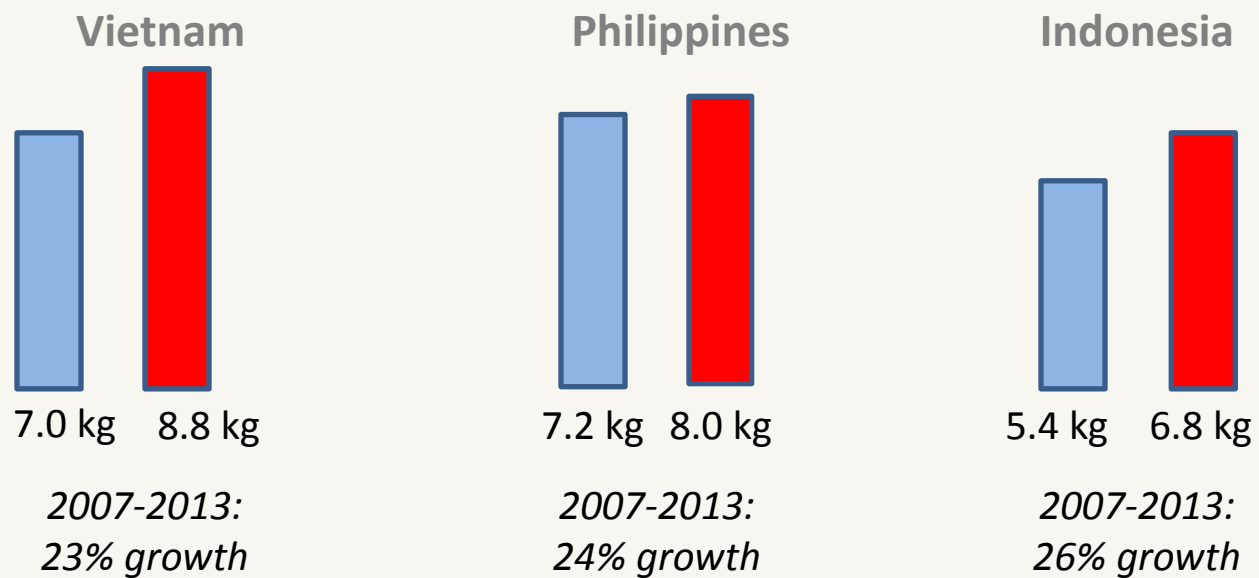
Increasing demand for poultry products

Overview of consumption growth in South East Asian markets

Growth of consumption of poultry meat (kg/year/capita) between 2007 and 2013:



Growth trends of poultry meat consumption in comparable markets:



Source: FAO, 2015



“Myanmar’s poultry sector 2025”

Estimated growth figures and impact for the sector

Economic drivers in Myanmar:

- Enormous growth of middle class (income > US\$ 10/day) -> from 3 to 15 mln in 2025.
- Growing consumptions of animal protein rich products and processed food.

Trends related to poultry sector:

- Increasing domestic poultry production & (further) processing of poultry products.

Demand for poultry meat is expected to more than double with the next 10 years: From 6.0 kg/y/head (current situation) to 14.0 kg/y/head in 2025. Consequences of domestic sector:

- Increase in total annual consumption : 400 – 600 mln kg.
↓
- Required increase of feed production: 1.0 – 1.5 mln ton.
↓
- Required areal growing feed ingredients: 400 – 600,000 hectares.

** This scenario assumes that the full increased consumption growth would be absorbed by increased domestic production (e.g. no imports) and taking into account the current average yields for the main feed ingredients in Asia:*

- Corn: 4.0 – 6.0 tonnes / hectare.
- Soy: 1.5 – 2.5 tonnes / hectare.



Key public stakeholders in Myanmar's poultry sector

Overview of institutions

Key institutions

- Myanmar Livestock Breeding and Veterinary Department (LBVD), part of the Ministry of Livestock, Fisheries and Rural Development (MLFRD).
- University of Veterinary Science, Yezin University, part of MLFRD.
- Myanmar Ministry of Commerce.
- Food and Drug Administration (FDA), part of the Myanmar Ministry of Health.
- Myanmar Veterinary Council (MVC).
- Myanmar Veterinary Association (MVA).
- Myanmar Livestock Federation (MLF).
- Food and Agriculture Organization of the United Nations (FAO), Myanmar branch.

Findings of the visit

Bottlenecks & potential actions identified

A. Bottlenecks related to animal health & diseases

- I. Insufficient knowledge on prevention, control and contamination of animal diseases.
- II. Lack of awareness within the sector on biosecurity.
- III. Insufficient information about biosecurity.
- IV. Insufficient data for farmers and practitioners (veterinaries).
- V. Laboratories not functioning at international / ASEAN levels.
- VI. High usage of antibiotics, potentially resulting in resistance.

Potential actions:

1. Support with better organizing farmer associations and improve cooperation & coordination between Government, veterinaries and farmers.
2. Set up a data management system and share information with stakeholders in the sector.
3. Provide training program for broiler/layer farmers on animal health & medication usage.
4. Set up demonstration project for alternative treatments (instead of antibiotics) within an open-house broiler farm setting in a (Yezin) University controlled trial.

B. Bottlenecks related to breeding, hatchery & farms

- I. Due to lack of local supply, price and quality of domestically production of day-old chickens is not stable.
- II. Lack of knowledge on farm management (hygiene, best practices).
- III. Relatively low investment in farm equipment (feeding, water, ventilation), resulting in low efficiency.
- IV. High mortality rates (8-12%) and low FCR (1.8-2.2) in open house broiler farms.

Potential actions:

1. Provide training program for broiler/layer farmers to improve management skills.
2. Set up demonstration project on international best practices on housing systems (from open to closed).
3. Support Myanmar farmers with developing a hatchery with a cooperative of 4-6 independent farmers – share the CAPEX, risk and DOC.

Findings of the visit

Bottlenecks & potential actions identified

C. Bottlenecks related to feed

- I. Lack of locally produced raw materials (particularly soy bean) and (too) low competition among feed producers, resulting in high prices.
- II. High usage of antibiotics in feed.
- III. Insufficient high qualified staff.

Potential actions:

1. Increase local production of feed (ingredients).
2. Provide training programs for feed manufacturers.
3. Execute audits of existing feed mills and provide insights on best practices in feed mills to improve efficiency.

C. Bottlenecks related to food safety & product quality

- I. Too high usage of antibiotics (up to day of slaughtering -> residue into products).
- II. Lack of cooling (cold transport & storage).
- III. Contamination, short shelf live, high levels of micro-organism due to current slaughter practices.
- IV. Insufficient information about biosecurity.

Potential actions:

1. Create awareness among farmers, vets, meat inspectors, consumers. Involve retail, food service & hospitality.
2. Develop & implement food safety protocols.
3. Provide training program on food safety (awareness) among slaughterhouse staff.
4. Make detailed projections on required increased slaughtering capacity, environmental impact, (waste)reduction & management.
5. Execute feasibility study to identify potential improvements in the slaughter chain.
6. Set up demonstration project on international best practices on slaughtering practices.

How the Netherlands could add value

Suggested next steps to support Myanmar with development of the poultry sector

Recommended next steps

1. Set up Netherlands public-private partnership (Consortium) with partners willing to jointly add value in Myanmar in the coming years (3-5 years).
2. Execute more detailed assessment of the value chain & current practices.
3. Define strategy, interventions & timeline (based upon lessons learned from neighboring countries, which are facing/faced similar development paths).
4. Set up Netherlands – Myanmar poultry platform.
5. Execute actions.

Public-private partnership

1. Integrated value chain approach: combination of training & demonstration projects within the Myanmar poultry sector.
2. Cooperation by Netherlands companies, knowledge institutes and Government.
3. Centrally coordinated and locally supported with implementation.
4. HR capacity building (universities, companies), which should be commercially viable in the long run.
5. Integrating Myanmar poultry associations and other key stakeholders.

Feasibility studies & pilots

1. Broiler & layer farms.
2. Hatchery.
3. Slaughtering.

Training

1. Curriculum building.
2. Training programs by all Netherlands partners:
 1. GD Animal Health: Veterinaries (labs).
 2. HAS: Academics (Yezin University).
 3. Aeres Group & companies: Private sector poultry farm managers.

Contact information

For any questions



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Myanmar Livestock Federation Yangon

Monday 16, 09:00 – 13:00



Myanmar Livestock Federation Yangon



Myanmar Livestock Federation Yangon

Monday 16, 09:00 – 13:00



INTRODUCTION TO INTENSIFIED POULTRY
INDUSTRY IN SOUTHEAST ASIAN
NEIGHBOURHOODS

• Poultry meat production per year in Myanmar

- Broiler meat 124,000 tons
- Native chicken 91,250 tons
- Fast layer hen 12,308 tons
- Semi-broiler 9,125 tons

• Total poultry meat 236,683 tons

• Total poultry meat production is 0.237 mil tons
(Thailand produced 1.4 mil tons in 2011)

• Per capita consumption of poultry meat was 3.8
kg/person for Myanmar (2012).

• Per capita consumption of poultry meat was 3.8
kg/person (2014)

lenovo

Myanmar Livestock Federation Yangon

Monday 16, 09:00 – 13:00





Myanmar Livestock Federation Yangon

Monday 16, 09:00 – 13:00



Ingredient	Quantity
1. Yoghurt	10.00 kg
- Whole milk	10.00 kg
Starter culture	0.2 g
	10.00 kg
	7.50 kg
	2.50 kg
	80 g



MAOBA





Myanmar Livestock Federation Yangon

Monday 16, 09:00 – 13:00



Lunch at Taing Yin Thar

Monday 16, 13:00 – 14:00



Medium Sized Broiler Farm (East Yangon)

Monday 16, 15:00 – 19:00



Medium Sized Broiler Farm (East Yangon)

Monday 16, 15:00 – 19:00



Medium Sized Broiler Farm (East Yangon)

Monday 16, 15:00 – 19:00



Medium Sized Layer Farm (East Yangon)

Monday 16, 15:00 – 19:00





Medium Sized Layer Farm (East Yangon)

Monday 16, 15:00 – 19:00



Company visit to Japfa Comfeed

Tuesday 17, 09:00





Netherlands poultry expert visit - Myanmar

Date: 15/03 till 19/03, 2015
Location: Yangon & Naw Pyi Taw
Subject: Visual Summary of Expert Visit
Organized by: Larive International & Larive Thailand







Site visit --- Future Closed Broiler House

Tuesday 17, 12:00



Site visit --- Future Closed Broiler House

Tuesday 17, 12:00

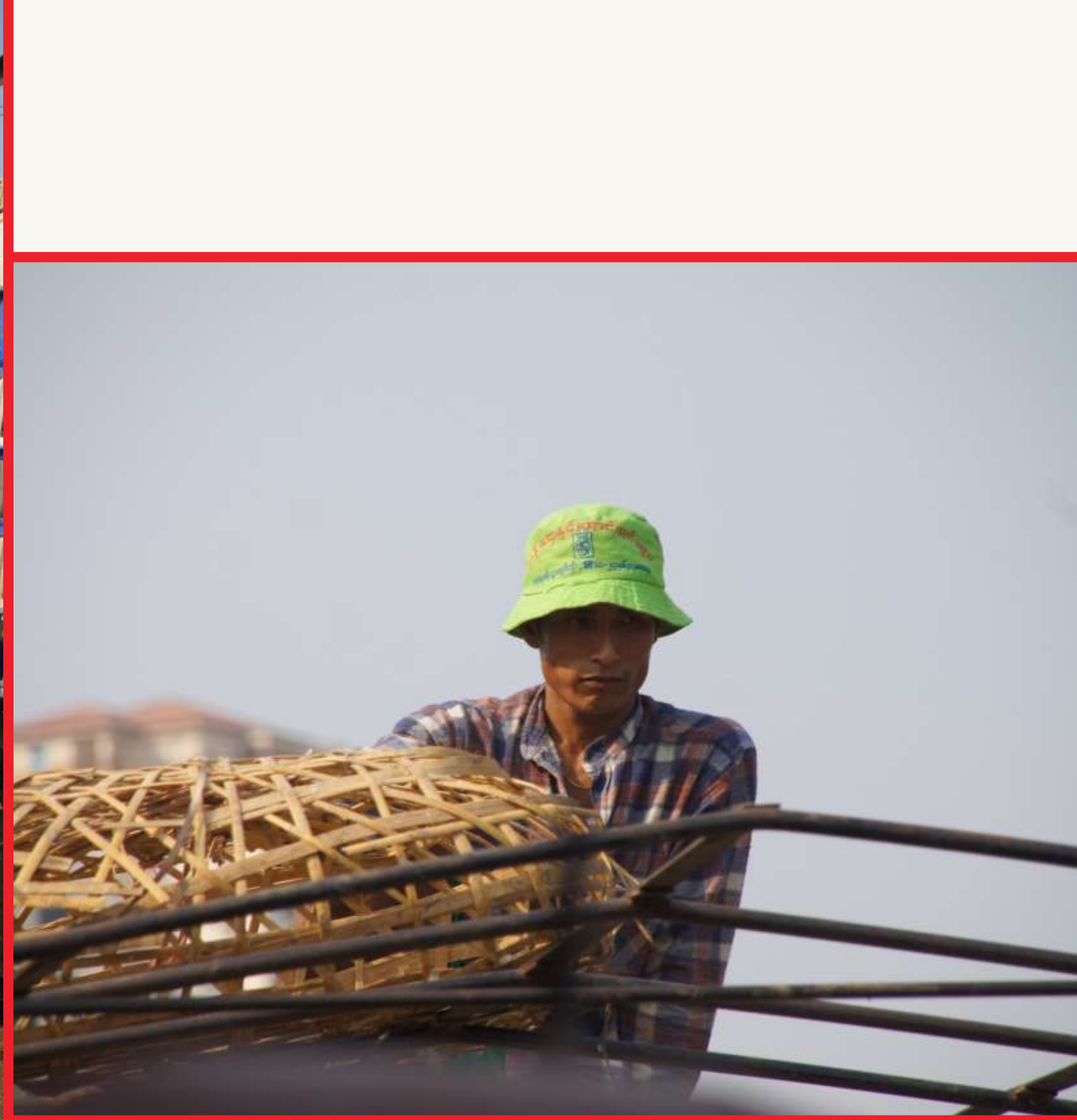


Site visit --- Wet Market Yangon

Tuesday 17, 15:00

















Workshops for 35 local farmers & stakeholders



Netherlands institutional cooperation

Leading schools & universities

Netherlands as international experts in agro-food

Unique educational system (also on

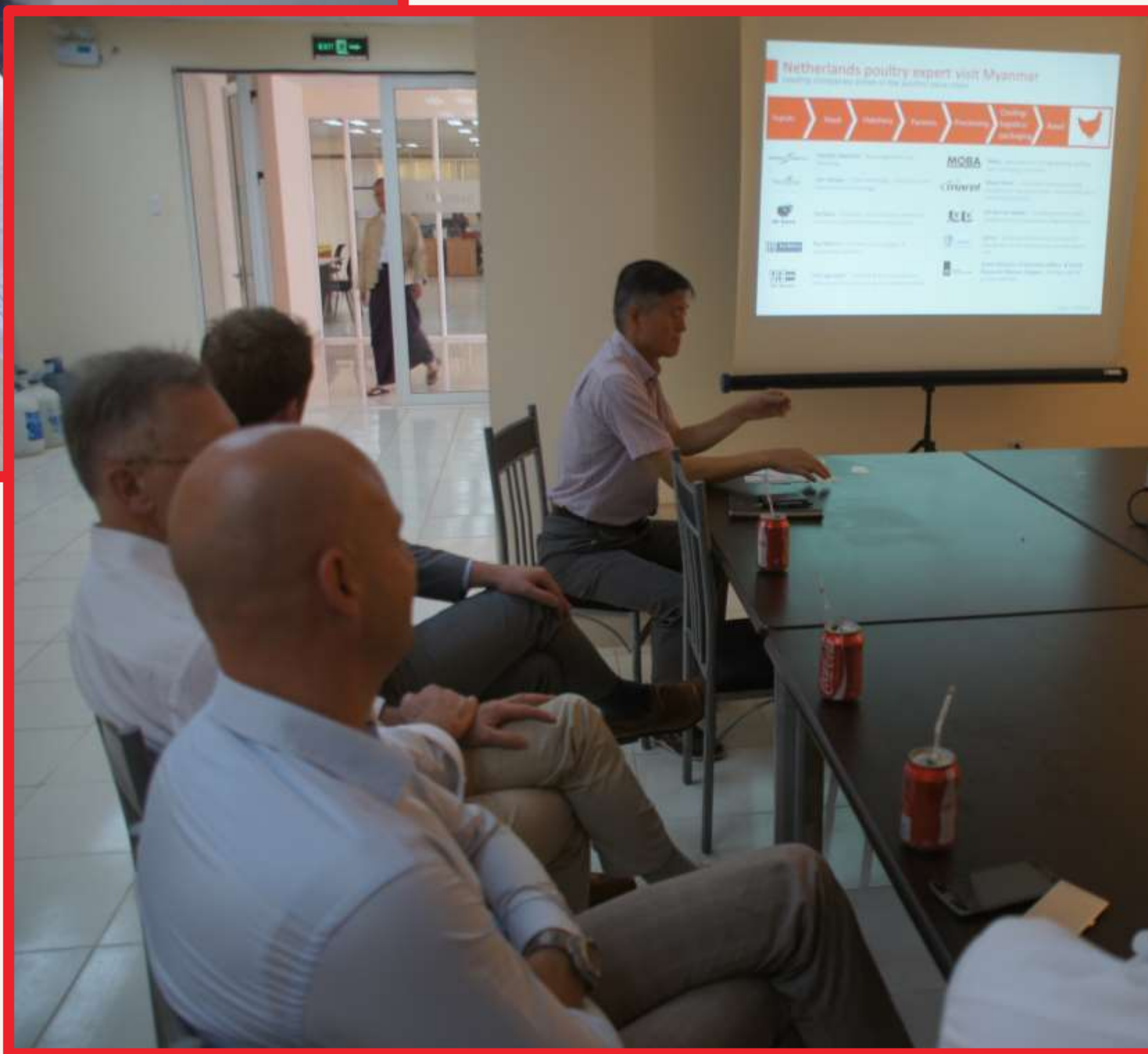


Animal Health; for farmers and consumers



Services:

- Animal health programmes (e.g. avian influenza)
- Monitoring & surveillance (e.g. Salmonella; Food Safety)
- Laboratory services
- Information products
- Applied research (R&D)
- Training & consultancy (GD Academy)
- Diagnostics & Proficiency testing's





Ministry of Livestock, Fisheries & Rural Development

Thursday 19, 09:00









University of Veterinary Science

Number of staff
 Teaching staff = 94
 Other staff = 200
 Total = 294



Prof. Dr. Mar Mar Win
Rector



Dr. H. H. Thein
Head Administration



Prof.
Dr. Ye Hsueh Aung
Pro. Rector Academic



About Larive

Your partner in emerging markets

- Larive is an international business development firm specialized in assisting companies in entering and expanding their business activities in **emerging markets**. Services include business intelligence, developing and coordinating PPP's, market entry & growth strategy advisory and implementation support.
- The company is headquartered in the Netherlands and has local (partner) offices in over 30 countries in Asia, Central and Eastern Europe, Turkey and East Africa. Its regional headquarters for South East Asia is based in Bangkok, Thailand. Since 2012 Larive has a **local presence in Myanmar** via its partner office in Yangon.
- Larive is predominantly active in the **agro & food (related) sectors** and has an extensive track-record in successfully executing and implementing PPP initiatives on behalf of the Netherlands Government. The added value of Larive is that it always works with local teams in the host countries to implement activities, which is considered crucial to achieve results and remain cost-effective throughout the project.
- Larive is amongst others the initiator and coordinator of “**FoodTechIndonesia**”, a public-private partnership combining the strengths of 10 Dutch companies active in the **poultry value chain** to improve and strengthen the poultry sector in Indonesia, in close cooperation with Indonesian counterparts.



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Do you have the ambition to explore new markets? Thanks to a network of 30 local offices, Larive is able to provide local expertise and practical assistance while maintaining a Dutch contact point at all times.

Our way of working has proved to be successful in the last 30 years. The support of Larive has enabled corporations from various sectors to enter the Central- & Eastern Europe, Africa and Asian markets successfully.

www.larive.com

Your partner in emerging markets