Review article

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# THE IMPACT OF AFRICAN SWINE FEVER (ASF) ON ROMANIAN PIG MEAT PRODUCTION: A REVIEW

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The first outbreak of African Swine Fever (ASF) in Romania was recorded in a backyard holding in Satu Mare County in July 2017 as a result of a previous large-scale spread of the virus in wild boars and domestic pig populations in two of Romania's neighbouring countries, Ukraine and the Republic of Moldova. Since then, more than 1.3 million domestic pigs have been infected in more than 5600 backyard holdings and commercial farms all over Romania where stamping out procedures have been performed afterwards. The spread of the disease could not be contained despite the contingency plans developed by the authorities based on the current EU and Romanian legislation, and currently, the entire territory of Romania is considered to be affected, leading to a significant decline of the pig inventory and major damages in the commercial farming system. Consequently, the amounts of pork imported from other EU member states have increased yearly, pig meat becoming the main commodity on the list of agricultural goods purchased by Romania. 2021 has been by far the worst year for Romanian pig meat production, generating the highest financial losses mainly due to the inability of authorities and policymakers to implement effective and efficient disease control measures.

Keywords: costs, outbreak, pork, Romania

### INTRODUCTION

African Swine Fever (ASF) genotype II is a deadly viral disease of domestic pigs and wild boars with a high level of contagiousness, being responsible for significant production and financial losses [1]. It is classified as a transboundary animal disease (TAD) with a high capacity of environmental resistance and spread by live or dead pigs, meat products, contaminated feed, fomites, and even insects [2-4]. Current results are still far from an effective commercial solution despite relevant research and financial efforts for developing a vaccine against the disease [5]. ASF is known to be endemic in Africa, with 24 active genotypes, but also in the Italian island of Sardinia since 1978.

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In Sardinia, ASF caused by ASF virus (ASFV) genotype I found ideal conditions for endemicity in the free-ranging pigs kept in the mountainous areas of the island, where they live in close contact with wild boars. Since 2007, outbreaks with genotype II have been registered in Georgia, Armenia, Azerbaijan, and in the European parts of Russia, Ukraine, Belarus, and the Republic of Moldova [6]. The first outbreak in the European Union was reported in in January 2014, in the wild boars of Lithuania. Following outbreaks were reported in February 2014 in Poland, then in June and September of the same year in Latvia and Estonia. Since then, the dangerous viral disease has spread further and it has entered other EU Member states like Czech Republic, Romania, Bulgaria, Slovakia, Hungary, Belgium, Greece and Germany by the end of 2021 [7,8]. Italy recorded its first outbreak in wild boars in January, 2022.

Romania experienced the first outbreak of ASF in July 2017, in a backyard holding in Satu Mare County. It is believed to have occurred because of previous large-scale spread of the virus in wild boars and domestic pig populations in two of Romania's neighboring countries, Ukraine and the Republic of Moldova. Since 2017, more than 1.3 million domestic pigs have been infected. The spread of the disease could not be contained and currently, the entire territory of Romania is considered to be affected by ASF.

Only two EU countries managed to contain and eradicate ASF on their territory so far. These successful actions targeting only wild boars were finalized in the Czech Republic (February 2019) and Belgium (November 2020). The EU legal framework related to ASF is the Commission Implementing Regulation (EU) 2021/605 of 7 April 2021, laying down special control measures for African Swine Fever [9]. It was adopted based on the new Regulation (EU) 2016/429, known as the "Animal Health Law" [10]. A comprehensive web based review of the legal framework related to ASF in Europe and Romania is available for all stakeholders in the pig production industry [11]. Even though most outbreaks in the last four years in domestic pigs have occurred in Romania, a thorough analysis of the costs of this unwanted spread is still missing. Published studies refer mainly to cases in specific geographic areas [12] and only one [13] aims to understand the human vectors as risk factors. Other works describe either the genetic background of the virus isolated in Romanian outbreaks [14] or insects as potential transmission vectors [15]. Therefore, the aim of this study is to highlight the economic impact of the ASF virus on the Romanian pig production systems focusing mainly on 2021, when the largest number of commercial farms were infected.

#### LEGAL BACKGROUND

Descriptive analysis and interpretation of statistical data related to ASF spread in Romania were conducted based on publicly available sources of information. The primary source is the National Sanitary Veterinary and Food Agency (ANSVSA), the Romanian competent and regulatory authority, being in charge not only with keeping track of the virus, but also communicating with the European Commission

(ADIS) and the World Organization for Animal Health (OIE). The contingency plan against ASF was published in 2016, months before the first Romanian outbreak, and it mainly translates the provisions of Council Directive 2002/60/CE. The plan contains the legal actions and establishes the supporting government entities. These are the National Centre for Disease Eradication (CNCB), the National Committee for Special Emergency Situations (CNSSU), and the Ministry of Agriculture and Rural Development (MADR). The chain of command in an outbreak situation is described in the contingency plan and it is publicly available on ANSVSA's official web site. Costs calculations of the disease evolution until 2021 were estimated based on the market value of the pigs, farm inputs and miscellaneous expenses incurred by the affected farms. Affected farms are considered to be units that have actually contacted the virus, pigs were euthanized and feed/materials were destroyed. Costs related to discarding euthanized pigs and contaminated feed and materials have not been covered by Romanian authorities, despite clear legal provisions. Farms located within a 10 km radius of a surveillance area from an outbreak (domestic pig or wild boar) are considered endangered. In these units, the costs were mostly collateral due to animal movement and transport restrictions and have not been compensated by the authorities so far, despite existing EU legal background.

# **EVOLUTION OF ASF OUTBREAKS IN ROMANIA**

As mentioned previously, the first outbreak of ASF in Romania was recorded in July 2017 in a backyard unit in Satu Mare county [12,16]. Following that, the first significant outbreak was reported in a large commercial farm in August 2018. The cumulative data on ASF outbreaks in Romania in domestic pigs reached the overall number of 5621, from 2017 to 2021, according to public sources (EU ADIS and ANSVSA) [17] (Table 1).

Table 1. ASF (African Swine Fever) outbreaks in Romania and EU

ASF outbreaks		Domestic pigs		Wild boars	
Year		RO	Other EU	RO	Other EU
2017		2	122	0	3855
2018		1163	1334	170	5128
2019		1724	123	683	5653
2020		1053	146	885	10003
2021		1676	150	1059	11017
Total	5618	1875		2797	35656
Average/year	1124		375	559	7131

Source: EU ADIS.

Most outbreaks occurred in backyard units (96.8 %). In the same period, 2797 outbreaks were recorded in 723 hunting areas, where 5422 wild boars were found

dead or hunted. The evolution and spread of the disease was impressive (Figure 1) and clearly reflects that ASF has been out of control in Romania, both in domestic and wild boars. The overall challenge in containing the disease in Romania is related to the inaccurate reported number of backyard domestic pigs and wild boars. Most of the backyard domestic pigs – 2.4 million according to authorities - are not recorded by legally required means like tags or tattoos, or registered in any national database [18]. The situation is even more ambiguous when the wild boar population is considered [19]. According to the Ministry of Environment, Waters and Forestry data, the total number of wild boars in 2018 was estimated to be somewhere around 130000 heads in Romania, while a safe number in current ASF epidemic conditions is considered to be 40000 heads, or a maximum of 0.5 wild boars per square km, according to the recommendations of the Directorate-General for Health and Food Safety (DG Sante).

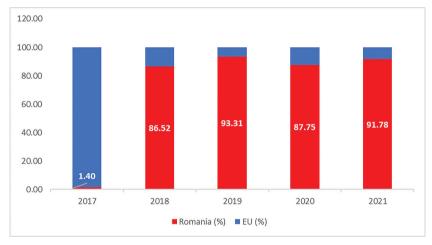
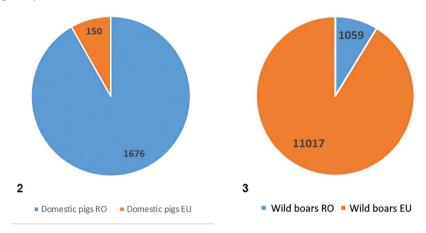


Figure 1. Evolution and spread of ASF (African Swine Fever) outbreaks in Romania and EU

To have a larger perspective, we compared the number of outbreaks in Romania to that in other EU countries in the same time interval, both in domestic pigs and wild boars (Table 1). However, the concept of an outbreak itself can be misleading, as an outbreak in a backyard unit with five pigs would be recorded in the same way as an outbreak in a commercial pig farm with 100.000 heads, while the procedures for stamping out are exactly the same. According to the evolution of the number of outbreaks in domestic pigs (backyard and commercial farms) in Romania and other EU states, the conclusion is that the spread of the disease was not contained in Romania as it was in most of the countries (Figure 1). More specifically, other EU states where ASF outbreaks have occurred since 2017 are Bulgaria, Estonia, Latvia, Slovakia, Poland and later Germany. Each of the last two member states has a much higher domestic pig population than Romania and the number of outbreaks should be proportional in theory. However, the pig farming systems in Romania cannot be compared with the ones in the mentioned member states at least for one reason. According to the statistical data published by

EUROSTAT [20], one of the specific features is that 62.8 % of the domestic pigs of Romania out of an estimated 4.2 million pigs are reared in backyard holdings with less than 10 heads, designated for family consumption and uncontrolled local/regional trade. The same source estimates that 58.4 % of the EU's backyard pig holdings are located in Romania. It is logical to conclude that the main source of the virus spread lays within the structure of the domestic pig farming sector, as these small units are owned by families with limited or no knowledge related to ASF epidemiology and do not impose any biosecurity measures, with pigs often reared freely on pastures and sometimes in close contact with wild boars.

By comparing overall ASF outbreaks in domestic pigs in EU vs. Romania between 2017 and 2021 (Figure 1 and Figure 2), we can conclude that close to 90 % of all reported cases occurred in Romania. This raises many questions regarding the efficiency of the strategy to contain the spread of the disease. This outcome was also highlighted in the latest DG Sante audit performed in 2021, concluding that animal movements and biosecurity in and between backyard holdings and animal registration are still completely out of control.



**Figure 2.** Comparison of the domestic pig ASF outbreaks in Romania vs EU in 2021. **Figure 3.** Comparison of the wild boar ASF outbreaks in Romania vs EU in 2021.

The same analysis of the situation in wild boars suggests similar conclusions (Figure 3). It is difficult to understand how only 7.84% of the total number of wild pig outbreaks were recorded in Romania within EU since 2017, while the country has one of the highest wild boar densities in EU.

The main outcome of these results seems to be that Romanian policymakers failed to implement a clear public communication and public awareness strategy, despite the requests and guidance recommended by DG Sante in the last three audit reports. The reason for not implementing a sound control and eradication strategy can be considered political. The political parties and the last three governments failed to apply the existing legal framework for containing the disease presumably because of

the social and electoral implications connected to the immense number of backyard holdings owners.

#### CUMULATIVE ASE COST IMPLICATIONS FOR ROMANIA

ASF outbreaks can impact producer prices in affected countries or even in smaller areas, mostly downwards [21,22]. Usually, the cost of outbreaks will vary depending on the nature of the pathogen and the exposure of the susceptible pig population. It is widely accepted that early detection, control and stamping out are critical conditions to minimize the direct and indirect costs of ASF outbreaks. The present study is focusing mainly on the direct costs of ASF and less on indirect ones, which are difficult to estimate based on available public data, and thus unreliable and inaccurate.

#### **Direct costs**

One of the most obvious outcomes of the ASF virus spread in Romania was the sharp decline in pig inventory (Table 2). According to national statistics published by the Ministry of Agriculture and Rural Development between 2017 (only 2 outbreaks) and 2021 (third trimester), the overall number of pigs declined by 24.63%. The main decrease was recorded in the backyard units, but this cannot be attributed solely to the ASF spread mainly because Romania is registering a significant reduction of the active rural population, doubled by the sharp increase of the average age of small farmers giving up animal husbandry activities. More relevant is the decrease of the pig population in commercial farms, which is primarily connected to the spread of ASF and the associated increasing business risks. Actually, most of the new farming expansion investments were halted – mainly in large units – as the authorities were not efficient in keeping under control the spread of the virus and the risk of infection due to uncontrolled pig movements in the territory.

**Table 2.** Changes in Romanian pig inventory (2017 vs. 2021)

Pig inventory	Total	BY	CF
2017	4410	2346	2064
2021	3324	1597	1727
Difference (%)	-24.63	-31.93	-16.33

Source: Romanian Ministry of Agriculture and Rural Development; BY - backyards; CF - commercial farms.

The analysis of the comparative changes in the Romanian sow inventory reveals a total decrease of the number of sows by 22.81% since the first ASF outbreak (Table 3). The reduction of the sow population in the backyard production system (-20.59%) looks less dramatic than in commercial farming (-32.53%). However, considering that there has been no recent census information and the pig recording database is unreliable, both figures related to pig and sow inventory in the backyard system should

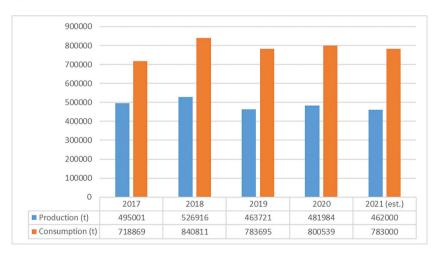
be interpreted with caution. Contrary, commercial farming is highly professional and all pigs are identified as per the legal requirements. Therefore, as commented above on pig inventory, backyard sow herd decrease cannot be fully correlated with the virus spread, while the same impact in commercial farms was mostly influenced by the outbreaks.

Table 3. Changes in Romanian sow herd inventory

Sow herd	Total	BY	CF
2017	285	136	166
2021	220	108	112
Difference (%)	-22.81	-20.59	-32.53

Note: BY - backyards; CF - commercial farms.

Although it is undeniable that inventory shrinkage in the backyard production system has an impact on the livelihood and the pig meat self-sufficiency for the rural citizens, where 40% of the Romanians live, decreasing pig production in professional farming has had a direct influence on pig meat trade. As pork is the meat of choice for Romanians and average annual consumption was around 37 kg per capita in 2020, imports (mainly intra EU trade) increased by 24.7% since 2017, correlated to the pig and sow inventory decline in the same period. The trend in absolute national pig meat production and consumption reveals an overall decrease in production, with a relatively stable consumption (Figure 4). However, production and consumption decline can be related to two causes/reasons. The main cause is the ASF spread, while the second one is the Covid-19 epidemic and consequent impact on the hospitality industry demand.



**Figure 4.** The trend of pig meat production and consumption in Romania since the first ASF outbreak.

However, the decline of the sow herd since 2017 is more important (Table 3). The disappearance of 54.000 sows from the commercial farming system brings up the discussion of costs for replacement and forgone revenue. Even if we only consider an average price per hybrid gilt of € 300 /head needed for restocking farms where stamping out was performed, the industry cost of replacement can be estimated at over € 16.000.000. Of this total cost, the replacement of 43000 sows euthanized in 2021 would reach a value estimated at € 13.000.000. Considering that it takes at least 24 months for a restocked farm to reach its full production capacity and that each female would produce 50 pigs during this time, we estimate a foregone revenue equal to the market value of 2.700.000 pigs. Adding an average price of € 150/pig, the total loss increases over € 405.000.000, half being attributable to 2021 loss only in closed herd farms. In addition, it should be considered that more than 1000000 pigs were not produced in specialized fattening units (with no sow inventory) in 2021. This would increase the revenue foregone for the industry by an additional € 150.000.000 in 2021.

When looking at Romania's pig meat product exports, it should be mentioned that the quantities were modest mainly due to the preexisting trade interdictions related to classical swine fever (CSF) status, which were lifted only in 2016 [17]. Thus, in 2017, the pig meat exported products reached a peak of 32896 tones and plummeted to 3159 tons in 2021 (Figure 5). If we would consider an average price of €1500/ tone of carcass weight, the overall income decreased to 92% or € 33.967.500 in 2021 only.

Considering the impressive number of ASF outbreaks during the last four years, the costs related to compensations for the market value of discarded pigs reached an excess amount of € 80.163.000. Out of this, compensations were estimated at € 39.632.071 in 2021. According to commercial pig producers, these compensations are covering only lost pigs, which represent 70% of the total losses incurred by the



Figure 5. The trend of the pig meat trade balance in Romania since the first ASF outbreak.

infected unit. Costs related to rendering, farm cleaning and disinfections were not covered in full by authorities, despite the legal eligibility. Therefore, the full cost would reach an estimated amount of € 51.500.000 in 2021 (Table 4). The main condition for compensation is to have had the euthanized pigs registered in the national database [23].

Table 4. Total estimated direct costs of ASF in Romania for 2021

Costs	Value	
Costs of compensations for euthanized pigs	€ 39.632.071	
Estimated collateral cost for culling	€ 11.867.929	
Costs for restocking	€ 13.000.000	
Estimated costs of revenue forgone:		
Pig meat products export	€ 33.967.500	
Overall pig meat production (integrated and finishing units)	$ \in 203.000.000 + \notin 150.000.000 $	
Total	€ 451.467.500	

#### Indirect costs of ASF in Romania

The costs incurred by the animal feed industry and other actors of the pig meat chain such as animal and meat traders, slaughterers, animal health workers, pharmaceutical manufacturers, distributors, and others were not considered in this analysis due to the lack of reliable information. However, these costs are likely to be high. According to the Romanian Animal Feed Industry Association, the demand for feed ingredients decreased by more than 20%, but the actual lost financial value is difficult to estimate.

In addition, the costs of detecting and monitoring the disease, establishing protection and surveillance zones, enforcing animal movement bans and market closures were impossible to evaluate, as there is no public information available. Out of these, indirect - or collateral – costs (e.g. enforcements of movement bans, including deliveries for slaughter) had an important impact on the businesses, as over 90 % of the affected farms were not able to trade for at least 30 days, despite EU regulations stipulating that national competent authorities can issue derogatory measures, under certain traceability rules. In Romania, these possibilities were declined by the veterinary authorities leading not only to high costs to the farmer, but also to increased animal welfare issues in commercial units.

Other indirect costs difficult to estimate due to lack of reliable information sources are related to tax revenues for the government from pig units closed due to farm bankruptcies.

#### CONCLUSIONS

The substantial reductions in costs associated with early detection and stamping out in the case of ASF outbreak are well documented. Therefore, further investments in farm biosecurity, animal disease monitoring, risk communication, outbreak and emergency response measures are urgently required to be implemented in Romania based on existing EU legislation and the recommendations provided by the DG Sante audit missions.

Based on available data, the estimated direct overall production costs of ASF losses, replacement breeding stock, and revenue foregone in Romania can be estimated at €451.467.500 only in 2021, and a cumulated value of € 1.245 billion since the first outbreak in 2017.

Romania remains by far the most ASF-affected country in the EU, in average with 90% of the recorded outbreaks in domestic pigs. To date, there are no reasons to believe that the situation will improve in the near future due to a constant lack of implication from the policymakers. This unfortunate status however is likely to increase the risk of the virus spreading in other EU countries mainly by the international transport avenues, traveling persons (tourists and workers) and derived pig meat products.

#### Author's contributions

IL carried out the conceptualization, extablished the methodology, was responsible of data curation, and has written the original draft. TP helped to draft the manuscript, edited and formatted the manuscript. DL was responsible with supervision, reviewing teh data and original draft preparation. All authors participated in the design of the study, have read and approved the final manuscript.

## Declaration of conflicting of interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **REFERENCES**

- 1. World Organization for Animal Health: African swine fever. [https://www.oie.int/en/disease/african-swine-fever/]. Accessed at 25.07.2022.
- Chenais E, Depner K, Guberti V, Dietze K, Viltrop A, Ståhl A: Epidemiological considerations on African swine fever in Europe 2014–2018. Porc Health Manag 2019, 5:6.
- Sánchez-Vizcaíno JM, Laddomada A, Aviles MM: Editorial: African Swine Fever. Front Vet Sci 2021, 7:632292.
- 4. Andraud M, Bougeard S, Chesnoiu T, Rose N: Spatiotemporal clustering and random forest models to identify risk factors of African swine fever outbreak in Romania in 2018–2019. Sci Rep 2021, 11:2098.
- 5. Revilla Y, Pérez-Núñez D, Richt JA: African Swine Fever virus biology and vaccine approaches. Adv Virus Res 2018, 100:41–74.

- De la Torre A, Bosch J, Sánchez-Vizcaíno JM, Ito S, Muñoz C, Iglesias I, Martínez-Avilés M: African Swine Fever survey in a European context. Pathogens 2022, 11(2):137.
- 7. European Food Safety Authority, Depner K, Gortazar C, Guberti V, Masiulis M, More S, Oļševskis E, Thulke HH, Viltrop A, Woźniakowski G, Abrahantes JC, Gogin A, Verdonck F, Dhollander S: The epidemiological analyses of African swine fever in the Baltic States and Poland (Update September 2016 September 2017). EFSA 2017, 15(11):e05068.
- 8. Van Goethem B: The state of play of African swine fever. 2022 COMAGRI Meeting Presentation, DG SANTE, European Commission. [https://www.europarl.europa.eu/cmsdata/244426/State%20of%20play%20of%20African%20swine%20fever.pdf]. Accessed at 15.07.2022.
- 9. European Commission: Commission Implementing Regulation (EU) 2021/605 of 7 April 2021 laying down special control measures for African swine fever was adopted by the Commission based on the new legal framework of Regulation (EU) 2016/429 ("Animal Health Law").
- 10. Council and Parliament of the European Union. Regulation (EU) 2016/429 of the European Parliament and of the Council of 9 March 2016 on Transmissible Animal Diseases and Amending and Repealing Certain Acts in the Area of Animal Health ('Animal Health Law') Article 57. Official Journal of the European Communities, L84/1. [https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L\_.2016.084.01.0001.01. ENG]. Accessed at 03.09.2022.
- 11. Beia SI, Bran M, Creţu RC, Alecu I, Beia VE, Andrei SV: Implications of the national and EU laws concerning the African Swine Fever on the Romanian rural economy. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development 2020, 20(1):75–82.
- 12. Imre K, Popa SA, Pascu C, Iancu I, Degi J, Costinar L, Herman V: Management and evolution of African Swine Fever, in Romania, during 2017-2020. Paper presented at the 38th IBIMA Conference, November 2021, Seville, Spain.
- 13. Boklund A, Dhollander S, Chesnoiu VT, Abrahantes JC, Bøtner A, Gogin A, Gonzalez Villeta LC, Gortázar C, More SJ, Papanikolaou A, Roberts H, Stegeman A, Ståhl K, Thulke HH, Viltrop A, Van Der Stede Y, Mortensen S: Risk factors for African swine fever incursion in Romanian domestic farms during 2019. Sci Rep 2020, 10:10215.
- Petrovan V, Turcitu M, Matei L, Constantinescu V, Zaulet M: Genetic characterization of African swine fever virus in Romania during 2018-2019 outbreak. bioRxiv; 2019. [https://doi.org/10.1101/2019.12.15.876938]. Accessed at 25.07.2022.
- 15. Balmoş OM, Supeanu A, Tamba P, Cazan CD, Ionică AM, Ungur A, Motiu M, Manita FA, Ancuceanu BC, Bărbuceanu F, Mihalca AD: Entomological survey to study the possible involvement of arthropod vectors in the transmission of African swine fever virus in Romania. EFSA 2021, External Scientific Report, EN-6460. [https://efsa.onlinelibrary.wiley.com/doi/epdf/10.2903/sp.efsa.2021.EN-6460]. Accessed at 20.07.2022.
- Ardelean F, Globig A, Gârdan –Navalici A, Blome S, Dietze K, Depner K, Zani L: The course of African swine fever in Romanian backyard holdings – A case report. Vet Med Sci 2021, 7:22.
- 17. European Commission. Animal Disease Information System (ADIS). Animal Disease Information. [https://food.ec.europa.eu/animals/animal-diseases/animal-disease-information-system-adis\_en#animal-disease-information]. Accessed at 29.07.2022.
- 18. Hoste R: Romania half of EU pig farms. Agrifuture 2015, pp. 20-21.

- O'Neill X, White A, Ruiz-Fons F, Gortázar C: Modelling the transmission and persistence of African swine fever in wild boar in contrasting European scenarios. Sci Rep 2020, 10:5895.
- 20. EUROSTAT: Web site pig population annual data. [https://appsso.eurostat.ec.europa. eu/nui/show.do?dataset=apro\_mt\_lspig&lang=en]. Accessed at 02.09.2022.
- Niemi JK: Impacts of African Swine Fever on pigmeat markets in Europe. Front Vet Sci 2020, 7:634.
- 22. Popescu A: Pork market crisis in Romania: pig livestock, pork production, consumption, import, export, trade balance and price. Scientific Paper Series Management, Economic Engineering in Agriculture and Rural Development 2020, 20(1):461–474.
- 23. The Government of Romania, Decision no. 1214 of 7 October 2009 on the methodology for determining and paying the compensations due to the owners of slaughtered, killed or otherwise affected animals because of rapid liquidation of outbreaks of transmissible animal diseases. [https://legislatie.just.ro/Public/DetaliiDocument/112910]. Accessed at 14.12.2022.

# UTICAJ AFRIČKE KUGE SVINJA (ASF) NA PROIZVODNJU SVINJSKOG MESA U RUMUNIJI

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Prvo žarište Afričke kuge svinja (ASF), u Rumuniji je registrovano u poljoprivrednom gazdinstvu u Satu Mare okrugu, jula 2017. godine, a kao rezultat epizootije u populaciji divljih svinja i domaćim rasama svinja u dva susedna okruga u Rumuniji, Ukrajini i Republici Moldavija. Od tada, registrovano je više od 1.3 miliona inficiranih domaćih rasa svinja u više od 5600 poljoprivrednih gazdinstava i komercijalnih farmi na teritoriji cele Rumunije pri čemu su sprovedene "Stamping out" mere i procedure. Uprkos razvijenim i primenjenim vanrednim planovima i procedurama koji su usklađeni sa EU planovima, širenje epizootije nije sprečeno. Trenutno, smatra se da je cela teritorija Rumunije zaražena što značajno smanjuje brojno stanje svinja i negativno utiče na komercijalni uzgoj ove vrste životinja. Kao posledica, povećan je godišnji uvoz svinjskog mesa iz drugih regiona i država EU pa je svinjsko meso postalo glavni uvozni artikl na listi uvoza Rumunije. Godina 2021. bila je nateža za proizvođače svinjskog mesa u Rumuniji, a u tom periodu su stvoreni najveći gubici, najviše zbog nesposobnosti odgovornih kao i nosioca političkih odluka da sprovedu efikasne i efektivne mere kontrole.