History of Land Value Assessment and Establishment of Benchmark Soils in Denmark

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Background

The roots of land assessment and soil survey are founded in Europe. Certain historical concepts such as land value assessment using soil properties and benchmark soils originated in Denmark in 1844. The evolution of land value assessment in Denmark is described in detail in the publication *Atlas of Denmark* (Breuning-Madsen et al., 1992) and summarized here.

Early Assessment Laws

During the Middle Ages, there were three different ways to assess Danish land for taxation purposes: (i) number of “plows,” (ii) amount of seed, and (iii) gold value. In 1241, King Valdemar the Victorious described the “plow” as a unit of measurement for assessing property in *The Law of Jutland*. King Erik “Plovpennig” has generally been credited with formally introducing the plow measurement, as well as the concept of land registration in 1250. Seed taxation was based on the presupposition that the amount of seed to be sown was determined by the soil type and the size of the property. The amount of seed sown was the taxation basis for King Christian V’s Great Danish Land Registrar of 1688. Assessing the gold value of a property for taxation was implemented during the 12th century on the island of Funen and in Jutland (Fig. 1). Apart from the use of plow tax in the Duchies, the other methods of taxation gradually lost their importance during the 14th and 15th centuries.

Land duties and tithes paid by tenants to landlords were widespread by the Late Middle Ages. Duties were paid in kind, as quantities of rye (*Secale cereale* L.), barley (*Hordeum vulgare* L.), butter, lamb, poultry, etc. To simplify the assessment of duties to be paid, a hard grain conversion unit (rye or barley) was introduced. This conversion, termed “tønde hartkorn” in Danish, was used as late as the 20th century. Although the duties to be paid based on the “hartkorn” value could vary from region to region and were not connected to the direct land valuation, they laid the foundation for the first national land register in the middle of the 17th century. The conversion of land duties to an aggregate hartkorn value was not only important for land properties as a taxation basis, but also as an evaluation basis for inheritance, land redistribution, and changes in ownership.

During the 1660 parliamentary session, a war bill was put forward requesting the introduction of a property tax using the hartkorn unit as the basis for land

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