

## **On Formulation and Solution of Regional Sustainable Development Problems. Part II**

**N. S. Popov, O. V. Peshcherova, A. A. Chuksin**

*Tambov State Technical University;  
G. R. Derzhavin Tambov State University, Tambov, Russia*

**Keywords:** artificial intelligence; set of purposeful states; principles of forecasting the future; natural-industrial systems; control theory; sustainable development, evolution.

**Abstract:** Amid growing controversy between the vital needs of modern society for natural benefits and the limited ability of the biosphere to reproduce them, the problem of sustainable development of human civilization becomes more and more urgent every year. The choice of effective methods of solution depends on a deep understanding of its content and scientific understanding of the causes of its occurrence. In this paper, the problem of sustainable development is considered from the perspective of long-term management of macrosystems, which include natural-industrial systems (NISs), which are of particular importance for the economic development of Russian regions. The complexity of the NISs as objects of management requires the use of non-conventional approaches to determining the trajectory of their movement towards the goals of sustainable development.

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