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#### AGRICULTURE IN DAILY PRESS IN SERBIA

Abstract: The aim of the paper is to investigate the presence of agribusiness topics in the daily press in Serbia. A quantitative and qualitative analysis of headlines in ten daily newspapers in the period from 1 November 2021 to 31 October 2022 was conducted. The results were analysed globally (as total number of headlines) and according to the following criteria: month of publishing, daily newspaper, and tonality of the headlines.

During the study period, 352 titles were published on agribusiness. The results show that this important topic is insufficiently present in the daily press and that a negative tone prevails in the coverage of agriculture and food. Part of these findings can be attributed to current political events during the study period. However, more objectivity, more responsible media policies and neutrality in reporting are needed to ensure that readers are adequately informed about the importance and perspectives of agribusiness.

**Keywords:** agriculture, agribusiness, print media, research, public opinion

#### 1. Introduction

Media is an important part of the communication process, and its role is not limited to information. By using various strategies, media control public opinion by creating certain images about topics they communicate, and they act as an impetus for debates about important issues in a society (Aleksić & Stamenković, 2019).

Public opinion can be defined as a widespread opinion on a social issue that prevails in the society of a particular social group at a particular time (Račić, 2020), or as the social attitudes and thoughts on certain issues and problems that are expressed publicly (Krivokapić, 2014; Nešić, 2022). Media play an important role in the formation of public opinion. This is especially true for agribusiness sector in countries with a higher level of development,

where the urban population, which has no direct contact with agriculture, relies on the media as a source of information (Marks et al., 2003; Ortega et al., 2014).

The importance of agriculture for the Serbian economy is very high. agricultural sector participates in the formation of the GDP of the Republic of Serbia with 7.0% and in total employment with about 15%, and agricultural and food products have a special importance in foreign trade, where they participate in exports with 21.3% and in imports with 8.9% (data for 2020) (authors' calculation according to the Statistical Office of the Republic of Serbia, 2022). Therefore, it is particularly important to examine how much space is given to the agribusiness sector in the media and how it is presented to the general public.

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The main goal of the research was to determine the presence of news about issues related to agribusiness sector on the front pages of newspapers. The analysis was conducted on ten Serbian daily newspapers in the period from 1 November 2021 to 31 October 2022. In addition to the main goal, four specific goals were defined:

- to determine the changes in presence of agriculture topics on a monthly basis;
- to examine differences in the number of agricultural news given in each of the ten observed daily newspapers, as well as for newspaper groups (quality, qualitypopular and tabloid press);
- 3. to analyse news title tonality (positive, negative and neutral); and
- 4. to systematize topics from the agribusiness sector by specific targeted areas.

Agriculture is part of the agribusiness system, which, in addition to the agricultural production sector, includes the agricultural input and agricultural processing-manufacturing sectors. Agribusiness represents the totality of these three interconnected elements, which include the provision of inputs to farmers and connecting them to consumers through handling, processing, transport, marketing and distribution of agricultural products (Wilkinson & Rocha, 2008). Therefore, agriculture cannot be viewed in isolation, neither within the economic system of the country nor in its media space. For the aforementioned reasons, the research presented in this paper included not only the presence of agriculture in print media in Serbia, but their coverage of agribusiness as a whole.

#### 2. Methodology

The intent of this study was to evaluate the media coverage of agriculture and agribusiness in the headlines in the daily press in Serbia. To achieve this goal,

quantitative and qualitative content analysis was used. The media content analysis dates back to the 1950s and is applied in order to observe, describe and express the key characteristics of the message (Malešević, 2018). The quantitative method was used in order to find out to what extent agribusiness is present in the newspaper headlines in Serbia, while the qualitative analysis was used to examine how this topic is presented. The unit of analysis is one newspaper headline, that is, one independent entity composed of headlines, subtitles and graphic or pictorial additions.

The study focuses exclusively on newspaper headlines. There were two reasons for this. First, the material covered is extremely extensive - ten daily newspapers were observed for 365 days. Originally, it was assumed that agriculture and agribusiness were heavily represented in the daily press, making the collected material very extensive and difficult to systematize. As similar research has shown, when newspaper articles are analysed in full, it is common to select a specific topic they cover (Cebalović, 2015; Lundy et al., 2018; Aleksić & Stamenković, 2019) and analyse them in a shorter period of time (Elezović, 2012; Obradović, 2014). The second reason is that headlines have a special importance in the daily press. They are often designed as a "lure" for readers and thus have an effect on public perception (Aleksić & Stamenković, 2019: 845). The role of the headline is not only to represent the text it refers to, but also "to attract the reader to embark on the 'adventure' of reading and contemplating the text, ... contribute to the graphic appearance of the newspaper (tabloids are based headlines)" and leave an impression on the reader (Obradović, 2014: 601).

## 2.1. Classification of the covered newspaper

The research included titles on the front pages of ten top-selling mainstream newspapers: "Politika", "Danas",

"Dnevnik", "Večernje novosti", "Blic", "Nova", "Informer", "Kurir", "Alo!" and "Srpski telegraf". The data were gathered from newspaper issues published between 1 November 2021 and 31 October 2022. The period covers 365 days, every day except for holidays and for the newspapers "Danas", "Nova" and "Informer", which have double issues on weekends.

The daily press can be divided according to various criteria: content, ownership, style, target audience, etc. In this paper, the selection of the newspaper was based on circulation and quality. According to quality, daily press can be divided into three categories: quality newspaper (broadsheets), quality-popular newspaper (semi-tabloids) and tabloids (red tops) (Todorović, 2006). Broadsheets are respected daily newspapers that usually have a long tradition and great social influence. The quality-popular or semi-tabloid press is characterized by a stronger market orientation, a larger readership, a higher circulation and a different content offer than the previous group. The tabloid press is characterized by sensationalism, a lack of objectivity in reporting, a strong market orientation, the manipulative function of headlines and content, but also by high circulations and significant influence on the readership.

The group of broadsheets includes "Danas" and "Politika" (the latter is the oldest daily newspaper in Serbia). This classification is consistent with similar classifications of Serbian daily press (Todorović, 2006; Obradović, 2014; Vuković et al., 2021; Malešević, 2018; Jevtović & Bajić, 2020). This group also includes the newspaper "Dnevnik", which until now has not been subject to classification, but can be evaluated as a broadsheet due to the selection of topics, content and the way of presenting news. The group of semi-tabloid press consists of "Večernje novosti" (Obradović, Malešević, 2018; Vuković et al. 2021; Jevtović & Bajić, 2020), "Blic" (Todorović, 2006; Vuković et al., 2021) and "Nova", a daily newspaper which recently appeared on

the market, and has not been classified or covered by similar research so far. In some sources, the daily newspaper "Blic" is classified as a tabloid (Malešević, 2018; Jevtović & Bajić, 2020; Trajković, 2020), but such view is in the minority, and in this paper "Blic" was categorized as semitabloid. The third group is tabloid press, and the analysed press from this group is: "Informer", "Srpski telegraf" and "Alo!" (Jevtović & Bajić, 2020), as well as "Kurir" (Todorović, 2006; Jevtović & Bajić, 2020; Vuković et al., 2021).

#### 2.2. Research methodology

The analysis of media content focused on agribusiness was carried out in tree steps. The first step was to identify the total number of headlines related to agribusiness, selecting a total of 352 titles. At the second level, they were systematized according to the time of publication and the newspaper in which they appeared. At the third level, the selected headlines were classified according to the specific topic they cover and according to their tonality.

Sorting by thematic diversity was done in two steps. First, five general categories were formed: (1) prices, (2) consumption, (3) domestic and foreign trade of agricultural and food products, (4) primary agriculture, and (5) other topics. Then, the largest segment of the titles, related to primary agricultural production, was systematized into the following subsections: agricultural land and mechanization; crop production; vegetable production; fruit and production; livestock production; subsidies and investments; food industry processing; and agricultural manifestations. The last part of the coding was related to the tonality of the messages: positive, negative and neutral.

#### 3. Results and discussion

In accordance with the principles of scientific work, a theoretical framework was

explored so that obtained results could be placed in a specific context and compared with similar studies. The conducted research led to the following results.

In the relevant scientific literature, considerable attention has been paid to the question of how specialized print media can be used in the dissemination of information from the field of agriculture, especially for the purpose of educating farmers and the work of agricultural extension service. This is the case when print media are used to disseminate specific knowledge in the field of agriculture to a small number of specialized users. Such research, while important, is not the subject of analysis in this paper.

The second group of research refers to the representation of agribusiness in the media, where certain limitations have identified. A small opus of the research relates to the analysis of the media image of agriculture as a whole, while a larger number of studies focus on a specific subject related to agriculture, such as the link between the environment and agricultural production (Ortega et al., 2014; Vuković et al., 2021; Pecurovska & Mladenovska, 2022), climate change (Innocent et al., 2021; Ayogu et al., 2015), digitization and application of new technologies in agriculture (Marks et al., 2003; Mohr & Höhler, 2021; Rust et al., 2021), and food security and safety (Lundy et al., 2018; Ortega et al., 2014).

Although these issues are important, they do not show the complexity of agribusiness, that is, they give readers an incomplete and simplified picture of agriculture. The media can play an important role not only in shaping public opinion, but also in influencing decision makers and agroindustry as a whole as consumers and society become increasingly concerned with food other agricultural safety and issues "As (Morrison, 2015). consumers increasingly gain an understanding of food production and marketing through the media, agribusinesses will be increasingly affected by how global media outlets report on food issues over time" (Marks et al., 2003:16).

## 3.1. Dynamics of reporting on agribusiness on newspaper front pages in Serbia

During the observed period, 352 news agribusiness headlines were published on the front pages of leading Serbian newspapers. In other words, at least one headline per day was related to agriculture, which means that each newspaper reported about agriculture on its front page about three times per month.

Dynamics of news publication by month has shown that most agribusiness news was published in March and that more attention is paid to agriculture in the spring and summer months (Table 1). This is to be expected since agricultural production is seasonal. The smaller volume of seasonal work may be the reason for less interest of print media for this topic during the winter months, so that the lowest number of news was registered in December. These results are partially consistent with other research, which found that the months with the most coverage of agricultural production were August and September and the least was November (Lundy et al., 2018).

Of the total number of news, about one-third related to agricultural production, which means that news about activities related to agriculture appeared in the media almost twice as often. The media paid great attention to food supply and food prices. Although always interested topic for readers, it gained particular importance during 2022, in light of the events on the global level. Indeed, in addition to the agricultural calendar. other important events participating significantly in the media space have high impact on the dynamics of publishing news on agriculture. outbreak of war in Ukraine at the end of February 2022 not only generated a lot of attention and space in the print media, but also increased concerns about food security and price changes of basic food products. Reporting on these topics in other countries was also present in the domestic media. More than 90% of the news (317 out of 352) referred to Serbia, while every tenth headline was focused on issues related to agriculture and food in other European countries.

**Table 1.** Frequency of titles on agribusiness and agriculture in analysed printed media

	Agribusi	Agriculture	
	ness	Number	%
November 2021	16	8	50,0
December 2021	10	4	40,0
January 2022	13	3	23,1
February 2022	19	10	52,6
March 2022	45	8	17,8
April 2022	43	11	25,6
May 2022	40	10	25,0
Jun 2022	39	15	38,5
Jul 2022	24	8	33,3
August 2022	36	11	30,6
September 2022	39	10	25,6
October 2022	28	14	50,0
Total	352	112	31,8

The end of 2021 was marked by the expansion of the discussion on ways to prevent the spread of the Covid-19, which also contributed to the decrease in the number of news related to agriculture. In October 2022, a significant decrease in agribusiness news was recorded, which can be explained, on the one hand, by the dynamics of the agricultural season and, on the other hand, by the increasing attention of the media to the long-awaited formation of the Serbian government. Moreover, the leading newspapers primarily report on important and current topics, while their coverage "on the agricultural industry often focus on crisis stories that receive a high level of attention for a short period of time" (Nelkin, 1995).

The aim was to capture headlines related to agribusiness as a whole, which affected the number of recorded headlines in daily newspapers in Serbia in the observed period.

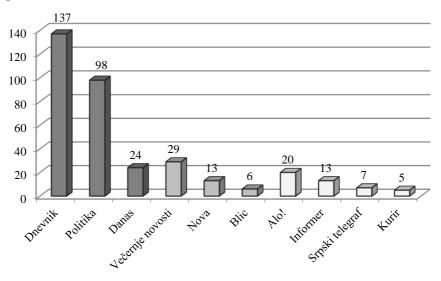
At first glance, the total number of 352 headlines related to agribusiness seems satisfactory, but it should be emphasised that a significant number of them focused on food security and food prices. These topics are interesting and important to many readers, so their presence on the front pages is not surprising, but they are not directly related to agricultural production. If only headlines related to agriculture (112) are included, it can be concluded that agriculture is very weakly represented on the front pages of the daily press. This is consistent with the findings of other studies according to which very little prominence had been given to the coverage of agriculture and that it was greatly neglected and underreported (Ruth et al., 2005; Ayogu, 2015; Mc Cormac & Wims, 2022), especially when it comes to treatment on the front pages of newspapers (Ogessa & Sife, 2017).

## 3.2. Distribution of agribusiness news according to daily press categories

The presentation of certain topics in the newspaper depends not only on the relevance of the topic itself and other important events taking place, but also on the characteristics of the daily press, its editorial policy, its circulation, its readers and their interests. These characteristics also determine the group in which a particular newspaper is classified.

Most of the front pages news on agribusiness were printed in the daily newspaper "Dnevnik" (137 or 38.9%), while "Politika" was in second place with 98 (27.8%) titles (Figure 1). Exactly two-thirds of the 352 headlines were published on the front pages of these two newspapers. "Dnevnik" published agribusiness news every third day and "Politika" every fourth day. The aforementioned characteristics put these two newspapers in a special category and show their long-term commitment to reporting on this topic. This confirms that serious and high-quality daily newspapers are focused on reporting on agribusiness and indicates a

significant difference between them and the so-called semi-tabloid and tabloid daily newspapers in Serbia.



**Figure 1.** Frequency of titles on agribusiness in analysed printed media (by media and quality groups)

The second group of daily newspapers includes "Večernje novosti", "Danas" and "Alo!" (one from each of the three quality categories of the daily press), which published between 20 and 29 front-page news during the analyzed period.

Despite being classified in the category of quality-popular daily press, "Blic" published only six front page news related to agribusiness, which, according to this criterion, puts it close to the tabloid press and confirms that there is a dilemma regarding the quality of this daily newspaper. Other daily newspapers from the tabloid category paid very little attention to agribusiness.

## 3.3. Tonality of news on agribusiness sector and agricultural production

The average reader has little personal experience and knowledge of agriculture and food production systems and therefore often relies on impersonal sources of information

(such as print media) to inform them. The way news (especially headlines) are framed is determined by journalist's understanding, ideology, styles and knowledge of the given topic, as well as by practical limitations such as deadlines and space, especially on the front pages (Marks et al., 2003).

The way in which the news are framed has a significant effect on shaping readers' opinions and attitudes. This affects how different kind of audience experience, accept and interpret them and what kind of public actions will follow (Lundy et al., 2018). Biased and fragmented reporting may polarize public attitudes on current agricultural topics (Reisner & Walter, 2010).

The analysis of media content usually involves the evaluation of its tonality, with news usually classified as positive, negative, and neutral (Elezović, 2012; Celabović, 2015).

When it comes to tonality of news about agribusiness, most of the front page news has a negative approach (137 or 38.9%),

meaning that given topic is represented in a negative manner (Table 2). As an example of such news, we single out "Domestic ponds are closing, and imports have increased to 70 percent" (Dnevnik, 10 April 2022). This title introduces "Dnevnik" daily topic and occupied almost a third of its front page. In addition to being negatively framed, the title is incomplete and unclear stylistically, which complicates its interpretation. Positive news, which have a favourable and laudatory attitude towards a certain phenomenon, are slightly less present (127 or 36.1%), and as an example we single out "There will be wheat for the entire Balkan" (Politika, 20 June 2022). A quarter of agribusiness news is neutral (Table 2), which means that they provide only certain information, without any positive or negative connotation like the news "Soybeans and wheat in winter sleep" (Dnevnik, 19 February 2022).

When it comes to the connotation of news exclusively from agriculture, the situation is significantly different. In this case, positive news is by far the most numerous (65.2%), while negative news is the least represented, with an almost equal proportion of neutral news as for agribusiness (Table 2). This can be explained by the fact that a significant number of negative news had been associated with the increase in food prices and restrictions on foreign trade, due to the outbreak of war in Ukraine and changes in the European and global food markets. Other events also influenced the news connotation. Farmers' protests that made headlines in August 2022 were related to changes in subsidies, producer prices for sunflowers, and severe drought that affected crop yields. The protests also led to an increased number of negative news stories in August.

Table 2. Number and tonality of titles from agribusiness and agriculture

		Positive	Negative	Neutral	Total
Agriculture	Number	73	12	27	112
	%	65,2	10,7	24,1	100,0
Agribusiness	Number	127	137	88	352
	%	36,1	38,9	25,0	100,0

It is interesting to note how certain messages can be presented in different ways. In June 2022, within just two days, two daily newspapers presented the same topic with a completely different connotation. On 11 June 2022, "Dnevnik" reported irrigation systems on additional 3,500 hectares in Vojvodina", and on 13 June, the daily newspaper "Nova" published the headline "The irrigated land area was reduces twice in 10 years - losses due to drought have exceeded necessary investments in the hydro system". The severe drought affecting Serbia and all of Europe was mentioned in more than ten headlines in the print media during the summer months of 2022. Although dealing with the same topic, the way these two headlines were framed and the choice of words influenced their tonality, which was positive in "Dnevnik"

and negative in "Nova".

The objectivity and balance in reporting, reflected in the neutral news, can be observed only in "Politika", which is expected from such a prestigious daily newspaper with tradition. Polarity in reporting can be observed in almost all other newspapers, regardless of which quality group they represent. "Dnevnik" tends to report positively, while the semi-tabloid "Večernje novosti" and "Nova" as well as the tabloids "Alo!" and "Informer" tend to report negatively on agriculture. The polarity is more pronounced when news about a single topic is analyzed (Cebalović, 2015), as is the case in this paper, than when all headlines of the daily press are analyzed (Elezović, 2012). Indeed, when more topics and different areas are covered in a larger number of print media, different opinions are

expressed and a "normal distribution" in terms of tone is more likely to occur.

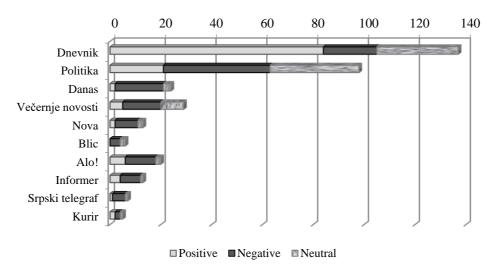


Figure 2. Frequency and tonality of titles on agribusiness

The research conducted in the United States is a vivid example of how connotations in news coverage can contribute to the formation of public opinion agriculture. Although in this case a medium was television, the analogy is clear. This research analyzed the attitudes of viewers of a TV program in which two girls explored "the realities" of farm life. Viewers with an agricultural background considered the program "inaccurate and disturbing" and felt that it did not accurately portray the amount of labour and intellectual capacity necessary when working on a farm. Viewers lacking in agricultural literacy thought that the program was entertaining, although they realized that "the program did not accurately portray real agricultural life, but could not discern where the program failed in its accurate representation" (Ruth al.. 2005). et Considering that the majority of consumers get a significant amount of information about food and agriculture from the press and television (Ortega et al., 2014), it is a concerning fact that some viewers experienced this TV program as an image of real farm life.

#### 3.4. The variety of agribusiness topics in the headlines of the daily press in Serbia

The primary function of agriculture is to produce food for people. Due to accelerated urbanization, which concentrates consumers in large cities, and the application of technological advanced technical and solutions in agriculture, which reduces the number of farmers, there is a growing gap between farmers as carriers of agricultural production and the inhabitants of cities as consumers of these products. One of the most important factors contributing to overcoming this gap is the media. The media and the information they transmit shape readers' beliefs and perceptions (Ortega et al., 2014), as well as their behaviour when they enter the market as consumers (Morrison, 2015; Ortega et al., 2014). Therefore, it is important that agribusiness is portrayed in the right way that contributes to readers' positive feelings toward this activity and toward farmers and their social and economic status, because the way the media pick up and amplify events has immediate and long-term effects on agribusiness (Marks

et al., 2003).

Unfortunately, agriculture mainly mentioned in the media when there are food shortages and price increases, or in the context of natural disasters that negatively impact agriculture and food production, and other negative events (Morrison, 2015). This is characteristic of most transition countries, where intolerant and sensationalist reporting prevails, which is a consequence of the market orientation of the media (Aleksić & Stamenković, 2019). The media focus on political and affirmative new, local and nonessential issues and lack capacity to cover important issues (Pecurovska Mladenovska, 2022), resulting in insufficient presence of agriculture in print media.

Less than one-third of the 352 titles from agribusiness (112 or 31.8%) relate to primary agricultural production. The second most common group of headlines (a quarter of the total) relates to prices of agricultural and food products (Table 3). The world is facing a period of volatile and rising food prices as a result of war in Ukraine and halt of their export. This food crisis is similar to the crises of 2007/08 and 2010/11, and when the disruptions caused by hunger are added, the result is the highest food price index published by the Food and Agricultural Organization since 1990, when it began recording data. It is therefore not surprising that such a large part of the news is devoted to this topic.

Considerable attention is paid to the consumption of agricultural products and food, which is directly related to their prices. The rise in food prices results in a shift from more expensive and higher quality foods to cheaper and lower quality foods. This was the subject of some headlines, such as "Traders expect a significant transition to plant-based products" ("Politika", 11 July 2022). The tabloid press also expressed concern about food quality, but (as expected) in a more sensationalist way: "What are we really eating in pate and hot dogs?" ("Srpski Telegraf," 24 September 2022).

**Table 3.** Diversity of different issues within the agribusiness

	Number	%
Prices of food	89	25.3
Consumption	42	11.9
Trade (domestic and foreign)	60	17.0
Primary agriculture	112	31.8
Other	49	13.9
Total	352	100.0

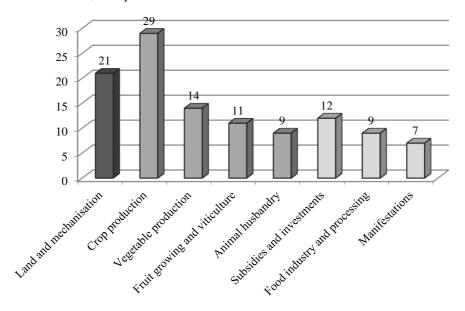
Agricultural and food products are of great importance for foreign trade and have continuously achieved a positive balance since 2005, significantly higher than that of neighbouring countries, reaching about USD 1.4 billion in recent years (Božić et al., 2021). Therefore, this topic is rightfully receiving attention in the headlines. Significant attention was given to foreign trade of food in the analyzed period, due to government restrictions on the export of certain products. These restrictions were imposed as a precautionary measure due to disruptions in the global food market. The goal of these measures was to ensure food security, but they also had negative economic consequences for farmers, which led to increased attention to this topic. Part of the 60 headlines related to foreign trade in food related to the supply of the domestic market, again in light of rising food prices, price restrictions, and supply constraints. As an example, we single out the headline from "Politika" (24 May 2022) "There is enough sugar, but not in kilo packs" where the accompanying text explains why this disruption is occurring in the market.

A portion of the headlines (49 or 13.9% of the total) could not be assigned to any of the above categories. This group includes news related to forestry ("Thousands of hectares of forest disappear due to illegal logging", "Politika", 25 September, 2022) and fisheries, but also a significant segment related to employment ("Nepalese pick cornichons in Gospođinci," Dnevnik, 30 June, 2022). The problem of seasonal labour exists in Serbia for a long time and is

particularly relevant in the summer months, i.e. during the harvest of certain types of fruit, which led to headlines on this topic.

Finally, it was interesting to see the focus of agricultural headlines in Serbian daily newspapers. These headlines were categorized into eight groups (Figure 3), which can be divided into three units: Soil and Mechanization, Crop and Livestock

Production, and Support to agriculture, Processing and Manifestations. Most titles are related to crop production, followed by soil and agricultural mechanization and other titles. Crop and livestock production is the subject of 63 headlines, which means that this was the most interesting topic.



**Figure 3.** Diversity of titles on agriculture in analysed printed media

Surprisingly few titles (only 12) were devoted to agricultural subsidies and investments. This can be explained by the fact that these news are of particular importance for farmers and that they are not so interesting for general public, but are more likely to be found in specialized agricultural magazines. This conclusion is also supported by other research, which state that specialized agricultural newspapers are more focused on critical issues that affect farmers, while mainstream newspapers tend to report on general news and do not deal with important agricultural issues (Mc Cormack & Wims, 2022).

#### 4. Conclusion

This paper sought to investigate the extent to which topics related to agribusiness are present on the front pages of daily newspapers in Serbia. The selected headlines were analyzed according to the time of publication, the daily newspaper in which they were published, the tonality and the topic, as dictated by the specific research objectives. The analysis covers 10 daily newspapers of quality, quality-popular and tabloid press in the period from 1 November 2021 to 31 October 2022. 352 headlines about agribusiness were published in the analysed period, of which 112 or 31.8% were related directly to agriculture.

The importance of the media and their coverage of agribusiness is reflected not only in the fact that they contribute to the formation of public opinion on the subject, but also in the fact that they directly influence the behaviour of readers when they act as consumers in the market. This was even more pronounced in the period under study, which unfortunately included the beginning of the war in Ukraine, which led to disruptions in the food market and the largest increase in food prices in recent decades. Therefore, it is not surprising that more than one third of the total headlines are related to food prices and consumption of agricultural and food products.

The number of headlines per month changed the analyzed period. agribusiness headlines were published in March and were also high in summer months, while the lowest number was in December. The dynamics of publishing headlines per month was influenced by the seasonality of agricultural work, as well as by internal (farmers' protests and shortage of seasonal labour) and external factors, which included the continuation of the fight against Covid-19 and the formation of the Serbian government, in addition to the Ukraine crisis.

Looking at the individual daily newspapers, there are significant differences in the number of agricultural headlines published. Two-thirds of them were published in only two daily newspapers — "Dnevnik" and "Politika" — indicating that this category of serious daily press is devoted to this topic. The quality popular and especially tabloid press reports on politically motivated and 'light' topics that their readers are interested, and only rarely (ones every two months) deal with agribusiness.

There is also a tendency to write about agriculture and agribusiness when certain problems such as food shortages, climate changes affecting the decline of yields, and food price increases are observed. Under such conditions, the tonality of the headlines can be expected to be negative, meaning that agriculture is portrayed in an unfavourable context. Since the studied period was full of such situations (severe drought in 2022, rising food prices, and changes in foreign trade flows), the tonality of the headlines was negative in a significant number of cases.

Headlines related exclusively to agriculture were mostly positive and most often reported on crop and livestock production, followed by agricultural land and machinery, and to a lesser extent other topics.

The media has a tremendous importance on reporting general public on topics from agribusiness and plays an important role in readers' opinions shaping and behaviour as consumers in the market. Therefore, it is necessary for the media to cover these issues with more care. Objective reporting focusing on the positive aspects of Serbian agribusiness, the application of innovations and modern achievements in production and its place in the Serbian economy would contribute to the formation of a positive public opinion in favour of agribusiness.

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#### **References:**

- Aleksić, D., & Stamenković, I. (2019). Migrantska i izbeglička kriza: komparativni prikaz izveštavanja dnevnih listova Blic, Politika i Kurir [Migrant and refugee crisis: comparative analysis of media reporting Case study daily newspaper Blic, Politika and Kurir]. *Teme*, 43(3), 839-859. doi:10.22190/TEME171213051A
- Ayogu, C. J., Agwu, A. E., & Enwelu, I. A. (2015). Print Media Journalists' Coverage of Agriculture related Climate Change News in Nigeria: Implications forachieving Vision 20:2020. *Climate Change*, 1(1), 11-19.
- Božić, I., Nikolić, M., & Božić, D. (2021). Značaj i konkurentnost kukuruza u spoljnoj trgovini Srbije i susednih zemalja [Significance and competitiveness of maize in foreign trade of Serbia and neighbouring countries]. *Agroekonomika*, 50(92), 1-13.
- Cebalović, M. (2015). Kako se stvara slika u medijima studija slučaja Elektroprivrede Srbije [How a media image is created a case study of Electric power industry of Serbia]. *Communication and Media Journal*, 33, 127-152. doi:10.5937/comman10-7702
- Elezović, A. (2012). O čemu pišu novine? Analiza sadržaja novinskih naslovnica (siječanj lipanj 2011) [What Newspapers Reported? Content Analysis of Newspaper Headline (January June 2011)]. *Medijska istraživanja, 1*(18), 61-88. doi:10.5937/comman10-7702
- Innocent, K., Nyaradzo, P. M., & Gadzirayi, C. T. (2021). Media coverage on food security and climate-smart agriculture: A case study of newspapers in Zimbabwe. *Cogent Food & Agriculture*, 7:1, 1-9. https://doi.org/10.1080/23311932.2021.1927561
- Jevtović, Z., & Bajić, P. (2020). Slika o korona virusu u dnevnoj štampi Srbije [The image of COVID-1 in the Serbian daily newspapers]. *Sociološki pregled*, 54(3), 534-559. doi:10.5937/socpreg54-27766
- Krivokapić, N. (2014). The world of communications: public, public opinion and media effects. *Medijski dijalozi*, 20(7), 129-142.
- Lundy, K. L., Rogers-Randolph T., M., Lindsey A. B., Hurdle, C., Ryan, H., Telg, R. W., & Irani, T. (2018). Analyzing Media Coverage of Agricultural Health and Safety Issues. *Journal of Applied Communications*, 102(4), 2018 ACE Conference Issue, Article 5. doi:10.4148/1051-0834.2222
- Malešević, K. (2018). Narušavanja privatnosti kao načela profesionalizma medija u izvešavanju dnevne štampe [Violation of privacy as a principle of media professionalism in daily press reporting]. In: Eds. Zoran Paunović, Željko Milanović, The Fourth International Interdisciplinary Conference for Young Scholars in Social Science and Humanities, 425-438.
- Marks, L. A., Kalaitzandonakes, N., Allison, K., & Zakharova. L. (2003). Media Coverage of Agrobiotechnology: Did the Butterfly Have an Effect? *Journal of Agribusiness* 21(1), 1-20.
- Mc Cormack, C., & Wims, P. (2022). Reporting on Vital Agricultural News in Ireland a Comparison between Mainstream Print Media and the Farming Press. *Journal of Applied Communications*, 106(2), Article 3. https://doi.org/10.4148/1051-0834.2422
- Mohr, S., & Höhler, J. (2021). Media Coverage of Digitalization in Agriculture an Analysis of Media Content. *Technological Forecasting & Social Change*, 187, 1-9. https://doi.org/10.1016/j.techfore.2022.122238
- Morrison, L. C. (2015). *The Exploration of Social Media as a Media Relations Tool for Agricultural Organizations*. Thesis, Degree Master of Science, The Ohio State University.

- Nelkin, D. (1995). Selling science: How the press covers science and technology. WH Freeman.
- Nešić, D. (2022). Mediji, društvene mreže i javno mnjenje [Media, social networks and public opinion]. Biro za društvena istraživanja, Accessed January 20<sup>th</sup>, https://www.birodi.rs/wp-content/uploads/2022/12/TEKST-Nes%CC%8Cic%CC%81-2.pdf
- Obradović, N. (2014). Manipulacija naslovima u srpskoj dnevnoj štampi [Manipulating with headlines in the Serbian newspapers]. In: *Istoriografija i savremeno društvo Nauka i savremeni univerzitet 3*, 600-612, Filozofski fakultet u Nišu, Univerzitet u Nišu.
- Ogessa, C. M., & Sife, A. S. (2017). Newspaper coverage of agricultural information in Tanzania. *University of Dar Es Salaam Library Journal*, 121, 12-26.
- Ortega, D. L., Wang, H. & Olynk, W. (2014). Effects of media headlines on consumer preferences for food safety, quality and environmental attributes. *Australian Journal of Agricultural and Resource Economics*, 59, 433-445.
- Pecurovska, B. & Mladenovska, D. (2022). The presence and treatment of environmental subjects in the Macedonian printed media. *South East European Journal of Sustainable Development*, 6, 249-267.
- Račić, M. (2020). Uticaj medija na stvaranje javnog mnjenja i promjenu medijskog ekosistema kao efekat pojave digitalnih medija [The influence of the media on the formation of public opinion and the change of the media ecosystem as an effect of the emergence of digital media]. Accessed January 20<sup>th</sup>, https://digitalizuj.me/2020/07/uticaj-medija-na-stvaranje-javnog-mnjenja-promjenu-medijskog-ekosistema-kao-efekat-pojave-digitalnih-medija/
- Reisner, A., & Walter, G. (2010). Agricultural Journalists' Assessments of Print Coverage of Agricultural News. *Rural Sociology*, 59(3), 525-537. doi: 10.1111/j.1549-0831.1994.tb00546.x
- Statistical office of the Republic of Serbia (RZS) (2022). Database, RZS, Belgrade.
- Rust, N. A., Jarvis, R. M., Reed, M. S., & Cooper, J. (2021). Framing of sustainable agricultural practices by the farming press and its effect on adoption. *Agriculture and Human Values*, *38*, 753–765. https://doi.org/10.1007/s10460-020-10186-7
- Ruth, A. M., Lundy, L. K., & Park, T. D. (2005). Glitz, Glamour, and the Farm: Portrayal of Agriculture as the Simple Life. *Journal of Applied Communications*, 89(4). doi: 10.4148/1051-0834.1311
- Todorović, N. (2006). Tabloidni žurnalizam [Tabloid Journalism]. *CM Komunikacija i mediji*, *1*, 19-31.
- Trajković, J. (2020). Predstavljanje osoba sa invaliditetom u srpskoj štampi: Analiza dnevnih novina Blic i Danas [Representation of persons with disabilities in the Serbian press: analysis of daily newspapers Blic and Danas]. *CM Communication and Media*, 15(47), 85-108. doi: 10.5937/cm15-25721
- Vuković, M., Vuković, A., Štrbac, N., & Voza, D. (2021). Analiza medijskih sadržaja o životnoj sredini u dnevnoj štampi u Republici Srbiji u vreme pandemije COVID-19 [Analysis of media coverage on the environment in daily newspapers in Republic of Serbia during the COVID-19 pandemy]. *Ecologica*, 28(104), 658-664. doi:10.18485/ecologica.2021.28.104.23
- Wilkinson, J., & Rocha, R. (2008). The Agro-Processing Sector: Empirical Overview, Recent Trends and Development Impacts. Plenary paper: Global Agro-industries Forum, April, 2008 (FAO/UNIDO/IFAD/Indian Government).

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