# Importation of Australian breeding cows

# Some lessons learnt from the importation of commercial Brahman heifers to Indonesia 2015

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# Summary of the importation project in Indonesia

- 2078 heifers imported by one of the Indonesian provinces in October 2015 for rural development and to raise the living standards of poor farmers.
- The heifers were distributed to about 1000 farmers arranged in 47 farmer groups.
- 60% pregnant, 40% not pregnant.
- Project started very badly. Wrong time of year. Too late. Cows were heavily pregnant and many calved in quarantine. Wet season. Very high death rate in quarantine.
- The Australian Government funded technical support from April 2016 until March 2018.
- The first year was very difficult but by 2018 the scheme had become successful and provided a good income for the farmers. The cattle were still going well when last checked in October 2019.



# Why is this relevant to Vietnam?

- Importation of Australian breeding cows is a possible way of rapidly introducing productive genetics, as well as increasing the size of Vietnam's domestic cattle herd.
- Some of the issues in Indonesia will not relate to Vietnam, but others will.
- We can talk about things that went badly as well as those that went well.



# 1. Should you import heifers?

#### Advantages of heifers

- You get the maximum lifetime benefit.
- Easier to buy in Australia.
- Less chance that they are being sold because of some problem.
- Very few heifers are infertile (2%-5%).

#### **Disadvantages of heifers**

- Brahman heifers have difficulty cycling when lactating with their first calf (lactation anoestrus) so they often take a year off.
- Their bodies are not fully developed, and lactation is the period of most nutritional stress.
- Feeding them extra at this time will not usually solve the problem as they partition the extra feed to milk supply.
- Best solution is <u>early weaning</u> of calves from heifers (from 100 kg).



### Or should you import cows?

#### Advantages of cows (5 years +)

- Experienced breeders. They should give a calf almost every year.
- Better mothers.
- Fully grown so cheaper per kg and worth more if they have to be slaughtered.
- In Vietnam you should be able to examine them individually and keep them productive to an older age than in Australia.
- If you buy cows, it makes sense to buy pregnant.



# 2. Should you import pregnant or not pregnant?

#### Advantages of pregnant

- Buying Preg-tested-in-Calf (PTIC) heifers or cows means an extra Australian-bred calf.
- Proof that the cow is not infertile.
- Quicker financial return.

#### **Disadvantage of pregnant**

 North Australian cows usually calve in the early wet season (October-December). Large stations start mustering from April - May. Regulations prevent shipping over 190 days pregnant, leaving very little time in June and July for selection, transport, quarantine and export. Risky!

#### Conclusion

 Pregnant heifers, non-pregnant heifers or pregnant cows – all have advantages and disadvantages.

#### Buying pregnant heifers - window of availability



## 3. Choice of farmers and need for good support structure

- Farmer groups were a good idea, but many farmers with no experience of cattle or understanding of the work involved
- Some of the farmer groups were not stable and broke up, with cattle being taken closer to home in groups of 2-6.
- Many of the cattle were moved to new owners who were much more motivated.
- Government staff were very important. In this project, one district was much better than the other.
- Training provided in animal health, infrastructure, nutrition, handling, and breeding



### 4. Infrastructure

On the farms, almost all the yards were very well built.





# 5. Animal behaviour

Cattle settled down within a few weeks, and there were no behaviour issues at all.





## 6. Productive cattle need more feed

- Most of the cows were fed in stalls ("cut-and-carry"). The first year was spent convincing the farmers to feed enough.
- The farmers learnt this, and by the second year most of the cattle were in excellent condition.



# 7. Grazing

- Neither Indonesia nor Vietnam have large areas for grazing, like Australia. If you can graze it is easier and more profitable.
- In this project, some of the herds were grazed on old coal-mining land, or in oil palm plantation
- Often cattle are not grazed long enough during the day. If cattle are penned at night, they need to be also fed there.
- Plantation owners don't want cattle in with very young trees (till about 4 years). There is then good feed till canopy closes (about 12 years). Most of grazing is grasses along tracks and in open areas.



# 8. Artificial breeding and bulls

- At the request of the Indonesian Government, we provided an expert to assess the AI system
- Indonesian inseminators are very skilled but two major problems:
- 1. Heat recognition, especially when the cows are tied up at night, and delay in fetching the inseminator
- 2. Maintenance of cold chain. Inseminators used to carry semen straws in thermos flasks on their motorbikes, so we provided them with five "dry shippers" which kept the straws in better condition





# 9. Bulls

- In North Australia we would never use just AI, we would always have a bull to use afterwards for those cows did not conceive from AI.
- This project did not import bulls at the same time. They tried to rely just on AI.
- Eventually there were enough bulls (Ongole bought by the farmers themselves, or calves born from project in 2015) and calving rates improved.
- When groups broke up and the cows were taken home in small groups, bringing the bull to the cow was a big problem.





## 10. Weaning

- Very important for re-conception, but it was hard to persuade the farmers to do this
- Weaning at 4 months (120-150 kg) will allow the cows to get back in calf with 15month inter-calving interval
- Farmers said they didn't wean because they wanted maximum growth from their progeny, because they did not have separate yards to move them to, and because weaned calves made too much noise in the night disturbing the family.





# 11. Animal health - satisfactory

Most serious issues

- Viral pneumonia (caused by stress)
- Mis-mothering (stress)
- Prolapse (stress)
- Bovine ephemeral fever (3 day)

After they settled in the farms, disease was not a big problem



# **Implications for Vietnam**

- 1. Importation of pregnant heifers, non-pregnant heifers and pregnant cows are all possible. There are advantages and disadvantages of each.
- 2. Brahman heifers always have problems with their second calf
- 3. Productive cattle need more feed
- 4. If grazing, then grazing time must be long enough, and feed at night
- 5. Weaning is very important
- 6. Main problems with AI are heat detection and maintenance of cold chain
- 7. Bulls are essential but, if the cows are kept in stalls, need to work out how they can get to the cows
- 8. Behaviour not a problem
- 9. Animal health not a major problem



