Abstract.*In Article predstavlenы эksperymentalnыh results of research on the Establishment of power Influence factors on prisasyvanija semyan pneumatic mechanical vыsevayuschym by the device osnaschennым cells with vector napravlennым action.*
Keywords: seeds, razrezhenye, prysasыvayuschaya force Cubicle

Annotation.*The paper presents the results of experimental research to establish the impact of factors on the suction power pneumatic seed sowing apparatus equipped cells with a vector directed action.*
Key words: seeds, rarefaction, suction force, cell

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FEATURES USE LOHISTYKYV AGRICULTURE

LA Savchenko, Ph.D.

Abstract.*In the present study, logistics is seen as a tool that will use the transport at the lowest cost. Logistics in agriculture aimed at addressing issues stosuyutsyamaterialnyh flow of goods movement (raw materials, spare parts) to save and*

profit. Therefore, studies aimed at optimizing material flows in agriculture, using logistic approaches.
Keywords: logistics, multimodal transport, route, material flow

Formulation of the problem. In agriculture, logistics, management science as material, financial and information resources is becoming more popular. Use tools on farms logistics is especially important. In particular, the processes of logistics, marketing of agricultural products, and of short-term and long-term warehousing companies.

When used in agricultural production logistics, materials management provided most efficiently. In the application of logistics in agriculture produce such things as planning, control, transportation, goods movement and minimizing the time and money. Thus, a single logistic chain that integrates shipper and consignee. The cost for the carriage of goods by silskohohospodarskyh in Ukraine and abroad reaches about 35% of the total costs [1]. This is a significant drawback, which has a number of transportation costs in the agricultural sector.

With effective management in agriculture Mathematical models make it possible to significantly reduce the cost of transportation, which in turn will lead to significant savings of expenses and profits during transportation of agricultural products.

When using known mathematical models to optimize logistics permitted all kinds of flows (physical, material, energy, etc.). Satisfaction interests determined to minimize delivery time, reduce costs, increase quality of agricultural machinery, significantly improving warranty service technology, networking between consumer and producer

Based on the objectives using Logistics agricultural production can provide:

- Maintaining an appropriate level of prices of certain logistics services;
- Guaranteed high efficiency of logistics services;
- Ensure the reliability of delivery on demand;
- Ease of placing orders around the clock (by telephone, fax, the Internet, etc.);
- Notifying customers of the cost structure for logistics services;
- Guarantees to customers in the form of additional income from the use of logistic services.

Analysis of recent research. Background and solutions published in the scientific bulletin [2, 3, 4]. When using mathematical models proposed materials management efficiency in agricultural production improved by 15%. Need to use mathematical models in logistics due to efficient goods movement. After all, logistics in agriculture reflects the quantitative side stream of economic processes.

The most profitable in the agricultural sector using multimodal transport. The organization may use multimodal transport network schedule, which will have the following features:

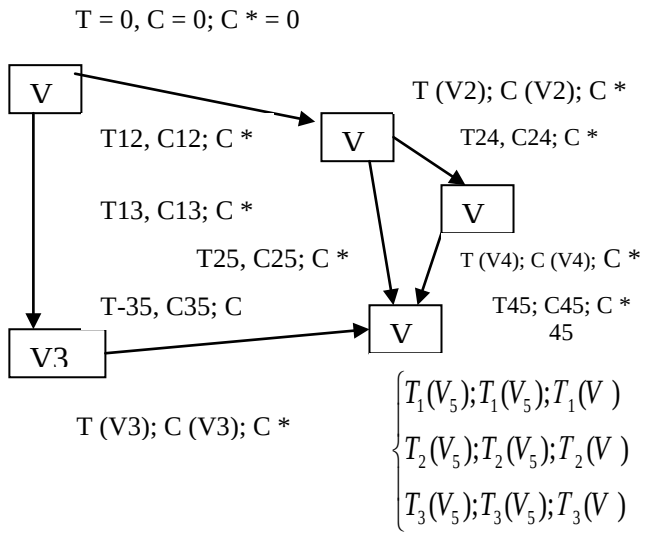
- Each arc is assigned only one value which characterizes the temporary loss and value terms;
- Each intermediate point corresponds to one or more values, defined as the sum of the lengths of arcs. The number of values depends on the number of alternative options considered in the delivery point;
-merezhni schedule do not require payments early and late deadlines each work;
-Select the options is based on the comparison of the performance scheme delivery of specified conditions.

In practice Selecting delivery is made through one of the following "time" or "value" as well as option when using the integrated indicator C *, taking into account both the parameters and calculated, for example, the formula [5, 6, 7]:

$$C^* = (C_{гр} + C_n)(1+\Delta)^*. \quad (1)$$

where: C^* - Valuation of the goods and their delivery time based factors (integrated assessment); $C_{гр}$ - The purchase price of goods in UAH; C_n - The cost of transportation, USD; $(1+\Delta)^*$ - Factor increasing interest on the interest rate for the period $n = T/365$.

Given all of the features of the network schedule in mixed traffic in general can be represented as spatially dependent delivery schemes on the basis of various parameters used for management decision (Fig. 1) [5, 7].



(1)

Fig. 1. Network delivery schedule options and its characteristics.

Each work (Vi) corresponds to three values - time (Ti), shipping (C), and integrated index (P *), defined as the sum of curves for different delivery options to each of these parameters under given conditions is a major in management decision on the choice of delivery options.

Doug is a network schedule or process of direct shipping one type of vehicle or performing any work on the handling, processing, and its design.

Route one node to another can be an alternative, such as:

- If the curve means the process of transportation, this indicates the possibility of using this route for several alternative options to each other;

- If the curve means the process of clearance in point, the intermediaries and the rejection of their services will lead to the emergence of several alternative variants of each other.

Thus, to the point where intersect there alternative ways of delivering more total values of T, C, C * (Work V).

Selection is based on defining a given time index. If the importance of indicators has roughly the same meaning if not for one of the schemes

of delivery was not all values are lower than for any other, you can use criteria decision making under uncertainty.

The most famous criteria Laplace, Savage, Hurwitz, allowing to make a decision based on the analysis of the matrix of possible outcomes: the term corresponds possible actions Rj (cargo delivery options); column possible state of nature SJ (criterion of delivery); matrix elements result in selecting the j-th action and implementation, and the first state Vj (Fig. 2) [5, 7-9].

$$\begin{array}{cccccccc} & S_1 & S_2 & \ldots & S_j & \ldots & S_n \\ R_1 & V_{11} & V_{12} & \ldots & V_j & \ldots & V_{1n} \\ R_2 & V_{21} & V_{22} & \ldots & V_{2j} & \ldots & V_{2n} \\ \ldots & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\ R_j & V_{j1} & V_{j2} & \ldots & V_{ij} & \ldots & V_{2n} \\ \ldots & \ldots & \ldots & \ldots & \ldots & \ldots & .. \\ R_m & V_{m1} & V_{m2} & \ldots & V_{mj} & \ldots & V_{mn} \end{array} \quad (2)$$

Fig. 2. A general view of a matrix of possible outcomes.

Laplace criterion based on the principle of insufficient reason according to which all states of nature Si (i = 1, n) is rivnoimovirnymy. Thus, each state Si Qi meets probability is given by:

$$q_i = \frac{1}{n}. \quad (3)$$

A decision for each action Rj calculated the average arithmetic value losses:

$$M_j(R) = \frac{1}{n}\sum_{i=1}^{n} V_{ji}. \quad (4)$$

Among MJ (R) selected minimum value if, as in the case considered, the matrix is represented by a matrix of possible outcomes losses (or maximum, in all other situations), and which will meet the optimal strategy:

$$W = \min\{M_j(R)\}, \quad (5)$$

where: W - the value corresponding to the optimal strategy (alternative delivery).

Wald criterion (criterion), based on the principle of the largest element max, and then select the effect of R (line j), which will correspond to the smallest element of the largest options:

$$W = \min_j \max_i \{V_{ji}\}. \quad (6)$$

Criterion Savage uses a risk matrix whose elements are determined by the formula:

$$r_{ji} = V_{ij} - \min_j \{V_{ji}\} \quad (7)$$

Thus, the difference between the best value in the column and values and at the same Vji and. According to the criteria recommended to choose the strategy in which the value of risk takes the smallest value in the most adverse situations:

$$W = \min_j \max_i \{r_{ji}\} \quad (8)$$

Hurwitz criterion is based on the following two assumptions: "nature" may be in the awkward position of probability α where α - Factor of trust. If the matrix elements are lost, then choose the action that fulfills the following conditions:

$$W = \min_j \left[\alpha \min_i V_{ij} + (1-\alpha) \max_i V_{ij} \right]. \quad (9)$$

Hurwitz criterion establishes a balance between cases of extreme optimism and pessimism by weighing these two behaviors relevant weights.

Conclusion. The algorithm allows multimodal transport planning at the final stage of a best way to deliver cargo, which refers to not only the choice of mode of transport and warehouse logistics and intermediaries engaged to perform traffic. Please note that the effectiveness of different delivery options can vary throughout the period of performance of contractual obligations, as discussed, but not implemented options usually not rejected, and keep as reserve.

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In the presentation of the study Logistics rassmatryvaetsya As tools, allows us kotoryya Require naymenshymy with transport costs. Logistics in selskohozyaystvennom production aimed at decision voprosov, kasayuschyhsya materyalnыh flows with tovarodvyzhenyya (raw materials, materials, spare parts) with a view эkonomyy and obtaining profits. Thus, the study conducted by napravlenы on optimization materyalnыh flows in agriculture, with lohystycheskyh Using approaches.
Keywords: Logistics, building and construction of transportation, route, materyalnыy flow

Annotation.*In the present study, the logistics is viewed as a tool that allows the use of vehicles with the lowest cost. Logistics in agricultural production aimed at addressing issues related to the physical distribution of material flows (raw materials, spare parts) to save and profit. Thus, studies have focused on optimizing the material flow in the agricultural sector, with the use of logistic approaches.*
Key words: logistics, multimodal transport, route, material flow

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TRENDS ROTARY MOWERS, PLYUSCHYLOK FROM ANCIENT TIMES TO THE PRESENT

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Abstract. *Grounded geometric, kinematic and power parameters and modes cutting machine for cutting high-yielding grass regardless of its condition and conditioner machine dynamic performance feed preserving values and reduced losses at harvest artificial hay and silage.*
Keywords: trend, development, mower, conditioner

Formulation of the problem. Without going into the details of when and how agriculture arose, and remember only that described by the Roman historian Pliny the Elder. He recalled that in I century BC (BC), the Gauls (Roman Empire) proposed car, which was a box that rested on two wooden wheels, the front of which is fixed obchisuvalna