

CURRENT ISSUES OF INVENTORY AND CADASTRAL REGISTRATION OF AGRICULTURAL LAND

Natalia A. Studenkova

Tomsk State University of Architecture and Building, 2, Solyanaya Sq. St., Tomsk, 634003, Russia, Senior Lecturer, Department of Geoinformatics and Cadastre, phone: (906)949-68-88, e-mail: studenkowa@mail.ru

Nadezhda I. Dobrotvorskaya

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, D. Sc., Senior Researcher, Professor, Department of Cadastre and Territorial Planning, phone: (960)795-08-95, e-mail: dobrotvorskaya@mail.ru

Evgeny I. Avrunev

Siberian State University of Geosystems and Technologies, 10, Plakhotnogo St., Novosibirsk, 630108, Russia, Ph. D., Advisor to the Rector's Office for Scientific Activities, phone: (383)344-31-73, e-mail: kadastr204@yandex.ru

Mariya V. Kozina

National Research Tomsk Polytechnic University, 30, Prospect Lenina St., Tomsk, 634050, Russia, Ph. D., Associate Professor, Department of Geology of the Engineering School of Natural Resources, phone: (923)413-34-00, e-mail: kozinamv@tpu.ru

Valerii P. Pyatkin

Institute of Computational Mathematics and Mathematical Geophysics SB RAS, 6, Prospect Akademik Lavrentiev St., Novosibirsk, 630090, Russia, D. Sc., Head of the Image Processing Laboratory, phone: (383)330-73-32, e-mail: pvp@oi.sccc.ru

The article discusses the problems of accounting for agricultural land, reasons for the lack of an integrated data accounting system. It is noted that the declarative nature of cadastral registration and state monitoring do not provide a complete record of data on the qualitative characteristics of land plots. Attention is focused on the discrepancy in the reported data on the amount of land in the composition of agricultural land provided by various departments, the lack of information on the boundaries of agricultural land, the lack of cartographic material. The study used the method of information and analytical review of the regulatory documentation of the Ministry of Agriculture and Rosreestr, types and sources of information in the UFIS AL (Unified Federal Information System of Agricultural Lands). A number of problems in the functioning of the UFIS AL have been identified, due to the lack of a legal framework governing the general procedure for collecting data for monitoring the condition and actual use of agricultural land. The lack of data integration between the state information systems UFIS AL and USRER is shown. The aim of the study is to develop technological solutions for updating information about agricultural land. As a result of the study, an information model for accounting for agricultural land in the Russian Federation was proposed. The necessity of carrying out an inventory of agricultural lands is substantiated. A technological scheme for updating information on agricultural lands based on the results of an inventory, which should be integrated into federal information systems, including the USRER, is proposed.

Keywords: land inventory, land registration, agricultural land, information support, information system

REFERENCES

1. *Doklad o sostojanii i ispol'zovanii zemel' sel'skohozajstvennogo naznachenija Rossijskoj Federacii v 2019 godu [Report on the state and use of agricultural land in the Russian Federation in 2019]*. (2021). Moscow: FGBNU "Rosinformagroteh", 404 p. [in Russian].
2. Malochkin, V. Ju. (2019). Development of a methodology for conducting an inventory of agricultural lands using GIS. *Mezhdunarodnyj sel'skohozajstvennyj zhurnal [International Agricultural Journal]*, 2(368), 17–21 [in Russian].
3. *Itogi Vserossijskoj sel'skohozajstvennoj perepisi 2006 goda: T. 3, Zemel'nye resursy i ih ispol'zovanie [Results of the All-Russian Agricultural Census of 2006: Vol. 3, Land resources and their use]*. (2008). Moscow: ISC "Statistics of Russia", 312 p. Retrieved from https://rosstat.gov.ru/storage/mediabank/tabl_t3.pdf [in Russian].

4. *Itogi Vserossijskoj sel'skohozajstvennoj perepisi 2016 goda: T. 3, Zemel'nye resursy i ikh ispol'zovanie. [Results of the All-Russian Agricultural Census 2016: Vol. 3, Land resources and their use]*. (2018). Moscow: ISC "Statistics of Russia", 307 p. Retrieved from https://rosstat.gov.ru/storage/mediabank/VSXP_2016_T_3_web.pdf [in Russian].
5. *Doklad o sostojanii i ispol'zovanii zemel' sel'skohozajstvennogo naznachenija Rossijskoj Federacii v 2016 godu [Report on the state and use of agricultural land in the Russian Federation in 2016]*. (2018). Moscow: FGBNU "Rosinformagrotech", 240 p. [in Russian].
6. *Gosudarstvennyj (nacional'nyj) doklad o sostojanii i ispol'zovanii zemel' v Rossijskoj Federacii v 2006 godu [State (national) report on the state and use of land in the Russian Federation in 2006]*. (n. d.). Retrieved from https://rosreestr.gov.ru/upload/documents/doc_gos_doc_2008.pdf [in Russian].
7. *Gosudarstvennyj (nacional'nyj) doklad o sostojanii i ispol'zovanii zemel' v Rossijskoj Federacii v 2016 godu [State (national) report on the state and use of land in the Russian Federation in 2016]*. (n. d.). Retrieved from <https://rosreestr.gov.ru/upload/Doc/16-upr/НацД за 2016 год.doc> [in Russian].
8. Decree of the Government of the Russian Federation of May 14, 2021 No. 731. On the State Program for the Effective Involvement of Agricultural Lands in the Turnover and Development of the Land Reclamation Complex of the Russian Federation. Retrieved from http://www.consultant.ru/document/cons_doc_LAW_384213/mc [in Russian].
9. Order of the Government of the Russian Federation of July 30, 2010 No. 1292-r. On the Concept for the Development of State Monitoring of Agricultural Lands and Lands Used or Provided for Agriculture as part of lands of other categories, and the formation of state information resources about these lands for the period up to 2020. Retrieved from <https://www.garant.ru/products/ipo/prime/doc/2072596/#> [in Russian].
10. Order of the Ministry of Agriculture of April 02, 2018 No. 130. On the commissioning of the Unified Federal Information System on agricultural land and land used or provided for agriculture as part of land of other categories. Retrieved from <https://docs.cntd.ru/document/557281846> [in Russian].
11. Draft Law on Amendments to the Federal Law. On state regulation of ensuring the fertility of agricultural lands. Retrieved from <https://sozd.duma.gov.ru/bill/1232063-7> [in Russian].
12. Karpik, A. P. (2004). *Metodologicheskie i tehnologicheskie osnovy geoinformacionnogo obespechenija territorij [Methodological and technological foundations of geoinformation support of territories]*. Novosibirsk: SSGA Publ., 260 p. [in Russian].
13. Dubrovsky, A. V., Ershov, A. V., Novoselov, Yu. A., & Moskvin, V. N. (2017). Elements of geoinformation support of inventory works. *Vestnik SGUGiT [Vestnik SSUGT]*, 22(4), 78–91 [in Russian].
14. Avrunev, E. I., Kozina, M. V., & Popov, V. K. (2018). Study of land value factors in urbanized territories. *Vestnik SGUGiT [Vestnik SSUGT]*, 23(2), 130–142 [in Russian].
15. Pavlova, V. A., Stepanova, E. A., & Uvarova, E. L. (2021). Designing an information base for the inventory of agricultural lands. *Izvestiya vuzov. Geodeziya i aerofotos"emka [Izvestiya vuzov. Geodesy and Aerophotosurveying]*, 65(2), 200–208 [in Russian].

Received 08.07.2021

© N. A. Studenkova, N. I. Dobrotvorskaya, E. I. Avrunev,
M. V. Kozina, V. P. Pyatkin, 2021