GLOBAL TRENDS IN AGRICULTURE AND AGRIBUSINESS

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ABSTRACT

The economical, political and market related parameters for the agricultural sector are in process of a heavy change these years. Common trends are seen across borders and across continents.

The agricultural policy is liberalised, and importance is increasingly attached to environment, food security and rural development. At the same time is happening a change of system with regards to the agricultural policy, which is changed from being focused on the sector to being focused on the farmers.

Both the liberalisation as well as the globalisation will mark the agricultural sector in future. The liberalisation will cause a more well acting world market and the trade will increase. The globalisation will cause a rise in the international trade and the specialisation, but also the foreign investments will become more important in future.

There is also a global trend towards a gradual industrialisation of the agricultural sector. The farms are getting bigger, more specialised and concentrated, the productivity is strongly increasing, whereas the terms of trade is continuously decreasing.

The demand is only slightly developing. The global trend is, that the growth is slight, but that areas as convenience, dining out, functional foods, health and food security are areas or parameters with relatively large growth.

The agro-industry also develops according to the global trends. The companies are getting bigger, more concentrated and transnational. At the same time global alliances become more and more prevalent.

The *<u>retail sector</u>* *– which is often an important target group for the agriculture and the agro-industry – also develops considerably these years. The structural development is strong, the concentration is increasing, and the retail sector is gaining more market influence and power through increased integration, private labels, etc.*

AGRICULTURAL POLICY

The agricultural policy in the Western world changes character during these years and the changes will probably continue into the next millennium. Especially the following conditions will be considered in the future agricultural policy:

Environment

For a long period efficiency, market stability and a high grade of self-sufficiency have been important objects. In recent years the environment improvements have been a general feature in agricultural policy. Due to this almost all industrial countries have during the past years carried out important agro-political initiatives in exactly the environment area in form of new subsidies, taxes, re-alignments, etc.

Food security

In the last years there has also been a new focus towards other areas of the agro-political effort fields. Food security has become an important subject and the BSE-crisis has increased this development. Other conditions as hormones, gene-modified organisms, salmonella, labelling etc. have lately absorbed the debate and much speaks for that these circumstances will become even more important in the years to come.

Rural Districts

There is increasingly focus on the development of the rural districts. It appears that that agricultural policy in its present version is not alone able to secure a wanted activity in the rural districts. Therefore there is a tendency to involve more specific initiatives, where the primary purpose is exactly to stimulate the employment and the production in the rural districts. An increased degree of decentralisation of the agro-political initiatives is an example of the wish for strengthening of the regional development.

Landscape policy

There is an increasingly understanding for the fact that there exist public advantages in form of cultural landscape preservation etc., which cannot be obtained during free trade and without public interference. You could in a way say that the agricultural trade produces immaterial services like i.e. securing the rest of the population a varied cultural landscape with the values that the society gives the highest priority.

Increasing re-alignment

The industrial countries have a general wish for increasing simplification, less bureaucracy and less re-alignment. However, there is a pressure in several areas towards increasing re-alignment – especially in the field of agriculture. Better food security and environmental protection, limited use of biotechnology, domestic animal welfare, change from market price support to direct subsidies, etc. will often itself demand more public interference and with that both re-alignment and control.

Restrictive price policy

While environmental, regional and food security policies have been given high priority, the price policy has been given low priority. This way the politically fixed prices have either been kept or decreased during the last years in most of the industrial countries. Seen over a number of years there has been a major real price decrease on agricultural products in the Western world and it is most likely that this development will continue.

There are several explanations to this development. A considerable cause is that through the GATT-agreement and the coming WTO-negotiations there are laid down rules for the future price support.

Less focus on the supply security

Despite the generally large degree of self-sufficiency in the Western countries, the supply security still matters very much when the national agricultural policy is drawn up. Concurrently with the end of the cold war, the drop of the wall and the increasing self-sufficiency, the security-political argument is on retreat. The fact that the international division of labour through increased world trade has resulted in an economical welfare gain has also displaced the politics of several countries from a market protection and large degree of self-sufficiency in the direction towards a more liberal trade policy.

Less production coupled support

These years the development takes the direction that the agricultural subsidies are made less production coupled than before. There are increasingly introduced new subsidy schemes, which depend on historical conditions, but also demand a certain quantity in production. This way there will be a certain – however less – stimulation of production.

During the last years alterations from market price support to direct subsidies have only in very few cases led to temporary or totally production decoupled support.

Less supply limitations

Supply limitations in form of quotas, set-aside, etc. appear to have had less importance, and it is possible that this development continues. The set-aside is reduced in both USA and EU, because the market situation has been improved and because it has been acknowledged that supply limitations are not a suitable instrument in a period with increasing market-orientation and liberalisation.

Structure policy

It is to be expected that the structure policy will obtain an even greater importance in the years to come. With expectations about an increasing liberalisation and changed objects and instruments in the agricultural policy, the need for adjustment and changes will grow. At the same time especially the structure policy will normally be among the accepted support-schemes in relation to the WTO-negotiations.

From sector to farmer orientation

The agricultural policy is now about to change focus from sector to farmer level. The price and market supports are decreasing and instead appear more direct support-schemes directed towards the farmers. It is now the individual farmer who is re-aligned.

Visible agricultural subsidy

Concurrently with the alteration of the agricultural policy from price and market supports to direct support the changed agricultural subsidy becomes more visible, although it has not become larger – more likely smaller. Seen from a political point of view it has often been advanced as a target itself to make the agricultural subsidy more visible, as this makes it easier to get an impression of the size and the consequences.

Multifunctionality

With the idea "multifunctionality" is in this connection meant that the agriculture has several functions beyond producing agricultural products and provisions. Especially rural district development and landscape preservation and other more or less immaterial parts are examples of this multifunctionality.

Concurrently with the relatively less importance of the supply and the more and more safe supply situation, most of the basic needs are fulfilled and others and more non-economic parameters emerge.

Change of system in the agricultural policy

As a consequence of partly the changed agro-political objectives and partly the negotiations within the framework of the GATT/WTO, a completely or partly change of system is taking place in the agricultural policy in many countries.

The change of system can also be characterised as a transition from high to low price policy system. Even though the change of system does not necessarily result in a less subsidy, the change will have important consequences. An important condition is especially that the high and low price policy affects the international trade in different ways.

LIBERALISATION

The agricultural trade in the Western world is today a highly regulated trade. However, the development clearly takes steps towards a larger liberalisation, which will have many and important consequences.

Reduced subsidies

The major part of the agricultural subsidy in the industrial countries is coupled to production, and this means that in the light the WTO-agreements a gradual reduction of the subsidies will take place.

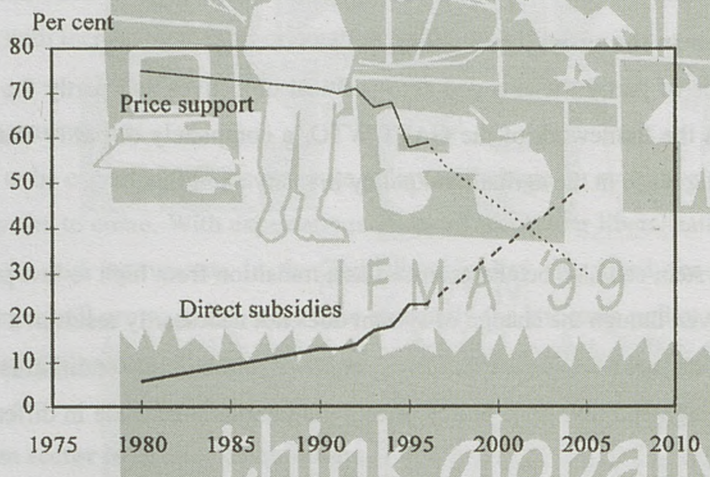
Reduced trade affecting subsidy

More circumstances speak for that the composition of the agricultural subsidy will change in the future.

In the WTO-negotiations the clear attitude is that especially the direct trade affecting support-schemes must be reduced, while the support-schemes securing income, rural districts, environment etc. will be more or less be kept clear of reductions.

The change in the support reforms is already noticeable and the development is expected to continue in the future, see figure 1.

Figure 1. *Composition of agricultural support in OECD*



Source: OECD (several issues) and own calculations

Larger international trade

A liberalisation of the agricultural policy will highly affect the international trade of agricultural products.

After a gradual liberalisation the trade barriers will gradually be removed, and the flow of international goods will then become larger. Most of the protectionism is to-day found in the typical net import countries and these countries will have to increase their import considerably after the liberalisation. The major agricultural countries generally have a low agricultural subsidy and they will therefore have a relative advantage from the liberalisation and this will result in larger export. Both aspects will in this way result in increased international trade.

New international specialisation

Important agro-political objectives with regards to the supply security etc. have meant that it far from is the comparative advantages and cost relations which have determined the international allocation of the agricultural production. Many countries have wished to keep a certain domestic agricultural production considering the supply security.

Concurrently with the fact that the agro-political instruments to keep these objectives disappear, an increasing participation in international division of labour and specialisation will take place. The result will be that the countries will produce and export the goods for which they have comparative advantages, and import the goods which they cannot produce cheap enough themselves in the international competition.

Altered producer prices

It is general for the industrial countries that the agricultural prices in the domestic markets are kept high by force so through that to secure the farmers a satisfactory income level.

After complete liberalisation there will be the same prices for homogeneous agricultural products all over the world. Only transport costs will create price differences between different markets.

Altered consumer prices

The provision prices for the consumers will also be altered concurrently with the liberalisation.

As the agricultural raw material only accounts for a minor part of the final price in the retail trade link, the percentage price-reduction will be considerably lower for the consumers than for the farmers. As the development takes the direction that both the farmers share of retail cost and that the provisions accounts for a smaller part of the total consumption, the affection of the consumer prices and spending power will therefore be relatively limited.

Altered world market prices

The world market prices on agricultural products are kept low by the agricultural protection and they are in this way lower than the price under free trade.

As a result of the liberalisation of the agricultural policy the world market prices will increase. The explanation is that the repeal of the export support etc. will limit the supply and repeal of the import restrictions will increase the demand. Both conditions will result in increasing world market prices.

Altered market stability

The market stability is today characterised by the fact that the world market is very unstable with regards to both prices and supply while a lot of domestic markets are tried to be made stable through intervention, trade barriers etc.

Concurrently with the liberalisation of especially the direct trade coupled support, the stability in the world market will become greater while the stability in many domestic markets will become minor than today. In practice there will be the same stability and prices in all national and international markets after a completed liberalisation.

Altered use of resources

The altered producer prices will automatically mean that the use of resources will alter as well. The optimum use of fertilisers, pesticides, labour, farmland etc. is in this way influenced in the same direction as the producer prices, although the relative changes probably are less for the use of resources than for the producer prices. This is due to the fact that the supply reacts relatively slowly on the agricultural price alteration.

Altered costs

A liberalisation of the agricultural policy causes that the demand for resources is altered and therefore the price of costs also alters.

However, you cannot expect that wages, interests and capital costs, taxes etc. are reduced to a "world market price level". Only the costs where the agricultural trade is the largest demander can be expected to fall. This means that the prices of farmland, agricultural machines, fertilisers etc. is foreseen to decrease because of decreasing demand.

GLOBALISATION

Trade and economy are still increasingly an international matter. The international trade increases far more than the production and therefore the international markets will be more important for companies.

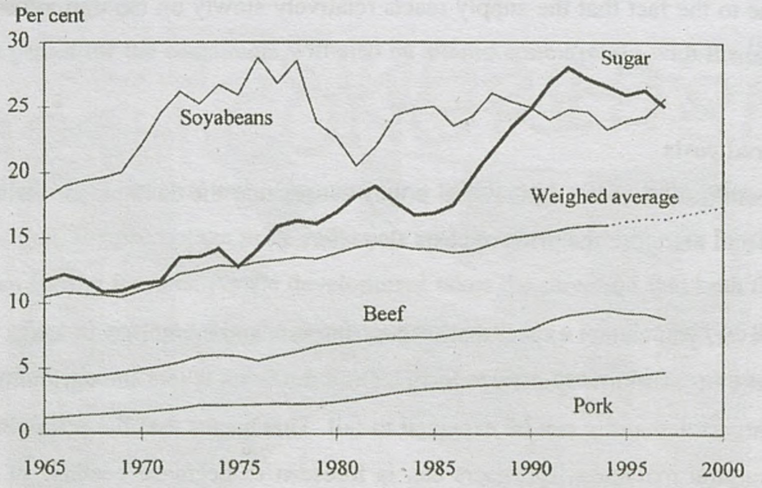
As shown in the following, the increasing globalisation will find expression in several ways.

Focus on the international trade

The international trade with agricultural products is relatively modest compared to the size of the production.

Even though there are political and economical obstructions for a strong internationalisation of the agricultural markets there has been a considerable growth in the international trade of agricultural products. The international trade in per cent of the total production has for instance increased considerably for most of the important agricultural products, see figure 2.

Figure 2. *International trade as percentage of total world production*



Note: Weighed average consists of 14 essential agricultural products

Source: Own calculations based on FAO (1999)

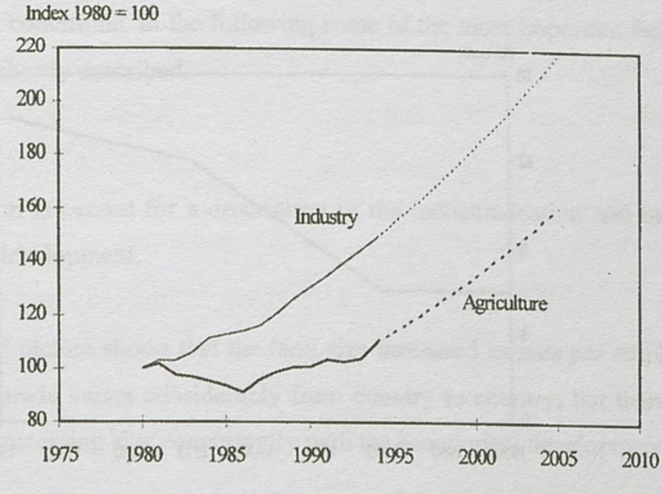
The development is expected to strengthen in the years to come because of partly the liberalisation of the agricultural policy and the improved food security, partly a conscious internationalisation strategy among several companies.

International specialisation

When the international trade becomes more important, a form of labour division or specialisation takes place between the countries. The individual countries will specialise within the areas where they manage best and give up the areas where they cannot manage the international competition.

Also here applies the fact that the development in the international specialisation has been relatively weak within the field of agricultural products. As you can see in figure 3 the international specialisation – here measured as development in international trade and production – in the last couple of decades has been far more strong for industrial products than for agricultural products.

Figure 3. *International specialisation in agriculture and in total industry*



Source: Own calculations based on GATT (various issues)

Concurrently with the increasing liberalisation and international trade especially in the field of agriculture the international specialisation will increase in the years to come.

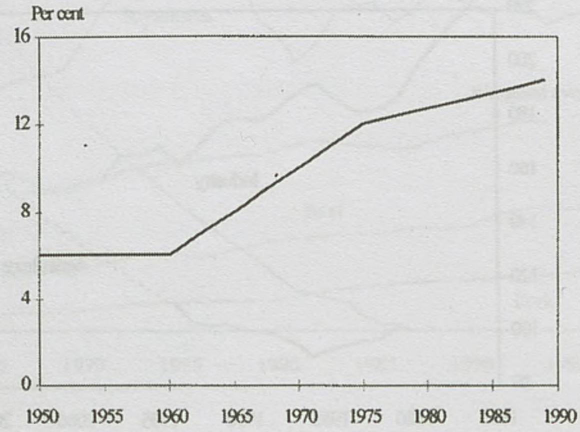
Export orientation

The globalisation and the increasing focus on international markets are also expressed in the way that the export gets an increasing meaning for the individual countries sale.

Measured on the international trade the American food industry is still very orientated on the domestic market. The export amounts only to 4 per cent of the total production of worked up provisions.

However, measured on the total international activities there has been a marked development during the last decades. Round 15 per cent of the American food companies now have more than 50 per cent international activities, which is considerably more than just a couple of decades ago, see figure 4.

Figure 4. *Food industries in The United States with more than 50 percentage international activities*



Source: Manchester, Alden C. (1994)

It is expected that the development will continue henceforward. This must be viewed in the light of the increasing international trade, where both export and import trade will increase. At the same time the increased segmentation in the sale will result in the fact that it will be increasingly necessary to involve international markets in the marketing.

Foreign investments

Another dimension in the globalisation is foreign direct investments. The foreign direct investments have in general had an increased importance since the beginning of the 1980'ties.

For the whole world together it now applies that direct investments abroad is the most important way for the companies to make access to the international market. This especially applies for the large food companies.

Sale through investments in foreign companies now creates more trade than the direct export. The internationalisation happens therefore more through foreign investments than through export.

INDUSTRIALISATION

The agricultural trade is gradually more and more industrialised. The industrialisation covers several conditions. In the following some of the most important features in this process are shortly described.

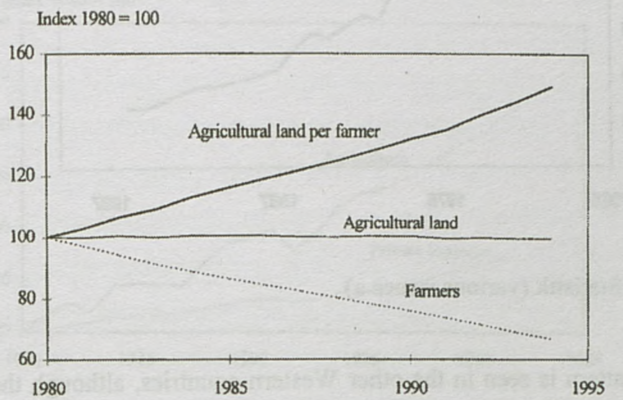
Size

The size of the farm is central for a description of the industrialisation and the belonging structural development.

The superior global picture shows that the farm size measured as area per employed in the agricultural trade varies considerably from country to country, but there is a tendency towards increasing size concurrently with the economical development.

The development in the size of the farms in the different countries shows a clear tendency in direction of larger farms. If you look at the group of industrialised countries together, it can be established that the size measured as farmland per farmer has increased with approximately 50 per cent since 1980, see figure 5.

Figure 5. *The development in the agricultural land in the developed countries.*



Source: FAO (various issues) and own calculations

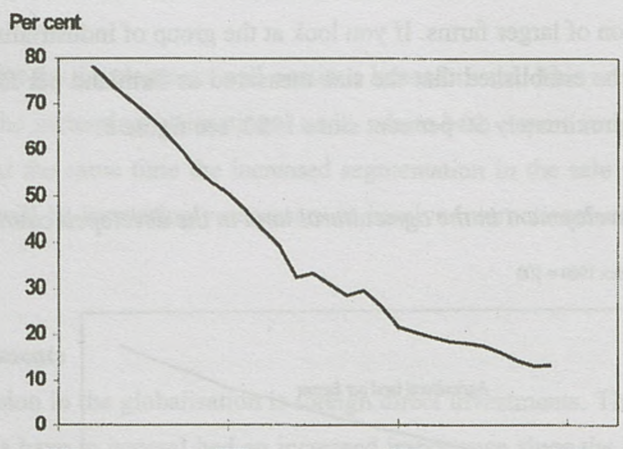
As shown in figure 5 the increasing size can almost solely be explained by the emigration from the agricultural sector.

Specialisation

The specialisation has been increasing in the past years and it is expected that the development will continue in the years to come. The increased specialisation has happened among other thing due to the technological development, which increasingly promotes the advantages of large-scale farming. At the same time the larger demands to specific knowledge will make necessary that you focus on less and eventually only a single production branch.

This development is clearly seen in Denmark. In the 1960'ties 75 per cent of all farms had a diversified production, defined as farms with both pigs and cattle. This share has since then fallen to round 10 per cent, see figure 6.

Figure 6. *Percentage of farms with both pigs and cows in Denmark.*



Source: Danmarks Statistik (various issues a)

A corresponding pattern is seen in the other Western countries, although the development is more advanced in Denmark.

Concentration

Concurrently with the increasing size and specialisation the agricultural production also becomes more concentrated. The concentration can be measured in several ways: Geographically the production becomes more concentrated in the areas, which offers the largest comparative advantages. For the farms the concentration happens in the way that the largest farms become even larger.

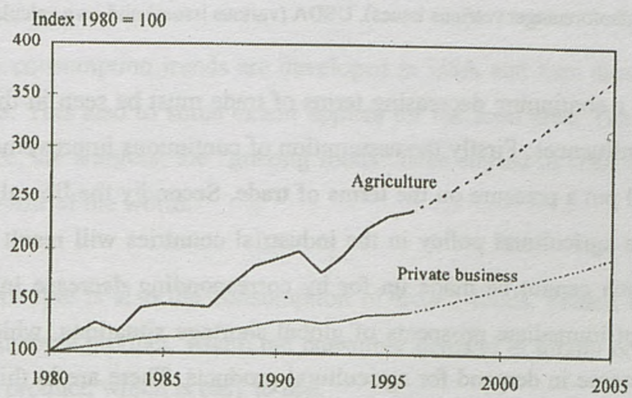
The concentration can be illustrated with the following key-figures: In USA 4 per cent of the farmers have 22 per cent of the land and 70 per cent of the land is owned by 25 per cent of the farmers.

In Denmark 17 per cent of the holding with pig production have 63 per cent of the herds of pigs and 20 per cent of the holdings with poultry production have 94 per cent of all broilers. At the same time there is a tendency towards an increasing concentration.

Development in production

It generally applies for the agricultural sector that both labour and capital productivity has increased heavily during the past decades. A farmer in for instance Denmark produces now 4-5 time as much as in the middle of the 1960'ties. The development has been considerably larger than in other sectors, see figure 7.

Figure 7. *The development of labour productivity in Denmark.*



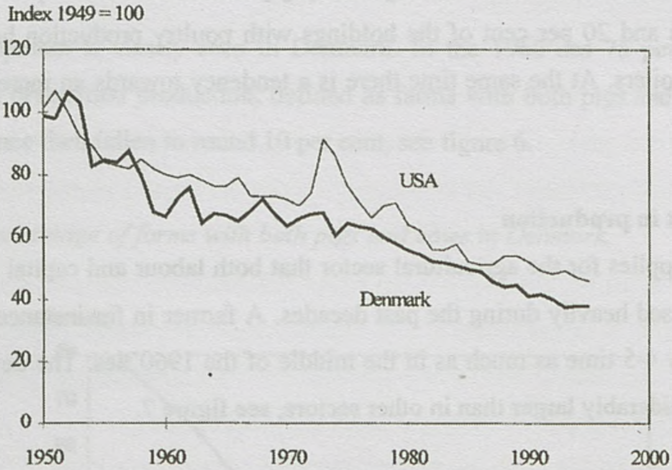
Source: Danmarks Statistik (various issues b) and own calculations

The development in the agricultural productivity is expected to continue in the years to come, although several conditions pull in different directions.

Development in terms of trade

The agricultural terms of trade – that is the relationship between the agricultural sales prices and the costs – are more than halved during the past 30 years. Only since 1980 it has dropped with 33 per cent and the development seems to be general in the industrial countries, see figure 8.

Figure 8. *The development in the agricultural terms of trade in Denmark and USA.*



Source: De danske Landboforeninger (various issues), USDA (various issues) and own calculations.

The expectations to a continuing decreasing terms of trade must be seen in the light of especially three influences: Firstly the assumption of continuous improvements of the productivity will put a pressure on the terms of trade. Secondly the liberalisation and alteration of the agricultural policy in the industrial countries will result in decreasing prices, which cannot be made up for by corresponding decrease in costs. Thirdly there are not immediate prospects of global shortage situations, which can result in marked increase in demand for agricultural products. There are in this way, seen from the global market of provisions situation, not prospects of increasing prices.

DEMAND

The demand for agricultural products and food often develops after global tendencies or waves. This way it is to some extent possible to predict the future development in the demand.

In the following the most important tendencies in the development are assessed.

Growth

Food plays an essential but decreasing part in the total consumption. Concurrently with the increasing economical welfare and increasing possibilities of consumption increases especially the demand for durable consumer goods, services, holiday trips, cars, homes etc. On the other hand the consumption of food is more constant as "you cannot eat one's fill more than one time". However, there is a change in direction towards more processed and more expensive provisions, but the actual increase in quantity is modest.

Food demand

The demand develops in very different patterns. It can be continuous change of consumption (change of level) or shorter or longer fashion phenomenons or waves.

Many consumption trends are developed in USA and then move to Europe, Asia or Africa. This also to some extent applies for the food area. The Fast-food, the Cola-culture, the Burgers, the "grazing foods" have started in USA and have then spread to the rest of the world.

An example is also the consumption of frozen foods. Frozen foods are typically a high-income product, where the consumer demand et totally or almost totally processed product, which is easy to use.

From production to consumer orientation

Through decades the agricultural and food production have had starting point in the technical, biological and economical production possibilities. Here is now a general trend to a change of paradigm away from the traditional product driven farm to a market and consumer driven farm. The chain of value “from soil to table” is increasingly turned to “from table to soil”.

The change is strengthened because of a displacement of power, which has taken place in the chain of value. The consumers have become more powerful and critical than ever and the displacement of power is supported the media-interest that the consumer-interest has.

Greater importance of non-economic parameters

The future consumer will increasingly place great importance on the non-economic parameters, that is conditions as animal welfare, methods of cultivation, ecology, environment, etc. The political consumers have come to stay, and even though they in reality are a minority, they will to a great extent be part of making the agenda.

There are several signs that the market for ecological products is in heavy growth. Even though the starting point is low, it is a remarkable increase.

Convenience

Convenience will have increasingly importance in the demand of provisions. There is generally an increasing demand for more processed products, which demands less or no preparation at home.

This development is expected to be even more spread, as the conditions will stimulate this development. Firstly more and more women will get work away from the home and the demand for convenience will increase. Secondly the size of the household become smaller and smaller concurrently with the economical development. Despite cultural differences etc. there is a very clear connection.

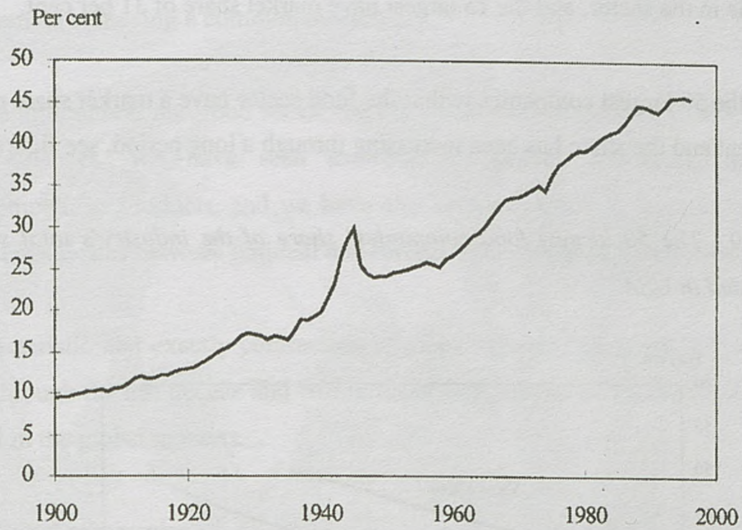
Dining out

Another clear trend in the food demand is that an increasing part of the consumption is taking place outside the home. Concurrently with increasing occupation frequency the dining at the workplaces etc. increase but also dining at restaurants are in considerable growth.

Especially dining out is typically dependent of income. At the same time dining out will be in clear growth concurrently with the economical development.

In USA, which is also a trend-setter in this area, almost half of the food consumption is taking place by dining out, see figure 9.

Figure 9. *Dining out in USA*



Note: The increase after the war was caused by food aid.
Source: USDA (1997) and own calculations.

Functional foods

Functional foods, nutraceuticals or pharmafoods are developed or altered so they will have a scientific documented health-encouraging and illness-preventive effect. These are common food products, which in some way influence the health.

FOOD INDUSTRY

The food industry also goes through a structural development. The globalisation, liberalisation and the international communication can explain this development, which is in heavy growth these years.

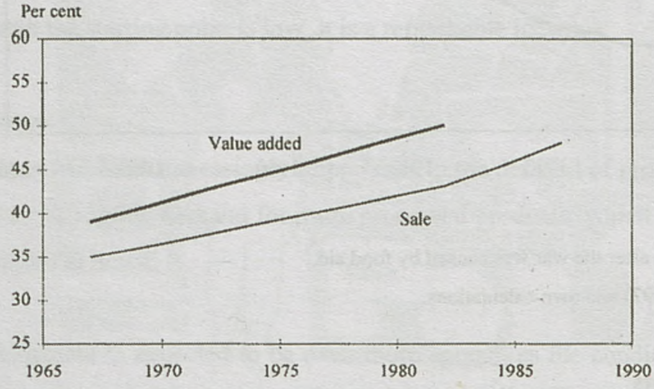
Especially concentration and globalisation – and the consequences – are the most important tendencies in the international food industry.

The international food industry is already today very concentrated. Round 5 per cent of the European food industry has 60 per cent of the trade.

The 100 largest European companies within the food industry have 62 per cent of the total trade in the sector, and the 15 largest have market share of 31 per cent.

In USA the 50 largest companies within the food sector have a market share of round 50 per cent and the share has been increasing through a long period, see figure 10.

Figure 10. *The 50 largest food companies' share of the industry's total sale and value added in USA.*



Source: Handy, Charles R. and Manchester, Alden C. (1990)

Increasing size

During the last couple of decades the Western food companies have grown considerably through buy up and mergers. The development can be due to several different conditions.

Firstly the technological development has promoted large-scale operations and in this way made larger units advantageous.

Secondly also the globalisation and the access to new and larger international markets have stimulated increasing size.

Global alliances

During the past years we have seen a lot of examples of global strategic alliances.

A global strategic alliance is a co-operation between companies from different countries concerning achieving a common objective.

Within the agricultural and food sector there are also new tendencies to real global strategic alliances. We have seen examples of mutual distribution of colleagues/competitors products, and we have also seen examples of research and development syndicates between national and foreign agro-orientated companies.

It is characteristic that exactly contraction of global strategic alliances has been increasing through the last decade and will be more conspicuous in the future as means to do well in the global markets.

Transnational companies

Transnational companies – companies with investments in more countries – will have an increasing importance in the international trade. Their foreign investments, production and export grow heavily, and a great part of the international trade now takes place within the transnational companies. This development is expected to increase in the years to come.

There are relatively many transnational companies within the food industry. The explanation to this condition is probably the low consumption growth within provisions, relatively large trade and transport barriers and the great importance of having access to raw material.

RETAIL SECTOR

The retail sector – which is an important actor on the agricultural and food market – is developing in several areas. In this connection there will especially be focus on two tendencies in the retail sector, namely concentration and internationalisation.

Concentration

Through decades there has been a heavy structural development and concentration in both the agricultural and food industry, which has strengthened the position in the market for the demanders.

However, the retail sector also goes through a considerable development in direction of larger concentration so that few big chains today dominate the market. Even in the Southern Europe the big chains and commercial unions have obtained large market shares at the expense of special shops and small family-owned shops.

Internationalisation

The Western retail sector has still strengthened its power through contracts of international alliances. The purpose has exactly been to strengthen the negotiation position of the sector toward the international food companies. During the last 10 years the alliances across borders have made heavy progress.

Today almost all European retail businesses are members of an alliance and in this way they have created a considerable power position. The six largest retail alliances in Europe have a total trade of round 50 per cent of the total European retail sale.

Increasing market power

The retail sector obtains a still stronger market position and much seems to show that the market strength is increased henceforward.

There are several explanations to the increasing market power of the retail sector:

Especially the increasing concentration and internationalisation will strengthen the placing and the negotiation power of the retail sector towards its suppliers and demanders.

Further the increasing focus on the consumer-orientation strengthen the placing of the retail sector, as the retail sector is much closer to the consumer than many other links in the supply chain.

Private labels

It is a tendency, that the retail sector's own brands in form of private labels are making progress at the expense of the food industry's brands. This is especially a European trend which especially is strong in U.K. where for instance Marks & Spencer has gone the whole length and only has their own brands on the shelves.

Backward integration

The increasing power and dominance of the retail sector in the value chain results among other things in the fact the it now seek to influence behind aimed activities as for instance distribution, marketing, product development and packing.

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