

УДК 677:339.13

SUSTAINABLE PRACTICES IN THE MANAGEMENT OF RESPONSIBLE TEXTILE MANUFACTURING IN THE REPUBLIC OF MOLDOVA

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The textile industry currently generates enormous amounts of waste, and its recycling is essential for reducing the impact on the environment. In order to solve the waste problem, action plans and strategies are being developed to reduce the amount of textile waste and increase the lifespan of textile products globally.

The Republic of Moldova is joining and aligning itself with European concerns for sustainability, developing national sustainability programs regarding the application of various measures to reduce the volume of textile waste derived from various sources.

The paper presents the results of the study evaluating the implementation of sustainability strategies aimed at the fashion sector and ensuring long-term sustainable development.

The study was carried out within the national project, 020408 Research on Ensuring Sustainable Development and Increasing Competitiveness of the Republic of Moldova in a European Context.

Key words: textiles, sustainability, textile waste, sustainable development

INTRODUCTION

Global sustainability concerns highlight the significant impact of products resulting from the fashion industry, considered to be the field from which the largest amount of textile waste results.

The measures taken at European level focused on this field are contained in the regulations developed and constitute benchmarks in analyzing the traceability of the implementation of these requirements, committing us to contribute to the sustainable EU development of the fashion field by ensuring it at national level.

PURPOSE

The study is aimed at analyzing the fashion industry in the Republic of Moldova as a source of textile waste and the sustainable practices applied by companies in this field in engaging in the implementation of the sustainable development strategy.

1. OBJECTIVES WITH REFERENCE TO SUSTAINABILITY IN THE TEXTILE SECTOR AND EUROPEAN REGULATIONS

The EU Commission's vision for 2030 with reference to textiles uncompromisingly shows that all textile products placed on the EU market [1]:



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- they must be durable, repairable and recyclable, largely made from recycled fibers, without treatment with hazardous substances and produced with respect for social and environmental rights;
- the archetype of "fast fashion" to be replaced by "slow fashion" and users to benefit from high-quality textiles at affordable prices;
- ensure the widespread availability of profitable reuse and repair services;
- textile producers to take responsibility for their products along the value chain, with sufficient capacities for recycling and incineration and minimal landfilling.

The actions planned to achieve the above objectives refer to:

- setting requirements for the design of textiles to make them longer lasting, easy to maintain, repair and recycle, as well as requirements for minimum recycled content;
- operating with reference to the identity of textile and textile products through digital textile passports that will present clear, transparent and real-time information:
- implementing the strategy to reverse overproduction and excessive consumption and discourage the destruction of unsold or returned textiles;
- addressing the exclusion of the use of synthetic textiles with the elimination of microplastics;
- promoting maintenance through eco-cleaning/laundry to raise awareness of sustainable fashion;
- implementing mandatory and harmonised rules on textile producer responsibility in all Member States and stimulating manufacturers to design more sustainable products;
- limiting the export of textile waste and promoting sustainable;
- stimulating circular business models, including the reuse and repair;
- encouraging companies and start-ups in the field to support and implement sustainable development strategies.

2. SUSTAINABLE PRACTICES APPLIED BY FASHION COMPANIES IN THE REPUBLIC OF MOLDOVA

Fashion companies in the Republic of Moldova have intrinsically committed to implementing the strategy with reference to sustainable development. One of the global sustainability objectives that constitutes a reference subject within this study is 12. Responsible production and consumption.

The elements that define the fashion sector at the national level are structured in: textile manufacturing; clothing manufacturing; tanning and finishing of hides, skins, harness and footwear; footwear manufacturing.

The revival of the fashion sector in the country after the 2000s was marked by the constant increase in the number of companies considering the support provided by the European Union and the United States Agency for International Development (USAID) through various country projects and programs.



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Statistical data on the number of companies for the period 2016-2024 [2-5] shows a decrease in the number of companies specialized in Tanning and finishing of hides, harness and footwear and Footwear manufacturing in the country. The number of companies focused on Manufacture of textile products and Garment manufacturing is continuously increasing.

The concern for sustainability has determined the transition from the linear to the circular economic model, intensifying the increase in the responsibility of manufacturing.

Textile companies have always been concerned with responsible manufacturing, aware that this field of activity produces a large volume of waste. Overall, global statistics are alarming, placing the fashion field as the field with the greatest impact on environmental pollution.

The focus on responsible manufacturing management in this study involves defining waste types to highlight the strategies undertaken in this regard by national companies.

From communication with representatives of textile companies, at the national level there is still no functional national regulated mechanism for textile waste management. According to data from the Ministry of Environment of the Republic of Moldova, in 2023, the textile industry generated about 1400 tons of waste [6, 7].

The pollution produced by the fashion industry is not only related to the waste produced by clothing companies but also to users who have embraced the culture of consumerism and have formed the habit of purchasing a large number of clothing products in the pursuit of fast fashion, some of which remain unused, but considered to be outdated, users try to get rid of them.

Perpetuating the term of sustainability in society, the concern for ensuring the balance of the ecosystem at a societal level through small businesses launched and charity associations through the fashion industry, the following measures are being taken:

- collection of clothing products by associations such as Shop-MESTO and offering them free of charge to users who preliminarily register and are selected according to certain criteria;
- collection of clothing products through the Clothing Bank project carried out by the Diaconia Foundation. The project is taking place in the city of Chisinau, in each sector, in supervised locations, where users can leave clothing products they want to give up, shoes, children's toys, accessories, cleaned and packaged in the Clothing Banks, which are subsequently picked up, selected by user groups and distributed to people in difficulty, homeless, vulnerable, etc.
- applying traditional technologies for recovering textile products by cutting and obtaining strips of predetermined widths and reusing them to obtain new products through weaving, sewing, braiding techniques such as: products for chairs, floor mats, etc., products for interior decoration, using strips in various agricultural activities, products obtained through the Pachwork technique - pillowcases, blankets, bed linen, blankets.
- depositing clothing products in physical or online stores, offered at reduced prices:



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- organizing clothing fairs sold at reduced prices;
- donating textile products to vulnerable people.

CONCLUSIONS

The study conducted allowed the following conclusions to be drawn: it is necessary to develop a national textile waste management strategy; promoting the culture of slow fashion and reducing the pace of purchasing clothing products if there is no urgent need; promoting the culture of sustainability in schools, creative centers, etc., to children from the youngest ages; encouraging the donation and collection of clothes, offering them to people who need them; encouraging the recycling of textile waste in the form of functional or decorative interior products.

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СТАЛІ ПРАКТИКИ УПРАВЛІННЯ ВІДПОВІДАЛЬНИМ ТЕКСТИЛЬНИМ ВИРОБНИЦТВОМ В РЕСПУБЛІЦІ МОЛДОВА

Зараз текстильна промисловість утворює величезну кількість відходів, і їх переробка є важливою для зменшення впливу на навколишнє середовище. Щоб вирішити проблему відходів, на глобальному рівні розробляються плани дій і стратегії щодо зменшення кількості текстильних відходів і збільшення терміну служби текстильних виробів.

Республіка Молдова підписується та приєднується до європейських вимог сталого розвитку, розробляючи національні програми сталого розвитку щодо застосування різноманітних заходів для зменшення обсягу текстильних відходів, отриманих з різних джерел.

Результати роботи з оцінки дослідження реалізації стратегій сталого розвитку, спрямованих на сферу моди та забезпечення довгострокового сталого розвитку.

Ключові слова: текстиль, стійкість, текстильні відходи, сталий розвиток.