Miguel Angel Gardetti Subramanian Senthilkannan Muthu *Editors*

The UN Sustainable Development Goals for the Textile and Fashion Industry



Textile Science and Clothing Technology

Series Editor

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This series aims to broadly cover all the aspects related to textiles science and technology and clothing science and technology. Below are the areas fall under the aims and scope of this series, but not limited to: Production and properties of various natural and synthetic fibres; Production and properties of different yarns, fabrics and apparels; Manufacturing aspects of textiles and clothing; Modelling and Simulation aspects related to textiles and clothing; Production and properties of Nonwovens: Evaluation/testing of various properties of textiles and clothing products; Supply chain management of textiles and clothing; Aspects related to Clothing Science such as comfort; Functional aspects and evaluation of textiles; Textile biomaterials and bioengineering; Nano, micro, smart, sport and intelligent textiles; Various aspects of industrial and technical applications of textiles and clothing; Apparel manufacturing and engineering; New developments and applications pertaining to textiles and clothing materials and their manufacturing methods; Textile design aspects; Sustainable fashion and textiles; Green Textiles and Eco-Fashion; Sustainability aspects of textiles and clothing; Environmental assessments of textiles and clothing supply chain; Green Composites; Sustainable Luxury and Sustainable Consumption: Waste Management in Textiles: Sustainability Standards and Green labels; Social and Economic Sustainability of Textiles and Clothing.

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Development Goals
for the Textile and Fashion
Industry



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Preface

In 2012, Rio de Janeiro Summit, organised by the United Nations and called "Rio +20", analysed the progress made since the summit held in Rio de Janeiro in 1992, and it also announced that the Millennium Goals were to be replaced—starting in 2015—by the Sustainable Development Goals, also called "the 2030 Agenda for Sustainable Development Goals".

In September 2015, the United Nations General Assembly approved the agenda, which sets up a transformational view to economic, social and environmental sustainability. The current development paradigm should be transformed into an inclusive paradigm based on sustainable development and with a long-term vision. The Agenda comprises the 17 goals below, which, in turn, include 169 targets:

- Goal 1: End poverty in all its forms everywhere.
- **Goal 2**: Zero hunger. End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- **Goal 3**: Good Health. Ensure healthy lives and promote well-being for all at all ages.
- **Goal 4**: Quality education. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- **Goal 5**: Gender equality. Achieve gender equality and empower all women and girls.
- **Goal 6**: Clean water and sanitation. Ensure availability and sustainable management of water and sanitation for all.
- **Goal 7**: Affordable and clean energy. Ensure access to affordable, reliable, sustainable and modern energy for all.
- **Goal 8**: Decent work and economic growth. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- **Goal 9**: Industry, innovation, infrastructure. Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.
- Goal 10: Reduced inequalities. Reduce inequality within and among countries.

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Goal 11: Sustainable cities and communities. Make cities and human settlements inclusive, safe, resilient and sustainable.

Goal 12: Responsible consumption and production. Ensure sustainable consumption and production patterns.

Goal 13: Climate Action. Take urgent action to combat climate change and its impacts.

Goal 14: Life below water. Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Goal 15: Life on land. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.

Goal 16: Peace, justice and strong institutions. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Goal 17: Partnership for the goals. Strengthen the means of implementation and revitalise the global partnership for sustainable development.

This book presents four chapters that relate textile and fashion to some SDGs. For example, the work titled "Traceability & Transparency: A Way Forward for SDG 12 in the Textile and Clothing Industry" developed by Natalia Papú Carrone presents a deepened understanding of what traceability and transparency concerns are all about, and how they can constitute an enabler to accelerate the industry efforts towards achieving SDG 12. Then, "Sustainable Development Goal 12 and Its Relationship with the Textile Industry" developed by Marisa Gabriel and María Lourdes Delgado Luque analyses SDG 12 and how it can be applied to the textile industry, considering the circular economy as a way towards. The Sanjoy Debnath's work titled "Flax Fibre Extraction to Fashion Products Leading Towards Sustainable Goals" covers, to some extent, cultivation and extraction of fibre and further processing into varn and fabric up to fashion garments. It also touches on aspects such as reuse and bio-disposal. This chapter further analyses the UN Sustainable Development Goals in the flax value chain. Finally, Radhakrishnan Shanthi in his Chapter "Sustainable Consumption and Production Patterns in Fashion" analyses the role of sustainable design development, the awareness of slow fashion and change in consumer mindset to attain Goal 12 (Responsible Consumption and Production), UN Sustainable Development Goals.

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Traceability and Transparency: A Way Forward for SDG 12 in the Textile and Clothing Industry



1

Natalia Papú Carrone

Abstract Sustainable Development Goal, SDG, 12 calls for a profound business transformation towards sustainable consumption and production patterns. This involves the entire value chain from a holistic perspective, from raw material to consumer, both globally and locally. Target 12.8 specifically identifies the need for people everywhere to 'have the relevant information and awareness for sustainable development and lifestyles in harmony with nature'. To enable this shift, industry practitioners and academics have recognised traceability as the necessary first step for informed decision-making. Traceability, according to the International Organization for Standardization, ISO, refers to the 'ability to identify and trace the history, distribution, location, and application of products, parts, materials, and services'. Full implementation of traceability systems will allow industry partners to have access to reliable, comprehensive data of their business activities as well as their related environmental and social impact. Once this information is traced and available for firms, transparency will enable all stakeholders to have access to the relevant information needed to make informed decisions, including but not limited to customers and business partners. Both transparency and traceability support visibility throughout the textile and clothing value chains and therefore contribute to build trust between stakeholders. Overall, the purpose of this chapter is to present a deepened understanding of what traceability and transparency concern, and how they can constitute an enabler to accelerate industry's efforts towards achieving SDG 12. Available literature is reviewed thoroughly and supported by examples of implemented industry practices.

Keywords Traceability · Transparency · Textiles and clothing · T&C · Sustainable development

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