## **INSIGHTS FROM 30 YEARS OF CATTLE FEEDING AND FEEDLOT MANAGEMENT IN INDONESIA**

**Greg Pankhurst** 





Livestock Exporters

Queensland

Exporters Association

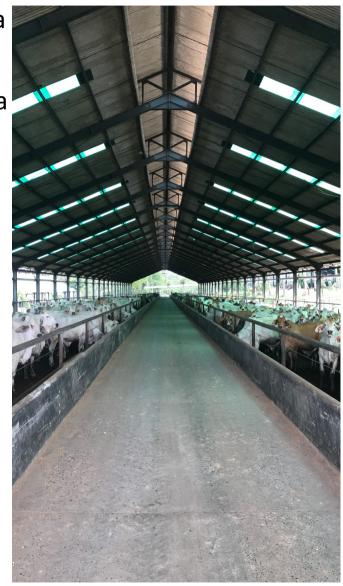




## THE LAST 30 YEARS FOR ME



- 1989 Assistant Manager at Rangers Valley Australia
- 1992 To Indonesia with Australian-Indonesian JV 17,000 hd feedlot – First modern feedlot in Asia
- 1997 Asian Financial Crisis
- 1999 JV with CPC Custom feeding Australian cattle 6 rented feedlots across Indonesia
- 2000 JV PT JJAA INDONESIA with CPC & Indonesian partner Dicky Adiwoso Build and operate 2 feedlots in Sumatra : 35,000 hd capacity Importing and feeding over 2 million cattle
- 2016 Divested Interests in PT JJAA
- 2016 Consulting Australia, NZ, Argentina, Indonesia, Vietnam, Brunei Ongoing consulting to PT JJAA
- 2017 Chairman QLEA .
- 2019 Frontier International Indonesia & Vietnam



# INDONESIA

- 278 000 000 people
- 4<sup>th</sup> biggest population globally Growing by 2 800 000 / year
- 16 th largest world economy (Top 5 by 2040)
- Biggest Muslim population in the world 96 %
- 17 000 islands 5300 km wide
- Extremely fertile land
- Rich in resources Gold, Coal, Tin, Agriculture
- Massive consumer of FOOD
- Ave Per Capita GDP USD 4300 and growing ..



#### **1992 ... TIPPERARY INDONESIA**





#### **FED STRANGE THINGS**



#### DID THINGS DIFFERENTLY ROLLED SILAGE WITH ELEPHANTS

### FEEDLOTTING AUSTRALIAN CATTLE IN INDONESIA

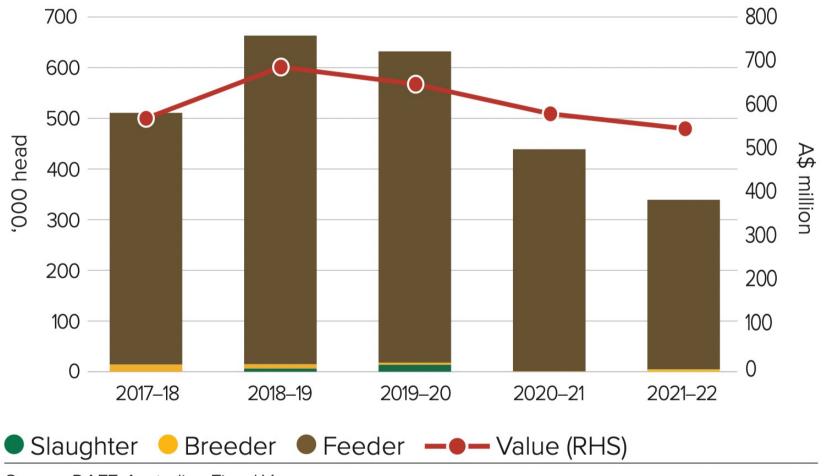
- First Feedlots started late 80's
- By-product based rations pineapple, palm, rice , tapioca, copra
- High amount of manual labor Min wage USD \$ 12 / day
- Fuel USD \$ 1.10 / litre
- 2500 mm of rainfall, 30c temps, high humidity



- Majority covered bunks , full concrete pens
- Current capacity 250 000 head for imported 25 feedlots
- To date all cattle from Australia
- Imports: 300 000 to 1 000 000 per year (head)
- Supplies 15% of Indonesia's beef requirements
- Employs well over 10 000 people directly

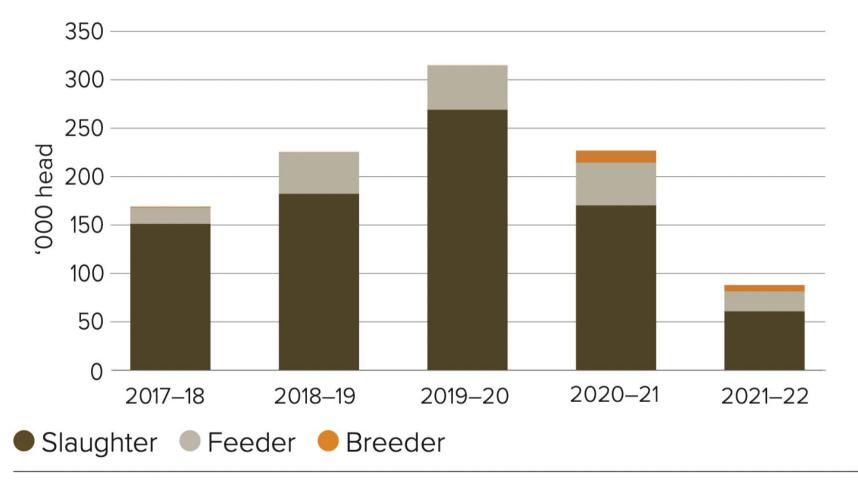


#### Australian live cattle exports to Indonesia



Source: DAFF, Australian Fiscal Year

#### Australian live cattle exported to Vietnam



Source: DAFF, Australian Fiscal Year

#### **FEEDLOTTING IN INDONESIA**



#### SOME TAKE AWAYS FOR

VEITNAM

# LAND & SITE SELECTION



- WATER 50 lts per head day
- WATER STORAGE LONG TERM AND EMERGENCY
- WEATHER Wind, Temperature, Rainfall AIR FLOW,
- MANURE DISPOSAL , Liquid runoff storage and removal
- POPULATION PROXIMITY flies, smell
- FORAGE CROPS ie Corn & Grass close
- MARKET all catergories
- STAFF they want to live there







#### **FEEDLOT DESIGN & CONSTRUCTION**

- PEN SIZE m2 per head
- PEN SLOPE 5 %
- PEN SURFACE NO SLIP
- FEED TROUGH WIDTH, FLOOR HEIGHT, RAIL POSITION
- WATER TROUGH SUPPLY PIPES AND PUMPS , EASY TO CLEAN
- ROOF SLOPE AND HEIGHT 18%, 8 m, machinery
- ROOF CONSTRUCTION Ammonia build up = RUST
- POST FOOTINGS Concreted
- BUILD IT RIGHT THE FIRST TIME MAKE IT TO LAST











#### CATTLE

- YOUNG CATTLE steers and heifers Ave 330 kg in
- OLDER CATTLE cows, bulls and slaughter types Ave 400 kg in
- UNDERSTAND CATTLE SUPPLY, SEASONALITY & LOGISTICS
- COMFORT, COMFORT, COMFORT = BEST RESULTS
- BEST PRACTICE ANIMAL WELFARE
- CONSISTENCY IN THE PENS cattle size, feeding times, cleaning
- HEALTH PROGRAM monitor for sickness and disease
- IDENTIFY INDIVIDUALLY -ear tags sickness, performance, origin
- FREQUENT ( 5 X a day ) LOOK AT CATTLE behaviour, feed aggression





#### **CATTLE** - What's the normal in Indonesia

- FEEDER STEER 300 330 kg in
- PREFER STEERS BUT 30 % IMPORTS ARE HEIFERS
- HIGH GRADE **BRAHMAN** PREFERRED –some crossed breeds
- 90 120 days feeding -
- WEIGHT GAIN OF 1.2 1.7 kg / day . A LOT OF FACTORS
- RATIONS MIXED AT FEEDLOT **TMR**
- FEED INTAKE **13 18 kg / day** as feed ( 30 % Moisture )
- WATER INTAKE 40 50 lt / day . Clean & you would drink
- SALE WEIGHT **450 550 kg** No Curfew
- CARCASS YEILD **51 56 %** , MEAT YEILD **35 38 %**
- MEAT / FAT Bright red color, lean carcass, minimum white fat
- **CREDIT** provided to buyers





#### **CATTLE** - What's the normal in Indonesia

- SLAUGHTER TYPES 400 500 kg in
- BULLS , SLAUGHTER STEERS AND COWS
- HIGH GRADE **BRAHMAN** PREFERRED –some crossed breeds
- 40 80 days feeding -
- WEIGHT GAIN OF 1 2 kg / day . A LOT OF FACTORS
- RATIONS MIXED AT FEEDLOT **TMR** . **HIGH FORAGE**
- FEED INTAKE 15 25 kg / day as feed ( 30 % Moisture )
- WATER INTAKE 50 60 lt / day . Clean & you would drink
- SALE WEIGHT **450 600 kg** No Curfew
- CARCASS YEILD **49 55 %** , MEAT YEILD **33 38 %**
- MEAT / FAT Bright red color, lean carcass, minimum white fat
- MARKET PREFERS 100 DAY FEEDERS









#### FEEDING

- CONSISTANT type, taste, texture, time
- FEED TESTING know what you are feeding
- MICRO MINERALS <u>use a professional to balance ration</u>
- STORAGE secure, moisture, pests
- WEIGHING SCALES Check bridge and feed trucks
- PLAN purchase or forward contract . Price and season
- LOOK FOR ALTERNATIVES bread, noodles, sweets, pulps
- CLEAN , FRESH WATER trough cleaned daily



- Feeding AD LIB as much as the animal can eat
- Intakes 13 20 kg per head per day AS
  FED
- Moisture content MUST BE MONITORED – FEEDING ADJUSTED
- Feed Trough clean out every day





#### FEEDING – COMMODITIES AND FORAGE

- MY EXPERIENCE Vietnam has excellent commodities
- COST IS THE CONSTRAINT Protein unit or energy unit
- MOLASSES up to 13 %
- PALM KERNEL MEAL up to 10 % Palatability problems >
- RAPE, SOYA, COPRA, DDGS, all excellent
- STARCH corn, tapioca or as a by product.
- BY PRODUCTS Noodles, biscuits, brewery waste, fruit waste
- FORAGE purchase the best available It makes your ration
- MAIZE 75 80 days with cob . Grass 40 50 days
- FORAGE CHOPPING & SILAGE MAKING moisture and chop size









#### FEEDING – MAKING IT STACK UP

- TODAY INDONESIA IN UNIQUE SITUATION BUY PRICE LESS THAN SELL PRICE – ONCE EVERY 8 YEARS
- EASY TO MAKE A MARGIN..NOT ALWAYS THE CASE 2018 2022
- COST OF GAIN SO IMPORTANT
- MUST BE LOOKING AT ADG OF AT LEAST 1.2 KG / DAY COST !!
- INDONESIAN FEED COST ABOUT USD\$ 3.00 A DAY / HEAD PLUS OPERATIONAL COST
- FEED PRICE HAS INCREASED 30 % IN THE LAST 4 YEARS AND 50 % IN LAST 8 YEARS
- IN 2000 , STILL FEEDING CATTLE FOR USD \$ 1.00 / DAY
- WITHIN THE NEXT 5 YEARS WE WILL HAVE TO LOOK AT CORN AS MAIN FEED COMMODITY

#### INSIGHTS RELEVANT TO VIETNAM .....

- CATTLE COMFORT floor, cover, fans, ventilation,
- CONSISTANTANCY throughout the whole feeding process and period .
- KNOW YOUR FEED Feed tests
- FODDER The key to good gains
- EXTERNAL ADVICE Feedlot and yard design, Nutrition, Health program ,
- INDIVIDUAL MONITORING & RECORDING Performance data – Feed, Optimum days on feed, Shed, Supplier, Station.
- DAYS FEED Set your target

