

Case Study: Deqingyuan

An excerpt from *Market Movers*:
Lessons from a Frontier
of Innovation

SustainAbility



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CASE: DEQINGYUAN

A LOT MORE THAN CHICKEN FEED



A small start-up near Beijing is helping transform Chinese egg production – anticipating a market trend towards better food quality and safety.

If you set out to find the most challenging environment in which to start a business, you would be hard pushed to beat the chicken industry in China. A series of food safety and health issues – SARS, bird flu, the Sudan 1 carcinogen – have undermined confidence in the ability of the world's biggest egg consumer (accounting for an extraordinary 40% of total world consumption) to monitor the quality of its poultry stock. This was not helped by the fragmented nature of the industry in China. Prices are continually under pressure from myriad small producers prepared to cut corners on production standards and food safety. Only a couple of farms in the whole country can boast more than a million birds. In Europe and America such farms are commonplace.

Nevertheless, in 2000 one man took on the daunting challenge of producing a quality egg for the Chinese market. He was not a serial entrepreneur with a family background in business. Rather, Zhong Kaimin was an engineer who had worked in the Ministry of Defence for 16 years. But he and his family knew that it was hard to find a decent egg in Beijing. So, with the help and advice of a few friends and family, he set out to fill the gap.

His company, Deqingyuan, based some 90 kilometres outside the Chinese capital, is now producing about 480,000 high-grade eggs a day and accounts for over 70% of

the (growing) branded egg market in Beijing. Profits doubled in 2005 (to over RMB 10 million), and only fell back in 2006 because of heavy investment in expansion – the company increased its infrastructure sixfold in a single year.

In March 2007 Deqingyuan began to sell its eggs at a premium price in Hong Kong, a city that has not traditionally sourced eggs from

Enter Deqingyuan, whose eggs are already available in over 500 Chinese supermarkets.

Mr. Zhong did not plunge into his venture totally unprepared. He gained an MBA from the People's University in Beijing and persuaded some friends with business experience to join him. They did door-to-door market research and, once production had begun, they gave

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mainland China. It now intends to open two new farms – one in the south of the country near Hong Kong, the other near Shanghai. Within three years Deqingyuan hopes to be producing 6 million eggs a day. Further plans include the production of liquid and powdered egg. These products have a longer shelf life than eggs in their shells and provide an efficient way of dealing with periods of high and low demand.

Meanwhile the egg-distribution system in China is shifting in Deqingyuan's favour, away from the traditional wet markets (which the health authorities are gradually closing down) and into supermarkets, some of them owned by foreign giants such as Wal-Mart, Carrefour and Tesco. World-famous brands such as these do not want to risk their reputations by selling food products of dubious quality.

away half a million eggs in order to show people how much better they tasted than the traditional fare.

Deqingyuan brands its eggs with distinctive packaging, and it stamps them with the date they were laid, the first time this has been done in China. The company also differentiates its product by selling eggs by number, as well as the more traditional approach of selling by weight. When an outbreak of bird flu caused egg sales to plummet (and a large number of producers to go bankrupt), Deqingyuan continued to sell everything it could produce at its full premium price. Local consumers were hungry for a product they could trust, a brand that they could rely on. "Sustainability has made Deqingyuan a market leader," says Mr. Zhong, "and a market leader will not only survive a crisis, it will thrive out of crisis."

Sustainability performance

Waste not, want not

Deqingyuan's business proposition is based on Chinese consumers' growing willingness to pay for food safety. Expenditure on household consumption in the country is rising by almost 7% a year, much of it going towards better quality food. So the highest environmental and animal-husbandry standards are fundamental to Deqingyuan's success. This means protecting the environment that birds live in, ensuring adequate cage size and siting and providing good quality feed, thereby reducing the incidence of disease and the need for antibiotic use in egg production.

The company is unusual in aiming to be green in one of the most polluting industries of all: in China agricultural waste is reckoned to be greater in volume than industrial and municipal waste put together. But the result is a higher quality product, which means that Deqingyuan can charge a higher price for its eggs (Deqingyuan's eggs sell at almost a 200% premium to the price of a standard egg).

Deqingyuan's sustainability concerns stretch well beyond animal welfare. There are significant worker health risks in this industry due to ammonia and dust concentration in the facility. Deqingyuan has purchased advanced equipment to address this problem, and provides a health care system for its employees. Other environmental measures include waste management, energy conservation and rainwater collection for landscape use.

Chickens make a lot of mess, and getting rid of it can be a problem. So Deqingyuan turns much of it into fertiliser which it sells to nearby farmers. But the company now produces far more waste than it can absorb, so the company has constructed a biogas plant, which



Courtesy of Deqingyuan

will come on stream in late 2007. This will convert the waste into methane gas, which can be used to produce electricity. The electricity produced will more than meet the company's own needs, so it will explore opportunities to sell the rest. The company will also benefit from a new revenue stream through the sale of Certified Emission Reductions (CERs).

The company's business goals have also led it to provide support to the local community. Above all, it needs to guarantee good foodstuff for its birds, and it needs to be sure they are not going to be infected by disease from other local stocks. So it provides high-grade organic fertiliser (made from its own waste) to local farmers to enable them to grow corn, which Deqingyuan guarantees to buy as feedstuff at a higher-than-market price. In addition, it gives cheap eggs to villag-

ers nearby in return for them not breeding their own chickens – a deal struck after the avian flu outbreak in 2004.

On governance, Deqingyuan has also set out to follow good practice, aware that without it foreign investment is unlikely. An international accounting firm is working on an audit with a future initial public offering (IPO) in mind. "They're not perfect on governance," says Joan Larrea of the Global Environment Fund, an investment fund focused on clean technologies and emerging economies. "The main attraction is that they do take it seriously." Deqingyuan holds regular shareholder and board meetings, and produces the required financial documents. They have an open discussion between the board and management, and have just added an independent board member.

Conclusion

“Head and shoulders above the rest”

Setting up an operation like Deqingyuan’s is expensive. The birds’ cages have come from Italy, the fertiliser-making equipment from Germany, and the biogas plant from America’s General Electric. Not surprisingly, for some time money was Chairman Zhong’s main challenge. He says he devoted up to 80% of his time to fund-raising.

of animal welfare was partly responsible for IFC’s interest. The project is smaller than would usually draw IFC’s attention, but the institution was impressed by the company’s vision of transforming China’s egg production at the same time as it pioneered new standards of sustainability. Receiving IFC support was crucial for Deqingyuan, bringing not only money but also expertise – in, for example, the biogas project.

in good stead as it approaches the market. Mr. Zhong says the thing that keeps him awake at night now is the challenge of finding enough suitably qualified people to manage the company’s rapid expansion. The industry has traditionally been run by small family firms; trained poultry managers in China are even rarer than good eggs.

The high price of entry may deter competitors from capturing Deqingyuan’s market share for the foreseeable future. Those who do enter will in any case be hard pushed to find the management skills required to maintain such high environmental standards. The few rivals that exist in the branded egg market currently outsource at least some of their production to others, handing over birds to their suppliers and collecting their eggs thereafter. Deqingyuan does everything itself and is in control of its birds all the time. It is, says Joan Larrea, “head and shoulders above the rest.”

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But he managed to attract some heavyweight foreign investors – including the IFC (which took a stake in the company in 2006) and the Washington-based Global Environment Fund. Mr. Zhong believes that Deqingyuan’s high standard

The company is now thinking of a stock-market listing in 2008 or 2009 to give it access to the further capital it will need if it is to scale up its operation to a national level. Its good governance and environmental performance will stand it

BOX 5: LEADERSHIP

Deqingyuan’s profitability depends on the company’s ability to charge a price premium to cover the higher costs of producing high-quality eggs. This is no mean feat in a country where food quality standards are inconsistent and many egg producers have been bankrupted due to the price competition. However, Mr. Zhong’s vision

and leadership allowed him to take the risk. He bet (correctly) that his high-quality eggs would mesh with the growing health-consciousness of Chinese consumers if he could build a brand that became associated with quality. He achieved this in several ways, including organising marketing activities in residential communities, giving away

more than 500,000 eggs for free for people to taste, and developing a unique brand and packaging, with production dates clearly printed. Mr. Zhong’s leadership in pioneering higher quality and ethical standards in the Chinese market also helped secure IFC investment – another critical factor that contributed to success.







Company profile

Deqingyuan, based in Beijing, China, produces high-quality eggs for the Beijing and Hong Kong markets. Deqingyuan was established in 2000 with the recognition that local egg quality was poor, and it became the first company in China to sell fresh eggs bearing a production date and trademark.

key data

FOUNDED

Beijing Deqingyuan Agriculture Technology Co. Ltd was founded in 2000 by the current chairman, Zhong Kaimin.

OWNERSHIP STRUCTURE

Owned by: Individual shareholders including Zhong Kaimin (14.9%), DQY Agriculture Technology Company (27.7%), Global Environment Fund (15.9%), Capital Today (15.9%), Innobiz Hong Kong (8.8%), Shanghai Yi Bei (8.6%) and IFC (8.2%)

SECTOR

Agribusiness

HEADQUARTERS

Beijing

OPERATIONS

Beijing

MARKETS

Beijing, Hong Kong

MAIN COMPETITORS

Following Deqingyuan (71% share of branded egg market in Beijing), competitors are Gegeda (25%), Liuminying (1%), Gazige (1%) and Xiaonong (1%)

EMPLOYEES

335

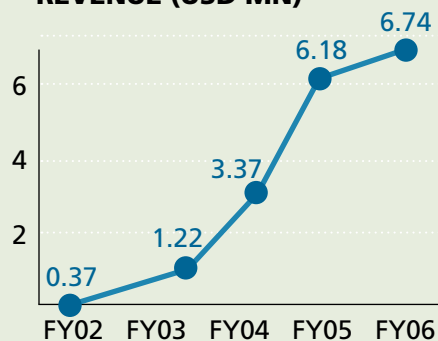
MARKET SHARE

71% of branded egg market in Beijing
3.6% of total egg market in Beijing¹⁴

AWARDS AND RECOGNITION

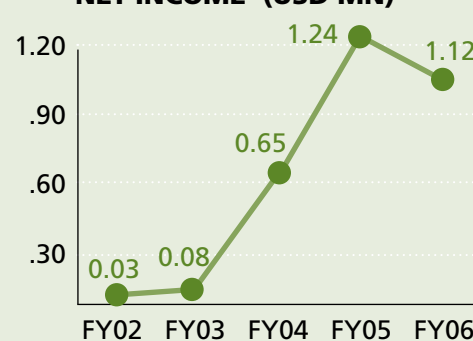
- National High-Tech Modern Agriculture Demonstration site
- National Food Safety Demonstration Enterprise

REVENUE (USD MN)



CAGR from 2002 to 2006: 107.3%

NET INCOME (USD MN)



CAGR from 2002 to 2006: 150.4%

US dollar figures for revenue and net income calculated by authors based on renminbi figures supplied by company and average annual RMB:US\$ exchange rate from the Economist Intelligence Unit.

¹⁴ Calculation of total market share, based on branded eggs accounting for 5% of all eggs in Beijing. However, this figure is growing fast.

The Deqingyuan business case – the three most important factors

Here we highlight the three most important ways in which sustainability performance at Deqingyuan is influencing business drivers and supporting business strategy.

1. Higher sales and market access from better environmental and safety standards

- Based on Deqingyuan's reputation for quality and safety, sales grew from \$0.4 million in 2002 to \$6.7 million in 2006.
- Deqingyuan has 71% share of the branded egg market in Beijing.
- Deqingyuan entered Hong Kong market, which does not traditionally source eggs from mainland China.
- Deqingyuan commands higher prices per egg in Beijing (0.9 RMB per egg vs average of 0.3 to 0.4 RMB per egg) and Hong Kong.

2. Brand value and reputation built on good environmental and safety standards

- High food safety based on sound environmental approach allows Deqingyuan to create a trusted brand.
- During SARS crisis, which deflated egg sales throughout China, Deqingyuan's sales increased - evidence of high level of trust Deqingyuan enjoys with consumers.

3. Access to capital from good corporate governance

- Although industry has difficulty gaining access to capital, Deqingyuan tapped into international investment from GEF and IFC.
- Investors are attracted by the company's pioneering vision, quality and environmental performance, and serious approach to governance.

DEQINGYUAN BUSINESS CASE MATRIX

	Environmental Performance	Social Performance	Governance Performance
Sales & Market Access			
Operational Efficiency			
Access to Capital			
Risk Mgmt & Licence to Operate			
Talent & Human Capital			
Brand Value & Reputation			

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