

The Evolution of the Romanian Agricultural Landscape

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Introduction

THE AGRICULTURAL landscape has unquestionably accompanied human evolution since the dawn of prehistory, being pre-dated only by the forestscape, from whose vegetal associations the first men procured, through hunting and gathering in the wild, those necessary for their precarious livelihood. In fact, it was the product of the first “revolution” in the history of humanity, namely the “agricultural revolution,” variously dated by researchers, in relation to the current stage and depending on the ancientness, geographical spread and intensity of the phenomenon of anthropization (Hart-Davis 2013, 36–37).

Ensuring the satisfaction of vital needs—the daily food—for the individual and the community, agriculture has continuously extended its domain, intensified and diversified typologically with the expansion of the *oikoumene*, of territories inhabited permanently or temporarily, as population numbers increased and technology progressed. From the fertile floodplains of rivers, with alluvial soils that could be cultivated with the most primitive tools, agricultural exploitation climbed on terraces and slopes, often overcoming obstacles of a morphological, hydrographic or climatic nature.

The territory of Romania has been no exception to this rule, the agricultural landscape becoming delineated, in all its structural and functional diversity, through its permanent resilience, reinforced by the advancement of knowledge about its natural support and the improvement of the logistics deployed in the service of this desideratum.

The material agricultural patrimony includes many constructed elements that facilitated either the practice of this occupation (terraces, irrigation canals, sheepfolds, winter stables, water wells for the animals) or the primary processing of the agricultural products (mills, whirlpools, fulling mills). The numerous names with agricultural connotations in the toponymy, such as Valea Morilor (Valley of the Mills), Livezile (The Orchards), Vișoara (Little Vineyard) etc., are proof of the development in those regions of branches or sub-branches of agriculture with their entire logistics.

The intangible agricultural heritage is also very rich, having its origins in the millennial practice of this occupation. It has transcended the vicissitudes of the historical epochs, surviving, despite inevitable losses, until today. Such are the traditions concerning the beginning of the agricultural year, the fertility of crops (“Cununa grâului”), or

pastoral occupations (“Măsuratul oilor”). Quite famous are “Nedeile,” very old pastoral celebrations held on the high plateaus of the Carpathians (Conea 1936; D. Pop 1989).

The Premises Underlying the Development of the Agricultural Landscape in Romania

IN ANY region and any historical period, the premises underlying the development of the agricultural landscape are related to the existence of two prerequisites: a suitable natural potential and the human resources for its exploitation.

The natural agricultural potential depends on the coexistence, on a particular territory, of fertile soils, of an optimal climate in terms of temperature and rainfall, and of a relief with favorable elevation and morphological features (declivity, fragmentation, exposure).

From a pedo-geographical point of view, Romania displays the entire gamut of soil classes and types specific to the temperate zone, from the mollisols that are characteristic to the plains to the poorly-developed soils of the mountainous areas. The existing pedo-geographical mosaic offers agriculture many opportunities, closely correlated with the organic productivity of the soils and the specificity of the vegetal associations whose development it conditions.

Romania's geographical position, on the 45th northern parallel and the 25th eastern meridian, ensures a moderate temperate continental climate, without notable temperature or pluviometric excesses. Thus, the average annual temperature ranges from 8.5 to 11°C between the north and the south of the country, respectively 11°C in the low part of the Romanian Plain and -2°C on the highest peaks of the Carpathians. The pluviometric range is between 137.6 mm at Sulina, in the Danube Delta, and 2,370 mm at Stâna de Vale, in the Western Mountains (Sandu et al. 2008, 263). It should be noted that the largest part of the territory presents an optimal water balance in the soil, there being no need for irrigation (except for the Romanian Plain and the Dobruja Plateau). Territory-wide, strong frosts and long droughts are climatic risk phenomena with low frequency, positively reflected at the direct level of agricultural practice.

The relief lends itself as physical support for the practice of agriculture, but it influences, sometimes decisively, pedogenetic phenomena, as well as climatic phenomena, through its altitude and exposition. The proportionality of the geographical forms (35% plains below 200 m in altitude; 39% hills, plateaus and mountains below 800 m; 26% mountain ranges of over 800 m in height) provides agriculture with three different geographical environments for its development, and with an equal number of possibilities for cultivability and for the diversification of land use. There is an altimetric stratification in the land utilization, plant and vegetable crops predominating in the lowlands and in the river meadows; a mixed agriculture, with a relative balance between crop production and animal husbandry in the hill area, at an altitude between 200 and 800 m, and livestock farming activity in the Carpathians. What should be noted is the presence in the Carpathian Mountains of leveling platforms: Borăscu, Râu-Şes, and Gornovița

(Martonne 1981, 175–178), which have become realms of pastoral life with few equivalents in other mountain ranges of Europe (Morariu 1942, 7, 20–21).

The favorable combination of the three abovementioned physical-geographical factors raise the percentage of agricultural use on the national territory to over 62%, well above the European average, which reflects positively on the spread and diversity of the landscapes generated by this activity.

The early, permanent and intensive anthropization of the territory is the second condition for the development of agriculture, primarily through the presence of labor and, secondly, through the need for food that will ensure the subsistence of the population.

As evidenced by the flint and bone tools found at Tetoiu-Bugiulești, Valea Dârjovului, and Oboga, the present-day territory of Romania has been continuously inhabited since the Lower Palaeolithic (C. S. Nicolăescu-Plopșor and D. Nicolăescu-Plopșor 1963; Păunescu 1989). The anthropization of the same space in the Middle Paleolithic is proved by the trace of the “Vârtoș man” dated by the Onac et al. (2005) to 62,000 years ago and the remains of the “early modern people” found in Peștera cu Oase in Banat, dated to 35,000 years ago (Trinkaus et al. 2005), while for the Upper Paleolithic quite illustrating are the prehistoric paintings of Cuciulat Cave in the Someș Plateau and the engraved pendant in Cioarei Boroșteni Cave (Cârciumaru 1980, 2000).

The anthropization of this space continued rapidly in the Epipaleolithic and the Mesolithic. In this context, the first indications of an agricultural activity of plant cultivation and animal domestication, a prelude to the future agricultural landscape, date back to the Mesolithic (Tardenoisian), the Schela Cladovei culture having in its own inventory of tools that seem to have had such destination (Rotea 2010, 33; *Istoria românilor* 2001, 1: 97–103).

The Evolution of the Romanian Agricultural Landscape

WE CAN speak about the emergence of an agricultural landscape on the present-day territory of Romania only after the end of the last glaciation (Würm) and the beginning of the Holocene, when, in the vast Danube plains and the intra- and peri-Carpathian plateaus and depressions, the major elements of the current climate appear. Like all the phenomena in the geosphere, with a complex structure and a long-term duration, this dynamics manifested itself not in a linear but in a sinuous manner, the periods of development and progress being followed by periods of stagnation, decline or reorientation. There resulted, thus, at the level of the timescale of its historical becoming, a sequence of evolutionary cycles, each with specific social, economic or political conditionalities, which marked its structure and functions. They took the form and role of “adaptive cycles,” designed to ensure the resilience of the landscape system (Walker et al. 2004).

The Gardening Proto-Landscape of the Neolithic

In the Neolithic period, in the analyzed area “the basic occupations of the people in this era were the primitive cultivation of plants and the breeding of domestic animals” (*Istoria românilor* 2001, 1: 116). This was the time slot in which there flourished the Starčevo-Criș and Vinča-Turdaș cultures, where agricultural activities acquired a *gardening* character, with the rapid depletion of soil fertility, which forced the human community either to practice nomadic and semi-nomadic land farming, with definitive travel across great distances, or to cyclically return to the same area, after soil fertility had been restored (*Istoria românilor* 2001, 1: 131). During this period, there took place the “Neolithic Revolution,” defined by Childe (1936, 59–86) as a phenomenon of transition from hunting, fishing and gathering to agriculture, through animal domestication and plant cultivation.

As a result, the Neolithic agricultural landscape consisted of small areas of cultivated land, overlapping with loose or sandy soils located in floodplains and on alluvial terraces, easily tillable with primitive stone, bone and horn tools. The distribution area of this landscape was very wide, including the Romanian Plain, the Moldavian Plateau, the Transylvanian Depression and the Western Plain and Hills.

Animal domestication (cattle, sheep, goats, horses) required a forage base represented by the tall grasses of the steppes from the Romanian Plain and by the meadows and pastures from the hilly and mountainous regions of the Sub-Carpathians and the Carpathians. It was expected, in the case of the latter, that the alternation of forests and glades would generate the *park type of landscape* that was to flourish and become permanent in the succeeding ages.

A characteristic feature of the Neolithic, which was to continue during the subsequent cycles, until the Middle Ages, was the permanent entwinement of the agricultural landscape with the natural landscape, represented by forests and meadows that protected the game—a “landscape of the woods and hunting” (Sereni 1997, 110)—composed mainly of boars, stags and deer, practiced as a side-line occupation throughout the period. In prehistory, the forest landscape occupied about 70% of Romania’s current territory (Giurescu 1976, 11), its share decreasing mainly because of the development of agriculture.

The Zoning of the Agricultural Landscape in the Metal Ages

The temporal span of the Metal Ages for the present-day territory of Romania covered the period between 2300 and 650 BC (*Istoria românilor* 2001, 1: 218, 298–299). It was in this period that there was an expansion of the gold and silver exploitation from the sands of the Carpathian rivers, and especially from the largest gold deposits in Europe, stationed in the “auriferous polygon” of the Western Mountains, at Săcărâmb, Roșia Montană, Brad, and Baia de Arieș (Șintimbrian et al. 2013). The search and exploitation of the gold, silver, copper and iron ores from Dobruja and the Carpathians (Parâng,

Poiana Ruscă, Metaliferi, Trascău, Rodna, Gutâi) led to the anthropization of those relief levels and, with it, to the agricultural exploitation of the surrounding land. In this stage, we consider that due to the increase in population and to rising pressure on the land plots, but also to the enrichment of the arsenal of knowledge, techniques and means of agricultural practice, there occurred a more rigorous adaptation of agriculture to the environmental conditions, in the sense of favoring wheat, barley or millet crops in the more fertile plains and raising livestock in the hills and mountains.

For the Bronze Age, the faunal inventory of many sites is dominated by remnants of sheep and goats, followed by cattle, suggesting a predominance of livestock farming, hence, of the predominant *pastoral landscape*. In the Iron Age, defined by tangible progress in the multiplication, diversification and improvement of agricultural tools, cultures diversified and farming intensified (*Istoria românilor* 2001, 1: 307, 332).

The Mosaic-like Agricultural Landscape of Dacian and Dacian-Roman Antiquity

The *mosaic-like agricultural landscape* developed in close connection with the Dacian and Dacian-Roman civilization that flourished in this area between the fourth century BC and the third century AD. Although the Dacian civilization was closely related genetically to the vast intra-Carpathian depressions which played the role of a shelter for it and to the extended Carpathian leveling platforms where it built its own *mental space* (Coccean 2006, 2008), it expanded much outside the mountain territory, reaching the Bug steppes in the east and the Pannonian Plain in the west, and including the entire fertile Danube Plain and the low plateaus of Dobruja, Moldavia, and Wallachia. These were territories with optimal agricultural cultivability and they were exploited accordingly.

The progress achieved in the sphere of metalworking during the previous period had led to the improvement of agricultural techniques and equipment, the introduction of the iron plough coulter in the second half of the second century BC having a major impact (*Istoria românilor* 2001, 2: 171). The same source noted the appearance, in the same period, of the hook sickle, specific to the Dacians, of vine knives, sheep trimming shears and grinders (primitive mills) for the grinding of grain.

The ancient historical documents mentioned more than once the *cereal crops* in the Danube Plain and the Dobruja Plateau. Describing the campaign of Alexander the Great against the tribals in 335 BC, the historian Arrian referred to the landscape left of the river, “where the fields were rich in wheat.” As regards Dobruja, the famous decree of Agathocles, encoded on an epigraph in the city of Histria from around 200 BC, mentioned how this local leader “knew how to protect his fallow land, allowing each and every one to gather their grain without harm” (*Istoria românilor* 2001, 1: 458, 505).

The *viticultural* type of landscape was also widespread in Dacia, which justifies Luginbühl’s opinion (2005, 47) that “vineyards and wine have played important roles in the social and political history of the countries that have grown and produced them.” Strabo’s account of the destruction of the Dacian vineyards during Burebista’s reign,

which took place in the first century BC, reveals the vast dissemination of vine cultures in that period.

The mosaic-like landscape of the crops of wheat (the Dacians cultivated three species of wheat!), barley, two-row barley, rye, broad beans, peas, lentils, and fiber producing textile plants, such as hemp and flax, covered the intra and peri-Carpathian fields and hillsides. There were also plots of land cultivated with vegetables (garlic, mustard) or fodder. The livestock consisted primarily of sheep and goats (further proof of the intense exploitation of the pastures and meadows from the mountain and hilly areas), followed by cattle, pigs and horses (*Istoria românilor* 2001, 1: 766).

The conquest of Dacia by the Romans after the wars of 101–102 and 105–106 meant a massive infusion of agricultural practices and techniques brought from the empire. The maximum degree of novelty was brought by the *villa rustica* type of agricultural landscape (Sereni 1997; Marzano 2007) which started to expand around the main strategic centers, like Sarmizegetusa Ulpia Traiana or Napoca and, respectively, along the Roman road that linked Drobeta to Porolissum.

The localities in Dacia where such establishments were found in the excavations, about 65 in number (Protase 2000, 21), show that such a landscape, in which plant cultivation was often combined with livestock farming, was specific to the plains (Vlădila, Gârla Mare), plateaus (Aiton, Chinteni, Rădaia, Miercurea Sibiului), valleys (Apahida, Iernut, Simeria) and depressions (Sântămăria-Orlea, Hobița), etc. It should be noted that the landscape with *villae rusticae* was equally widespread in the Dobruja Plateau at Murfatlar, Cilic and Telița (*Istoria românilor* 2001, 1: 170–171).

The Disruptions Affecting the Agricultural Landscape during the Peoples' Migrations

The immediate consequence of this Brownian political environment, manifest in this part of Europe during the transition from Antiquity to the Middle Ages, between the fourth and the ninth centuries, was that the economic and social structures consolidated during the Roman administration of the Dacian province were upset (Madgearu 2011, 7, 10), including agriculture and the landscape generated by the practice thereof. An illustrative example is the disappearance of agricultural facilities of the *villa rustica* type even before the end of the fourth century (*Istoria românilor* 2001, 2: 569).

In such an uncertain political and social environment, the agricultural landscape of the great plains of the Danube, exposed, in the new historical context, to all invasions, underwent fragmentation, remaining in use only in the areas attached to the localities. Its partial re-naturalization through the proliferation of steppe and forest-steppe associations (in some areas, such as in the central area of Wallachia, in Vlășia, these were forest associations) is a plausible phenomenon, as is, in fact, the proliferation of an *open pastoral agricultural landscape* in the hilly and mountainous regions, safer and easier to defend against invaders (Sereni 1997, 60–63). Such a slight shift in the agricultural profile of the territory, from the previously established balance between plant cultivation

and livestock farming to the stronger development of the latter occupation, is to have been expected. The pastures and hayfields widened through the clearing and burning of forests, and the crops, which focused on basic cereals in ensuring the population's daily meals, but were much less extensive, occupied the intra and peri-Carpathian depressions or the fertile meadows of the valleys.

The Reconstruction of the Agricultural Landscape during the Middle Ages

The documents of the time (charters, chronicles, travel writings) attest to a development of agricultural activities over widespread areas. Its extensive character was achieved through massive deforestation in the forested hilly and mountainous regions of the Carpathians, the Sub-Carpathians and the plateaus, and through the grubbing of the steppe and forest-steppe regions of the Romanian Plain, the Moldavian Plain and the Western Plain. Intensification was achieved through the improvement in agricultural techniques and inventory, crop rotation and the use of natural fertilizers (Rüsz Fogarasi 2009, 183). Livestock farming developed through the addition to the farms' subsistence livestock of a large number of cattle, sheep or horses, on the large estates of boyars or rulers, which were the precursors of the later livestock farms (Murgescu 2010, 48–49).

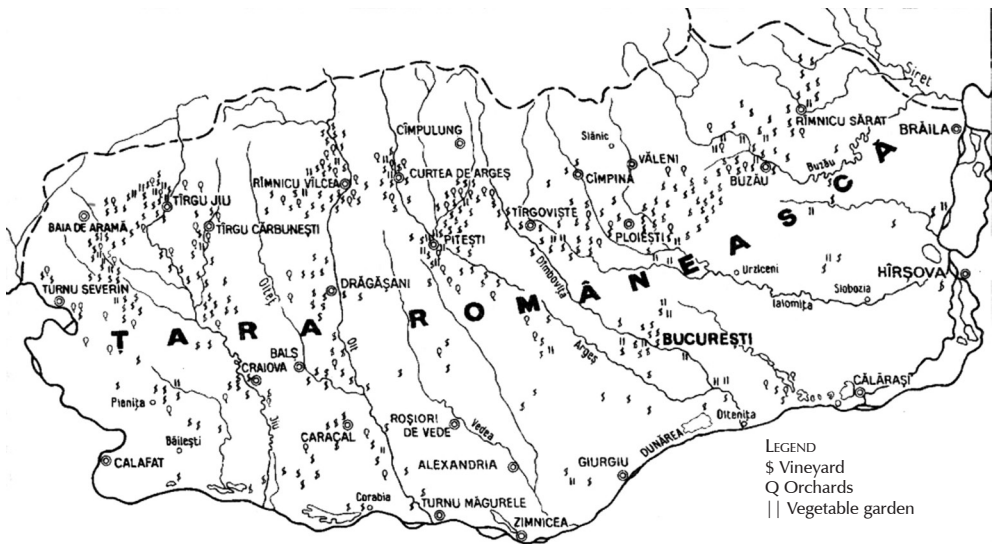
Each homestead had around the house a “garden,” where the vegetables necessary for consumption were cultivated, and at the property boundaries strips of fruit trees, especially plum, apple and pear trees were planted. This was the period of the consolidation of a *bocage type of landscape*, consisting of plots of varying sizes, with a mosaic use of the land plots: cultivated lands, inhabited plots and forest vegetation (Watteaux, 2012, 72).

There were, of course, also great domanins where the culture of fruit trees, vegetable farming and viticulture occupied large areas, as noticed in the adjacent map, referring only to Wallachia (fig. 1).

Beekeeping registered a large expansion due to two of its products: honey, used as a sweetener and as medicine, and, respectively, wax, used in religious practices. The areas where beekeeping was practiced were the plateau and the Sub-Carpathian areas, where there was a rich honey production basis (composed of Tilia and willow forests), coinciding with the location of numerous monasteries (Voronet, Moldovița, Neamț, Dealu, Cozia, Horezu, Polovragi, Tismana), where this occupation was widespread. The beekeeping landscape had, as a specific entity, the “apiary,” a relatively flat terrain, with fruit trees among which traditional beehives were scattered.

Another agricultural landscape that was revived after the upset caused by the era of migrations was the viticultural one, the vineyards of Cotnari and Vrancea in Moldova being famous for their wines, as were those from the Drăgășani area in Wallachia or the Târnave area in Transylvania.

FIG. 1. MAP OF THE DISTRIBUTION OF VINEYARDS, ORCHARDS AND VEGETABLE GARDENS IN WALLACHIA IN THE FOURTEENTH-FIFTEENTH CENTURIES



SOURCE: *Istoria românilor* 2001, 4: 65.

The Contrasting Agricultural Landscape during the Capitalist Period

The capitalist period began in Romania later than in Western Europe, the relations of this type substituting the feudal ones during the first half of the 19th century (Murgescu 2010, 64, 108).

The agricultural landscape expanded at the expense of the forestscape, between 1800 and 1948 the Romanian forested area decreasing by more than 2,5 million hectares, (Giurescu 1976, 106).

All these aspects were visible on the major estates from the plain and the low hill areas, where vast cereal crops appeared, Romania being considered, in the interwar period, one of “Europe’s breadbaskets.” However, there was also a noticeable tendency to simplify the agricultural landscape by expanding monocultures and altering the traditional model of land use (Larsen 2013). Livestock farming also developed, the cattle, pig or horse farms increasing in number and production capacity. Sheep and goat farming continued the tradition of the previous, medieval stage, the transhumance phenomenon reaching remarkable intensity, with the seasonal migration of the herds from the depression area of Sibiu, Făgăraș and Brașov to the Pannonian Danube steppes or to those in Dobruja and even in the north of the Black Sea.

Conversely, in the high hilly and mountainous regions, densely populated and with a considerable division of agricultural land plots, the bocage type of landscape prevailed, with a constant interference of land cultivated with cereals adapted to the area (spring

wheat, corn, rye and oats), fruit trees, meadows and pastures. The traditional character of this landscape remained defining for the forms it took and the elements it comprised.

The “Multilateral” Agricultural Landscape of the Communist Period

The communist period made its debut in the history of Romania immediately after World War II, when, under Law no. 187/23 March 1945, a comprehensive agrarian reform was launched, leading to the expropriation of over 1.468.000 ha and the allotment of land to about 918.000 people (Academia Română 2016, 336). Under the same law, all types of agricultural machinery were transferred to state ownership. In this context, the agricultural census of 1948 showed the presence in Romania of over 5,5 million landowners, the vast majority having less than 3 ha in their property.

The second event with major repercussions on the development of agriculture and, implicitly, of the agricultural landscape was the *collectivization of agriculture*, triggered by the decisions regarding the “socialist transformation of agriculture” adopted by the Plenary of the Central Committee of the Romanian Workers’ Party on 3–5 March 1949. The collectivization process was completed in 1962 and consisted of the expropriation and merging of all agricultural properties from the plain and hilly regions of the country through the creation of agricultural cooperatives and state-owned farms. The only ones who remained, thus, uncollectivized, in possession of their old properties, were the farmers from the mountain areas, where the mechanization of agricultural works was not possible for morphological reasons.

Finally, the development strategy of the “multilaterally developed society” proposed by Nicolae Ceaușescu had obvious repercussions in the field of agriculture, which was now, according to the same strategy and in terms of its participation share in the establishment of the national GDP, the second main branch of the economy, after industry. The concept of “multilaterally developed” had primarily a quantitative connotation, agriculture being called to produce as much as possible, meeting all the needs for diverse agricultural products. In this sense, it is not without interest to mention the example of the introduction of rice crops in the Danube floodplain, an area where, because of the climatic conditions and the lack of experience, the results were not as expected. Another less successful experience was sericulture, the lack of mulberry plantations preventing its expansion to all the regions, as it had been envisaged. On the other hand, identifying the agricultural cooperatives of production with the administrative units of the communes prevented, even in the plain regions, the emergence of the agricultural landscape of monocultures, due to their relatively small land plots and to their strategy of practicing as many types of cultures as possible (Cocean and David 2014, 43–51).

At this stage, the traditional agricultural landscape of the bocage type from the hilly regions was substituted by the *partitioned landscape* of the production cooperatives, where, depending on the cultivability of the land, agricultural crops, orchards, vineyards, meadows and pastures occupied distinct lots with relatively large areas. The old farm terraces parallel to the contour lines of the slopes were destroyed through mechanical

leveling or through the relinquishment of the traditional techniques that had generated them, while the curtains of fruit trees, shrubs or forests that marked the old properties were removed. The aesthetics of the landscape became simpler and poorer.

In the plains regions, the preferred site for the creation of state-owned farms, the landscape changes were fewer despite the massive mutations in the sphere of property types. They became synonymous with the large farms, specialized in cereal and technical plant crops, but also with livestock farming in large zootechnical complexes. Typologically, this landscape pertained mostly to the *open field landscape* that has been conserved in Central and Eastern Europe, hence, also in Romania, to this day (Renes 2010, 37).

The state-owned farms were also established in the hilly and plateau regions, which specialized in the growing of fruit and vines in the orchard basins of Argeș, Bistrița, Hațeg, or Suceava, as well as in the famous vineyards of Cotnari, Murfatlar, Odobești, Drăgășani, Jidvei and Lechința. Expanded orchards developed around cities, to meet the local demand (Pop 1983, 66); after 1990, they were systematically destroyed by the expansion of real estate activities, as was the case in Cluj-Napoca, Bistrița, Baia Mare and so on.

During the communist period, the agricultural landscape reached full extension in terms of its spatial development, thanks to the hydrotechnical embankment works of the Danube as well as of other rivers (Mureș, Someș, Olt, Siret), to the drainage of ponds and marshes from the Danube Delta and floodplain, followed by their cultivation, by land reclamation works and by the constriction of the buildable areas of the settlements through their forced systematization.

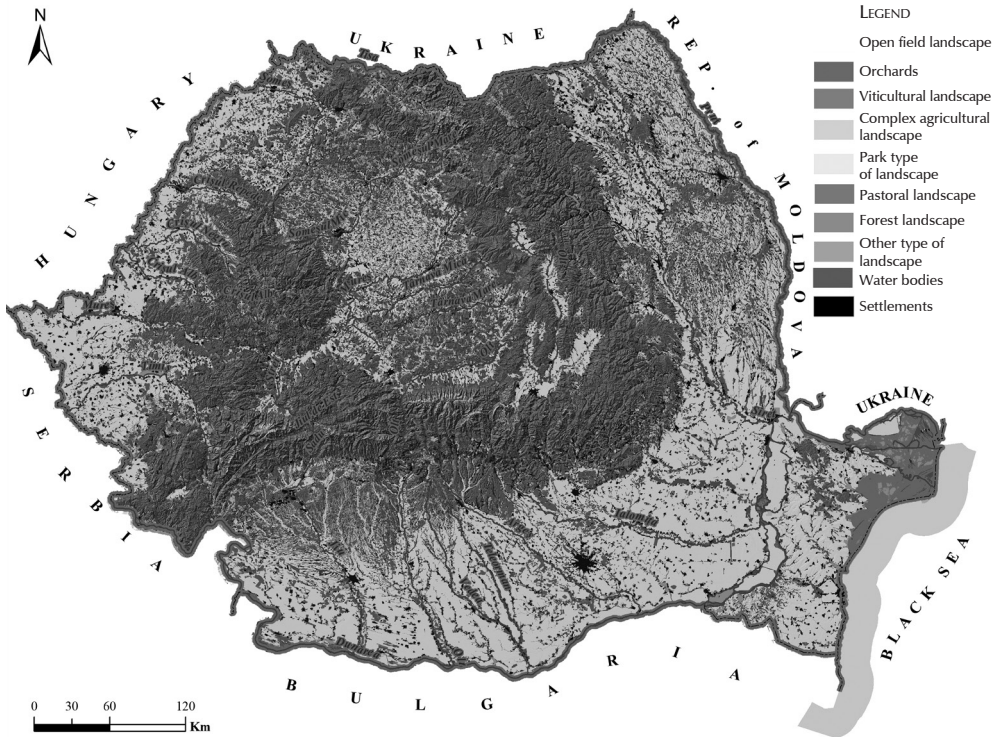
The Crisis of the Romanian Agricultural Landscape during the Transition Period

The period that followed the collapse of communism at the end of 1989, commonly called “the period of transition to a free market economy,” had notable consequences for the Romanian agricultural landscape. These consequences were not the most favorable or desirable ones, on the contrary. The poor management of the political transition from one ideology to another, from one system of values to another, from one type of economy (rigorously planned) to another type (competitive) was reflected in the sinuous, often deviant evolution of the agricultural field. In Otiman’s opinion (2012, 340), the development of Romanian agriculture in the period 1990–2012 was defined by three detrimental processes: de-agriculturalization, de-zootechnization, and the physical and social desertification of the rural space.

The three aspects mentioned above are encountered at every step on the territory of Romania, the share of land practically removed from the agricultural circuit by abandonment or non-exploitation reaching nearly 2.9 million hectares, out of a total of 14.8 million hectares in 1991 (hence, 19.6%!); the fruit tree landscape of the orchards has decreased by 37% (113,000 ha) and the viticultural one by 21.3% (46,600 ha); the irrigation system inherited from the old regime, which served 3 million hectares in the southern regions of the country, the most exposed to droughts and desertification in the

current global warming conditions, has contracted, through destruction and deactivation, to only 600,000 hectares today (hence, by 80%!); the livestock numbers have been drastically reduced due to the closure of the state farms and the dwindling of such activities in the rural households. Moreover, there has been a pronounced ageing and numerical reduction of the rural population, mostly engaged in agriculture, followed by the disappearance of many settlements in the mountainous and hilly regions (Otiman 2012).

FIG. 2. TYPES OF AGRICULTURAL LANDSCAPES OF ROMANIA



SOURCE: CLC Land Cover, 2012.

There appears thus a widespread *degraded agricultural landscape*, both as regards its manner of land use and its typical infrastructures (Cocean and David 2014, 166). On the other hand, by contrast, there has developed, albeit still at an insular level, a *landscape that is specific of modern, intensive agriculture* (InterAgro, TCE 3 Brazi, Bardeau Holding, Agrofam Holding, Comcereal Vaslui, Comcereal Dolj, etc.), with an advanced agro-technology, or of the *modern livestock farms* (including for species that are new to Romania, such as snails, ostriches and buffalo). According to data provided by the Ministry of Agriculture and Rural Development, *ecological agriculture* has an alert pace of development, currently featuring over 26,700 operators and being practiced on about 450,000 ha.

Conclusions

THE AGRICULTURAL landscape of Romania has a millennial history and has evolved spasmodically, in close connection with the political, economic and social changes that have occurred during the various historical eras. Territorial expansion and typological diversification have been closely dependent on the pace and intensity of anthropization, on the enrichment of knowledge and technical means placed in the service of agricultural activities.

The development of its types and its subtypes has vacillated between, on the one hand, subsistence agriculture, specific to the small agricultural properties, generating a genuine *landscape puzzle*, and on the other, agricultural activities conducted on vast estates, either private or public, with a tendency towards the prevalence of monocultures, perceived as standardizing and simplifying.

The agrarian reforms of the last century and a half (1864, 1921, 1945) and the restitution, after 1990, to the former landowners, of the land the communists had integrated in the agricultural cooperatives of production and state-owned farms during collectivization, had not only beneficial social and economic consequences, but also contradictory effects on the landscape, contributing to the dismantling of the large estates and the appearance of an inextricable grid of millions of land plots, primarily of small size, exploited in an uncoordinated manner, depending on the needs and possibilities of their smallholders. This has entailed the formation of a *mosaic-like agricultural landscape*, in which the traditional aspects combine with the modern and the diverse types of crops (cereals, industrial crops, leguminous plants, fodder), with orchards and vineyards, as well as with meadows and pastures used for grazing (fig. 2). At present, it is also defining for the mountain regions and the high hills of Romania.

The chaotic state of the present-day agricultural landscape in Romania, marked by the gradual extinction of the traditional landscape and the metamorphosis of the landscape generated by commodity producing modern agriculture, is heading towards the restoration of a new equilibrium at the level of the systemic structures of the landscape in general, the expansion of other types of landscapes (touristic, habitational, technogenic) causing the contraction of its surface. The role played by the political, economic and social factors in directing the agricultural phenomenon and, implicitly, the landscape derived from it (Moreira et al. 2001, 557) has proved to be decisive in many cases, generating genuine evolutionary cycles.



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Abstract

The Evolution of the Romanian Agricultural Landscape

The natural potential of the present-day territory of Romania, particularly suited for agricultural activities and subjected to a long and intense process of anthropization, has ensured the fundamental conditions for the emergence and assertion of an agricultural landscape of great originality and vast typological variability. Its premises appeared in the Mesolithic, expanding and diversifying in the subsequent epochs. Its evolution has not been linear, but rather cyclical, its periods of development and diversification being separated by periods of stagnation or even regression, conditioned by political, economic or social factors. Each cycle has tended to preserve, through resilience, certain structural elements of the previous stage, to which were added new elements imposed by the progress of technology and knowledge in the sciences pertaining to the field. While at its beginnings the agricultural landscape closely coexisted with the forestscape, expanding its spatial coordinates at the expense of the latter, at present it is under pressure and its span is being diminished due to the assertion of other landscapes, like the tourist, urban or technogenic landscapes, etc. The current period, witnessing the transition from the communist planned economy to that of the free market, is defined by the presence of an agricultural landscape that is inherently marked by a physiognomic, typological and structural contrast and entwinement between its traditional and its modern aspects.

Keywords

agriculture, anthropization, agricultural revolution, agricultural landscape, open field landscape, Romania