



Husbandry Unit, Youran Husbandry

Dayang Dairy Farm



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Contents

Chapter 1 About Youran Husbandry and Dayang Dairy Farm	3
1.1 About Youran Husbandry	3
1.2 About Dayang Dairy Farm	4
1.2.1 Profile	4
1.2.2 Production Processes	5
1.2.3 Equipment	6
1.2.4 Organizational structure.....	7
1.2.5 Employees	7
Chapter 2 Background of TPM Introduction and Milestones of TPM Activity	8
2.1 Background of TPM introduction	8
2.2 TPM milestones.....	8
Chapter 3 Achievements of TPM Activity.....	9
3.1 Tangible achievements	9
3.2 Intangible achievements	9
Chapter 4 Key Factors to Success	9
Chapter 5 Achievement Sheet.....	11



Chapter 1 About Youran Husbandry and Dayang Dairy Farm

1.1 About Youran Husbandry

Youran Husbandry Co., Ltd. is a leading dairy company in China and was listed in the Hong Kong Stock Exchange on June 18, 2021. The business of Youran Husbandry covers cow breeding, forage grass cultivation, animal feed manufacturing, and dairy farming. Its practice in dairy farming is known as the best model in China. The company currently runs 96 dairy farms, 15 fodder factories, 15 forage grass farms, 7 bull breeding stations, and 1 animal husbandry trading center. The dairy farms are distributed in 17 provinces or autonomous regions in China. The dairy cow inventory of the company exceeds 600,000 head. The company started dairy goat farming business in 2023. (Fig.1.1)



Fig.1.1: About Youran Husbandry

In recent years, Youran Husbandry maintained growth of operating revenue in its four principal businesses. The annual revenue in 2023 increased by 3.6% than the previous year, and revenue in the first half of 2024 increased by 10.8% than the same period of the last year. (Fig.1.2)

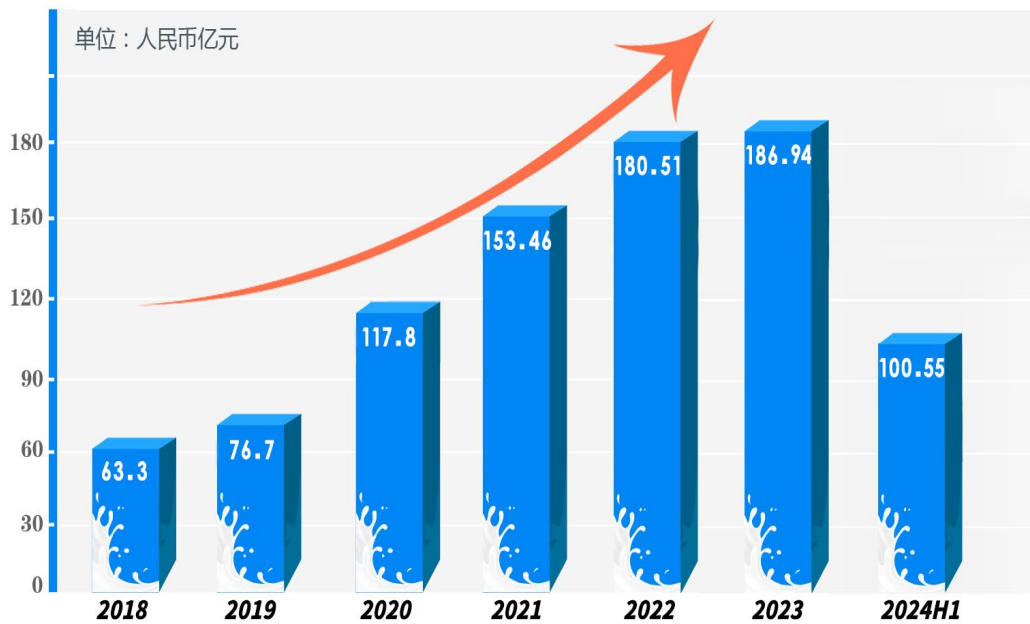


Fig.1.2: Operating revenue of Youran Husbandry

1.2 About Dayang Dairy Farm

1.2.1 Profile

Dayang Dairy Farm is a wholly-owned subsidiary and the pilot dairy farm of lean management of Youran Husbandry. The farm is located in Hohhot City, Inner Mongolia Autonomous Region, covering an area of 333,000 square meters. It was put into operation in September 2012. The farm consists of indoor cowsheds, open-air cowsheds, milking parlor, silage bunkers, material warehouse, calf island and manure treatment facility, and is equipped with TMR mixers, DeLaval milking machines, manure solid-liquid separator, pasteurizers and other modern dairy machines. There are more than 2,700 cows, including 2300 lactating cows in the farm, and the daily milk production is nearly 100 tons. (Fig.1.3)



Fig.1.3: Layout of Dayang Dairy Farm

- April, 2011: Start of construction work. October, 2011: Introduction of cows.
- August, 2012: Birth of the first calf. September, 2012: Start of milk production.
- 2013: Good Dairy Farm of Husbandry Division.
- 2014: Good Youth Team of Youran Group.
- 2015: Good Dairy Farm/Cow (DHI)Farm of Youran Group.
- 2016: First prize, Safety Management Team Award.
- 2017: Cow Longevity & Daily Milk Production Award.
- 2018: Kick-off of TPM.
- 2019: Team Education Base, TPM Pilot Unit Award, TPM Kaizen Team Award.
- 2020: Team Innovation Award; First Prize, Kaizen Team of the Year;
- 2021: The first TPM Excellence Award (Category B) in animal husbandry industry.
- 2021: One of the 36 modern dairy farms.
- 2022: Silver Medal, TPM Promotion Award, Youran Husbandry.
- 2023: Passed health-check assessment for Award for Excellence in Consistent TPM Commitment.
- 2024: Follow-up assessment for Award for Excellence in Consistent TPM Commitment.

1.2.2 Production Processes

There are four main processes in the farm: feed processing, milk production, milking, and manure treatment. Feed processing is done using machines. Feeds for cows usually contain corn silage, grass, and concentrates. Silage is prepared through cutting, piling, and fermentation of whole maize plants. Milk production is done by lactating cows. Milking is done using milking machine. Each lactating cow will go through 3~4 milking every day. The milking procedure is consisted of the following steps: cattle driving, standing-by, going on stage, pre-dipping, milk check, teat



cleaning, attaching the milking unit, milking, removal of the milking unit, post-dipping, getting down from the stage, and returning to cowshed. Manure is cleaned 3~4 times a day and treated using solid-liquid separation machine. The coarse fibers in manure are dried and fermented in a tank at temperature above 55 °C, then go through natural drying until water content is lower than 40%. The resulting material is a recycled manure solid that can be used as bedding material. (Fig.1.4)

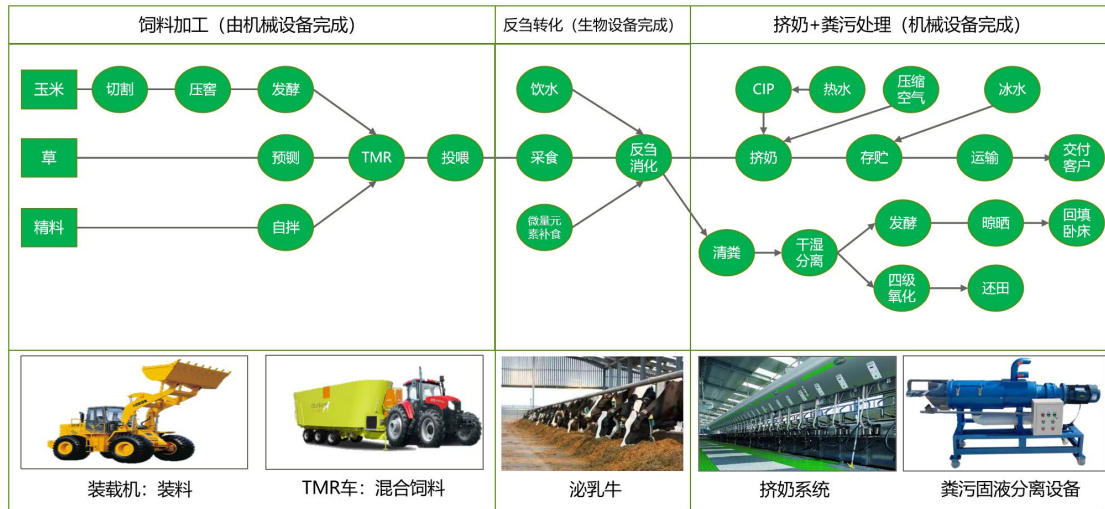


Fig.1.5: Production processes

1.2.3 Equipment

The farm is equipped with 113 machines, including 31 machines in cowsheds and supporting facilities, 35 machines in milking parlor, 12 manure treatment machines, 10 power machines, and 21 other machines. (Fig.1.5)



Fig.1.6: Equipment layout



1.2.4 Organizational structure

There are one Farm Director, six production departments, one direct department, and two common-functional departments (Financial and Human Resource) in the farm. The farm hires 68 employees, including 63 direct employees (92%) and 6 indirect employees (9%). (Fig.1.6)

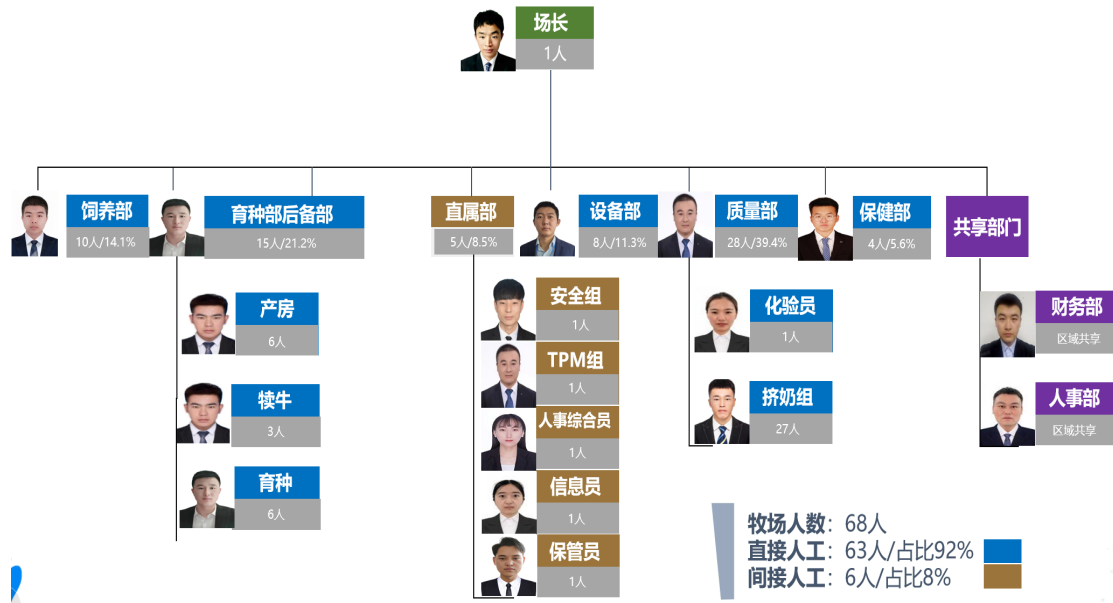


Fig.1.6: Organizational structure

1.2.5 Employees

51% employees are college graduates or above. The figure is 79% for management staff. The average age of employees is 27. 69% employees have worked in the farm for more than two years. The average years of service of department managers is four years. The labor force is stable and satisfies the needs of daily operation. (Fig.1.7)

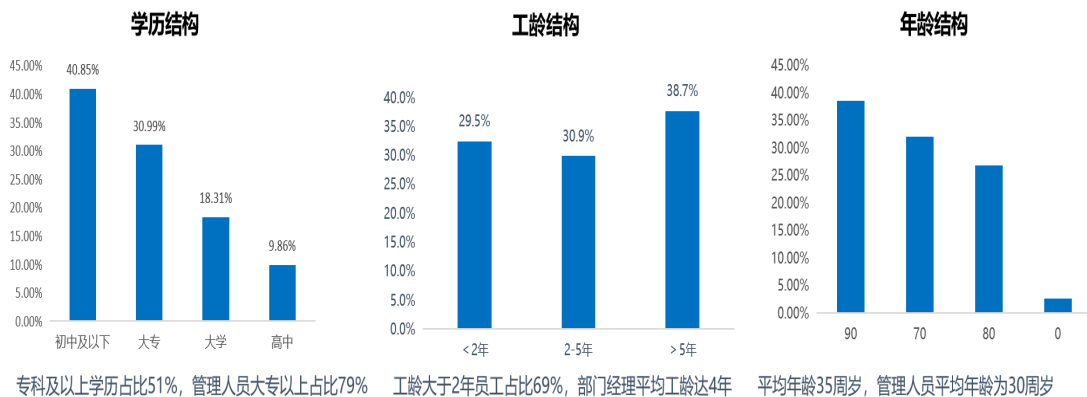


Fig.1.7: Employees



Chapter 2 Background of TPM Introduction and Milestones of TPM Activity

2.1 Background of TPM introduction

To support the mission of Youran Husbandry, which is to “become the most trusted, world-class animal husbandry technical company in China”, and the mission of Dayang Dairy Farm, which is to “become a model dairy farm practicing lean management”, we started TPM activities in 2018. Our strategies are safety assurance, high quality, high revenue, and talent cultivation. Our target is to achieve operating revenue of 150 million Yuan by 2025. (Fig.2.1)

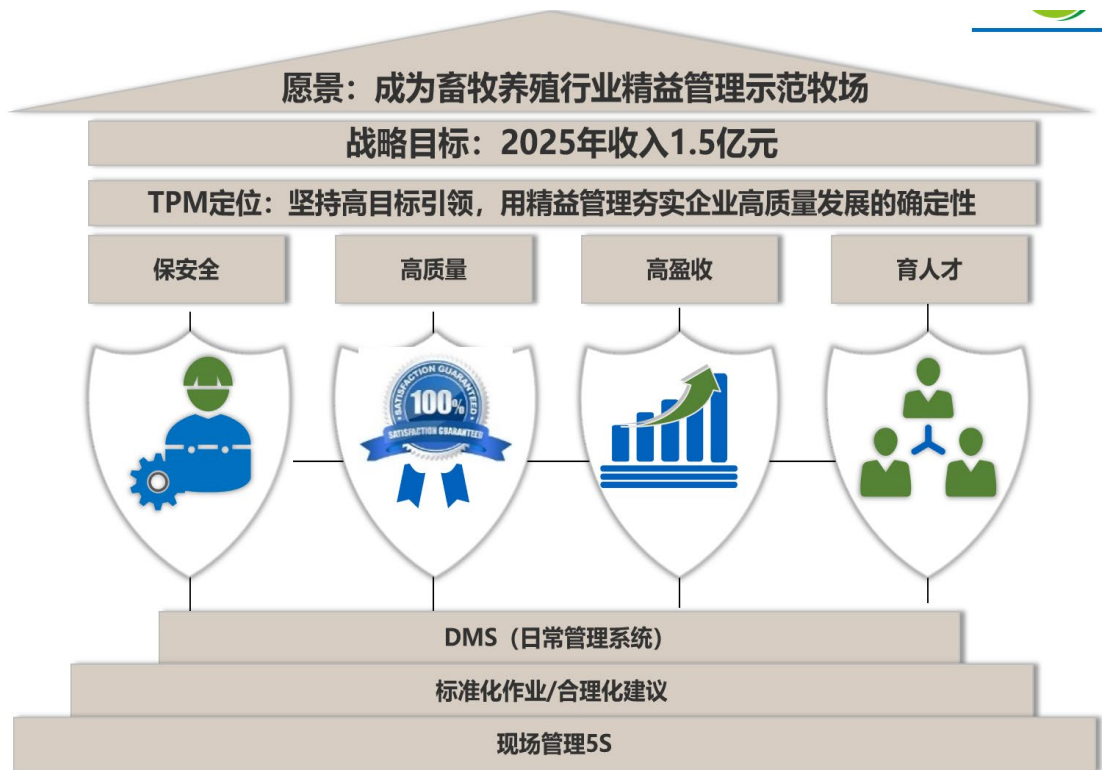


Fig.2.1: Strategy of Dayang Dairy Farm

2.2 TPM milestones

We started DMS and standard operation in June, 2018. Through daily, weekly, and monthly DMS meetings and improvement activities, our performance is improved significantly. To promote standard operations, we prepared standard work instructions and trained employees through JI training. We established a steering committee and then nine pillars including FI, AM, QM, E&T, E-PM, C-PM, SHE, EM, and TIO. (Fig.2.2)

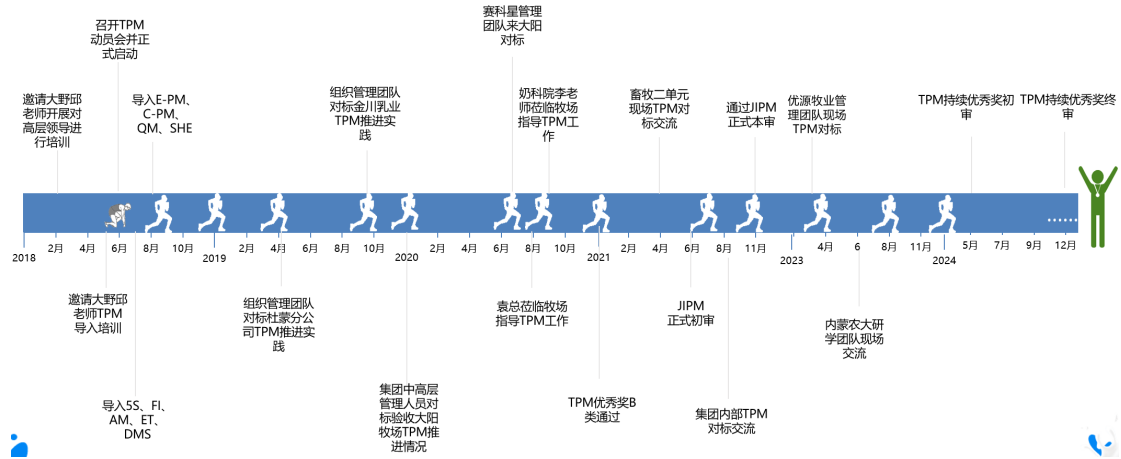


Fig.2.2: TPM milestones

Chapter 3 Achievements of TPM Activity

3.1 Tangible achievements

Safety/environmental/occupational accidents: zero.

Quality accidents/claims: zero.

Operating revenue: 58.7% increase than 2018.

Sales volume: 34,689 tons in 2024, a 54.3% increase than 2018.

Daily milk production of individual lactating cow: 42.05 kg in 2024, a 9.97 kg increase than 2018.

3.2 Intangible achievements

- 1) Seven methodologies for pillar activity and six methodologies for team activity.
- 2) Closer collaboration between departments.
- 3) Improved mindset of systemic thinking and problem-solving skills.
- 4) Improved workplace environment and morale.

Chapter 4 Key Factors to Success

- 1) 100% involvement in TPM activity and No.1 in the ranking of improvement proposal of the group.
- 2) Continuous cultivation of talents for the organization.
- 3) A management system for continuous improvement of dairy farm.
- 4) The first TPM certified dairy farm that provides talents to the animal husbandry division, Youran Group, and the dairy industry in China.

We will continue TPM activity, challenge all TPM awards, and build a dairy farm where cows live longer, healthier and make more quality milk, where superior cows can be bred, employees can grow faster in their career path. Eventually, we will build a world-class dairy farm with excellent performance. (Fig.4.1)

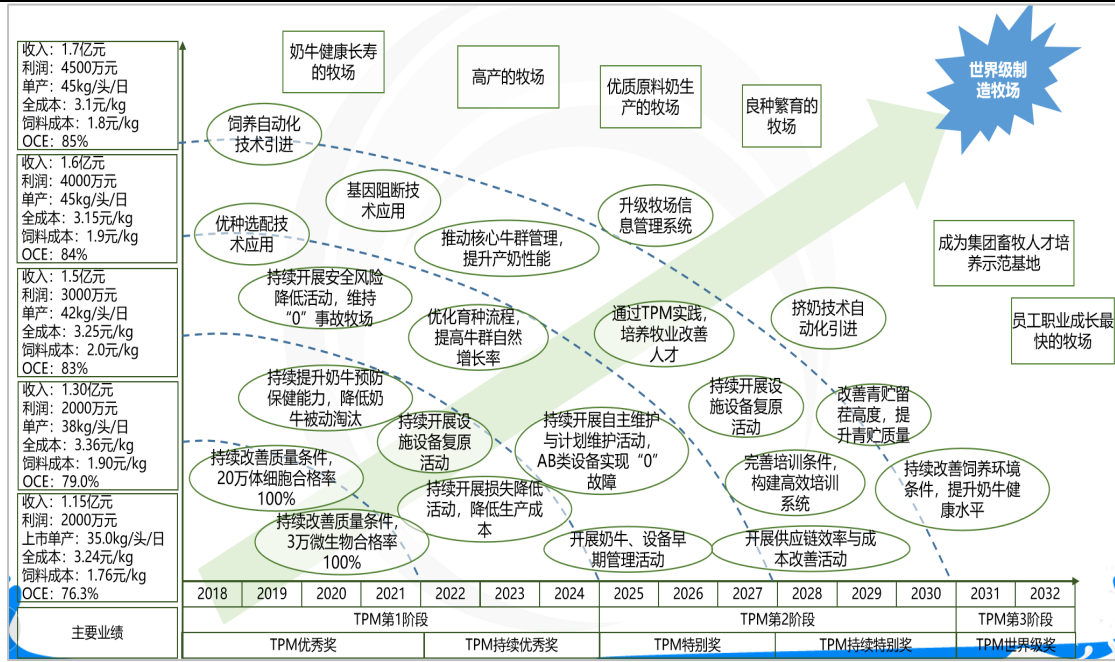


Fig.4.1: TPM activity plan



Chapter 5 Achievement Sheet

TPM Achievement Sheet

No.	Gate	Indicator	Unit	Actual						
				2018	2019	2020	2021	2022	2023	2024
1	S	Safety accident	case	0	0	0	0	0	0	0
2	H	Occupational disease	case	0	0	0	0	0	0	0
3	S	Occurrence of work-related accidents requiring days off work	case	0	0	0	0	0	0	0
4	S	Occurrence of work-related accidents not requiring days off work	case	0	0	0	0	0	0	0
5	E	Environmental claim	case	0	0	0	0	0	0	0
6	Q	Quality accident	case	2	0	0	0	0	0	0
7	Q	Quality claim	case	0	0	0	0	0	0	0
8	Q	Pass rate of 200,000 SCC (Somatic Cell Count) standard	%	69	73.5	75	78.8	87.5	94	100
9	Q	Pass rate of 30,000 TBC (Total Bacteria Count) standard	%	93.8	95.7	97.39	98.7	99.2	100	100
10	C	Revenue	10,000 Yuan	8,096	10,562	11,627	12,950	12,402	10,968	12,850
11	C	Sales volume	ton	22,486	27,413	27,527	27,457	29,734	29,007	34,689
12	C	Feed conversion ratio	%	-	-	-	1.51	1.59	1.71	1.72
13	P	Daily productivity of lactating cow	kg/cow/day	32.08	32.69	35.19	36.6	38.11	40.23	42.05
14	P	Overall Cow Efficiency (OCE)	%	69.31	71.14	76.24	78.97	81.4	83.83	84.01
15	P	21-day pregnancy rate	%	27.11	28.07	30.14	30.14	30.29	33	35.44



Dayang Dairy Farm, Inner Mongolia Younan Husbandry

16	D	Milk processing time	Hour	9.7	8.9	7.5	7.4	6.9	3.8	3.8
17	C	Unit cost	Yuan/kg	3.4	3.46	3.24	3.39	3.47	3.43	3.09
18	P	Labor productivity	ton/head	265	345	357	384	390	391	397
19	P	Disease incidence	%	8.1	5.9	5.1	4.58	3.76	2.88	2.84
20	P	Number of BD	case/month	24	18	8	5	3.5	1.5	1
21	P	MTTR	min	215	166	114	89	56	25	19
22	P	MTBF	h	30	40	90	144	206	480	680
23	C	Disease incidence of grown heifer	%		5.9	5.1	4.58	4.52	4	3.8
24	M	Turnover rate	%	3.73	2.07	1.7	1.5	1.43	1.3	1.2