Study on Recycled PET - Understanding the Landscape of Recycled Polyester in Pakistan
Terms of References (ToRs) for Consultant

GENERAL
This document contains the Terms of Reference (TOR) for the Consultant, to be engaged by WWF-Pakistan (hereinafter called the Employer), for conducting a study on ‘Recycled PET - Understanding the Landscape of Recycled Polyester in Pakistan’ (hereinafter called the study)

BACKGROUND
In 2020, 13.1 million tons of PET bottles were produced worldwide. Pakistan’s growing population of 216 million consumes large amounts of PET bottles domestically. At the same time, there is rising demand for recycled material in products, which is driven both by consumer preferences, changes in legislations and other stakeholder expectations. Products with circular story, i.e. made from post-consumer waste from a known source are especially sought after. With the domestic textile industry currently more focused on natural fibres, such as cotton, recycled polyester is also an opportunity to expand into synthetic fibres. Synthetic fibres can be used to make more value-added products, such as sports goods and active wear, therefore generating business opportunities and supporting diversification. Recycled polyester presents a great opportunity that if utilized correctly can support the country’s economy and environment. With a project to establish Pakistan’s recycled polyester fibre industry, local capacities can be built up to meet global standards of circularity. As a first step, a study with focus on PET collection centers and spinning mills is to be conducted.

OBJECTIVES AND SCOPE
The long-term vision is to establish recycled polyester industry in Pakistan for the global fashion industry. The study will support the local industry of recycled polyester to meet international standards of compliance, transparency, traceability and quality. This will help the country diversify and create value-added export products. Furthermore, it will lead to long-term social, environmental and economic benefits by creating safe and decent jobs, value-added export products and incentivize effective waste management. Transparency and traceability in supply chains all the way to the source material is becoming increasingly important in the global fashion industry. In the case of recycled polyester, transparency and traceability start at the collection centres and is therefore core focus areas of the study.

The study aims to gain a closer understanding of the recycled polyester landscape in Pakistan. The project will systematically investigate the situation in PET collection centers and spinning mills. The main activity of the study will be baseline assessments of collection centers and spinning mills in Punjab and Sindh, with focus on Lahore and Karachi. Based on the results of the study, a concept for scaling up the project will be developed.

The contents of the study will encompass the following components:

Collection Centers
First, initial research will determine basic information about local collection centres. Next, on-site visits and baseline assessments will provide more insight into the specific status-quo of the collection centres. Questions to be answered are product range of the collection centres, capacities, existing systems of transparency and options for traceability. Particular focus will also be on quality control and monitoring systems as well as on social and environmental compliance. Moreover, needs regarding trainings, management systems etc. will be assessed. One goal of the activities is to identify which collection centres are open for cooperation and suitable for participation in follow-up projects.

Spinning mills
After the original source of the PET at the collection centres was identified, systems for transparency and traceability will be established at the spinning mills. Quality management for staple and filament production will play a vital role. Through communication with spinning mills as well as on-site visits, the current baseline situation will be assessed. Focus will be put on the following areas:

- **Traceability**

  Transparency and traceability all the way to the material are becoming increasingly important in global supply chains. From collection to final product, the entire supply chain needs to be transparent and traceable. In the case of recycled polyester, traceability begins at the collection centre and is therefore a core focus area of the activities in spinning mills, who source from these centres. This can be achieved with adequate management systems and digital tools for monitoring and documentation. Traceability is important to provide necessary information over the origin of the material of the final product, compliance and quality control.

- **Transparency**

  Transparency is a prerequisite of compliance. It is especially relevant in light of recently passed legislations in Europe regarding due diligence in global supply chains.

- **Sustainable and compliant processes**

  Human rights, international regulations, labour standards and environmental standards need to be adhered to at every stage, including spinning mills. Deficiencies indicate a need for audits, trainings and certification. Cooperation with local NGO’s can be considered as well.

**DELIVERABLES**

- Report on the situation in collection centres with assessment of:
  - Product range and capacities
  - Social and environmental compliance
  - Quality control and monitoring systems
  - Challenges and opportunities
- Report on the situation in spinning mills with assessment of:
  - Product range and capacities
  - Social and environmental compliance
  - Existing systems of transparency and options for traceability
  - Quality management system for staple and filament production
  - Challenges and opportunities
- Estimation of market potential
- Identification of suitable certification and standards
- Plagiarism report of the study, with similarity index less than or equal to 15%
- Proposal for follow-up upscaling project:
  - Concept development based on the results obtained
- Two dissemination sessions (seminars/webinars) for industrial representatives

**EXPERTISE AND COMPETENCIES REQUIRED**

- Consultant/Team of Consultants must have a Masters in textile engineering/environmental engineering/environmental sciences or related fields with a minimum experience of 10 years working in the field of waste reduction, recycling and cleaner production.

**TIME FRAME**

05 months