

## STRUCTURAL TRANSFORMATION OF THE ECONOMY OF A MOUNTAINOUS REGION WITH AGRICULTURAL SPECIALIZATION

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**Abstract.** We study the problem of structural transformation of the economy of a mountainous region with agrarian specialization. Technological changes, reflected by production functions of the regional industry of specialization lead to an adaptation of the employment structure and, as a result, the structure of output in the economy of an open region in the medium term. For small mountainous regions with a traditional sectoral economic system structure, the choice of the path of regional development largely depends on the chosen trajectory for stimulating structural changes. We have presented a model of the influence of technological changes in the agricultural production industry on structural changes in the economy of a mountainous agrarian region in the medium term with the classification of technological innovations into three types - land-saving, labor-saving and neutral. The model is a two-factor model of an aggregated production function in a small open regional economy and describes the influence of technological change on the transformation of the sectoral structure. The region in the model is a small open agrarian economy with immobile factors of production. The conditions of equilibrium in statics are considered and analyzed. We show that the introduction of land-saving or neutral concerning the balance of returns from production factors of technological innovations, an increase in agricultural productivity causes a decrease in industry share as labor flows into agriculture. The proposition is substantiated that if land and labor as factors of production are strong complements, labor-saving technological changes in agriculture lead to an outflow of labor from the agricultural sector. It is shown how the proposed model helps to make a strategic choice of the program of technological re-equipment of the industry of specialization of a small region with an open economy.

**Keywords:** mountainous region, structural change, modeling, agriculture, land-saving technologies.

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