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LAND USE AND LAND CADASTRAL MANAGEMENT WORKS

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Annotation
The article shows the need to create a database by using GAT programs in the organization and management of state land cadastre works, to create new electronic digital cards, and to develop methods for creating land cadastral cards and conduct them based on established principles. Also, information on the scientific results of the CIS scientists on the organization and management of state land cadastre work, land construction, design and land monitoring was given.

Keywords. Land cadastre, cadastral card, cadastre, land account, state cadastral system, relief, cadastral number, cadastral zone, cadastral massif, cadastral region, GAT.

Introdcution

The state land cadastre, which is one of the components of the unified system of state cadastres, contains the natural and economic condition of the existing land fund, legal regime, category, quantity and quality, value, location, dimensions, owners and users of land. consists of a system of necessary documents about the distribution between
It is known that the use of land started from the time of the emergence of human society and continues to develop until now. That is why land accounting is one of the most important issues in land cadastral work.

In the current environment, where the influence of natural resources on human activity is increasing, the problem of their rational use and protection arises, which, in turn, creates the need to regulate legal, natural and economic relations, relying on reliable, fast and scientifically based information on their use. causes. In order to put these issues into one system, a number of positive works are currently being carried out on the creation and maintenance of the state cadastre.

The history of the formation of the cadastre The first information about the cadastral works carried out for the purpose of accounting and valuation of land in ancient Mesopotamia, China and Egypt dates back to the third millennium BC. During this period, people defined their territory, i.e. boundaries, for the purpose of farming, which is one of the first signs of cadastral formation. It is worth noting that the initial data on cadastral work also includes elements of graphic representation of land cadastral data [2].

According to information, cadastral works were initially carried out in Italy (in the 6th century BC) and in Greece (in 584) on the basis of special state laws of that time. In this, the existing land areas and the real estates located on them are registered, the type of soil distributed in the area, their productivity, methods of its processing are determined, and the appropriate amount of tax is determined based on their analysis [5].

The term "Cadastre" was first introduced in France during the Napoleonic era during the reform of existing land areas. Some historians attribute the origin of this term to the name of the Roman ruler Augustus: in 27 BC, he approves the unit of data collection called "capitiqum" and introduces the registration "capitum registrum". Over time, these words were combined - "capitastrum" and later "catastrum". According to other sources, this term is said to be derived from the Greek word "catastichon", which means "record book", "roll", "registration" or Latin "capitastum" - tax objects. list [6]. Thus, in the period before the new era, the list of existing lands, their area and other necessary information were reflected in the cadastre, mainly for the purpose of tax collection.

Also, the following points have been made about the cadastre in a number of sources. Cadastre - (French cadastre - list) - a set of basic data on state-level taxes, various economic resources, as well as the use of land, houses and other related objects, officially compiled on the basis of periodic or continuous observations , consists of information on sales and mortgage processes [2].

During the period of feudalism in Europe, that is, by the years 900-1200, large landowners were suzerains and priests, who were in favor of documenting the ownership of land and real estate. First, in 1066 in England, in 1162 in Italy, and in

1269 in France, the state land cadastre was developed in order to enrich the state treasury. The initial methods of cadastral surveying and land cadastral accounting remained almost unchanged until the middle of the 18th century and were mainly carried out using rope, iron and wooden measures [5].

Currently, every country in the world is conducting research on cadastral problems and their practical solutions. In this regard, many researches are regularly conducted in countries such as the USA, Germany, Sweden, Denmark, Switzerland, the Netherlands and Greece. The socio-economic development of each country leads to the creation of a cadastral system that can serve many purposes.

Along with the formation of the cadastral system in these countries, special attention was paid to national and regional features in the management of this system. The information collected in it has been changed according to cadastral purposes.

The formation of the cadastre, the use of modern technologies in its management is the result of long historical processes [2]. The analysis of cadastral works in the past and their activities makes it possible to organize such works more precisely today. This will serve as a programmatic action to determine prospective plans to be made in the future.

The land cadastre has a special place in the state cadastre system. This is due to the fact that land is one of the most important components of the natural environment.

Land is a necessary material basis for all production industries in the implementation of the labor process. It serves as a means of production in agriculture and forestry, industry, transport and all other areas of human material activity. In addition, land is significantly different from other means of production. It is a product of nature, it is an object that has appeared outside of human consciousness and is always present. Unlike other means of production, it has been considered that as society develops, it changes in terms of quantity and quality [5].

The scientific results of CIS scientists on the organization and management of state land cadastre work, land construction, design and land monitoring are of particular importance. For example, in the research of A.V. Kolmykov (2013), recommendations were made about the organization of rational use of agricultural land in land formation, the justification of the placement of alternating crops in the conditions of greening of land use, and the ways of effective use of land in the agro-industrial complex.

In addition, S. N. Volkov (1991) studies the methodology of determining the national economic efficiency of land management in the farm using the index chain method, how to achieve effective land management, land structure design and land ownership and land use, and the theoretical basis of land structure. information provided.

In the studies of A.S. Cheshev and V.F. Valkov (2002), the issues of land use and land management were considered.

P.F. Loyko (2012) in his scientific research made recommendations about some aspects of modern land use in the Russian Federation and the improvement of the land use management system and the development of the territorial cadastre.

As in all regions of the world, land relations have always been viewed as one of the most important issues in our region. Because in the ancient times, in the Middle Ages and later, different countries have kept an eye on our borders. In the centuries before Christ, the rulers of ancient Iran, China, Alexander the Great, and later Arabs, Mongols, Tsarist Russia and other countries tried to establish their rule and succeeded. But in any situation, for example, during the ancient Kushan period in our territory, the Turkish khanate in the middle ages, the Khorezmshahs who ruled later, the state of Amir Temur, the khanates of Bukhara, Khiva, and Kokan before the conquest of Tsarist Russia, land was divided into land and land. relationship exists [2].

Effective and rational use of agricultural land in Uzbekistan, their quantitative and qualitative analysis, land accounting and solving management problems at different levels of land relations, targeted research on land monitoring S.A. Avezboyev, A.S. Altiyev, A.R. Babajanov, Q.R. It was conducted by Rakhmanov, D. Dzhorakulov, I. Ikhlosov, R. Turayev, A. K. Bazarov, Sh. Norboyev, A. Inamov and others.

In particular, S.A. Avezboyev (1992) was engaged in targeted research on effective and rational use of agricultural land, their quantitative and qualitative analysis, land accounting and resource assessment [12; 41 c.].

A.K. Bazarov (2009) in his scientific researches systematized land use methods representing the set of sub-systems of state regulation of land relations and administrative management of land use and defined the role of land quality monitoring [3].

In the scientific research of A.S. Altiyev (2017), taking into account the specific characteristics of agriculture, the indicators of the forecast of their use were calculated based on the analysis of the current state of agricultural land use and the level of efficiency in the areas of use opportunities, and taking into account the factors affecting the effectiveness of the use system, a mechanism for its regulation was developed [5].

In the research conducted by R.A. Turayev (2022), he improved the technology of monitoring agricultural lands and developed a mechanism for assigning them fixed contour numbers, and improved the methods of placing agricultural crops based on land development projects [6].

Therefore, almost all of the above definitions of the cadastre are focused on the issues of systematic information collection about objects in a certain field of science. In the conducted studies, the concept of cadastre was studied in general as a specific field of the national economy.

As it can be seen from these sources, the most important factor in carrying out and maintaining cadastral work is the land border, attributive data, coordinate system, scale of maps, the concept of relief in the representation of land on maps and plans, cadastral number, and digital layers. no importance. However, the concept of cadastre cannot be defined without this information. For example, as the Russian scientist A.A. Korolev pointed out, it is necessary to abandon the concept of a cadastral data collection without such information [1]. Such an approach allows this research to determine the general principles of creating state cadastres, to give their official definition, and to develop requirements for cadastral systems to account for objects based on them.

The achievement of independence of the Republic of Uzbekistan and the formation of market relations in the economy required, first of all, a radical restructuring of land relations. This, in turn, created the need to form the state land cadastre. All this is the adoption of the new "Land Code" of the Republic of Uzbekistan, the Law "On State Land Cadastre" and a number of other regulatory documents related to land use and state land cadastre management by 1998. prompted to do it. Conducting cadastral work and its regulation in our republic is carried out on the basis of the Law of the Republic of Uzbekistan on "State Land Cadastre" and is regulated in accordance with Article 10 of this Law [2].

Administration of state land cadastre by the Decree of the President of the Republic of Uzbekistan dated October 15, 2004 No. PF-3502 "On the establishment of the State Committee for Land Resources, Geodesy, Cartography and State Cadastre of the Republic of Uzbekistan" Land resources, geodesy, cartography and state cadastre of the Republic of Uzbekistan are carried out by the district (city) land resources and state cadastre departments of the state committee [2].

On October 15, 2020, under the chairmanship of the President of the Republic of Uzbekistan Shavkat Mirziyoyev, a video selector meeting was held on the issues of effective organization of the new system of state cadastre management. It was noted at the meeting that it is no secret that a number of systemic problems have accumulated in the field of land allocation and state cadastre in our country for several decades.

For example, the issue of non-registration of the right to a plot of land or arbitrary acquisition of land is one of the urgent problems. It is noted that this year alone,

11,200 hectares of land were arbitrarily occupied in nearly 50,000 cases, of which illegal housing was built on 3,200 hectares. 99 percent of them are irrigated, fertile agricultural lands.

In addition, it was noted at the meeting that an information system will be launched that will allow for quick detection of illegal devices and elimination of construction at the first stage, using observation through satellites in space.

This problem is also of great importance in the land cadastre system in Bulung'ur district of Samarkand region. Because, according to the calculations, the illegal appropriation of agricultural land in the district is ignored. Also, in the thesis work, attention is paid to the issues of online monitoring of illegally acquired land areas in the district through satellites. These issues will be discussed separately in the second chapter of the thesis.

Decree No. PF-6061 dated September 7, 2020 [3] of the President of the Republic of Uzbekistan "On measures to fundamentally improve the system of land accounting and state cadastre management" and "Cadastre under the Tax Committee of the Republic of Uzbekistan In order to ensure the implementation of Resolution No. PQ-4819 of September 7, 2020 [6] "On measures to organize the activities of the Agency", the Cabinet of Ministers of the Republic of Uzbekistan "Regulates certain regulations regulating the field of state cadastre maintenance" On the basis of Resolution No. 389 of June 22, 2021 "On Approval of Legal Documents", a regulation on the procedure for maintaining the state land cadastre was developed [6]. The third paragraph of the first chapter of this regulation states that the land fund of the Republic of Uzbekistan is an object of the state land cadastre, and the fourth paragraph provides for the continuous improvement, systematization, storage, updating of the land cadastre data development technology and the provision of land cadastre information to users. Providing reliable information about land is the main task of the state land cadastre [5]. In the implementation of these tasks, the Cadastre Agency under the Ministry of Economy and Finance of the Republic of Uzbekistan has been assigned the following priority tasks related to land cadastre, and at the same time, it has been determined that the principles of state land cadastre management are as follows (Fig. 1.1.1).

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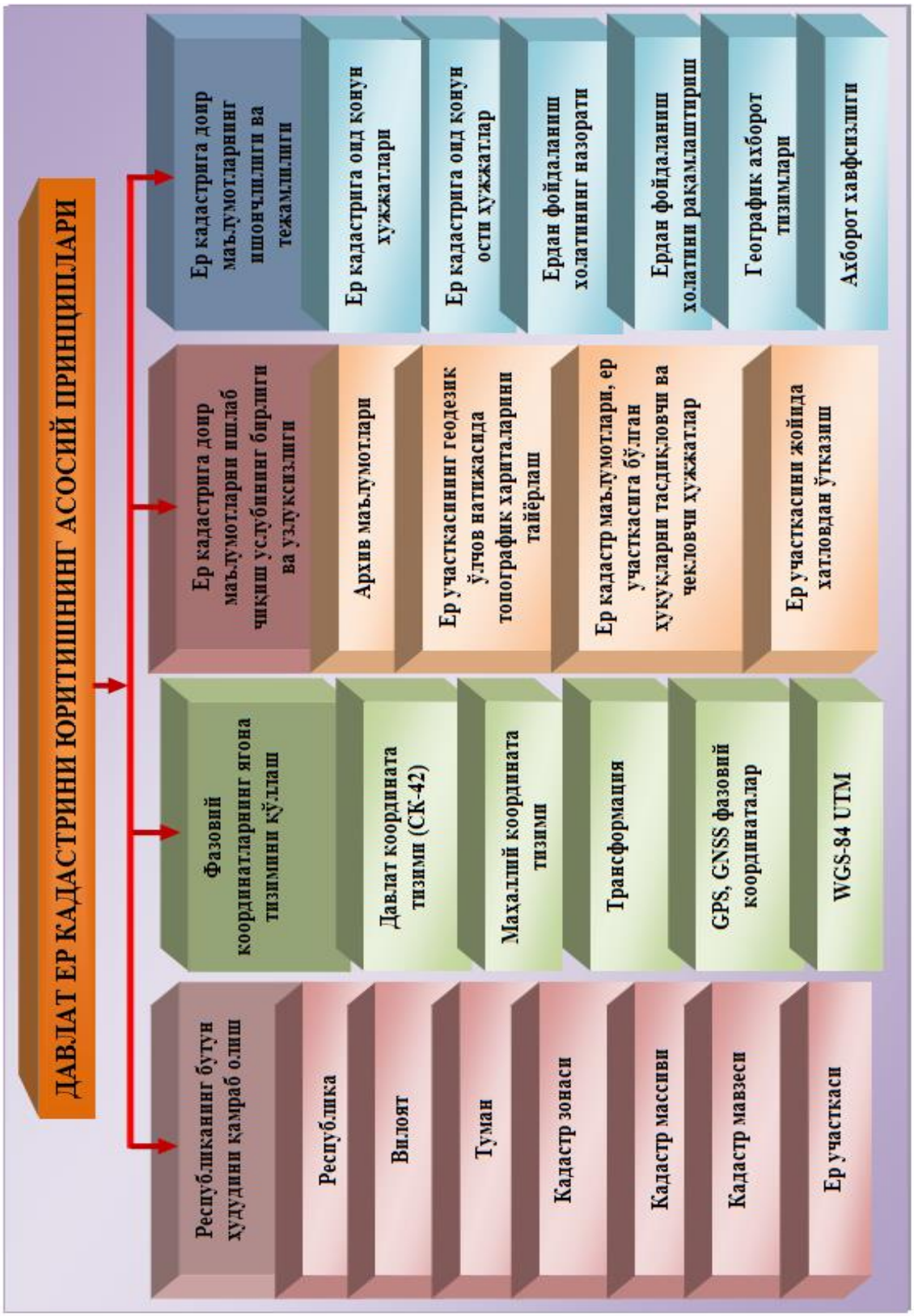

1.1.1-расм. Давлат ер кадастрини юритишнинг асосий принциплари

As shown in Figure 1.1.1, issues of coverage of the entire territory of the republic in the management of the state land cadastre are implemented on the basis of the Law of the Republic of Uzbekistan "On State Land Cadastre" [2].

It is mainly intended to form the cadastral number of the republic, region, district, cadastral zone, cadastral massif, cadastral district and land plot. In carrying out these works, the accepted cadastral numbers of the district and city were used to cover the entire territory of Bulung'ur district. Based on the conducted research and accounting books, proposals for the formation of cadastral numbers of land areas of Bulung'ur district using GAT programs were developed with the participation of the author and the staff of the cadastral agency (Fig. 1.1.2).

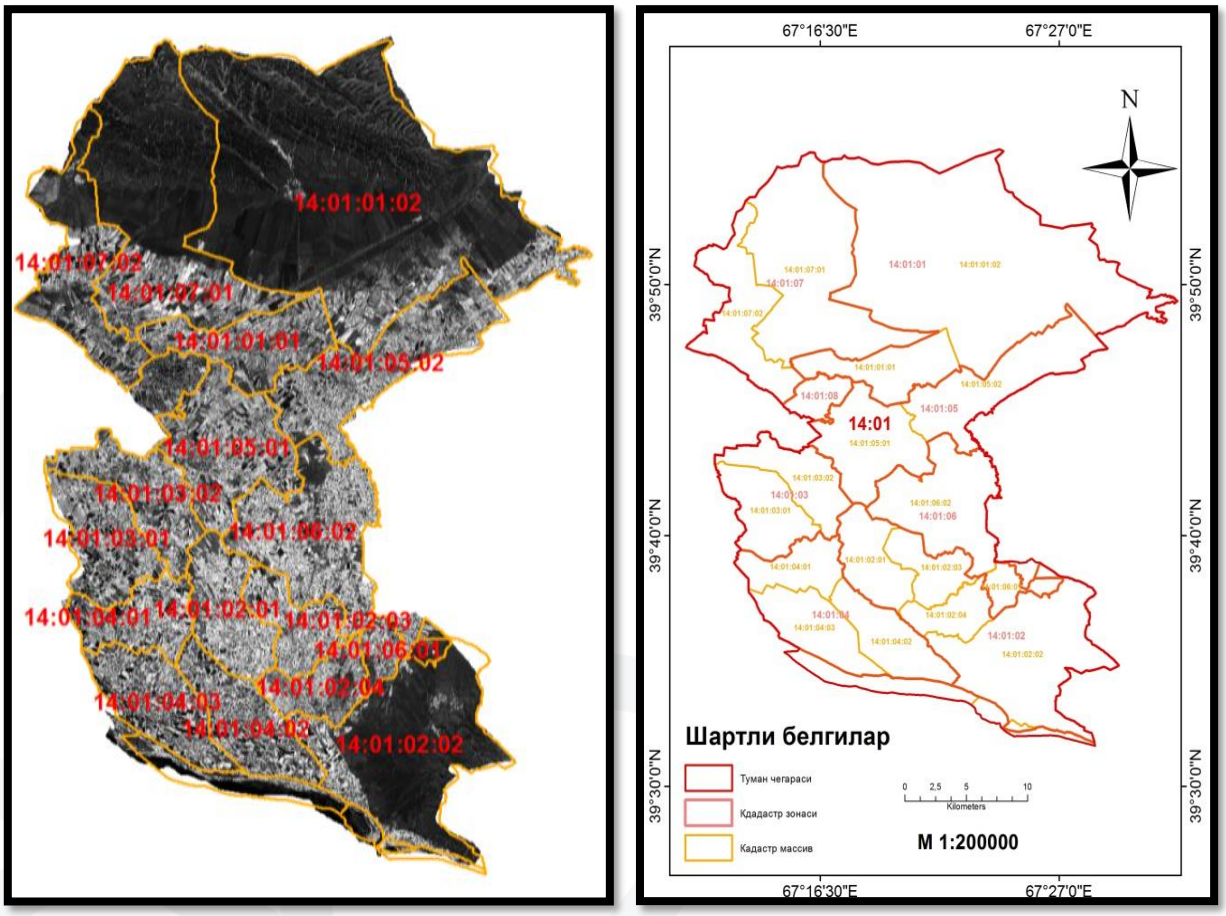

Figure 1.1.2. The plan for dividing the territory into cadastral zones, massifs, and regions developed on the basis of GAT technologies

In developing the proposal for the formation of cadastral numbers of Bulung'ur district into cadastral zones, cadastral massifs and cadastral districts, first of all, the border of the district was determined using space photographs.

When dividing the territory of the district into cadastral zones, it was recommended to take into account the boundaries of 7 rural citizens' assemblies and 1 city in the district, because it is appropriate to say that the boundaries of rural citizens' assemblies constitute cadastral zones when dividing the district into cadastral zones.

In this case, the boundaries of the border turning points and natural borders, whose coordinates are available in the division into cadastral zones, were determined. As a result, the area of 75197 hectares of the district was divided into 8 cadastral zones.

After the division of the territory into cadastral zones was completed, each area of 8 cadastral zones was divided into cadastral arrays. When dividing the territory into cadastral arrays, the boundaries of 17 arrays within the cadastral zones of the district were defined and divided into cadastral arrays.

Thus, the territory of the massif was divided into cadastral districts. Taking into account the red lines of buildings and constructions, natural boundaries, the territory of the district was divided into 700 cadastral areas, and the cadastral number of the cadastral areas was completely formed. After the formation of the cadastral number of the cadastral areas, it was noted that the cadastral numbers of the state land and building structures will be formed.

Development of the field of state cadastres, geodesy and cartography in 2023-2026 in the Resolution No. PQ-405 of the President of the Republic of Uzbekistan dated October 20, 2022 "On measures to further improve the activities of the Cadastre Agency under the State Tax Committee" developed a road map [5]. Clause 5 of this road map stipulates that the Cadastre Agency should develop parameters for the transition from the state coordinate system (SK-42) to the global coordinate system (WGS-84) [6].

Summary

In the implementation of these works, first of all, it is necessary to provide the residential areas with a complete local coordinate system. For this purpose, it is necessary to determine settlements without a local coordinate system, to install local coordinate systems using the coordinates of the existing state geodetic network in settlements where a local coordinate system is installed. By transforming the established local and national coordinate systems, we can move to the global coordinate system (WGS-84). Continuity, reliability and cost-effectiveness of land cadastral data are ensured through world coordinates.

The conducted research showed the need to create a database, create new electronic digital cards, and develop methods for creating land cadastral cards and conduct them based on established principles by using GAT programs in the organization and management of state land cadastre work.

List of References

1. Allanazarov O.R. Improvement of the cartographic-geodesic support of the cadastre of communication objects based on GAT technologies: // Dissertation written for the degree of Doctor of Philosophy (PhD) in technical sciences. abstract - T., 2018.- 45 p.
2. Bobojonov A.R., Rahmonov Q.R., Gafirov A.J. Land cadastre. - T.: TIMI, 2008. - 202 p.
3. Gulmurodov, F. E., Umarov, N. S., & Khamidova, P. J. (2021). 3D models development of tourism facilities. Asian Journal of Multidimensional Research, 10(12), 572-578.
4. Umarov N.Sh. Creation of the scientific basis of cartographic provision of the state land cadastre based on GAT technologies: // Dissertation written for the degree of Doctor of Philosophy (PhD) in technical sciences. abstract - T., 2023.- 45 p.
5. Umarov, N. S. (2021). Methodology of monitoring agricultural land of Bulungur district and creation of electronic digital cards for cadastre objectives. ACADEMICIA: An International Multidisciplinary Research Journal, 11(10), 1582-1590.
6. Shermatovich, U. N., & Ramonovich, Y. Z. (2021). THE USE OF GIS TECHNOLOGY IN RECORDING AND CREATING A DATABASE OF AGRICULTURAL LAND IN BULUNGUR DISTRICT. Innovative Technologica: Methodical Research Journal, 2(11), 30-39.