

Award for TPM Excellence

Chapter1: Outline of Company and Plant



1. Company

1.1. CPV profile

1.1.1. History

C.P. Group (Charoen Pokphand Group) was established in 1921 in Bangkok, Thailand. Now, C.P Group is a multi-industry manufacturing corporation and one of Thailand's strongest corporations in the field of industry - agriculture and food processing. C.P. Group has invested in Vietnam since 1988, had representative office in Ho Chi Minh City. In 1993 C.P Breeding ltd., Co was established. Head office was located in Bien Hoa Industrial Zone 2, Dong Nai province. In 2011, company name was changed to C.P Vietnam Corporation (CPV).

Major manufacturing sectors include:

- Feed Business
- Aquaculture Farm Business
- Livestock Farm Business
- Food Products Business
- Veterinary Technical Services
- Organic Vegetable Business Projects
- Distribution, retail food

With Integrated Food Production Chain of 4F "FEED-FARM-FOOD-FOOD OUTLETS" CPV has become a leader firm in safety food production. (Fig 1-1)



Fig.1-1: Integrated Food Production Chain of 4F



C.P. VIETNAM CORPORATION – DONG NAI FACTORY 3 Award for TPM Excellence



1.1.2. Logo CPV



Fig.1.2: Logo CPV

Lotus is a symbol of morality, effort devote the fair values for the community reason CP chose the lotus as the symbol representing values of the corporation.

1.1.3. CPV VISION

"Kitchen of the World"

1.1.4. CPV MISSION

CP invested in Vietnam with six missions:

- Expand the closed industry- agriculture and food production
- Create potential growth towards to world level
- Leadership in quality and safety food
- Promote initiative and increase efficiency
- Focus on developing human resources
- Responsible for society and environment

1.1.5. CPV VALULES

The Company strives to build a working culture that encourages everyone to work together and decide based on trust, honesty, morality and desire to create good values for community. This is done through communicating the Company's core value:

- 1. Three Benefits to sustainability: for country, for employees and for company
- 2. Speed & Quality
- 3. Simplification
- 4. Adapt to change
- 5. Innovativeness
- 6. Integrity, Honesty & Reciprocity



Fig.1-3: CP Values



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1.1.6. CPV Organization

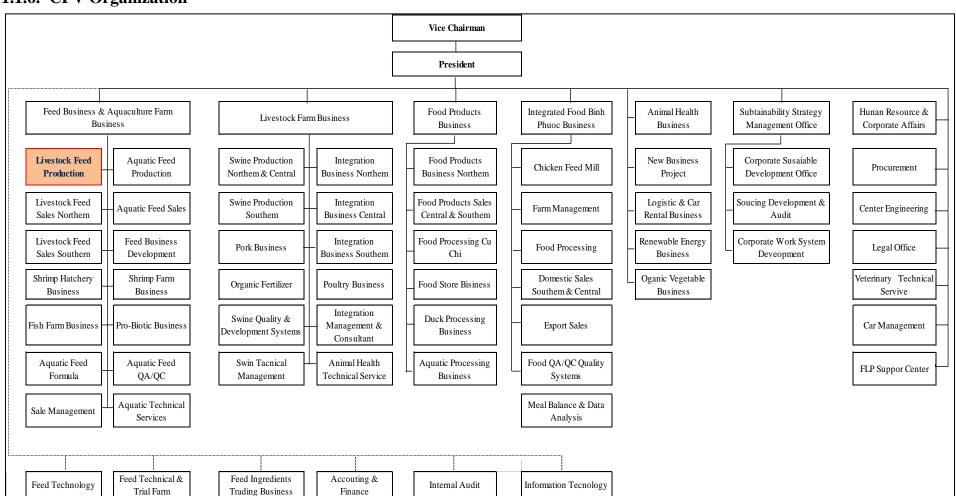


Fig.1-4: CPV Organization



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1.2. Feed Business Unit Profile

1.2.1. Overview

Feed business unit is first chain in Integrated Food Production Chain follow the pattern 4F of CPV. In 1993, CPV invested to build the first animal feed plant in Vietnam, location in Bien Hoa Industrial Zone 2, Dong Nai Province.

Now, CPV is the leader of animal feed manufacturing in Viet Nam. The major products include: cattle feed (pig, beef cow, dairy cow), poultry feed (chicken, duck, quail), aqua feed (Shrimp, fish). There are two feed shapes, mash feed and pellet feed appropriate to the characteristics and development stage of each animal type. Products are distributed to farming and dealers' systems across the country.

The raw materials resource to produce animal-aquafeed is tightly controlled by a modern laboratory system with the purpose to control the nutritional value as well as the residue of banned substances in raw materials.

1.2.2. Market share in Vietnam

In 2022, the market share of CPV accounted 21%, maintaining the leading position in Agro feed production in Vietnam. (Fig. 1-5)

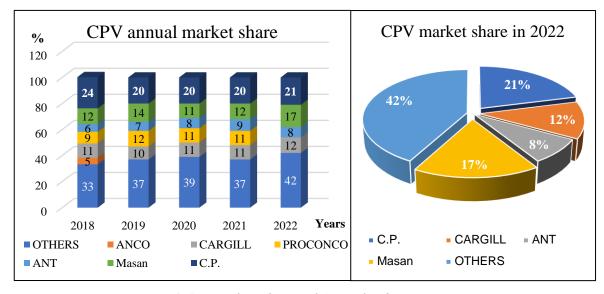


Fig.1-5: Market share of Agro feed in Vietnam



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1.2.3. CPV Feed Business Unit VISION

"Agro Feed Manufacturing Leader in Vietnam"

1.2.4. CPF Feed Business Unit POLICY

"Produce good quality and safety feed with competitiveness cost; increase feed capacity to support growth of integrated business Feed-Farm-Food with high technology, environment friendly and sustainable"

1.2.5. Feed Business Unit STRAGETY

- Implement TPM (Total Productive Maintenance) to increase production efficiency, reduce production cost, developing knowledge and skill of employees.
- Create standard systems (ISO and HACCP) to provide good quality, safety feed, customer satisfaction service and build safety-healthy workplace, friendly environment.
 - Create continuous improvement system (3i) to increase competitiveness.

1.2.6. Feed Business Unit Organization Central Area

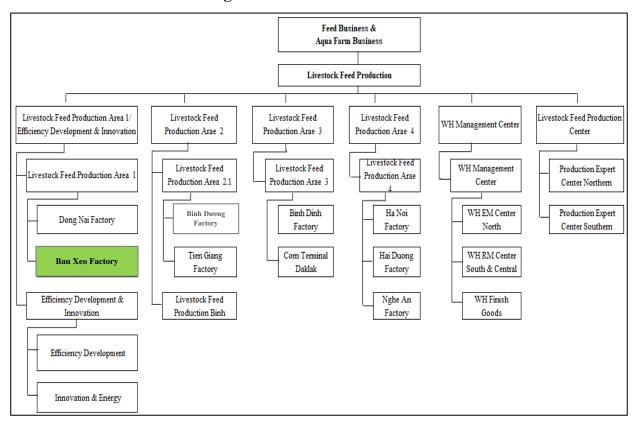


Fig.1-6: Agro Feed Organization



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1.2.7. CPV Feedmill in Vietnam

With policy of continuous development and expansion, we have built eight factories spanning from North to South. In future, we will build the new plants. Currently, total capacity of CPV is 5,506,400 tons/year. (Fig. 1-7)



Start Operation	Plant	Symbol	Capacity	
1993	Dong Nai	DNI	554,400	
1996	Ha Noi	HNI	720,000	
2001	Tien Giang	TGG	540,000	
2009	Binh Duong	BDG	720,000	
2012	Hai Duong	HDG	720,000	
2015	Binh Dinh	BDH	720,000	
2016	Bau Xeo	BXO	500,000	
2020	Binh Phuoc	BPC	1,032,000	
	5,506,400			

Fig.1-7: CPV Feed mill location



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1.3. Plant Profile

1.3.1. History of plant

- Company name: C.P. Viet Nam Corporation – Dong Nai Factory 3

- Address : 2A street, Bau Xeo Industrial Zone, Song Trau Ward,

Trang Bom District, Dong Nai Province, Vietnam

Area : 11,200 m²
 Start Operation: In 2016

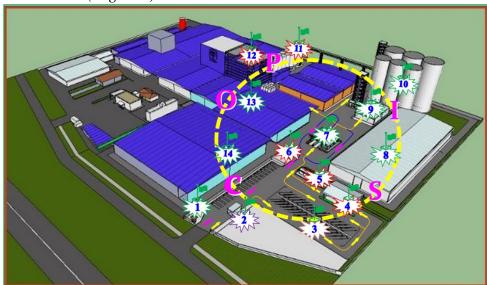
Product : Feed for animalMarket : Direct farm

- Capacity : 500,000 ton/year

- Employees : 104 persons

1.3.2. Plant layout

BXO plant layout has 14 main areas; it is designed follow SIPOC model with separation of five zones: Supply-Input-Process-Output-Customer to prevent cross-contamination. (*Fig. 1-8*)



1	Security 1	6	Security 2	11	Silo 200 Ton
2	Disinfect	7	Truck Scale	12	Production
3	Truck park	8	Raw material warehouse	13	Finish Good warehouses
4	Sampling house	9	Receive RM	14	Engineer Dept. and RM aqua
5	Register and Sale and RM	10	Silo 4,500-7,500Ton		

Fig.1-8: Plant layout



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1.3.3. Main product

Main product of the BXO plant is animal feed. About feed shape, pellets accounts 100%. Customer groups are direct farm account 100% with mainly packaging is bag accounts 70% and silo accounts 30%.



Fig.1-9: Main Product

1.3.4. Production Process

Production system include six main processes: Receiving-Preparing Raw Material, Grinding, Mixing, Pelletizing, Packing and Delivery. Among of them, mixing is the most important process, because it must ensure that nutritional raw materials are mixed with accurate rate according to each animal growing period.

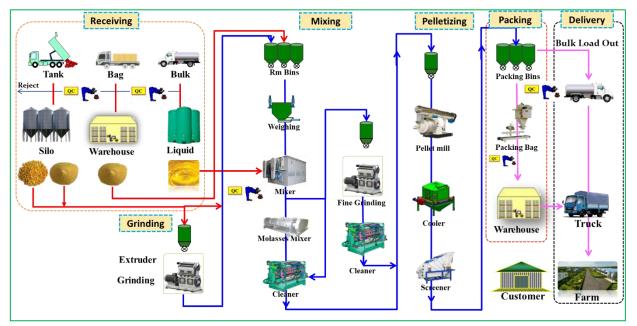


Fig.1-10: Production process



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1.3.5. Main Machine

- To help the above 6 processes to run smoothly, we have installed a total of 1,175 machines, of which rank A 135 machines amount 12%, rank B 451 machines amount 38%, rank C 589 machines amount 50%.
- Rank A are the high important machines that change physical & chemical properties of the raw materials/products.
- Rank B are middle important machines that mainly perform a transport function.
- Rank C are low important machines, providing support.

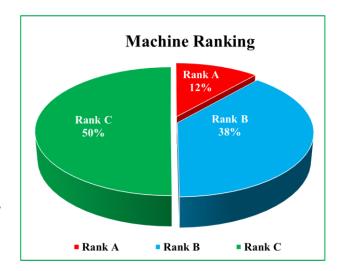


Fig.1-11: Main machine

1.3.6. BXO Organization

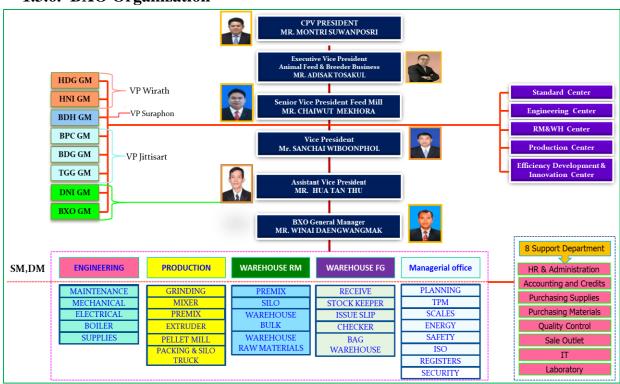


Fig.1-12: BXO Organization



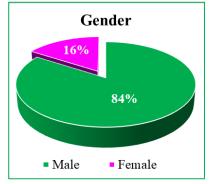
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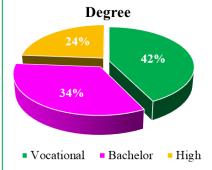


1.3.7. Workforce

We have total 104 employees. Most of them are young and under 40 years old, this is also the strength of the BXO plant. There are 84% male employees and most of employee degree is vocational or lower, it accounts 42%.

No.	Department	General Manager	Dept. Manager	Section Manager	Staff	TOTAL
1	Managerial	1		2	9	12
2	Production		1	4	37	42
3	Raw Material			2	15	17
4	Finish Goods			1	8	9
5	Engineering		1	3	21	25
	TOTAL	1	2	12	89	104





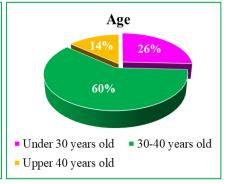


Fig.1-13: Workforce

2. Milestone on the Journey of Manufacturing Excellence

BXO plant was built in 2000, as an aqua feed plant. In 2016, it was renovated and built to become the 7th agro feed plant of C.P. Viet Nam.

Bau Xeo Plant started production since 2016, by to renovation from the aquatic feed plant. With the 15 years old plant, machinery are in a state of deterioration, the systems are not interested in maintenance, knowledge and skills improvement for both operation and maintenance so that occur deteriorated condition, increase production costs, capacity has not met expectations. Recognizing this situation, Top manager has found many tools to develop employees and improve efficiency.

Other Agro feed mills have applied TPM to their production processes with great success. After a while, Top manager realized that TPM- JIPM is the best tool to apply. Therefore, in 2018 The top manager decided to implement TPM -JIPM in Bau Xeo Plant with the main objectives. In 2019 we organize "Kick-off TPM" and horizontal replicate in whole plant.



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- 1. Increase productivity
- 2. Improve product quality
- 3. Reduce production cost
- 4. Enhance service quality
- 5. Improve safety working place, ensure the health and environmental friendliness
- 6. Create internal training system.

Moreover, Top manager always follow up and monitor the progress of TPM system, realizing the TPM activities of Bau Xeo plant gets initially successful so deciding to participate in the TPM Excellence Award.

3. Benefits Achieved:

- 1. Zero Accident from May 2019
- 2. Production capacity increases from 959 tons per day to 1,230 tons per day
- 3. Quality rate increases from 99.72% to 99.91%
- 4. Saving cost 1.3 M.USD
- 5. Delivery performance increases from 91.7% to 97%
- 6. Tag: 33,177; OPL (One Point Lesson): 9,188; Kaizen: 8,218

(Benchmark: 2019 – Present: 2023 YTD-Oct).

Intangible result:

- 1. Employee's morale is improved, self-conscious and more relaxed.
- 2. Working environment is funny, harmonious and cohesive.
- 3. Employees and customers believe in the company.

4. Key of our Manufacturing Excellence:

With the consensus of all employees combining with young- qualified-studious human resource well applied knowledge into actual works. Moreover, with the support of spirit, workforce as well as finances from Top manager help improvement idea implement successfully, contribute to the growth of company.