

## **REGISTRATION OF AGRICULTURAL TRAILERS IN POLAND IN THE YEARS 2012-2016**

### *Summary*

*The results of analyses of registration of new agricultural trailers in Poland in the years 2012-2016 were presented. The Polish agricultural trailer market is dominated by domestic manufacturers. The largest of them are: Pronar Narew, Metal-Fach and Metal-Tech.*

**Key words:** *agricultural trailer, market of agricultural trailers, sales of agricultural trailers, Poland, analysis of the market of agricultural trailers*

## **REJESTRACJA PRZYCZEP ROLNICZYCH W POLSCE W LATACH 2012-2016**

### *Streszczenie*

*Prezentowano wyniki analiz rejestracji nowych przyczep rolniczych w Polsce w latach 2012-2016. W analizowanym okresie miał miejsce spadek rejestracji zarówno nowych, jak i używanych przyczep rolniczych. Polski rynek przyczep rolniczych jest zdominowany przez krajowych producentów. Do największych z nich należą: Pronar Narew, Metal-Fach i Metal-Tech.*

**Słowa kluczowe:** *pryczepa rolnicza, rynek przyczep rolniczych, sprzedaż przyczep rolniczych, Polska, analiza rynku przyczep rolniczych*

### **1. Introduction**

The level of sales of agricultural technology depends on many factors, including the economic situation in agriculture. One of the indicators of changes in the agricultural machinery market concerns the number of registrations of agricultural tractors and trailers. The topic of the tractor market in terms of domestic supply of these vehicles and the number of their registrations in the Central Register of Vehicles and Drivers (CEPiK) has so far been widely addressed in the literature [1, 2, 3, 4]. On the other hand, the knowledge base is much more limited in the agricultural trailer market. So far, the market of these machines has been considered from the point of view of domestic supply (production + import - export) [5, 6]. No publications on the registration of agricultural trailers, reflecting the level of sales of these machines, have been found in the available literature. This work is aimed at supplementing the state of knowledge in this field.

The aim of the article is to analyze the changes in sales of agricultural trailers in Poland measured by the number of registrations in the Central Register of Vehicles and Drivers (CEPiK). The time span of the analysis is 2012-2016.

### **2. Materials and methodology of the research**

The source material for the analysis consisted of data from the Central Register of Vehicles and Drivers (CEPiK) made available by the Polish Chamber of Commerce for Agricultural Machinery and Equipment (PIGMiUR). The analyses took into account the first registrations of agricultural trailers on the territory of Poland, both those produced in Poland and those imported from abroad.

The new trailer according to the definition adopted by PIGMiUR was a trailer registered for the first time in the current year or in the previous year, possibly manufactured 2 years earlier. It is known that new trailers registered e.g. in 2016 are machines manufactured in 2016, 2015 or 2014.

The scope of analyses covered the registration of trailers in the time system as well as the structure of demand for these machines, taking into account the permissible load capacity and specific brands (manufacturers).

### **3. Results and their analysis**

Between 2012 and 2016, 44,930 agricultural trailers were registered in Poland, including 31,219 new machines. In the analysed period, the number of registrations of new trailers decreased by 60% and the number of registrations of used trailers more than doubled. As a result, the total number of registered trailers in 2016 was lower by 32% than in 2012.

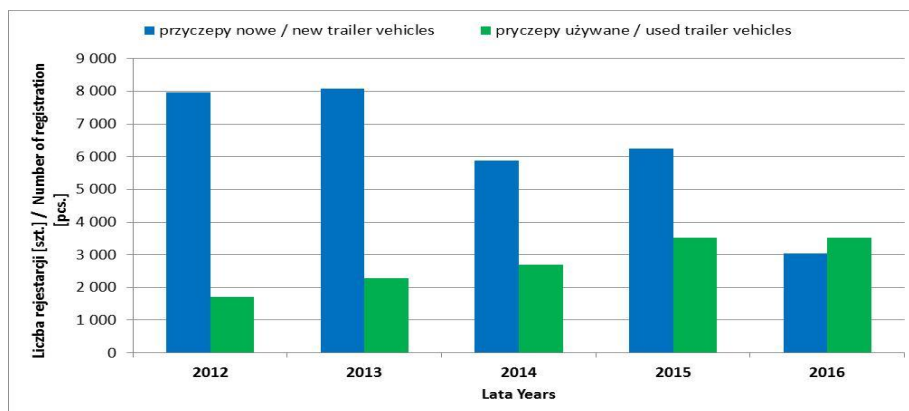
The advantage of the number of registered new trailers over those used in 2012 was 6,274. In 2015, the difference decreased to 2,737 units. Immediately in 2016, the number of registered new trailers was fewer by 478 than the number of used trailers.

The registrations of new and used agricultural trailers during the period 2012-2016 are shown in Fig. 1.

The structure of buyers of agricultural trailers is dominated by private persons. Between 2012 and 2016, 40,517 trailers were registered by private users. In the analysed period, 4 413 trailers were registered as company trailers. As the analyses show, the companies mainly purchase new trailers. The number of new trailers registered by a company in the years 2012-2016 amounted to 3 920, while the number of used trailers amounted to 493.

The number of registrations of new trailers made by private users in the period of 2012-2016 decreased by 67%, and those by companies decreased by 16%.

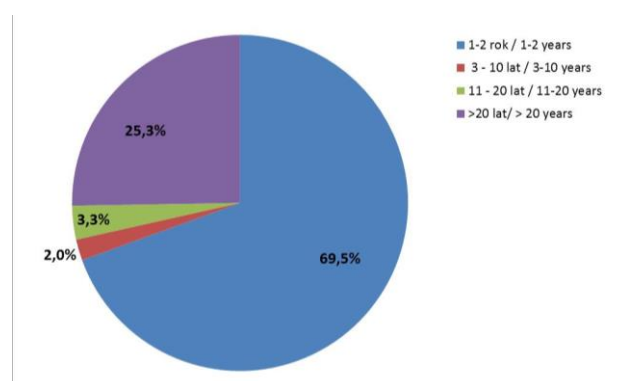
The registration structure is dominated by trailers purchased in Poland. In the analysed period they accounted for 78% of all registered trailers. In total, 5 117 trailers purchased in Poland were registered, but the number of registrations of these machines in the period 2012-2016 decreased by 42%. In the analysed period, the number of registrations of trailers imported from abroad almost doubled.



Source: Own calculations based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 1. Registration of new and used agricultural trailers in Poland in the years 2012-2016

Rys. 1. Rejestracje nowych i używanych przyczep rolniczych w Polsce w latach 2012-2016



Source: Own calculations based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 2. Age structure of agricultural trailers in Poland in the years 2012-2016

Rys. 2. Struktura wieku przyczep rolniczych rejestrowanych w Polsce w latach 2012-2016

The registration structure is dominated by new trailers, which accounted for 69.5% of the total during the analysis period. A significant share in the total registration is represented by used trailers whose age exceeds 20 years. In total, in the analysed period 11 350 units of these machines were registered, which constitutes 25.3% of the total number of registrations of trailers. Contrary to the sale of new trailers, the number of registrations of used trailers older than 20 years of age has increased between 2012 and 2016. The number of registrations of over 20 year old trailers in 2016 amounted to 3 005 and was more than 2 times higher than in 2012. The age structure of trailers registered in 2012-2016 is shown in Fig. 2.

According to the conducted analyses, machines with a payload of 10 000-12 999 kg had the largest share in the structure of registration of new and used agricultural trailers in the years 2012-2016. In the analysed period, 10,705 trailers were registered in this segment of the payload, which constitutes 24.8% of the total number of registrations. The second largest number of registrations in the analysis period was in the range of 6 000-6 999 kg, whose share in the total trailers registration was 18%

The number of registrations of new and used trailers in each payload segment for the period 2012-2016 is shown in Fig. 3.

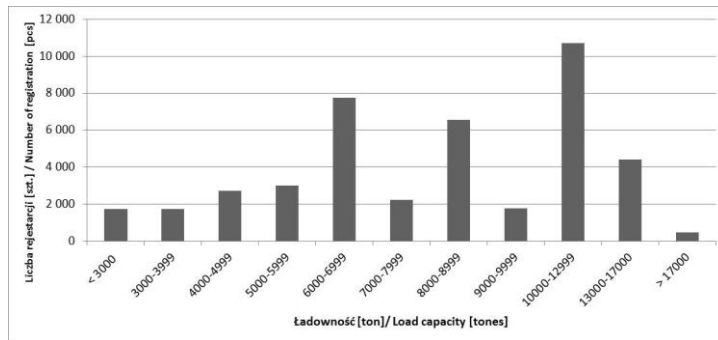
As a result of the analyses carried out, differences were found in the structure of registration in the group of new and used trailers. In the structure of the total number of registrations of new trailers for the period 2012-2016, the biggest share (28.9%) was in the range of 10,000-12,999 kg. The largest share in the group of used machines (18.4%) were trailers with a capacity of 6,000-6,999 kg. The share of trailers with a tonnage of 6 000-6 999 kg in the total number of new machine registrations in the analysed period amounted to 16.8%.

In the group of trailers with a payload up to 17 000 kg, in the analysed period the predominance of registration of new trailers over used ones prevailed. The biggest difference in the number of registrations between new and used machines was found for trailers with a capacity of 10 000-12 999 kg. In Poland, in the period 2012-2016, users registered 7 187 more new trailers with a tonnage of 10 000-12 999 kg than used trailers. The smallest advantage in registration of new trailers over used trailers was found in the case of machines with a load capacity of 9 000-9 999 kg.

The opposite trend was observed for trailers with a payload exceeding 17 000 kg. In this group of machines, in the period 2012-2016, 151 used trailers were registered more than new ones. However, the share of this load compartment in the registration structure of both new and used trailers was small and amounted to 0.48 and 2.15% respectively.

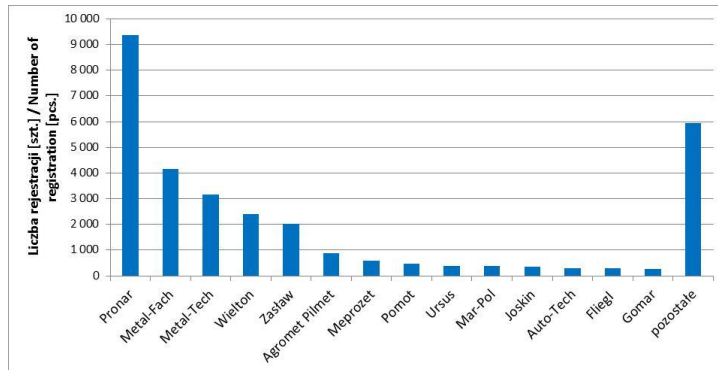
The market of new agricultural trailers in Poland is dominated by domestic producers. The largest are: Pronar Narew, Metal-Fach and Metal-Tech. The share of these manufacturers in the total number of registrations of new trailers in the period 2012-2016 amounted to 53.86%. The fourth and fifth position in terms of the number of new trailers registered in the analysed period was taken by Polish companies Wielton and Zaslaw. The total share of these five manufacturers in the total number of registrations of new trailers in the period 2012-2016 was 67.6%.

Over 30% of the new trailers (9,366 units) registered in the CEPiK base during the analysis period were manufactured by Pronar from Narew. The advantage of registration of trailers manufactured by Pronar over the other two producers with the largest market share - Metal-Fach and Metal-Tech - in the analysed period amounted to 5 212 and 6 212 units respectively.



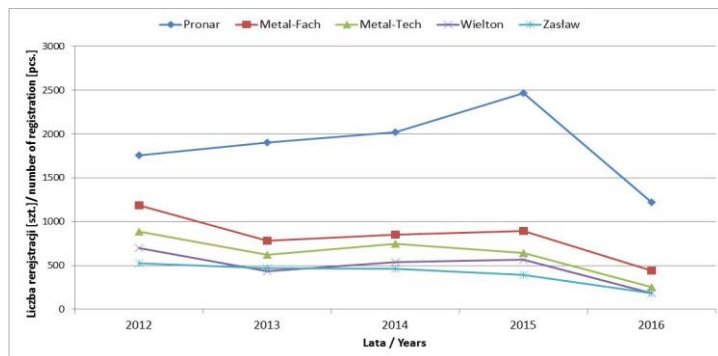
Source: Own elaboration based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 3. Registration of new and used agricultural trailers in Poland in the years 2012-2016 in the load segments  
 Rys. 3. Rejestracje nowych i używanych przyczep rolniczych w Polsce w latach 2012-2016 w segmentach ładowności



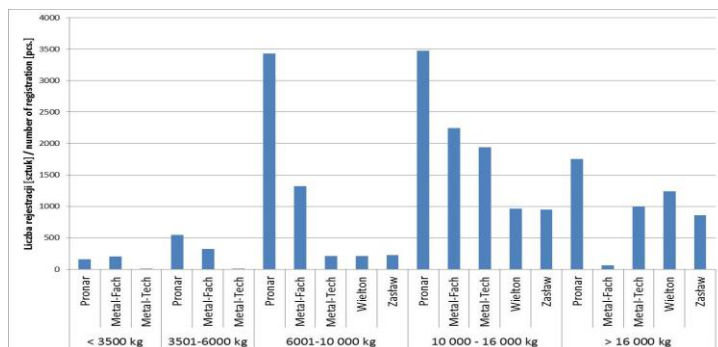
Source: Own elaboration based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 4. Number of registered new agricultural trailers of individual producers in Poland in the years 2012-2016  
 Rys. 4. Liczba zarejestrowanych nowych przyczep rolniczych poszczególnych producentów w Polsce w latach 2012-2016



Source: Own elaboration based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 5. Change in the number of registered new agricultural trailers of the five largest producers in Poland in the years 2012-2016  
 Rys. 5. Zmiana liczby rejestrowanych nowych przyczep rolniczych pięciu największych producentów w Polsce w latach 2012-2016



Source: Own elaboration based on data from the Polish Chamber of Commerce for Agricultural Engineering and Equipment  
 Źródło: opracowanie własne na podstawie danych Polskiej Izby Gospodarczej Maszyn i Urzędzeń Rolniczych

Fig. 6. Registrations of new agricultural trailers of the five largest producers in individual load segments in the years 2012-2016  
 Rys. 6. Rejestracje nowych przyczep rolniczych pięciu największych producentów w poszczególnych segmentach ładowności w latach 2012-2016

A significantly lower demand was recorded in the analysed period in the case of agricultural trailers manufactured by Wielton and Zasław. In the years 2012-2016, the CEPiK base registered 2,416 Wielton trailers and 2,033 Zasław machines. In the case of other manufacturers, the average number of trailers registered in the period did not exceed 1 000 units per manufacturer.

The number of registered new trailers of each manufacturer for the period 2012-2016 is shown in Fig. 4.

In the period 2012-2016, a decrease in the number of new trailer registrations was observed for almost all manufacturers. Comparing the purchases of new machines in 2016 with the 2012 level, the lowest percentage decrease in the number of registrations was recorded for trailers manufactured by Meprozet (29.17%) and Pronar Narew (30.64%), and the highest for machines offered by Joskin (76.67%) and Agromet-Pol (94.21%). A higher number of trailers registered in 2016 (73 units) in relation to 2012 (40 units) was recorded in the case of Mar-Poland. Ursus increased its registration by 37 units in 2016 compared to 2013.

For this manufacturer, the start of the analysis period was 2013, when trailers with the Ursus logo first appeared on the market.

The analysis of the demand for new trailers offered by five producers with the largest market share in Poland (Pronar Narew, Metal-Fach, Metal-Tech, Wielton and Zasław) showed different trends in the registration of these machines in the analysed period. In the case of Pronar Narew, the manufacturer's trailer registration increased until 2015, after which it decreased by 50.5% in 2016. In 2013, Metal-Fach, Metal-Tech and Wielton recorded a significant drop in the number of registrations. But as compared to the previous year, it was followed by an increase in 2014, which continued in 2015, and a further decrease in 2016.

The change in the number of registered new agricultural trailers available in the offer of the five largest producers in Poland in the years 2012-2016 is shown in Fig. 5.

In the analysis period, the segment of new trailers offered by companies with the largest market share (Pronar Narew, Metal-Fach, Metal-Tech, Wielton and Zasław) was dominated by machines with the capacity of 10,001-16,000 kg and 6,000-10,000 kg (Fig. 6). The lowest demand was recorded for trailers with a load capacity of < 6 000 kg. Trailers from this segment were not available in the offer of Wielton and Zasław in the analysed period.

In the years 2012-2016, 9,574 new trailers with a capacity of 10,001-16,000 kg were registered, available from these manufacturers, which accounted for 30% of all new trailers registered in Poland. Pronar trailers were the most popular in this segment (3,478 units), followed by production machines manufactured by Metal-Fach (2,243 trailers) and Metal-Tech (1,939 units). The number of registered trailers with a load capacity of 10,001-16,000 kg produced by Pronar Narew, Metal-Fach, Metal-Tech, Wielton and Zasław in 2016 was lower by 1,542 units than in 2012. The smallest decrease in registration in this load segment concerned Pronar trailers (162 units), while the largest company - Metal-Tech (458 units).

The number of new registered trailers with a payload of 6 000-10 000 kg in the analysis period amounted to 5 391. As in the previously discussed segment, the largest number of Pronar trailers were registered (3,427). For this manufacturer, the number of new trailers with a load capacity of 6 000-10 000 kg registered between 2012 and 2016 does not differ significantly from the registration of machines with a tonnage of 10 001-16 000 kg.

In contrast, the other four largest trailer manufacturers found a significantly smaller number of registered trailers with a payload of 6 000-10 000 kg compared to the registration of machines with a tonnage of 10 001-16 000 kg. This difference in the case of registration of trailers of Metal-Tech company amounted to 1 729 pieces, Metal-Fach - 923 pieces, Wielton - 752 pieces and Zasław - 728 pieces.

As with the other segments, the number (943 pieces) of registrations of new trailers with a tonnage of 6 000-10 000 kg also decreased during the period considered. In this group of trailers, the biggest drop in registration was recorded for Pronar (370 units) and Metal-Fach (320 units) machines.

#### 4. Summary

In the years 2012-2016 the number of registrations of both new and used agricultural trailers on the Polish market decreased. By 2015, new trailers dominated the number of registrations. This situation changed in 2016. The share of new trailers in the total number of registrations of these machines in the analysed period amounted to about 70%. A significant part of the group of registered trailers is made up of machines over 20 years of age.

In the analysed period, both new and used trailers were registered with machines with a capacity of 10,000-12,999 kg.

The Polish agricultural trailer market is dominated by domestic manufacturers. The largest of them is Pronar from Narew, whose share in the total number of trailer registrations in the years 2012-2016 amounted to over 30%. The share of the other two producers (Metal-Fach and Metal-Tech) in the analysis period was 24%.

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