USE OF QUEUING SYSTEMS FOR OPTIMIZATION OF MAINTENANCE OF COMBINES

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Abstract. *The paper presents the analysis of the total cost of operation of combine harvesters when using the optimal number of service units defined using the Queuing system. Minimum total costs of the facilities group combines possible when using the optimal number of service units is determined using a Queuing system.*

Total cost is slightly dependent on the year of operation of the combines and summer download. These expenses decreased accordingly in the range from 13.63% to 3,12%. Greater impact on the value of the cost of implementing them the number of harvesters in the group.

The formation noptimal the number of service units gives a loss of funds from 3187 until 1881 hryvnia (1 and 7 years of operation). Producers at the period of harvest is to attract additional professionals services required for the optimal number of links that will give you the opportunity to offset the additional losses and reduce costs, including at the expense of grain quality for compliance with the terms of the harvest.

Key words: ***system of mass service, optimization, costs, harvesters***