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### ALIGNING THE CLOTHING MANUFACTURING INDUSTRY OF THE REPUBLIC OF MOLDOVA WITH THE SUSTAINABLE FUTURE OF FASHION

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#### Abstract:

This paper analyses the influence of the European Union Strategy on Sustainable and Circular Textiles on the textile and clothing industry in the Republic of Moldova, a sector that plays an essential role in the national economy through its significant contribution to exports, job creation and stimulation of regional development. In recent years, there has been an increase in the number of companies in the clothing sector, increasingly oriented towards the production of high value-added items. Many of these companies sell their products under their own brand on the domestic market, and thanks to the development of e-commerce, some have also managed to penetrate foreign markets. The activity of companies in this sector is influenced by a number of factors, including: legislative changes, changes in consumer behavior and geopolitical developments. In order to ensure sustainable development and adaptability to the global context, the clothing industry in the Republic of Moldova must align itself with these transformations. In this regard, a long-term vision on sustainability in the field of fashion in the Republic of Moldova has been developed, based on a sustainability diagnosis of the industry. The results of this effort formed the basis for the formulation of strategic recommendations and a medium-term action plan, to be implemented with the support of the APIUS Association. Therefore, the paper emphasizes the importance of aligning the Moldovan garment industry with European trends and the principles of sustainable fashion, in order to ensure long-term competitiveness.

Key words: clothing industry, sustainability diagnosis, legislative regulations, sustainable future, slow fashion

JEL classification: 0140, 0033, Q550, Q580

### 1. INTRODUCTION

The fashion industry in the European Union is at a critical juncture, facing the imperative need to become sustainable in a context dominated by the accelerated consumption model ("fast fashion") and a considerable environmental impact. According to official data, textile consumption ranks fourth in terms of environmental and climate impact, surpassed only by the food, housing and transport sectors. At the same time, the textile industry ranks third in terms of water consumption and land use, and fifth in terms of greenhouse gas emissions generated by the consumption sectors.

A critical aspect of this industry is the massive generation of waste: around 5 million tonnes of clothing are disposed of annually in the European Union, equivalent to around 12 kilograms per person. However, only around 1% of textiles are recycled into new products, highlighting the inefficiency of the current linear economic model, characterised by the 'produce-consume-throw' paradigm. [2]

To ensure the sustainable development of the fashion industry, the European Union has adopted 16 pieces of sustainability legislation that will impact the fashion industry. Comprehensive strategies have also been developed and adopted to guide the textile industry towards sustainability. One of the most important is the European Union Strategy for Sustainable and Circular Textiles (launched by the European Commission in March 2022), which sets out the vision that by 2030 textile products on the market should be durable, repairable, reusable and recyclable, contain a high proportion of recycled fibres, be free of hazardous substances and produced with full respect for social and environmental rights. The strategy explicitly states that "fast fashion is out of fashion", and European consumers will benefit from high-quality, affordable and long-lasting textiles instead of disposable products [2]. To achieve this vision, a set of concrete measures are being

implemented:Inovații tehnologice care permit trasabilitatea materialelor și eficientizarea proceselor de producție;

- a) Reducing environmental impact by using environmentally friendly materials and optimizing resource consumption;
- b) Improving work ethics, by ensuring fair working conditions and respecting workers' rights;
- c) Promoting the circular economy and the concept of "slow fashion", which encourages sustainability, reuse and recycling of textile products.

This research aims to analyze in depth these directions of transformation, providing concrete examples and relevant academic and institutional references, which outline the transition towards a sustainable fashion industry in the European Union. It also highlights the situation in the fashion industry in the Republic of Moldova, a supplier to the European Union, based on a sustainability diagnosis of the industry and outlines a long-term vision for a sustainable and adaptable development to the global context.

#### 2. RESEARCH METHODOLOGY

In developing this paper, various research methods were combined, such as documentary analysis and the historiographic method, to describe trends in the European fashion industry over the last decade, in the field of ensuring a sustainable future for fashion. Subsequently, a quantitative approach was used: relevant statistical data in dynamics for the period 2018–2023 were collected and analyzed, such as export volume indicators of fashion industry enterprises in the Republic of Moldova, which argued the importance of the sector for the national economy. The results of the sustainability diagnosis in the textile industry in Republic of Moldova based on interviews and discussions with relevant stakeholders were also used. The data were collected both through visits to various companies and online interviews with entities from the fashion industry in Republic of Moldova.

To carry out the sustainability diagnosis, the opinions of directors and specialists of 20 enterprises were collected both through visits to 10 enterprises and through online interviews with another 10 enterprises in the fashion industry in Moldova. To collect data both through visits to enterprises and online, a structured questionnaire was used, consisting of 22 questions that covered the three fundamental pillars of sustainability: (i) economic (identification of economic growth trends); (ii) social (assessment of working conditions and the level of social responsibility); and (iii) environmental (identification of the attitude towards environmental protection). In particular, the investigation of the types and quantity of waste generated, the recycling methods used was aimed at). During the visits to enterprises, the main specialists in the technical-technological and economic fields participated in the discussions, a total of 36 specialists. The online interviews were conducted with 10 enterprise directors. The purpose of the diagnosis was to assess the current situation and identify the challenges encountered in implementing sustainability principles.

The selection of companies was carried out in such a way as to ensure a balanced representativeness depending on the size of the enterprise, business model, specialization, location (urban vs. rural) and type of ownership (domestic, foreign or mixed capital) [3].

### 3. CONTEXT AND TRENDS IN THE EUROPEAN FASHION INDUSTRY

The European Union and the textile industry have been adopting measures for a sustainable future for fashion in recent years, focusing on technological innovations, reducing environmental impact, improving work ethics and promoting new trends such as the circular economy. All these measures are intended to accelerate the sector's transition to sustainable practices.

## a) Technological innovations that allow for material traceability and streamlining of production processes

One of the key directions for increasing sustainability in the textile sector, pursued by the European Union, aims to implement technological innovations based on production automation and digitalization, which allow both resource optimization and waste reduction. A clear example is the European project on automated cutting with zero waste (Zero Waste Automated Fashion Manufacturing), which has developed hardware and software that allow cutting materials without generating unusable scraps. [4] This technology could make it possible to industrially produce clothes without waste, by optimizing patterns and reusing each piece of fabric, representing a significant progress towards a circular economy in the production of ready-made clothing.

3D printing and digital design also allow garments to be manufactured directly from a digital model, using exactly the amount of raw material needed. This technology allows fabric waste to be minimized, as there is no fabric scrap generated as in traditional tailoring. According to a study cited by the European Commission, this technology could save up to 90% of the natural resources used in fashion. Already, famous European designers are using 3D printing for innovative dresses, demonstrating the creative and ecological potential of this technique. Furthermore, 3D printed clothes can be made from recycled or biodegradable materials, offering sustainable solutions for the future. [5]

Another key innovation in the supply chain is Blockchain and traceability. Blockchain technology creates distributed and tamper-proof ledgers, allowing the tracking of every step of production – from raw materials to the final product – increasing transparency and trust. Pilot projects have already been carried out in the European Union that combine markers embedded in materials with blockchain platforms to verify the authenticity and provenance of organic fibers. For example, a consortium led by the organization Fashion for Good was able to track organic cotton from farmers to shelves, using invisible markers in the fibers and a blockchain ledger to record every transaction in the chain. [6] This demonstrated the feasibility of ensuring full traceability, providing guarantees that a product labeled "organic" or "fair trade" truly comes from sustainable sources and meets the declared standards. In the near future, the European Union's proposed digital product passport could use similar technologies so that every clothing item sold in Europe would have a digital "report card" with information about materials, carbon footprint and production conditions [2].

Advances in textile fiber recycling aim to close the loop of the clothing life cycle. Currently, the vast majority of recycled clothing is reprocessed into inferior products (rags, insulation) and less than 1% of used textiles are reprocessed into fibers for new clothing. New technologies are addressing this challenge. A notable example is the production in 2024 of the first 100% enzymatically recycled "fiber-to-fiber" T-shirt from textile waste. This technological breakthrough marks a turning point towards full circularity in the textile industry. Thus, recycled polyester can even come from old clothes, avoiding their landfill or incineration and significantly reducing the associated carbon emissions [7]. Multiple initiatives for the chemical recycling of cotton and cellulose have also emerged in European Union. Innovative companies such as Infinited Fiber (Finland) or Renewcell (Sweden) have developed processes to transform cotton waste into new fibers. Renewcell produces Circulose, a pulp from used cotton-based textiles, which is then used to make viscose or lyocell, and Infinited Fiber has created Infinna, a cellulose fiber also obtained from post-consumer textiles. Such recycled fibers have begun to be experimentally adopted by wellknown European brands (from fast fashion chains such as H&M, Zara to premium brands Adidas, Levi's, Ganni or ArmedAngels), which have integrated them into sustainable capsule collections [8]. These collaborations between technological innovators and retailers demonstrate the feasibility of advanced recycling on a commercial scale in the years to come.

In the field of manufacturing, automated machines and sewing robots are changing the paradigm of production, allowing for the relocation of some of the manufacturing closer to

consumers (nearshoring), with lower environmental costs. Although the production of soft materials by robots is still a developing field, progress is being made – for example, automated whole-garment knitting machines that create sweaters without seams and thread waste, or robotic arms capable of sewing simple items. These technologies, together with Artificial Intelligence used to optimize design and demand forecasting, can reduce overproduction and unsold stocks. European brands have begun to use AI algorithms to predict trends and sales volumes, thus minimizing inventory waste and the need for stock liquidations, which often end up as waste [9].

Overall, technology offers a range of tools, from revolutionary materials and high-tech textiles to automated processing and digital intelligence, that can transform the fashion value chain into a more efficient, transparent and circular one. Supported by investments (including European research funds, such as Horizon Europe programmes that finance the development of green technologies for textiles [2]) and collaborations between tech startups and fashion companies, these innovations will be the pillars of a sustainable future for European fashion.

## b) Reducing environmental impact through the use of ecological materials and optimizing resource consumption

In order to address the negative impact of the fashion industry on the environment, the European Union, together with the fashion industry, is implementing various solutions, from technological changes to regulations and voluntary initiatives.

Particular attention is being paid to sustainable and eco-friendly materials. The use of low-impact fibres such as organic cotton is increasingly being promoted. A study by the CBI shows that the production of organic cotton uses approx. 91% less water, 62% less energy and has a global warming potential of approx. 46% lower than conventional cotton [8]. Other natural fibres such as hemp, flax and bamboo are coming back into the spotlight, as they require few chemical inputs and water, but offer durable, biodegradable and compostable textiles. Investment is also being made in innovative alternative materials (biomaterials) to replace leather or synthetic materials: from vegan leather obtained from apple or grape waste, to leather from cactus or pineapple. By 2030, these plant-based alternatives are expected to become widely available and affordable for footwear and leather goods production [10].

Many companies are adopting sustainable dyeing technologies that drastically reduce water and chemical consumption. For example, digital dyeing technology (inkjet) allows materials to be dyed without traditional chemical baths and without wastewater. Laser or ozone finishing instead of stone and chemical washing of jeans is another practice that is gaining ground. To eliminate hazardous chemicals, major brands have joined initiatives such as ZDHC (Zero Discharge of Hazardous Chemicals), committing to gradually eliminate toxic compounds from the production chain by 2020-2030. The European Union supports this direction through REACH legislation, which restricts the use of hazardous chemicals at European level, protecting both the environment and consumers [11].

Against the backdrop of the European Green Deal and the climate neutrality objectives, many retailers and fashion houses in European Union have set decarbonization targets. Around 130 global fashion companies (including many European ones) have signed the Fashion Industry Charter for Climate Action under the auspices of the UN, pledging to reduce GHG emissions by 30% by 2030 and reach net-zero emissions by 2050 at the latest. The measures include the transition to renewable energy in manufacturing plants (some brands finance the installation of solar panels at suppliers), the optimization of logistics (maximizing sea and rail transport instead of air freight, the use of electric or biofuel trucks for distribution) and the compensation of unavoidable emissions through verified green projects [12].

## c) Promoting the circular economy and the concept of "slow fashion", which encourages the sustainability, reuse and recycling of textile products.

A key element of a sustainable future is the shift from "cradle to grave" to a "cradle to cradle" approach in fashion. This involves extending the lifespan of clothes through reuse and repair, as well as recovering materials at the end of the cycle. Already in countries such as Sweden, France, the Netherlands, there are centres where consumers can bring old clothes to be sorted – wearables are sent to second-hand markets and unwearables to be recycled.

Reuse and repair are encouraged: repair shops are becoming more accessible. The European Union sees these services as a sector with growth potential. It is estimated that expanding the collection and preparation of textiles for reuse can create 20-35 jobs for every 1000 tonnes of textiles processed, in areas such as repairs, dry cleaners, upcycling and second-hand retail. The European Union Textile Strategy provides for fiscal incentives for these circular models and aims for reuse and repair services to be widely available by 2030 [2].

# d) Improving work ethics, by ensuring fair working conditions and respecting workers' rights

The global fashion supply chain is often characterised by major disparities: Western brands making significant profits from cheap labour in developing countries or emerging economies. Europe, while relatively advantaged in retail and design, is directly implicated in the fact that many of its brands produce their collections in South Asia, North Africa or Eastern Europe, including Moldova, where labour standards can be poor. Assessing labour ethics involves analysing working conditions, wages paid to seamstresses, factory safety and respect for human rights in garment factories. Working conditions in the global textile industry remain, in many places, at an unacceptable level. It is estimated that around 60 million people work in the garment industry worldwide, and the overwhelming majority of them work in indecent conditions, often overtime and at subsistence wages [13]. However, initiatives to ensure fair wages have recently emerged. For example, the Amsterdam-based Fair Wear Foundation works directly with around 140 member brands (many of which are medium-sized European brands) to help them improve working conditions at their suppliers. The Fair Wear Code of Practice includes paying a living wage to workers and their families, a normal working week (max. 48 hours/week), and workplace safety. Through tools such as the Fair Price app (which calculates how the price paid to the supplier should be adjusted to allow for wage increases), the Fair Wear Foundation seeks to engage brands directly in addressing the wage issue [14]. Thus, the work ethic in European fashion is improving under the combined pressure of activism, media attention, and new regulations. European consumers want to know that their clothes are not tainted by someone else's exploitation. A McKinsey survey showed that, in the context of the pandemic, 63% of European consumers considered it important for brands to take care of their employees and workers in Asia in times of crisis [15]. In March 2024, EU member state representatives approved the Corporate Sustainable Due Diligence Directive (CSDD), designed to hold companies accountable for human rights and the environment in their supply chains [16].

### 4. CONTEXT AND RECENT DEVELOPMENTS IN THE TEXTILE INDUSTRY IN THE REPUBLIC OF MOLDOVA

## a) The role and evolution of the textile industry in the Republic of Moldova in the context of trade relations with the European Union

The progressive economic integration of the Republic of Moldova into the European Union space constitutes a major strategic advantage for the textile sector, consolidating the country's

position as a competitive supplier for European consumer markets. The Republic of Moldova stands out for its high-quality production, short delivery times, flexibility in order processing and the ability to offer value-added services. These include not only CMT (cut-make-trim) production, but also complete supply, logistics, packaging and pattern development services. At the same time, preferential access, without customs duties, to the markets of the European Union, Eastern European countries and Turkey, provides a favorable framework for export. However, the COVID-19 pandemic situation left a rather harsh mark on textile exports, which in 2020 recorded a reduction of over 20% compared to 2018. In the following years, there was an increase in exports, reaching a maximum value in 2022 of \$422.24 million, a value lower than the export in 2018 (table no.1).

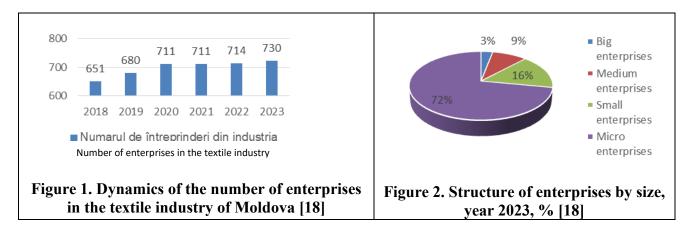
Table no.1. Textile industry export trends and share in total export of RM

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Export	2018	2019	2020	2021	2022	2023
Total export of RM, million USD	2706.17	2779.16	2467.11	3144.50	4332.15	4048.60
Growth rate, %	111,6	102,7	88,8	127,5	137,8	93.45
Total export of textile of RM, million USD	427.58	379.23	338.88	390.72	422.24	398.08
Growth rate, %	106,49	88,7	89,4	115,3	108,1	94,5
Share of textile export in total export, %	15,8	13,6	13,7	12,4	9,7	9.85

Source: Calculated based on [17]

The main export destinations of the textile industry of the Republic of Moldova are European Union countries, such as Italy, Romania, Germany, France and Poland. The share of exports to European Union countries is over 80%.

The textile industry has recorded constant growth in recent decades, demonstrating remarkable resilience in the face of economic fluctuations. This positive development is significantly supported by stable trade relations with the European Union. In the period 2018–2023, the number of enterprises in the sector increased from 651 to 714, including during the pandemic period, contrary to global trends of economic contraction (Figures 1 and 2).



Of the total number of enterprises in 2023, SMEs accounted for 97% (Figure 2), and the share of micro and small enterprises was 88%. Namely, these enterprises are mainly oriented towards the manufacture and sale of items under their own brand. The main sales market is the local market, and some export due to e-commerce.

In terms of employment, at the end of 2023, approximately 22,470 people were employed in the textile industry, representing about 3.1% of the total number of employees in the economy. This contribution highlights the significant role of the sector in providing jobs, especially in rural regions.

Thus, the textile industry in the Republic of Moldova constitutes an important pillar of the national economy, making an essential contribution to exports and employment. The sector is consistently among the top five exporters of the country, and its development prospects remain favorable in the context of maintaining and expanding trade relations with the European Union.

### b) Factors influencing the textile industry in the Republic of Moldova

In the context of new European sustainability policies, in particular the European Union Strategy for Sustainable and Circular Textiles, a reassessment of the development directions of the textile sector in the Republic of Moldova is required. Identifying the drivers of these changes and developing appropriate adaptation strategies will be essential to ensure the long-term viability and competitiveness of the sector.

The change is conditioned by at least three main factors:

- Legislative regulations: adaptation to new European Union requirements on sustainability and the circular economy;
  - Change in demand: consumers' orientation towards ecological and ethical products;
  - Geopolitical changes: regional instability and reconfiguration of supply chains.

The situation in the textile sector in the Republic of Moldova will be primarily affected by legislative regulations. Legislative authorities in the European Union, but increasingly around the world, want to regulate the textile industry, more than ever before. The main objective of this regulation is to oblige the industry to reduce its environmental footprint, i.e. to reduce waste and CO<sup>2</sup> emissions, to limit the use of certain chemicals and to reduce water consumption. Lawmakers also want to increase transparency in the supply chain and to combat social abuses in the textile industry, for example, child labor and unfair wages (below living wage). In essence, the textile industry is moving from an unregulated to a highly regulated sector. Companies will have to adapt to this new environment, which will have consequences for the entire value chain.

Recent changes in the textile market are significantly influenced by the evolution of consumer behavior, which shows an increasing concern for the ecological and social impact of clothing products. Younger generations adopt preferences oriented towards reused or recycled items, while the demand for transparency regarding the origin and social compliance of products is increasing. However, price remains a decisive criterion in the purchasing process.

Brands play a crucial role in facilitating the transition towards responsible consumption, by promoting transparency and establishing fair pricing policies for sustainable products. Intergenerational differences in consumer preferences highlight a diversification of demand, from branded items to unisex, non-seasonal and label-free products. In this context, the adaptability of business models becomes essential, as traditional seasonality is gradually replaced by functional offers, valid throughout the year.

Current trends in sustainability and consumer behavior, together with geopolitical ones, will profoundly influence the evolution of the fashion industry in the Republic of Moldova. For companies that adopt an innovative and integrated approach at all operational levels, these changes can represent strategic opportunities for growth and consolidation in domestic and foreign markets. On the other hand, for actors that fail to adapt, the transition can generate significant difficulties, including losses in competitiveness and economic sustainability.

### c) Sustainability diagnosis in the textile industry in the Republic of Moldova

The sustainability diagnosis was made possible by interviews and discussions with directors and specialists of enterprises in the sector both during visits and online interviews. The diagnosis showed that most enterprises have recovered from the pandemic and have registered economic growth since 2020. At the same time, the sustainability diagnosis identified a number of social and environmental challenges were identified and analyzed, targeting the definition of sustainability in the context of the fashion sector, issues related to labor and ethics, certification and traceability requirements in the supply chain, waste management, the impact of climate change and energy use, consumer and retailer awareness and responsibility.

The main conclusions of the sustainability diagnosis were as follows:

 As a result of the interviews conducted with the directors and specialists of garment factories in the Republic of Moldova, it was highlighted that the correct meaning of sustainability is not really understood. 100% of the respondents confuse the concept of sustainability with that of quality. At the same time, they consider that sustainability is one of the most important requirements of the industry, being perceived not only as a characteristic of the final product, but also as a fundamental principle of the production process.

- Awareness and practical implementation of sustainable development in the textile industry still
  remains limited, although most companies in the textile sector are aware of the importance of
  sustainable development and the concrete application of sustainability principles in practice.
  Despite the efforts made, the transition to sustainable production models is still at an early stage
  within manufacturing enterprises.
- Despite the fact that working conditions are quite good, automation and digitalization of processes still remains insufficient Within the textile industry value chain, the garment manufacturing stage is characterized by high labor intensity (at about 70% of enterprises). This characteristic makes it one of the most sensitive components of the sector in terms of operational costs and production efficiency. The implementation of advanced technologies, such as industrial robots, automated cutting systems and digital solutions for production management, contributes to increasing productivity, reducing errors and optimizing resources. However, the transition to automation requires significant investments, which the companies are not ready to make, and adapting the workforce to new technological requirements.
- Regarding the certification of sustainable products, it is worth noting that, in the Republic of Moldova, the use of certifications for products with sustainability attributes is not yet a widespread practice. In particular, local companies rarely resort to certifications that attest to the sustainable origin of raw materials, their traceability or compliance with social and environmental criteria in the production process (only about 10% of the interviewed companies). This lack of alignment with international standards may constitute an obstacle to accessing certain foreign markets. In contrast, many international companies impose strict requirements regarding sustainability certification, requesting documents issued by globally recognized organizations, such as Textile Exchange.
- Practically all textile enterprises in the Republic of Moldova collect different types of waste separately (cardboard, film), but textile waste is not collected separately and is not recovered, which represents a serious problem regarding environmental protection.
- At the same time, there are initiatives to reduce the carbon footprint in the clothing industry in the Republic of Moldova. Clothing companies are showing an increasing interest in adopting sustainable practices, oriented towards energy efficiency and reducing their carbon footprint. Among the most effective techniques available in this regard are the installation of solar panel systems, which allow the use of renewable energy sources, as well as the optimization of production processes to reduce resource consumption. These measures contribute not only to reducing the environmental impact, but also to increasing the competitiveness of companies on international markets, especially in the context of increasingly strict sustainability requirements from European trading partners.
- More and more factories produce and sell items under their own brand on the domestic market. In order for these companies to be able to capitalize on sustainability as a competitive advantage, they should communicate transparently with consumers. An effective way to achieve this is by using labels that provide clear information on the quality of the products and their sustainable attributes. Sustainable labeling and the role of the consumer in promoting sustainability is not used by Moldovan businesses.

### 5. STRATEGIC INITIATIVES AND LONG-TERM VISION FOR THE TEXTILE INDUSTRY IN THE REPUBLIC OF MOLDOVA

To ensure the sustainability of the fashion industry in the Republic of Moldova, with the support of the Future Technologies project, funded by USAID, Sweden and the UK, the roadmap "Sustainable Future of the Fashion Industry in the Republic of Moldova" was developed, which

aims at strategic initiatives and the alignment of the textile industry in the Republic of Moldova with the sustainable development vision "Moldova 2030" [3]. This strategy promotes a people-centered approach, in which the citizen – as an employee – is considered a direct beneficiary of development, and not just an economic resource. Such a vision is particularly relevant for the textile industry, a sector characterized by a large and diversified workforce. In this context, priority interventions were defined in areas such as regulation, investment and education, which would contribute to improving the well-being of employees and capitalizing on human potential from an entrepreneurial, educational and productive perspective. Economically, it is essential to ensure sustainable and inclusive growth in the textile sector, so that the benefits are distributed fairly between employees and companies[3].

Transforming the industry into a sustainable and competitive sector requires adopting a new business model, focused on innovation, proximity to key customers, workforce resilience and an optimistic attitude towards change. Such an approach can contribute to strengthening an entrepreneurial culture in which the personal and professional development of entrepreneurs is encouraged and supported.

The social dimension of sustainable development implies a socially equitable approach within the textile industry. This involves, first of all, ensuring decent wages for employees, as a means of reducing labor migration and maintaining human capital in the country. In parallel, it is necessary to make investments in improving working conditions, so that they allow not only the safety and comfort of employees, but also to obtain incomes that reflect the value of the work performed. Another essential aspect is the elimination of disparities between working conditions in rural and urban areas. Balancing these differences is crucial for equitable regional development and for creating an inclusive economic environment, in which all textile sector employees benefit from equal opportunities, regardless of geographical location.

In the current context, marked by an increasing concern for environmental protection, there is an increasing need to raise public awareness of the importance of conserving natural resources and reducing the environmental impact of industrial activities. In this regard, it is essential that personnel within textile industry enterprises assume environmental responsibility and an active role in the responsible management of waste generated in the production process. One of the fundamental measures in this endeavor is the separate collection of industrial waste, which allows for the efficient recycling of materials and the reduction of the volume of waste disposed of in the environment. The implementation of rigorous sorting and recycling practices contributes not only to environmental protection, but also to the creation of an organizational culture oriented towards sustainability and social responsibility.

In order to implement the roadmap "Sustainable Future of the Fashion Industry in the Republic of Moldova", the "Action Plan to Ensure Sustainability for the Textile Industry in the Republic of Moldova" was developed, and the employers' association of light industry enterprises APIUS was identified as the coordinator of the implementation of this plan. Currently, the APIUS association, with the support of various local and international partners and the active involvement of businesses, is concerned with the implementation of this plan.

### 6. CONCLUSIONS

Aligning the fashion industry in the Republic of Moldova with global sustainability trends is essential for maintaining competitiveness. The proposed strategies provide a coherent framework for the transition to a circular economy, strengthening the sector's position on the international market.

The fashion industry is in a profound process of transformation, driven by major changes in international regulations, as well as the rapid evolution of consumer demands. In this context, companies in the Republic of Moldova must prepare to operate in a new economic and legislative environment, characterized by higher standards of sustainability, traceability and social responsibility.

In the nearest future, the impact of European Union regulations on the textile industry in the Republic of Moldova will be most pronounced. The significant increase in the number of legislative acts at the European Union level will have a direct impact on the light industry in the Republic of Moldova, both in the case of companies that intend to market products under their own brand on European markets, and in the case of those that operate under the CMT (cut-make-trim) regime for international brands. In this context, a careful analysis of the new regulations and rigorous preparation to ensure full compliance with legislative requirements becomes imperative.

The efficiency of organizing the transition process towards a more sustainable textile industry in the Republic of Moldova will depend on adapting to new European standards, strengthening institutional capacities and supporting enterprises in the transformation process.

Although managing change can be difficult, it offers significant opportunities for enterprises that adopt a proactive approach. Early adaptation to new requirements can transform these challenges into competitive advantages. Thus, it is essential that companies in the textile industry in the Republic of Moldova strengthen their internal capacities, invest in innovation, digitalization and human resource training, preparing for a new era of fashion. Through such a strategic approach, the sector can emerge from this transition period stronger, more resilient and better positioned in international markets.

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