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THE IMPORTANCE OF SAFE FINANCIAL REPORTING WITH THE AIM OF REALISTIC MANAGEMENT OF AGRICULTURAL MACHINERY, EXAMPLE OF THE REPUBLIC OF SERBIA

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Abstract: Reliable financial reporting depends on numerous factors that can be applied in the real-world management processes of many legal entities. In this paper, the authors emphasise the importance of secure reporting for decision-makers in relation to the actual use of agricultural machinery, both for individual farms and for medium-sized companies operating mainly in agriculture. The paper analyses the following factors: the value of agricultural machinery, fuel consumption and the maintenance of agricultural machinery in the two forms of agricultural production organisation mentioned. The main conclusion is that medium-sized agricultural enterprises use more expensive agricultural machinery and have lower fuel consumption and maintenance costs for agricultural machinery. The importance of reliable reporting was substantiated by applying regression analysis after conducting 131 surveys.

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The Authors demonstrated that the value of agricultural machinery to individual farms can be predicted by actual fuel consumption and maintenance costs.

***Key words**: financial reporting, agricultural machinery, business security*

INTRODUCTION

Safe and realistic business decision-making by decision-makers largely depends on established controls in business [1-5].

The establishment of realistic business decision-making in agricultural enterprises, but also in general, largely depends on the correct evaluation of all parts in them [6-9].

Real reporting to business owners is the essence of making valid management decisions at all levels of observation [10-12].

The basis of correct, safe and realistic business decision-making are financial reports on all parts of legal entities, which is of great importance especially for agriculture and companies that operate mainly in it, and the essence is decision-making while reducing business risk [13-15].

MATERIALS AND METHODS

The research was conducted in the period from November 1 to November 30, 2023 on the territory of the Republic of Serbia. 110 medium-sized agricultural enterprises and 121 agricultural holdings were surveyed, i.e. a total of 131 participants were included in the survey. Everyone was guaranteed complete anonymity and a statement was made that after the survey, the data obtained will be used exclusively for scientific purposes and the writing of this paper.

The value of the mechanization was obtained on the basis of the statement of the owner of the farm on the real value of the mechanization, that is, on the basis of the business books in which it is kept from the last final account of the company.

In addition, for the factors of fuel consumption and maintenance of agricultural machinery, the evaluation of respondents was used in the interval from 1 to 5, so that with 1 it was possible for the respondents to declare that there is a weak influence of the factor on business, that is, use, and with 5 as a strong influence.

The goal of the research was to examine whether there is a difference between individual farms and medium-sized agricultural enterprises in relation to: the value of agricultural machinery in business books, the owner's assessment of fuel consumption and maintenance of machinery in relation to the observed individual agricultural farms and medium-sized agricultural enterprises.

The t test of independent samples was used to examine the differences between individual farms and medium-sized agricultural enterprises. In the research, multiple linear regressions where applied for agricultural farms to examine the mentioned three factors in relation to the possibility of predicting the value of mechanization.

The data obtained from the survey were statistically processed using the software IBM SPSS (Statistical Package of Social Science) version 25 and the threshold value where 0.05.

RESEARCH RESULTS AND DISCUSSIONS

Safe financial reporting of individual producers as well as medium-sized agricultural enterprises in this study is shown based on the analysis of three factors, namely: the value of agricultural mechanization, fuel consumption and its maintenance, which can be seen in Table 1.

Reinforcement of the presentation from Table 1 is done below by predicting the value of mechanization at individual farms and the results themselves are given in Tab.2.

Table 1. Presentation of factors in relation to the form of use of agricultural machinery from the point of view of significance

Analyzed factors	Name of machinery	Form of use of machinery		t	p
		Individual farms	Medium-sized agricultural enterprises		
		Middle value			
The value of mechanization	Tractor	3906.50 ± 2548.44	4924.32 ± 3058.77	-10.553	<0.0005*
	Small machinery	369 ± 227.47	539 ± 238.66	-18.318	<0.0005*
Fuel consumption	Tractor	6.61 ± 0.69	5.20 ± 1.64	9.358	<0.0005*
	Small machinery	4.49 ± 0.00	3.12 ± 0.00	16.099	<0.0005*
Maintenance of machinery	Tractor	6.22 ± 1.13	3.40 ± 1.08	23.014	<0.0005*
	Small machinery	4.59 ± 0.43	1.99 ± 0.00	38.478	<0.0005*

*Statistical level of significance at the level of 0.05

Table 2. Prediction of the value of mechanization at individual farms

	Beta	t	p
A constant	-	-4.779	<0.0005*
Fuel consumption	0.300	2.942	0.028*
Maintenance of machinery	0.180	1.781	0.074

*Statistical level of significance at the level of 0.05

Based on the results shown in Table 1, it can be seen that for all analyzed factors, that is, for all the use of machinery, there is a statistically significant difference, as well as that medium-sized agricultural enterprises have more expensive agricultural machinery in use compared to individual farms, as well as that they have lower consumption fuel and lower maintenance costs of agricultural machinery.

The regression analysis yielded a coefficient of determination of 0.375, on the basis of which it can be concluded that the obtained model describes 37.5% of the total variance.

The value of mechanization can be predicted based on fuel consumption and maintenance of mechanization since the model is statistically significant ($F=161.228$, $p<0.0005$), which can be seen in the presentation of the obtained research results in Table 2.

CONCLUSION

The results obtained in the study suggest that by analyzing the value of agricultural mechanization, fuel consumption and maintenance costs, it can be concluded that there is a statistically significant difference in the actual use of individual farms as well as medium-sized agricultural enterprises.

Second, medium-sized agricultural enterprises own more expensive agricultural machinery compared to individual farms.

Third, medium-sized agricultural enterprises achieve lower fuel consumption as well as having lower maintenance costs for all agricultural machinery.

In the end, it can be concluded that the value of agricultural machinery can be predicted on the basis of two factors, i.e. on the basis of fuel consumption and maintenance of agricultural machinery.

CONFLICT OF INTEREST

None is declared.

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ZNAČAJ SIGURNOG FINANSIJSKOG IZVEŠTAVANJA SA CILJEM REALNOG UPRAVLJANJA POLJOPRIVREDNOM MEHANIZACIJOM, -PRIMER REPUBLIKE SRBIJE

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Abstract: Sigurno finansijsko izveštavanje zavisi od mnogobrojnih faktora koji se mogu primeniti u procesima realnog upravljanja brojnih pravnih lica. U ovom radu autori ističu važnost sigurnog izveštavanja nosioca odlučivanja u vezi realnog korišćenja poljoprivredne mehanizacije i to kako kod individulanih gazdinstava tako i kod srednjih preduzeća koja se pretežno bave poljoprivredom.

U radu su analizirani faktori: vrednost poljoprivredne mehanizacije, potrošnja goriva i održavanje poljoprivredne mehanizacije, u pomenuta dva oblika organizovanja poljoprivredne proizvodnje.

Osnovni zaključak je da srednja poljoprivredna preduzeća koriste skuplju poljoprivrednu mehanizaciju, kao i da imaju niže vrednosti potrošnje goriva i niže troškove održavanja poljoprivredne mehanizacije.

Značaj sigurnog izveštavanja osnažena su nakon urađene 131 ankete i to putem primene regresione analize.

Autori su dokazali da se kod individualnih gazdinstava može predvideti vrednost poljoprivredne mehanizacije putem realne potrošnje goriva i troškova održavanja iste.

Ključne reči: *finansijsko izveštavanje, poljoprivredna mehanizacija, bezbedno upravljanje*

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