# FORMATION OF RATIONAL AGRICULTURAL LAND USE SYSTEM ON THE BASIS OF SOIL FERTILITY RECREATION THEORY

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The article represents scientific and methodological approach to the problem of rational agricultural land use system formation (RALUS) based on soil fertility recreation theory. The main methods of research: system approach to the analysis of subject matter, theoretical generalization of the problem condition. The basis of approach to RALUS formation is the algorithm of soil fertility estimation, represented by a number of parameters, determining soil fertility, used in technological land use systems, determined by the main regional evolutional and ecological and genetic conditions for formation and recreation of the fertility level of the given soil types. The final estimation of agricultural land fertility level - the backbone of the RALUS economy of the municipality, is based on the calculation of productivity – getting the average values of biomass per unit area at the 8-10 most common cultivated crops and their mixtures (wheat, barley, oats, rye, peas, buckwheat, canola, rump, alfalfa, clover, etc.) in specific soil-climatic zone. As a result of the research, there were formulated the basis and content of the scientific and methodological approach to the estimation of the agricultural land fertility (productivity) level, as well as recommendations for the formation of zonal RALUS on the example of the Novosibirsk region, the use of which makes it possible to more reliably use (according to 3-5 years) the crop potential of the land fund of the economy, district, region.

**Key words:** soils, fertility, crop potential, rational land use, estimation, result, biomass, monitoring.

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