PA #7 The Portuguese Bioeconomy and supporting knowledge on the transition to a local circular bioeconomy

Portugal's rural bioeconomy is a vibrant sector with immense potential. The country's rich natural resources, thriving primary sectors, and supportive government policies have fostered a dynamic bio-based industry.

Abundant Natural Resources: Portugal's natural capital provides a robust foundation for its bioeconomy. With over 36% of its land area covered by forests, Portugal boasts a significant wood biomass resource. The country's fertile agricultural lands yield a diverse range of crops, including renowned olive oil, wine, and citrus fruits. Additionally, Portugal's extensive marine waters support a thriving fisheries and aquaculture sector.

Strong Primary Sectors: Portugal's primary sectors play a crucial role in the bioeconomy. The agricultural sector contributes significantly to the national economy, generating employment and driving rural development. Portugal's forestry sector is also expanding, producing timber, paper, and other wood-based products. Moreover, the fisheries and aquaculture sector provide a valuable source of protein and supports coastal communities.

Growing Bio-based Industry: The Portuguese bio-based industry is experiencing rapid growth, driven by innovation and investment. Numerous bio-based companies are emerging, developing innovative products and processes using biological resources. Bioeconomy is also attracting interest from research institutions, which are conducting cutting-edge research in areas such as biorefinery, biopolymers, and biocatalysis.

Government Support: The Portuguese government recognizes the bioeconomy's potential and is actively supporting its development. The Sustainable Bioeconomy Action Plan (SBAP) outlines a vision for a sustainable, circular bioeconomy that contributes to Portugal's economic and environmental goals. The government also provides financial incentives and regulatory frameworks to encourage bio-based businesses and research.

Contributions to the Economy: The bioeconomy plays a significant role in Portugal's economy, generating employment, exports, and tax revenue. The bio-based industry employs over 100,000 people and produces goods worth over €4 billion annually. Portuguese bioeconomy exports are increasing, reaching over €2 billion in 2021.

Benefits to the Environment: The bioeconomy offers environmental benefits, helping to reduce the country's dependence on fossil fuels and promote sustainable practices. Bio-based products can replace traditional materials, reducing greenhouse gas emissions and resource consumption. Additionally, biorefineries can process biomass residues, diverting them from landfills and reducing waste.

Pathway to Sustainable Development: The bioeconomy is a key pillar of Portugal's sustainable development strategy.By valorizing its natural resources and promoting innovation, Portugal can create a bioeconomy that is economically viable, environmentally friendly, and socially equitable.



Figure 1: Portuguese rural area