



# Agroforestry windbreaks during the communist period in Romania

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**Abstract.** One of the initiatives implemented in Romanian agriculture during the communist period was the promotion of agroforestry windbreaks, which were promoted for several reasons: wind and erosion control, microclimate modification, diversification in rural income, ecological benefits. During that era the government implemented various policies to encourage the establishment of windbreaks. State-owned agricultural enterprises and cooperatives were also involved in these efforts. After the fall of communism in 1989, the agricultural landscape in Romania underwent a shift towards more market-oriented policies, which had both positive and negative effects on agroforestry practices.

**Key Words:** agriculture, benefits, development, shrub, tree.

**Introduction.** During the communist period in Romania (1947-1989), agriculture was a central focus of the government's economic policies (Petrescu-Mag 2007). One of the initiatives implemented in Romanian agriculture during this time was the promotion of agroforestry windbreaks.

Agroforestry windbreaks are rows of trees or shrubs planted to provide shelter from wind, reduce soil erosion (Chang et al 2021), and create a microclimate suitable for crops (Baker et al 2021). They can also serve as a barrier to protect against pests (Podhrázká et al 2021) and provide additional sources of income through timber and non-timber forest products.

In Romania, agroforestry windbreaks were considered an important component of agricultural development (Figure 1). They were promoted for several reasons:

**Wind and erosion control.** Romania has a diverse climate, including areas with significant wind exposure. Windbreaks were seen as crucial for protecting crops from wind damage and reducing soil erosion, which can be especially problematic in open, flat areas.

**Microclimate modification.** Windbreaks can create a more favorable microclimate by reducing wind speed, temperature extremes, and evaporation rates. This can extend the growing season and increase overall agricultural productivity.

**Diversification of rural income.** The cultivation of trees and shrubs in windbreaks can provide additional sources of income for farmers through the sale of timber, fruits, nuts, and other forest products.

**Ecological benefits.** Agroforestry practices are known to have positive environmental impacts, including enhanced biodiversity, improved soil health, and carbon sequestration.



Figure 1. Windbreaks near Vișoara village, Cobadin commune, Constanța county, Romania (original photos).

**Before and after the Revolution.** During the communist period, the Romanian government implemented various policies to encourage the establishment of windbreaks. This often involved providing subsidies, technical assistance, and incentives to farmers. State-owned agricultural enterprises and cooperatives were also involved in these efforts. However, it is important to note that the success and impact of these initiatives varied depending on factors such as local conditions, the willingness and capacity of farmers to adopt agroforestry practices, and the level of support provided by the government.

After the fall of communism in 1989, the agricultural landscape in Romania underwent significant changes, including a shift towards more market-oriented policies. This transition had both positive and negative effects on agroforestry practices, as they had to adapt to new economic and regulatory conditions.

Specific details about agroforestry windbreaks in Romania during the communist period may vary based on local experiences and specific historical records. For the most precise and detailed information, consulting academic sources, historical documents, or experts in Romanian agricultural history would be advisable.

**Conflict of interest.** The author declares that there is no conflict of interest.

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Received: 13 May 2023. Accepted: 02 June 2023. Published online: 11 June 2023.

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How to cite this article:

Mocanu C., 2023 Agroforestry windbreaks during the communist period in Romania. *AES Bioflux* 15(1):32-34.