The international competitiveness of fresh tomatoes, peppers and cucumbers.

<u>Published in: Cantliffe, D.J. (2003), Proceeding of the international congress on Greenhouse Vegetables: The product chain of fresh tomatoes, peppers, cucumbers. ISHS, Leuven. Acta Horticulturae no 611. PP 79-90</u>

1 November 2001

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Summary

Since decades the Netherlands is worldwide a renowned and large exporter of fresh tomatoes, peppers and cucumbers. The level of Spanish export grows fast and has recently superseded the Netherlands concerning the export level of tomatoes. The export position of the Netherlands and Spain is remarkable because the tomato production in Netherlands is just 1 % of the world production and Spain has a share of 4 %. Several countries have a higher production for instance Turkey with a share of 8 %, Italy or Egypt with 6 %. USA and China are also large producers (around 15 % of the world production) but are of no significance in terms of exports. Not only in these countries but in fact worldwide more than 90 % of all grown vegetables are consumed in the production region.
In Europe, Spain and the Netherlands are the main suppliers on the price-oriented German market and on the value-added oriented British market. Spain is catching up very fast on quality aspects and market-orientation. This improvement of the Spanish competitiveness strength is added to the traditionally low cost price. The advantage of the Netherlands lies in the performance and effectiveness of the supply-chain. A cost-price orientation is still an important strategic challenge. A quality strategy is as important, because supermarkets want to differentiate themselves. Improving the market focus related to the supermarket will be a future key strategic factor. Supermarkets are the main distribution channel of vegetables, and their importance will only increase. In the near future the competitiveness depends strongly on the possibilities of supplying the global operating supermarkets with mainly local produced vegetables.
On the production side the Netherlands and Spain have a different growing season. They are supplementing each other in providing year around the supermarkets with fresh produce. However knowledge diffusion of plant production techniques, global operating wholesalers and diminishing EU-trade barriers give several large producing countries like Turkey, Egypt or Morocco opportunities. Global operating wholesalers are sourcing price efficiently worldwide. Non EU Mediterranean countries can be the competitors of Spain because of the identical growing season. The position of the Dutch supply-chain firms (growers, packers, wholesalers, shippers) depends on the success of their shared internationalisation strategy.

1. Introduction

Competitiveness deals in the fact with the question: ‘Who is the best in meeting the consumers’ preferences?’ The firm with this key success factor will provide the consumers with products. This looks like a simply question, however the answer is complicated. Worldwide billions of consumers decide daily which produce they buy and where. Their buying decisions depend on several aspects like availability of the produce, their welfare level, the price of the product or their flavor. Competitiveness can be dealt with from different viewpoints. The market orientation of firms determines according to Hunt and Morgan (1995) the competitiveness. The key success factor is fulfilling the consumers’ preferences by new varieties, a differentiating assortment or exclusive concepts. The achievement of firms in combining the resources in such a manner that their products are distinctive or that the price is lower than the competitors is the central point in Hamal and Prahalad (1994). It is obvious that a lot of firms are involved in providing the consumers with goods. The horticultural chain for instance consists of plant breeders, growers, shippers, wholesaler and retailers. The strategy of firms is not the scope of this paper, because each group of firms at a certain level in the chain needs an own competition strategy. What is more each firm within such a group will all have its own strategy, which will not be discussed openly.
In this paper the competitiveness will be discussed at a more generic level. The viewpoint of the theories of international trade and industrial economics will be leading. Porter (1990) integrated various concepts in a framework known as the ‘diamond’. The paper gives first an overview of the international trade in greenhouse products. On this overview a selection of markets and competitors can be based. The discussion of the four determinants of Porter starts with analyzing the ‘demand conditions’. Next the ‘supporting industries and the market channel’ will be dealt with. The production cost and factor

conditions are the third determinant of the diamond. The fourth will be the strategy for the greenhouse vegetable industry.

2. International trade in greenhouse products.

In this paper the greenhouse vegetables tomatoes, (sweet) peppers and cucumbers will be the scope. Table 2.1 gives key figures about the world production. Tomatoes have the largest share in the production. China is the largest producer of the before mentioned products. But it is also the largest consumer. The main European producers are Turkey, Italy, Spain and the Netherlands.
The Netherlands and Spain are the main suppliers for Germany and the United Kingdom as Mexico is for the United States. The share in the world production of the Netherlands varies between 1 and 2 %, of Spain is between 2 (cucumbers) and 6 % (peppers) and of Mexico is less than 2 % except for peppers, which has a share of 7 %. The export position of these countries is remarkable (Van Meijl at al. 1998).

	Fresh tomatoes	Cucumber s	Sweet peppers
World production MT	88.6	24.7	15.3
European Production	24 %	13 %	73 %
World export million $	2,500	800	1,100
European export share	68 %	73 %	73 %
Largest exporters (world shares)			
Netherlands	30 %	46 %	40 %
Spain	21 %	19 %	27 %
Mexico	18 %	15 %	16 %
European import shares	67 %	73 %	68 %
Largest importers (world shares)			
Germany	23 %	41 %	30 %
USA	17 %	15 %	22 %
UK	11 %	8 %	9 %

Table 2.1 World production and trade of greenhouse vegetables in 1993-1995.

In general the vegetable production is largely consumed in the same region: about 95 per cent of the European vegetable production is consumed within a distance of 500 till 1000 km from the production region. Tomatoes, cucumbers and sweet peppers have no different patterns. Therefore the largest exporting countries aren't mostly the largest producers. The largest producers of tomatoes in Europe are Turkey (8 % of the world production) and Italy (6%). However the largest exporters are Spain and the Netherlands (van Meijl, 1998).
In Europe the Netherlands are a renowned exporter of agricultural products. However the leading export position in Europe in vegetables of the Netherlands is deteriorating. Spanish producers increase their market share on the main European markets Germany and Great Britain. The competition between Spain and the Netherlands is rather severe. For this reason the performance of these two competitors will be compared on the German and British market. The consumer orientation on these two markets is very different and therefore quite interesting. The German market is strongly price oriented and on the other hand the British market is a value added demanding and quality conscious market. It will

be clear that the geographical scope of the paper not the ‘worldwide’ competitiveness of greenhouse products is but the European Union. Secondly competitiveness will be dealt with from the viewpoint of the Dutch position.

The Netherlands exported in 2000 approximately 465 million kg tomatoes, 250 million kg sweet peppers and 300 million kg cucumbers. Germany with 82 million consumers is the main export destination for Dutch vegetables. The British market, 59 million consumers is second. On both these markets Spain is second foreign supplier. The Dutch market share for the products taken into account on the German market is decreasing. On the British market the share for tomatoes is also decreasing. Spain is taking over these Dutch losses. The performance of Spain outstands the Dutch (Poot et al. 2001).

	Tomatoes 1988	Tomatoes 1998	Peppers 1988	Peppers 1998
Netherlands	73	50	35	45
Spain	9	23	40	46
Others	18	27	25	9

Table 2.2. Market shares on the German market (source: Bunte 2000)

The Dutch market share of tomatoes on the German market decreased from 73 % in 1988 to 50 percent in 1998 (table 2.2). In the same time the market share of Spain grew from 9 tot 23 percent. On the British market the Dutch position is even more dramatic (table 2.3). On both markets Spain improved the relative import price, the Dutch price deteriorated.

	Tomatoes 1988	Tomatoes 1998	Peppers 1988	Peppers 1998
Netherlands	36	22	60	68
Great Britain	35	26		
Spain	27	45	21	25
Others	2	7	19	7

Table 2.3. Market shares on the British market (source: Bunte 2000)

The export of tomatoes, sweet peppers and cucumbers from Spain has seen a sharp increase in the nineties. In the five years to come, this increase will continue to a somewhat lesser degree: between 3% for cucumbers and 8% for tomatoes and sweet peppers. The export of tomatoes from Italy has strongly increased in the course of the nineties, which is especially due to the success of tomatoes on the vine. Italy’s export of tomatoes appears to have stabilised and no further increase is expected in the years to come. The Spanish performance on both markets is much better than the Dutch. The growers in Great Britain lost a major market share due to the high value of the British pound compared with the Euro. The production area for tomatoes and cucumbers is decreasing in the United Kingdom, as many small enterprises have ceased to exist. Not surprisingly, one may expect a decrease in the production of between 5 and 10% up until 2005.

3. **Consumption and marketing of greenhouse products: the demand conditions.**

The main driving force on competitiveness is to understand the consumers. The consumption of tomatoes and sweet peppers in the main export markets of the Netherlands is expected to grow. The consumption of tomatoes and sweet peppers in Germany is expected to grow about 2% in the next five years. In the UK, the demand for tomatoes will increase by 4%, while the demand for sweet peppers may increase by as much as 20%. The demand for cucumbers will decrease by 1% in both the UK and Germany (Poot et al., 2001). The growth percentages are rather high for food and remarkable because the European vegetable market is quite saturated. In general the reasons for low or even negative growth percentages for food consumption are:

- The population growth in western countries has slowed down;
- The share of food in the income of consumers' expenditures is decreasing
- The plentiful supply of food.

Several driving forces however influence the growing consumption of tomatoes and peppers. In short the relevant forces will be dealt with:

1. Decreasing time for food preparation, because of relatively high labour participation of women. Outdoors working wives means less time for food preparation. Fresh greenhouse products are available in convenience packages. Double income households are cash rich and time poor. In the twentieth century the time for preparing the mail decreases each 20 years with 50 %. In 1934 about 2,5 hours were needed for preparing the meal, in 1954 1 hour and in 1994 just 15 minutes.
2. Fresh vegetables, easy to cook and pre-prepared supersede the traditional and more preparing demanding vegetables. Conserved vegetables and storable vegetables like cabbage are substituted by fresh produce, which are year around available. The wholesalers are sourcing worldwide in order to use the different growing seasons. Fresh tomatoes and strawberries are no exceptional ingredients for the Christmas dinner.
3. Increasing welfare stimulates the demand for more luxurious products. This reinforces the search for conveniences and increase the need for more variety. Tomatoes and peppers in various varieties and flavour fit well in this demand. Secondly emotional aspects like organic or GMO free products are of increasing importance.
4. The habit of grazing, food consumption at several moments on the day and in different situation, makes availability of food snacks important. The importance of food consumption outdoors instead of home made is growing considerably. Consumers are considering dining out or buying ready-to-eat meals or parts of meals as good alternatives for preparing a complete meal themselves. 'Salad' products based on tomatoes and cucumbers but also iceberg lettuce are a very common combination with fast food or meals in outdoors.
5. Health and consumer concerns are still of growing importance. This is fed by recent incidents like BSE (mad cow disease), dioxin in livestock feed and high levels of CCC on pears. This put food safety on the top of the consumers' mind.

Several levels in the distribution chains anticipate on the changing demand conditions. Product innovation is an ongoing process in the Dutch greenhouse industry. The assortment of tomatoes and sweet peppers has grown amazingly last decade. Next to round tomatoes the industry offers for instance tomatoes on the vine, cherry tomatoes, beef tomatoes, plum tomatoes. Moreover several producers' organizations produce these varieties with a different flavour. Sweet peppers are available in different colours and sizes like 'baby peppers'.

The supply of fresh food increased and also more pre-packed vegetables products were bought. These facts are in line with mentioned consumer preferences. Enlarging the assortment because of the demand for health food, convenience or pre-prepared food (like frozen meals) and for different packaging sizes in line with the mentioned trends.

4. Supporting industries and market channel

Retailers

Retailers underline the trends of quality and convenience by offering fresh convenience products in the store for instance pre-prepared fresh, frozen or fast food. The trend of less time for preparing meals influences the importance of market channels. The market share of the specialized retailers (greengrocers or market stalls at day and week consumer markets) in selling vegetables to the consumers has decreased from more than 40 per cent in the eighties to about 30 % at this moment. The share of supermarkets has increased from 50 to over 60 %, a development that is still in progress. The remaining part, less then 10 per cent, is sold directly from the grower to the consumers or box schemes.
The importance of the supermarket channel needs more attention. Supermarkets anticipate on the consumers' needs and preferences. Consumers in the United Kingdom are sophisticated and particularly interested in convenience food, health food and new

	Germany	United Kingdom
Market share top-10 food-retailers	84 %	60 %
Largest food retailers:	Edeka/AVA, Rewe, Aldi and Metro	Tesco, Sainsbury, Asda
Most important shop formulas	Discount markets with limited floor space 'Verbrauchermarkten' (1500 m^2 or more)	
Investment level	Relatively low	Relatively high
Opening hours	Traditionally limited	Open at night
Dominant competition strategy	Price	Specificity
Homogeneity shop formulas	Different formulas. Not always a corporate image	Corporate
Position of vegetables.	Low-level presentation. Limited number organic products	Appealing presentation (15 % sales floor) Large number organic products
Vegetable assortment	Discounter: pre-packed Consumer market: pre-packed and self picking and packing	Emphasis on pre-packed Large assortment, varieties and packaging
Typology of vegetables	Low prices, no frills and 'basic'	Convenience, health, grazing, special
Cooling facilities	Limited	Standard

Table 4.1 Some characteristics of food-retail in Germany and the United kingdom (Poot et al. 2001).

varieties of products. British supermarkets offer a lot of convenience goods, ready-to-eat salads and organic products in their assortment. British supermarkets allow for product innovations within the vegetable and fruit assortment.
In Germany, consumers pay a lot of attention to the prices in the supermarket. One can observe on all points that supermarket chains in the United Kingdom are strongly focussed on supplying the customer with as much added value as possible. In Germany, on the other hand, discount markets with a rather limited assortment, have a market share of 32%. They are almost completely focussed on price competition.
The British and German retailers give in fact the scope of the different strategies of the supermarkets within in Europe. The types of supermarkets in other European countries are a mix of both types. If a wholesaler or supplier succeeds in supplying the British quality supermarkets and the German discounters, he will also succeed in supplying mixed types of supermarkets in other European countries. This is an important key success factor due to the globalisation of the retailers. Several retailers are aiming at a worldwide coverage of their outlets. The sourcing of these global operating supermarkets is also world-wide oriented. Moreover several supermarket organisations will combine their purchases. This market power needs wholesalers who are operating on the equivalent scale.
How do the German and British retailers mark the Netherlands and Spain? British supermarket chains are positive about the offer of Spanish growers and suppliers. The British appreciate the innovative ability of the Spanish growers, as well as the short lines between the buyers and the Spanish producers. Germany on the contrary has a good opinion about the Dutch growers. The Germans mention the flexibility, the extensive know-how and the efficiency (cost price). The co-operation within the chain and the ability to adapt to changes in the market are considered positive aspects as well.

Wholesalers

As an exporting country the key question for the Netherlands is ‘Who supplies the retailers?’. In the Dutch vegetable and fruit sector at least 500 wholesaling firms with a turnover of more than 50,000 ECU are in business. Only a very low percentage of the wholesalers (approximately 2 per cent) have a turnover of about 25 million ECU. Their market share is about 25 per cent (van Os, 2000). The main tasks of wholesalers are import, export, collecting, composing assortments of products and distributing.
Composing assortments of products is rather important because "vegetables" is a collective noun for a large number of different and in general perishable products with a broad variety of quality characteristics.
The wholesalers are characterised as conservative and living with the daily transactions. Lack of knowledge about the developments in logistics, information technology and promotion are some of their weaknesses. Figure 4.1 shows the performance of the competitiveness of the Dutch wholesalers. The Netherlands have a good mark on ‘market adaptability’ and on ‘chain firmness’. On ‘cost and efficiency’ and future possibilities the Spanish are better. The wholesalers have a lack of knowledge of their performance, which is a major weakness. Mostly the Dutch think they are the best in the world. This overestimation threats their position in the long run because the are not keen enough on the performance of their competitors.

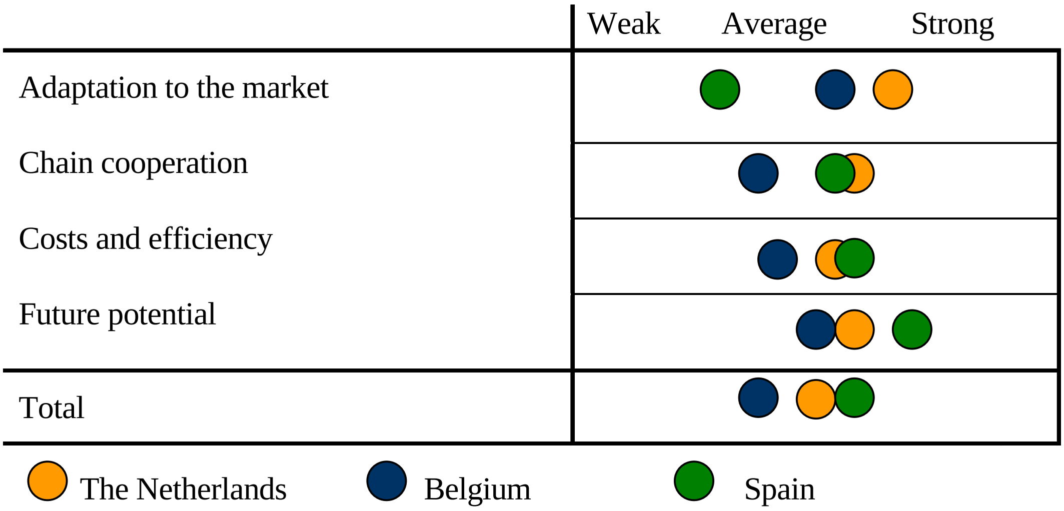

Figure 4.1. The performance of Dutch competitiveness (source: Wijnands and Silvis, 2000).

At the moment the wholesalers are still nationally based, despite the fact that both Dutch and Spanish wholesalers are exporting to several European countries. These wholesalers are providing just a part of the total assortment, especially the deficit at the local grown vegetables. As mentioned before more than 90 percent of the consumed vegetables are also locally grown. Global operating supermarkets with a wide range of products need a counterpart which operating on the same scale. Creating countervailing power by consolidation and merging within Europe is essential.
Despite the mentioned weaknesses, the Dutch wholesalers have a relatively strong position in Europe. As the Spanish they are the suppliers of wholesalers or supermarkets in several European countries. The advantage of the Dutch is the Rotterdam seaport with an important fruit terminal.

Breeders and intermediate suppliers
The outstanding image of the Dutch greenhouse industry depends on the well-developed supporting industry. Most of the international operating plant and seed breeders have a Dutch origin. Several breeding and research facilities are located in the Netherlands. Product innovation, an important issues in meeting the consumer demands, will be developed in close harmony with firms in the greenhouse vegetable chain.
Next to the breeder the technology level of the Dutch greenhouse industry is one of the highest in the world. Dutch companies are exporting greenhouse constructions and equipment all over the world. The last decade integrated pest management became the standard in vegetable growing. Biological predators and bumblebees for fertilization are used almost without exception. This renowned high technological position needs a high level of continuous innovation. Research on innovation is only possible if sufficient funds can be raised from firm’s margins, which requires a certain scale of economics (Van Meijl, 1999).
The Dutch market for greenhouse technology is not large enough. World-wide the Netherlands have only a small part of protected crops. The areas of protected crop cultivation are shown in table 4.2. Large areas of protected crop production are situated in Southern parts of Europe and in Asia and pacific region. Especially the situation in Spain is interesting. The area of protected crops is growing fast and the estimate for 2000 is

40.000 hectares. In the Spanish region Almeria growers are substituting the traditional plastic greenhouse with a very low technology level for more advanced greenhouses with a higher technology level of the equipment. This is necessary for diminishing the rather high level of pesticide use, which is only possible with some heating. Secondly it enables an increase in production and an improvement of the quality level of the produce (Wijnands, 2001). This means a large market for the Dutch technology suppliers. Several Dutch companies are also located in Almeria, in the center of a large market. In fact Dutch technology contributes to a catching up of the Spanish growers.

Country or region	Area (10.000 square meters)	Of which glass (%)
The Netherlands	10,350	99
France	7,300	25
Germany	4,650	77
Western Europe total	29,100	75
Spain	18,500	1
Italy	17,000	9
South Europe total	53,500	9
Central and East Europe	27,100	37
Middle East and North Africa	10,300	5
North America	5,000	40
SE Asia, Australia, New Zealand	50,200	5
China	36,500	1
World total	214,000	19

Table 4.2 Areas of protected crop cultivation 1993 (Jakobs, 1993)

Price formation

A common misunderstanding is the conclusion that the wholesalers or the retailers earn a lot of money. It is evident that just like growers they have also costs for labour, capital and other production factors and goods. In the USA 21 % of the in consumer expenditure of in America grown food goes to the growers. The costs in the rest of the chain are shown in table 4.2. It is shown that the profit margin is rather small.

	%
Growers	21,0
Labour	38,5
Packaging	8,5
Transport	4,0
Deprecation	3,5
Advertisements	4,0
Energy	3,5
Rent and other costs	13,5
Profit (total chain exclusive growers)	3,5
Total	100,0

Table 4.2 Costs in the USA food chain (source USDA, 1999)

On average the Dutch growers have a share of 25 to 30 percent in consumers expenditures In the Netherlands the costs in the chain, growers included, take a share of 87 percent in the consumer expenditures for fruit and vegetables. The growers get about 6 % of the margin, the processing industry 2 % and the wholesalers and retailers get together 5 % (de Bont, 2000). The general statement of growers that they don't have a fair share in the profit is not based on facts.

5. The product costs and factor conditions.

The cost price of Spanish tomatoes, sweet peppers and cucumbers at the consumers market is at this moment considerably lower compared with the Dutch. In table 5.1 some figures about the cost price are given (Verheagh, 1998). The lower Spanish cost prices in the nineties contributed to a higher market share on the German and British market as mentioned in section 2.

	Tomatoes	Tomatoes	Sweet peppers	Sweet peppers	Cucumbers	Cucumbersc)
Costs	Netherlands	Spain	Netherlands	Spain	Netherlands	Spain
Production	1,22	0,60	2,59	1,15	1,08	0,45
Collecting and grading	0,24	0,47	0,47	0,48	0,24	0,45
Wholesalers	0,09	0,06	0,17	0,12	0,07	0,08
Transport to Frankfurt	0,05	0,22	0,08	0,32	0,06	0,19
Total	1,60	1,35	3,31	2,07	1,44	1,17

Legend: Spain modern firms in Almeria.

Table 5.1. Cost price in Dutch guilders of Spanish and Dutch tomatoes, sweet peppers and cucumbers. (source: Verheagh, 1998).

The major difference in production cost are caused by lower cost for labor and investments. The Spanish costs of transport to the German market are higher due to the longer distance to the market. The economic development in Spain will strongly influence the costs. First of all the labor cost will rise. In the main production region of Spain the labor conditions in the tourism and service industry is much more attractive. Growers are hiring lots of laborers from Morocco and South America. Secondly the greenhouse has to be replaced by more sophisticated ones. This is necessary for improvement of the growing climate for higher yields per square meter and a reduction of the use of chemical pesticides (Wijnands, 2001). Together with the rise in production costs the yield will increase. It is expected that Spain will keep an advantage in the price level compared with the Netherlands.

However not only Spain has this competitive advantage. Several other Mediterranean countries have this or even a greater advantage. In table 5.2.some factors of Porter's competition Diamond are given till 2020. As mentioned before the main season for Spain is the winter period. The mentioned competitors in table 5.2 are also producing in that period. It is shown that several others countries have even better factor conditions than Spain. Knowledge and services of supporting industries can easily be obtained from the Netherlands, just like Spain at this moment. In the future Spain will be sandwiched between the low-cost Mediterranean Sea countries and the high technology and innovative

It is not possible to make a similar table for the Netherlands. The main producing countries with a comparable production season as the Dutch have all a degree of self-sufficiency below 100 percent. That means they are importing vegetables. The production capacity in Great Britain decreased due to the over appreciated pound. British growers compete on their domestic market mainly with the Dutch. The competition for the Netherlands comes largely from Spain during the end and the starting of the Dutch season. The effects of this competition depend on the Spanish success in starting earlier and ending later in the season.

	Spain	Morocco	Turkey	Egypt
Climate	++	+++	++	+++
Natural resources	++	+++	++++	+++
Labor	++	++++	+++	++++
Capital	+++	+++	++	+
Infrastructure	++++	+++	+++	++
Knowledge	+++	+++	++	+
Home market	++	+	+	+
Supporting industries	++	++	+	+

Legend: ++++ excellent, +++ good, ++ poor, very poor.

Table 5.2. Comparison of competition aspects of 4 Mediterranean Sea countries till 2020 (source Alleblas and de Groot, 2000).

6. Strategy.

Dutch growers of tomatoes, sweet peppers and cucumbers enjoy a strong competitive position on the European market. In order to maintain this position, it is important that entrepreneurs opt for favourable strategies. One option that holds perspectives appears to be the strategy of being of optimal service to a limited number of large buyers. A decision in favour of this strategy means giving up a part of one’s freedom in making decisions concerning the production and sales. In exchange, the entrepreneur will be given guarantees regarding the sales and the prices and can participate in a strategic co-operation with possibilities for growth. The shift towards the chain strategy is the strongest in the UK. Due to the strong position of the discount markets, the cost-price strategy remains very important in Germany (Poot et all. 2001).
From a Dutch viewpoint two links in the chain are very important for the Dutch greenhouse industry: the wholesalers and the growers. Wholesalers are responsible for selling the Dutch produce to the retailers. Their market position influences the profitable of the Dutch growers. The retailers operate on an international scale and it will almost impossible to influence their strategy. Moreover the sales of fresh vegetables are just a minor part of their turn over.

Wholesalers
Wholesalers and intermediate traders in vegetables and fruit have to develop a strategic view on their position. Some possibilities of these strategies are:

- Next to supplier they also aim at advisory tasks in store promotion. This means a good understanding of consumer preferences. Due to the globalisation of the retailers, the European wholesalers need a good understanding of at least the European consumers.

- Taking over the collecting, grading and logistic functions of distribution centres of large retailers. The consumers' preferences of a wide variety of products the year round, means global sourcing. First the different production seasons result in a seasonal supply, unless the wholesalers purchase in different production regions. Spain and the Netherlands supplement each other rather well. The production season in Spain start in the beginning of the autumn till the spring and in the Netherlands from the beginning of the spring till the autumn. Secondly consumers want also exotic products from for instance tropical regions.

Growers

Growers can opt for the following strategies (Poot et all, 2001):

1. *Cost price strategy*. Growers produce and market their products of an acceptable quality at low costs. Larger production units of at least 5-hectare greenhouses are necessary for this strategy, which can also be reached by joining producer groups. Word-wide low costs remains importing for wholesalers and growers. This strategy is important for the price conscious German market.
2. *Quality strategy*. Growers who follow this strategy produce and market products of a high quality at an acceptable price. The quality of the product and the production process must come up to the needs of the buyer; Eurep-Gap or BRC norms are standard in this respect. The product quality, hygiene and food safety are guaranteed by means of a chain (quality) control system and "tracking & tracing".
3. *Chain strategy, or market focus strategy*. Growers who follow this strategy have to meet the buyers' specifications. The participation in a closely organised chain is a prerequisite in this respect. Comparatively speaking, the cost price is less important with close chain relationships and made-to-measure added value
4. *Niche strategy*. Growers with this strategy focus on a special part of the chain and try to serve small, special market segments, or niches, with innovating products. Several producers in the Netherlands are successfully in this respect. The market for these products will not be limited to Europe, but will be also the USA, Japan or other regions with relatively high living standards.

7 Conclusions

The strong competitive position of the Netherlands is deteriorating. Spain is taking over market shares in the main destination market of the Netherlands. The market power of supermarkets forces the Dutch greenhouse industry in making a re-orientation on its market strategy. One of the strategies is a broader orientation on internationalisation. Wholesalers will source the major part of their products on the international market. They have to supply year around the retailers with a broad variety and assortment of fresh vegetables and fruit. They have to know the consumers' preferences and they have to support the retailers in marketing fresh vegetables. Because of the globalisation of the supermarkets chains the wholesalers should also operate on an international scale and on some markets as a co-maker.
The growers should adopt several strategies. The German market is price-oriented and the British market is quality and co-maker ship oriented. Niche marketing is essential for innovations. New varieties, different flavours, different sizes or colours, sustainable production methods, codes of good practice are necessary for staying at the market.

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