

AGE OF FARM OWNERS AND THEIR OPINIONS ON A NEED AND FORMS OF TRANSPORTATION SERVICES

Summary

This paper presents results of research on the need for transportation services and their forms. Based on a conducted survey it might be stated that 59.04% of farmers see a need for transportation service and the share in answers increases along with an increase in age of the respondents (50% for group A and 68.18% for group C). 46.94% of respondents point to time savings as the most common reason for such service demand. The average of service users is 48.80%, but this number increases along with an increase in farmers' age. The most frequent justification for the use of transportation services is time efficiency (increase in number of users along with an increase in age) and cost efficiency (there is however an opposite correlation). 43.98% of farmers are service providers and their main reason is additional income, with a decreasing tendency along with an increase in age. Combination of supply services and sales with transportation services performed by companies who supply and purchase products is the most frequently quoted service model, with the average of 36.73% and a decrease in interest in such ventures along with an increase in farmers' age is visible. Another model is neighbour-to-neighbour services, with an average of 30.73% and a significant increase along with an increase in farmers' age.

Key words: transportation means, transportation services, service, owner's age

WIEK WŁAŚCICIELA GOSPODARSTWA ROLNICZEGO A OPINIE O POTRZEBIE I FORMIE OBSŁUGI TRANSPORTOWEJ

Streszczenie

Przedstawiono wyniki badań dotyczących potrzeby usług transportowych na terenach wiejskich i ich modelu. Na podstawie przeprowadzonych badań można stwierdzić, że 59,04% rolników widzi potrzebę usług transportowych i w miarę wzrostu wieku właściciela liczba odpowiedzi rośnie (grupa A 50% i grupa C 68,18%). Oszczędność czasu (46,94% odpowiedzi) to najczęstszy powód zapotrzebowania na usługi. Przy średniej 48,80% korzystających z usług w miarę wzrostu wieku rolnika liczba korzystających rośnie. Podstawowym powodem korzystania z usług jest oszczędność czasu (wzrost korzystających wraz ze wzrostem wieku), drugi powód to taki, że usługi są tańsze (tendencja odwrotna). 43,98% rolników jest usługodawcami, a główny powód to dodatkowy zarobek – widoczna tendencja malejąca w miarę wzrostu wieku rolnika. Łączenie zaopatrzenia i sprzedaży produktów z transportem wykonywanym przez firmy zaopatrujące w środki i zakupujące produkty, to najczęściej wymieniany model obsługi (36,73% odpowiedzi) ma coraz mniejsze zainteresowanie w miarę wzrostu wieku rolnika. Drugi z kolei model to usługi sąsiedzkie (30,73% odpowiedzi), na który występuje znaczny wzrost zainteresowania w miarę wzrostu wieku rolnika.

Słowa kluczowe: środki transportowe, obsługa transportowa, usługi, wiek właściciela gospodarstwa

1. Introduction

Modern production technologies require a proper selection of machines, which in turns increases the efficiency of farming operation [10].

Transportation, as one of the core activities performed on a farm, has a significant share in a machine park and a correct selection of transportation means, both in regard to quality and quantity, is reflected directly in the efficiency of transportation work, as well as in expenditures incurred by a farm [4, 5, 7]. High cost of agricultural transportation depends, among others, on the conditions in which transportation means operate, but also on the type of transportation means above all [1, 3].

Modernisation of production technology involves purchase of new equipment, which means long-term capital investments. For that matter, machine services are becoming increasingly important as an alternative to own purchase of equipment. According to a number of authors, both using and offering such services by a farm contributes to an increase in farming efficiency and improving its financial

conditions. Within the scope of services used, transportation services constitute a considerable share. They place right after IT and consulting services as the top technical service [8, 9].

Modern technologies require a high level of awareness and expertise from a farm owner, which are determined by his age to a large degree. Research shows that technical advancements are more often implemented by younger farmers [2].

2. Scope and aim of work

Due to changes occurring in agriculture, which also concern agricultural transportation, the present work aimed at examining opinions of farm owners on the following subjects:

- need for transportation services in agriculture,
- a potential model – form of transportation services.

The subject of research covered farms producing agricultural goods in the Małopolska region. Research included 166 farms. The analysis was performed within the context

of the age of farm owners. Therefore, the examined farms were divided according to their owners' age into the following groups:

- A – up to 40 years of age – 26 farms – 15.66%,
- B – 41 – 55 years of age – 118 farms – 71.08%,
- C – over 55 years of age – 22 farms – 13.26%.

3. Methods

Research was carried out based on a dedicated survey and research subjects were selected deliberately – declaration of running agricultural production on the same level or, which occurred quite often, an increase in production. Research concerned transportation means in possession and usage of such means, as well as the respondents' opinion on the needs and forms of transportation services. The respondent farm owners were asked questions concerning the form and scope of service use and a vision of transportation service model. A detailed methodology has been presented in a previous work [6].

4. Results

An analysis of a basic production workshop, that is farm square area and field sizes, allowed for a statement that there is a considerable diversification in relation to both aspects. The difference between the A group (youngest – largest farms) and C group (oldest – smallest farms) is 57.08%. Therefore, the largest distances in internal transportation

occur in A group, while the smallest in C group. Similar relations occur for external transportation. The most advantageous equipment occurs in group A, however there is little difference between these groups. A detailed characteristics of the studied subjects is shown in a previous work [6].

Table 1 shows a percentage share of responses to a question whether transportation services for agriculture are needed and why so.

Table 1. Percent of answers whether transportation services are needed and why so

Tab. 1. Procent odpowiedzi na pytanie czy usługi transportowe są potrzebne i dlaczego

Description	Owner's age – years			
	average	up to 40	40-55	over 55
Yes	59.04	50.00	61.86	68.18
lack of financial means	27.55	15.38	28.77	33.33
time savings	46.94	61.54	32.88	33.33
cheaper	25.51	23.08	38.35	33.34
No	40.96	50.00	38.14	31.82
in possession of own means	100.00	100.00	100.00	100.00

Source: own work / Źródło: opracowanie własne

With the average of 59.04 yeses, the number of positive answers increases along with an increase in age of farm owners (group A 50% and group C 68.18%). It is probably connected to the level of equipment in transportation means presented above. Time savings were indicated in 46.94% of answers as the most frequent reason for demand for transportation services (which decreases significantly along with an increase in the age of farm owner). If the answer is “no”, such services are unnecessary. 100% of respondents indicate that they are in possession of sufficient own means.

Table 2, in turn, presents 5 answers to the question: Do you use transportation services and why so?

Table 2. Percent of responses to the question: Do you use transportation services and why so?

Tab. 2. Procent odpowiedzi na pytanie czy korzysta z usług i dlaczego

Description	Owner's age – years			
	average	up to 40	40-55	over 55
Yes	48.80	50.00	48.31	54.55
lack of financial means	28.40	23.08	31.58	33.33
time savings	35.80	30.77	36.84	41.67
cheaper	35.80	46.15	31.58	25.00
No	51.20	50.00	51.69	45.45
in possession of own means	57.64	61.54	60.66	60.00
They are expensive	42.36	38.46	39.34	40.00

Source: own work / Źródło: opracowanie własne

The average of service users is 48.80%, but this number increases along with the increase in farmers age. The most frequent justification for the use of transportation services is time efficiency (increase in number of users along with an increase in age) and cost efficiency (there is, however, an opposite correlation to the previous one). Most of respondents who do not use such services indicated that they are in possession of sufficient own means, followed by excessive cost.

The next question asked to farmers was: Do you provide services and why? As stated in Table 3, 43.98% of farmers provide services and their main reason for that is additional income (71.24% answers). It must be mentioned that the percentage of the above mentioned answers decreases along with an increase in farmers' age. The share of the second reason, work done to discharge one's debt, increases along with increase in age. The basic reason for not providing services given by farmers is the lack of demand for such services. With the average of 38.71%, the number of answers is highest for the youngest age group and only slightly smaller for the oldest age group. This may indicate that if demand for such services appears, they will potentially become service providers.

Table 3. Percent of responses to the question: Do you provide transportation services and why so?

Tab. 3. Procent odpowiedzi na pytanie czy daje usługi i dlaczego

Description	Owner's age – years			
	Average	up to 40	40-55	over 55
Yes	43.98	61.54	44.92	22.73
extra income	71.24	100.00	69.81	60.00
debt discharge	28.76	0.00	30.19	40.00
No	56.02	38.46	55.08	77.27
Lack of financial means	30.10	30.00	30.77	29.41
Lack of time	25.81	0.00	35.38	5.88
Uneconomic	5.38	0.00	0.00	0.00
Lack of demand	38.71	70.00	33.85	64.71

Source: own work / Źródło: opracowanie własne

The next question asked to farmers concerned their perception of a future model of transportation services for agriculture. The largest share in answers belongs to a model in which transportation services are provided by companies who supply farmers with production means and purchase

agricultural produce. This means combining supply services and sales with transportation services performed by these companies. With the average of 36.73%, this model attracts less respondents along with an increase in their age. This results from a need to relieve a farm from transportation works perceived by the youngest farmers, which may be executed through contracts involving both production and sales. Another model is neighbour-to-neighbour services, with an average of 30.73% and a significant increase along with an increase in farmers' age.

Table 4. Percent of answers to a question concerning the preferred model of services

Tab. 4. Procent odpowiedzi na pytanie preferowany model usług

Description	Owner's age – years			
	Average	up to 40	40-55	over 55
Specialist transportation companies	13.87	23.08	11.02	18.18
Farmers' associations	10.84	3.85	12.71	9.09
Neighbour-to-neighbour services	30.73	15.38	27.97	36.36
Purchase of goods with transportation	6.02	7.69	13.56	13.64
Sale of produce with collection	1.81	3.85	1.69	0.00
Purchase and sale with transportation	36.73	46.15	33.05	22.73
Total	100.00	100.00	100.00	100.00

Source: own work / Źródło: opracowanie własne

5. Summary and conclusions

Based on conducted research it may be claimed that the highest burden in transportation occurs for the youngest farmers group. Largest shipment coincided with produce sales and largest shipping distances.

59.04% of farmers declare a demand for transportation services and the number of positive answers increases along with an increase in age of farm owners (group A 50% and group C 68.18%). It is probably connected to the level of equipment in transportation means presented above. 46.94% of respondents point to time savings as the most common reason for such service demand. The average of service users is 48.80%, but this number increases along with an increase in farmers' age. The most frequent justifi-

cation for the use of transportation services is time efficiency (increase in number of users along with an increase in age) and cost efficiency (there is however an opposite correlation). 43.98% of farmers are service providers and the main reason lies in additional income – 71.24% of answers, with a decreasing tendency along with an increase in age.

Combination of supply services and sales with transportation services performed by companies who supply and purchase products is the most frequently quoted service model, with the average of 36.73% and a decrease in interest in such ventures along with an increase in farmers' age is visible. Another model is neighbour-to-neighbour services, with an average of 30.73% and a significant increase along with an increase in farmers' age.

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