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EL CANNABIS SATIVA EN PORTUGAL: EL POTENCIAL DE UN SECTOR DE ALTO VALOR

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EDITORIAL

CANNABIS SATIVA IN PORTUGAL: THE POTENTIAL OF A HIGH-VALUE INDUSTRY

For decades, Cannabis sativa L. was perceived almost exclusively as a plant associated with recreational use, due to the presence of delta-9-tetrahydrocannabinol (THC), the main phytocannabinoid responsible for the plant's psychoactive effects. Today, however, science, medicine, agriculture and industry reveal a much broader reality. This plant species offers enormous potential for pharmaceutical, food, textile, biotechnological and environmental applications, and is progressively establishing itself as a strategic raw material for the 21st-century bioeconomy.

When discussing cannabis, it is important to clearly distinguish between two distinct categories: medicinal cannabis and industrial hemp. Although they belong to the same botanical species, their production models, legal frameworks and value chains are profoundly different. Medical cannabis is intended for therapeutic purposes and is produced under a strict pharmaceutical framework, supervised by Infarmed. Its cultivation requires compliance with international quality standards, such as the GACP (Good Agricultural and Collection Practices) and GMP (Good Manufacturing Practices) guidelines, ensuring traceability, safety and consistent phytochemical profiles. It is a highly technological activity, often based on Controlled Environment Agriculture (CEA) systems. Industrial hemp, on the other hand, uses authorised varieties with a THC content of less than 0.3 per cent, grown in open fields and geared towards the production of fibre, seeds and biomass. Its value lies in sustainable construction, biomaterials, functional foods, bioplastics, textiles and a wide range of applications linked to the circular economy. Whilst the success of medicinal cannabis depends on chemical precision and pharmaceutical quality, that of industrial hemp is measured by production efficiency and the ability to utilise biomass at scale.

Portugal has natural soil and climate conditions that are particularly favourable to the development of this crop. The high number of hours of sunshine per year, the diversity of soils, experience in intensive horticulture and the growing adoption of agricultural technologies give the country significant competitive advantages within the European context. In the medical cannabis sector, Portugal has already established itself as one of Europe's leading centres for production and export, attracting domestic and international investment and benefiting from specialised infrastructure. Signs of growth are also beginning to emerge in the industrial hemp sector. According to data from the Directorate-General for Food and Veterinary Affairs (DGAV), the authorised area for cultivation increased from around 68 hectares in 2024 to approximately 480 hectares in 2025. More than just an increase in the number of producers, this development suggests a consolidation of production scale and greater maturity of the projects.

Despite its potential, the sector continues to face significant structural obstacles. The main challenge remains the regulatory framework. Licensing procedures, for both medicinal cannabis and industrial hemp, continue to be cited by producers and industry professionals as time-consuming and, in some cases, characterised by ambiguities in interpretation. In the case of industrial hemp, one of the main obstacles remains the lack of processing infrastructure. The lack of a robust network of shiving and processing facilities limits the capacity to add value to domestic raw materials. Without this initial processing, much of hemp's economic potential is lost or becomes dependent on external markets.

In addition to its economic importance, industrial hemp contributes to several of the United Nations' Sustainable Development Goals (SDGs), particularly in the areas of sustainable agriculture, industrial innovation, sustainable construction, the circular economy, climate action and the protection of terrestrial ecosystems. Its ability to produce renewable biomaterials, sequester atmospheric carbon and fully utilise biomass positions hemp as a raw material aligned with European strategies on the bioeconomy, decarbonisation and combating climate change (SDG 13 – Climate Action). In the construction sector, materials such as hempcrete and insulating panels contribute to more efficient and sustainable buildings (SDG 11 – Sustainable Cities and Communities). At the same time, the development of biomaterials, biocomposites and other industrial applications promotes innovation and the creation of sustainable infrastructure (SDG 9 – Industry, Innovation and Infrastructure). Furthermore, the full utilisation of the plant and its integration into circular economy models encourage responsible production and consumption patterns (SDG 12 – Responsible Consumption and Production).

Furthermore, its health benefits and its role in soil regeneration promote the sustainable management of terrestrial ecosystems and natural resources (SDG 15 – Life on Land). Finally, the high nutritional value of the seeds and their derivatives supports more sustainable food systems (SDG 2 – Zero Hunger and Sustainable Agriculture). In this context, hemp could play an increasingly important and strategic role in the transition to more sustainable production models.

The coming decade is likely to be marked by greater professionalisation of the sector, business consolidation and the gradual development of high value-added industrial applications. It is unlikely that cannabis will come to dominate Portuguese agriculture, but all the signs suggest that it could establish itself as a specialised, innovative and strategically relevant sector for Portuguese agriculture, the bioeconomy and the high value-added industry. Portugal now has unique conditions to consolidate a Cannabis sativa sector based on scientific knowledge, technological innovation and sustainability. The real challenge is no longer to demonstrate the potential of Cannabis sativa, but rather to create the necessary conditions to transform that potential into economic, industrial, scientific and social value.