PreVEnting and ReDucing the tEXtiles waste mountain in the MED area

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Introduction

The textile and clothing industry is highly resource-intensive, accounting for 3% to 10% of global CO₂ emissions (Global Fashion Agenda and McKinsey, 2020). The sector also represents a significant contributor to global waste, with an estimated 7 to 7.5 million tons of textile waste generated annually in the European Union alone, equating to over 11 kilograms per person (European Environment Agency (EEA), 2019). Textiles and the environment in a circular economy. This mounting waste has critical environmental implications, exacerbated by linear consumption patterns and inadequate waste management strategies (McKinsey & Company, 2022). The VERDEinMED project, "PreVEnting and ReDucing the tEXtiles waste mountain in the MED area", funded by the European Union's Interreg Euro-MED program, addresses these pressing challenges by promoting the adoption of circular economy principles across the Mediterranean region. The project integrates innovative tools, cross-sector collaboration, and targeted awareness initiatives to create pathways for sustainable waste reduction in the textile industry.

Materials and Methods

The initial phase of the VERDEinMED project involved an extensive assessment of textile waste management systems across key Mediterranean countries, including Greece, Spain, Portugal, Slovenia, Italy, North Macedonia, and Bulgaria. This multi-country investigation analyzed the socio-legal, technical, and market dynamics underpinning the management and generation of textile waste. A comprehensive SWOT analysis was performed to identify strengths, weaknesses, opportunities, and threats related to waste management and circular economy practices. The analysis was based on a desktop study, gathering data from Eurostat, studies on textile production and waste as well as all available litterature on the subject and it was performed both at country and EU level.

Additionally, a three-pronged support service model was developed to target civil society, textile manufacturing and waste management industry, and policymakers, to accelerate change towards sustainable and circular economy targets as presented by the EU strategy for sustainable and circular textiles (EU strategy for sustainable and circular textiles, Environment, European Commission, 2022). This includes:

- A Technical Assistance Service (TAS) for businesses, which includes consultations and advisory services, adapted to their needs, provided by local and transnational mentors,
- Communication campaigns and Living Labs, aimed at educating consumers about the impacts of their consumption habits and everyday use of textiles, and;
- The "VERDE Academy", a series of workshops along field visits for public servants to help them build stronger strategies around sustainable textiles production and waste management.

Results and Discussion

Findings from the EU and cross-country analysis revealed a complex interaction of social behaviors, policy gaps, technological limitations, and market barriers driving the annual generation of textile waste. The SWOT analysis highlighted key areas of opportunity, such as increasing collaboration among stakeholders and promoting the adoption of circular economy strategies.

Moreover, the project's three-tiered support approach shows promise in addressing these gaps by fostering awareness, providing technical support to the textile manufacturing and waste management industry, and influencing policy development. Through targeted consumer campaigns, mentoring programs, and technical assistance services, VERDEinMED aims to create systemic changes in industrial practices and consumption patterns. Furthermore, by introducing regional and national circularity hubs and establishing a centralized knowledge-sharing platform, the project seeks to enhance stakeholder collaboration, facilitating informed decision-making and fostering innovation in textile waste reduction.

The adoption of a circular economy model depends on aligning industry practices with sustainable consumption behaviors and establishing policy frameworks that incentivize such transitions. The project will demonstrate how multi-sector partnerships, informed public participation, and strategic technical interventions can drive measurable progress in addressing the impacts of the textile industry.

Conclusions

The VERDEinMED project offers a comprehensive, multi-sectoral approach to addressing the complex issue of textile waste management in the Mediterranean region. The results from its first year of implementation show that through collaborative efforts, innovative strategies, and tailored support services, industry norms and consumer behavior towards a circular economy can be shifted. Central to this effort are education and awareness campaigns, technical mentorship for industries, and workshops that engage policymakers. Ultimately, by promoting circular economy principles and fostering inter-stakeholder collaboration, VERDEinMED has the potential to significantly reduce textile waste and improve sustainability in the textile and clothing industry across the Mediterranean.

References

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