

MSC: 34A37, 49K15, 91B32, 92D25, 93C95

DOI: 10.21538/0134-4889-2016-22-2-38-46

### EFFICIENCY OPTIMIZATION FOR THE CYCLIC USE OF A RENEWABLE RESOURCE

Received March 8, 2016

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We consider a periodic impulse harvesting of a renewable resource distributed in a domain of the arithmetic space and obeying the logistic growth law. We prove that for a given harvesting effort there exists an appropriate stationary distribution of the effort in the resource domain providing the maximum efficiency of the harvesting at infinite horizon, where the efficiency is the ratio of the harvesting profit to the total effort applied.

Keywords: renewable resource, logistic law, harvesting effort, cyclic process, optimal exploitation.

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Cite this article as:

A. O. Belyakov, A. A. Davydov. Efficiency optimization for the cyclic use of a renewable resource, *Trudy Inst. Mat. Mekh. UrO RAN*, 2016, vol. 22, no. 2, pp. 38–46.