



EUROPEAN POLICYBRIEF

**SHEMAKES.EU**

Gender opportunities in the textile and clothing sector

10/01/2022

INTRODUCTION

Female creativity and innovation potential are an under-exploited source of economic growth and creation of jobs. While women constitute 52% of the total European population, and 59% of first level university graduates, they only represent 40% of employed scientists and engineers, and 30% of start-up entrepreneurs. Women hold less than 10% of patent applications. Innovation can play a key role in addressing and solving societal challenges. It is time to break gender stereotypes, in particular in innovation and entrepreneurship, and to create a smart, sustainable and inclusive innovation ecosystem that encourages young girls to become women innovators and that provides them with the support they need to be successful.

In parallel, policy interventions to reduce the gender gap need to go beyond STEM and startups and address gender issues in mainstream economic sectors. The textile and clothing industry is an ideal field for action, both as a sector with a strong yet undervalued role for women and an industry where a growing awareness of significant social and environmental impacts is leading to change. In this context, the Shemakes project is exploring the nexus between gender equality, innovation, and industrial transformation towards the circular economy through a hand-on, lab-based approach that is already showing its potential for impact.

EVIDENCE AND ANALYSIS

The European textile and clothing sector employs more than 2 million workers of whom female staff account for a staggering 74% of the total. The industry continues however to follow hierarchical and patriarchal models of production, where most women are considered more as “producers” than leaders and deciders. This sector therefore represents a strong opportunity to rethink gender equality and empower women to become confident innovators.

In this context, the main findings of the Shemakes project after the first months of activity are as follows:

1. Shemakes has developed an **active lab-based approach** that is proving successful in making innovation attractive and accessible to mainstream female (and male) participants.
2. Innovation in the sector, when linked to a clear gender vision, becomes an enabler for themes such as the **regenerative economy** and **respectful digitization**, where women are in fact emerging as leading figures.
3. The resulting Shemakes model promises **resilient growth** both for the network itself and for the textile and clothing sector more broadly.

1. The Shemakes lab-based approach

Evidence

In the first phase of the Shemakes project, a **lab-based model** was developed to engage girls and women in activities

leading to **innovative learning** and skills development, while at the same time connecting with the **surrounding community** and **business ecosystem** through a lab service model. This approach proved successful in the number of participants reached, **exceeding expectations with more than 250 girls and women from 5 different countries** interested to explore innovation in both the “hard” and “soft” skills aspects.

Analysis

What makes innovation attractive and accessible in the Shemakes model is that, on the one hand, participants are invited to explore innovation from a “technical” point of view (STEM type training that is traditionally addressed to “men”) through e.g., 3D printing, connected textiles etc. On the other hand, they are invited to develop the “social skills” they need for the implementation of innovative ideas e.g., pitching, partnering, managing etc.

In this framework, access to innovation opportunities is personalized and depends *a minima* on the age of the participant e.g., raising the curiosity for innovation in younger girls with fun after-school classes as compared to supporting experienced textile specialists to manage the launch of their own apparel brand.

This open framework results from the Shemakes model, which integrates elements from both Fabricademy (FabLabs promoting distributed learning at the intersection between textiles, digital fabrication and biology, <https://textile-academy.org/>) and TCBL (Textile and Clothing Business Labs, a network fostering and validating responsible innovation, <https://tcbl.eu/>).

Development and validation of the impact of the Shemakes approach on gender issues is supported by a reputation management strategy that enhances the visibility of role models at all levels – leading figures, lab mentors or “gurus”, and inspired participants as “ambassadors” – to help all participants gain greater confidence in their innovation potentials.

2.The regenerative economy and respectful digitization

Evidence

Shemakes has developed a gender vision that deeply links **innovation** in the sector with themes such as the **regenerative economy** and **respectful digitization**, areas where women are leading the transformation of the textile and clothing industry. This link has become evident in the lab-to-lab projects dealing with the **wool value chain**, successfully exploring how **traditional crafts** (and even zootechnical methods) can merge with small scale **DIY machinery** and innovative **bacteria and fungi based textile treatments** to build new **circular loops** from sheep to recycling.

Analysis

Participants in Shemakes activities are aware of the challenges faced by the textile and clothing sector, from the social, environmental, and economic standpoints. In general, they are already taking action as individuals, attempting to reduce the consumption of the planet’s limited resources, reuse existing textiles instead of throwing them away, rework damaged clothes to extend their lifetime value, and use recycled materials wherever possible.

From this baseline, Shemakes participants expect to gain a more holistic and pro-active approach, imagining a type of economy inspired by bio-ecological principles, where every act of production has a role in a “live ecosystem”: what is referred to as “**regenerative**”. Mother Nature” becomes a source of inspiration for that “regeneration”.

As concerns digitization, this often means “reducing costs to the minimum” in linear textile and clothing value chains, transforming factories in assembly lines where there is no place left for purpose and creativity. Our participants are more interested in building alternatives that combine craftsmanship (crafts-woman-ship?) and manual work with digital innovation. This is what we call “**respectful digitization**”.

3.The Shemakes model for resilient growth

Evidence

The **impact path** for Shemakes depends on the **attractiveness of its vision** and the related lab-based model, as the basis for **resilient growth for the network** itself and ultimately for **mainstreaming** towards the textile and clothing sector in general. The project aimed to test this attractiveness through an **Open Call** for new “transfer” labs to join in the second phase of activities scheduled for 2022. Although there were only **12 openings available**, we received eligible applications from **85 labs from 31 countries**. In less than a year, the Shemakes lab network has thus grown from the original **6 to 18 labs in 16 countries** in Europe.

Analysis

The **traction** of the shemakes model lies in its dual validity, internal and external.

Internally, shemakes is a community that shares a common gender and innovation vision for a desired future. This vision is based on values, work and human relations and mainstreams the goals of “game-changers”. It also proposes a canvas to position each shemakes lab on an innovation roadmap.

Externally, the model affirms that successful innovation can only happen when labs are parts of local ecosystems. The quadruple-helix model, where academia, industry, institutions, and civil society work together to facilitate the uptake of both technical and social innovation, is applied in this context to work collectively to bridge the gender gap.

Policy implications

The interim results of Shemakes have direct implications for the relationship between gender policy and other policy actions. While gender inequality is indeed a pressing issue, it needs to move beyond a compartmentalized approach and explore its intrinsic relations with the social, economic, and organizational dimensions that shape it.

Shemakes is exploring these issues by addressing the mainstream economic sector of textiles and clothing. In doing so, we have seen that as we try to improve the position of women in existing jobs and businesses, it is women who are in fact leading the kind of transformation that the sector needs to take at the broader level. Recognizing the leading role of women in moving forward with the EU's highest priorities, including e.g. the industrial transformation towards a circular economy, can lead to both a stronger role for gender policy transversally, and a revisitation of the role of gender issues in a broad range of policy priorities.

Challenges

- Mainstream women are **varied groups**. In Europe, dominant cultures regarding gender (and age) exist, and range from believing in biological differences (women cannot innovate) to believing that individuals are keys (nothing but social prejudices can stop a woman to be an innovator). In this context, we should be careful about “one size fits all” solutions and reflect further on how, where possible, men can be allies for the development of equal opportunities.
- Business development is also quite a broad issue, both for the launch of new enterprises and the adoption of new business models in existing contexts. Much depends on access to training, funding and support services that may only be accessible to a “tech elite” that is often described as male, wealthy and white. On the other hand, women are also showing the capacity to develop viable businesses despite these barriers. While aiming to address inequalities, policy makers should in parallel look and listen to alternative approaches being followed by women entrepreneurs.

Policy recommendations

1. Policy makers need to holistically integrate visions for transformative social and economic models based on regeneration and respect with **the gender component as a driving force for change**.
2. Gender policies need to be more **deeply integrated into broader policy priorities** such as the circular economy, “industry 4.0”, climate change, and so forth. In all these contexts, policy makers would do well to see what innovative initiatives women are carrying out and listen to their needs and concerns.
3. Gender initiatives need to take a **pro-active stance in mainstream economic sectors**, using innovation as a lever for change. The textile and clothing sector is a good example of how empowering women through innovation can lead to empowering change.
4. Gender approaches need to take **diversity of situations and context** into account, both in subjective terms (gender identity, age and experience, social groups, different abilities) and objective terms (economic sectors, cultural and geographical differences, etc.). Diversity and variety need to be considered as opportunities rather than obstacles to growth.
5. Social policies need to develop **alternative education plans** for women in mainstream sectors such as textiles and clothing, to make innovation attractive and accessible. These need to combine tech-based with social skills, which together support confidence in one's own innovation capacities and potentials.
6. Local business ecosystems need to be encouraged to explore the **implications of new gender stances on social and environmental well-being** as well as regional competitiveness. Industrial policies thus need to explore overcoming barriers to women entrepreneurs together with the opportunities women can offer as change-makers for industrial transformation.
7. Gender policies can improve their impact path through multi-stakeholder engagement at the level of local communities and business ecosystems. This implies the adoption of the **Quadruple helix approach** for the uptake of innovation in industrial sectors such as textile and clothing, to formulate shared **Gender equality plans** for better leadership.

Following our open-source and permanent beta testing philosophy, the Shemakes project has developed some outputs that can already be inspirational for other projects:

- **Shemakes handbook** on github. This handbook documents the actions, process, results and reflections on those results for each activity conducted. Available at: <http://fabricademy.fabcloud.io/shemakes/handbook/>
- **Shemakes conversations**. When insightful conversations happen with participants or contributors to the project (members of the Advisory Board to date), they are released online on our website and social media channels. These insights give live qualitative flesh to our results. See: <https://fr-fr.facebook.com/shemakes.eu/> and https://www.youtube.com/channel/UCITCBbydmT5wqEVHIYBDVtQ/videos?view=0&sort=dd&shelf_id=0

RESEARCH PARAMETERS

Objectives

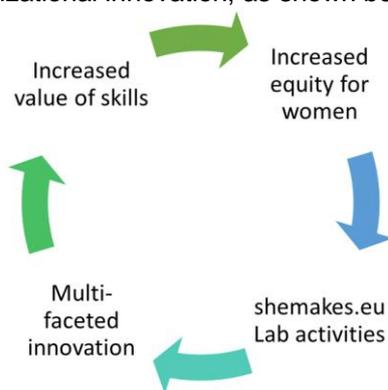
The Shemakes project is aiming to:

- Blend the approaches of two leading innovation ecosystems in the textiles and clothing sector.
- Promote, highlight and celebrate the leading role of women in innovation.
- Permanently re-shape the opportunity structures of at least 16 European Member States and Associated Countries.

It is currently half-way through its two-year life-span, and the insights and recommendations in this document reflect interim results and findings.

Methodology

The Shemakes project develops a pro-active, lab-based model through an iterative process linking the above objectives with widespread social, technical and organizational innovation, as shown below:



PROJECT IDENTITY

PROJECT NAME Shemakes. Opportunity ecosystems bridging the gender gap (shemakes.eu)

COORDINATOR CEDECS-TCBL SAS, Le Mans, France

CONSORTIUM

- FLOD SRL – FLOD
Prato, Italy
- INSTITUT D'ARQUITECTURA AVANÇADA DE CATALUNYA - IAAC
Barcelona, Spain
- FUNDACION TELICE MAGNETIC ANOMALY - LEON
San Andres del Rabanedo, Spain
- MAKESENSE – MAKE
Paris, France
- MATRIX GMBH AND CO KG - MATRIX
Düsseldorf, Germany
- ONL'FAIT – ONLF
Genève, Switzerland
- ATELIERUL REDU SRL – REDU
Iasi, Romania
- TAVISTOCK INSTITUT GMBH – TIG
Bornheim, Germany
- STICHTING WAAG SOCIETY – WAAG
Amsterdam, Netherlands

FUNDING SCHEME

H2020-SwafS-2018-2020 Topic Swafs-26-2020.

DURATION

January 2021 – December 2022 (24 months)).

BUDGET

EU contribution: 1 495 031,25 €

WEBSITE

<https://shemakes.eu/>.

**FOR MORE
INFORMATION**

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FURTHER READING

For further information, visit the project website at: <https://www.shemakes.eu/>



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