8 Globalization of a potato starch co-operative

The case of AVEBE

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Introduction[1,2]

AVEBE is a co-operative based in the north of the Netherlands, in the region called the Veenkoloniën, producing and marketing potato starch and starch derivatives. In recent years AVEBE has followed a strategy of international expansion through Foreign Direct Investments (FDI), not only in nearby countries but also in Asia and South America. The strategy is not unchallenged and does not have a long history. This paper investigates the background to the international expansion of AVEBE. The nature of the internationalization of AVEBE differs sharply from that of the private firm of W.A. Scholten, also a potato starch producer, founded in the nineteenth century, and at that time truly internationally oriented. We will focus especially on the differences between the co-operative and this private firm.

The Veenkoloniën

The Veenkoloniën is a region in the northeast of the Netherlands (Figure 8.1) between the sandy part of the province of Drenthe and the German border. It is the Dutch part of the 50,000 hectares of Bourtanger Moor that used to cover the whole northern border area of Germany and the Netherlands (Figure 8.2).[3] An important peat bog developed there from 5500 BC. After 1600 the peat was systematically removed, primarily to serve as fuel. The region became an important rural-industrial area during the peat-digging period that lasted until the 1930s. Part of the industry was related to the peat digging (peat-litter, but also shipbuilding, for instance), another part to agriculture (the production of potato starch and strawboard). The availability of cheap fuel furthered energy-intensive industries, not only agro-industries, but also, among others, the glass industry. The industrial development had a deconcentrated spatial structure. Industrial development occurred in different villages and towns (Hoogezand, Sappemeer, Pekela, Winschoten, Veendam, Wildervank, Stadskanaal).

According to Voerman (2001), this scattered industrial, and hence scattered residential structure prevented the rise of an urban centre with potential for developing into an agglomeration in the future. The economic situation of the Veenkoloniën deteriorated after 1850, when the peat digging gradually declined.

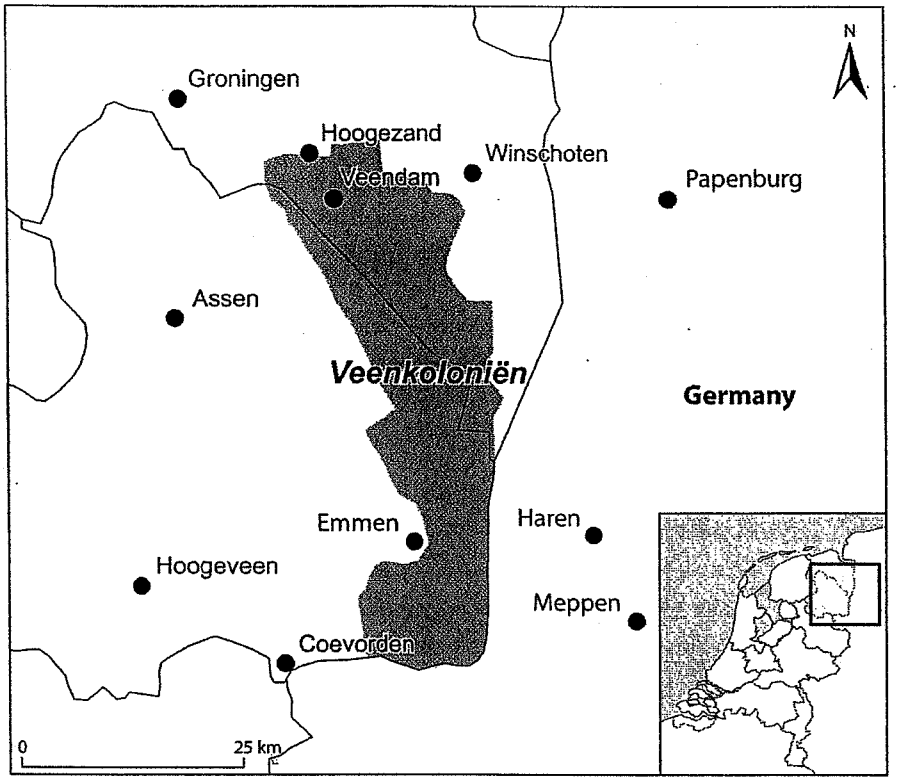

Figure 8.1 Veenkoloniën (source: derived from www.veenkolonien.nl).

The situation worsened in the twentieth century as the favorable water connections (internal, but also to other parts of the country) became less important, and even became a hindrance to the development of an efficient road system.

After the removal of the peat layer, the sandy underground and the top layer of the bog were mixed and became fertile agricultural land. Gradually the region became famous for its arable production, with cereals, sugar beet, and especially starch potatoes as the main crops.

A major restructuring plan was started in the 1970s to modernize the infrastructure and the agricultural potential of the region. This restructuring plan was given the form of an official law[4] because of its size and the complicated nature (infrastructure, ownership, land use, and water management). However, this region is still one of the least developed in the Netherlands, with above-average unemployment, an under-developed service sector, and is relatively unattractive for residential use.

The history of potato starch in the Veenkoloniën

At the beginning of the nineteenth-century potato starch, which is also called potato flour, was used to starch linen and other textiles. It replaced the more expensive wheat starch which had been used until then. The first factories for potato flour production in the Netherlands were actually located in the textile-producing

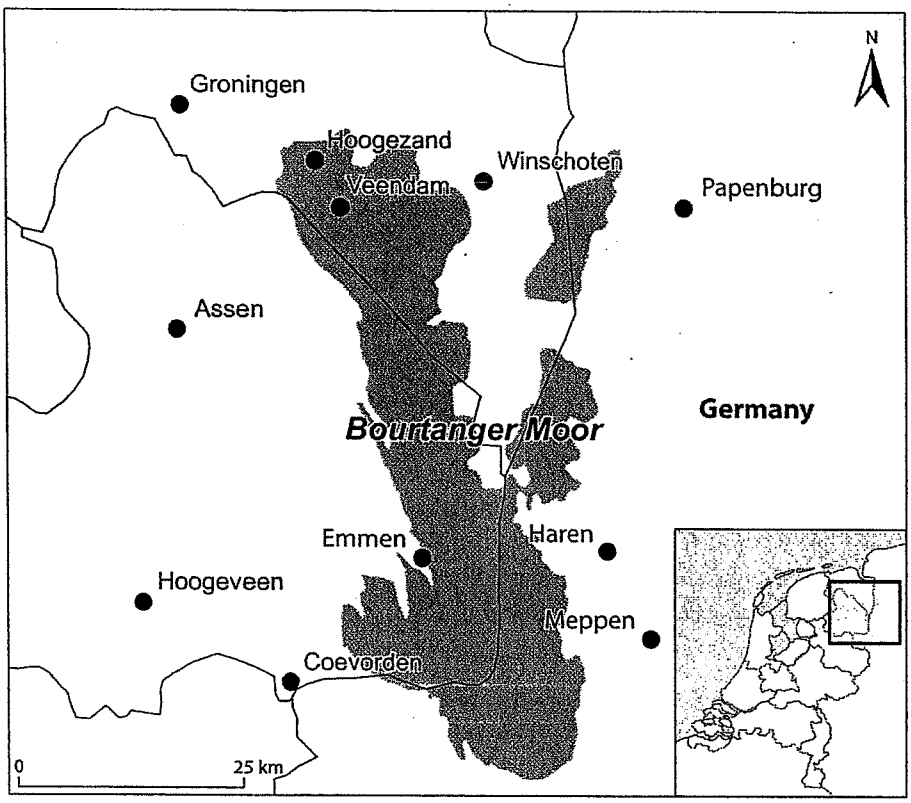

Figure 8.2 Bourtanger Moor (source: derived from Seedorf, H.H. 1977, Topographischer Atlas Niedersachsen und Bremen. Wochholz, Neumünster).

regions (the eastern part of the country in Gelderland and Overijssel) in the 1830s.[5] Comparable developments occurred in textile-producing regions in Belgium and France. Unlike in England, textile production on the continent was still a home industry at that time (Dendermonde 1979, p. 55).

Although potatoes contain less starch than wheat, it was easier to extract and therefore cheaper. The founder of potato starch production in the Veenkoloniën, W.A. Scholten, moved his operation from Gelderland to the Veenkoloniën in 1841 (some parts of this firm were acquired by AVEBE in 1978). In 1840 Boon, a producer from Amsterdam, had already made the same move, and a few years later Dutalis, a producer from Mechelen in Belgium, also moved his operation to the Veenkoloniën, but in the end the only really successful firm was that of Scholten. They all acknowledged the advantages of the area in terms of cheap fuel (peat) and cheap potatoes.[6] They moved away from the consumption regions, primarily because starch, or flour, was much cheaper to transport than the raw materials. This agrees fully with the location theory proposed by Weber.

The starch, sometimes still wet, was transported to the consumption regions of Gelderland, Flanders and Leiden. After some years, Scholten produced too much starch for his home market and tried to market this abroad to the textile region of Lancashire (Dendermonde 1979, p. 56). From that time on, potato starch became subject to developments in the international markets.

Competition on the market for starch

In the first instance, potato starch was a cheap alternative for other starches. More than twenty potato starch factories were established in the Veenkoloniën between 1840 and 1880, all were private firms. In the second half of the century the profitability of the factories decreased due to increased competition, both in the region from new factories, and abroad with new production areas being developed in the Alsace and in the east of Germany. Moreover, in the last quarter of the nineteenth century, new and cheaper starches, produced from overseas corn, came onto the market.

During that period, there was increased tension between the firms and the farmers in the Veenkoloniën. The farmers increasingly felt that the owners of the firms got the best deal in transactions. This tension was fed further after 1880 during the international agricultural crisis, with low prices for arable crops and increasing protectionism in the neighboring countries. Several co-operative production units were founded in the 1890s, with Borgercompagnie (1898) as the first, as an answer to the problem of low prices for potatoes. These co-operatives can be seen as the predecessors of AVEBE. By 1912, there were already 13 co-operative potato starch factories in the region (see Table 8.1).

Specialization

The co-operative factories were small, partly because the founding farmers had difficulties in financing their operations, but also for logistical reasons. In principle, there were advantages of scale in this type of industry, but the transport of potatoes and peat, used to provide energy, was expensive and stimulated small-scale production. The formation of the co-operatives caused serious problems for the private firms and many had to close or went bankrupt. The number of private firms decreased from 23 to 11 between 1898 and 1926. The share of the private firms in milling potatoes decreased from 94 percent to 13 percent. The total quantity of milled potatoes quadrupled in that period, but the net result was that the milling capacity of the private firms was halved (Table 8.1).

Table 8.1 Number of plants, quantity of milled potatoes, and shares of co-operatives and private plants, 1898–1926

Year	*Number of co-operative plants*	*Share in the quantity of milled potatoes (%)*	*Number of private plants*	*Share in the quantity of milled potatoes (%)*	*Total quantity of milled potatoes (1000 hectolitre)*
1898	2	6	23	94	2,641
1905	9	40	24	60	8,449
1912	13	49	20	51	13,630
1919	22	87	15	13	10,096
1926	20	87	11	13	12,012

Source: copied from Knaap (2004, p. 329).

The figures also disclose another fundamental development, that is that the private firms moved forward in the production chain, into the processing of flour, and selling products for final consumption. This development is not unique in the sense that agro food co-operatives normally do concentrate on the first stage of the production process. The main reason is the need for farmers to counterbalance power (van Dijk 1997, p. 95).

The severe competition then resulted in a form of specialization, with the co-operatives buying the potatoes and producing flour from them, while the private firms bought the flour and produced all kinds of derivatives from it. It was the private firms that became most active in the market for finished and semi-finished products. At that time there were already quite a number of derivatives produced from native starch, for example, starches for all kinds of industries (paper, textiles, paints, and foodstuffs such as chocolate and confectionery), syrups for food products and for the production of liqueurs and confectionery, sago and starch for the consumer market, and all kinds of dextrins or gums for the production of glues, pharmaceuticals, etc. (Knaap 2004, p. 63).

A common sales office

The severe competition led to initiatives being taken by the private firms to co-ordinate their sales activities for potato flour, but the differing interests and mistrust were too great to make this a success. This was in contrast to the development made by the co-operative firms. They succeeded in organizing a common sales office, named Coöperatief *A*ardappelzetmeel *V*erkoop*B*ureau (AVB, later AVEBE), that was formally founded on 11 November, 1919. This was the real start of the present-day co-operative AVEBE. In the first instance, 12 co-operatives joined AVB, followed by four more in 1921. The three largest co-operatives did not join at that time and remained independent for many years. An important reason for establishing a common sales office was significant market power on the demand side. This was especially the case during World War I, when the German government developed a centralized import bureau. The small suppliers – the separate co-operatives – were confronted with one major buyer.

Lack of co-ordination

For many years the founders of AVB, the co-operatives remained independent firms. This situation continued until 1971, when AVEBE was re-formed into a primary co-operative, with farmers, instead of co-operatives, as direct members. It was the end of the role of the underlying co-operatives. The formation of the primary co-operative was the end of a long process. As early as the 1930s Keuning (1933) had put forward a strong case for a full merger, including production planning and facilities. During the first years of AVB, starch packed for small-scale consumers and derivatives were excluded from the common operation, and purchases of potatoes, planning, relations with the farmers, and the production technology, all remained in the hands of the individual co-operatives.

The task of the sales office was just to sell. The customers were the users of native starch; the textile industry and producers of derivatives. It took until the 1950s before AVB was able to increase its scope. In that year it opened its own research laboratory and a factory for derivatives. The articles of association were changed in 1952, from sales office AVB to sales and production association AVEBE. Two decades later, the production of derivatives still covered only one-third of their own starch production. Two-thirds still had to be sold as native starch, implying that developments in the starch market were at that time still of crucial importance for the firm. In recent years this picture has changed, and nowadays starch makes up less than one-third of the turnover of AVEBE (29 percent in 2003/2004).

Internationalization/FDI

AVEBE opened its first sales office abroad in the 1960s. The first international partnerships also date from that time – with a Danish potato starch industry, two co-operatives in southern Germany, and a corn starch firm in Belgium. The spectrum of AVEBE became more international in 1978, when AVEBE took over the starch parts of the old Scholten firm, then named KSH. Scholten had gone bankrupt as a result of mismanagement and misguided mergers. AVEBE gained the ownership of Scholten-Chemical, which was internationally oriented, and also of a number of foreign plants and sales offices: Stadex AB in Sweden; Haussimont in France; and Sepa in Italy (closed in 1985). AVEBE opened new sales offices abroad, in Belgium and in the USA, at that time, because of the increased scale of operations.

It was not until 1985 that AVEBE started FDI on its own. In that year it started a joint venture project in Thailand (Siam Modified Starch Company: SMS) for the production of derivatives based on cassava, together with Poon Phol from Thailand and Matsutani from Japan. Starch from cassava or manioc in many respects has comparable properties to starch from potatoes (low fat and low protein), and is much cheaper. It can, therefore, be used as an additional source of starch for the firm for the production of derivatives, or for direct sales to customers. Cassava is grown in tropical climates, so using cassava automatically implied a step towards internationalization. AVEBE now has a 34 percent share in SMS (1/8/2004). SMS opened its first processing plant in Pathumthani, Thailand in 1987. AVEBE became partner in a second project in Thailand (Siam Quality Starch) for the production of cassava starch in 1994 with a 23 percent share (1/8/2004).

AVEBE started a joint venture for the production of derivatives based on cassava in Argentina in 1996, in Indonesia in 1997, and in Brazil in 2003. All these investments were intended to extend the resource base. A joint venture in China, with a majority share of 63 percent, for the production of potato starch was started in 2002. The background to this joint venture was to gain a foothold in an important potato-producing region of the world, in completely different institutional circumstances. The development in China was not the first time that AVEBE has produced potato starch abroad; it had taken over a German co-operative, Wendland

Table 8.2 Key figures of production locations in 2004

Location	*Country*	*Number of employees*	*Product*	*Market*
Charleston (SC)	USA	40	Starch specialities; derivatives	Food industry
Cikampek (Java)	Indonesia	110	Tapioca starch	Paper industry
Dallmin	Germany	70	Potato starch	Food and feed industry
Foxhol	Netherlands	500	Starch specialities; protein	Food and feed industry
Gasselter-nijveen	Netherlands	100	Potato starch and related products	Food and feed industry
Guaira	Brazil	70	Tapioca derivatives	Paper industry
Haussimont	France	65	Potato starch and proteins	Food and feed industry in Southern Europe
Lüchow	Germany	70	Potato starch and proteins	Food industry
Malmö	Sweden	80	Starch specialities	Food industry
Nijmegen	Netherlands	80	Wheat starch and proteins	Food industry
Xuan Wei	China	180	Potato starch	Food industry
Ter Apel-Stadskanaal	Netherlands	500	Potato starch, proteins, derivatives	Food and feed industry
Veendam	Netherlands	85	Dextrin and starch specialities	Food industry

Source: data taken from AVEBE, Annual Report 2004, and from newspapers.

Stärke, in 1989 and the members of Wendland gradually became full members of AVEBE. The production unit, in Lüchow, is still in use. A production unit for potato starch was bought in Dallmin, in the former GDR, in 1995. See Table 8.2 for an overview of the present AVEBE locations.

Agricultural policy

The enlargement of the resource base with the step into cassava was not only driven by the motive of cost prices, but also partially has an institutional background. Potato starch production in the European Union is heavily subsidized, but the continuation of that support has been quite uncertain for many years now. The EU policy for starch since the 1960s has been based on the following principles:

- Starch from potatoes is more expensive than starch from other sources, such as cereals, and the difference has to be compensated for in order to keep producers of starch potatoes in business. The compensation takes the form of a premium for potato starch producers. This is paid to the milling industry, and transferred to the farmers in the form of a higher price for the potatoes.

- Because of the relatively high price for cereals in the EU compared to non-EU countries, EU producers of starch should be compensated for their competitive disadvantage with production restitutions. The restitution enables the starch-producing firms to pay a guaranteed minimum price to their suppliers (the farmers). The amount of potato starch has been limited by a quota system because of budgetary problems since 1995.
- The production of starch potatoes and the related industries is an important economic activity in some specific regions of the EU.

There is uncertainty about the system as such, about the premium, about the level of compensation (the restitution), and about the allocated quota. The system was modernized in the mid-term review of the Common Agricultural Policy in 2003 but fundamental decisions still have to be taken. One of the possible measures to be taken is particularly threatening. The current policy provides for a direct payment for producers of starch potatoes. Its amount was fixed at €110.54 per tonne of starch in the framework of Agenda 2000. Up to now, these payments have been paid to the starch industry and not to the farmers, allowing the industry to pay the farmers a relatively high price for potatoes. The mid-term review of the CAP proposed to transfer the payment directly to the farmers, to be included in the single farm payment. As a consequence of this, the price for potatoes would drop considerably, possibly so low that farmers would switch to other crops rather than starch potatoes and the industry would lose its input. A compromise agreement was reached in the end, after heavy pressure from the starch industry: 40 percent of this payment will be included in the single farm payment and 60 percent will still be paid to the industry. However, the logic of the agricultural policy is such that in the long term, possibly after 2013, the 40 percent could be increased, leaving the industries with none or not enough potatoes.

Although the potato starch-producing firms in the EU – AVEBE and the German co-operative Emsland Stärke are the leading firms – are partners in the struggle for continuation of the existing system, at the same time they are attempting to make their firms less vulnerable to changes in the system. Apart from that, further growth in potato starch and derivatives in the home region is quite impossible, because of the quota system mentioned above. Global production and enlargement of the resource base are important instruments for reducing vulnerability, together with the reduction of the costs of production.

Profitability

AVEBE has gone through some difficult times in the past. The co-operative was close to bankruptcy in the 1980s after the exploding energy prices, and in the 1970s after the takeover of parts of Scholten. Solvency was no more than 2.7 percent for instance in 1980. The firm recovered, after a major restructuring of debts by banks and governments, with solvency increasing to 6 percent in 1986, 14 percent in 1987, 26 percent in 1989, and 34 percent in 1991. Financially, AVEBE has been quite a healthy company since that time. The solvency has

increased further in the last ten years, from 36 percent to 45 percent in 2004.[7] However, profitability is still low. The results are now mostly positive after the dramatic 1980s, with annual losses reaching 5 percent of the annual turnover in 1983. However, the return on group equity has been less than 4 percent in many recent years, while the aim of the executive board is for a minimum of 10 percent.

Business units

For a number of years the management of AVEBE has been trying to make the firm more customer-oriented, in order to increase profitability. An important step in that process was the decision taken in 2001 to split the firm into four independent operational companies (opcos), with integral responsibility for marketing, R&D, and also for profitability. Three opcos are market-oriented (food, paper, specialties), the fourth (starch) is responsible for starch production and sales. The three market-oriented opcos have no obligations to buy starch from number four. The general policy (until 2005, see hereafter) was local-for-local, meaning that products should be produced close to the market. According to that philosophy, products for Asia should be produced in that region, and not in the Netherlands. This has markedly improved the market opportunities of the three opcos, but at the same time the end of the truck system is a threat for the starch opco, which will probably lose some important internal customers. The pressure on starch will be translated into pressure on the farmers/owners (lower prices, less demand).

Present situation

The present position of AVEBE in the Netherlands is that it has two milling plants and another two plants for the production of derivatives. The last two will be closed in the near future and the production capacity will then be concentrated in two locations in the Veenkoloniën, apart from a small unit in Nijmegen. The total number of employees in the Netherlands is 1,400, including those in the company head offices in Veendam, and is decreasing. There are another 600 employees located abroad, including 180 in China. The importance of AVEBE for the region lies not only in the direct employment, but also in the indirect relations (transport, construction, engineering works, etc.) and for agriculture. Approximately 20–30 percent of the regional agricultural income stems from the production of starch potatoes.

Scholten

It is interesting to compare the internationalization of AVEBE with its important predecessor, the potato starch-producing firm of W.A. Scholten. The Scholten firm can be seen as the first industrial multinational in the Netherlands (Knaap 2004, p. 326).

Knaap (2004, p. 68) has reconstructed the exports of potato starch in the nineteenth century. Although there was some export in earlier years, exports become important from 1860 onwards and rapidly increased from approximately

2,000 tons in the 1860s to 15,000 tons in the 1880s. The exports of derivatives at that time seem to be negligible. Knaap (2004, p.70) also concludes that in the nineteenth century the potato starch-producing firms had no serious (push) reasons for becoming engaged in foreign direct investment. The national (Dutch) market offered enough opportunities for further expansion. Nevertheless, from 1866 onwards, Scholten began to invest abroad, first in Brandenburg, Germany (p.82). Knaap has analyzed the possible motives for this investment. Two elements seem to play a role:

1 Scholten was trying to avoid German import duties on his products (he was already exporting to the German market).
2 He was convinced that Germany was a promising market, and the Havel region was an attractive area for production.

Scholten was confronted with all of the problems associated with foreign direct investment, such as difficulties with concessions, difficulties in getting enough raw material (potatoes), problems with contracts, and unknown requirements from the market (Knaap 2004, pp. 152–164). Put in present-day terms, the transaction costs were high. But he succeeded, and founded new factories in Prussia (Neu Ruppin 1869; Tangermünde 1870; Landsberg 1876). Scholten was not the only firm to become engaged in foreign direct investments. His old rival, Dutalis, who came from Mechelen and had relocated to the Veenkoloniën, followed him to Prussia and opened up factories there too (Knaap 2004, pp. 159–161). A new factory was built by Scholten in Podejuch in 1889, with the aim of producing starch for export from Germany to other European countries. Germany had created high tariff walls for starch and the German starch industry flourished. Other countries with a more liberal trade philosophy (Great Britain, Belgium, the Netherlands) had not followed the German example and were easy targets for German export. Once more, Scholten tried to take advantage of institutional differences.

But he did not just stay in Prussia. He founded factories elsewhere in the Habsburg empire, starting in Galicia, east of Krakow, near what is now the Polish-Ukrainian border, in 1870. Some years later, in 1876, he founded a factory in Olmütz on the Austrian-Hungarian border. Again the motive seems to be that he expected a market for the final product (Vienna, Budapest) and he looked for cheap resources, summarized by Knaap (2004, p.315) as "searching for *locational advantages*". Unlike the situation in Germany, protection and tariffs seem not to have played an important role in his decision to found factories in the Habsburg empire. Figure 8.3 shows the location of the different investments made by Scholten (1869–1892).

The Galician activities never became profitable and were terminated in 1875, and the factory in Olmütz was sold in 1888. Scholten also expanded to the Russian empire in the 1870s, first in what is now Poland (Petrokow, 1872, sold in 1888), and then in Nowy Dwor in 1881, sold in 1892. He later tried unsuccessfully to develop a factory near Moscow. In this case it is clear that the main motive was market opportunities.

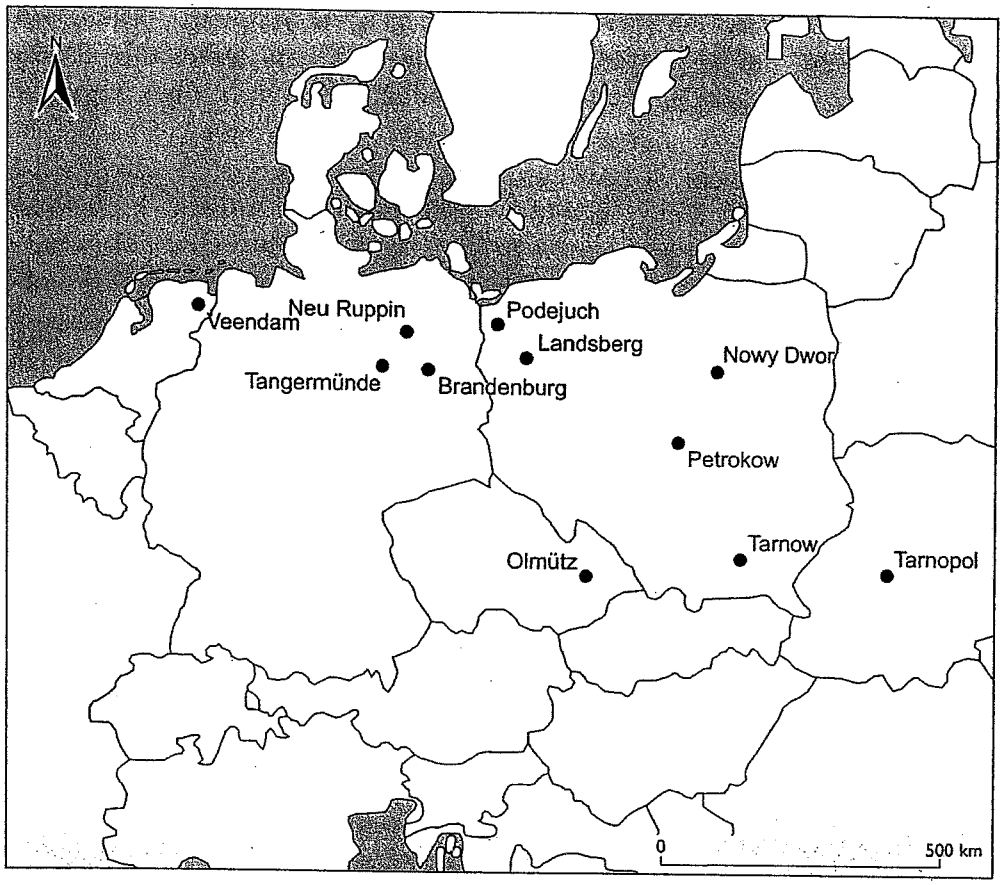

Figure 8.3 Locations of investment by Scholten (1869–1892) (source: derived from Knaap 2004).

There is a clear difference between the success of Scholten in Germany and the relative failure in the places that were further away (although the Russian branch was not so unsuccessful). Knaap (2004, p. 298) states that this difference can be partly explained by the differences in 'market familiarity'. Scholten traditionally already traveled a lot in Germany, and the geographical and cultural distance was relatively small for him. Austria and Russia/Poland were further away, also in a cultural sense.

The chemical division

As stated before, Scholten, and other private starch producers, gradually moved away from starch production and specialized in the production and marketing of starch derivatives with higher added value. For the Scholten firm this tendency towards specialization in the added value part of the production is visible in the establishment of a biochemical division in 1920 that soon outstripped the starch division (Knaap 2004, pp. 333–335). The chemical division had a strong international profile; in the 1930s it was able to serve important export markets (Middle East, Asia, USA). Its first step in FDI (in France) was

again motivated by institutional factors (production behind a prohibitive tariff wall). The development of its own, diversified production of derivatives, including all kinds of biochemicals, made the firm less vulnerable to the volatile starch market, and it increased internal flexibility.

Starch from corn

Another reason for Scholten to move away from starch production was the emergence of new competition from starch from corn in the last quarter of the nineteenth century. The development of this corn starch is fully in line with the ideas of Håkanson (1992). The production was developed in the USA, with a stable basis in the Midwest. In the first instance, the corn-based starch and derivatives competed with imported potato starch, also that from Scholten, on the home market in the USA, but later on, at the turn of the century, corn starch was exported to Europe. One of the key players in the USA corn starch industry, CPRC, opened its own sales office in Hamburg in 1905, and in the 1920s it planned to start FDI in Europe, in Germany (Knaap 2004, p.206). The German factories belonging to Scholten were at that time already organized in an AG (Private Limited Company). Some of the shares were no longer in the hands of the Scholten family, and in 1927, CPRC acquired the majority holding. It was the end of the foreign possessions of Scholten, and it gave the American competitor a strong foothold in Europe.

Discussion

Belated FDI

In the past, AVEBE could be described as a co-operative with members/owners who did not think in terms of markets but in costs. The differences with the former private company of Scholten is striking. Scholten started with FDI as early as in 1866. In fact, he followed the local-for-local policy, which was not adopted by AVEBE until 2001. According to Knaap (2004), Scholten tried to find locational advantages, from Germany to Moscow. It is only in recent years that AVEBE has been doing the same, but this development has even been blocked by the members recently (see below).

The relatively slow and weak movement towards the internationalization of AVEBE was also remarked upon in an article on "globalization of smaller firms" (Prasad 1999). In an international comparison of the timing of internationalization, Prasad found that AVEBE was the only firm in his set that started internationalization in the third or mature phase of its organizational life cycle. All other firms had already made this step in the second or growth phase.

Further in the value chain

The difference in market orientation between Scholten and AVEBE is also illustrated by the relative importance of starch production for the firms. At the end of

the nineteenth century Scholten and other private firms were already trying to specialize in the production and marketing of derivatives. Scholten opened his chemical division in 1920, and the production of starch became relatively unimportant for him very soon. The same development only started for AVEBE in the 1950s, with the opening of a research laboratory and a pilot plant for derivatives. There have been continuous efforts since then to increase the production and marketing of derivatives, until the level of today, with 60 percent of the turnover now coming from derivatives. AVEBE stressed in many press releases that the future lies with the derivatives. This focus has changed in recent years. The research capacity of the group has been considerably decreased, and what is left is directed at customer-oriented applied research. This implies that the further development of derivatives will be increasingly less easy with, as a consequence that a larger share of the production will have to be sold in strongly competitive markets requiring cost reductions which will be difficult to achieve.

Becoming a market leader

The turnover of AVEBE was primarily realized in the Netherlands and nearby countries until the mid-1980s. For instance, 83 percent was realized in Europe in 1984. The European share decreased to 68 percent in 1990 and since then has continued to decrease steadily (58 percent in 2003). FDI outside Europe hardly contributed to the turnover of the group in 1984. The FDI of AVEBE at that time was primarily in Europe, and mostly inherited from the Scholten firm, Stadex in Sweden and Haussimont in France, for instance. Since then the picture has changed considerably. The share of non-European FDI (Southeast Asia and South America) in the turnover of the group was 20 percent in 2003.

The co-operative character

The specific feature of co-operative firms is that the owners are also, and even primarily, the suppliers. The main objective of an owner is the creation of value (profit, capital, continuity), while the main objective of the supplier is unlimited demand for the output of his farm, which at the same time is the input of the co-operative, at the highest possible price, and continuity. This implies an immanent struggle between the two. The higher the price for the potatoes, the lower the profit and the less the continuity. Hendrikse and Veerman (2001) have shown that, even for a marketing co-operative, the owners tend to have a preference for investment in their own farms, leading to underinvestment in the co-operative. The more specific the investments in the co-operative are, the less the farmers will be willing to invest.

As long as the internationalization of a co-operative is limited to simple international sales activities without serious investment requirements, the decision rules of a co-operative will probably be equal to those of a private firm. It is the owner part of the farmer that evaluates chances and risks. In that sense it is not so surprising that AVEBE, in its old days as a sales office, did have international

sales offices. The situation becomes different when international sourcing or production becomes a profitable alternative for local sourcing and production, or when international sales require high, specific investments. The owner side and the supplier side of the farmer then have fundamentally different interests. International sources may be profitable for the firm but will replace local sources. A full switch from potatoes to foreign cassava or wheat, or even potatoes produced abroad, is quite impossible, because of the co-operative character of the firm: the firm is owned by Dutch potato growers.

The move of AVEBE towards globalization and market orientation started only after near bankruptcy in the 1980s. The obvious reason for going international was the conviction that the co-operative serves its members best when it remains an independent producer. The idea was that AVEBE could only survive when it is, and remains, the market leader in its relevant market, that is in the world market for potato and related starches and derivatives. AVEBE's world market share of potato starch is about one-third.

The policy of AVEBE is in line with the more general attitude of the large Dutch co-operatives (the auctions, the dairies, the meat producers) that market, and hence price leadership is a necessity for survival (van Dijk and Mackel 1991). This strategy has one specific difficult aspect for AVEBE: the market for potato starch is only a small segment of the total starch market. According to figures prepared by Ostertag and updated by Fuglie and Oates (2004), nearly two-thirds of the world starch production is from maize, a quarter from sweet potatoes and cassava, 5 percent from wheat, and another 5 percent from potatoes. This means that being market leader for potato-based starch still means only being a small player in the total starch market. At the moment, AVEBE's market share in the world market for starches is less than 2 percent.

As stated previously, the members of the co-operative have a strong influence on AVEBE's internationalization policy. Reference can be made to the end of the 1970s, when expansion by AVEBE into wheat activities in France was fiercely attacked by the farmers/owners as an example of the immanent internal struggle between the firm and the co-operative. Nevertheless, AVEBE did participate for some time in a wheat starch project in France: Chamtor s.a. More recently, the same type of troubles have again emerged, now concerning further investment in starch production in Asia, and in further expansion in cassava starch (the so-called two-resource strategy: potatoes and cassava). Two members of the board of the co-operative left in 2004 because of doubts about these investments. Three months later the chairman of the co-operative, Haselhoff, withdrew because of the same dispute. The debate culminated in October 2005 when the director (Krijne) was dismissed, again because he was in favor of further internationalization and of the two-resource strategy. The new director was given the task of concentrating upon lean and mean production of potato starch in the traditional home region. The representatives of the members apparently did not want to spend more money in the development of production facilities in Asia. They seem to be risk-averse, and they wish to give priority to the starch production facilities in the Netherlands where their own potatoes are milled. As a consequence, it was also decided that

the independence of the four business units in the organizational structure will be terminated. The turn in the strategy became fully visible in 2006. In a few months all foreign production activities outside Europe were sold, including the newly established factory in China, and including the traditional footholds in Thailand. In order to save money, even the headquarters of the co-operative in Veendam was sold. The board and the management departments left their characteristic office in Veendam and moved to an old and much smaller office building at a production unit near Groningen (Foxhol).

One could argue that the behavior of the members is not so much risk-aversion, but that they have a keen eye for long-term continuity, but in my opinion this is not the case. If their main objective was long-term continuity of the firm, extension of the resource base to, for instance, cassava, in the light of the political threats faced by potatoes, would be a desirable strategy. So, the behavior reflects their primarily short- and medium-term interests.

The continuous struggle about the future direction illustrates perfectly the difference between the interests of a firm and of a co-operative. The departure of chairman Haselhoff is especially interesting in this respect. As a farmer his main concern must have been the selling of his potatoes. As chairman, and responsible for the firm, his main concern was the future growth of the firm, if not in potato starch, then in cassava, and if not in the Veenkoloniën, then in Asia or South America.

AVEBE: advantage or disadvantage for the region?

What would have happened to the Veenkoloniën region if there had not been co-operative starch producers? The development of the Scholten firm, and the imitation by Dutalis, allows the conclusion to be drawn that some of the private starch-producing firms had no close ties with the region, and not even with the potato. They were entrepreneurs, looking for profit. On the other hand, there were also private firms that were founded by old industrial families from the region (Wilkens, Meihuizen, Duintjer, Van Linge; Knaap 2004, p.45) that were probably more attached to the region, and less willing to leave. It is clear that the private firms withdrew from starch production and concentrated upon the production of derivatives as soon as there was a reason to do so.

There is a good chance that the private firms would either have left the region or would have stopped the production of potato starch in difficult times. A second argument is that the public sector probably would have been less willing to subsidize the production of starch potatoes if the sector had been characterized by private instead of co-operative ownership. As a matter of fact, the active behavior of the public sector, both in regard to spatial policy and the national and EU agricultural policies, was certainly also triggered by the high unemployment rate in the region.

The consequence of less public involvement would have reduced the orientation of the region towards arable farming. This would have had implications at three levels. In this scenario the arable farmers would have earned less in the

short term, and they would probably not have found alternatives in the arable sphere. This would have opened up a development towards dairy farming or intensive livestock farming, sectors that did relatively well in Dutch agriculture in that period. The consequence for the region would have been less employment opportunities, at least in the short term. In the longer term it could have led to a different long-term industrial development, but the specific picture is unclear. The third implication would have been that the public sector would probably have devoted much less effort to measures to maintain the potato production. For a long period the regional spatial policy has been directed at maintaining the best possible production circumstances for AVEBE and its farmers. This has led to an open, arable landscape that is not very attractive for non-agricultural developments (nature, residential, etc.).

All in all, it is questionable whether a private firm would have attracted enough public involvement to keep the potato and starch production in the region.

Conclusion

The production of potato starch has been an important economic activity in the north of the Netherlands for more than one-and-a-half centuries. The production shifted from the place of consumption to the area where the raw materials, potatoes and fuel, were available cheaply in the 1830s. Potato starch soon became an internationally traded commodity. The leading processing firm, Scholten, soon started foreign direct investments in different European regions. Scholten is seen as the first Dutch industrial multinational and its main motivation was profit-seeking. The same firm was also the first to make the step from basic production to biochemical engineering in the 1920s. Scholten went bankrupt in 1978 and important parts of the firm were then integrated into the co-operative AVEBE.

Although Scholten and AVEBE were the two leading firms in potato starch for decades, AVEBE followed a completely different line of development. Due to its co-operative structure – its *raison d'etre* – the production of derivatives did not start until the 1950s. AVEBE was not involved in FDI until the integration of the remnants of Scholten. It has only been since the end of the 1980s, after near bankruptcy, that AVEBE has been active in the global markets. This happened under the threat of increased international competition on the starch market, and under the threat of decreasing protection from the Common Agricultural Policy of the EU. The central strategy became local-for-local; the aim was to be the leader in the market for potato starch, and an important player in the starch market in general. It is a brave policy, but because the firm will not be able to become leader in the market for starch, it is questionable whether this strategy can be successful. The position of potato starch, with its high costs and limited market chances, is such that international expansion will probably not help to maintain the actual production in the Veenkoloniën. The focus has recently changed again, in the direction of the home region, and with priority for potatoes and not for cassava. The co-operative character of AVEBE and its co-operative predecessors has an important spatial implication: potato growing and starch

production would probably have ended in the region a long time ago if AVEBE had been a private firm.

Notes

1 Information on the foreign operations was kindly supplied by AVEBE where this was not available from the Annual Reports.
2 Unless stated otherwise, figures on the financial situation of AVEBE are taken from the Annual Reports of the years 1980 to 2003.
3 There are several comparable but much smaller areas outside the Veenkoloniën but still in the north of the Netherlands. Those areas went through the same process of digging peat, the rise and decline of agricultural industries (also potato starch), and restructuring.
4 Wet op de Herinrichting Oost-Groningen en de Gronings-Drentse veenkoloniën, Stb. 1977, 694.
5 A potato starch factory opened in Gouda in 1819, but its main purpose was the production of sweet syrup (Gouda is still known for its syrup waffles). At that time starch factories with the same sweet purpose were developed in other places as well (Rotterdam, Oosterbeek). The location of these syrup factories was close to the consumption regions (Knaap, 2004, pp. 37–38).
6 After the removal of the bog for peat production, the remaining soil, a mix of peat and sand, was well suited for the production of potatoes. Before the peat could be removed, the bog had to be drained by canals. These canals were also the waterways for the transportation of the peat, and later on they were used for the transportation of potatoes; an additional advantage for the region.
7 In 2006 it appeared to have dropped considerably, to 31 percent, among others due to restructuring costs.

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