



LEADING THE WAY

# Regenerative agriculture, *a unique opportunity* for the Luxury industry

# Preface

We have joined our forces to investigate, assess and propose concrete actions in regenerative agriculture for luxury.

From soils management to confectionary, regenerative practices benefit the environment and ultimately contribute to better product quality while creating new dialogues with its end customers.

The luxury sector can pioneer these approaches and guarantee a new excellence in sourcing, manufacturing and deploying sustainable material all along its value chain.

This article is a first state of the art of what is done and might be done.

It is aimed to help the reader navigate an ecosystem that is yet not fully mapped and will continue to evolve.



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# *Changing playground*

As the world confronts the realities of climate change, resource scarcity and environmental decline, the **luxury sector finds itself at a crucial turning point**. Historically attached to exclusivity, quality, excellence and craftsmanship, luxury brands have always led the way in creating products that stand the test of time. But in today's sustainability-driven market, **exclusivity alone is not enough**. Clients and particularly younger generations demand products that not only showcase exceptional craftsmanship but also embody their commitment to environmental and social responsibility. Indeed, 89% of French consumers expect a brand to contribute to the common good; this figure reaches 94% for consumers under 30 years old<sup>1</sup>.

While environmental regulations are setting up a new playground, luxury brands are rethinking their supply chain and committing to transparency and traceability. At the same time, the global consumption of textile fibers continues to rise, fueled by population growth and changing consumer behaviors, further amplifying the urgency to adopt sustainable sourcing practices.

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<sup>1</sup> Brand'Gagement, « L'engagement comme condition des marques durables », 2022.

# Regenerative agriculture

– *why?*

From wool and cotton to leather and exotic fibers, many of the raw materials vital to the whole fashion and accessories industry have a significant impact on greenhouse gas (GHG) emissions and land degradation.

In fact, it is estimated that **the global fashion industry contributes between 6 to 8% of global greenhouse gas emissions<sup>2</sup>, largely due to the agricultural practices used for production.**

Such practices have significant impacts on:

1. The environment and biodiversity, polluting soils, air, water and deforesting
2. Resource availability
3. Animal welfare
4. Native communities
5. The final consumers' perception of "acting for good"

Regenerative agriculture comes into play as a promising solution for more sustainable sourcing of raw materials.

We believe that inside the fashion industry, luxury players can pioneer this approach, build new industrial models and introduce these new practices into the whole sector.

In the following article, we will explore the potential for **luxury to embrace regenerative agriculture as a long-term sourcing strategy**, focusing on what value it could bring to the whole value chain, with a focus on **textile & leather**. We will **explore pathways for the sector to operate this transformation**, outline roadmaps and **identify key challenges** that may arise along the way.

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<sup>2</sup>Sharpe, S. · Dominish, E. · Martinez Fernandez, M.C., Taking Climate Action: Measuring Carbon Emissions in the Garment Sector in Asia, ILO Working Paper, 2022.







## Time is up for *Luxury*

The luxury industry stands at a critical crossroads, as shifting consumer expectations, heightened scrutiny of unsustainable practices and an increasingly strict regulatory landscape demand urgent transformation.

# Growing consumer demand for sustainable products

The profile of the luxury consumer has evolved, with buyers no longer satisfied by a mere promise of quality: **they want assurance that their purchases are socially and environmentally responsible.** Transparency regarding product origins, environmental impact, and the communities involved has become essential. According to the Capgemini Research Institute<sup>3</sup>,

**43%** consumers are uncomfortable buying non-sustainable luxury products.

This heightened awareness of luxury clients has also significantly fueled a growing interest in circular fashion and second-hand luxury. According to Ipsos<sup>4</sup>, 60% French people regularly buy second-hand clothes, 17% have already purchased a second-hand luxury item, with another 13% intending to.

Additionally, Very Important Clients (VICs), who are responsible for generating 40% luxury revenues<sup>5</sup>, are increasingly investing in Environment, Social and Governance (ESG) assets and showing an increased sustainability awareness. This shift in behavior reflects a deeper understanding of the importance of sustainability and its alignment with their evolving priorities.



## Increasing number of sustainability breaches damaging brand reputation

Luxury brands have come under increasing scrutiny from environmental Non-Governmental Organizations (NGOs) and activist groups, which are calling for action against resource-intensive practices like monoculture cotton farming and synthetic material use that harm ecosystems.

The ongoing investigation on the sweatshops in Italy for some iconic luxury Houses, including Dior and Armani, have raised concern about sourcing methods via opaque third-party contractors and pushed organizations to innovate sourcing operating models and ways of working to build new industrial organizations. Similarly, a recent investigation reported that a major organic and ethical Indian cotton supplier to large Western brands works with many Indian farms using child labor, other human abuses and unauthorized synthetic pesticides<sup>6</sup>.

<sup>3</sup> Capgemini Research Institute, Consumer demand survey, October-November 2023.

<sup>4</sup> Ipsos, "Fast fashion or second-hand luxury?", May 29, 2024.

<sup>5</sup> Bain & Company, "Setting a New Pace for Personal Luxury Growth in China", February 7, 2023.

<sup>6</sup> The Business of Fashion, "Ethical cotton is being picked by child labourers in India, watchdog finds", S. Kent, January 7, 2025.



These findings point out the little visibility that both suppliers and most brands have over their raw materials sourcing, largely due to a systemic problem of multiple intermediaries. Such disclosure results in human rights scandals and long-lasting reputational damages.

High-profile advocates, including high profile fashion ambassadors<sup>7</sup>, have also raised their voices, calling for a radical transformation starting from agricultural practices.

As luxury brands navigate rising scrutiny and reputational risks, they must also contend with an increasingly rigorous regulatory landscape that is adding more pressure for brands to accelerate their efforts.

## Navigating a new regulatory landscape

Improving sustainability performance used to be largely driven by marketing opportunities. To drastically change trends, **states and governments strengthened the regulatory framework** in which corporations operate by increasing the number of policies. Taking into consideration the fashion and luxury global footprint, these regulations have 5 different objectives that will significantly impact the industry:

**Acknowledge and measure the impact :** the Corporate Sustainability Reporting Directive (**CSRD**, 2023) mandates companies to **assess and report their environmental and biodiversity footprint and improve their ESG performance.**

It focuses on improving reporting practices to enhance transparency of corporations' environmental impact and their accountability in sustainability efforts.

**Enforce accountability:** the Corporate Sustainability Due Diligence Directive (CS3D)

introduces **obligations for companies to conduct human rights and environmental due diligence across their entire value chain**, otherwise they face sanctions (fines and legal penalties). It aims to enforce corporate accountability, ensuring that businesses identify and mitigate their social and environmental impacts.

**Prevent deforestation:** the European Union Deforestation Regulation (**EUDR**) **prohibits the import of products causing deforestation from the European Market regarding specific raw materials including leather.** The underlying mechanisms of the regulation force players to establish transparency in their upstream supply chain. Unlike usual ESG reporting directives, failing to establish the process and controls results in direct sanctions such as product bans or recalls, endangering the continuity of operations.

Mitigate and restore the damage done: the Nature Restoration Law (enacted in August 2024) targets **ecosystem restoration and biodiversity protection**, to promote long-term and sustained recovery of biodiverse and resilient nature. The legislation includes specific targets, requiring EU states to address the:

- Increase in population of grassland butterflies and farmland birds
- Growth in stocks of organic carbon in cropland mineral soils
- Expansion of the share of agricultural land with high-diversity landscape features
- Restoration of drained peatlands currently under agricultural use

**Encourage circular business models :** the French **AGEC** law ("Anti-Gaspillage pour une Economie Circulaire" or anti-waste law for a circular economy) promotes waste reduction, incorporation of recycled material into product and extended producer responsibility, pushing companies to adopt more sustainable practices across the value chain.

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<sup>7</sup> Vogue, "Regenerating fashion's supply chain", April 5, 2024.

Stricter regulations mark a shift from voluntary sustainability efforts to mandatory compliance for companies in the luxury sector. While these measures tackle critical environmental and social issues, they also come with economic implications. Companies are faced with potential income loss, increased operational costs and the risk of penalties for non-compliance including fines, product recalls and restricted market access. **Adapting will demand investment but also offers a chance to lead in building a more resilient and sustainable future.**

## Fast fashion & “sustainable by design” brands upgrading their game

Change and competitive pressure from Fast fashion are increasing. Leaders like H&M and Zara are setting ambitious net-zero goals and experimenting with regenerative sourcing. In 2024, H&M<sup>8</sup> launched its first mini collection using Regenerative Organic Certified cotton, while Inditex<sup>9</sup> announced plans to reach sustainability goals by 2030, including sourcing 40% of its fibers from conventional recycling and 25% from sustainable farming. Zara is also pushing boundaries with its collaboration with Stefano Pilati<sup>10</sup>, former Yves Saint Laurent’s creative director. Some pieces from this collection are certified by sustainable labels such as the Responsible Wool Standard, highlighting Zara’s commitment to ethical and transparent sourcing while redefining the intersection of luxury and sustainability.

**Smaller, independent brands are entering the Fashion market with sustainability at their core, challenging traditional luxury models and creating a gap with luxury.**

For example, **Nanushka** has made **circularity a central pillar of its strategy**, with the motto “waste is a design flaw,” emphasizing the reuse and repurposing of materials to reduce raw material needs.

Among the brand’s key initiatives, it includes a repair pack for each item; with “the ANEW” initiative, the brand created new collections made from old ones and a partnership with RealReal and Rent the Runway.

Another example is **Arket**, from the H&M Group, with several sustainability initiatives:

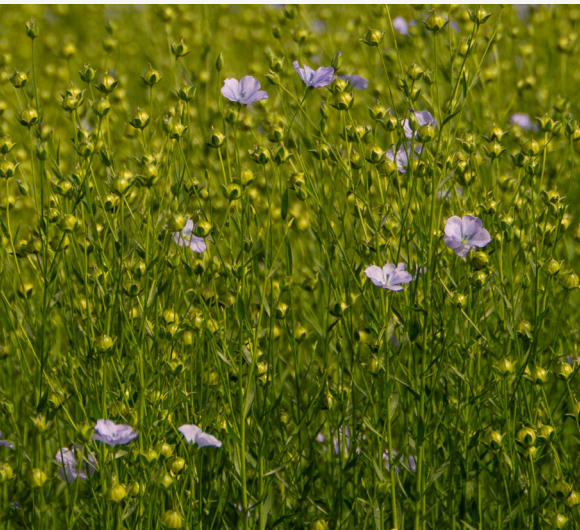
- 1. Design philosophy:** Arket focuses on timeless, modular designs that aim to **minimize overconsumption**. The collections are created to be versatile and durable, made to resist to trends.
- 2. Material innovation:** Arket uses sustainable materials like NATIVA™ regenerative wool, RWS-certified (Responsible Wool Standard) wool, organic cotton and chrome-free tanned leather.
- 3. Recycling and circularity:** the brand promotes a **circular fashion economy** by offering pre-loved resale options on its website.



<sup>8</sup> Vogue Scandinavia, “H&M Studio’s dreamy mini summer capsule puts regenerative cotton at the fore” July 4, 2024.

<sup>9</sup> Fashion Network, “Inditex revises its sustainability goals and announces new incentive plan” July 12, 2023.

<sup>10</sup> Le Figaro, “Stefano Pilati pour Zara : «Bien s’habiller est une preuve d’éducation »”, October 1, 2024.



# Regenerative agriculture

*- methods and applications*

To mitigate these impacts and ensure long-term viability, the luxury industry must act now and actively contribute to rethinking agricultural practices.

**The path forward lies in adopting regenerative agriculture, which has positive impact on:**

- the **land**, by **restoring ecosystems and protecting resources and biodiversity**
- **climate change**, by sequestering carbon in soil and reducing greenhouse gas emissions
- **farmers' sustainable livelihood**, while still yielding crops and providing enough food and raw material for the world's population.

Regenerative agriculture encompasses a variety of methods, highly dependent on the land, climate and ecosystem, such as crop rotation, polyculture planting, integration of livestock in fields providing animal well-being, water management techniques, etc. According to Sebastien Roumegous, Founder of Biospheres, *"regenerative agriculture is a tool for ecosystem and soil regeneration. It is impact and measurement-oriented, rather than just a set of best practices' requirements"*.

Out of the many practices, we believe that three of them can sustainably reduce the environmental and biodiversity footprint of cotton, wool and leather:

**no-till farming, agroforestry and regenerative grazing.** Indeed, few luxury brands are pioneering in these regenerative practices.



# No-till farming

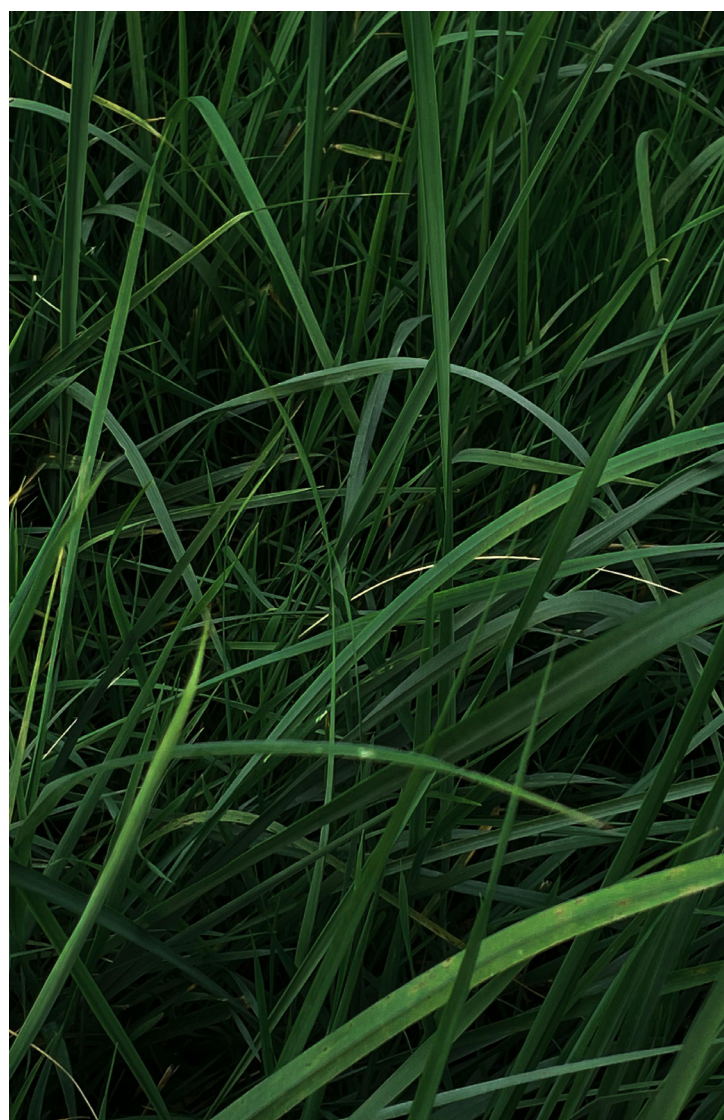
Conventional farming practices use tilling, a process of mechanically turning over and breaking up the soil. This method aerates and loosens soils, helping seeds germinate and take root, and fertilizers to be dumped. Although effective for crop-yielding in the short-term, over time, it damages the entire soil ecosystem, reduces carbon storage and its ability to regenerate itself.

No tilling, one of the most emblematic regenerative agriculture practices, means that the farmer leaves the prior crop's residue and plants on the soil surface, along with the roots still on the ground and directly plants the new crop. This practice is recognized for **protecting the entire soil ecosystem, increasing water retention and infiltration, reducing erosion, boosting soil biodiversity** – hence above ground biodiversity – and **allowing more carbon sequestration than emission**<sup>11</sup>.

Such a regenerative practice was introduced through the partnership between **Stella McCartney and SÖKTAŞ**, a Turkish company producing luxury cotton fabrics and supporting the Turkish farms' transition from conventional to regenerative cotton since 2019. It became real with the first-ever regenerative cotton luxury garments displayed during the Stella McCartney's Summer 2023 Runway Show.

In addition to using significantly less water than conventional cotton, regenerative cotton captured and sequestered approximately 34.38 tons CO<sup>2</sup>/ha between 2019 and 2023.

CO<sup>2</sup> emissions associated with regenerative cotton production and processing by SÖKTAŞ have been compensated through soil sequestration directly on its farm, with an additional 13.81 tons of CO<sup>2</sup> (eq)/ha/year being absorbed from the atmosphere<sup>12</sup>.



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<sup>11</sup> Allan Savory, *Holistic Management Handbook: Regenerating your land and growing your profits*, 2019.

<sup>12</sup> Restoring our planet with SÖKTAŞ: Regenerative cotton, November 30, 2023, [https://www.stellamccartney.com/fr/fr/soktas-regenerative-cotton.html?srsId=AfmBOoqfk3k9oMbxjFRB9GeXUO\\_AblkTRs4GMno1sMWGklQdTfyeatzl](https://www.stellamccartney.com/fr/fr/soktas-regenerative-cotton.html?srsId=AfmBOoqfk3k9oMbxjFRB9GeXUO_AblkTRs4GMno1sMWGklQdTfyeatzl)

# Agroforestry

Agroforestry involves planting trees and bushes with extensive root systems in the middle of crops and livestock parcels to create a harmonious habitat that will be protected from severe weather conditions. Agroforestry generates a virtuous cycle by offering rich habitats: trees provide water retention, shade to prevent other species from being directly exposed to the sun, improve soil structure and fertility and promote high levels of biodiversity by providing sources of food and shelter to protect crops and animals from extreme temperatures and rains. Furthermore, as trees capture more carbon than crops, they act as a powerful global warming mitigator. Implementing this agricultural regenerative

practice **fosters biodiversity** which will in turn **boost local ecosystems and reduce farmers' dependency on input usage** (pesticides and fertilizers), hence lower their input spending, while enhancing natural yield.

**Armani**, through the Apulia Regenerative Cotton Project, is already on the move to regenerative agriculture, developing an agroforestry-based cotton production in the Puglia region of southern Italy since 2023. This "test and learn" initiative *"aims to demonstrate how to enhance landscape diversity, water saving and soil fertility as well as biodiversity-related ecosystem services while producing cotton with a low carbon footprint through the use of agroforestry systems."*<sup>13</sup>



## CONVENTIONAL AGRICULTURE

Low ecological niches  
High weed level and herbicide use  
Poor water infiltration  
Soil erosion and low fertility



## REGENERATIVE AGRICULTURE

Growing plant cover  
Climate regulation  
Carbon storage  
Improving soil biodiversity

Source: Biospheres

<sup>13</sup> The Armani Group Announces The Apulia Regenerative Cotton Project, Armani Group Press Release, June 5, 2023.



# Regenerative grazing

Cattle raising is known for being heavily environmentally destructive when it uses conventional methods: forest clearing for pastureland, packed herds releasing large amounts of methane and overgrazing meaning that livestock (mostly sheep and cows) eat all the grass which does not have the chance to grow back fast enough before it is eaten again. Such practices lead to soil erosion, drought and desertification<sup>14</sup>.

However, regenerative grazing involves strategically controlling where the animals graze, continuously moving livestock from one parcel to another to leave enough time for the grass and plants to recover instead of overworking the soil.

Additionally, animal manure contributes to enrich the soil by adding nutrients and animals' continuous movements help spread plants' seeds and polycultures. **Rather than suffocating the soil, regenerative grazing sequesters carbon<sup>15</sup> in the ground and boosts its fertility.**

Australian wool supplier to the **AnotherTomorrow** brand, White Gum Wool Farm, has been using regenerative grazing, along with other regenerative agriculture practices, to raise its livestock and produce wool for the past eight years<sup>16</sup>. Among the production benefits, the farmer witnessed 27% gain in wool production per sheep, 30% fertility gain, much easier lambing and improved general health with significant reduced stress.

The model provided by regenerative agriculture creates a self-sustaining, renewable farming method that relies on natural processes enhancing ecosystem health rather than on costly, harmful chemicals, while still enabling yielding crops and livestock. To date, very few luxury brands embrace regenerative methods, and the pioneer ones mentioned above shall pave the way for a more sustainable [luxury] fashion industry.



<sup>14</sup> Ibanez et al., Desertification due to overgrazing in a dynamic commercial livestock-grass-soil system, 2007.

<sup>15</sup> Sanderman et al., Impacts of Rotational Grazing on Soil Carbon in Native Grass-Based Pastures in Southern Australia, 2015.

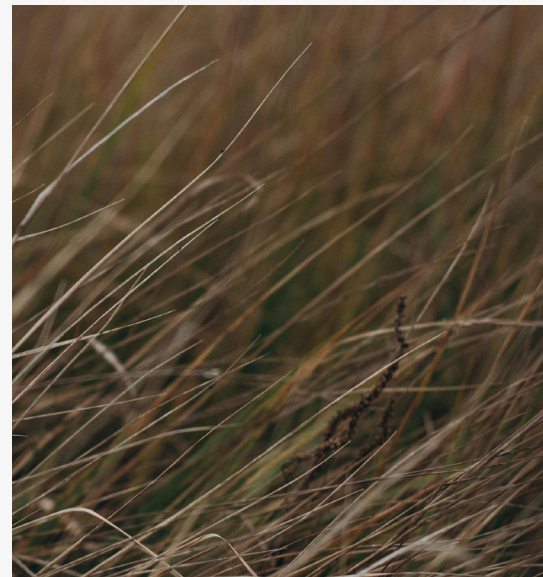
<sup>16</sup> White Gum Wool, <https://www.whitegumwool.com.au/the-farm>. Accessed on December 3, 2024.





*Three illustrative  
examples of  
companies  
implementing  
regenerative  
agriculture*

*Biosphères, Human Ocean  
& Connecting Food*







# BIOSPHERES

AGRICULTURE RÉGÉNÉRATRICE

Founded by Sebastien Roumegous, Biospheres is the leading European company in the deployment of regenerative agriculture, from pilot to scaling. The company bases its expertise on 15 years of cumulative experience in deploying regenerative agriculture practices in more than 20 countries, across sectors: viticulture, arboriculture, large-scale crops, perfume plants (PPAM), market gardening and livestock farming.

## THE MISSION

Simplify and secure the transition of agricultural, food, cosmetic and luxury sectors with its multiple partners.

1. Fully restore and regenerate agricultural and terrestrial ecosystems
2. Accompany humans in their transition to activities within planetary limits
3. Disseminate best practices in regenerative agriculture and agroecology

## THE METHODOLOGY

Biosphere provides an end-to end approach, from strategy to concrete operationalization :

1. Exploration
2. 360° Audit (soil, water, landscape, equipment)
3. Strategic planning
4. Pilot program
5. Scaling
6. Performance measurement

As the key success factor of the transformation is human intervention, Biospheres offers training modules to support cooperatives, technicians and farmers in the transition to regenerative practices.





# HUMAN OCEAN

Recently founded by Marie-Eve Nardou and Martina Planty, **winner of the France 2030 funding program in the Creative and Cultural industries category**, Human Ocean is an innovative systemic project aimed at fashion and design.

In order to fight against greenwashing, textile pollution and microplastics, **Human Ocean sells eco-designed fabrics made from natural fibers (wool, linen, hemp) and new services**. The fabrics are produced through short supply chains from the territory of origin of the fiber: France. These fabrics reflect an ecosystem of committed stakeholders working to preserve France's natural and cultural heritage.

Using the France 2030 funding, the company will develop new textile solutions including natural dyes, biodiversity CSR services that ensure transparency regarding the impacts and benefits of the fabrics and finished goods brought to market in compliance with French and European regulations and finally, training to support knowledge transfer. The first production of fabrics is planned for early 2025.

Regenerative agriculture is evolving with new practices and technologies. Collaboration with different sectors would help develop alternative solutions and move towards a waste-free economy.

Human Ocean supports regenerative farmers by integrating them into its business model. Innovative tools are used, such as the carbon contribution established by GaiaGlobe.

This tool rewards farmers who sequester carbon and enhance biodiversity.

Each step of the value chain is certified according to the KER MER specifications, implemented in a low energy blockchain, using the PoET system from Connecting Food.

Human Ocean offers its clients several actions to have a tangible impact:

1. Order fabrics made from French wool, linen, hemp and/or alpaca for a capsule collection that includes biodiversity CSR services
2. CSR services, eco-design and training
3. Participate in R&D on plant-based dyeing and its properties using agricultural co-products and/or dye plants for excellence projects (color, color charts, textiles and other applications)
4. Join the global symposium on natural dyes under the scientific endorsement of Dominique Cardon, a place for exchanges that promotes sharing solutions and experiences among specialists and scientists in this field

Collaborating with Human Ocean means adopting a lifestyle in harmony with nature, using materials derived from regenerative agriculture to feed, wear and live. The business model of Human Ocean connects textile production to biodiversity preservation and the reduction of greenhouse gas emissions.



The platform has the following 3 capabilities :

**1. Data gathering**

- Retrieve and centralize data from various sources
- Check and standardize data using intelligent algorithms

**2. Digital audit**

- Analyze collected data to extract valuable insights: configurable digital audits, compliance assessment, traceability.

**3. Traceability**

- Share analyses with relevant stakeholders: internal teams, regulators, customers, consumers

If we take the example of leather, at each step of the value chain, the platform checks the level of compliance with the brand's requirements in terms of:

- Country of birth of the animal
- Animal breed
- The breeder's ID (country, address)
- Duration of transport to the slaughterhouse
- Slaughterhouse method

Connecting Food is a **platform that enables to collect, gather and audit data up to the farm, and assess sustainability and compliance risks in supply chains.** Information can be safely shared with and showcased to internal and external stakeholders and customers to create value through transparency.

This data is combined in a Digital Twin, which is linked to the batch of leather skins at the end of the value chain.

The skin comes with its digital twin containing all the audited information, which is visible in the Connected Food platform.

So far, Connecting Food has observed the following benefits for their clients :

- 100% Transparency: Total visibility of the food supply chain.
- 30% Risk reduction: Significant reduction in food safety risks.
- 2x Efficiency: Double the efficiency of data-driven decision-making.

**For Luxury, such technology could be an answer to overcome supply chain complexity, gather information seamlessly at each step and ensure compliance with upcoming regulations.**



# How *Luxury* can drive the shift to regenerative agriculture

For luxury brands, shifting to regenerative agriculture involves both structural and strategic changes that align high-quality production with ecosystem restoration. To achieve this transformation, luxury brands can leverage a combination of vertical integration, industry-wide collaborations, innovative financing and robust change management.



## Vertical integration: *taking control* over the supply chain

By vertically integrating their supply chains, **luxury brands can oversee every step of the sourcing process**, from raw material production to final product manufacturing, thus **securing their raw material supply**. This control allows brands to directly implement regenerative agricultural practices within their own or closely monitored farms, ensuring that soil health, natural resources and biodiversity are protected as well as children and human rights are respected. **Vertical integration also facilitates close collaboration with farmers, who can be trained in regenerative methods and receive support for adopting new practices**. This approach **aligns brand values with production practices, reinforcing quality control and brand transparency**.



## Consortium of brands: getting stronger together

Luxury brands can work together to create a **pool of resources and knowledge to scale regenerative practices across the industry**. By uniting under shared sustainability goals, brands can negotiate with suppliers, drive demand for regenerative materials and foster accountability. A consortium approach also allows for shared investments in research, technology and farmer training. By supporting regenerative agriculture together, luxury brands can create a **larger impact** while **reducing individual costs and risks** associated with the transition.

Luxury brands should also work with inter-sector companies. Indeed, a better cattle and sheep allocation will be done by a stronger coordination with the meat industry.

## Producers' consortium: building *resilience* at the source

Brands can work directly with producers, forming consortiums of local farms and cooperatives to implement regenerative practices. This approach allows farmers to share resources, tools and insights, promoting knowledge-sharing that accelerates adoption. Luxury brands can provide financial and technical assistance, enabling farms to invest in necessary resources like soil health monitoring tools or crop diversification.



# Financing: investing in *regenerative practices*

Financing is critical for the transition to regenerative agriculture, as the initial costs of soil improvement, biodiversity restoration and new farming practices can be substantial. Luxury brands can establish dedicated **funds to support regenerative farmers, providing grants, low-interest loans, or co-investments in regenerative projects**. A few years ago, Kering and its partner Conservation International funded seven regenerative agriculture projects in key sourcing landscapes with a focus on leather, cotton, cashmere and wool. Not only do they provide financial support to producers to facilitate the transition to regenerative agricultural practices, but they also work with the producers to co-create a learning exchange and community of practice to share best practices<sup>17</sup>.

Additionally, brands can leverage public subsidies available for sustainable agriculture, especially in the European Union. **By offering financial incentives, luxury brands can encourage more farmers to adopt regenerative practices, ensuring long-term availability of sustainable raw materials.**

As for Biospheres, according to its extensive experience after over 100 projects led in more than 20 countries, there are 2 main phases:

1. The pilot phase: financing consulting and know-how
2. The scale phase: financing means of production

Sebastien Roumegous argues that **traceability is the real pain point for the luxury industry**, especially leather traceability.

Raw material traceability should be performed before launching the pilot phase to connect efforts to real sourcing.



## Certifications & labelling

Certifications and labels are a practical way for luxury brands to **ensure accountability and transparency in their sustainability efforts**.

Certifications like Global Organic Textile Standard (GOTS) or Forest Stewardship Council (FSC) set clear standards for ethical and environmentally friendly practices, **helping brands build trust with consumers**. Although they provide a straightforward way for customers to identify responsible products, reinforcing the brand's commitment to meaningful change, the poor governance of some labels has led to many scandals, sometimes confusing consumers. Yet while certifications can be challenging to implement, supporting suppliers in achieving them is a worthwhile investment that aligns with industry goals and strengthens credibility.

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<sup>17</sup> The Armani Group Announces The Apulia Regenerative Cotton Project, Armani Group Press Release, June 5, 2023.



# Innovation and technologies: driving *efficiency* and *transparency*

According to Biospheres' experience, *"regenerative agriculture is a proof-based approach that requires two kinds of Key Performance Indicators (KPI): the practice-based KPI that helps drive changes through a specific set of practices that the farmer needs to focus on; and the outcome-based KPI to prove that the practices are positively affecting the area of interest."* He argues that *"these KPIs must be driven by science and backed by large empirical experience or scientific papers as they allow to set a dashboard to monitor and verify the results of farmers' efforts on the ground."*

At Biospheres, they believe that the current European legislation focuses on the right impact areas to integrate in any project: land use (soils and landscape), water, biodiversity, climate and livelihood. Therefore, they *"structure the regenerative framework [they] have developed for [their] client worldwide with these items and [they] adapt them to their sourcing challenges, locations and type."*

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*Adopting advanced technologies is key to implementing and monitoring regenerative agriculture.*

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Technologies like satellite imagery, soil health sensors and blockchain for supply chain transparency allow brands to track **regenerative impacts** and **measure improvements**.

Blockchain enhances traceability, helping brands verify that materials meet regenerative standards but also provide more transparency to end clients via the Digital Product Passport (DPP). Innovation helps not only in implementation but also in demonstrating and communicating results, reinforcing the brand's commitment to sustainability.

An example of end-to-end technology is **Fairly Made** which offers a solution to enable brands (mostly premium ones like the SMCP Group) to track their supply chain, measure their environmental and social impacts and communicate about it using digital passports.

Since September 2022, **Stella McCartney** has set up a blockchain technology along with UNECE and SÖKTAŞ to trace regenerative cotton T-shirts throughout its entire supply chain. Instead of complex paper traceability, the blockchain enables farmers, processors, buyers and consumers to retrieve all information about each step of the product using a single ledger<sup>18</sup>.

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<sup>18</sup> Restoring our planet with SÖKTAŞ: Regenerative cotton, November 30, 2023, [https://www.stellamccartney.com/fr/fr/soktas-regenerative-cotton.html?srsId=AfmBOoqfk3k9oMbxjFRB9GeXUQ\\_AblkTRs4GMno1sMWGklQdTfyeatzI](https://www.stellamccartney.com/fr/fr/soktas-regenerative-cotton.html?srsId=AfmBOoqfk3k9oMbxjFRB9GeXUQ_AblkTRs4GMno1sMWGklQdTfyeatzI)

# Organizational shifts & change management: *transforming from within*

Transitioning to regenerative agriculture calls for a cultural shift across both brands and their suppliers. Internally, **educating employees** - particularly those in sourcing and product development - is equally important to ensure they understand the value of regenerative agriculture and the brand's commitment to it. Strong, **sustainability-focused leadership is vital**, and new roles, like a "Circular Economy Lead" are emerging in luxury companies like Chanel and embedding regenerative principles throughout the organization.

Luxury brands can also support this transformation by **training farmers in regenerative practices** and equipping them with essential knowledge. Looking back at Biospheres' experience, **training is essential, as education plays a crucial role**. Sebastien Roumegous believes that "education of farmers is required to shift practices. At the root of negative practices is the lack of knowledge. Therefore, the first move to drive change in any group of farmers is to share knowledge and align on basic science." And it works! Sebastien Roumegous noticed that *"after two days of training, among ten skeptical farmers, only two - or sometimes none - remain unconvinced. Disseminating best practices and positive messages is equally important: emphasizing that even in the absence of officially validated technical guidelines through a formal structure, regenerative agriculture is still viable."*

Similarly, Human Ocean founders consider that farmers are ready to change if they are encouraged and supported in this transition to minimize associated financial risks. Yet the learning curve is complex.

Biospheres explains that *"even with proactive farmers, it takes between 3 and 5 years for them to be able to fully traverse the technical roadmap without any problems."* **Innovative methods and convincing about the economic interest will be key to onboard farmers on this path of transformation towards regenerative agriculture.**



# *How to make it happen*

The journey that luxury brands is currently undertaking is uncertain yet clear in its destination: **reshaping the luxury landscape for a better sourcing of sustainable raw materials and a more transparent supply chain.**

The much-needed transformations do not necessarily need to occur altogether at once but can be integrated into **implementing learning by doing processes and best practices shared with intermediaries and final clients.**

To make this transformative journey a reality for luxury brands, our approach focuses on a series of strategic steps that foster sustainable practices, transparency and resilience within the industry.

Here's how we propose to make it happen:

# 1 **Fast diagnostics and definition of eligible scopes and Minimum Viable Products (MVPs)**

- a) **Fast diagnostics:** we will start with a rapid assessment to identify priority areas and opportunities for sustainable transformation. This phase includes a succinct analysis of current processes and specific challenges faced by the client.
  - b) **Defining eligible scopes:** we will determine the eligible scopes for initial transformations by identifying segments of the supply chain and operations that can be improved in the short term.
  - c) **MVPs:** we will define MVPs to test and validate sustainable solutions on a small scale before expanding them. This allows for incremental and measurable changes while minimizing risks.
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# 2 **Strategic roadmap development**

We will partner with our clients to explore and define their potential opportunities. By leveraging our expertise, we will help them construct an initial operational roadmap that aligns with their sustainability goals. This includes acting as a liaison among farmers, trading platforms and other intermediaries to ensure cohesive and integrated action plans.

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# 3 **Data empowerment and analytics**

We will enhance our clients' data capabilities to enable precise measurement and continuous improvement. By implementing robust data collection and reporting systems, we can ensure transparency throughout the supply chain from raw material sourcing to the final product. This step involves creating comprehensive reporting tools that provide insightful metrics to all stakeholders.

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## **4** **Connectivity and data integration**

Establishing advanced connectivity tools is crucial for seamless data flow and real-time updates. We will set up and maintain these tools to ensure consistent and accurate data collection, which is vital for informed decision-making and supply chain transparency.

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## **5** **Business model adaptation**

We will anticipate and prepare for the impacts of these transformations on existing business models. This includes analyzing the potential effects on industrial operations, pricing strategies, and profit margins. By doing so, we can help clients adjust their business strategies to remain competitive while embracing sustainable practices.

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## **6** **Human impact management**

Successful implementation of new processes requires a well-prepared and skilled workforce. We will conduct thorough assessments to ensure the new practices align with the current organizational structure. This involves providing targeted training programs for teams across the supply chain, from sourcing personnel to retail staff, to ensure smooth adoption and execution of sustainable initiatives.

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By following this comprehensive approach, luxury brands can navigate the complexities of the transformation journey, achieving a more sustainable and transparent supply chain while enhancing their resilience in the market.



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