

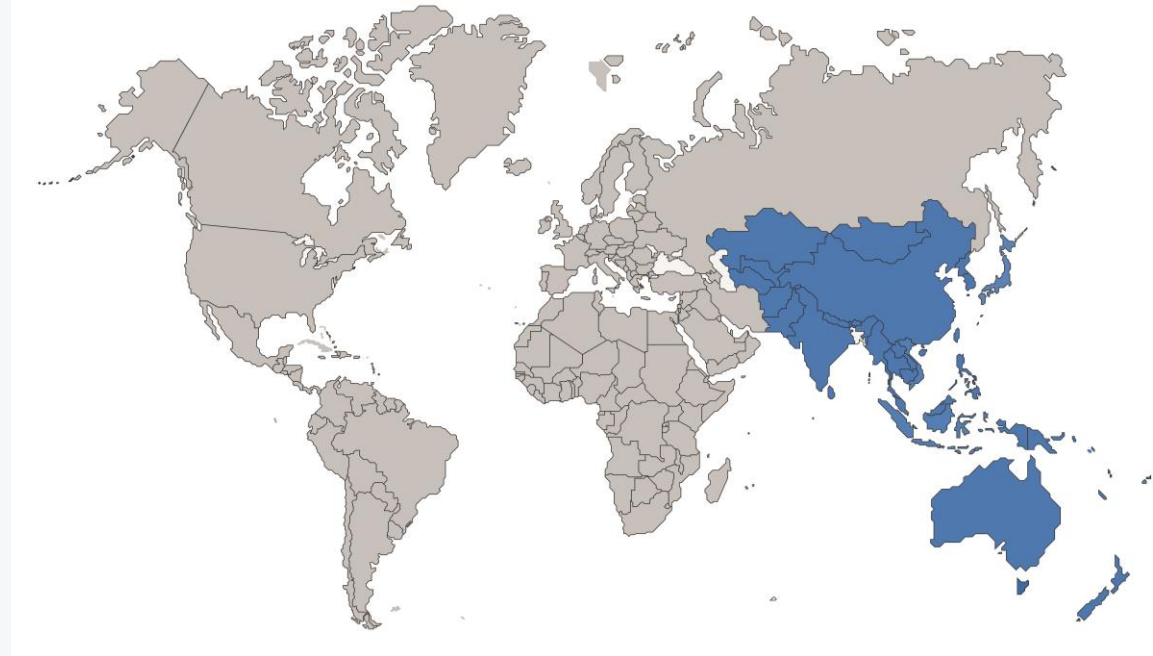
China Dairy Development

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Introduction

- Close to 40 years in the Dairy Industry with DeLaval
- Native of New Zealand – the world's largest exporter of Dairy products
- Lived and worked in Sweden, headquarters for DeLaval
- Lived and work in the US for DeLaval covering both North and South America
- Roles in Sales, Marketing and Product Development
- Currently living in New Zealand but working across the Asia Pacific region



The first problem and solution

- In 1996, 77% China dairy cows were owned by family farms, on average 3 milking cows per family.
- These farmers were milking at home by hand and then transporting the milk to the collection centre where they received payment for their milk.
- Some Dairy companies who rely on milk collection centers had to disassemble the pasteurizer machine every couple of hours and clean the dirt due to milk quality problem.
- Yili, the largest milk processor in China created the village milking centres and DeLaval partnered with them to develop milking equipment to match this need.



The first problem and solution

- DeLaval designed a special milking machine for dairy companies to build Milking Center replacing Collection Center.
- First bucket milking machine with specially designed cleaning system
- Then glass Jars
- The problem solved; dairy companies did not have to disassemble their pasteurizers anymore.
- This approach also assisted very much in the security of the milk quality.
- More village milking centres were created locally but also owned locally



The second problem and solution

- 2008, the melamine crisis broken out, which is related to some milking centers which were owned locally.
- The industry started to build industry farms replacing family farms and milking centers
 - Yili and Mengui drove this development to secure milk quality for the consumers of China.
- By end of 2022, top 30 farm companies:
 - Own 1.24 million Holstein cows, accounting 40% national total
 - Produce 46% total national commercial raw milk
 - Totally 524 farms, each with average cow number of 2368



The second problem and solution

- One of the most successful industry farm was built by AustAsia, owned by an Indonesia agriculture company.
 - They learned a lot from US industry farms
 - They have 10 farms in total now. Each with 5400 milking cows, with twin 80B Rotaries for 4 milking per day. Running 24 hours per day.
 - This has become model for the industry
 - The latest one built in 2023, milking 7000 cows with twin 100B E500.
 - The level of performance on their farms is comparable with any of the large dairy farms across the world.



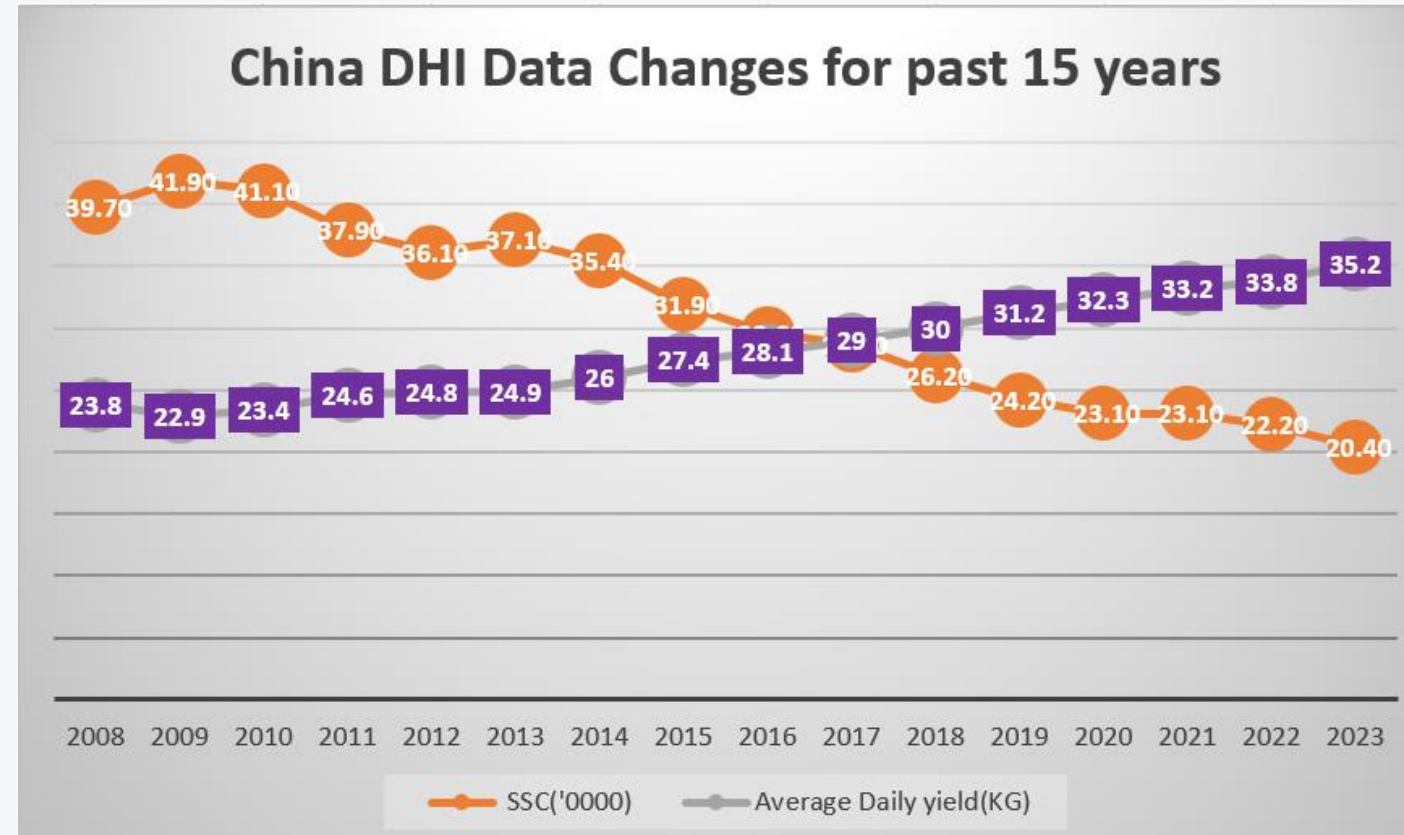
DeLaval in China

- DeLaval started business in China from 1994, starting with simpler milking machines: Bucket, Glass jar, HB, Parallel.
- With the industry moving to industry farms, we focus more on rotaries. So far 420 DL rotaries have been installed; mostly 80B PR3100.
- Among top 77 farms with average yield above 12T, 62% of the 166,127 cows are milked by DeLaval equipment
- Note: Based on Chinese dairy magazine data
- DeLaval totally has 200 service technicians in China: 150 employed by DeLaval + 50 from dealers
- After sales service, including consumable and advisory, account about 50% of total business



Yield and Somatic Cell Count development

- DeLaval has been actively supporting our customers on parlor management and mastitis control by trainings and advisory
- Focus on SSC improvement
- DeLaval suggested milking routine has become the industry standard
- Driving milk quality and on farm profitability



People Development

- The value of the workers on the farm has also increased by the adoption of standardised process and Farm management tools.
- They have excelled in taking control of their own destiny by enforcing milk quality standards and farm management practices.
- Even genetics now is seen as a key driver for their self-sufficiency.
- But today the industry is in a tough phase as it is globally, but they have built a very strong base to come out of the current situation.

- The dragon is well and truly awakened.



A close-up photograph of a person's hand holding a small, round, green moss ball. The background is a soft, out-of-focus green, suggesting an outdoor setting with sunlight filtering through trees. The text "We make sustainable food production possible" is overlaid on the right side of the image in a white, sans-serif font.

We make
sustainable
food production
possible