Thaer 200 years at Möglin (Germany)

Martin Frielinghaus Claus Dalchow

Introduction

In February 1804 Minister von Hardenberg wrote a request to Albrecht Daniel Thaer asking him to move from the town of Celle in the elector's princedom of Hannover to Prussia. Thaer went immediately to Berlin.

While at Berlin Thaer received an autograph letter from the Prussian King dated 19th of March 1804 listing the conditions offered for the move, i.e. affiliation to the Academy of Science, disposable long lease for the domain Wollup in the Oderbruch (floodplain of River Oder), authorisation to purchase an appropriate manor, support for the foundation of an agricultural academy and nomination as a Royal Prussian Private Counsellor.

On 30th June 1804 Thaer bought the manor of Möglin with some 250 ha, situated on the Barnim plateau, close to the rim of the Oderbruch. Simultaneously he took a long lease on the farm Königshof with some 50 ha at the Oderbruch. On total, 23 people came with Thaer to Möglin, including relatives, collaborators like Einhof and Sprengel and personnel with their families (Körte, 1839). In handling his affairs, Thaer had to return once more to Celle, but in September everything had been arranged, and in a letter he could announce to his wife his arrival at Möglin for the 8th or 9th October 1804 (Simons, 1929).

The purchase of Möglin

In 1804 when Thaer purchased the manor of Möglin, he took over a previously noble estate, that owned specific privileges in terms of the General Law. Since 1750 citizens that intended to purchase a noble estate needed a royal approval. The civil owner did not automatically receive all of the civil rights attached to the estate like jurisdiction or the right to become a member of the regional parliament. The opening of the real estate market only occurred through the October 1807 Edict (Schiller, 2003). The fact, that the citizen Thaer was allowed to purchase a manor already in 1804 is a sign of the king's appreciation.

Thaer himself and his first biographer (Körte, 1839) gave numerous reasons for the purchase. At first, it surely was of importance that Thaer had already travelled the region. Both in 1799 and 1801 he had undertaken two trips through the Mark Brandenburg during which he learned to appreciate many farm owners in the vicinity. In 1803, during the French occupation of Celle, he took his wife and his daughters into security to the Brandenburgian country.

Thaer commented for the first time on this topic in 1808 in the Annals of Agriculture (Annalen des Ackerbaus; Thaer, 1808), and in an anonymous report entitled "Brave and honest Report about Möglin on occasion of the closure of the fiscal year 1807/08" (Getreue und wahrhaftige Darstellung von Mögelin beim Schlusse des Wirthschaftsjahres 1807/08) with additional comments. Thaer wanted to avoid the trouble of separation of farmland and the calculation of the remuneration for peasant manual and traction services. In addition, he intended to relocate quickly and with all the personnel he needed without having to face previous civil works. Möglin was a realigned manor with sufficient building fabric available, but no peasants, only four Kossäten doing hand services, and some other daily hired farm workers. On total Möglin in 1800 represented 305 ha land, 80 residents, 13 fireplaces, four Kossäten, four minor land owners, one blacksmith's shop and one windmill (Schmidt, 1928). Möglin had been ill-treated and its soils were in bad condition. There was hence a good opportunity to demonstrate the potential of a rational crop rotation.

Also, Möglin with its sandy to loamy soils provided a good complement to the farm Königshof on the Oderbruch with its heavy alluvial soils. There were several options to improve the fertility of the arable land at Möglin by the application of marl or peat.

The contrasting situation of Möglin and Königshof, along with the examples available from adjacent, successfully managed, large farms, seemed a useful basis for the foundation of an agricultural academy.

To develop the forage production, and shift to stable feeding, Thaer intended to seize the opportunity and increase the grassland area by the implementation of man-made alluvial pastures (*Schwemmwiesen*), while establishing teaching and demonstration fields to become examples for the whole kingdom.

Finally, the relatively short distance to the royal Berlin residence was another advantage. Möglin was near enough to keep in touch, but far enough to avoid distraction.

In "The history of my farm at Möglin" (Die Geschichte meiner Wirthschaft in Möglin) in 1815, Thaer once again listed his reasons for purchasing the manor of Möglin (Thaer, 1815). His aims consisted in demonstrating that it was possible to successfully manage a typical portion of the Mark Brandenburg with its particularly unfavourable site conditions. Thaer also recognized to have insufficiently cared for the heterogeneity of the diluvial site. The abrupt changes of soil quality and texture within short distance due to a marked soil mosaic even today create problems for the agricultural production.

Thaer at Möglin

There considered that agriculture was a trading activity which should produce sustainable benefits. This practical result, however, was difficult to achieve as is clearly documented by the frequent changes of ownership of many Brandenburgian manors between 1800 and 1921 (Schiller, 2003). In assessing these records, one still

has to consider that in the case of noble properties family traditions certainly played a role quite apart from the financial aspects. During the above-mentioned time span 29% of the manors owned by nobilities changed hands every ten years or less as compared to 58% for civil ownership. Such a fast changing rate is certainly not a sign of economic sustainability.

Changes were frequent at Möglin, too, where they occurred on six occasions between 1750 and 1804 (Schmidt, 1928), Thaer being the sixth owner in 54 years when he purchased the manor in 1804. Afterwards Möglin remained for 68 years in the ownership of Thaer's family i.e. up to 1872, when Thaer's grandchild Albrecht Conrad sold the manor which changed hands twice again until the 1945 land reform.

The royal domain administration was obviously aware of the problem, and by the end of the 18th century the average leasing time gradually rose from six to eighteen years. In addition, most contracts included various obligations concerning the sustainability. As a consequence, the lease often lasted over long periods as for Thaer's former co-worker Johann Gottlieb Koppe who first leased the domain Wollup adjacent to Möglin in 1827. Afterwards, the domain remained in the Koppe family until the end of World War II, i.e. for 118 years (Frielinghaus and Herzog, 1998; Frielinghaus and Müller, 2003).

In 1806 Thaer, based on his experience at Celle, founded an agricultural academy, which became the Royal Prussian Academy of Agriculture at Möglin in 1819, and is considered as the nucleus of academic agricultural education for the German language area.

The academy was a commercial enterprise run by the landowner of Möglin. The royal patronage was restricted mainly to the payment of subsidies towards the salaries of the head and the teachers. The disciples/students were mostly prospective owners, lease holders or administrators of large farms. In 1806, the General Directorate gave instructions with a view to select candidates based on good certificates from the academy when recruiting for the civil service or for the lease of domains.

Tuition fees covering as much as possible of the costs had to be paid. The mostly seminar-like organised courses were mainly offered during the summer semester whereas attendance during the winter semester could be combined with courses at the Berlin university, where Thaer was professor of cameralistics.

The academy existed with ups and downs up to 1862 and after Thaer's death was lead by his son Albrecht Philipp. On total 773 students were enrolled, 155 of them from foreign countries, mainly from eastern and south-eastern Europe.

Thaer's contributions in terms of sheep management and breeding were important and the sale of breeding animals and high quality wool was an important source of income for Möglin. In 1826 for instance a total price of 15,500 taler was obtained for the sale of 254 animals. The price of a breeding buck reached up to 200 taler, sometimes considerably more when auctioned. To cross-breed merino sheep into the local race with a view to improving wool quality, Thaer created the Royal Principle Sheep Farms (Königliche Stammschäfereien). In 1816 he took the responsibility of two new sheep farms at Frankenfelde near Möglin and at Panten (Silesia). In 1820 a shepherd school was created in Frankenfelde. Between 1816 and 1849 the sheep stock in the German area increased from eight to sixteen million animals, largely due to Thaer's influence.

Thaer contributed to design the Prussian Agrarian Reform, first as a Private Counsellor of the Ministry of the Interior, later on as Principal Counsellor of the government. A substantial part of the agrarian reform consisted in separating peasants' and squire's land, and abandoning both fragmented holdings and compulsory cultivation. This supposed that the soils could be evaluated, and in 1810 Thaer made proposals for a soil assessment concept. Many components of the land appraisal based on soil bonitation (Bodenzahl) still in use, including the validation index and the condition levels stem from his ideas. In 1811 he participated in the elaboration of a Law on Land Cultivation (Landeskulturedikt) which among others promulgated new regulations for using pastures. Between 1812 and 1818 he made various proposals concerning the regulation of land separation (Gemeinheits-Teilungsverordnung), which resulted in 1821 in a proper law that smoothed the way towards the suppression of forest pastures and installed rights for using pasture or forest.

Due to excessive uses in the form of grazing, yield of leaves, hay, mulch, old leaves and needles the forested areas were in bad condition.

Quite apart from administrative regulations Thaer also contributed to positively change and reorganize the agricultural practices through increased stable feeding, forage, cereal, and straw production which reduced forest pasture and mulch collection.

During all his stay in Möglin Thaer received many decorations and awards, like the third degree Red Eagle Medal (*Roter Adlerorden*) in 1817. Even from that point of view, he thought in economic terms as this written comment illustrates: "For you, my beloved wife, my cross medal is advantageous insofar, as you can assert more resolutely your claim on the private council annuity. Because this is part of the secret statutes of this decoration" (Simons, 1929).

Thaer's message today

Thaer (1810) wrote: "Agriculture is a trade with the purpose ... to produce profit or to gain money. The higher this benefit in the long run, the more complete this purpose is fulfilled". In the course of the current discussion on the likely environmental effects of the agricultural production, various requirements are being addressed which often are not sufficiently considered. Any input and technique used needs to be first correctly assessed in terms of both its environmental acceptability and its economic adequacy.

As a consequence, production abandonment may be regionally quite different whereas shifting to landscape conservation could well develop to a large, however, regionally differentiated extent. But even the activities of farmers involved in landscape conservation only have to be judged from an economic point of view. Today, one would say: is has to pay off. As early as 1810, however, Thaer had stressed the need for a sustainable approach of the orientation selected, i.e. to take care of the future. The European agricultural policies with short validity periods of regulations have often insufficiently respected the principles of sustainability, leading farmers to act in ways that were not ecologically sound.

It is generally known that Thaer was a representative of the humus theory in plant nutrition. To him, organic fertilisation by stable

manure, plant residues and green manure played a crucial role, the exception being lime applications and marling. (We know today that the humus theory is partly incorrect, because the assimilation of carbon by the plant follows a completely different way; the nutrition sources are the soil minerals and the soil organic substances, both combined in the soil humus complex.) His disciple and subsequent co-worker Carl Sprengel created the basis for the mineral nutrition of the plants, a doctrine which was developed later by Justus von Liebig with great success. Thaer's humus theory, however, still exerts some influence today, and the stabilising role of the soil organic matter, as well as the need for its pure reproduction or even expansion are undisputed.. On the other hand, organic farming, the way to produce agricultural goods without chemical fertilisers and pesticides, is heavily based on the availability of quality humus. As a consequence, legume-grass-mixtures are still a crucial and necessary element of an ecologically oriented cropping system.

The abandonment of the old three-field rotation comprising winter cereal, summer cereal and fallow, the introduction of fodder, root, and industry crops into the fallow period and the whole notion of crop rotations are closely connected with Thaer's name. He used the terms of "rotation of crops" and of "rules of crop succession", and developed management or plot systems including six to twelve plots. At first, Thaer was a proponent of very strict rules of crop rotation. However, subsequently he argued for flexibility and adaptation. This he also did as result of a discussion with his former co-worker and meantime critic Johann Gottlieb Koppe. In § 249 of his trade doctrine of 1815, he pointed out, that location, time and personal circumstances had to be considered (Thaer, 1815).

Every farmer today is convinced of the importance of the crop rotation in terms of sustainable management, whereas serious deviations from the basic rules of a sound crop rotation can be observed. The reasons for these deviations lie, among others, in the present regulations of the agricultural production, whereby subsidies are being paid out for particular crop plant species. Winter rape for instance is attracting a highly lucrative financial support. The present system does not really take crop rotations into adequate consideration. In future, the agricultural production system will obviously have to change with a view to have rather land management subsidised instead of an individual plant or animal product. As

demonstrated by Feller *et al.* (2003) for instance, one would expect that Thaer's considerations about crop rotation and sustainability will again gain importance.

In an attempt to appreciate Thaer according to current criteria, Klemm (2002) mentioned in particular the timelessness of parts of his work; the importance he gave to crop rotation, soil sciences, animal breeding, and feeding, and to academic agricultural education; his combined competences as an erudite, professor, public officer, and practitioner; and his polemic capacity, associated with the ability to correct some of his views.

Closing comments

During the 1945 Democratic Land Reform, the Möglin manor was expropriated without compensation. Twenty-four farm labourers and peasants, one owner of a small property, and twenty-four resettlers from Eastern parts of the former German Empire received a total of 432.5 ha land. From 1952 on, the management was gradually taken over by the Agricultural Production Cooperative (LPG) "A. D. Thaer", later on by a LPG with office in a neighbouring village. When the former GDR was merged with the old BRD, large parts of the manor went to the Trust Institution (*Treuhandanstalt*), and subsequently to the Land Utilisation and Administration Corporation (*Bodenverwertungs und –verwaltung GmbH; BVVG*).

Starting in 1991, an education and demonstration farm (*Lehr- und Demonstrationshof e. V.*) developed at Möglin. This farm provided the nucleus of a limited company (GmbH), which purchased a large part of the former manor from the BVVG. Unfortunately, the BVVG missed the opportunity to stipulate precisely defined requirements with a view to guarantee the agricultural production and a continued administration of Thaer's heritage. This kind of privatisation very soon caused serious practical problems which up to now could not be solved (Frielinghaus, 2004).

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