

selected the site for its production base for its clean air and water, as well as its distance for industrial zones. Surrounding the base is a natural buffer zone with woods, roads, rivers, and grasslands, which helps to isolate the farm from sources of pollution.

The pristine location has helped Chaoda not only to win organic certification but also build a brand around "Bashang Vegetables", known for their superior taste and quality. The organic certification of

the base comes up for renewal each June, after field inspection by experts from the China National Organic Certification Center. In order to qualify for organic status, the base must meet standards based on soil, water, and air samples, records of its production and operational processes, and the management system. Inspections have regularly confirmed the organic status of the Zhangbei base. Chaoda has become a leader and role model for other enterprises in

the Zhangbei economic development zone, which in 2012 gave top priority to promoting green agriculture based on low-carbon technologies, recycling, and high-tech manufacturing. This has also been among key policy initiatives of the Central Committee of the Communist Party and State Council, which in February 2012 underlined the importance of technological innovation for agriculture in a document entitled, "Opinions on Accelerating the Promotion of

Agricultural Technology Innovation and Increasing Capacity for Guaranteeing Supply of Agricultural Products in a Sustainable Manner." This policy statement has triggered a flow of new ideas and policies supporting scientific and technological innovation in agriculture. Chaoda's innovations at its Zhangbei base predate the current policy but are helping to fulfill its objectives in a variety of ways.

## Sharing technology with farmers: A more productive form of aid

Why Chaoda encourages its employees to spend time on charitable works is simple – it believes it's the right thing to do. At the same time, Chaoda is determined to cultivate social responsibility as a core component of its brand identity and brand value. The more the company and its employees engage in serving the weaker members of society, the more credibility attaches to its brand, and the more Chaoda becomes part of a virtuous circle building stronger communities, social cohesion, and positive brand associations.

For their part, Chaoda's workforce has responded enthusiastically to the call to charity. Here are a few

examples:

Chaoda's "Loving Month": Initiated by Zhao Lili, Chaoda's second annual "Loving Month" was held in May 2012. The idea behind "Loving Month" is to inspire employees to think of ways that they can help their community. So, for example, Wu Weihong donated blood for the second time. She said: "After being cared for by Chaoda and my colleagues for so many years, I'm glad to help others in a meaningful way." Zhao believes that the goodwill generated by "Loving Month" will "warm others" over the next twelve months.

Risking personal safety to help others: In 2009, when two Chaoda

security guards risked their lives to save people from a raging river near headquarters, they said to local media: "It's what anyone would have done. We are just two ordinary people who happened to be there at the right time" to help passing strangers.

•Thinking outside the box to help others: In the winter of 2010, southern Fujian suffered extreme low temperatures, leading to widespread insect death. Starving flocks of birds turned to crops for food. In response, Chaoda's Yunxiao Production Base adopted a complex system of nets to prevent birds from attacking the fields, rather than use poison or other environmentally

destructive methods. While local farmers initially complained about the inconvenience, in the end they were satisfied that Chaoda's "green" approach served its purpose in a minimally destructive way.

Serving the elderly: At Chaoda's Shanghai Production Base, there is a tradition of volunteers bringing fresh fruit and vegetables to the elderly in nursing homes at the time of harvest.

Such good deeds may have only a modest impact taken individually, but collectively they have reinforced Chaoda's reputation as a company that takes its social responsibilities seriously.

## A single flower is not a garland

A Chinese proverb says, "A single flower is not a garland." While, as with any proverb, there are a variety of interpretations, for Chaoda it is a statement of the interdependence of enterprise and community. It represents the kind of thinking that lies behind Chaoda's efforts to bring modern agricultural knowledge to farmers across the country, in its "Chaoda Class" program. It is also among the reasons why Chaoda provides direct material support to its workers and others in need. When workers' families are in trouble, or

when disasters hit – such as when famers in Taiwan suffer from typhoons – Chaoda is always among the first donors to come to their aid. It is gradually taking a range of ad hoc philanthropic activities and providing funding and organizational support, shifting the emphasis from merely encouraging such activities to take place to focusing on results and feedback. Such programs range from Love Farmers Month to Loving Month, the Rainbow Project, Chaoda Class, and the Youth League Training Base.

According to Chaoda executive vice president Chen Junhua, business is dependent on social stability, so that the sustainable development of a company is inseparable from sustainable development of society as a whole. Farmers produce Chaoda's products; the people of Taiwan are Chaoda's best customers. It would be unthinkable, Chen says, to stand by while they are suffering. In May, Chaoda received the "Silver Jasmine Flower Prize" for its philanthropic contributions to the city of Fuzhou. The award reflects

the respect and admiration that the public has for Chaoda on account of its philanthropy, and sees it as a good corporate citizen serving the public good. Chaoda's corporate social responsibility program, while still evolving, has also helped create support for its products and a greater understanding of its corporate culture and brand identity, which in turn provides support for its bottom line performance.



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## World Brand Labs values Chaoda's brand at RMB 16.9 billion

On June 28, New York-based consultancy World Brand Lab announced its brand leaders for China for 2012, at its 2012 World Brand Summit. On its list of the "Top 500 brands in China", Chaoda was number 81, with a brand value of RMB 16.936 billion and number 82 on the list in 2011.

This was the ninth edition of World Brand Lab's China rankings. The average brand value of companies on the Top 500 list was RMB 13.1 billion. The brand of the bottom-most company on the list was valued at RMB 1.18 billion, up from RMB 1.01 billion in 2011. The total value of the brands of the 500 companies on the list was RMB 6.5837 trillion.



## How supermarkets and food producers can work together to improve distribution

On May 8, Huang, manager of Chaoda (Shanghai) Edible Fungus Co., met with the organizing committee of the New Products and Technology Promotion and Marketing "Link Up" Conference sponsored by the Mycology Association of China, the China Vegetable Distribution Association; the China National Health Industry Working Committee; Chinamushroom.net and Mushroom Market Magazine. The conference, held in Nanjing's Zhongcai Logistics Center, attracted several thousand mushroom experts, academics, and business people. Huang introduced how Chaoda collaborated between food producer and food retailer in an interview.

Chaoda's "edible fungus" business segment, as its division selling

straw mushrooms is called in English, sees its success as linked to three key strategies.

First is developing a broad enough business model to be able to partner effectively with China's domestic supermarket giants. This implies a wide geographic footprint in order to shorten the delivery times to major markets; the ability to supply products throughout the year; cold chain logistics; reliable quality; and brand reputation.

Second, food producers need to support efforts by retailers to increase market penetration. In the case of straw mushrooms, sales of straw mushrooms in China are only 10 percent of the level of Japan, Hong Kong, and Taiwan, on a per capital basis. The market potential is enormous, but will not develop

without an investment in marketing. Chaoda has helped to build a sales community around its straw mushrooms as well as innovative sales channels as part of its marketing effort, which helps supermarkets promote the product to their own particular clientele.

Third, straw mushrooms are extremely fragile, and require a cold-

chain logistics system that runs from the farm and processing centers to the supermarket depot and shelves. One of Chaoda's challenges in developing the market is that few supermarkets yet have adequate cold storage shelves. Without these, the products lose their freshness quickly.



## Why missing the best planting season can be good for business

Success in business is often a matter of turning crisis into opportunity. Such was the experience at Chaoda's Baodi Production Base, or farm, near Tianjin. Earlier this year, the farm

was forced to postpone the seedling stage of its broccoli fields when an unseasonable cold front passed through the region. With the wet and rainy weather likely to reduce the seedling yield, a decision was made

to postpone planting by one week. That was when the planning capabilities of Chaoda kicked into action. Chen Baoyu, the production manager of the base, fully understood the implications of a late

start to the crop, and its possible advantages. A July harvest, as opposed to the usual mid-June harvest, would launch the farm's products on the market during the off-season, potentially driving up

prices and therefore profit. Chen also knew that he would need a species of broccoli with higher heat tolerance than the species they had been about to plant.

Working together with headquarters, the Baodi farm was able to take swift action to change their growing plan. Operationally, the later planting schedule and inclement weather also meant careful seedbed

management. Seedling technicians kept a close watch on air temperature, covering plants in their greenhouses with straw for insulation when the temperature dropped, and increasing ventilation to help dissipate heat when temperatures rose. The result of these measures was a productivity rate of 98 percent, increasing chances of a higher yield for the

harvest. In July, at the time of harvest, Chaoda's quality control system came into play, with workers assessing the size of broccoli florets by eye and cutting the stalks at the precise angle required. Processing involves cutting the leaves and side branches of the florets and dipping them into ice water prior to placing them in cold storage.

In the end, the Baodi farm's strategy

worked, together with a bit of luck. As the harvest got underway, both international and domestic demand for broccoli was at a high. Orders poured in, and prices rose. The case demonstrates the strengths of Chaoda's production system in terms of risk management and shows that agriculture can manage weather hazards, rather than being ruled by them.

## Chaoda's Zhouning Production Base: Developing high-altitude agriculture

Zhouning County, in the mountains of industrial air pollution. With its sub-eastern Fujian, has an average altitude of 800 meters and is celebrated for its "natural air conditioning" – cool in summer and warm in winter. It has little or no

tropical monsoon climate, influenced by the nearby East China Sea, Zhouning has a long history of agricultural production, limited only by under-developed infrastructure,

the small scale of output, and lack of access to regional and national sales networks. For Chaoda, Zhouning became an early test of its ability to develop a production base for off-season vegetables.

Development began with reshaping the land to increase arable area, soil quality, and efficiency. Greenhouses were built, together with roads, drainage, tree plantings, and irrigation systems. All of these worked to maximize crop yields and risk resilience, as well as protecting the environment and enhancing the natural attributes of the region's ecology and living conditions.

Next, Chaoda unfurled its corporate model at its new production bases in the county, introducing professional management, standardized production, and integrated operations to develop high-yield, high-quality, high-efficiency agriculture built around scale production and sound ecological principles. The company conducts annual tests of the soil, water and air to build an accurate data bank on land quality. Before each planting season, Chaoda's plant protection experts assess weather forecasts and plant predators to develop seasonal pest and bacteria control programs. Strict tests are also conducted to screen production

materials, and when planting crops, front-line workers follow Chaoda's planting manual. Problems are solved in close collaboration with experts at headquarters. Each year, the company carries out species selection and testing in order to introduce the most appropriate, high market value species to Zhouning and Chaoda's other production bases nationwide.

The result has been to develop a unique platform for two popular vegetables in their off-seasons – cauliflower and corn. The unique geographical conditions and planting techniques help to ensure that Zhouning's cauliflower and corn taste better than comparable products on the market. Chaoda's national sales network helps the farms take full advantage of their off-season harvest times. As the cauliflower harvest winds up in mid-June, Zhouning corn is just beginning to mature. The careful calibration of species choice, production times, and pest control has helped to bring Chaoda's farms in Zhouning to a whole new level, in which they are part of a nationwide market as well as a professionally managed agricultural enterprise committed to sustainable development.



## Platform for innovation: Chaoda's Bashang Production Base

The Bashang grassland and its Zhangbei economic development zone are located along the border of northwest Hebei Province and Inner Mongolia, a region of high plateaus and cold weather. In this beautiful but unlikely spot, Chaoda has built a platform for green innovation, ranging from plug technology to advanced processing and refrigeration facilities to solar panels and irrigation equipment. These are some of the innovations that Chaoda has brought to the region:

**Plug technology:** Chaoda developed seedling plugs based on a proprietary ratio of turf to limestone for nutrition, which has helped to improve seedling yields.

**•Modern processing facilities:** The base has a processing facility with functions including product sorting, cleaning, rapid refrigeration, processing, packaging, and cold storage, to ensure the freshness and integrity of the vegetables as they are delivered to the market.

**Solar panels for power generation:** Small solar panels, attached to electrical transformers, provide power for drip irrigation under the plastic film. These take advantage of the Bashang region's ample sunshine, with 2,860 to 3,300 hours of sunshine per year and annual solar radiation averaging 1,500 to 1,700 Kilowatt hours per

square meter.

**• Fertilization technology:** The Zhangbei farm has developed new methods of irrigation to improve efficiency. Among these is the use of sparge tubes – tubes with holes drilled every 50 centimeters for sprayers. The new sparge tubes enable a team of three people to work six to seven times faster than previously, so that work that used to require five working days with a two-man team, now takes only a day. Inspiration for the sparge tube device came from a television program featuring a cultivator-tiller turning over the soil.

**Innovation on drip irrigation:** With the drip tubes, the original tubes

were so small that were actually hindering plant growth due to low water flow. Larger tubes have allowed greater water flow and reduced water pressure, solving the problem.

When Chaoda first scouted the Bashang grassland in 2005, it quickly realized that the high altitude, ample sunshine and wide temperature variation made it an ideal base for off-season northern vegetables. With an average altitude of 1,600 meters, the perennial cold and wide temperature swings from day to night reduced the survival rate of pests and diseases, and made it possible to produce crops using few chemical fertilizers or pesticides. Chaoda

