



Raw materials in luxury

Luxury products are primarily made with natural materials, meaning materials that were produced by nature, as opposed to synthetic materials, that are man-made and mostly derived from oil.

It is important to note that all materials come from nature. However some materials come from plants and animals, and undergo natural processes to turn them into useful materials such as yarn, whilst other materials originate in the ground such as oil based materials, which still come from a raw material but have undergone extensive chemical processing. The time it takes to grow and produce raw materials is also important to consider; oil takes millions of years to form beneath the ground, whereas cotton grows seasonally. These are environmental considerations in sourcing materials which will help you make better-informed material decisions.

What is special in luxury is the quality of raw materials. Quality is inherent to luxury, and thus there is a need to ensure the highest standards in terms of savoir-faire, environmental and social criteria. Luxury Houses use the most beautiful leathers, the finest cashmere, the softest silk and what ensures the quality of luxury products, is the health of the natural sources that produce the raw materials in them.

Definition: “Raw materials” are the unprocessed fibres and textiles that make up our products; the leather we use in our bags, the cotton and wool in our ready-to-wear, the gold and diamonds in our fine jewellery.

High-quality raw materials are notoriously rare. They come from countries around the world that have rich natural ecosystems to create beautiful materials, with the right people with the appropriate skills to ensure the quality of these raw materials along the manufacturing process. Raw materials are the foundation of supply chains that transform them into workable materials that we can use directly in our products. For wool to become a jumper, it has been scoured, dehaired, and then spun into yarn, before it is knitted or woven into a fabric. All these different manufacturing steps require the greatest care for the intrinsic quality of the materials, and sophisticated manufacturing processes, which use the right amount of water, energy and chemicals to create highest quality products.

Whilst most luxury products are manufactured in Europe, the raw materials they are made of come from all around the world. They use savoir-faire all along the supply chain: from the sheep farmers in New Zealand to the mills in Italy, in order to create distinctive and valuable materials for designers to craft into luxury garments for customers to wear.

Short instructive video on what it takes to make a cotton t-shirt:
www.youtube.com/watch?v=BiSYoeqb_VY

The impact of raw materials in luxury

The sustainability challenges for sourcing raw materials are linked to the 8 issues in relation to fashion discussed during week two of this course. The impacts are amplified because the supply chains are global and highly complex.

Kering carefully monitors the environmental impact of its activities, from raw material extraction right up to the sale of products in its Houses' stores. Kering environmental studies have identified that three quarters of its total environmental impacts are generated at the start of the supply chain, with half of the impacts associated with raw materials production (such as cotton growing, cattle farming, ore mining...) and a further quarter of its impacts associated with raw materials processing (including leather tanning, refining metals and textile spinning for example). Its at the raw material level where critical environmental impacts of the fashion industry lie!

The largest environmental impact generated by raw material production is greenhouse gas emissions, responsible for a significant contribution to man made climate change. This is due to the high use of energy in the processing of materials, leading to emissions of carbon dioxide. This is also due to the methane emitted by the farming of the animals (like cattle for leather) and the use of chemical fertilizers for growing plants (like cotton).

- Did you know that 1 trillion kilowatt hours are used every year by the global textile industry, which equals 10% of the total carbon impact?
- Did you know that the average carbon footprint of a cotton t-shirt is estimated to be approximately 6kg? This means its carbon footprint is approximately 20 times its own weight.



If not managed carefully, raw material production can intensify climate change, and then respectively, climate change has an impact on raw material sourcing as it leads to a reduction in raw material quality. We have entered a vicious circle. You can read more about this in this report (Climate Change: Implications and Strategies for the Luxury Fashion Sector: www.kering.com/sites/default/files/document/bsr_kering_report_climate_change_implications_and_strategies_for_the_luxury_fashion_sector.pdf) to know more about this phenomenon.

The sustainable use of water is another key challenge for fashion supply chains. For instance, the cultivation of cotton relies on heavy consumption of freshwater. When you know it takes around 2,700 litres of water to produce the cotton needed for one single t-shirt, you understand the need to ensure cotton is not coming from water-stressed areas and does not contribute to water scarcity for local people.

Another point that is quite specific to the luxury sector is the use of “precious / exotic skins”, which come from animals such as crocodiles, alligators or snakes. Some skins are from wild-caught animals. It is a challenge to ensure that the harvest is done in such a manner as to not negatively impact the wild populations and habitats of the animals. Their trade is regulated and it is of utmost importance to make sure no skin comes from trafficking and to stand against this type of illegal practice.

Additionally, there are large ethical challenges when sourcing material. The first one is about making sure that there is value creation for people throughout the supply chains. Many producers of raw materials are small hold producers like farmers, herders and small-scale miners. The livelihoods of their families and communities are 100% dependent on the production of cotton, or wool, or gold. They are directly affected by the fluctuating market prices of these commodities, as well as extreme weather events, water scarcity, and so on. Fashion brands need to ensure that their activity is safe, healthy and resilient. The conservation of their traditional ways of working is an imperative.

Another ethical challenge that has been growing in awareness in the past few years is how animals are treated. Sometimes fashion is the direct user of animal products (such as fur or precious skins) and sometimes it is a co-user of animal products (such is

the case with leather and wool, where animals are primarily bred for use by the food industry). In both cases, one must make sure that the highest standards for animal welfare are in place across the supply chain, be it with regards to breeding, transporting or slaughtering.

Sustainable sourcing of raw materials

A pre-requisite for sustainable sourcing is transparency: you must know where your raw materials come from and how they have been produced. Traceability is key.

Then you must make sure you put the highest standards in place across your supply chain. You must implement policies to reduce the impacts mentioned here above, but ensuring due diligence in the supply chain is not an easy task, it requires an enormous effort and the collaboration of many stakeholders.

Using certified materials can be a good support for improving traceability and standards in the supply chain. Certification is a means to confirm that the level of social or environmental performance claimed for a product is correct and verified by an external party. For instance a certified organic cotton ensures you that the cotton was grown without the use of toxic pesticides, without synthetic fertilizers, with a reasonable water use and with seeds that have not been genetically modified.

One last thing to keep in mind is that the future of sustainable sourcing requires new economic models too. The circular economy is a model that values resources throughout their lifespan and beyond, it sees an endless use for resources. Circular economy is about changing our economic model, which is linear (“take, make, dispose”) and creates lots of waste, into a model which is circular, where the materials of today never become waste and are the resources of tomorrow. For the fashion industry, it means the ability to use and reuse materials instead of diminishing natural resources. At Kering, the Group’s Houses have already started using recycled materials, such as recycled nylon or regenerated cashmere. Circular economy is an important opportunity for innovation as described in this report of the Global Fashion Agenda: www.copenhagenfashionsummit.com/wp-content/uploads/2017/05/Pulse-of-the-Fashion-Industry_2017.pdf