## Step by Step: Digitisation Projects of Cadastral Documents in the Central Archive of National Archives of Hungary, Budapest

The cadastral survey of Hungary was carried out in the second half of the 19<sup>th</sup> century as the part of the Habsburg Monarchy. The patent of the emperor Franz Joseph the First of Austria introduced the land taxation cadastre for Hungary in 1849. The provisional survey began in 1850, and the detailed, parcel by parcel survey later, in 1856<sup>1</sup>. The country was surveyed progressively from west to east. The rectification, the revision of the maps was ordered in 1875 to enter all boundary and ownership changes on the maps and registers.

The cadastral documents of Hungary are kept in many institutions, they are preserved in several archives (for example in central archive and in regional archives of the National Archives of Hungary), in libraries (for example in National Széchényi Library) and at The Institute of Geodesy, Cartography and Remote Sensing, moreover in some county land registration offices. That means, that unfortunately the collection of the central archive is not complete.

The map collection of the central archive includes many important cadastral cartographic materials and written documents in two fonds: in cadastral collection and in so called cadastral oleatas (S 76). Within the cadastral collection there are two subfonds: maps (S 78) and written documents (S 79). Some cadastral maps are located in other fonds, for example among the maps of the family archives.

Various types of maps were produced during the cadastral survey: small-scale sketch maps, provisional maps and agriculture maps, furthermore large-scale field sketches, original maps, indication sketches, printed maps and so called oleatas.

In the second half of the 19<sup>th</sup> century diverse sketch maps were drawn during the cadastral surveys, *inter alia* croquis. The German

<sup>&</sup>lt;sup>1</sup> Instruction zur Ausführung der zum Behufe des allgemeinen Katasters in Folge der Allerhöchsten Patente vom 23. December 1817 und vom 20. October 1849 angeordneten Landes-Vermessung, Wien 1856, <http://www.catastrum.hu/docs/Instruktion\_1856. pdf> (01/19/2015).



1. The 5. sheet of field sketch of the community Kékesd, 1865 (HU-MNL-OL S 79, N. 86/5).

croquis about the individual cadastral communities were produced in the 1850s, even at the beginning of the surveys. Later, in the 1870s, during the revision surveys Hungarian sketch maps were already constructed. The sketches mostly at a scale of 1:28800 represent the fields and their land use, and in the tables, belonging to the sketches, field names with their land use and area are given<sup>2</sup>.

In recognition that a mapped cadastre would take a long time to effect, provisional order was issued in 1850 to specify the systems which were to operate while work for the new cadastre was carried out. The provisional survey took place in the 1850s, so called provisional maps were drawn mostly at a scale of 1:7200. It wasn't a parcel-by-parcel surveying, only the boundaries of the cultivated areas were delimited as a block, the property owners were required to submit depositions of the extent and boundaries of their lands.

Field sketches at a scale of 1:2880 are free-hand drawings of the ar-

<sup>&</sup>lt;sup>2</sup> Е. Тöröк, *Krokik, avagy kataszteri térképvázlato,k*, «Catastrum», 1/1, 2014, pp. 26-9.

ea, they were drawn up in the field. The cadastral units were mapped using the «a la vue» method, which means that the surveyors simply observed the terrain and anticipated the distances. The quarter sheets (each sheet was divided into four segments) contain the name and the place of residence of the land owner, in addition the land use (fig. 1).

The original cadastral maps were produced with the plane-table method, with triangulation. The maps at a scale of 1:2880 are accompanied by registers, parcel protocols which are ordered by parcel number, and contain the owners' name, the place of owners' residence, the size of the plot, the land use and further description of the nature of the plot (fig. 2).

The coloured, manuscript indication sketches at a scale of 1:2880 were copied from the original maps. They contain the name and the place of residence of the land owners, the land use<sup>3</sup> (fig. 3).

To make the cadastral maps available for a wide variety of state and private users, as early as the 1860s they were reproduced using the process of lithography. At first they were published in Vienna, later, from 1870

2. The original cadastral map of the comunity Hévízszentandrás, 1858 (HU-MNL-OL S 79, 310. téka - Hévíz - 14-19).



<sup>3</sup> Е. Тöröк, *Felvételi előrajz, kataszteri térkép és birtokvázlat*, «Catastrum», 1/2, 2014, pp. 14-21.



3. Detail of the indication sketches of the community Kisújfalu, 1888 (HU-MNL-OL S 78, Esztergom m. - Kisújfalu - 1-40).

in Budapest. The cadastral oleatas are prepress maps on oilpaper from the early 20<sup>th</sup> century. Agriculture maps, small-scale (1:36000) county maps were compiled from cadastral maps for administrative purposes.

The written documents are kept in the subfond S 79. They are more diverse than the maps. The most-significant records are parcel protocols, registers of building plots, land use statistics, owners lists, house number schedules, border descriptions with boundary maps, calculation protocols, registers of alterations, etc. The survey began with delimitation, description and mapping of the cadastral community boundaries. The boundaries were carefully surveyed and fixed before surveying of land parcels started. The parcel protocols (or registers of land plots, German: Parzellen Protokoll) list for each land parcel its reference number, the name of the landholder, the land use, and its area. There is also a section in which changes of ownership, subdivision of plots, and changes of land use are noted. The register of building plots (German: Auszug der Wohnhäuser) lists the function of each building, the name of the owners, whether it had one or more stories. The land use statistics (German: Ausweis über die Benützung des Bodens) aggregate statistics of the area of each land use. The owners

list (German: alphabetisches Verzeichnis der Grundbesitzer) is an alphabetic list of the landholders. In the house number schedules (street number lists, German: Häuserverzeichnis) the proprietors resident in the locality are listed in the order of house numbers. The registers of alterations show alterations made in ownership, area of the plots or land use<sup>4</sup>.

In 2006 we have started to build up virtual collections of scanned maps to reduce the handling and use of original material, to protect it and to increase access to the documents. Beside the old maps we started to scan the cadastral maps too, with the support of the National Cultural Fund of Hungary. By 2008 the great part of the subfond S 78, more than 450 multisheets maps, was digitise, not the whole subfond: since at the beginning of the project not the whole cadastral collection was catalogued, we didn't know exactly how many sheets we have, therefore we could not exactly calculate. In 2008 253 maps were scanned for outside order, with own resources further 96 maps in 2010.

In line with the digitisation of the maps the senior researchers of this project compiled a study about the digitisation of the cadastral maps. Some data about the history of cadastral surveys, about the transfer of the documents to the archives and about the contents of the maps are also collected there<sup>5</sup>.

Due to the second project in 2009 the oleatas, the prepress maps on oilpaper were scanned, georeferenced and online published. This project was funded by the National Cultural Fund of Hungary, led by my colleague, Csaba Reisz, and carried out by Arcanum Database Ltd., as previously.

In 2010 we made our catalogue with images of maps available online (<http://mol.arcanum.hu/terkep/>) in framework of a project supported by the National Cultural Fund of Hungary. The catalogue provides more access points to the documents, allows customers to search and browse by title, geographical names, names of the surveyors, date, type of documents, scale etc., and to study the maps by the help of the images. The database consists of more than 30,000 descrip-

<sup>&</sup>lt;sup>4</sup> Ead., Néhány kataszteri irattípus, in Zs. KÁDÁR, B. LAKATOS, Á. ZARNÓCZKI (edd.), Archivariorum historicorumque magistra: Történeti tanulmányok Bak Borbála tanárnő 70. születésnapjára, Budapest 2013, pp. 207-23.

<sup>&</sup>lt;sup>5</sup> B. BAK et al., Kataszteri térképek tömeges digitalizálása, módszertani tanulmány, Budapest 2008, <http://mek.oszk.hu/13200/13275/> (01/19/2015).

tions, and more than 100,000 images, belonging to the one third of the descriptions.

Our current, three-year project started in 2013, and is funded by the Hungarian Scientific Research Fund. The aim of the project is to describe the written documents and the field sketches in our catalogue, to scan field sketches, to make the catalogue with images online accessible. We will compile a handbook about the cadastral documents and a list of the people participating in the cadastral survey. We want to collect, scan and publish regulations and old periodicals regarding the cadastral surveys. For example last we scanned the instruction for the surveyors from 1869<sup>6</sup>. In this year up to the present we catalogued more than 4700 documents and prepared more than 300 field sketches for digitization.

Finally some words about our plans. It is possible to integrate our already existing digital content in European portals. It is necessary to initiate a national catalogue of the historical cadastral documents to get an overview over cadastral heritage, what is preserved where. For the archives the Digital Archives Portal can provide an opportunity for standard cataloguing of the cadastral documents: <a href="https://www.eleveltar.hu/">https://www.eleveltar.hu/</a>. The work can be continued by developing a historical cadastral database with the information of the preserved documents, a database which contains both the information from parcel protocols and from maps in digital format. Some attempts have been made in this direction on the Hungarian archives portal<sup>7</sup>.

Емікő Тörök National Archive of Hungary, Budapest

<sup>&</sup>lt;sup>6</sup> <http://www.catastrum.hu/docs/Utasitas\_1869.pdf> (01/19/2015).

<sup>&</sup>lt;sup>7</sup> In 2014 we published the first numbers of our magazin about the history of the Hungarian cadastral survey: «Catastrum» (<http://www.catastrum.hu/>, (01/19/2015).