



Farming in Europe: Landgut Nemt, Anthura BV and Riverford Organic Vegetables Ltd

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Introduction

This case collection of three farmers illustrates some of the strategic choices that entrepreneurial farmers across Europe are taking. Like many other places, European farmers are subjected to a thick maze of governmental regulations, restrictions and incentives and, the need to battle with high labor and real estate costs. At the same time, European farmers benefit from productive soil conditions, sophisticated customers, well developed food chains and advanced technologies. European farmers respond to the challenges by professionalizing, internationalizing, specializing, diversifying, consolidating and moving up in the value chain – just as any business will do in a changing environment. These entrepreneurs seek to grow their businesses and try to maximally exploit the opportunities provided by technologies and markets. If the following farmers are any guide, then the one thing that Europeans farmers are unlikely to do, is to give up and surrender their industry.

The European version of governmental interference in farming activities is particularly complicated since it is provided on two levels: on the national level, and on the European Union level. But again just like anywhere else, this regulatory thicket is under high pressure to open up in response to the meta-change drivers of global business: globalization, demographic changes, rising commodity production and the general trend towards free(er) markets and international trade as enforced by WTO and other bodies. European farmers' exposure to these meta drivers is therefore becoming more immediate and forceful, and they need to identify and utilize their competitive advantages for charting their course accordingly.

The first company illustrated in this case is Landgut Nemt, which dairy and vegetable producer René Döbelt manages in Saxony in the East of Germany; the second is Anthura BV, operated by the Dutch flower producers Nic and Iwan van der Knaap; and the third is Riverford Organic Vegetables Limited, an organic farming cooperative run by Guy Watson in the South of England.



Landgut Nemt: René Döbelt from Saxony

René Döbelt impatiently passes by his recently completed dairy production facility on the way to his new office premises on the second floor. His old office consisted of two tiny rooms right next to the milking stand inside the barn where he also had 600 head of dairy cattle. In the new office he finally has the space and infrastructure to organize his increasingly complex operations efficiently.

The completion of the new dairy production facility put a major plank of his strategy into place: he will now be able to process up to 1000 metric tons of milk per year into a complete array of dairy products: yoghurts, curds, cheeses, butter, etc. In addition, he is installing a bakery to produce fresh bakery items. He plans on selling the largest part of what they produce in direct delivery service to currently 2000 households in the Leipzig area. Once up and running, the production facility will take up about 20% of his own overall milk production as it becomes his fourth main line of business. Döbelt is anxious to launch the facility and hand it over to a general manager for day to day management, so that he can turn his attention to initializing business area No 5. To make the deal, he needs to give that his top attention now. He also recently came back from a high-level fact finding trip as part of a delegation visiting Brazilian agribusinesses, and this gave him even more ideas for the business areas No 6, 7, 8, etc, altogether making him even more impatient to move ahead.

The first business: Milk production with 650 cows and 450 calves

René Döbelt is what they call a *Wiedereinrichter* in Germany – a "re-establisher". Shortly after German reunification, former farmers of Germany's eastern regions or their heirs were offered preferential access to capital if they wanted to reestablish a family farm. Since his mother had been a farmer, he used this route to take over a socialist farm combinat together with a partner in 1992. At the time the farm had 500 cows and 800 ha of land under cultivation. In 1996 the partner left and Döbelt became the sole owner.

Viewed in retrospect, it turned out that the help provided by the *Wiedereinrichter* program was negligible in light of the challenges they had to face to be competitive. The first couple of years were spent upgrading, or better said, replacing the farm's run down and outworn or dispersed capital equipment. With investments in new facilities and halving the labor force to 16, the milk production finally became competitive. On restarting production, Döbelt switched to organic milk production, becoming the second largest organic milk producer in the whole eastern part of Germany. At that time he was able to achieve a sufficient price premium for the organic milk.

By 2002, the price premium for organic milk production had almost disappeared, so Döbelt switched back to conventional production. By 2005 he had expanded to 650 milk producing cows, plus 450 calves. He owns milk quotas for 4000 metric tons of milk per year, which is a little less than the amount he is producing (see Exhibit 1 for information on the European milk quota system). With 650 cows, he is one of about 200 German farmers with dairy farms of that size or larger.

From benchmarking data provided by private business consultants, Döbelt knows that managing to get EUR 0.02 per kg of milk as operating income puts him in the bracket of the 25% most profitable milk producers in the country (see exhibit 4 for productivity data comparisons). From other data he knows that the best managed single purpose dairy farms are able to net EUR 0.04 per kg on their milk. Döbelt knows very well where he loses that additional profit potential: if he would focus on the dairy production himself rather than hiring a general manager, he could save that GM's salary and run the dairy on a somewhat larger scale. These two factors combined would earn about 3 cents per kg of milk.

The current milk quota pricing is the biggest problem he would face if he intended to expand production. Since 1984 in EU Europe, and since 2001 for the East of Germany, milk quotas have been tradable property rights. At a recent auction he submitted a price at which he would earn no profit on the additional milk sold, but the settled price ended up 30% above that. Döbelt knows that whoever bought these rights will make steep losses on them. However, he also knows that a lot of farmers buy milk rights on a variable cost calculation only, ignoring the need for capital investment and depreciation. The upshot of this general pricing behaviour is that on the whole, the dairy industry cannot keep up with necessary investments, and farms are going out of business at an alarming rate.

In 2004, the milk business earned EBITDA of 12% on sales of EUR 1.8 million. (See Exhibits 2 and 3 for detailed financial information on the Döbelt group of companies.)

The second business: vegetable, potato, grain, legume and feed production on 970 ha mostly adjacent land

Along with the farm for the dairy production, Döbelt had also acquired 800 ha of leased farming land when he established the business in 1992. Over the years he has expanded his ownership to 200 ha and has an additional 770 ha under lease contracting, also contracting produce from 200 ha of other farm land. He has effective control over 1200 ha of land.

In field production, Döbelt has chosen niches through the years. The two niches that he has developed are organic production and vegetable production. His vegetable and potato fields are on about one fourth of his land, and they bring half of the sales. He cultivates several types of vegetables, potatoes, onions, beans, peas, carrots, and beet root in order to manage the market in a portfolio approach and weather the risks that are associated with vegetables. He uses 25% of his fields to produce feed for his dairy business, which supply about 10% of the feed needed by value and 35% by volume. He makes use of 50% of the fields for grain production (wheat, maize, and triticale).

The field production earned EBITDA of 21% on sales of EUR 1.45 million in 2004. Döbelt is concerned that the income ratio has been steadily decreasing over the years – if he can't turn that trend around, he'll have to change his strategy. One easy exit would be to switch from niche production to commodity feeds for his own dairy business, and for input to the biogas plant that he is about to erect. With the biogas plant he will be taking a lot of the complexity out of his business, because it will integrate all the businesses into a single value chain and reduce the management task of handling complex crops.

The third business: JV buy out of an 800 ha farm 130 km away

In 1999 Döbelt bought a 50% share in a combined dairy/field production at an 800 ha farm some 130 km away. His cash infusion was used to recapitalize the farm and restructure the business. Shutting down the dairy production, they sold 150 cows (and the milk quota) on the open market.

The fourth business: Direct sales to Leipzig area households

As early as 1997, Döbelt started a direct selling network for the delivery of milk and farm produce to households in the region, including customers in the city of Leipzig about 30 km away. Over the years he has managed to grow the business and is serving 2000 households with four full time deliverymen. At this size, his company is already one of the largest direct sales networks in Germany for agricultural produce. The business is hampered, however, by a few obstacles – mostly that the milk has to be delivered in returnable containers, and that he can only sell a limited range of products.

In 2004 he bought what in pre-communist times had been the largest farm in the village for EUR 90,000 – including 26 ha of farm land. Under socialist rule the farming family had emigrated, and the barns and stables eventually became a storage place for pharmaceuticals. After reunification the German government agency *Treuhandanstalt* renovated the buildings to bring them in line with Western electrical and sanitary standards and returned ownership to the emigrated family. These had for years tried to sell it on the market for what was supposed to be its accredited value of EUR 250,000 and they never found a buyer.

Döbelt took the shell of the building and invested all in all around EUR 1 million to install his own dairy processing equipment, bakery, street shop and company offices there. Now equipped with a full range of natural fresh farm produce, dairy and bakery products, and being the only such supplier in the Leipzig region, he hopes that his direct marketing business will really take off. Leipzig, a city of 500,000 inhabitants (population of about 2 million in a 50 km radius) is showing strong economic growth in recent years, with a solid industrial base in automotive and logistics industries.

René Döbelt's brother is the general manager of the direct sales business, and he owns 10% of the shares. So far this business has generated EUR 460,000 in sales, with 9% EBITDA. With the new investments in place, the sales and profits are expected to grow at a rapid pace.

The fifth business: Biogas driven generation of electric power

The German government has been very generous to any kind of electricity generation that is renewable. In 2004 the second stage of a renewable energy law came into effect, forcing electricity generators to accept electric power from renewable sources at minimum prices. These prices act as an income guarantee for anybody installing a wind turbine, a solar plant, or in fact a biogas plant. The beauty of the law is that the government does not have to pay for this subsidy – consumers pay for it with higher average electricity costs. However, since these are not separately shown, and since the utility companies would not want to appear to be anti-green, the consumers don't really notice the cost of the subsidy. Instead, many Germans, by some accounts up to 70% of all households, have become part owners in financial mutual funds specialized in erecting renewable power plants, with above average returns guaranteed. Therefore, opposition to the law has been minimal. The scheme has been a superb political success.

The minimum prices stipulated for electric power from biogas facilities had not been attractive enough for some years, but that changed in 2004 due both to a revision of the law and improved technologies in the market. Döbelt has calculated that with the power plant proposal that was offered to him, he could earn a tidy return on his investment, virtually guaranteed over the next 20 years. Furthermore, he has a natural hedge built into his operations, because he could use his own land for producing the feedstock material for the power plant.

Moreover, the brilliant engineer who proposed the plant to him seemed to lack commercial savvy, especially in contract negotiations and selling. Döbelt offered him a 50/50 joint venture selling these power plants. Döbelt would be the initial site for installations, and being a farmer himself, he is sure that he can sell these plants to fellow farmers much more effectively than this engineer could. If this JV is pulled off right, each plant sold will generate several hundred thousand euro of net profit.

However, the biogas business will require a lot of Döbelt's attention, in order for it to take off. He'll need to make sure that his other four businesses largely run on their own.

Other minor activities

Besides his 5 main businesses described above, Döbelt also owns some minor activities that don't consume any of his management activity, nor do they materially change his income position. Together with two other farmers Döbelt owns part of a 240 ha farm with 120 head of cattle some 80 km away. He also owns 16% of a marketing company selling organic farm produce in Saxony, and together with a local farmer he owns 50% in a JV storage facility.

Next businesses

The kind of businesses that Döbelt is strongly interested in could be found a few hundred kilometers eastward. Polish, and further away also the Ukrainian farms are undercapitalized, often undermanaged with too little know-how, and in the case of Poland will over the next

few years have to come in line with EU agricultural productivity. Döbelt feels that he has all the know-how he would need to convert ex-socialist, undercapitalized farming operations into companies fit to operate in the market. The skills for that go beyond the merely technical and managerial; this is also a question of understanding and guiding the people attached to the land. He has gone personally through that process, and he feels that he could leverage his skills in the East. If only he can free up enough time to take a good, long, careful look, he is certain he would find interesting deals.

The Strategy of Diversification

Döbelt has reconsidered his strategy of diversification over and over again – and he still is not certain that it was the right thing to do. He knows that he is stretching both himself and his organisation by running several businesses at once. He knows where he has lost net profit potential as a result. Despite that, however, he has been outperforming most of his competitors in each of these businesses. He also feels that going forward, there will be more and very important synergy effects in his portfolio of activities. Certainly one of them is market risk reduction. The feed production might supply his milk production or the biogas facility, the milk production can sell both into the commodity market and into the dairy direct marketing channel, the biogas facility is both customer and supplier to the other businesses, etc.

Another very important risk consideration made itself all too real in the year 2003, when Döbelt had to face a serious drought. Reversed, in 2002 parts of his farm land were drowned in the "flood of the century", when the Elbe and Mulde river system overflowed. In 2001, there was a near catastrophe of another sort. He had sold grain to a storage warehouse that only weeks later became contaminated as part of an illegal industrial waste scandal. He himself had only narrowly escaped having his stored grain confiscated and being involved in follow-on liabilities. Similarly, in the years before that he had been spared from any trouble with BSE, partly because he was an organic producer. But he knew too well how many of his fellow farmers had seen their existences wiped out with the disease.

Even though he has never been dealt a full blow by disaster in the past years, it would be plainly naïve to believe that his businesses could be fully immunized to troubles such as these. Thus it seems to René Döbelt that it is not such a good idea to place all his capital into a single business activity – it could be destroyed at any moment by an occurrence completely outside of his control.

A major contributor to success in the past was Döbelt's patience – waiting for the right moment to do the deal. One experience he made over and over again was that it required patient but stringent attention to be able to snap up assets at a price below the real value, and not at the typically absurd levels at which they were openly traded. That was true for his purchase of the old farm for the dairy production facility, for the expansion of his milk quotas, purchase or lease of new land, and even the biogas facility. If anything, Döbelt wants to keep this as a guiding principle for further expanding his business.

But would he be able to repeat these successes on entering markets that he did not know so well? How could he institutionalize his abilities better, and how could he attract more capital in order to seize opportunities faster when he identified them?

Döbelt had again one of those inner moments of restlessness as he hurried up to his new office. He wanted to move ahead faster than he had so far, but not so fast that he could trip. As he opened the door to his office, two gentlemen were sitting there and waiting to talk with him about some of the next steps in establishing business with the biogas facility. He needed to make decisions about the set-up for selling them – whether to be a turnkey supplier or only the technology supplier, for instance. Döbelt did not have any experience with these choices, or enough time to reflect on this, nor did he have a business school education – but none of that had stopped him from being successful in his other businesses. After all, how different could biogas facilities be?



Anthura BV:

Nic and Iwan van der Knaap in Zuid Holland

As he surveys the future production site for propagation of young anthurium plants after laying the foundation stone in the Chinese Yunnan Province on this lush August morning, Nic van der Knaap has many thoughts going through his mind. In several important ways, this new production site represents a major departure from how his company has progressed over the past 33 years of breeding and propagating the tropical flower Anthurium. But in many other ways, this new production plant only represents a different implementation of the same two strategic principles the company has always followed. These two principles have served them well in the past: 1) be the most knowledgeable expert in Anthurium flower breeding, and 2) use this knowledge to achieve total control over every aspect of the business so that the fruits of that expertise flow into the company and not into someone else's pocket.

One of the major changes which the Chinese production facility involves is that his son Iwan v.d. Knaap conceived and implemented this project. He will also be the one to make a success of it – because in November 2004 Nic v.d. Knaap handed over managerial control of the company to his two sons, Iwan v.d. Knaap as General Manager and Marc v.d. Knaap as Production Manager, and as commercial director, Marco van Herk. Back in 1972, when Nic v.d. Knaap was 28 years old, his father handed the company over to him, and it had long been clear that he would do the same with his sons – the time for this handover came in 2004.

The second major change is that this production facility is the first that the company has ever installed outside Europe (in Europe they established a German breeding and propagation facility for orchids back in 1995). As of 2004, the company has been selling its products to clients in well over a hundred countries, ranging from Iceland to Saudi Arabia, but never had they moved anthurium production outside of Holland before.

The third major change has been a recognition of the fact that, if the company wanted to maintain its approximately 70% world wide market share for young anthurium flower plants, it needed to extend its intellectual property protection scheme to a much higher level. In the past, it was typically sufficient to own the patents or breeding rights on the flower varieties and enforce them through strong customer relationships. However, in a market like China, and increasingly elsewhere, that strategy is no longer sufficient to protect the business.

Breeding and propagating *Anthurium* varieties

Nic v.d. Knaap, like his father before him, grew tomatoes and cucumbers in Holland until 1972. In that year, soil disease problems in his hothouses devastated the yields. Unable to resolve the problem, Nic v.d. Knaap decided to switch to flower propagation instead.

The Dutch flower business was doing very well at that time, profiting from a major reconstruction of the horticultural industry initiated seven years before by the Dutch government. There were about 70 anthurium growers in Holland, and one of them was Nic v.d. Knaap's father-in-law. That is where he found his liking for the *Anthurium* flower, and by 1973 he had switched all his production from tomatoes to anthuriums.

By 1980, anthuriums had gone out of fashion. Prices were depressed and the second oil crisis had just increased cost of production significantly. Nic v.d. Knaap saved his business with intense marketing of the flower at fairs, local flower shops, hotels, in lifestyle magazines, etc. He developed marketing thrust by creating and providing design ideas to the flower users, in order to raise overall consumption of this singular and relatively expensive tropical flower. In those days of end customer marketing, Nic v.d. Knaap developed his instinctive feel for what the market wants, and how to develop new markets for different varieties of his flower.

Also, from 1980 onwards, a technology shift brought change to the flower industry. Professor Pierik had developed a tissue cloning technique for plant propagation at Wageningen University. Anthurium flowers were the first for which he fine-tuned the technology, and during the next ten years, anthurium growers had either switched production from seedling to tissue culture or left the business.

In response to this new technology change, Nic v.d. Knaap revised his business model in 1985. Instead of growing anthurium flowers to full size and auctioning them to customers, he would focus exclusively on propagating young plants. He would sell the young plants to growers anywhere in the world, who could sell the flowers at auctions or through direct sales channels. This move towards young plant production was accompanied and reinforced by an unique and invaluable strategic action which he took early on. Nic v.d. Knaap understood that tissue cloning would very quickly reduce the gene pool diversity of *Anthurium* varieties, since growers would only clone popular strains, and would allow the rest to disappear. So he travelled up and down the country, collecting unpopular or leftover varieties which the growers did not want to use any longer. This is how he assembled the largest range of *Anthurium* flower and pot plant varieties in the industry. A few years later his company, Anthura BV, could draw on this large gene pool to breed new varieties which they patented.

Effectively introducing this new step of young plant production into the value chain made sense for the industry for two reasons. First, many growers of the flowers and pot plants were capable of growing the plant, but might not have the capacity to fully master the tissue cloning technology. Alternatively, they might master the tissue culture technology, but they lacked the genetic material from which to clone. Second, transporting the full-grown flowers was costly and harmful to the flower. The closer the flower could be grown to the actual place of consumption, the more cost effective the total chain would be. So Anthura began to concentrate on young plant propagation in Holland, shipping them to grower customers around the world who finish raising these plants to full size, and then sold them in their local markets.

To focus on selling young anthurium plants and leveraging the intellectual property rights in connection with their gene pool has paid off nicely for Anthura BV. In 1990, Anthura BV had a 25% market share in Holland for Anthurium young plants, facing one competitor of

about equal size and a fractured community of other small growers. By the year 2000, Anthura BV had a close to 90% market share in Holland, with the rest split among hobby growers and here or there a company that owned some specific varieties. Anthura estimated a market share of about 60% outside Holland, both for flower and pot plant production. The other 40% consisted of a large and diverse group of local growers who only sold a few specific varieties plus low quality plants, or who in fact bred and sold varieties in violation of Anthura's intellectual property rights.

Expansion moves during the 1990s

Since Anthura BV had more or less reached the limits of all that could be achieved in the worldwide anthurium market, they decided to diversify into another flower market with similar characteristics.

In 1995, the company entered the Phalaenopsis flower business to cultivate this orchid. The phalaenopsis market was dominated by the company Floriculura almost as completely as Anthura dominated anthurium production. Nonetheless, within 10 years of steady investment and application of their know-how, Anthura BV reached a Dutch market share of 15% in 2004, and became established as a strong No 2 in the phalaenopsis market. The owners of Anthura established Anthura Arndt, the production facility (1.7 hectares) located in Germany, which is responsible for the breeding and propagation of all of the company's phalaenopsis plants.

The attractive feature in the phalaenopsis market is that at 32% in 2003/2004, it is growing much stronger than anthurium sales. So the main problem at both companies is in fact the struggle to keep up with demand. Still, the orchid business only represented 30% of Anthura's total business in that period (see Exhibit 5 and Exhibit 6 for gross revenue and costs of Anthura BV and Exhibit 16 for examples of Anthura produce).

In 2001, the company entered into a marketing agreement with the Corn. Bak BV, a company that breeds and propagates young bromeliad plants. Anthura did not enter upon production of these plants, but they could sell propagation material through their worldwide network. Growers liked obtaining these three tropical plants – Anthurium, orchids and Bromeliads – from a single source. By entering into the marketing agreement with Corn. Bak BV, Anthura could improve client relations with the growers and pick up additional sales margin in their sales network.

Both of these expansion moves beyond the Anthurium could be judged as successful and gave the company a multiple set of growth options for the future (see Exhibit 7 for sales growth). Besides expanding the market for Anthurium flowers and pot plants in various shapes and channels, they could grow stronger in the orchids business. They could launch into a third and a fourth tropical flower market, or they could leverage their worldwide sales network for several additional activities. The company has solid finances and a healthy cash flow to support further expansion. Nic v.d. Knaap handed a healthy company with attractive options for further growth and development to his two sons (see Exhibit 8 for facilities and Exhibit 9 on the Dutch flower market). What will they choose to do?

Anthura's strategic principle

In each business activity that the company ever entered, Anthura BV has employed the same strategic principle, which leads them to use all available knowledge to achieve total control over their business in all stages as much as possible.

In anthurium propagation that has meant for instance:

- The company continuously develops new varieties and tries to improve old ones. The large gene pool available to them gives them a natural edge over any potential competition, as variety breeding is still an affair of 1 hit out of 10,000 tries. Nonetheless, to keep the lead, Anthura BV has to invest continuously in its intellectual properties.
- The company experiments with every possible aspect of Anthurium breeding and propagation in order to achieve a consistently high quality flower: soil compositions, watering cycles, lighting, temperature, and shipment conditions are constantly controlled, enhanced and investigated. The company has just developed and patented a new diaphragm solution for controlling ambient light in the green house. The company's intellectual property rights and implicit know-how for anthurium growing conditions have become an increasingly important corollary to the rights on their plant varieties. Any variety on the market could be easily and illegally copied through tissue cloning, but knowing how to grow it right is quite a different challenge, and much harder for the potential intellectual property violator to achieve.
- Even though the company is not active in the end customer market itself, a vigorous watch is kept on the end customer market trends in order to guide the breeding program, and equally important, the propagation program. Growing a variety to full maturity takes two years, so in essence the company has to anticipate market demand by variety about 2 to 3 years ahead. Once that process is set in motion, though, the plant production of a variety can neither be increased nor told to stop growing. It requires intensive coordination with the growers to maintain an even flow of preferred varieties to the end market, since Anthura is in effect the only significant supplier. If Anthura misjudges the markets too often, growers might switch to other plant species, and Anthura would lose the business.
- The company vigorously collects data on every single variety and activity of any of its competitors in the Netherlands and as much as possible abroad. In Holland, Nic v.d. Knaap claims, he is well informed about every single square metre of soil where anthuriums grow.

China

In 2005, 30% of the world's anthurium growers are located in Holland. Anthura sells about half of its production in Holland, and half in the rest of the world. The Dutch growers once supplied most of Europe with flowers and pot plants, but that is changing. Iwan v.d. Knaap expects that in five years' time he will no longer distinguish between Holland and the rest of the world the way his father did. In the future, Anthura BV will consider the EU as one market, and the rest of the world as the other.

Iwan v.d. Knaap also expects most of their growth to come from the overseas markets, with China leading the way, although there are many other markets as well.

However, the growth in China presents two challenges to Anthura BV:

1. Intellectual property rights on ornamental plant varieties are either nonexistent or difficult to enforce there, and the Anthura BV executives expect that this will remain so for several years to come.
2. Plants that are shipped from abroad are considerably more expensive than those produced locally based on local propagation material.

The younger and the smaller the shipped plants are, the less expensive are shipping costs. The solution is therefore to install a young plant propagation facility in China. The Dutch facilities will ship plants that are only a few weeks old to the Chinese facility to be grown for 12 months before being sold to the final growers for the last growth phase, which takes another 12 months (see Exhibit 17 for the growth stages of Anthurium plants).

By controlling the flower growing stage in their own production facility inside China, Anthura BV can ensure that their expertise in the production of high quality anthurium flowers is applied to the flower in a cost efficient manner, while not giving anything away to potential competitors. This should make it possible to provide high quality flowers at competitive prices for the Chinese market. Some growers will always violate intellectual rights on the varieties. But they will be missing the second key ingredient of this knowledge: how to grow the plant under optimal conditions towards optimal quality. Over the long run, Iwan v.d. Knaap hopes it will make more sense for growers to enter into respectable customer relationships with Anthura BV and buy the young plants from them, along with the intellectual property rights.

That at least is the plan. Both Iwan and Nic v.d. Knaap have no illusions about the Chinese market. To establish a market for Anthura in China will neither be easy nor will it go fast, and the effort will divert a great amount of management attention from their home base. However, Iwan v.d. Knaap feels that he would rather attack the Chinese challenge head on than wait until the Asian market takes off without Anthura and eventually arrives back home to attack him. He is totally committed to maintaining the dominant position that Anthura BV has in the worldwide Anthurium ornamental market. He is not going to let it slip away, either now or later, not yielding to the Chinese or any others.

So on this August morning in 2005, Nic v.d. Knaap sighs as he turns his eyes from the new production site back to where his son stands amidst the Chinese. He knows that his son Iwan v.d. Knaap has his work cut out for him. Wanting to continue a proven strategy of absolute control is one thing, executing that strategy on a worldwide scale with the resources of a small scale business is quite another. That will be the work of a new generation, he thinks. Whether his sigh is one of relief or concern, only Nic v.d. Knaap knows.

Appendix

Outlook for the Dutch flower industry in the coming decade

Out of every ten flowers that cross a national border somewhere in the world, 7 originated in the Netherlands – a very impressive market share. The next largest exporter of flowers in the world is Colombia, with less than 1 in 10 flowers (0.7 to be precise).

In 2004 the Netherlands produced EUR 4.7 billion worth of ornamentals, and exported ornamentals worth EUR 5.9 billion. The imports are typically sold at the auctions, then repacked and exported again. That illustrates two well developed competencies of the Dutch people – their meticulous care of a huge production on every square centimetre of valuable soil, and the high degree of competence they have developed in trade. The Dutch have been practicing trade since the sixteenth century. But, as anyone in the Netherlands will hurry to say, successes of the past are no guarantee for the future.

Role of the Dutch auction system

Looking at the past, it is obvious that the invention of the auction system as a market-place owned by the growers of fresh produce allowed for this enormous development in the market for ornamentals. The rise of hothouse production goes on the account of a strong drive for innovative agricultural and horticultural growing techniques.

In the fruit and vegetable business a similar system of auctions existed all through the twentieth century, but it collapsed as the outlets merged into fewer and fewer retail chains. In the ornamental sector the same change is under way, but not at the same rate. It is slower, and many Dutch growers refuse to acknowledge that there is such a trend at all.

Changes in Dutch hothouse economy

Nonetheless, these developments are indicative of the ongoing changes, most notably of scale

enhancement. Hothouses smaller than 2 hectares in area have been disappearing, and the number of those larger than 5 hectares has increased in the last 5 years (LEI data). So the number of companies is diminishing, while total production is rising. At the same time the competitors from countries close to the equator, such as Kenya, Uganda, Ecuador and Mexico, are growing stronger. Their labor is cheap and they can produce at about 2000 m above sea level the entire year round with no essential seasonal climate change or significant technical investments.

The Dutch flower industry is holding on to its competitive edge with the development of new, mechanised growing and harvesting techniques that allow for year-round production at minimal labor costs, while maintaining very high quality standards. At latitude of 52°, it is necessary to have heating in the hothouses for at least half of the year. With the enormous rise in the cost of energy, including the natural gas they use, it is mandatory to reduce the energy input in hothouse production. At the moment, experiments are running that use an underground aquifer to store excess heat in the summer and use that heat in the winter. At present, this method brings a 30% reduction in energy use with a 20% increase in production.

However, ideas to improve the system so that it can produce excess energy (dubbed "the Energy Producing Greenhouse") are also under development. At the same time, walking plant systems are being developed, which rotate plants through the hothouse, taking them through segregated compartments where different climactic conditions prevail.

Computer vision programs coupled to camera systems decide which treatment the plants should get in order to deliver the right plants at the right moment. This saves expensive hothouse space, since there is no more need for paths between the plants for people to move through for visual inspection. The plants are brought to the people

for harvesting and treatments instead. This saves labor and allows for the coming use of harvesting robots, so that in future, labor costs will be cut to an absolute minimum.

In answer to environmental restraints the government places on production, all resources are used in closed loops and wherever possible recycled. In fully closed hothouses with minimum human intervention, no airborne pests can enter and agro-chemicals will no longer be used.

The financing of enterprises such as envisaged here is a great obstacle as they become more and more capital intensive. It is becoming impossible to do this on a small scale, the consequence of which is that investments go to larger and larger companies. At the same time the growers of fresh produce see their opportunities in a forward movement into the supply chain. This implies that they also try to create

more and more added value, eliminating the middle man between them and the final outlet servicing the consumer, cutting costs as well.

From this image we can conclude that the future Dutch ornamental producing company will be very large scale, producing year-round high quality material in direct demand of the retail outlet. It will do this with a minimum of labor input and extremely high resource efficiency in an environmentally friendly way. These companies will be financed and run like any modern industry. Once the development is saturated on the level of resource and labor efficiency, the companies will eventually leave the Netherlands or at least position themselves in locations where the other conditions for production and trade are optimal. This process may take 10 to 15 years or more.

*Olaf van Kooten, professor of horticulture,
Wageningen University, The Netherlands*



Riverford organic vegetables
home delivery

Riverford Organic Vegetables Limited

Guy Watson, owner and managing director of Riverford Organic Vegetables Limited (Riverford, or the Company) took his boots off and leaned back in his chair. So far, in terms of revenues, 2005 has been an unbeatable year, and this on the back of an outstanding year 2004 (see Exhibit 10) when gross profits increased to 48% from 45%, net profits increased from 3.3% to 4.7% and EBIT reached 13%. The Company even won the prestigious Organic Business of the Year award. What now? Guy Watson faced some big challenges, going forward.

Riverford is the largest distributor of organic vegetable boxes in the South of England, and one of the largest independent growers nationally. Box sales have been growing at 1000 per month, already exceeding the targets for 2005 (see Exhibit 11). The active customer count is soaring, with more than 10,000 customers buying regularly. The net profit per box has also risen in the past 12 months to almost 10% (company estimate).

The Company is neither short of potential distribution franchisees nor of national distributors and growers wanting to be a part of Riverford's successful business model. The message from consumers is clear and positive, too. They want good, fresh (local) food, and Riverford is producing and delivering just that. More than 1000 new customers are signing up each month, confirming the interpretation of IGD data in March 2005 which showed that 96% of UK consumers believe it is important to have a wide variety of food grown right there in England. Of that high majority, 69% even say it is very important to them¹.

Managing the growth

Now Watson is faced with some big decisions about how to lead the Company from here on. Given the strong evidence of consumer demand, there is considerable scope for growth across the UK and possibly abroad. A joint venture strategy has been established and is operating successfully in the East Midlands, where alongside an existing family run business, the Riverford model has been successfully replicated as River Nene Organic Vegetables Limited.

How many times can this replication be done successfully? How big can Riverford become without losing the ethos and culture that drives it, and without over extending the existing management team, who in general lack formal training, skills development and coaching? Watson holds all the pieces of the business together, leading from the front, and he is used to

¹ Data produced in March 2005 from The Institute of Grocery Distribution

exerting considerable control, particularly over the details. How would he personally adapt to the proposed strategy of joint venturing with other companies in other geographies in order to grow?

Performance in a more competitive environment

How would Riverford fare as competition increased? Only that week, customers were telling those delivering the boxes that Dairy Crest, one of the UK's largest doorstep milk delivery companies, would be delivering organic vegetable boxes with their milk at a competitive price (see Exhibit 12: comparative price data). Internally, they are seeing evidence that consumer behaviour is changing, because the ratio of 8 orders per week from 10 active customers has decreased to 5 orders per 10 customers². Even allowing for the seasonal variations of summer holidays, the decline is worrisome. With every box contributing some £2.15 to overheads in 2005, keeping volumes up is essential.

Could Riverford realistically expect to continue to "*pick one day, deliver the next*"³ if they operated nationally? Would they be able to offer such a flexible service to their customers – which currently enables weekly or fortnightly ordering, weekly, fortnightly or "*other*" delivery and up to the last minute quantity alterations both on line and on the telephone? Watson is focused on the threat, constantly seeking to find new, better and cheaper ways of doing business and keeping overheads as low as possible.

History

Guy Watson started renting and farming 3 acres of his father's farm at Staverton in South Devon in 1984 with a conviction that good, fresh, affordable food should be available to everyone. He didn't see farming as "the difficult bit" of the food business but rather felt that significant value could be generated in putting all the pieces of a supply chain together from grower to consumer. He ran the whole operation himself, growing, marketing and delivering vegetables to local shops and restaurants throughout the region. It was hard work, with days beginning at 0500 and regularly finishing at 2300, but Watson's belief in what customers wanted, his ability to grow it and to deliver it "*to the door*" bore good early results, and his cash driven enterprise made a profit of £6,000 in the first year.

Growing organic

The decision to grow and market vegetables organically could be more than justified commercially as Watson established his business: despite the risks associated with producing a crop organically, the marketplace returns were higher than for conventional crops, and he converted to organic status early. It was, however, primarily a decision based on hours spent

² Company data

³ www.riverford.co.uk

in the fields observing, learning and constantly questioning. Watson had decided early in his life, as he put it, *"I don't like using the chemical stuff."* Trying new approaches and watching and 'listening' to the effects on the crop, the soil and the adjacent flora and fauna, and perhaps even more importantly, by regularly not doing anything at all, he developed a very deep conviction that farming organically is the only sustainable way to produce food.

A confident approach

The challenges involved in opportunities for growth in the summer of 2005 heralded a new stage in the life of the Company, and these were more welcome than those they had faced and overcome before. It was in 1993 for example that Guy Watson took the call from Safeway in his vegetable packing shed and smiled broadly as he received the news that he had been waiting for: the supermarket giant wanted his organic vegetables. Having received the good news and then asking if he could meet the buyer in London on Friday rather than Thursday, the telephone line went dead. He quickly dialed the buyer's number... *"sorry, I don't know what happened there, but the line was cut..."*.

"I know why," was the terse reply. *"No, Sonny, when we whistle, you jump. Either you are up here on Thursday or there is no meeting."*

There was no meeting. Watson, incensed by the arrogance and values demonstrated by Safeway's buyer, decided at that very moment to develop his business without the supermarkets. His vision was to make good, fresh, affordable food available to as many people as possible by matching the efficiencies of the supermarket supply chain. His vegetable box scheme – delivering vegetables direct to farm shops and consumer homes – was realising that vision exactly, if only on a small scale. He decided to increase his focus on his direct-to-consumer business.

Watson's reaction to the attitude of the supermarkets summarized his approach to life in general and the food production business in particular: *"Why Not?!"* His quick decision proved to be a savvy one. In ten years, Riverford became the largest independent grower of organic vegetables in the South West of England, and one of the largest distributors of vegetable boxes on a national scale (Exhibit 13).

There are lots of different ways to get around problems

The Company has no frills. There is a universal understanding about what creates value and what creates cost, and new ideas are scrutinized in immense detail in those terms. If the proposal adds value to the quality, choice and freshness of what is offered to the customers, or if it increases the number of customers that can be reached, then Riverford will invest heavily. Otherwise, they won't – a fact that some potential professional advisors have failed to understand.

Once a proposal becomes a reality, it is broken down into its component parts and examined in detail. The important pieces are turned into procedures to be repeated over and over

again. With these 'bones' in place, and Riverford's ethos running through the veins of the Company, Watson can manage his team in a relaxed way, giving individuals significant responsibility. There are 5 core pieces to the Company: the growers, the pack-house, the franchise distribution agreements, the shared IT system, and the administrative processes. The value creators are the product, the people, the pack-house, marketing, and the company ethos.

The right (and good) people

Riverford is an attractive and popular place to work in the South Hams. Watson has collected an extremely capable team around him. To date, he has not had to pay too much for those capabilities. Managers are only paid the local market rate. They tend to be under-qualified for their positions, but produce outstanding levels of performance. They rarely leave the Company and all are united in their pursuit of the Riverford vision. Similarly, non-managers are only offered the marketplace average on an hourly basis, but demonstrate absolute conviction in the worth of their work and take huge pride in the Company. Their outdoor work is hard and manual. The indoor work environment is basic, but all employees have access to an exceptional canteen where meals of the highest culinary standards are produced daily. All are extremely positive about how they are rewarded.

Production: farming is not the difficult bit

Although Watson is an agriculturalist by training, and takes every opportunity he can to walk the fields, he spends very little time growing. With an excellent farm manager (with green fingers!) and a well-structured grower co-operative in place (formed in 1997), there are some 13 family run farms in South Devon who share their machinery, labour and knowledge and grow 85 different varieties of vegetables in order to secure supply agreements to fill the boxes, so he no longer needs to focus on planting and growing crops. He comments:

"I can make assumptions about the value creating potential of this asset (the land) that I can't make about any other asset utilized in the business: providing you don't lose the hands-on connection with the soil, providing you respect it and are gentle with it, you can rely on it and use valuable management time on other parts of the business."

In any case, he has to focus on running the business overall: in 2000, for example, the company grew too quickly, and Watson was almost running others' farms for them as he taught neighbours how to grow crops well organically. This took his eye off the company as a whole and the financial results reflected that. Today, the co-operative benefits from Riverford's knowledge and experience in growing fresh produce, and the risks have been significantly reduced with better access to the markets.

Operations in the packing shed, co-located with the main offices of the Company are the domain of a young production manager running a very tight ship. Success here depends on an excellent working relationship between the distribution manager and the production manager, powerful relationships between Riverford and its growers across the UK and Europe, and a hands-on approach to solving supply problems as they (unexpectedly) occur.

Time to make decisions is limited, but it is in the packing shed and the distribution hubs that profits are won or lost. Riverford's future depends upon the quality and freshness of the vegetables coming in for packing, and as volumes increase, the stakes are higher, as the production manager has to source and substitute ever larger quantities of one vegetable for another.

Marketing

Riverford has a leading position over competitors in the marketplace. The boxes they offer to the customer with fresher, better quality vegetables and more choice match or beat those listed by competitors (see Exhibit 14). This approach is driven by the need to be cost focused in a commodity based business, and by Watson's personal skill for identifying the main drivers of value, breaking down those parts into very small pieces so that he completely understands them, and then controlling them and repeating them relentlessly.

In terms of marketing, however, knowledge of those who eat the food and what they want has driven the good results. Riverford has not spent much on professional marketing advice, but with the help of a designer who truly understands and believes in the ethos of the Company, they have established an effective and recognizable brand: the copy is all produced on unbleached recycled paper written in simple language and with clear, easy to use designs (see Exhibit 15). Another effective marketing tool has been the weekly newsletter written by Watson himself and with recipes that he often creates himself. Customer feedback suggests that this adds huge value to the product, especially for people who may be using some of the vegetables for the first time and do not know how to prepare them.

Customers buying a Riverford vegetable box are buying a fresh, simple, practical product and a transparent production process. They are also buying a piece of Guy Watson's vision: the 'packaging' reflects and indeed encourages that approach. In 2005, over 80% of Riverford's profit contribution will be generated by direct-to-consumer vegetable boxes.

Distribution - Delivering to the customer

Distribution of Riverford's vegetable boxes around the country is carried out by franchisees who pay EUR 30,000 for the licensing rights to become a distributor. After paying Riverford an on-going management fee of 3% of turnover, they realize an average gross margin of 23%. The cost of distribution per box "*from soil to franchisee*" is 9% of the total cost of goods, all of which is co-coordinated and managed by the distribution manager, who also runs his operation as his own business. In this way, both the risks and the rewards are shared between Riverford and the entrepreneurs that own and operate the distribution businesses, and most of the highly depreciable assets associated with distribution (trucks, vans etc) are kept off the balance sheet.

The franchising agreements reflect an attempt to keep day to day business management as simple as possible. This is achieved by taking an enormous amount of time selecting the franchisees and structuring the agreements in the first place. Franchisees are self employed.

Only entrepreneurial candidates may apply and there are plenty of them, with a waiting list of potential new candidates almost always available.

The future for Riverford Farms

The core assets for Riverford going forward are the very solid supply base, the people, and the Company's culture. Their competitive advantages are the quality and freshness of their product, low overhead and administration costs, and the efficiency and integrity of the supply chain.

The future strategy is a simple one to describe: *"to multiply the network up around the regions so there will be 6–8 Riverford models across the country"*.

The performance is good, the future is full of potential, and locally at least, the marketplace is confident that Guy Watson has built a profitable, sustainable company selling good food at good prices.

He has all to fight for, but for now it's lunch time. He puts his boots back on and walks out to his "field kitchen", a beautiful ecologically sound building on the farm designed and operating as a restaurant which has taken some 7 years to complete – the jewel in the crown.

Exhibit 1**The European milk quota system**

The milk quotas system, with member states being allocated national quotas, was introduced by the European Community on 2 April 1984 as a means of curbing excess production and reducing expenditure on the disposal of surplus milk and milk products. At that time, expenditure on support in the dairy sector had reached 5.2 billion ECU or around 30% of the total agriculture budget.

There are two types of quota – wholesale and direct sales. Under the system, if production of either or both types is above the national quota, producers who have exceeded their individual quotas are liable to pay a punitive levy on their over-production after the end of the quota year. The levy collected is used to offset the cost of storing and disposing of surplus milk within the European Community. The levy is set, per 100 kg of milk, at EUR 33.27 for the 2004/05 quota year, EUR 30.91 for 2005/06, EUR 28.54 for 2006/07 and EUR 27.83 for the period 2007/08 and thereafter.

Types of Milk Quota

The wholesale quota is held by milk producers who deliver milk (the produce of the milking of cows) to a purchaser (generally a dairy or intermediary co-operative with which the producer's quota is registered). The direct sales

quota is held by producers who sell their milk directly to the market without going through a purchaser, or who sell products other than milk, e.g. skimmed milk, cream, butter, yoghurt and cheese. Producers can hold one or both types of quota.

Both types of quota are, in principle, attached to the holding which means that the quota remains with the land even when the landowner moves.

Levy, Trading and Conversion of Quota

The milk quota year runs from 1 April to 31 March. If a wholesale producer's deliveries of milk exceed his quota and a nation goes above its national wholesale quota, he is liable to pay a levy on his over-production. Producers can reduce their levy liability by cutting back production or by buying, leasing or converting quota to cover their extra production. Producers can thus transfer quota in or out to match production. The price of transactions is determined by the market. Producers can convert their wholesale quota into direct sales quota or vice versa to reflect their actual production. Conversions can be either permanent or temporary. Producers may not convert quota that they have already leased out or produced against.

Source: EU

Exhibit 2**Financial Data of the Döbelt companies**

| in Euro 2004 | Business 1 Milk production and feed | Business 2 Vegetable and dairy | Business 4 Direct sales | Other businesses and holding |
|---------------------|--|---|------------------------------------|---|
| Total Sales | 1.796.927 | 1.456.849 | 466.068 | |
| Materials* | -1.110.325 | -529.573 | -235.956 | |
| Personnel | -324.996 | -287.338 | -150.815 | |
| Depreciation | -124.693 | -85.112 | -17.709 | |
| Other costs | -145.061 | -335.630 | -36.176 | |
| Financing costs* | -110.379 | -57.009 | -5.635 | |
| Net Income | -18.529 | 162.187 | 19.778 | |
| EBITDA | 216.543 | 304.308 | 43.122 | |
| EBITDA/Sales | 12% | 21% | 9% | |
| Estimated Value | 5.413.000 | 2.306.000 | 850.000 | 1.554.650 |
| Debt Position | 2.025.000 | 593.000 | 330.000 | 759.440 |
| Net Value | 3.388.000 | 1.713.000 | 520.000 | 795.210 |

Exhibit 3**History and projections of key financial data for Döbelt companies**

| Reporting Years | | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 |
|--|--------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Net Profit | in EUR | 372.685 | 440.007 | 432.506 | 352.827 | 571.722 | 597.260 | 557.177 |
| Utilization of long term credit volume | in % | 208% | 66% | 384% | 163% | 112% | 101% | 118% |
| Utilization of medium term credit volume | in % | 136% | 57% | 125% | 126% | 96% | 83% | 92% |
| Utilization of short term credit volume | in % | 90% | 54% | 112% | 114% | 90% | 76% | 82% |
| Total Sales | | 2.892.328 | 3.958.102 | 3.818.457 | 3.655.070 | 4.007.488 | 4.089.504 | 4.056.769 |
| Profitability | in % | 12,9% | 11,1% | 11,3% | 9,7% | 14,3% | 14,6% | 13,7% |
| Cash flow | in EUR | 226.344 | 513.551 | 175.761 | 315.435 | 532.118 | 511.052 | 469.831 |
| Total debts | | | | 1.588.388 | 1.594.923 | 1.426.538 | 1.105.664 | 809.118 |

* including calculatory costs for owned assets

Exhibit 4**Productivity data comparisons of Landgut Nemt**

Rene Döbelt (2000/01–2003/04)

Best Practice
top 25%
of group

| | <i>Capacity</i> | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 25%+ |
|----------------|-----------------|----------------|----------------|----------------|----------------|-------------|
| # dairy cattle | 600 | 500 | 452 | 463 | 509 | 529 |
| Quota | 3.979.711 | 3.531.152 | 3.776.835 | 3.776.835 | 4.251.357 | 3.435.832 |
| Milk 4% fat | 3.900.117 | 3.569.406 | 2.983.901 | 3.504.134 | 4.262.234 | 4.329.148 |

| Reporting Year | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 25%+ |
|---------------------------------------|----------------|----------------|----------------|----------------|-------------|
| <i>Performance in €cent/kilo milk</i> | | | | | |
| Milk Sales | 38,5 | 35,9 | 30,7 | 30,0 | 33,2 |
| Cattle Sales | 4,0 | 13,1 | 11,7 | 8,5 | 3,6 |
| Cattle Purchases | 2,9 | 14,6 | 9,0 | 8,4 | 3,9 |
| Other income | 2,2 | 8,9 | 3,4 | 4,3 | 2,1 |
| Total Income | 41,8 | 43,3 | 36,8 | 34,3 | 35,0 |
| Total Costs | 45,0 | 45,8 | 36,6 | 34,1 | 31,7 |
| Calculatory Income | -3,2 | -2,5 | 0,2 | 0,2 | 3,3 |
| plus implicit quota return | 3,5 | 2,9 | 1,9 | 1,3 | 3,1 |
| Company net profit | 0,4 | 0,4 | 2,2 | 1,5 | 6,4 |
| Direct Animal Costs | 5,6 | 6,5 | 5,6 | 4,2 | 3,5 |
| Base Feed Costs | 8,4 | 7,0 | 5,0 | 4,3 | 5,6 |
| Supplements feed costs | 0,8 | 0,7 | 0,8 | 0,6 | 0,6 |
| Concentrate feed costs | 11,9 | 12,5 | 7,3 | 8,3 | 5,7 |
| Sum feed costs | 21,1 | 20,2 | 13,0 | 13,2 | 11,9 |
| Labor costs | 9,5 | 10,6 | 11,0 | 10,5 | 9,1 |
| Barn and buildings | 4,5 | 4,4 | 4,3 | 4,3 | 3,1 |
| Overhead | 0,7 | 1,1 | 0,7 | 0,6 | 1,2 |
| Quota | 3,5 | 2,9 | 1,9 | 1,3 | 3,1 |
| Total Costs | 45,0 | 45,8 | 36,6 | 34,1 | 31,7 |

Exhibit 5**Composition of gross revenue of Anthura BV
by products in 2004**

| Product | Gross revenue (€) | Distribution of revenue |
|----------------------|--------------------------|--------------------------------|
| Anthurium cutflowers | 8 000 000 | 27% |
| Anthurium potflowers | 11 500 000 | 38% |
| Orchids | 9 000 000 | 30% |
| Bromeliads | 1 000 000 | 3% |
| Others | 500 000 | 2% |
| Total | 30 000 000 | 100% |

Exhibit 6**Anthura BV cost accounting**

| Accounting entry | Distribution |
|-------------------------|---------------------|
| Purchase plant material | 15% |
| Energy | 9% |
| Base materials | 7% |
| Labor | 39% |
| Amortization | 10% |
| Housing | 3% |
| Direct sale | 5% |
| Plant breeding | 2% |
| Immediate costs | 2% |
| General costs | 3% |
| Interest | 5% |
| Total | 100% |

Exhibit 7**Total sales Anthura BV from 1994 - 2004**

| Year | Sales (€) |
|-------------|------------------|
| 1994 | 5 000 000 |
| 1995 | 6 000 000 |
| 1996 | 7 500 000 |
| 1997 | 8 000 000 |
| 1998 | 9 500 000 |
| 1999 | 14 500 000 |
| 2000 | 15 500 000 |
| 2001 | 17 500 000 |
| 2002 | 20 000 000 |
| 2003 | 25 000 000 |
| 2004 | 30 000 000 |

Exhibit 8**Hectarage (acreage) and composition of work force of Anthura BV in 2004**

| Total | 160 employees | hothouses 14 ha (35 acres) |
|---------------------|---|---|
| Anthura Breeding | investigations into and development of new varieties | breeding hothouse 2.2 ha (5.5 acres) |
| Anthura Laboratory | propagation (tissue culture) of Anthurium and Phalaenopsis | in-vitro laboratory 0.3 ha (0.75 acres) |
| Anthura Microplants | all plants are hardened and sorted here; preparation of shipments of micro-cuttings and plugs | hothouse 2.8 ha (7 acres) |
| Anthura Production | completely automated and robotized young plant "factory" | hothouse 7 ha (17 acres) |
| Anthura Flower | testing and inspection of new and existing Anthurium varieties for the cut flower culture | hothouse 1.6 ha (4 acres) |
| Anthura Arndt | breeding and propagation of Phalaenopsis plants | hothouse 1.7 ha (4.2 acres) |

Exhibit 9

Dutch flower market by variety

| Dutch flower market (auctions) | | | Sales and change compared to 2003 | | | |
|--------------------------------|-------------------|-------------|-----------------------------------|-------------|---------------------------|---------------------------|
| Cut flowers 2004 | Revenue (€000) | % change | Supply (x1000) | % change | Price / piece 2004 (€) | Price / piece 2003 (€) |
| <i>Rosa</i> | 705 942 | 3.6 | 3 464 237 | 1.90 | 0 21 | 0 20 |
| <i>Chrysanthemum</i> | 285 328 | -4.6 | 1 447 521 | 2.10 | 0 20 | 0 21 |
| <i>Tulipa</i> | 184 959 | -0.5 | 1 438 435 | 9.70 | 0 13 | 0 14 |
| <i>Lilium</i> | 158 331 | -1.0 | 413 919 | 4.10 | 0 39 | 0 41 |
| <i>Gerbera</i> | 115 904 | 9.5 | 752 985 | -2.30 | 0 16 | 0 14 |
| <i>Cymbidium</i> | 65 217 | -0.8 | 32 736 | 1.10 | 1 99 | 2 03 |
| <i>Freesia</i> | 59 616 | -1.0 | 446 920 | 5.20 | 0 13 | 0 14 |
| <i>Anthurium</i> | 39 722 | -6.8 | 69 576 | 8.20 | 0 58 | 0 67 |
| <i>Chrysanthemum GE</i> | 38 859 | 3.0 | 108 833 | 15.0 | 0 36 | 0 40 |
| Total | 2 329 575 | 0.0 | 11 847 084 | 1.50 | 0 20 | 0 20 |

Exhibit 10

Riverford Ltd – Summary income statements (£000)

| | 1988 | 1992 | 1993 | 1997 | 1998 | 2000 | 2002 | 2004 | 2005 |
|-------------------|------------|-------------|-------------|------------|------------|------------|------------|------------|------------|
| Sales | 38 | 113 | 137 | 730 | 1109 | 2991 | 3660 | 5400 | 10 000 |
| Cost of sales | | | | 136 | 216 | 1488 | 1816 | 2800 | |
| Gross profit | | | | 594 | 892 | 1503 | 1844 | 2600 | |
| Distribution | | 13.5 | 11 | 442 | 786 | 169 | 262 | 474 | |
| Operating profit | | | | | | 288 | 287 | 317 | |
| Net profit | 4.4 | 15.5 | 26.8 | 178 | 291 | 203 | 208 | 256 | 600 |

Source: Company Accounts

Exhibit 11

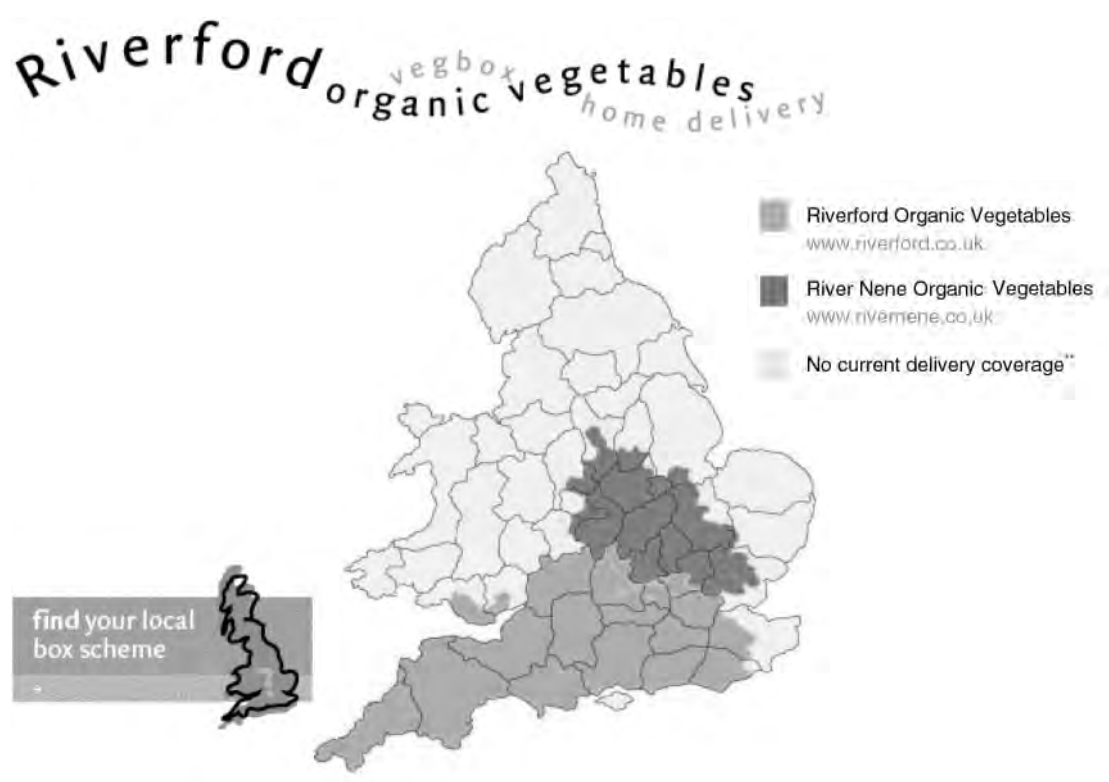
Riverford Ltd – Number of vegetable boxes produced weekly

| | 2000 | 2001 | 2002 | 2003 | 2004 | 07/2005 | 2005E | 2007B |
|-----------------|------|------|------|------|--------|---------|--------|--------|
| Number of boxes | 3700 | 4200 | 5000 | 6500 | 11 500 | 22 500 | 30 000 | 33 000 |

Source: Company Data

Exhibit 12**U.K. market – Vegetable box comparisons 20 August 2005**

| Company | Box contents | Price |
|-----------------------|---|--------|
| Organics - 4u.co.uk | New potatoes, baking potatoes, carrots, broccoli, cabbage, sweet potato, leeks, red onion, kohlrabi, fennel, beet root, turnip, radishes, celery, lettuce, tomatoes, cucumber, peppers, mushrooms, courgettes, 2 varieties of apples, kiwi, melon, bananas, oranges | £28.95 |
| West country organics | Hispi cabbage, bunch turnip, broccoli, courgettes, green onion, lettuce, Swiss chard, new potatoes, fresh basil, globe artichoke, tomatoes, bunched carrots | £14.20 |
| Abel and Cole | Bananas, broccoli, carrots, cucumber, lettuce, pears, tomatoes, washed potatoes, white onions | £16.50 |
| Dairy Crest | Data currently not available | |
| Riverford | Basil, Swiss chard, bunched beet root, hispi cabbage, bunched carrots, celery, courgettes, green batavia, lettuce, new potatoes, rocket, bunched turnips, onions, runner beans or French beans | £12.50 |

Exhibit 13**Distribution areas for Riverford Organic Vegetables in the UK (from www.riverford.co.uk)**

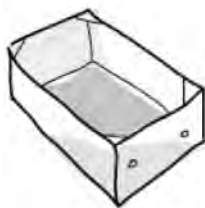
Although we don't deliver in these areas at the moment, we will be soon, so please register your details with us above by entering your postcode in the box above and we will write to you when we are in your area.

Exhibit 14**Marketing for 'this week's box' (from www.riverford.co.uk)**

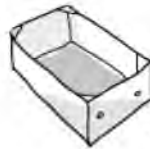
Riverford *organic veg box vegetables*
home delivery

this week's box**22nd - 28th August 2005**

Every week we select the best seasonal produce available for our boxes. With a range of box sizes and contents you can choose the box that best suits your household's needs and you choose how often you would like to receive it.

**large****£12.50**

basil
swiss chard
bunched beet root
hispi cabbage
bunched carrots
celery
courgettes
green batavia lettuce
new potatoes
rocket
bunched turnips
onions
runner or french beans

**small****£8.50**

bunched beet root
hispi cabbage
bunched carrots
cherry tomatoes
courgettes
green batavia lettuce
new potatoes
onions

**mini****£7.00**

bunched beet root
hispi cabbage
bunched carrots
courgettes
garlic
new potatoes
onions

**medium****£10.50**

bunched beet root
hispi cabbage
bunched carrots
courgettes
leeks
green batavia lettuce
new potatoes
rocket
bunched turnips
onions
runner or French beans



Exhibit 15

Marketing for Riverford Organic Vegetables Ltd



Riverford organic vegetables
home delivery

the carrot



- fresh fruit and vegetables delivered to your door every week
- all certified organic
- very fresh - most picked one day and delivered the next
- 80 per cent from our South Devon fields
- order weekly, fortnightly or whenever you like
- great value - you'll struggle to find cheaper

bananas?

we don't think so
in ten years Riverford has become the largest independent grower of organic vegetables in the south west
and neither do our customers
we supply over 10,000 households.

Here's what they say...

Brilliant! Potatoes like my Dad used to grow.

I'm being introduced to some wonderful new vegetables and my interest in cooking has revived - the flavours are marvellous.

We love our organic vegbox - unpacking it is just like Christmas!

Having tried several different box schemes, I've found yours offers the best in terms of quantity, variety and quality. Congratulations!

more than a vegbox

Our award winning scheme lets you

- request extra quantities
- order freshly produced, top quality organic food including milk, eggs, fruit juice and cereals
- receive a booklet describing all the vegetables we grow
- enjoy a weekly newsletter, with information about organic production, recipes and nutritional ideas to help you to get the most out of the very best.

Exhibit 16

Pictures of anthuriums, orchids and bromeliads



Exhibit 17

Growth stages of an Anthurium plant



Exhibit 18

Picture of the Chinese facility after laying the foundation stone



Exhibit 19

Open house at Landgut Nemt in June 2005

