Globalization & Sustainability in the Fashion Supply Chain: Scalable Upcycling for Post-Consumer Textile Waste

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Apparel Disposal

The fate of clothing at the end of its lifecycle has become increasingly burdensome and complicated with the growth of mass production and multinational retail firms enabling the rapid delivery of fashionable items on a global scale to a trend-driven industry.

The imbalance of consumption and disposal often pushes the overconsumption of developed nations into the markets of lesser-developed countries.
Fashion cycles typically promote obsolescence without many options for disposal – this is left up to the consumer.
Fashion Lifecycle

Retailer take-back programs may encourage some in-store disposal but this is not yet a widespread practice.
Fashion Lifecycle

Retailers that do have take-back programs often rely on third parties to manage the donated clothing.
Textile Waste as Part of Municipal Solid Waste in the U.S. (EPA, 2012)

- Generated: 14.3 TONS
- Discarded: 12.08 TONS
- Recovered: 2.25 TONS
AND THIS AMOUNT IS GROWING

Between 1999 and 2009 the volume of PCTW generated grew by 40%, while the diversion rate only increased by 2%.

1999
18.2 billion pounds

2009
25.46 billion pounds

2019
Projected: 35.4 billion pounds

Fashion Recycle

Recycling apparel is not the same as the recycling process around common materials like glass, paper or plastics. These items can have a shorter lifecycle based on their intended use and therefore necessitate an organized and streamlined recycling process.
Statistics: Global Trade in Apparel & SHC

According to 2012 data from the United Nations, the global export trade in used clothing was valued at over US$4.8 billion (SITC 269). The United States is the largest exporter of used clothing making up 15% of global trade valued at US $733.2 million, followed by the United Kingdom (US$578.9 million) and Germany (US$441.6 million).

Source: UN Comtrade
Statistics:
Global Trade in Apparel & SHC

The largest importing nations of used clothing:

Value

Source: UN Comtrade
Statistics:
Global Trade in Apparel & SHC

Nations with the highest trade deficits for used clothing were in Sub-Saharan Africa (US$.9 billion), the Commonwealth of Independent States (US$.3 billion), and Latin America and the Caribbean (US$.2 billion).

Source: UN Comtrade
Environment

15% recycled textile waste in the US

60% is exported

(smart.org)
This case study focused on a unique business model initiated in the post-earthquake apparel sector. It specifically documents the business model used by a Toronto-based firm and one of its apparel contractors in Port-au-Prince, Haiti to transform secondhand clothing into new clothing styles sold in North American markets. The contractor is a non-profit micro-garment producer made up of approximately 600 members in 32 cities.
Methodology

Primary research:
   In-depth interviews
   Site visits
   Questionnaires

Data collected during visits to apparel industry partner’s main office in Toronto, Canada and their production facility in Port-au-Prince, Haiti, in both 2013 and 2014.

Fashion Lab:
   Production simulation
Objectives of this study

examine the practices of a sustainable business utilizing apparel end-of-life strategies (recycle and reuse) as part of a business-based solution for addressing the economic development needs of Haiti.

evaluate the role of Haiti’s existing micro-enterprise infrastructure in supporting growth in the apparel manufacturing sector.
Economics

Apparel is Haiti’s largest export (exports to USA$803M in 2013)
Politics

Embargoes
Expiration of preferential agreements
Industrial Parks

CBTPA (2000)
HOPE (2006, 2008)
HELP (2010)
Developing economies

Apparel production

• “Race to the Bottom”
• Fair wages
• Value-added
• Human resources/labor
• Working conditions
HOPE

Hemispheric Opportunity through Partnership Encouragement Act (United States-Haiti)

HOPE I 2006
HOPE II 2008

Goal: assist Haiti with expanding its apparel trade as a way to help stimulate economic growth and employment
HELP

The 2010 earthquake destroyed many factories, killed countless workers and severely damaged Haiti’s economy.

The U.S. responded with the Haiti Economic Lift Program, or HELP, to support post-earthquake economic recovery.

Extend provisions of HOPE through 2020
Clinton-Bush Haiti Fund

Nonprofit organization founded after 2010 earthquake
Fundraising request from Pres. Barack Obama to the
former presidents
Efforts now focused on sustainable reconstruction to
promote jobs and economic opportunity
October 25, 2012

Hope for Haiti: Caracol Industrial Park Opens

By ARTHUR FRIEDMAN

HELP increased U.S. trade preferences for Haitian made apparel

Hillary and Bill Clinton helped to dedicate the opening of the Caracol Industrial Park.

Photo By Larry Downing/AFP/Getty Images
Secondhand Clothing & Upcycling
The Movie
Q & A with Students
Q & A with Students
Q & A with Students
Future Work

Scalability
Industry Partnerships
International
"Clothes" the Loop NY

Acceptable Materials

Drop off:
- Clothing
- Underwear
- Coats
- Shoes/Boots
- Sneakers
- Hats
- Stuffed animals
- Linens
- Pillows
- Curtains/Drapes

A partnership between

The New York State Association for Reduction, Reuse, and Recycling
NO EXCUSES

Our vision is for an industry where human rights and sustainability are not the effect of a particular initiative, but the cause of a business well run. Where social and environmental injustices are not unfortunate outcomes, but reasons to do things differently. Where excuses are ignored and action is taken.

We're working toward a world in which the clothes you love to wear create nothing but love.

VISION 2020

The first five years of our plan to get to 100% sustainability.

Our vision is for an industry where human rights and sustainability are not the effect of a particular initiative, but the cause of a business well run. Where social and environmental injustices are not unfortunate outcomes, but reasons to do things differently. Where excuses are ignored and action is taken.
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CENTER FOR INTERNATIONAL STUDIES
Thank you!

I AM HUMAN ECOLOGY