



TRENDS AND DYNAMICS IN VEGETAL PRODUCTION IN THE WEST DEVELOPMENT REGION OF ROMANIA

IRINA-ADRIANA CHIURCIU, PAULA STOICEA, ELENA SOARE, ANDREEA-ROXANA FIRĂȚOIU
 University of Agronomic Sciences and Veterinary Medicine Bucharest,
 Faculty of Management and Rural Development

Abstract: This study analyzes the evolution of vegetal production in Romania's West Development Region during 2020–2024, focusing on cultivated areas and productions of cereals, oilseeds, technical crops, vegetables and fruit orchards. The results highlight important changes influenced by climatic conditions, market demand and EU agricultural policies, emphasizing the agricultural importance of Timiș, Arad, Hunedoara and Caraș-Severin counties.

Introduction

The West Development Region is characterized by favorable natural conditions for agriculture, due to the diversity of its relief forms and the presence of extensive agricultural plains, particularly in Timiș and Arad counties. Its geographical position near the borders with Hungary and Serbia also supports economic connectivity and agricultural exchanges. Agriculture plays an important role in the regional economy and has benefited from European Union rural development measures and structural support following Romania's accession to the EU.

Material and method

The research was conducted using statistical data provided by the National Institute of Statistics (INS). A comparative analysis was carried out for the period 2020–2024 in order to identify the main trends in vegetal production within the West Development Region. The analyzed data were processed comparatively using percentage dynamics and trend analysis.

Results and discussions

The tables presented above illustrate the evolution of the main agricultural indicators in the West Development Region during the period 2020–2024, including the fleet of tractors and agricultural machinery, cultivated areas and total production for the main cereals, oilseeds, industrial crops and technical crops.

Table 1. The Main Fleet of Tractors and Agricultural Machinery in the West Development Region

Categories of Tractors and Agricultural Machinery	2020	2021	2022	2023	2024	2024/2020 %
Agricultural tractors	35,492	30,067	30,313	30,552	30,588	86.18
Tractor ploughs	23,488	19,283	19,377	19,779	19,929	84.85
Mechanical cultivators	4,637	2,770	2,714	2,753	2,731	58.90
Mechanical seed drills	9,840	5,815	6,041	6,262	6,334	64.37
Mechanically powered spraying and dusting machines	287	249	266	285	242	84.32
Self-propelled combine harvesters for cereals	3,132	2,492	2,587	2,515	2,580	82.38
Self-propelled forage harvesters	102	142	167	173	183	179.41
Potato harvesting machines and combines	626	626	639	724	735	117.41
Balers for straw and hay	2,048	2,081	2,236	2,442	2,517	122.90
Windrowers for forage crops	110	79	87	102	118	107.27

Source: INS, 2026

Table 2. The area cultivated with the main cereals (ha) in the West Region during the period 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Rye	172	983	528	581	538	312.79
Wheat - total	231,401	217,355	241,240	252,768	247,683	107.04
Barley and Beer Barley	27,321	22,428	25,182	31,509	29,237	107.01
Oat	11,794	7,661	7,006	6,865	6,803	57.68
Grain maize	257,175	246,305	225,803	196,523	207,049	80.51
Sorghum	1,944	2,882	1,354	1,771	3,773	194.08

Source: INS, 2026

Conclusions

The analysis revealed a reduction in several cultivated areas and significant production fluctuations during 2020–2024, mainly caused by climatic variability and market conditions. Wheat and grain maize remained the dominant crops, while sunflower maintained an important position among oilseed crops in the West Development Region.

Table 3. Area cultivated with the main oilseeds (ha) in the West Region during 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Sunflower	90,129	57,272	55,468	59,600	69,304	76.89
Rapeseed	63,662	61,209	60,134	77,968	79,408	124.73
Soy beans	31,317	25,753	21,480	24,506	24,109	76.98
Oil flax	772	500	341	226	277	35.88

Source: INS, 2026

Table 4. Area cultivated with industrial and technical crops (ha), in the West Region, 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Sugar beet	208	17	8	52	199	95.67
Broom sorghum	263	538	355	351	417	158.56
Potatoes	9,080	7,129	5,782	5,724	5,472	60.26

Source: INS, 2026

Table 7. Production obtained on the main industrial and technical crops (t) in the West Region during the period 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Sugar beet	4,120	376	201	1,409	5,530	134.22
Potatoes - total	111,121	79,853	55,539	49,024	40,996	36.89

Source: INS, 2026

Table 5. Production obtained on the main cereals (t) in the West Region during the period 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Rye	448	967	1,954	1,362	1,540	343.75
Wheat - total	1,008,465	1,135,537	1,202,496	1,254,270	1,309,031	129.80
Barley and Beer Barley	117,737	114,079	121,677	149,219	156,529	132.95
Oat	28,119	22,592	16,367	16,655	17,455	62.08
Grain maize	1,518,457	1,336,543	612,619	1,009,025	794,608	52.33
Sorghum	14,065	17,723	5,091	8,437	11,976	85.15

Source: INS, 2026

Table 6. Production obtained on the main oilseeds (t) in the West Region during the period 2020-2024

Specification	2020	2021	2022	2023	2024	2024/2020 %
Sunflower	234,405	139,620	101,476	141,875	140,762	60.05
Rapeseed	180,586	186,395	179,210	268,018	208,304	115.35
Soy beans	68,258	49,280	26,896	53,408	34,934	51.18
Oil flax	811	681	353	345	551	67.94

Source: INS, 2026