Univerzitet u Beogradu
Poljoprivredni fakultet
Institut za poljoprivrednu tehniku
Naučni časopis
POLJOPRIVREDNA TEHNIKA
Godina L
Broj 2., 2025.
Strane: 1 – 6

University of Belgrade
Faculty of Agriculture
Institute of Agricultural Engineering
Scientific Journal
AGRICULTURAL ENGINEERING
Year L
No. 2., 2025.
pp. 1 - 6

Review article
Pregledni rad
DOI:10.5937/POLJTEH2502001J

PROCUREMENT OF AGRICULTURAL MECHANISM THROUGH IPARD MEASURE-1, AND APPLICATION OF MARKETING IN THE MEANING OF EXPLANATING THE PROFITABILITY OF INVESTMENTS BY THE ADVISORY SERVICE

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Abstract. The study showed the importance of marketing in terms of making a business decision on the purchase of agricultural machinery that is not older than five years for the needs of the agricultural economy.
In this study, the authors determined that there is a strong influence between the three influencing factors on the conditions of purchasing agricultural machinery (the existence of the possibility of refunds in the amount of 60-70%), and in relation to cases where marketing was used by the advisory service for agriculture, that is, when there was no direct marketing activity regarding the possibility of using IPARD-1 for the purpose of purchasing agricultural machinery.
In addition, we found that T-values differ significantly in cases of not using marketing and its value ranges from 15,253 to 25,455, but in the case of applying marketing in relation to the purchase of new agricultural machinery, that interval would be even higher, that is, the significance is even higher, larger and ranges from 17,331 to 31,456.

Key words: *IPARD-1, agricultural machinery, marketing, refund.*

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INTRODUCTION

Making valid management decisions of individual agricultural producers is of great importance for the optimal and rational spending of funds that are used in accordance with the same decisions [1-5], especially regarding the purchase of large items in the organization of agriculture, such as the purchase of agricultural machinery and mechanization.

Such activities are accompanied by other segments of influence on decision-making, such as the application of advertising, propaganda, emphasizing the advantages of financing through the use of various funds in agriculture [6-11].

In addition, upgrading in agriculture can also mean making business decisions in accordance with rational decisions regarding the purchase of agricultural machinery, where very often the agricultural advisory service can play a positive role in the case of the purchase of necessary inputs related to the organization of agricultural production [12-16].

MATERIALS AND METHODS

For the purposes of this study, the authors surveyed 55 individual producers who did not apply marketing when purchasing agricultural machinery and 89 of those who applied marketing, meaning a total of 144 such participants in the Republic of Serbia were surveyed. The research period was 01.09. to 30.09. 2024.

The factors of the return of funds through the IPARD-1 measure to encourage the purchase of agricultural machinery were analyzed, as follows: the first case, which implied a 60% return of money from the total eligible investment costs, 65% of the investment if it is a mountainous area, as well as 70% in the case when the investment was made by a young farmer.

After that, the authors performed statistical data processing using the IBM SPSS (Statistical Package of Social Science) software version 25, which was strengthened by applying the t test.

The level of 0.05 was used as the threshold value of significance.

RESEARCH RESULTS AND DISCUSSIONS

The aim of the research was to reveal possible differences in relation to the procurement of agricultural machinery using the IPARDA-1 measures and the behavior of individual farms in this regard.

The observation was carried out in conditions when there was no application of marketing, that is, in another case when there was application of marketing in relation to the procurement of agricultural machinery.

In this way, it would be possible to clarify the importance of the procurement in relation to the existence of the marketing advisory agricultural service, which would provide additional explanations about the possibility of refunding funds. All of this was strengthened based on statistical processing using a t-test to reveal the significance of relationships on this issue.

Below is a presentation of Tables 1-2, which depict the results obtained in relation to the cases of non-application of marketing and application of marketing in order to promote the IPARD-1 measure based on the procurement of agricultural machinery.

Table 1. Assessment of the evaluation of the procurement of tractors through IPARD-1, without the use of marketing in relation to agricultural holdings in the R. of Serbia

IPARD-1 incentive factors		Mean	Standard deviation	T-value	p
60% of the total eligible investment costs	Without marketing (N=55)	2.66	0.69	15.254	<0.0005*
65% of the investment if it is a mountainous area	Without marketing (N=55)	4.43	0.70	15.622	<0.0005*
70% in the case when the investment was made by a young farmer	Without marketing (N=55)	4.65	0.71	25.455	<0.0005*

Table 2. Assessment of the evaluation of the purchase of tractors through IPARD-1, with the application of marketing advisory services in relation to agricultural holdings in the R. of Serbia

IPARD-1 incentive factors		Mean	Standard deviation	T-value	p
60% of the total eligible investment costs	With the application of marketing (N=89)	2.81	0.69	17.331	<0.0005*
65% of the investment if it is a mountainous area	With the application of marketing (N=89)	3.42	0.68	19.245	<0.0005*
70% in the case when the investment was made by a young farmer	With the application of marketing (N=89)	5.15	0.66	31.456	<0.0005*

Based on the presented results (Table 1), it can be seen that there is a significant difference in terms of the analyzed influencing factors on the return of funds through the application of IPARD-1 funds. That difference increases as percentages of refunds related to cases where no marketing is applied by the agricultural extension service increase.

Similar behavior is also visible after displaying Table 2, that is, it can be seen that there is a significant difference in terms of the analyzed factors influencing the return of funds through the application of IPARD-1 funds.

At the same time, the difference increases as the percentages of refunds of the analyzed factors, which refer to the cases when marketing is applied by the advisory agricultural service, increase. However, in the case of marketing applications, higher values of the T-test are seen, which indicates a strong dependence of the return of money through the mentioned fund in relation to the form of the analyzed return factor.

CONCLUSION

The obtained results of the study indicate that there is a great importance of applying marketing in relation to making an important business decision on the purchase of agricultural machinery that is not older than five years for the needs of the agricultural economy.

Apart from this basic conclusion, the following conclusion can be highlighted, that there is a strong influence between the three analyzed influencing factors on the conditions of procurement of agricultural machinery, in relation to cases where marketing was used by the advisory service for agriculture, i.e. in cases where there was no direct marketing activity regarding the possibility of using IPARD-1 in order to manufacture agricultural machinery.

Thirdly, the results indicate that the obtained T-values differ significantly in cases of no marketing (the value ranged from 15,253 to 25,455), but in the case of applying marketing in relation to the purchase of agricultural machinery, that interval would be even higher (within an interval of 17,331 to 31,456.) which points to the existence of high significance between the analyzed factors and the application of marketing that promotes the purchase of agricultural machinery through IPARD-1 measures that are foreseen in the business of legal entities in the Republic of Serbia.

CONFLICT OF INTEREST

None is declared.

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NABAVKA POLJOPRIVREDNE MEHANIZACIJE PUTEM IPARD-1 I PRIMENA MARKETINGA U CILJU OBJAŠNJENJA PROFITABILNOSTI ULAGANJA PUTEM SAVETODAVNE SLUŽBE

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Abstrakt: Studija je pokazala važnost marketinga u pogledu donošenja poslovne odluke o nabavki poljoprivredne mehanizacije koja nije starija od pet godina za potrebe poljoprivrednog gazdinstva.

U ovoj studiji autori su utvrdili da postoji snažan uticaj kako između tri faktora uticaja na uslove nabavke poljoprivredne mehanizacije (postojanje mogućnosti povraćaja sredstava u iznosu od 60-70%), tako i u odnosu na slučajeve da se koristio marketing od strane savetodavne službe za poljoprivredu, odnosno kada nije postojala direktna marketinška aktivnost po pitanju mogućnosti korišćenja IPARD-1, u cilju nabavke poljoprivredne mehanizacije.

Pored toga, ustanovili smo da se (T-vrednost) značajno razlikuju u slučajevima ne korišćenja marketinga i njena vrednost se kreće od 15.253 do 25.455, da bi u slučaju primene marketinga u odnosu na nabavku nove poljoprivredne mehanizacije taj interval bio još viši, odnosno značajnost je još veća i kreće se od 17.331 do 31.456.

Ključne reči: *IPARD-1, poljoprivredna mehanizacija, marketing, povrat novca.*

Prijavljen/Registered:
***Submitted*: 29.01.2025.**
Ispravljen:
***Revised*: 10.03.2025.**
Prihvaćen:
***Accepted*: 01.04.2025.**