

OBJECTIVES AND GOALS OF PRECISION AGRICULTURE FOR NATIONAL TECHNOLOGY INITIATIVE IMPLEMENTATION

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Food supply security and independence, increasing of the domestic product competitiveness at the world markets and decreasing of technological risks in agriculture are among the major challenges facing Russia. To overcome these challenges authors are suggesting to use the methodology and tools of precision agriculture as a scientific and technical platform within National Technology Initiative. The world (developed countries) achievements and the authors' own experience in the application of precision agriculture technologies, as well as in the design theory of the adaptive-landscape agriculture systems have demonstrated the innovative possibilities of the scientific direction in the effective production of crops and raw materials.

The main obstacles for precision agriculture development in Russia and emergent risks are considered. The principal tasks for innovative development of agrarian sector in Russia are the creation of national physico-technical and hardware-software basis sets of precision agriculture as well as the staff assistance of development processes and tool implementation of a «smart agriculture» segment of Food Net National Technology Initiative. The government program and an infrastructure will be necessary in order to ensure continuous training of the experts in the area.

Key words: national technological initiative, precision agriculture, big challenges, food supply security, development risks.