

**Marioara RUSU, Violeta FLORIAN, Elisabeta ROȘU**

*Institute of Agricultural Economics, Romanian Academy, Bucharest*

*rusu.marioara@gmail.com*

*florian\_violeta@yahoo.com*

*betty\_rosu@yahoo.com*

## MARKETING THE PRODUCTION OF FAMILY FARMS WITHIN LIMITS IMPOSED BY THE COVID-19 PANDEMIC

### ABSTRACT

One of the main actors in the rural area, the family farm, is deeply affected by the health crisis caused by the novel coronavirus. On the one hand, the economic and social fragility has deepened the dysfunctions – already existing before the pandemic – generating inefficient self-defense/self-protection mechanisms, for risk reduction; on the other hand, the shocks have been so strong that they caused the agri-food chains to break. The family farm economic structures, its specific functions, mainly those related to the sale of agricultural products, have proved to be vulnerable, the same as the entire system of relations of family farms with the other areas of activity, mainly with the markets for the sale of agricultural products.

**Key words:** family farm, market chains, impact, COVID-19.

**JEL Classification:** Q19, Q13.

### 1. INTRODUCTION

The empirical data suggest the intensity of the health crisis impact upon the rural communities and their important economic actors – the family farms. In this period, the functional structures have been subjected to deep challenges, generated by the new economic and social tensions specific to the health crisis. The fragility of the family farms, which was latent and punctual, has been revealed by the specific requirements of this year's pandemic. The family farm reactions have been limited by their own weaknesses – the precariousness of the social-demographic and financial and technical capital – and by the shocks induced by the breaking of food chains, inefficient relations with the macro-social domains and the unexpected syncope of the association/cooperation forms. The resilience of small and medium-sized farms, generated by the sale of agricultural products, may be a consequence of the use of short food supply chains and of online trade and production

adjustment to the new challenges, depending on the demand characteristics in this period.

## **2. STATE OF KNOWLEDGE**

The outbreak of COVID-19 pandemic has been unprecedented in size and extent and has caused, since early 2020, both a public health crisis and a socio-economic crisis with multiple repercussions on the population's food security. Several studies indicate that in the event of a health crisis, the proper operation of the market chains and the flow of agricultural products are key factors that influence the food and nutrition security (WFP-CILSS-FEWS NET, 2010, FAO, 2011, Atherstone, C., Roesel, K. & Grace, D., 2013). In the event of a health crisis, certain market chains are more resilient and absorb shocks better than others, facilitating the access to food for the most vulnerable households (FAO, 2016).

## **3. MATERIAL AND METHOD**

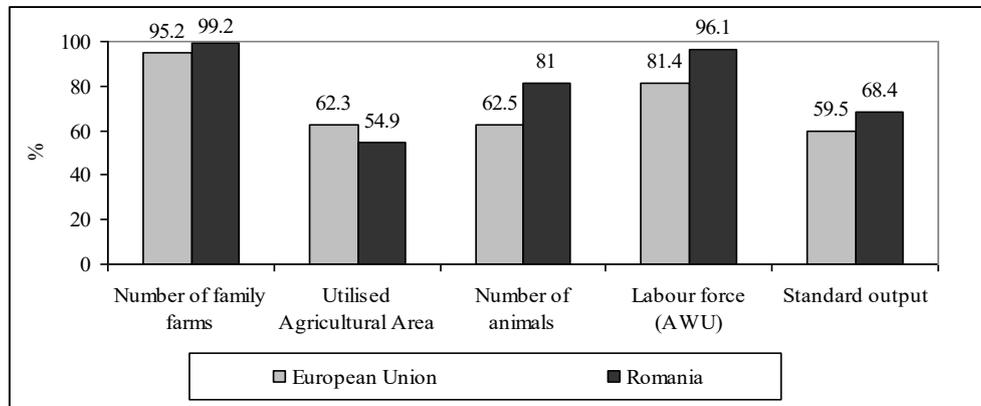
The methodology included the analysis of secondary data – from the national and European statistics – complemented by the bibliographic analysis – studies, socio-economic surveys, stand takings by experts and farmer organizations. At the same time, various experiences, relevant cases, pragmatic examples on internet have been explored.

## **4. RESULTS AND DISCUSSIONS**

### **4.1. FAMILY FARM – OPPORTUNITIES AND CONSTRAINTS/VULNERABILITIES**

Family farms are a common reality of the agricultural sector worldwide, summing up almost 90% of the total number of farms (95% in the EU and 96% in the USA). Ranking based of FAO' definition – any family-run farm, where 50% or more of the regular agricultural labour is provided by family workers. In Romania's case, the individual agricultural holdings are considered family farms. Most of these farms are small-sized farms: FAO estimates that at present, out of the 500 thousand family farms, about 95% are smaller than 2 hectares and 82% are smaller than 1 hectare (Lowder *et al.*, 2014).

Family farms prevail both in Romania' and the EU's farm structure, with more than 55%, both in terms of number, operated area, number of animals, contribution to labour employment and the value of output (Fig.1).



Source: Eurostat, Farm Structure Survey, 2016.

Figure 1. Importance of family farms in Romania and the European Union (EU).

According to the FAO, besides their important place in agricultural production, family farms are preservers of traditional foodstuffs, while contributing to a balanced diet and protecting the world's agro-biodiversity and the sustainable use of natural resources. At the same time, they represent an opportunity to stimulate local economies, especially when specific policies targeting social protection and community welfare are combined (FAO, 2014a).

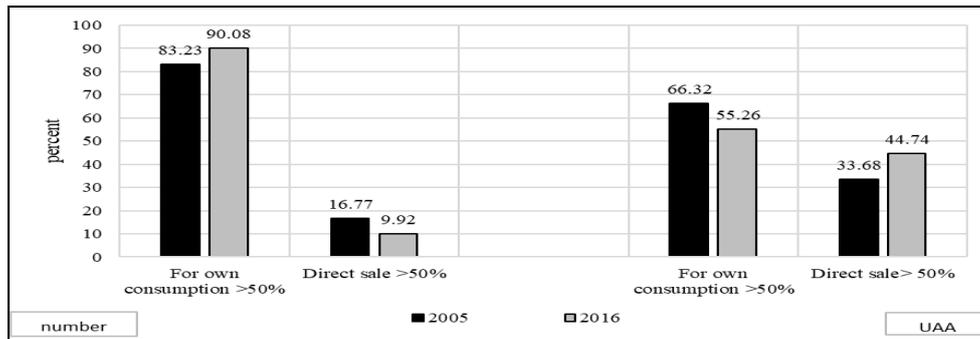
The main challenges the family farms have to face often reflect issues common to all small business types: poor endowment with modern production means, lack of a production planning system, lack of marketing skills to support the sale of products, as well as the lack of technical means to prepare the products to be placed on the market, lack of financial resources and the weak bargaining power in the market (Toderita, A., Popescu, R., 2020).

FAO's warning is that, in the context of the current health crisis, there is also a food crisis risk, which might affect the most vulnerable persons in the first place, among which small and medium-sized farmers in particular, who are subjected to challenges in access to markets to sell their products and purchase basic inputs (<http://www.fao.org/2019>).

#### 4.2. FAMILY FARM – FUNCTIONAL CHALLENGES: UTILIZATION/MARKETING/SALE OF AGRICULTURAL PRODUCTS

About one-third, i.e. 3.4 million of the 9.9 million family farms in the EU, operate in Romania. Romania is the EU member state with the largest number of small-sized farms: 92% are farms smaller than 5 ha and 72% smaller than 2 ha. In the case of family farms, the sale of products obtained is a great challenge that has

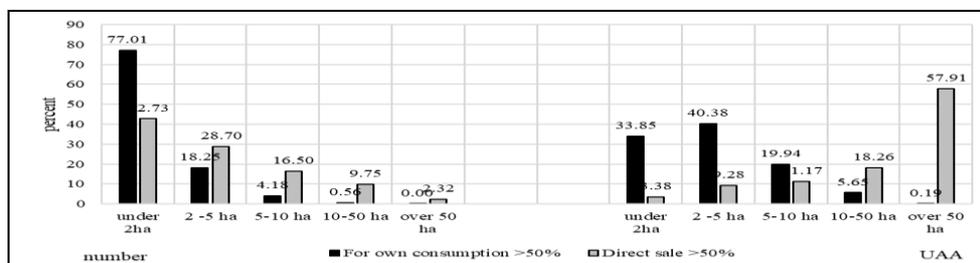
continued throughout the years: in the period 2005–2016, the large number of farms (over 85%) that use more than 50% of the production obtained for their self-consumption has been maintained, and has even slightly consolidated, i.e. a 7% increase of the number of farms that fall into this typology.



Source: authors' processing of NIS, FSS data, 2005 and 2016.

Figure 2. Evolution of the share of family farms by farm production destination (number and UAA) in the period 2005–2016.

A brief analysis by size classes (Fig.3) reveal that the small and medium-sized farms (under 10 ha), both in terms of number and utilised agricultural area, mainly produce for self-consumption and sell their products on the market only occasionally.



Source: authors' own processing of NIS, FSS data, 2005 and 2016.

Figure 3. Share of family farms by farm production destination, by size classes, in the year 2016.

Despite their low share in total UAA, small family farms represent an extremely important segment of the agricultural sector, with a important contribution to food production and general food security. Small farms carry out production activities with a greater diversification level, producing a wide range of vegetables, fruit, grapes, dairy products, animal products, etc.

## Box 1

## Production sale by small family farms – case studies

The studies conducted in the year 2018 revealed that the small farms in the regions Giurgiu and Bistrița Năsăud have already greatly contributed to regional food security. The studies targeted the small farms up to 5 hectares with an economic size of maximum 8 ESU (equivalent to EUR 9,600 standard gross margin). *The potato and pork production of small farmers in the county Bistrița Năsăud account for 80–100% of regional production.* A very high share of total potato production (80–100%) is consumed in the county, while pork production covers the consumption in the county, and one-third is also sold outside the county. *The small dairy farms in Bistrița Năsăud county produce 60–80% of region's total, 70% of production being sold outside the county, thus contributing to food security outside the region as well.* In the county Giurgiu, egg production comes both from the small and large farms. 80–100% of total egg production coming from the small farms cover the county's consumption needs, either for self-consumption (on the households where the eggs have been produced), or sold through informal networks (relatives, neighbours, etc.). Although the small tomato farmers cultivate only 1.92% of the county's agricultural area under this crop, 80–100% of the total tomato production in Giurgiu county is obtained on this area. Up to 70% of production is sold to other regions, and it can cover the tomato demand in the southern part of Romania in the hot season. *The data collected under the SALSA project validates the fact that the small farmers interviewed in Giurgiu and Bistrița counties keep only 26% of production for their self-consumption on the average.* In addition to preserving the culinary traditions, their lifestyle, in which own produced food plays a central cultural role, *at least partially alleviates poverty in the rural area* and complements the social support (provided through pensions and social assistance to many small subsistence farms in the rural area). At the same time, in nutritional terms, this lifestyle contributes to the access of rural households and well as of their extended families, to healthy food. *The regional data in the two counties also reveal that the small farms are increasingly market-oriented.* Regardless of the typology with which they have been identified, the interviewed small farmers want to sell and develop, mainly through land succession to the younger generation. In both investigated counties in the project, and regardless the typology of small farms in which they would fall according to our studies, the interviewed farmers expressed their desire to grow and continue production, despite the challenges caused by the lack of labour force, and most farmers motivated that this was rather a lifestyle to produce their own food for them and their families, than a significant income source.

Source: HCC, H2020 SALSA – Small farms, small food businesses and sustainable food security, April 2016 – June 2020, <https://highclere-consulting.com/>

The evaluation of the Covid-19 crisis impact upon the agricultural sector is premature and only speculative at this stage, and it will depend on how long the emergency situation in the health sector lasts and on the restrictive measures that will remain in place after the economy resumes its activities. In the present context, in which family farms are lacking solid experience in marketing the obtained production, the analysis of the challenges they are facing may be relevant and inspiring. The analysis of the only available documentary source, i.e. “digital media” conducted in the period April 12–25, 2020 revealed the following.

*Limiting farmers' access to markets for the sale of their products* emerged as a result of imposing transport restrictions and lockdown measures. There have been major problems with the sale of fresh foodstuffs. Road closures/blockages and travel checks have prevented small farmers in particular from selling products or buying inputs, resulting in loss of products and income losses implicitly.

*Changing consumption habits/patterns and consumer behaviour:* in this period of crisis there have been an increase in both basic foodstuffs and in ready-to-eat products that can be stored. These trends have led to difficulties in selling perishable agricultural products and to income diminution/loss for many farmers; at the same time, there have been an increase in the demand for ecological products, with positive consequences for the small and medium-sized farms.

*The closure of peasant markets* was a measure adopted by several countries in a first stage, but then, due to the negative effects upon small farmers, this measure was reconsidered.

*The closure of the HORECA sector* also affected many farmers who had contract with these units (mainly for dairy products, fruit and vegetables, wine, etc.).

*Surplus of food products – production is thrown away – consumer incomes' diminution, increasingly low demand of products in the sector of food services, the closing down of schools and canteens* led to the emergence of a surplus of agricultural products.

*Strong growth of e-commerce* – the pandemic has created a situation where people cannot move freely and products cannot circulate. For many small farms, the marketing of agricultural products has experienced a critical period. Even since the beginning of crisis, part of the society became aware of the need to support the small farmers at local level in particular. Consumption from proximity farms has been promoted on social networks. Both online sales of products and home deliveries have accelerated (Toderita and Popescu, 2020).

#### Box 2

Romania – development of marketing online platforms at national and local level

*www.rndr.ro/legume* – as a MARD initiative, developed at the end of March. The farmers who grow vegetables can display here the amounts of products for sale, thus facilitating the dialogue with retailers. Even though several hundreds of farmers have used the platform to promote their products so far, its utility proves to be low compared to the large commercial chains, due to the procurement procedures of the latter, which imply the standardization of the production they take over. The merchandise must be sorted, calibrated, packaged. Furthermore, taking over low amounts of vegetables from a great number of farmers implies high costs, so that farmers association seems to be a solution to this problem (<https://www.agro.basf.ro/>).

*Map of local producers in Romania – producatoridinromania.ro* – developed by two students, is addressed to the Romanian producers of bee honey, agri-food products, hand-made products, household appliances and other categories, who can sign up for free on the online map, so that they can be easily identified and found by potential customers. At present, everything is free of charge, both for producers and for consumers. There are 10 categories of pre-defined products on the map. “We have around 50 producers listed and 30–40 waiting” (<https://economie.hotnews.ro/>).

*Platform PiataNoastra.ro* intends to bring together buyers interested in Romanian foodstuffs and local farmers producing agri-food products. It aims to shorten and facilitate the food chain from domestic production to final customers, eliminating intermediaries and high prices from the process. At the same time, the initiators of the project declare that there will be no mark-up for the products listed on site (<https://www.startupcafe.ro/>).

*Platform Farmeria.ro* – launched by three high-school students, intends to support farmers to sell their products to nearby consumers (<https://www.startupcafe.ro/>). *Farmeria.ro* is a marketplace platform that provides farmers across the country the opportunity to market their products. The platform promotes local producers and community trade, through the way it sorts and displays users' products: priority is given to products from the same locality, and then to those from the respective county.

*Platform Targulescu.ro* – is a project developed by some young people who want to support the small farmers in Giurgiu county. They became aware of the need for bioproducts on the market, which are demanded by consumers. “We empathised with the farmers from Giurgiu county who needed an outlet to sell their products” (<https://www.targulescu.ro/>).

*Platform Taraba Virtuală* has a mobile application, on Android and iOS, and a web site, through which farmers are put in direct contact with those interested in buying local, natural products. The business was initiated in 2017 by two programmers from Bucharest. (<https://www.startupcafe.ro/>)

#### 4.3. MARKETING OF AGRICULTURAL PRODUCTS – PROACTIVE MEASURES

In order to counteract the pandemic shock impact on the marketing of farm production, the convergent action of all governmental, economic and social actors is needed. Measures to boost the sale of agricultural products by farmers:

- *stimulating the establishment of new agricultural cooperatives and empowering the already existing ones* to facilitate the sale of products, of perishable products in particular, by the small and medium-sized farmers, according to requested procedures and standards; the high-urgency activities aim at procuring or renting new storage, sorting and packaging facilities, procurement of transport means, equipment/ice boxes, as well as making investments for the processing of certain products; association can lead to a higher level of farm technological upgrade, to a more efficient organization of production, to an improved position of farmers on the value chain and an increased bargaining power, while facilitating communication between farmers and providing access to marketing services and online sale of products, counselling, vocational training and extension services; the positive trend in the cooperative sector must be consolidated: in the period 2015–2018, the number of registered agricultural cooperatives increased from 796 to 1425. Nevertheless, only a small part of these (230) operated in the year 2018 (MADR, 2019);
- *supporting the continuation of activities aimed at digitizing the sale of production*, mainly in the case of small farmers, such as “the basket of vegetables”, online platforms, etc.; particular attention should be paid on supporting the transport of these products, as most farmers who have joined

- such platforms complain about high transport costs; this crisis also highlighted the need for farmers to acquire minimum computer skills required for the use of IT products (interactive maps, creative local platforms, interactive networks) (<https://www.francebleu.fr/>);
- *continuing to support “short chain” cooperation projects*, mainly those aimed at supporting marginalised and isolated communities; this type of measure was supported under NRDP through sub-measures 16.4 and 16.4a and consumed about 7 million euros) (Toderita and Popescu, 2020); the support to such projects represents an important local development opportunity on the long run and a safety net for other potential crisis situations; thus, in the context of debates on preparing strategic plans for the future CAP, the fragility of long supply chains will have to be taken into consideration;
  - *maintaining, by local authorities, peasant market operation* in safety conditions adapted to the pandemic situation; authorities’ support is needed to ensure the continuity of sales in hygiene and safety conditions, both for farmers and consumers;
  - *establishment of mobile collection centres* intended especially for small farmers; establishment, with the support of central and local authorities, of *storage systems* that could help reduce harvest losses. This investment is of critical importance, with a strategic role for the development and resilience of national food chains on the medium and long term;
  - *implementation of public procurement schemes* that take over agricultural commodities from small farmers to increase (or establish) buffer stocks. This would be operational for non-perishable food commodities;
  - *strengthening the partnerships between national authorities and economic actors, between local farmers and the main national retail networks* – the Romanian Farmers Club considers that the responsibility and solidarity of national retail networks is absolutely necessary to reconsider and strengthen the partnership with the Romanian farmers, mainly by ensuring priority and fast access to the retail shelves of agri-food products supplied by these.

### Box 3

#### Partnerships between local farmers and the main national retail networks

“*Romanian Tastes from Householders*” scheme, launched by Mega Image seven years ago, includes 195 producers who grow vegetables on a total area of more than 120 hectares. The farmers deliver fresh seasonal vegetables to Mega Image and Shop&Go stores on a daily basis, immediately after being harvested. At the same time, to encourage the consumption of products from Romanian local producers, Mega Image applies price reductions to vegetables from the Romanian Taste Scheme (<https://www.hotnews.ro/>).

*KAUFLAND* provides support to local suppliers of agri-food products. The Romanian Farmers Club welcomes and expresses its appreciation for Kaufland’s initiative to unilaterally change the terms of payment for its suppliers of fresh products from 7 to 3 days and for other products from 30 days to 7 days. This action provides direct support to farmers and processors of agri-food products, contributing to a stable cash-flow.

## 5. CONCLUSIONS

The vulnerability of small and medium-sized farms stems from their own demographic and social characteristics – the farm heads are in the category of elderly persons, and the specific technical and financial profile: poor endowment with modern production means and lack of technical means to prepare the products to be distributed on the market, lack of financial resources and weak bargaining power in the market. Low professionalization of farm heads – the absence of a production planning system, lack of marketing skills to support the sale of products and enable bargaining power – contribute to economic fragility and to timid, ineffective reactions in crisis situations.

The declining population and labour force mobility due to the COVID-19 pandemic has been a shock to the production systems, mainly for the marketing networks. The COVID-19 pandemic, still ongoing, has significantly impacted the sales of agricultural products by farmers. The main challenges these are facing refer to changing consumption patterns, at consumer level and on marketing chains, the change of the ratio of fresh products to basic products, blockages on the peasant markets and increasing online deliveries, syncopes in the agro-processing industry, closing down of the HORECA economic operators, as well as of schools and canteens, etc. All these challenges may result in lower incomes for farmers, alongside with the decline of agricultural production.

The support to small and medium-sized farms is needed, through the social recognition of their role in food security and the economic stability they provide to rural communities. Following this logic, proactive measures are necessary focusing on the recovery and efficient support to the marketing systems for farmers:

- a) stimulating the existing systems that are economically and socially efficient: combining the traditional marketing forms (peasant markets) with the modern systems (online trade); multiplication of partnerships between local producers and retail networks; continuation of projects of “short chain” type.
- b) social innovation of pre-commercial/pro-commercial structures: establishment of mobile collection centres; implementation of public procurement schemes, by which agricultural commodities are taken over from small farmers, to increase (or establish) buffer stocks (non-perishable products).

## REFERENCES

1. Atherstone, C., Roesel, K. & Grace, D., 2013, Ebola risk assessment in the pig value chain in Uganda. ILRI Research Report 34. Nairobi, Kenya: International Livestock Research Institute. ISBN 92-9146-350-7
2. FAO, 2011, A value chain approach to animal diseases risk management. Food and Agriculture Organization of the United Nations, Rome. ISBN 978-92-5-106861-8
3. FAO-PAM-Guinée, 2014, Evaluation rapide d 'l'impact de la maladie à virus Ebola sur l'agriculture et la sécurité alimentaire en Guinée: FAO-PAM- République de Guinée.

4. FAO, 2014a, Family Farmers Feeding the world, caring for the earth, <http://www.fao.org/3/mj760e/mj760e.pdf>
5. FAO, 2016, Impact of the Ebola virus disease outbreak on market chains and trade of agricultural products in West Africa, <http://www.fao.org/3/a-i5641e.pdf>
6. HCC, H2020 SALSA – Small farms, small food businesses and sustainable food security, April 2016-June 2020, <https://highclere-consulting.com/>
7. Lowder, S.K. , Skoet, J. and Singh, S., 2014, What do we really know about the number and distribution of farms and family farms worldwide?Background paper for The State of Food and Agriculture 2014. ESA Working Paper No. 14-02. Rome, FAO.
8. INS, 2006, Ancheta structurală în agricultură 2005
9. INS, 2017, Ancheta structurală în agricultură 2016, <https://insse.ro/cms/ro/content/ancheta-structural%C4%83-%C3%AEn-agricultur%C4%83-2016-date-pe-macroregiuni-regiuni-de-dezvoltare-%C5%9Fi-jude%C5%A3e>
10. MADR, 2019, Planul de guvernare – Agricultură și dezvoltare rurală, <https://www.madr.ro/docs/minister/program-guvernare-PNL-agricultura-2019.pdf>
11. Toderita, A., Popescu, R., 2020, Cum asigurăm securitatea alimentară a României pe timp de pandemie. Rolul fermelor mici și mijlocii, CRPE Policy Brief nr. 44, [http://www.crpe.ro/wp-content/uploads/2020/04/CRPE\\_Policy-Brief-44.pdf](http://www.crpe.ro/wp-content/uploads/2020/04/CRPE_Policy-Brief-44.pdf)
12. WFP CILSS-FEWS NET., 2010, Cross border trade and food security. Liberia, Sierra Leone : WFP, CILSS, FEWS NET, <https://documents.wfp.org/stellent/groups/public/documents/ena/wfp225001.pdf?iframe>
13. World Bank, 2014, Update on the Economic Impact of the 2014 Ebola Epidemic on Liberia, Sierra Leone, and Guinea, <https://www.worldbank.org/content/dam/Worldbank/document/Economic%20Impact%20Ebola%20Update%202%20Dec%202014.pdf>
14. <http://www.fao.org/2019-ncov/qa/impact-on-food-and-agriculture/en/>.
15. <https://www.agro.basf.ro/ro/stiri/stirile-saptamanii/reasezare-relatie-produs-alimentar-piata-pandemie.html>
16. <https://economie.hotnews.ro/stiri-consumator-23846076-harta-producatorilor-locali-din-romania-fii-gasit-mai-usor-clienti.htm#>.
17. <https://www.startupcafe.ro/idei-antreprenori/programatori-romani-piata-alimentara-online.htm>
18. <https://www.startupcafe.ro/idei-antreprenori/farmeria-site-fermieri-vanzare-consumatori.htm>
19. <https://www.targulescu.ro/>
20. <https://www.startupcafe.ro/idei-si-antreprenori/startup-romania-taraba-virtuala-aplicatie-foodkit.htm>
21. <https://www.francebleu.fr/infos/agriculture-peche/covid-19-une-carte-interactive-pour-trouver-les-producteurs-fermiers-pres-de-chez-vous-1585644374>)
22. <https://www.hotnews.ro/stiri-esential-23839697-masuri-timp-criza-preturi-reduce-legumele-romanesti-195-producatori-care-beneficiaza-piata-mare-desfacere.htm#>