



ROMANIAN TRADITIONAL DISHES AND CERTIFIED FOOD PRODUCTS

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Received 15th March 2023, accepted 15th June 2023

Abstract: *The aim of this paper is to provide a description of Romanian gastronomy and to analyze the current situation of certified food products. Tastes, aromas, colors, combinations of Romanian ingredients and traditional technologies have led to the appearance of traditional products that have been passed down from generation to generation. Research focuses on linking existing natural resources to Romanian cuisine from each region of the country. Currently, at national level there are 725 certified traditional food products with unique characteristics, while at European level there are 11 products (meat, fish, cheese, fruit and vegetables) with Protected Geographical Indication (PGI) designation and one product with Protected Designation of Origin (PDO) (cheese), 41 wines with PDO, 13 wines with PGI and 9 spirits with Geographical Indication (GI). The largest number of traditional meat, dairy and bakery products were certified in the Center region of the country, while the largest number of beverages and traditional fruit and vegetable products were certified in the North-West region.*

Keywords: *certification, gastronomy, Romanian cuisine, traditional foods.*

1. Introduction

Food production is related to location, climate conditions, biodiversity, religion and beliefs, trade routes. Since ancient times all communities developed the dishes based on diversity offered by nature [1]. Thus, the natural resources, social, economic, and cultural development contribute to the traditional dishes [2]. Romanian gastronomy was also influenced by these factors by combining old peasant recipes with recipes from the neighbors [3]. Romanian cuisine includes meat (bacon, sausage, drums, wire, roast pork, and bone soup) and vegetables dishes, milk and cheese, fish, polenta, pies with cheese, meat, cabbage, wine, beer, plum brandy etc. Over time, Romanians began eating pork in the winter and poultry in the summer, while sheep and goat meat were consumed in smaller quantities since wool or milk were considered more important

than meat [4]. Romanian cuisine includes everyday food (breakfast, lunch, and dinner) and festive dishes connected with Christian traditions especially holidays like Christmas, Easter and New Year [3, 5]. All the historical regions of Romania have common but also different dishes, having a very well-defined gastronomic identity [3]. The objectives of this paper are to provide a review of the location and characteristics of Romania regions, a brief description of the gastronomy specific to Romania and to identify the certified Romanian food products.

2. Romania: location and characteristics

Romania (with an area of 238,937 km²) is a largely rural country [7] and is located in South-Eastern Central Europe [6]. Romania's relief includes mountains (the Carpathians with a maximum altitude of 2,544 m, the Moldoveanu Peak), hills and plateaus (the Subcarpathians and the

Western Hills, the Moldavian, Dobrogean and Getic plateaus, but also the Mehedinți Plateau) and plains (the Romanian Plain and the Western Plain). The lowest region (below 10 m altitude) of the country is the Danube Delta [8]. Romania benefits from all types of aquatic units: rivers, lakes, underground waters, sea waters [9]. According to Prăvălie et al. [10] multiannual mean temperatures range between 11-12 °C in the south and fall below 1 °C in the mountains. Carpathian Mountains influence the temperate climate of the country, resulting precipitation > 1300 mm in mountain areas, while in extra-Carpathian regions the precipitations are even as low as 400 mm [10]. In the mountainous area, annual average wind speeds of over 10 m/s were recorded, while in the Black Sea area, Danube Delta and Northern Dobrogea, were 9–10 m/s, and in the Bârlad Plateau were registered between 6 and 8 m/s. In the other areas of the country, the average annual wind speeds are lower [11]. In Romania, there are 210 sunny days per year with three types of sunlight areas: greater than 1400 kWh/m²/year, between 1200 and 1400 kWh/m²/year, less than 1200 kWh/m²/year [12]. In Romania, ecosystems (forest, grassland, freshwater and brackish ecosystems, marine and coastal ecosystems, and underground ecosystems) represent approximately 47% of the country's surface. At the national level, 89.1% of the forests are located in mountainous and hilly areas. Coniferous forests represent 30.4% of the total forest area, and deciduous forests 69.6%. In Romania there are beech forests (31.1%), followed by spruce (22.9%), various oak species (18.2%), fir (5%), pine (2.1%), other conifers (0.9%) and other deciduous (0.5%), the rest of the forests being made up of mixed forests. In the Danube Delta there are over 5,400 species of flora and fauna and 30 types of ecosystems. In 261 areas throughout the country, 783 types of

habitats were identified. To date, 3795 species and subspecies of higher plants (3136 wild species, 623 cultivated species), 965 species of bryophytes (mosses), 8727 species of fungi (mushrooms), over 600 species of algae, including 35 marine species, have been recorded. Also, a number of 33,802 animal species have been identified, of which 33,085 are invertebrates and 611 are vertebrate [13].

The 42 counties (including Bucharest capital) of Romania are grouped in the following regions: North-East (NE), South-East (SE), South-Muntenia (SM), South-West Oltenia (SW), West (W) North-West (NW), Centre (C) and Bucharest-Ilfov (BI) [6]. The historical provinces of Romania were Muntenia, Oltenia, Dobrogea, Moldavia, Bucovina, Transylvania, Maramureș, Crișana, Banat [14]. The NE region is part of the old historical region of Moldova, and includes Bucovina as well, South-East Romania region includes part of the historical region of Moldova (Vrancea and Galati counties), part of the historical region of Muntenia (Braila and Buzau counties), as well as the historical region of Dobrogea (Constanta and Tulcea counties), the South Muntenia region is located in the southern part of Romania and includes most of the historical region of Muntenia. The SW Oltenia region coincides with the old historical region of Oltenia, West Region includes mainly the Banat region, while North-West Development Region includes Crisana and Maramures historical regions. Central Region is located in the center of the country and includes the Transylvania historical region.

According to INS [15], in 2021, the total population was 22046917 inhabitants, of which 56.3% had residence in urban area and 43.7% in rural area. The highest number of inhabitants is found in the NE region, followed by the SM region (Fig. 1). Also, the highest percentage of women

living in rural areas are in these two regions. In 2014, the agricultural area of Romania was 14630072 ha, and the arable area was 9395303 ha. South- Muntenia and South-East regions have the largest agricultural areas and arable land (Fig. 2). 40% of the total areas of 209417 ha of vineyards and viticultural nurseries are located in the SE region of the country, while from the total of 196941 ha orchards and fruit nurseries approximately 41% are

located in two regions: South- Muntenia (20.90%) and South-West Oltenia (20.16%). The regions rich in forests and other forest vegetation are Centre and North-East, together accounting for about 37% of the total existing areas in 2014 (6734003 ha) [15]. The highest employment rate was observed in Bucharest-Ilfov, while the lowest was in North-East region in 2020 (Fig. 3).

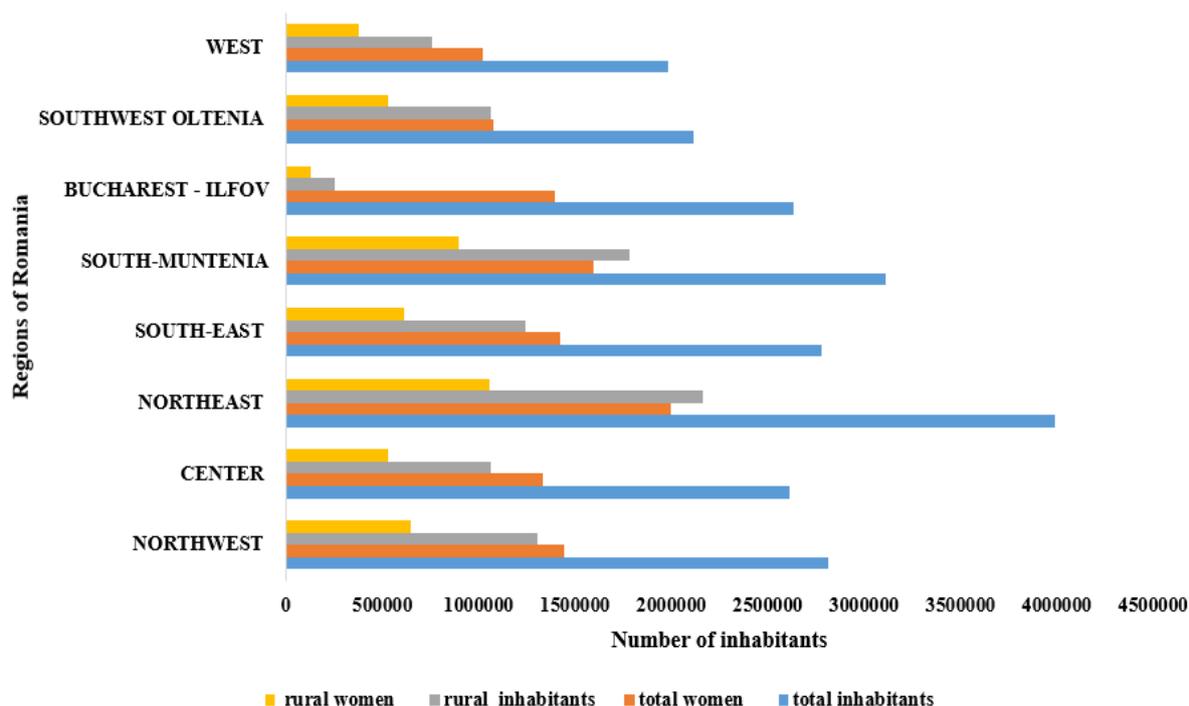


Fig. 1. Inhabitants number by residence in different regions of the country (based on the data provided by INS [15])

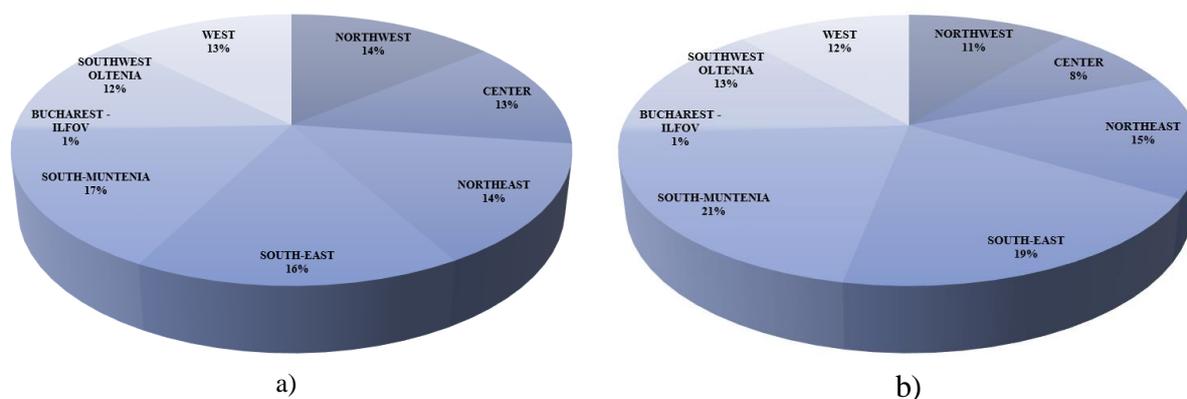


Fig. 2. Distribution of a) agricultural area and b) arable land in Romanian Regions, in 2014 (calculated based on the data provided by INS [15])

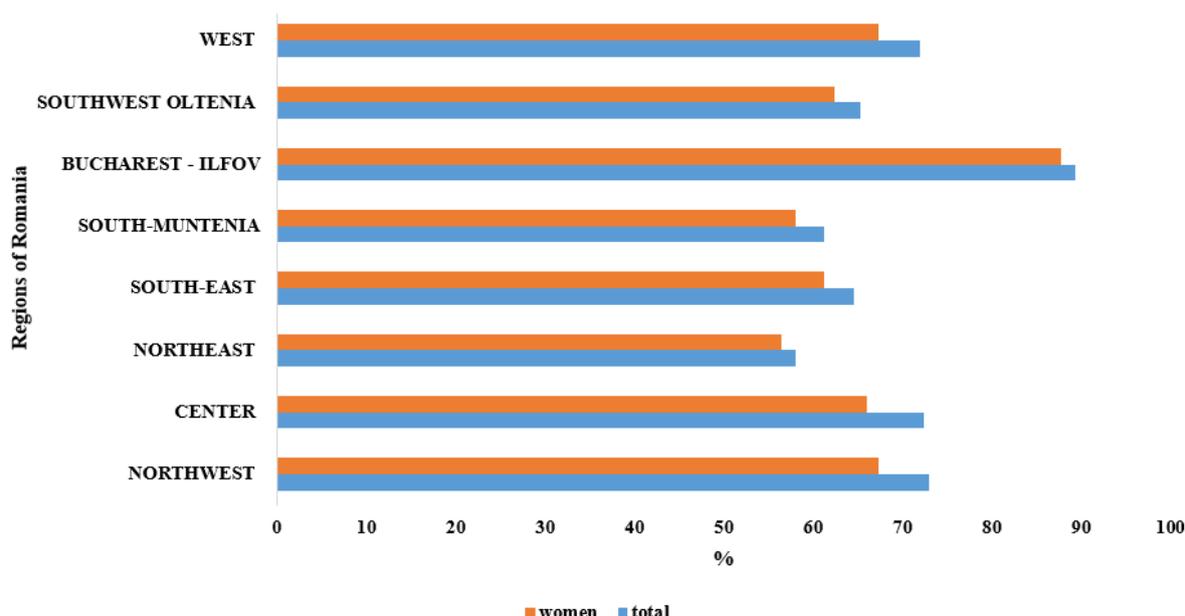


Fig. 3. Employment rate by development regions (calculated based on the data provided by INS [15])

The oldest form of human settlement is village, which can be found in all geographical areas of Romania. About 90% of the Romania's surface is rural area and the majority of the rural population works predominantly in agriculture [16]. Due to the large agricultural areas, good soil quality and temperate climate Romania is an important producer of agri-food products [17].

In 2020, the live weight of animals intended for slaughter for cattle consumption was 172586 tons live weight. The regions that contributed more to the total number of cattle destined for slaughter were North-East with 29%, Center with 16%, North-West with 15%, South Muntenia with 14%. The West region contributes the most to the total live weight of animals destined for slaughter for consumption - pigs (498,098 tons live weight in 2020) with 34%, followed by the NW and SM regions, each with 13%, by the SE and NE regions with 12% and 11% respectively. The rest of the regions with contributions below 10% each. Also in 2020, the live weight of animals destined for slaughter for sheep and goat consumption was 120,571 tons of live weight (with 22% contributed by the SE

region, followed by the Center region with 20% and the NW region with 15%, while the other regions contribute with smaller percentages). The live weight of animals intended for slaughter, for poultry consumption was 663328 tons live weight. To this quantity, the South Muntenia Region had the largest contribution (with 25%), followed by the South-East and North-East regions, each with a 19% contribution. In Romania, the total production of milk in 2020 was 42609 thousand hectoliters. The largest volumes of milk produced were registered in the NE, Center and NW regions. The NE region is famous for cow's milk, while in the SE region it ranks first in the production of sheep and goat milk. The most pieces of eggs were produced in the South Muntenia region, 1,349 million pieces out of a total of 5,428 million pieces produced throughout the country in 2020. 30714 tons of honey were produced in Romania in the same year. In the SE and SW Oltenia regions, the largest quantities of extracted honey were produced, 5652 tons and 5278 tons, respectively. In 2020, 6392369 tons of wheat (the regions that contributed the most to this amount were South Muntenia with 28%, SW Oltenia

with 23% and the W region with 16%), 847241 tons of barley (SM, SW Oltenia and SE being the largest producers of barley), 196659 tons of oats (oats are grown on large areas especially in the NW region, but also in the NE and SW regions of Oltenia), 10096689 tons of grain corn (the regions that contributed the most to this amount were SM with 18%, NW and NE, each with 16%) and 24,958 tons of rice (rice is grown only in the SE and SM regions), were obtained. The SW Oltenia, SE Muntenia and SE regions are the largest producers of vegetables at the national level. Sunflowers are cultivated more in the southern regions of the country, and in 2020, 2122865 tons of sunflowers were produced throughout the country. The high production of rapeseed was obtained in the South Muntenia region, followed by the West and South-East regions. Sugar beet and potatoes are mainly cultivated in the NE and Central regions [15].

3. Gastronomy in Romania

Gastronomy or food consumption plays an important role in country tourism and not only. The cuisine variety is influenced by different natural, historical and socio-cultural factors like the relief, forest region, climate, seasonal changes, water source, soil type and agriculture. It is well knowing that Romanian cuisine inherited numerous culinary habits from Dacians, Celts, Greeks, Turks, Russians, Bulgarians, Hungarians, Serbs, Germans and Austrians [4, 18].

Romanian cuisine includes various dishes based on the local products (meat, milk, eggs, grain, vegetables, fruits), of these [19]:

- *soups and borschts*: vegetable cream soup (pumpkins, tomatoes, carrots, green beans, peas, peppers, potatoes, parsnips or leeks can be used), chicken soup with dumplings, vegetable soup (with potatoes,

carrots, peppers, parsley, celery, onion, dill, etc.), fish soup with tomatoes, chicken peasant soup (chicken, carrot, parsnip, celery, red bell pepper, onion, boiled peas, oil, parsley, salt and pepper), beef soup, pork soup, lamb soup, tripe soup (beef bone, boiled beef belly, carrots, parsley root, celery, bay leaves, hot peppers, 20% sour cream, egg yolks, garlic, oil, salt and pepper to taste. To serve with: sour cream, hot peppers, pepper, vinegar or lemon juice) etc.

- *vegetable dishes*: stuffed peppers (for the filling - minced meat, carrot, red bell pepper, green bell pepper, rice, onion, oil, salt, pepper to taste, fresh thyme. Sauce - tomato pulp, spoonful of flour, large onion, spoonful of paprika, oil, parsley, pepper), potato dish with mushrooms, spinach dish with garlic, pilaf with mushrooms, vegetable pot, bean dish, mashed vegetables („zacusca”), baked beans etc.

- *salads*: eggplant salad with tomatoes and peppers (ripe eggplant, bell pepper, red onion, tomato, oil, salt and pepper, parsley), cabbage salad with carrots, potato salad with meat, vegetable salad, baked zucchini salad, beetroot salad with horseradish, etc.

- *steaks*: grilled chicken wings, chicken legs with vegetables in the oven, roast beef in a pan, lamb roast with potatoes (lamb (leg and rib), oil, water, garlic, dried thyme, pepper, salt and paprika), pork neck with onions and potatoes etc.

- *fish dish*: fish borscht, fried fish with cornmeal, fish brine, fish plate (fish, onion, oil, garlic, red and green bell peppers, bay leaves, broth, small fresh tomatoes, fresh parsley, salt and pepper), carp with celery puree, marinated mackerel salad, carp roe salad etc.

Romanian cuisine includes dishes that can be prepared in entire country, and also specific foods belonging to Romanian historical regions (with specific culture and customs) [5].

Bucovina is famous for “sărmăluțe” in a nest of cream, pork sausages with beetroot and horseradish salad, trout “în fir de cetină”, chicken soup with homemade noodles, chicken or beef vegetable stews and pork chops. Dishes made from forest mushrooms (“hribii, opintici”) are indispensable. For dessert, the most famous is the “cozonac”, followed by “poale-n brâu” pies, pancakes or “papanasi” with cheese. Also here you can find a wide range of alcoholic appetizer, made from fruit: cherries, blueberries, corned, raspberries. The traditional drink is double distilled brandy or “pălinca”. Home beer is also a popular drink, which housewives brew from hops and corn kernels [20]. The inhabitants especially like to consume milk, cream and cheese. Sour cream is consumed mostly with “tochitură de purcel”, with a “butcher's tochitura”, with “sarmale”, and even with a cheese pie. Also, the borscht is prepared with sour cream. In this area are prepared “tocineii” (balls from Bucovina “barabule” - Bucovina potatoes), trout or mushrooms with cream [21].

In *Moldavian* cuisine are prepared „ciorbă de potroace”, „borșul moldovenesc”, „pârjoale moldovenești”, „alivenci”, „răcitură de pasăre”, „piftie de porc”, polenta, fish brine, „tochitură moldovenească”, pie with cighir, sausages (large intestine from pork stuffed with meat, onions, rice or groats), „poale'n brâu”, „cozonac” and „pască moldovenească”, pumpkin, cheese, apples and cabbage pies [22, 23]. The most important wines produced in Moldavia are: “Grasa de Cotnari”, “Feteasca alba”, “Feteasca neagră”, “Galbenă de Odobești”, “Zghihara de Huși”, “Frânzușă”, “Băbeasca neagră”, Tămâioasa Românească” and “Busuioaca de Bohotin” [24].

Dobrogea cuisine includes fish soups, belly soup, fish marinades, carp brine, fish “la proțap”, stuffed carp, mutton sausages,

lamb in proțap, saslac, kebab, moussaka, kefir, rice side dishes, but also baklava, “sarailii”, sweets with raisins. Some examples of specific Dobrogean dishes: fried fish, in the oven, on the grill, marinated, smoked catfish pastrami, fried turbot, Danube carp brine, crumble on the grill or on the tray, pike marinated with vegetables in the oven, perch brine like in the Danube Delta, potato moussaka with fish, pike liver pate, fish sausage, filled pike, pike meatballs with rice, vegetables and seaweed, “sarmale” with fish, fishing borscht, fish meatballs in sauce, Dobrogean “tochitură”, Vareniki (dumplings with sweet cheese), Cherdele (pies made from leavened dough, filled with a cheese composition), Ghisman (it is prepared from corasla - the first milk given by a cow after giving birth), Nalangate (with yogurt, eggs, sugar, sodium bicarbonate, lemon or vanilla essence), Dobrogean pie [25]. Murfatlar wine is famous, and wines like Chardonnay, Pinot, Riesling and Muscat Ottonel are produced in Dobrogea [24].

Muntenia traditional cuisine is characterized by tasty dishes like belly soup, beef and pork soup, “sarmale with polenta”, lamb stew, “ciulama”, „mititei”, grilled steaks and fish, pasta puddings, pies, pastry sweets with cream and chocolate. The traditional dishes are based on vegetables and meat and very appreciated in this country area are borscht of nettles, beans, mushrooms or chicken. Steak with prunes and pie with cheese or pumpkin are prepared especially in winter. In Muntenia, among the favorite dishes are roast chicken with quinces or apricots or duck with olives. Rooster or goose stew is preferred by inhabitants, while pork stew is also prepared in winter [26]. “Țuica” and wine are the alcoholic beverages produced Muntenia, while non-alcoholic are “socata” and syrups (of fir, rose, sour cherry) [27]. Some famous wines such as “Tămâioasa românească” and “Feteasca

neagră” or “Feteasca regală” from Dealu Mare or Pitești brandy are obtained in this region [24].

In *Oltenia*, the custom of cooking in clay pots is still preserved today. “Sarmale” cooked in clay pots are very well known. Fresh vegetables, poultry, beef and pork, fish or dairy products are used in *Oltenia* cuisine. *Oltenia* sausages, made from equal amounts of beef and pork, minced and mixed with garlic, pepper and salt, and sheep intestines which are stuffed with this paste, are smoked for two hours, are very famous. In *Oltenia* villages are used more vegetables like nettles, stevia, sedge, green onion leaves for cooking. The soups are more sour, pickled with cabbage juice or tomato juice. Chicken, vegetable, leek, loboda, stevia soups are preferred by *Oltenians*. The leek has a place of honor in *Oltenia* cuisine, and is prepared in most diverse forms. Olives are also found in many dishes. Desserts include doughnuts, puddings, pancakes [28]. “Feteasca regală”, “Băbeasca neagră”, Sangiovese, “Roșioara”, Pinot noir, wines are produced in this region [24], while “Zaibăr” wine is the pride of each *Oltenian* [27].

In *Transilvania* cuisine, influenced by Austro-Hungarians, there are fatty, spicy and very tasty dishes based on pork. Along with meat, vegetables, milk and cheeses are used. Tarragon is a specific spice used in this region, especially in soups, soured with vinegar or cabbage juice, and dressings with egg yolk and cream. The sauces are white or seasoned with paprika, for color. The most famous dishes from *Transilvania* are: “varza a la Cluj - Cabbage á la Cluj”, “branza de burduf”, “gulaș ardelenesc”, “ciorba de fasole în pâine”, “gomboți cu prune”, “Vargabeles” [29, 30]. White wines “The White Feteasca”, “The Royal Feteasca” or the delicious “Muscat Ottonel”, and red wines “Babeasca” or “Feteasca Neagră” are obtained in *Transilvania* [29].

Similar to *Transilvanian* cuisine, *Banatean* cuisine receives Austro-Hungarian influences, but also influences from Greek, Italian and French cuisine. The dishes mainly consist of pork, with vegetables fried and stewed in lard and oil, with flour sauces and seasoned with pepper, thyme, paprika and cumin. The soups are soured with lemon, seasoned with tarragon and improved with cream. The sauces are made with breadcrumbs made from heated flour mixed with tomato or vegetable broth. Sarmales from *Banat* are prepared from meat minced with a cleaver, and are much larger compared to those specific to *Moldova*. Pork, cow, poultry and less fish are used a lot. The most popular *Banat* dishes are: zacusca, veal soup, sarmale, stuffed onion, *Banat* food with pork [31, 32]. Pinot noir, Cabernet Sauvignon, Merlot, Big Burgundy, “Cadarcă de Recaș”, Italian Riesling, Sauvignon Blanc, “Creață de Banat”, “Majarcă” and Steinschiller wines are obtained in this region [24].

Crisana cuisine was influenced by Hungarians and Germans and is based on pork and vegetable dishes. Products like Pecica hearth pita, Nădlac salami, Chisindia brandy, Măderat mustard are a real brand for this region [33]. Aldești, Groșii Noi or Chisindia brandy, Miniș and Pâncota wine are produced in *Crisana* [33]. In *Maramures*, dishes have an „ancestral taste” influenced by Romanians, Saxons and Hungarians. This region is famous for zamuri, (soups) stews, papricaș, balmoș and gomboți (dumplings with plums). Cauldron dishes are also prepared in this area, prepared over a fire with fir wood in the open air. Cauldron stew, cauldron goulash and Easter cauldron lamb are just a few examples [34, 35]. Lard and cheese are used a lot, and there is no shortage of plum “horinca” and “țuica” boiled with honey [23].

In *Romania*, there is a very taste and unique cuisine and the historical regions

has a well-defined gastronomic identity [3, 22]. Cuisine, culture and customs, house architecture and traditional costumes specific to each region contribute to Romanian cultural heritage [5]. The cuisine is influenced by a number of material factors: geographical factor (relief, climate, vegetation, crops), historical and social factor (foreign occupations, historical experiences, social structures, exchanges trade), the economic factor (degree of productivity and prosperity). Consumers will look for and privilege those foods, dishes and recipes that are part of their culinary tradition [36].

4. Certified food products

Due to the large agricultural areas, good soil quality and temperate climate, Romania is an important producer of agri-food products [17]. At European level, Romania has certified 11 products with the name Protected Geographical Indication (PGI): “Magiun de prune Topoloveni” (Class 1.6. Fruit, vegetables and cereals fresh or processed), “Novac afumat din Țara Bârsei”, “Scrumbie de Dunăre afumată” and “Salată cu icre de știucă de Tulcea” (all three in Class 1.7. Fresh fish, molluscs, and crustaceans and products derived therefrom), “Salam de Sibiu”, “Cârnați de Pleșcoi” and “Salinate de Turda” (all three in Class 1.2. Meat products (cooked, salted, smoked, etc.)), “Telemea de Sibiu” and “Cașcaval de Săveni” (both in Class 1.3. Cheeses), “Plăcintă dobrogeană” and “Pită de Pecica” (both in Class 2.3. Bread, pastry, cakes, confectionery, biscuits and other baker's wares), and one Protected Designation of Origin (PDO) product namely “Telemea de Ibănești” (Class 1.3. Cheeses) [37]. As far as wines are concerned, 41 wines with PDO (such as Cotnari, Recaș, Murfatlar, Dealu Mare or Panciu) and 13 wines with PGI (like

Dealurile Crișanei, Dealurile Sătmăruului, Dealurile Transilvaniei, Dealurile Zarandului etc.) have been certified so far [37]. Also, Romania certified 9 spirit drinks with Geographical indication (GI): “Pălincă”, “Țuică de Argeș”, “Horincă de Cămârzana”, “Țuică Zetea de Medieșu Aurit” (product category: 9. Fruit spirit) and “Vinars Segarcea”, “Vinars Târnavă”, “Vinars Vrancea”, “Vinars Murfatlar” and “Vinars Vaslui” (product category: 4. Wine spirit) [37]. The total number of traditional product certificates nationwide is 725, according to the National Register of Traditional Products (RNPT) published on 6 July 2022. Of these, 304 are meat and meat products, 131 are milk and milk products, 114 are bread, bakery and pastry products, 113 are fruit and vegetables, 28 are fish, 29 are beverages and 6 are other. The correlations between the traditional products and the main ingredients produced in the country regions are illustrated in Figs. 4-7.

According to Fig. 4, the largest quantities of meat were produced in the following regions: beef in the North East region (NE), pork in the West region (W), sheep meat and goat meat in the South East region (SE), and poultry meat in the South Muntenia region (SM), while most traditional meat products were certified in the Central region (C).

It can be seen that although there are large meat producers, in these regions the certification of traditional products is lower. Small productions of pork and mutton were obtained in the Bucharest Ilfov (BI) and Sud Oltenia (SO) regions, while the North-West (NW) region ranks third in the production of beef, pork and mutton. A classification in descending order of the regions according to the number of certified traditional meat products would be the following C>NW>SE>NE>SO>SM>BI>W.

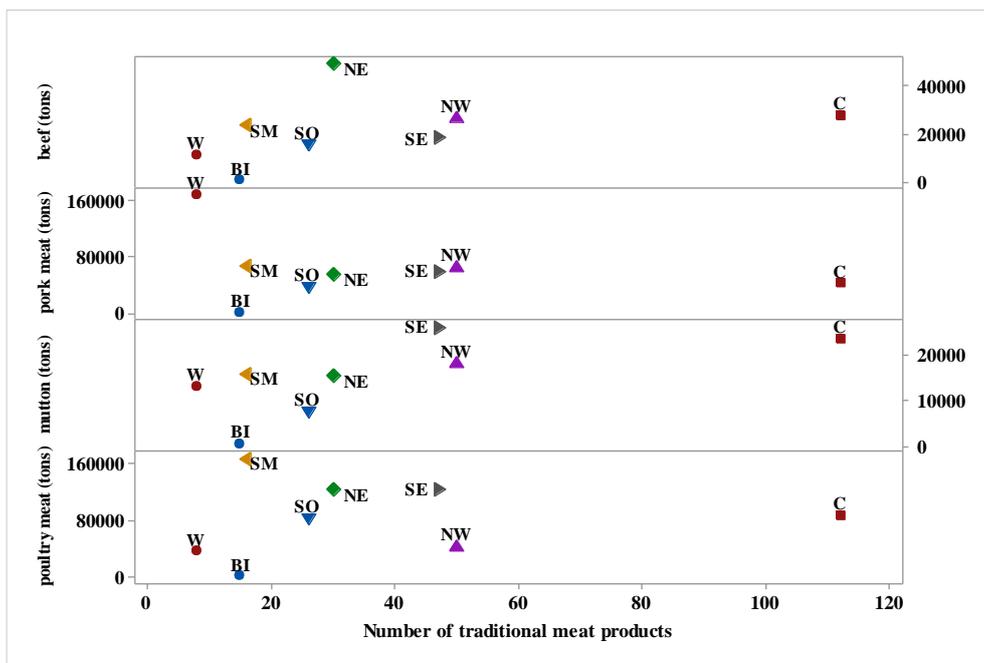


Fig. 4. Correlation between traditional meat products and meat production by regions

Most dairy products were also certified in the Center region according to Fig. 5, instead the regions where the higher quantities of milk are obtained in the NE region (cow's milk) and the SE region (sheep's milk). The Center region is in

second place in the production of cow and sheep milk. A descending ranking of regions according to the number of nationally certified traditional dairy products would be as follows: C>NW>SM>NE>W>SE>SO.

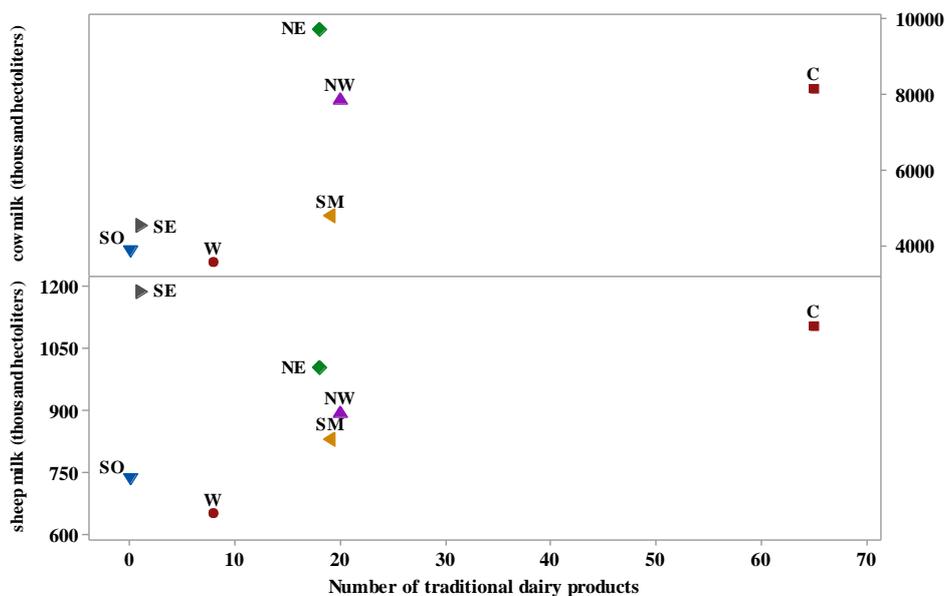


Fig. 5. Correlation between traditional dairy products and milk production by regions

The largest quantities of fruits were produced in the SM, NW and SO regions,

while the largest quantities of vegetables were obtained in the SM, SO and NE regions.

The region where the largest quantities of potatoes are produced is the Central region, followed by the NE and NW regions. Fig. 6 indicates that most traditional fruit and vegetable products were certified in the NW region. Such products were also certified in the NE, C and W regions, and a smaller number of

such products (under 10) were certified in the other regions. The regions where the largest amounts of grain are produced are SM, SO and W, while the SM region produces the most eggs. According to Fig. 7, the Center region recorded the most traditional bakery products, followed by the NW and NE regions.

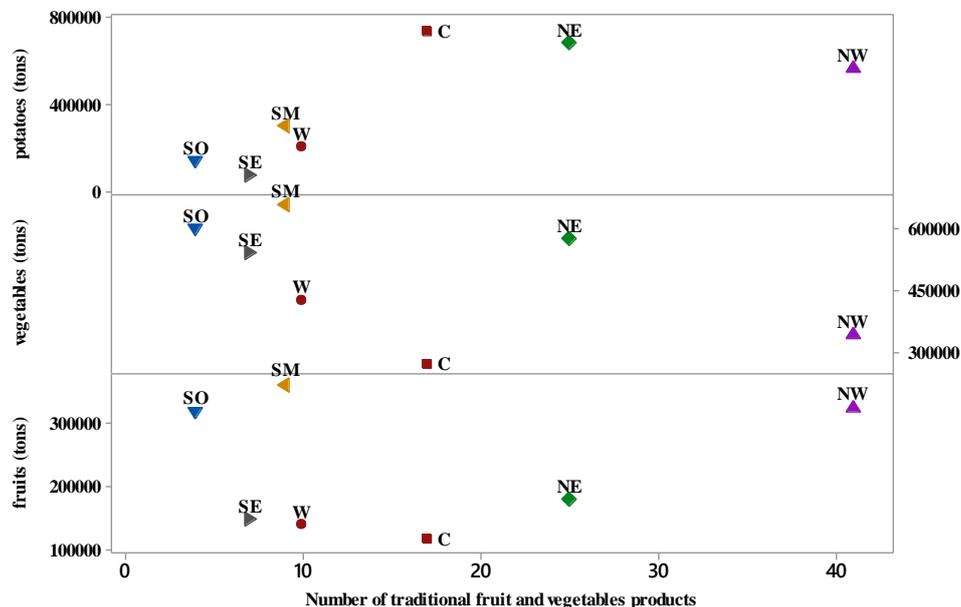


Fig. 6. Correlation between traditional fruit and vegetable products and fruits and vegetable production by regions

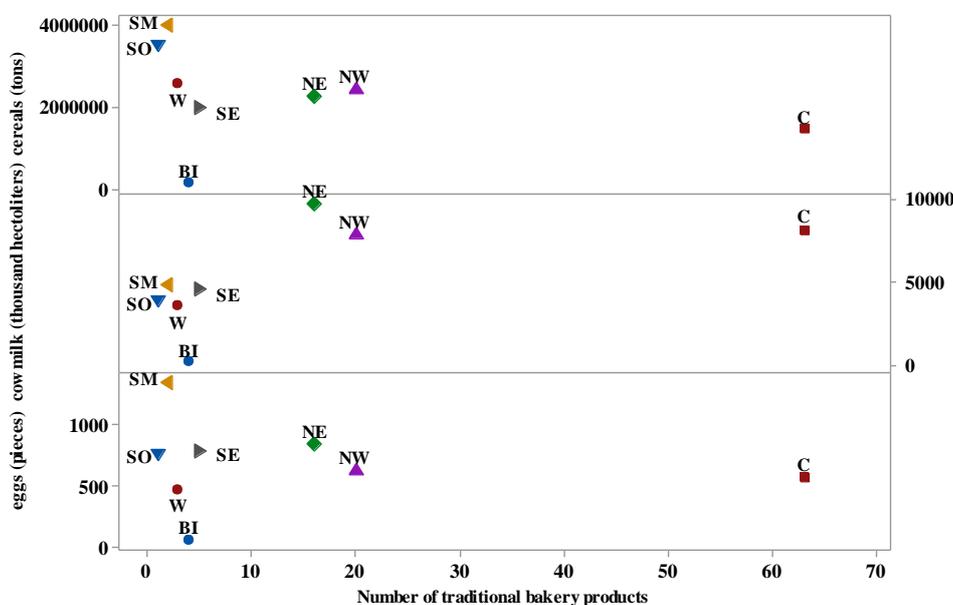


Fig. 7. Correlation between traditional bakery products and cereals, milk and eggs production by regions

Classification of the regions according to the number of traditional bakery products in descending order is the following C>NW>NE>SE>BI>W>SM> SO. The results showed that the certification of traditional products is not specifically done in the large regions producing raw materials, so in the Center region the most traditional meat, milk, bakery and fish products were registered, while in the Northwest region there were most fruit and vegetable products, but also beverages, were registered.

5. Conclusion

Traditional foods are prepared based on beliefs, behaviours, religions, values and social norms. Each cuisine has unique characteristics and associated with cultural aspects can represent an attraction of tourists especially in rural areas. A wide variety of gastronomic riches were found in all country regions. Certification of traditional products is a guarantee of product quality, may increase by income of rural producers and depends on the pedoclimatic conditions of raw materials. Even if they have a high price, their certification promotes them as natural, authentic and healthy products. Rural producers must be encouraged and supported to obtain the certification of traditional products.

6. Acknowledgments

This paper was supported by Competitiveness Operational Program – Call: POC/975/1/1/Large infrastructures – Projects for Innovation Clusters, under the contract no. SMIS 2014+ 153837.

7. References

[1]. ÖZER Ç., ATAY E., Investigation of Local Cuisine Culture in Turkey by Regions and The Importance in Rural Tourism, *International Journal of Social and Economic Sciences*, 7:17-21, (2017)

[2]. PIPAN A., GAČNIK A., Role of Cultural Heritage in the Development of Gastronomy Tourism in the Rural Area: Case of the Vipava Valley, *Agricultura*, 17:19-26, (2020)

[3]. SIMONI S., TEODOROIU F., ȚALĂ M.L., ȚIGU G., Cultural and Economic Aspects of Promoting Romanian Traditional Gastronomy, *BASIQ International Conference*, 582-589, (2017)

[4]. VOINEA L., POPESCU D.V., NEGREA T.M., DINA R., Nutrient Profiling of Romanian Traditional Dishes—Prerequisite for Supporting the Flexitarian Eating Style, *Information*, 11:514, (2020)

[5]. SALANȚĂ L.C., PĂUCEAN A., TOFANĂ M., MAN S., POP C., Romanian cuisine: culinary habits and local produce, *Journal of Agroalimentary Processes and Technologies*, 21:186-191, (2015)

[6]. VRÎNCEANU A., DUMITRAȘCU M., KUCSICSA G., Site suitability for photovoltaic farms and current investment in Romania, *Renewable Energy*, 187: 320-330, (2022)

[7]. IORIO M., CORSALE A., Rural tourism and livelihood strategies in Romania, *Journal of Rural Studies*, 26:152-162, (2010)

[8]. LUNGU M., *Antologia Statelor Lumii (a doua ediție) (Anthology of the States of the World (Second Edition))*, Ed. Steaua Nordului, Constanța, (2004)

[9]. PĂTRU I., ZAHARIA L., OPREA R., *Geografia Fizică a României—climă, ape, vegetație, soluri (Physical Geography of Romania – climate, waters, vegetation, soils)*, Ed. Universitară, București, (2006)

[10]. PRĂVĂLIE R., PITICAR A., ROȘCA B., SFÎCĂ L., BANDOC G., TISCOVSCHI A., PATRICHE C. Spatio-temporal changes of the climatic water balance in Romania as a response to precipitation and reference evapotranspiration trends during 1961–2013, *Catena*, 172:295-312, (2019)

[11]. DRAGOMIR G., ȘERBAN A., NĂSTASE G., BREZEANU A.I., Wind energy in Romania: A review from 2009 to 2016, *Renewable and Sustainable Energy Reviews*, 64:129-143, (2016)

[12]. NĂSTASE G., ȘERBAN A., DRAGOMIR G., BREZEANU A.I., BUCUR I., Photovoltaic development in Romania. Reviewing what has been done, *Renewable and Sustainable Energy Reviews*, 94:523-535, (2018)

[13]. CBD, *Strategia națională și Planul de acțiune pentru conservarea biodiversității 2014 – 2020 (The national strategy and action plan for biodiversity conservation 2014-2020)*, Available online at: <https://www.cbd.int/doc/world/ro/ro-nbsap-v3-ro.pdf>, (12 December 2022)

[14]. COCOȘ R., SCHIPOR S., HERVELLA M., CIANGA P., POPESCU R., BĂNESCU C.,

- CONSTANTINESCU M., MARTINESCU A., RAICU F., Genetic affinities among the historical provinces of Romania and Central Europe as revealed by an mtDNA analysis, *BMC Genet.*, 18:20, (2017)
- [15]. INS, TEMPO - INS database, National Institute of Statistics, Romania. Available online at: <http://statistici.insse.ro/shop/?lang=en>, (29 July 2022)
- [16]. ACADEMIA ROMÂNĂ, Cunoaște România (Get to know Romania), Ed. Economică, București, (2004)
- [17]. GAVRILESCU C., VOICILAȘ D.M., Competitiveness of the Romanian agri-food trade and the new agricultural policies, *Zagadnienia Ekonomiki Rolnej*, 4:106-116, (2014)
- [18]. SAVA C., CLEȘIU S.R., Romanian gastronomy between traditionalism commerce, business and rural tourism, *Knowledge Horizons – Economics*, 6:66–69, (2014)
- [19]. Romanian cuisine, Available online at: <https://bucataria-romaneasca.ro/>, (12 September 2022)
- [20]. Local gastronomy. Authentic Bukovinian taste, Available online at: <https://sadova.ro/mancare-sadova-bucovina/>, (12 September 2022)
- [21]. DĂNILĂ S., ALBU A., Gastronomiă din Bucovina, Available online at: <http://tourisminbucovina.ro/gastronomie.pdf>, (2014)
- [22]. MUNTEAN M.C., NISTOR C., NISTOR R., SARPE D., Local Cuisine – Always an Important Decisional Factor in International Tourism, *WSEAS Transactions on Business and Economics*, 4:381-391, (2010)
- [23]. NISTOR S., Ghidul gastronomic al României (Romania's gastronomic guide), Editura House of Guides, (2004)
- [24]. NEDELICU A., Gastronomic and wine tourism – key elements for local economic development. case study Romania, Second International Thematic Monograph, *Thematic Proceedings Modern Management Tools and Economy of Tourism Sector in Present Era*, 142-160, (2017)
- [25]. Danube Delta culinary recipes, Available online at: <https://www.info-delta.ro/category/retete-culinare/page/4/>, (12 September 2022)
- [26]. Muntenia cuisine, Available online at: <https://bucatarianationala.wordpress.com/2015/01/16/bucataria-din-muntenia/>, (12 September 2022)
- [27]. SMARANDA S., Traditional Romanian food-as the result of history, nature, way of life and human ingenuity, *Lucrări Științifice Management Agricol*, Seria I, 19:229-235, (2017)
- [28]. Muntenia-Oltenia, Available online at: <https://www.romanian-places.com/muntenia-oltenia.html>, (13 February 2023)
- [29]. PĂUCEAN A., A Geographical and Historical Overview of the Transylvanian Cuisine, *Bulletin UASVM Food Science and Technology*, 70:1-7, (2013)
- [30]. Transilvania and Banat cuisine, Available online at: <https://www.unileverfoodsolutions.ro/inspiratie-bucatari/bucatariile-lumii/bucataria-traditionala/bucataria-din-transilvania-si-banat.html>, (13 February 2023)
- [31]. PIRVULESCU I., BORDEAN D.M., PETROMAN I., PETROMAN C., RUJESCU C., RADU S., SIRBULESCU C., Study on Banat's traditional gastronomy, *Lucrări Științifice seria Agronomie*, 52: 732-736, (2009)
- [32]. Traditional cuisine, Available online at: <https://www.unileverfoodsolutions.ro/inspiratie-bucatari/bucatariile-lumii/bucataria-traditionala.html>, (13 February 2023)
- [33]. APTR, Crisana-Bana, Trasee naturale în zonele carstice din Vestul Munților Apuseni (Crisana-Banat), Mandrii de Romania, Ghid Turistic (Crisana-Bana, Natural routes in the karst areas of the Western Apuseni Mountains (Crisana-Banat), Proud of Romania, Tourist Guide), (2012)
- [34]. Maramures, Available online at: <https://www.romanian-places.com/maramures.html>, (13 February 2023)
- [35]. The traditional Maramures cuisine, <https://marea-alpina.ro/bucataria-traditionala-maramureseana/>, (13 February 2023)
- [36]. MITU S., Traditional Food and Gastronomy in Maramureș, *Memoria Ethnologica*, 78 – 79:82-101, (2021)
- [37]. EC, eAmbrosia the EU geographical indications register, <https://ec.europa.eu/info/food-farming-fisheries/food-safety-and-quality/certification/quality-labels/geographical-indications-register/>, (2022)