STANDARDIZATION OF PROPERTY QUALITIES

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Key words: Land Registry, Cadastre, Property Quality, Property Type, Standardization, Land Use/Cover.

SUMMARY

Build a solid foundation is one of the most important points when creating a structure and also one of the most important solid foundation in a model is classification. The major deficiencies of the current system in our country is already the lack of a specific classification. When standardizing the property quality first arises, it is considered a completed project or solved a problem decades ago consider that in a country that dimension of Turkey. However, TSE (Turkish Standard Institute), was founded to bring standards in our country, has even become blurred using "etc." after using many concepts in property type documents. Although more than 8000 of property type and property quality data in TAKBİS (Land Registry and Cadastre Information System) database, in fact these data are same or close. But it causes confusion due to manual data input of this system. Thus standardizing these data is an inevitable necessity. TKGM (General Directorate of Land Registry and Cadastre) should be an institution that determines how to determine the point at which the needs of the property qualities of stakeholder institution while fulfilling business and operations. Not only need to bring standards to property qualities should not be an abstract discussion on paper alone, but also it should have an algorithm that integrates the e-government projects conducted by TKGM and the spatial projects carried out by other institutions. Especially it should be studied to improve the system to provide the most reliable and current data for approximately 56 million parcels in our country. Thanks to this study, work to make bring standards to property qualities should provide a modern structure on the concept of property type and property quality crossed beyond the theoretical debates in particular TKGM. So it will provide a benefit to facilitate registration and statistical studies. Moreover, thanks to this work; the activities of stakeholder institutions is seen to be quite useful related with modern and standard property quality. For example, the deficiencies of land use/cover classifications in agricultural spatial systems and problems of property quality in condominium/servitude operations experienced by local governments can be solved with this structure.

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1. INTRODUCTION

The most valuable and important resources of the country are their grounds. Since the first day they were there, People felt the need to have the assurance that goods and sought assurances goods. Therefore, ground and human relations are issue closely related to social, political and economic problems of virtually every country. Land is the main place of human activity. For this reason, since the day that mankind has always been in relation to land. This relationship has a dynamic structure with the factors such as Agriculture, industry, information technology, sustainable development, globalization, urbanization, decentralization were carried out in different ways in different periods of history (Enemark, 2001; Williamson, 2001; Williamson ve Ting, 2001; Steudler vd., 2004). I.e. land is a quite large ecosystem which have too many sub-components within certain rules.

The use of the land with sustainable development approach, however, it is possible the existence of an effective land administration and management system. Healthy land policies are needed for effective land administration and land management. One of the prerequisites for the development of an appropriate structure of land policy is to have qualified knowledge of the land (Dale ve McLaughlin, 1999).

2. PROPERTY QUALITY

Build a solid foundation is one of the most important points when creating a structure and also one of the most important solid foundation in a model is classification. The major deficiencies of the current system in our country is already the lack of a specific classification. When standardizing the property quality first arises, it is considered a completed project or solved a problem decades ago consider that in a country that dimension of Turkey. However, Turkish Standard Institute (TSE), was founded to bring standards in our country, has even become blurred using “etc.” after using many concepts in property type documents (TSE-TS 10970, 1993). Besides, when made the first Cadastre, whatever is written on the ground as shown while retaining ownership due to the powers and responsibilities given by the Cadastre Law and thus it has led to the establishment of dozens of different attributes describing the same thing (TKGM, 2010). In the same manner, TAKBİS (Land Registry and Cadastre Information System) database also have similar errors due to rather than the repetitive nature of each other rather than complementary.

TKGM (General Directorate of Land Registry and Cadastre) should be an institution that determines how to determine the point at which the needs of the property qualities of stakeholder institution while fulfilling business and operations. Not only need to bring standards to property qualities should not be an abstract discussion on paper alone, but also it should have an algorithm that integrates the e-government projects conducted by TKGM and the spatial projects carried out by other institutions. Especially it should be studied to improve the system

to provide the most reliable and current data for approximately 56 million parcels in our country.

In this context, by trying to bring property quality standardization, it should be aimed to get a result of facilitating the work of land registry, registration inventory and statistics. This requirement is necessary for a long time but institutions related to property in our country have had so far in this regard. TKGM could be called one of the most important contractors or responsible for the problem because the foundation of the work is based on cadastre. In order to TKGM is the only authorized institution to make cadastral, this requirement must be fullfilled by TKGM (T.C. Resmî Gazete, 1987; T.C. Resmî Gazete, 2010).

When it comes to the present day, the problem is made re-determined the scope of the renovation cadastral activities by the TKGM Internal Audit Report and it is proposed to become standard expeditious manner, by preventing this repetition in many different ways. A commission has been established in accordance with the paradox of the Internal Audit Report. It was decided to prevent the repetition and to bring standardization by commission (TKGM, 2014). In this framework, structure intended to solve this paradox is presented in Table 1 proposed by the Commission.

Table 1. TKGM property quality standardization proposal.

Type of Property	**Property Quality**
Property without Structure	Land
	Public Common Use Grounds
	Farmland
	Forest
	Common Public Goods
	Under the provision and saving of the state places
	Cemetery
Property with Structure	Housing
	Public Buildings
	Commercial Buildings
	Prayer room
	Health Facilities
	Sport Facilities
	Education Facilities
	Cultural and Historic Buildings

Type of Property	Property Quality
	Industrial Facilities
	Transportation Structures
	Energy Facilities
	Agricultural Structures
	Social Facilities
	Tourism Facilities
	Civil Society Facilities
	Farmland with structure
Structure/Structureless Property	-

3. IMPLEMENTATION

Although more than 8000 of property type and property quality data in TAKBİS (Land Registry and Cadastre Information System) database, in fact these data are same or close. But it causes confusion due to manual data input of this system. Thus standardizing these data is an inevitable necessity.

It is useful to reduce the classification to be a little more specific due to the topic is very broad and so Implementation will focus only on agricultural activities. On the other hand, it will be useful to integrate with Land Use/Cover Classification created in "112Y027 - Data Model for Management of Farmers' and Farmland Information: A Case Study in Kayseri" project which financially support by The Scientific and Technological Research Council of Turkey. Integrated classification is shown in Table 2.

Table 2. Integrated Classification.

Type of Property	Property Quality	Property Use Purpose
Property without Structure	Farmlands	Fields
		Water Fields
		Garden
		Rose Garden
		Nut Area
		Tea Area
		Olive Area

		Willow Area
		Nursery
		Poplar Area
		Bond
		Greenhouse
		Meadow
		Land
		Cultivated Farmlands
		Dry Farmlands
		Marginal Farmlands
		Absolute Farmlands
		Under Cover Farmlands
	Temporary Farmlands	Abandoned Farmlands
		Non-Farm
		Raw Soil
	Other Farmlands	Mixed Farmlands
		Other Farmlands
	Common Public Goods	Grassland
		Threshing floor
		Pasture
		Overwintering Sites
		Meadow
		Pasture

Two classifications are integrated. However, the main issue which is the topic of how to put into practice a system can be applied in these roles has come. As it is known, located between people freedom has taken part in many national constitutions and international human rights treaties as one of the fundamental rights. "Property Rights" " is referred to in our constitution in our country and it is stated that this right is constitutionally under the state guarantee. State guarantee and all authority related to property was given to TKGM with the Law No. 6083. Property features such as the boundary of a property, type, area, etc. are created when the first cadastre and finalized. Except for the matters permitted by law and cannot be replaced without the knowledge of the related person. So it is necessary to recommend a proposal for a solution depending on the requirements without prejudice to final property features is necessary to propose a solution. For this, switch to a land management system which appropriate the present

conditions, national and international standards and technologies and depending on the authority permitted by law can be updated anytime should be required.

On another matter; even if such a study, subject of produce, use or provide data is essential which is necessary for TKGM. It would be more appropriate to provide depending on TKGM's authorities. It is also known that authorized to produce and use this data by GTHB (Ministry of Food, Agriculture and Livestock of Turkey) and GTHB carries out pre-preliminary study of this scope with LPIS (Land Parcel Identification System of European Commission) Project and thus establish a system that can operate in an integrated manner with the LPIS project of TAKBIS system is thought to be useful tremendous.

System integration than can have process of produce, use and update data should continue under the roof of TKGM and it should be given authority to other stakeholders in the system. In this context, proposed solution is designed in two parts. The first step is the processes required by TKGM (land registry logbook operations and loading classifications to TAKBİS). Secondly; giving authority to the other institutions of the system is kept up to data via TAKBIS or in an integrated manner from a different system.

3.1 Authorizing stakeholders

Property quality with steps to be taken by TKGM is planned to become a standard depend on methodology in land registry and cadastre activities. In the second part of the solution will be studied for a suitable structure for agricultural activities. As known, It is necessary to work together with GTHB because of all authority related to agricultural activities and so ÇKS (Farmer Registration System) and LPIS systems should be investigated and how should be considered integrated with TAKBİS.

The most important point is that according to the sub-plots model and temporal data structures in order to run smoothly, healthy and become integrated. Although not this task TKGM's authority, it is important in terms of land management. The authorized to edit should be given to GTHB in TAKBİS. The authority to regulate can be done only in TAKBIS but an integrated way to do with the GTHB's own systems over WMS/WFS as a result of the authorization by the mutual agreements and protocols, because of the need to be comprehensive and useful. Thus It will be prevented create unnecessary burden and slowdown problems in TAKBİS.

Two points in the authorization is very important. There are unlimited change authority in terms of temporal data management and the most important that determine multiple class structure in such a way according to sub-plots models. However, important point is that it should be authorized to only relevant stakeholder's areas of authority. This is because the system did not lead to the prevention of confusion.

Spatial data input should be also provided in accordance with sub-plots model. All sub-plots could shown under the parcel as a whole. Thus, sub-plots, area of sub-plots, boundaries, classification data, agricultural goods, cadastre, land registry data, ortophotos, satellite images

will be found in the integrated system Furthermore, This study performed at regular intervals according to temporal data model, the change may also be provided to be seen in a very easy way. Finally, all kinds of transactions and queries can be made. It will provide crucial data for agricultural subsidies and statistics with the new system. It will also consist of a reliable active farming system and the most important will be a very important step for the transition to land management.

4. CONCLUSION

Thanks to this study, work to make bring standards to property qualities should provide a modern structure on the concept of property type and property quality crossed beyond the theoretical debates in particular TKGM. So it will provide a benefit to facilitate registration and statistical studies. As described in the example, co-operation between TKGM and GTHB, it is obvious that it would be very useful for agricultural activities in information systems. Moreover, thanks to this work; the activities of stakeholder institutions is seen to be quite useful related with modern and standard property quality. For example problems of property quality in condominium/servitude operations experienced by local governments can be solved with this structure. Moreover, as a result of strong land administration system, if it should be planned as a full system, it is likely to lead to important benefits for the property valuation, economy and land taxes.

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REFERENCES

Dale, P. F. ve McLaughlin, J. D., 1999. Land Administration Systems, Oxford University Press, Great Clarendon Street, Oxford OX2 6DP, ISBN 0-19-823390-6.

Enemark, 2001a. Land administration infrastructures for sustainable development, Property Management, Volume 19 Number 5 2001 pp. 366-383.

Steudler, D., Rajabifard, A., Williamson, I. P., 2004. Evaluation of land administration systems, Land Use Policy, 21, 371–380.

T.C. Resmi Gazete, 2010. Tapu ve Kadastro Genel Müdürlüğü Teşkilat ve Görevleri Hakkında Kanun, Kanun No. 6083, Başbakanlık Basımevi, 27781.

T.C. Resmi Gazete, 1987. Kadastro Kanunu, Kanun No. 3402, Başbakanlık Basımevi, 19512.

TKGM, 2010. Kadastral Harita Üretimi ve Kontrolü Genelgesi. 2010/11 nolu Genelge, Ankara, http://www.tkgm.gov.tr/sites/default/files/mevzuat/2010_11_0.pdf/.

TKGM, 2014. Taşınmaz Niteliklerini Standartlaşma Komisyonu Kararı, Taşınmaz Niteliklerini Standartlaşma Komisyonu, 10.07.2014 tarih ve 1 nolu Kararı. Ankara.

TSE, TS 10970, 1993. Formlar - Yapı Kullanma İzin Belgesi. Türkiye Standartlar Enstitüsü, Ankara, TSE, TS 10970, 1993. Formlar - Yapı Kullanma İzin Belgesi. Türkiye Standartlar Enstitüsü, Ankara,

Williamson, I. P., 2001. Land administration ‘‘best practice’’ providing the infrastructure for land policy implementation, Land Use Policy 18 (2001) 297–307.

Williamson, I. P. ve Ting, L., 2001. Land Administration and Cadastral Trends – A Framework for Re-Engineering, Computers, Environmental and Urban Systems.

BIOGRAPHICAL NOTES

Ismail DURSUN; Born in Ilgın, Konya in 1985. Geomatics Engineer. Received a BS Degree in Geomatics Engineering from Istanbul Technical University in 2008 and nues BS Degree in Geomatics Engineering from Erciyes University. Continues PhD studies about Geographical Information Technologies in Necmettin Erbakan University. Worked as engineer for 4 years in Ministry of Environment and Urbanization. Working as Land Registry and Cadastre Specialist in General Directorate of Land Registry and Cadastre. Married with 2 childs. Speaks English.

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