



Circular Fashion

Developing Sustainable Clothing From Local Waste

Background

Waste presents one of the biggest environmental and public health challenges. Clothing and textiles contribute significantly to the global accumulation of waste. However, over the recent years, there has been an increased pressure on fashion companies to take responsibility for their polluting activities. The circular economy has been proposed as a solution to adopt a more sustainable behavior in the fashion industry by returning resources into the product cycle at the end of their use. More specifically, the reusing and recycling of discarded clothing items is claimed to help reduce waste in landfill, prevent new production of virgin materials and create a smaller environmental footprint. Nevertheless, the largest part of European textile waste is exported to other countries that are oftentimes unable to deal with it. Little investigation on the potential of closing loops with local waste streams has been done so far. Local sourcing could, however, reduce the lead time, prevent transport emissions and support developing countries in their waste management. The recent confrontation with the COVID-19 pandemic has further highlighted the vulnerability of global supply chains and the importance to build local resilience.

Objective

This research aims to explore the chances of generating clothing out of local waste. The guiding research question is: *How can the implementation of local waste streams strengthen the sustainability of circular fashion business models in the Netherlands?* To help understand the potential of integrating the local aspect into the process, this study looks at different actors in the Netherlands that could help push the development further.

Methods

- Qualitative research design: multiple case study
 - 9 interviews with participants that engage in fashion and waste management activities in the Netherlands
- Semi-structured interviews that were based on the guidelines of the Appreciative Inquiry
 - Allows to remain flexible whilst still focusing on positive aspects and how potential barriers can be overcome
- All interviews dealt with locality, the Corona crisis, partnerships and hopes for the future in order to ensure comparability of the cases

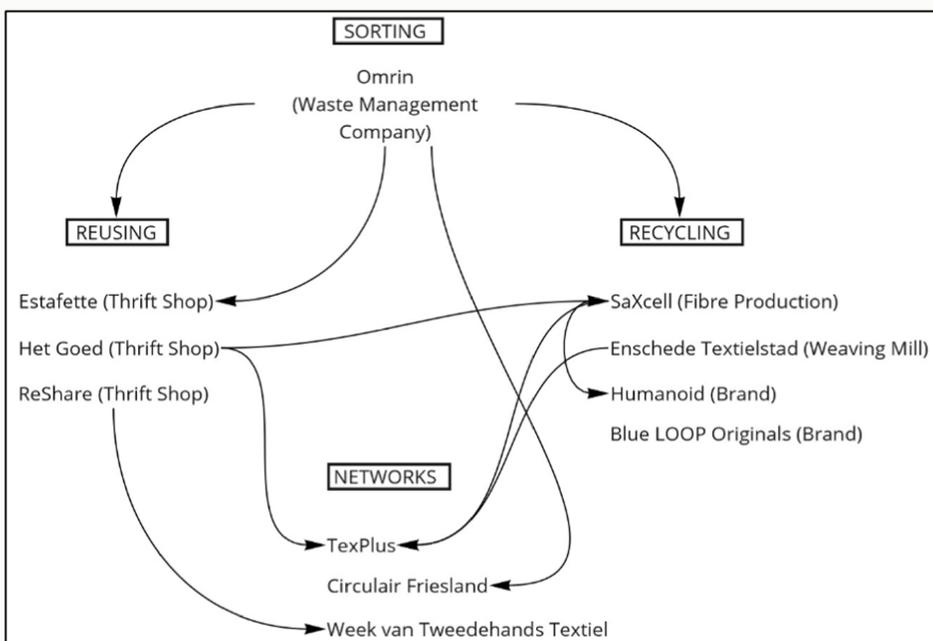


Figure 1. Interconnectedness of Organizations

Results

Waste Streams

- Quality of textile waste declines while amount of textile waste is continuously increasing
 - Reasons:
 - Soiled containers
 - Fabric composition/ Fast Fashion
 - International Second-Hand Retailers
- Presents a threat to reusing and recycling activities

Local Loops

ADVANTAGES	BARRIERS
Control	Costs
Convenience	Demand
Independence	Development Time
Job Creation	Dissent
Time-efficiency	Facilities
Transparency	Online Retailers
Transport	Scale
Trust	

Impact of Covid-19

- Affected participants differently
- Highlighted vulnerability of supply chains and the dependency on the global market

FACTORS TO PUSH LOCAL CIRCULAR FASHION

- Raising Awareness
- Collaborations
- Communication
- The Right Collection Method
- Design Preconditions
- Education
- Extended Producer Responsibility
- Global Solutions, Local Implementation
- Government/ Law
- Mindshift
- Store Design
- Transparency

Conclusions

All participants agreed that integrating the local factor into supply chains would strengthen the sustainability of Dutch circular fashion business models. However, although local cycles are more sustainable, their feasibility and desirability is still debatable. Findings indicate that the priority of locality varies depending on the context and the situation. The implementation of a local fashion industry also differs between the recycling and the reusing industry. The collecting, sorting and reusing of clothing can be facilitated more easily locally compared to the new production of clothing from recycled materials. This can be attributed to the current lack of both adequate facilities and scalable solutions in the Netherlands. Therefore, large scale solutions are only feasible internationally whereas closing loops within the Netherlands should be for quick responses and small-scale solutions. In principle, however, the origin of textile waste and its transport routes are important indicators for the sustainability of circular business models and should be taken more strongly into consideration in the future when thinking about circular solutions.