

Introduction of innovative broiler houses in Indonesia for a healthier future

Seed money project

10th January, Rick van Emous / Erik den Besten



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Objectives of the SMP

- Exploring possibilities of a pilot project with a modern broiler housing system (BroMaxx®)
- Studying the feasibility of unrolling the above mentioned modern broiler housing systems
- Developing improved training material focussing on management

Project partners

- Jansen Poultry Equipment: broiler housing system
- Sommen Automation & Electronics: climate control and data collection/analysing
- Aeres Training Centre International: international poultry training centre
- Poultry Expertise Centre: centre for poultry innovations
- PT Medion: poultry medicines, vaccines and equipment (Indonesia)
- Wageningen Livestock Research

Project approach

■ Background study:

- Trends poultry production Indonesia
- Inventory of broiler farms
- Indonesian stakeholder analysis

■ Field visit:

- Possibilities of realisation of a pilot project
- Discussing with different Indonesia stakeholders

Results

- Background study:
 - Trends in poultry meat production / consumption
 - Current situation broiler houses
 - Antibiotic use Indonesia
- Field visit:
 - Trends in poultry meat production / consumption
 - Meetings with Indonesia stakeholders
 - Possibilities of introduction BroMaxx®
- Poultry tour NL (JPE and farms):
 - Agriculture attaché and embassy Indonesia

Indonesia

- World's largest island country (> 13,000 islands)
- Population: 266 million (nr. 4) => ca. 320 million 2050
- Almost 90% Muslim



Java



- Jakarta (Batavia): >10 million citizens
- Greater Jakarta:
 - >30 million citizens / 36 in 2030
 - 2nd largest urban agglomeration (after Tokyo)

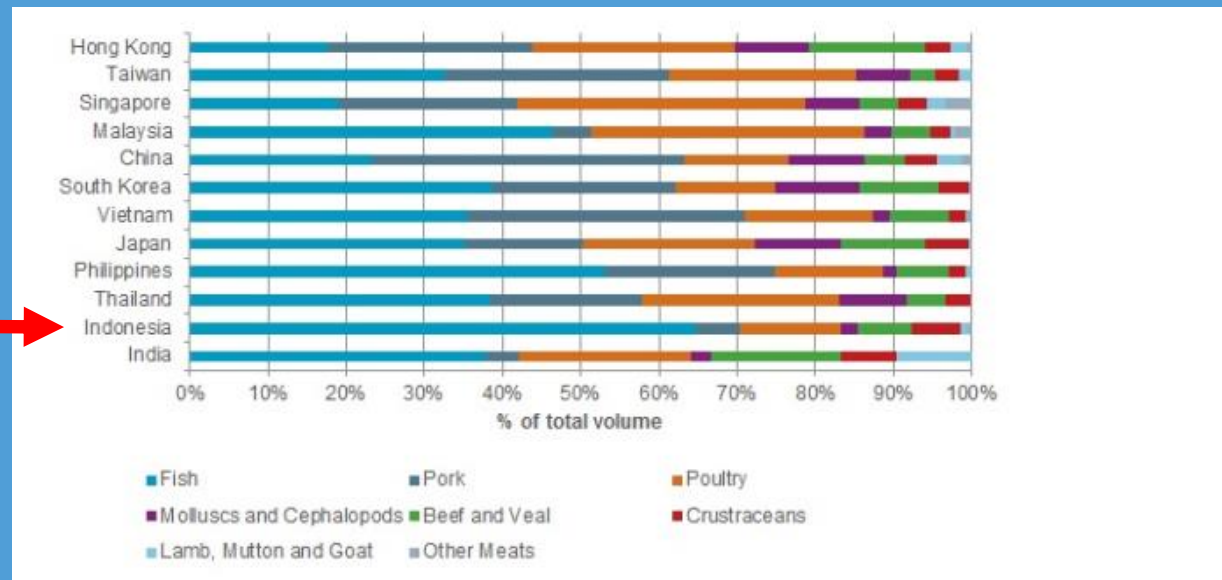


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Meat production

- Muslim country
- Low number of pigs (9 million)
- Fish, beef, goat and chicken (duck)



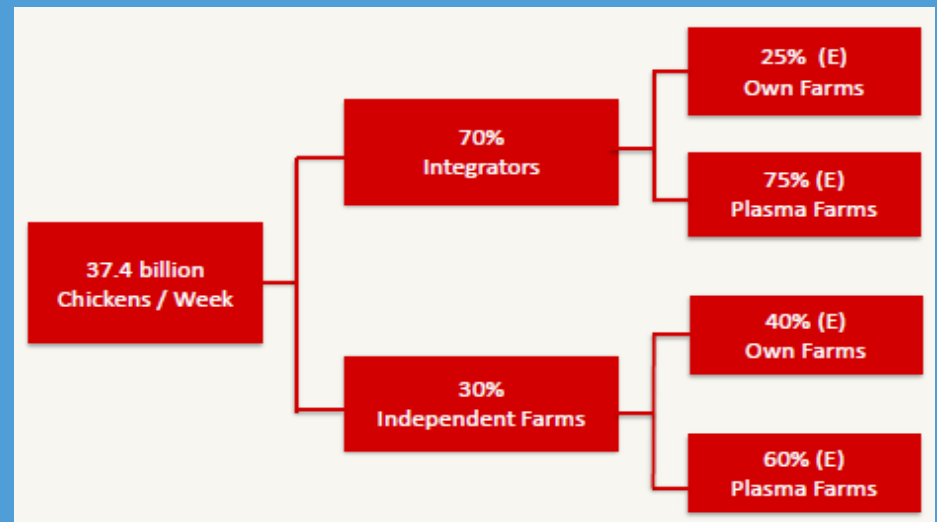
Poultry sector

- Jobs to 12 million people
- Commercial poultry sector in 2015 at 3.5 billion broilers, 200 million layers, and 25 million breeders
- The poultry sector supplies around ca. 13% of the Indonesia animal protein



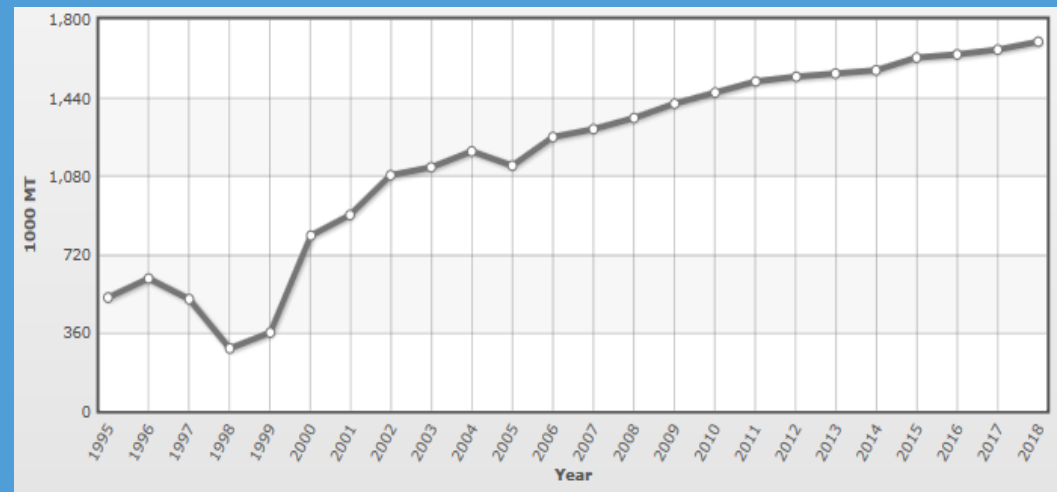
Poultry market structure

- Plasma farms: large companies purchase birds from collectors (middleman), who have their own informal arrangements with farmers.
- Subcontracting disconnects the direct link between the company and farmer. This can result in lower income for the farmer, poorer quality standards and irregular production.

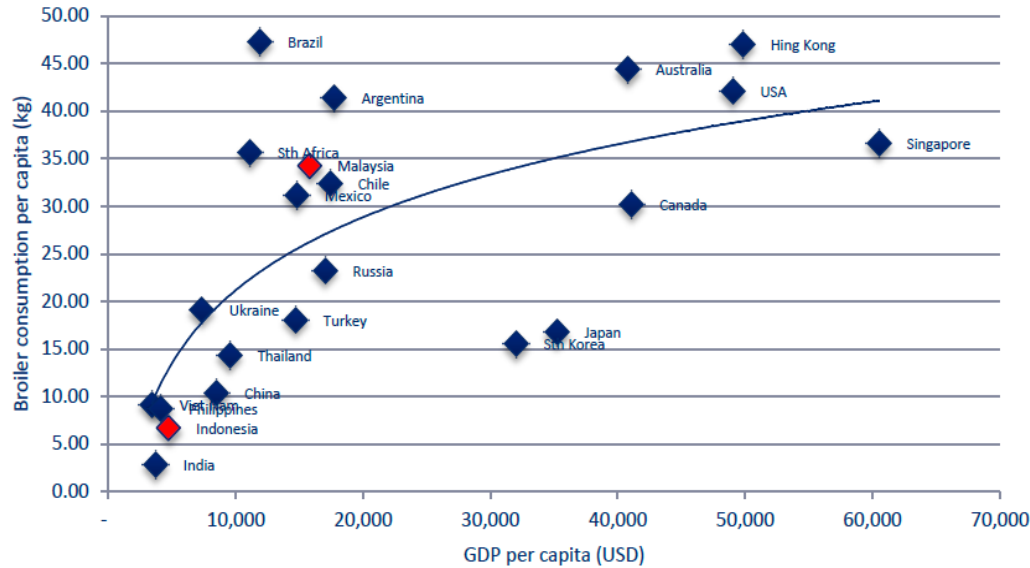


Poultry production

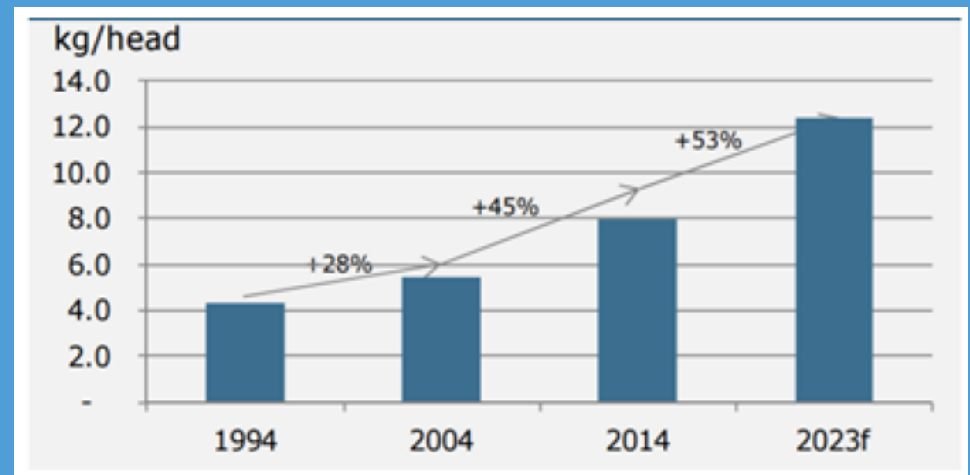
- Increased significantly since 1980s driven by: population growth, poultry meat consumption and urbanization
- Between 1995 and 2018 broiler meat production increased from around 500 to 1,700 MT per year (10%/year)



Poultry meat consumption



Source: USAID, 2013



Source: Rabobank

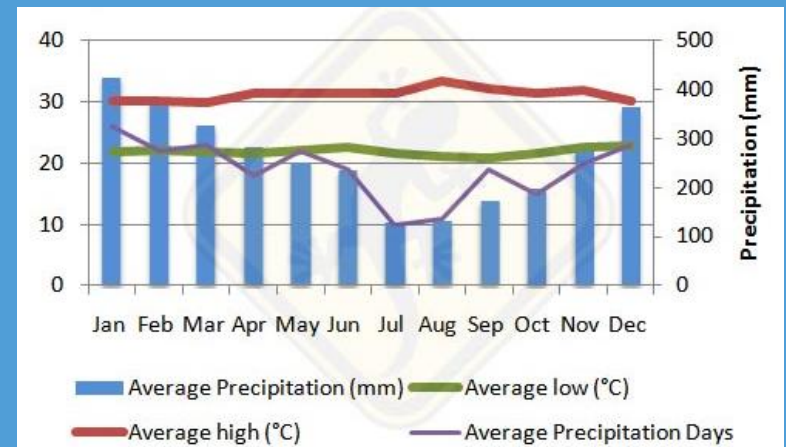
Broilers in traditional open houses

- 70-80% of birds (5,000 – 25,000 birds / farm)
- Bamboo, manual feeding and water systems
- No mechanical ventilation
- Low biosecurity levels and limited climate control



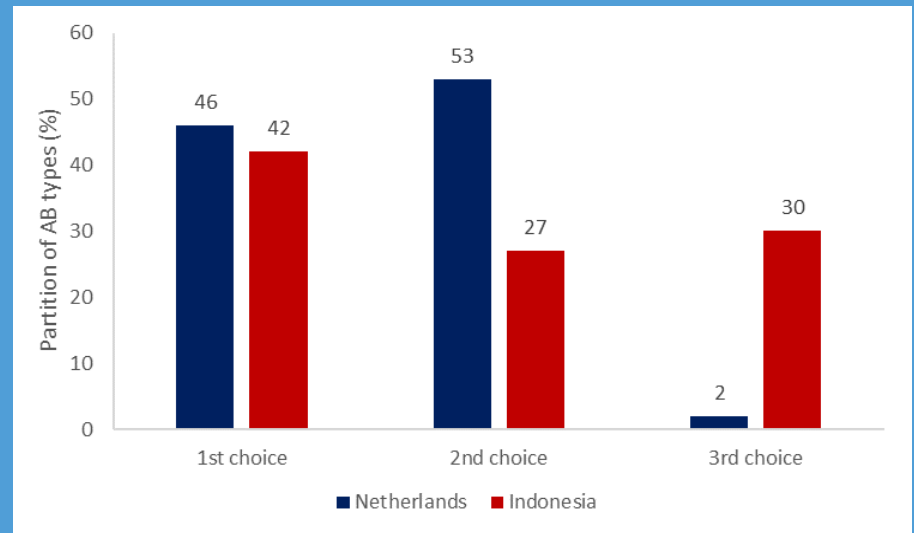
Heat stress

- Climate: high temperature and relative humidity
- Combi open houses + climate: **Heat stress**
- Effect of heat stress on:
 - Performance: lower BWG / higher FCR + mortality
 - Health: high AB use, mortality
 - Welfare: panting and increased mortality (to 10%)



Antibiotic use Indonesia (DIFS-Live / WLR)

- Survey in 2017
- 15 SME independent broiler farms
- Daily dosage of antibiotic per animal year (DD/Y) of 133 (NL = <10 DD/Y)
- High 3rd choice AB use



Innovative housing system (BroMaxx®)

- Jansen Poultry Equipment, Barneveld
- Broiler colony system
- Optimized environment, hygiene and animal health
- Maximum growth, lower FCR, lower mortality, no footpad lesions



Innovative housing system (BroMaxx[®])



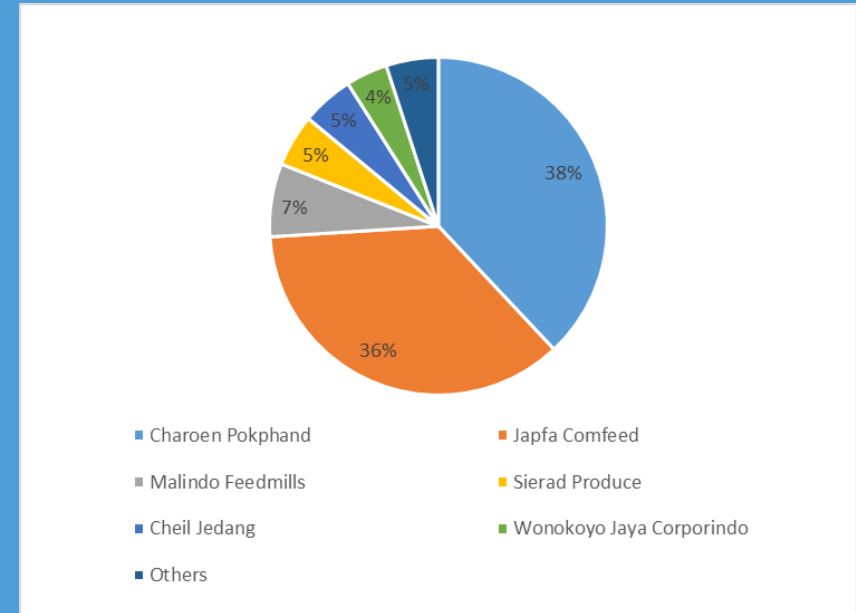
Stakeholders



- Meetings during the 13th Indo Livestock:
 - With the help of Medion PT
 - Expo and Forum for poultry, dairy and fish
 - Biggest event Indonesia
 - 4-6 July 2018, Jakarta
 - Approx. 15,000 visitors
 - More than 300 companies / 30 countries

Stakeholders

- 2 big integrators (74%):
 - Charoen Pokphand
 - Japfa Comfeed
- 4 smaller integrators (26%):
 - Malindo Feedmills
 - Sierad Produce
 - Cheil Jedang
 - Wonokoyo Jaya Corporindo



Stakeholders

ASIA—POULTRY PRODUCERS			
Head slaughtered annually (broilers, millions)	Company name	Country	BROILERS
1,300.0	New Hope Liuhe	China	○
807.0	Wen's Food Group	China	○
685.0	CP Group (including CP Foods, COFCO, Chio Tai and Severnaya)	Thailand	○
400.0	Suguna Foods	India	○
380.0	Doyoo Group	China	○
380.0	Sunner Development Co. Ltd.	China	○
320.0	Japfa Ltd.	Singapore	○
320.0	San Miguel Pure Foods	Philippines	○
270.0	Harim Group	South Korea	○
250.0	OSI China (subsidiary of OSI Group)	China	○

Meetings stakeholders



PT CHAROEN POKPHAND INDONESIA Tbk

- CP: biggest integrator
- Mr. Eddy Huitink: Breeder and broiler manager
- Some experience with BroMaxx (CP Thailand)
- Production performance are good
- Problem Indonesia: poor infrastructure (feed, DOC)
- Not interested

Meetings stakeholders



- Japfa: second integrator
- Mr. Nilton Pedro Vieira: Poultry Breeding - Farm Tech & Environment Control Management (and 2 colleagues)
- Visit Philippines:
 - July 2018
 - Bounty farm with BroMaxx[®] for some years
- Quotation in September 2018 for the first BroMaxx[®] broiler house in Indonesia
- Follow up: March 2019

Poultry tour NL

- Planned: visit of the minister of agriculture of Indonesia (Amran Sulaiman): unfortunately cancelled
- Delegation of the visit:
 - Agricultural attaché Indonesia and assistant
 - 2 persons from the Indonesia embassy the Hague
- Goal: to be informed about the professional farming of chickens to inspire Indonesian poultry housing and business

Poultry tour NL

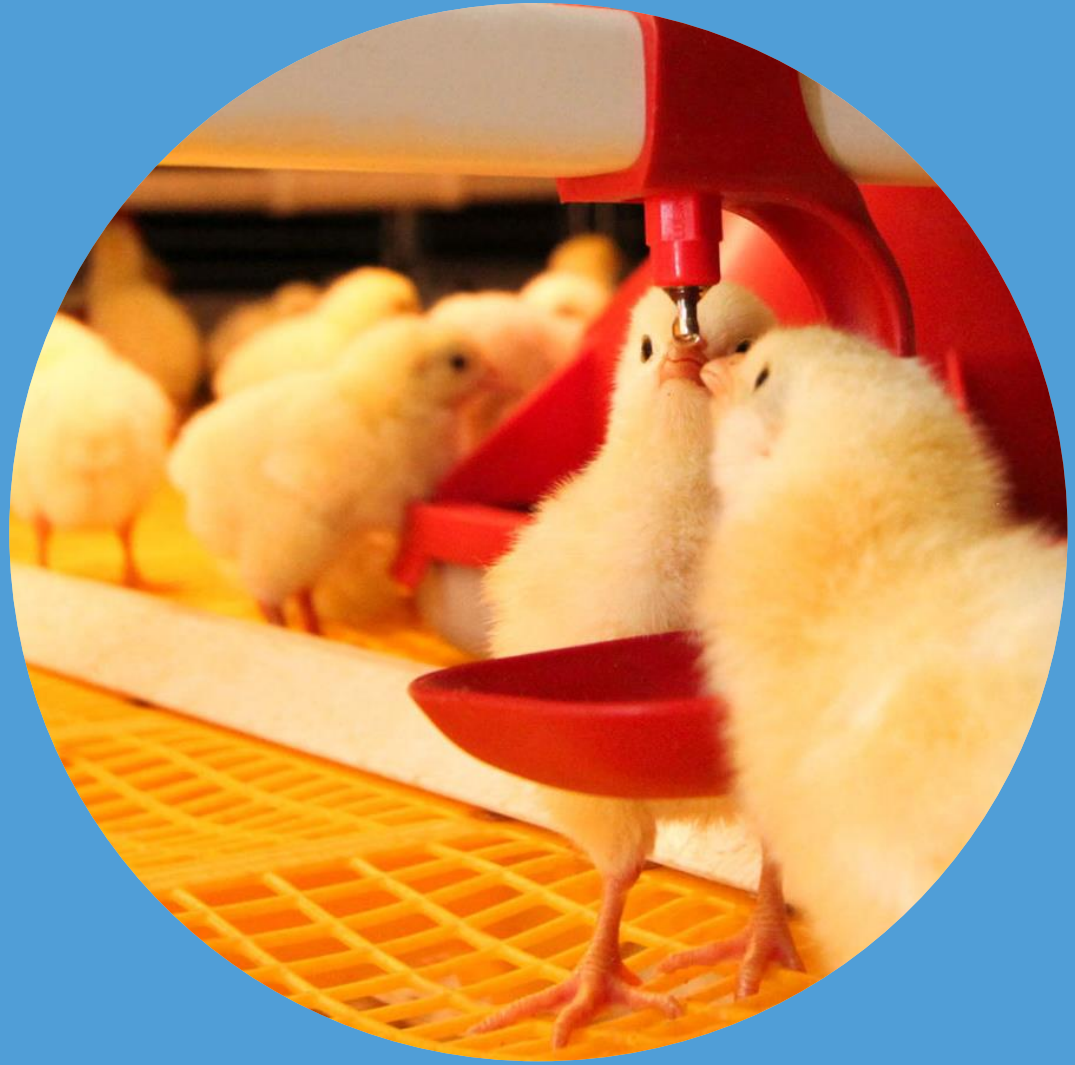
- Visit Jansen Poultry: modern poultry housing (lectures and showroom)
- Visit Aeres International Training Centre and Poultry Expertise Centre
- Visit to layer and broiler farm



Overall results

- More insight in the trends in poultry prod/cons, current situation broiler houses and AB use in Indonesia
- Update trends poultry sector during field trip
- Meetings with 2 biggest Indonesia broiler integrators and some small ones
- Possibility of introduction BroMaxx® at Japfa Comfeed
- Contacts with agriculture attaché and embassy Indonesia

End



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