

## Chances for more sustainability in clothing production and consumption

Silke Kleinhückelkotten, Daniel Gardemin & H.-Peter Neitzke  
 ECOLOG-Institut für sozial-ökologische Forschung und Bildung

With about 12 kg per head and year the Germans are world champions in clothing consumption together with the Swiss and the US-Americans (Neugebauer & Schewe 2015). The purchase of clothes is stimulated by faster and faster changing fashions and trends. This *fast fashion* is only possible due to low costs for raw materials, transport, and labour, poor working conditions, and heavy negative environmental impacts (for the problems see e.g. Downer & Cassidy 2012; Gardetti und Torres 2013; Muthu & Senthilkannan 2014).

In the project 'Slow Fashion' of the interdisciplinary InNaBe research association funded by the German Federal Ministry of Education and Research (BMBF) the amount of clothing consumption and the qualitative preferences of consumers were investigated in a representative survey differentiated according to sociodemographic and socio-cultural population segments.

Table 1 shows that the level of consumption is highest in the well-established milieus. The critical-creative milieus and the young milieus also show an above-average level of clothing consumption. In these milieus a hedonistic attitude is widespread (table 2). Many tend to impulse buying and enjoy the shopping experience. They therefore regularly make room for new pieces in their wardrobes. A low portion of people with hedonistic consumption attitudes and a more restrictive clothing consumption can be found in the precarious milieus. This is probably caused by the comparatively low-income level in this milieu segment. According to this the clothing consumption is lowest in the precarious milieus (table 1).

Table 1

Indices for the consumption of outerwear taking into account the number of clothes and the resources used for their production (Results from the InNaBe representative survey 2017, N=2,000)

	Social Milieus						
	All	Tradi- tional	Well- estab- lished	Mod. Main- stream	Preca- rious	Crit.- crea- tive	Young
<b>Consumption Level</b>	1,0	0,9	1,3	0,9	0,7	1,1	1,1

Table 2

Attitude dimensions for buying clothes (mean values of the answers on several questions in each case on a scale from 1 (full agreement) to 6 (absolutely no agreement) (Results from the InNaBe representative survey 2017, N=2,000)

	Social Milieus						
	All	Tradi- tional	Well- estab- lished	Mod. Main- stream	Preca- rious	Crit.- crea- tive	Young
<b>Hedonistic Consumption</b>	3,5	3,8	3,1	3,7	3,9	3,5	3,2
<b>Restrictive Consumption</b>	3,1	3,0	3,4	2,9	2,7	3,3	3,1
<b>Eco-fair Consumption</b>	2,7	2,6	2,5	2,9	3,2	2,2	3,0

The main objective of the InNaBe Slow Fashion project is the investigation of the chances for more sustainability in the clothing sector. To get a broader assessment of the developments in the clothing market until 2030 an expert survey was conducted in 2016. The openness of consumers for innovative products and services that lead to more sustainability in consumption, was examined in the already mentioned representative survey with 2,000 people in the German-speaking population in spring 2017. It was preceded by focus groups with consumers from modern mainstream and well-established social milieus.

For a transition to more sustainability in clothing market and consumption a more efficient use of resources (efficiency strategy) and an environmentally and socially responsible design of production, use, and after-use phase of clothing (consistency strategy) are necessary.

Due to the results of the expert survey the public pressure on companies to make their production socially and environmentally acceptable will increase until 2030. Most experts regard it likely that European regulations will be passed in this time span defining higher demands on the production of clothes.

It is expected that the consideration of sustainability requirements along the textile chain will increase until 2030:

- In the design of clothes the importance of requirements, like multi-purpose usability, seasonal independency, low energy consumption for care, reusability of the threads, fibres or fibrous materials, avoidance of waste in the cutting (zero waste) and biological recyclability (cradle-to-cradle) will increase.
- The portion of fibres of plant or animal origin from sustainable production as well as of fibres based on cellulose and bio-degradable plastics will grow strongly.
- In the finishing of clothes mainly safe chemicals and procedures will be used.
- The major fashion companies will only accept suppliers that ensure at least the compliance of the core labour standards of the International Labour Organization (ILO) and of high environmental protection standards.
- Many clothes will be provided with RFID chips allowing a high-quality sorting of materials.

- More and more fashion companies will take back their products after use for recycling.
- New sorting methods will allow the provision of large quantities of the same used garments offering better opportunities for upcycling.
- The recyclability of chemical-synthetic fibres will be improved significantly.

However, the question is to what extent the developments predicted by the experts are supported by consumers, respectively in which social segments a rapid diffusion of sustainable innovations is to be expected and in which there are barriers.

Due to the results of the representative consumer survey most of the consumers show an openness for buying eco-fair produced clothes already today. Many consumers state to buy at least now and then sustainably produced clothes or express the willingness to do this. The affinity to eco-fair consumption is highest in the critical-creative milieus (table 2). In these social milieus as well in the well-established milieus the intention to buy eco-fair fashion in the future is clearly above the average.

But many consumers do not know how to identify sustainably produced clothes and doubt the credibility of the information by the manufacturers. They want a state seal for clothing, which guarantees environmentally compatible and fair production, like the one for organic food or the 'Blue Angel'. In the opinion of the majority the state should ensure that only sustainably produced clothes are put on the market.

The change to a more ecological and social adequate production and consumption of clothes will certainly contribute to reach sustainability development goals like poverty reduction, (workers) health, environmental protection, and employment especially in the production countries. However, despite these positive trends resource consumption (especially land, water, energy) will probably not decrease, because the number of annual collections will increase as expected by the experts.

A reduction of the mass throughput in the clothing sector (sufficiency strategy) is essential. For this the term 'slow fashion' has become widely accepted. Following Vivienne Westwood slow fashion means "Buy less, choose well, make it last". Lengthening the phase of utilization of clothes requires a) product qualities allowing a long period of use and at least as important b) consumers' willingness to wear their clothes for a long time and/ or to give clothes a second life.

In the experts' view a slowdown of consumption is unlikely to happen until 2030. They are sceptical that the average lifetime of clothes will increase and that the trend to buy more clothes at always lower unit prices will decrease.

On the part of consumers at least the basic insight is widespread that clothes should be used as long as possible, and should only be sorted out if no longer acceptable, as the results of the

representative survey show. The expressed willingness to reduce one's own clothing consumption and to use clothing for a long time is also widespread. In the critical-creative milieus, the portion of those who intend to reduce their clothing consumption in the future is largest.

Offers or activities to extend the utilization phase are interesting for many consumers (table 3):

- To swap clothes is particularly an option in the young milieus, as it could be expected, but also in the critical-creative milieus. The experts assume that the swapping of clothes will be more widespread in 2030 than today.

Table 3

Acceptance of (social) innovations and distribution of sustainable consumption patterns in the clothing sector (Results from the InNaBe representative survey 2017, N=2,000)

%	Social Milieus							
	All	Tradi- tional	Well- estab- lished	Mod. Main- stream	Preca- rious	Crit.- crea- tive	Young	
<b>swap clothes online</b>								
	often	2,3	0,3	2,4	0,8	0,9	1,6	6,6
	occasionally	7,2	1,3	5,6	6,1	3,9	7,2	19,4
	not yet, but imaginable	24,1	16,9	22,3	22,1	19,7	36,1	32,2
<b>swap clothes at events, e.g. swap parties</b>								
	often	2,2	0,3	3,6	0,6	1,3	0,0	5,9
	occasionally	5,4	0,7	4,2	4,4	1,3	4,3	15,5
	not yet, but imaginable	22,7	15,0	21,7	20,0	18,4	35,7	28,6
<b>buy second-hand clothes</b>								
	often	5,9	2,3	5,3	3,0	5,7	8,5	8,6
	occasionally	25,8	21,9	19,6	26,5	24,1	33,8	30,9
	not yet, but imaginable	24,7	22,3	24,3	26,9	23,7	24,3	28,3
<b>buy second hand clothes conditioned by a brand manufacturer</b>								
	often	1,8	0,0	2,7	0,2	0,4	1,0	5,9
	occasionally	8,9	4,0	10,4	7,0	6,1	6,2	18,4
	not yet, but imaginable	42,0	38,2	37,1	43,8	39,0	59,0	41,4
<b>let reconstruct clothes</b>								
	often	2,8	0,0	3,3	1,1	2,2	2,6	6,3
	occasionally	18,5	17,3	23,7	17,1	11,8	22,6	22,4
	not yet, but imaginable	33,6	27,2	30,6	35,4	26,8	40,7	38,8
<b>bring back sorted out clothes to the dealer for exploitation</b>								
	often	2,2	0,7	2,4	0,8	0,9	0,7	5,3
	occasionally	8,4	5,3	9,8	6,7	4,8	6,6	16,4
	not yet, but imaginable	49,7	44,2	48,1	52,0	39,9	69,8	52,6
<b>hire or lease garments from a commercial provider for a short period or a certain occasion</b>								
	often	2,1	0,0	2,7	0,4	0,4	0,3	4,9
	occasionally	6,0	1,7	7,1	5,1	1,8	3,0	16,8
	not yet, but imaginable	31,1	18,6	32,6	31,2	27,6	43,6	38,5
<b>hire or lease garments from a commercial provider for a longer period (e.g. a year)</b>								
	often	1,5	0,3	1,5	0,4	0,9	0,7	4,3
	occasionally	5,3	0,0	5,6	3,8	2,6	1,6	17,1
	not yet, but imaginable	19,6	9,6	22,0	17,0	15,4	26,9	29,6
<b>buy clothes made of recycling material</b>								
	often	2,3	0,0	3,0	1,0	0,9	2,3	5,3
	occasionally	11,8	6,0	11,3	8,2	8,8	16,7	21,1
	not yet, but imaginable	48,0	46,8	43,6	51,2	42,5	63,6	48,4

- About half of the consumers can imagine buying second hand clothes or do this already. In some social milieus the second hand option is more attractive in the case that second hand clothes is conditioned and sold by a brand manufacturer.
- Upcycled clothes are most attractive for people from the young and the critical-creative milieus.
- To hire or lease garments from a commercial provider for a short period or a certain occasion is imaginable for about one third of the respondents, with higher portions in the young and the critical-creative milieus.

The understanding that our clothing consumption must be changed is already widespread today. A majority says they are willing to buy sustainably produced clothes, to limit the consumption of clothing and to use clothes for a long time.

Although the actual behaviour of most consumers is still far from being sustainable, there are obviously chances for changes. In the Slow Fashion project strategies to promote the diffusion of innovations for more sustainability in the field of clothing will be developed in cooperation with actors from science and research, companies, environmental and consumer associations as well as other civil society actors. The focus is on (social) marketing strategies, new design strategies and business models, technical aspects will also be considered. Important target groups are, in any case, the well-established, the critical-creative, and the young milieus with high portions of heavy clothing consumers. The well-established and the critical-creative milieus are also important because of their function as societal leading groups.

## References

Downer E.F. & Cassidy T.D. 2012: Cycle clothing from a lifestyle perspective in the UK's contemporary marketplace. *Int. J. Fashion Design, Technology and Education* 5 (1): 33-43

Gardetti M.A.; Torres A.L. (Ed.) 2013: *Sustainability in Fashion and Textiles*. Sheffield: Greenleaf Publishing Limited

Muthu S.M. & Senthilkannan S. (Ed.) 2014: *Roadmap to Sustainable Textiles and Clothing*. Berlin: Springer

Neugebauer C. & Schewe G. 2015: Wirtschaftsmacht Modeindustrie – Alles bleibt anders. *Aus Politik und Zeitgeschichte* 65 (1-3): 31-41