



## Frisian sweater

TAGS: Circular textiles, local production, biodiversity, waste materials.



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# 1. Project definition

## Frisian sweater (Fryslân, Netherlands) 2016 - 2019

After the Leeuwarden-Fryslân area was awarded as the 2018 culture capital of Europe, Erfskip was tasked with developing a souvenir that had to be coherent with the values they wanted to promote, it had to be sustainable and as much as possible locally produced by Frisian people. This is when they decided to partner with Loop.a life, who are focused on circular clothing, to create the Frisian sweater.

They developed the concept of a sweater and vest family that had to be locally produced with locally available materials, and clearly linked with the Frisian heritage. They wanted the clothes to be made from repurposed wool from old sweaters of the Frisian people along with linen made from locally produced flax. Erfskip itself would help boost the production of these crops with the collaboration of the Flax Museum. The sweater's aesthetic was inspired by the traditional Frisian costume and the patterns created by the flax sheaves as they were set out to dry in the area. These criteria were given to the designer, Berber Soepboer who co-designed with Erfskip and Loop.a life to the final shape and the finishings.

These were turned into prototypes which were later tested by potential customers at the Dutch Design Week 2018. They found great success there as they were even approached by large clothing brands who were interested in their product. Erfskip and Loop.a life then sought after launching customers such as Omrin or the municipality of Leeuwarden who ordered a large amount of garments which provided them the margin they needed to continue with the product development.

Just a few months later they launched a crowdfunding campaign which proved

very successful as they acquired 55,000 €, 15,000 above their asking amount. After the crowdfunding they started producing the garments which by the end of 2018 were sent to their clients. This batch was sold as a collector's pieces until items last as they have now fulfilled the goals they set at the start of this project.

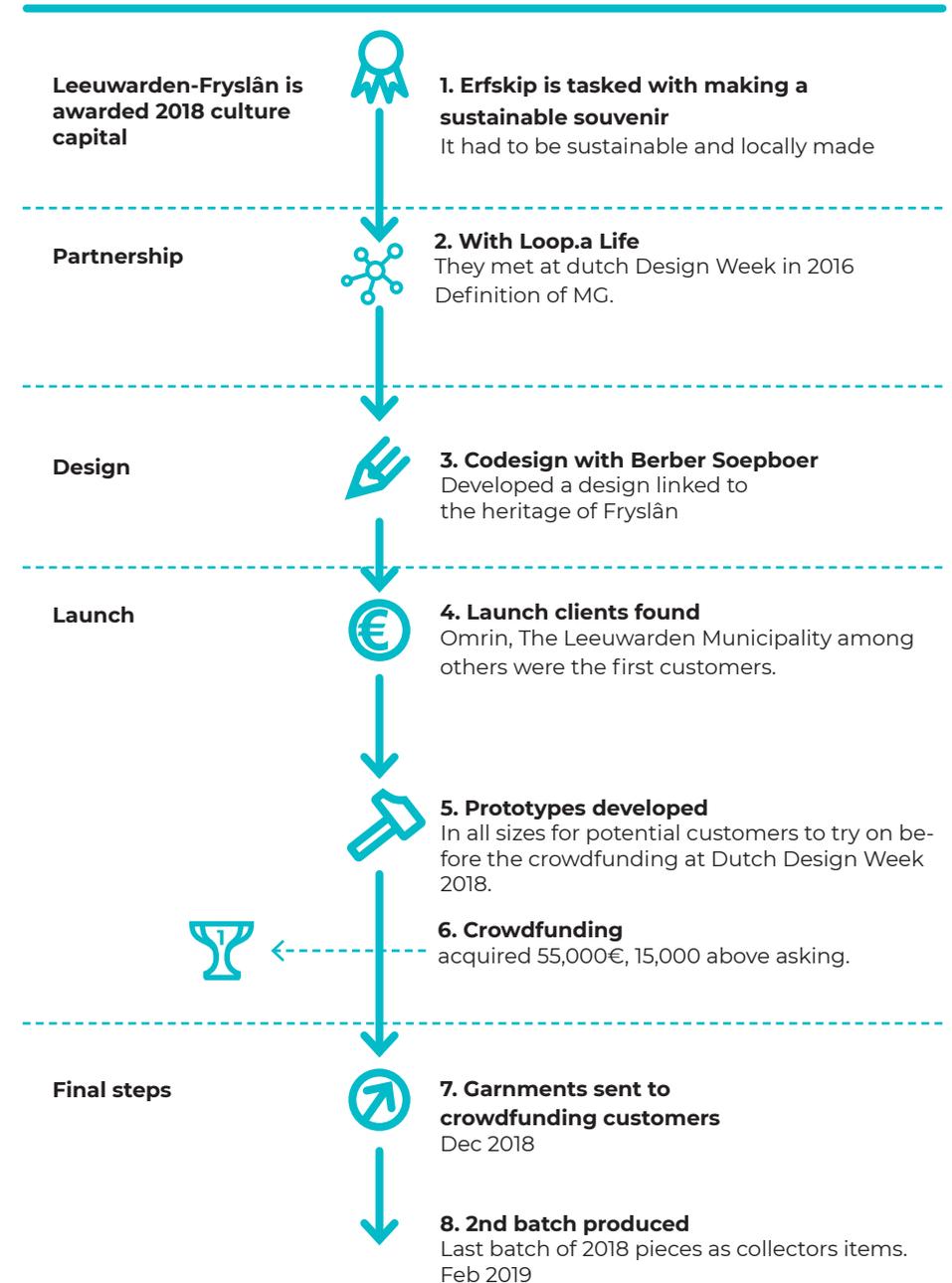
These goals were to boost the local crop biodiversity in the area, reduce waste, promote Frisian heritage, enhance the maker industry of the area, develop a demand for flax crops and develop a final product that could be used in the area as a best practice model for other designers.

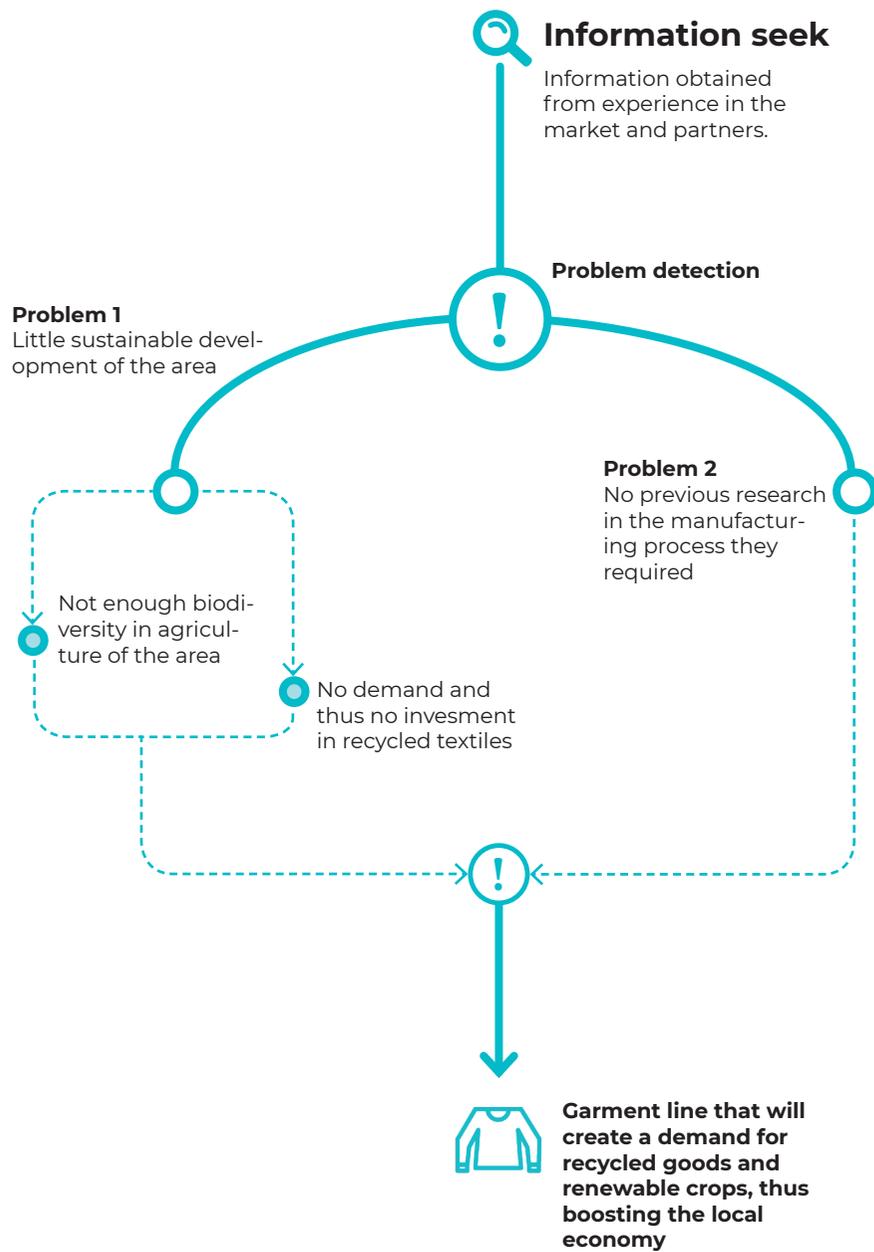
These goals have been exceedingly achieved as multiple farmers have pledged to continue growing flax after this project ended, a local vocational school has been inspired to create a sustainable textile lab, the local recycling companies have become more aware of the value of separating textiles (specially cotton, denim and wool) and more than 200 locals have reached out to offer their garments for the production of the Frisian sweater, which in itself demonstrates the growth of the community.

Their total production of 1500 garments has saved 750,000 L of water and 5kg of CO2 compared to other production processes.

Keywords: partnership, local production, crowdfunding, launching clients.

# Timeline





## 2. Research

Eileen Blackmore from Erfskip has been working in the development of the Leeuwarden-Fryslân area for many years now, having participated in a three year-long project led by the European Union that looked to recover crafts in Europe and the spin-off of several projects linking design to crafts and sustainability.

It was through her experience managing several projects that she was aware of the status of both sustainability and agriculture in her area. This area had traditionally grown flax, which is an excellent renewable rotation crop, but through the years the agricultural sector of Leeuwarden-Fryslân had lost the diversity in their offer, due to the focus on specialization.

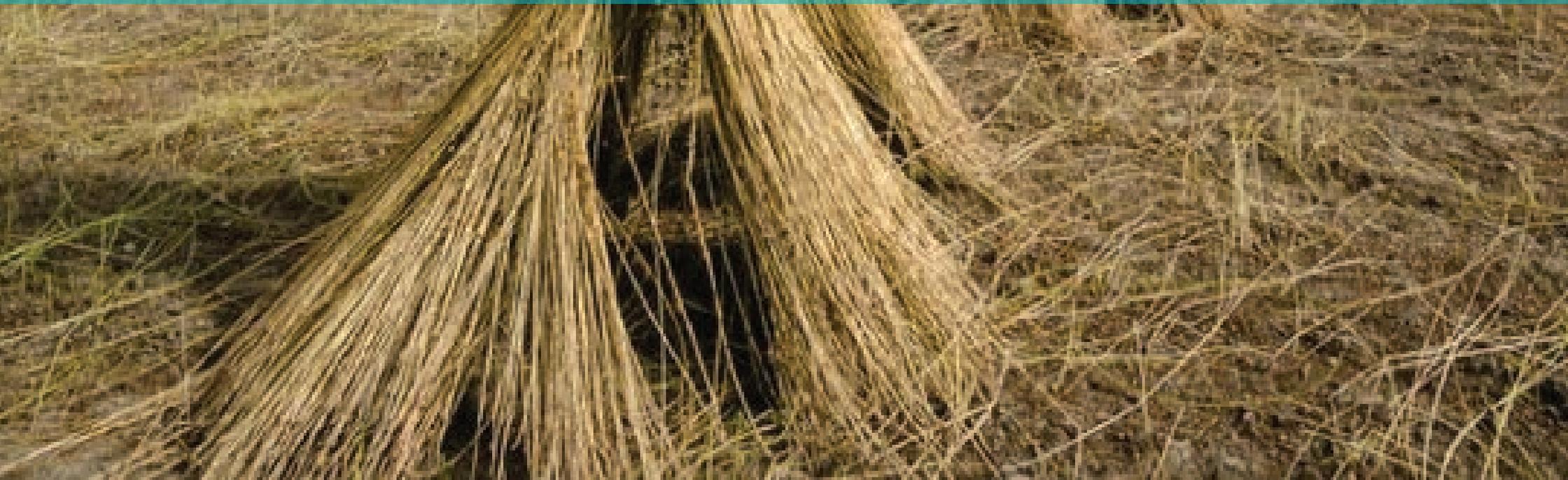
This fact prompted the motor group to create a garment range that boosted the local recycling of textiles and flax crops to create linen. This is when they had to start the second stage in their research. As their concept required a new manufacturing process, they had to carry out a lot of research to know if it was feasible and if so, how to do it.

The wool is sourced from old, discarded sweaters which are then sorted by colour, shredded, felted, spun and finally knitted into the final garment along with the linen and PET. As the wool is sourced from sweaters, its wool has already been spun to create the garment. When they spin it after shredding and mixing, it constitutes a second spinning process which greatly improves the strength and feel of the wool. This aspect meant that in using recycled material, the quality of their product was improved.

**KEYWORDS:** renewable crops, recycled textiles, demand, local economy



The design for the Frisian sweater is inspired by the traditional Frisian costume and the patterns of the sheaves of flax drying in the Frisian fields.



### 3. Analysis

It was important for the MG to fully define the direction of the project before delving into the design. Its feasibility had to be ensured in this particular community and the constraints of each stakeholder had to be known beforehand.

According to Eileen Blackmore, the initial driver of this project, “80% of your time should be spent orienting the project in your area, finding stakeholders and creating your network. This is the most important part when building a project.”

In this case, they found partners such as Omrin and The Salvation Army to participate in the production line of the project though the sourcing of the wool from discarded sweaters. This was an essential step to define within the project as without it the design would not come to reality.

The other material in the garments was linen made in part from local flax. One of the intended impacts of this project was to boost the biodiversity of crops in the area, by creating a demand for flax as well as to create the systems to ensure it was a sustainable investment after the project ended. This is why the partnership with the Flax Museum was essential.

Another aspect that they set to define from the beginning was what they called “go or no-go moments”. These were critical moments in the development process of this product in which they would decide whether or not to continue with the project based on the success of that step. The stages they defined were the testing of the material, in which if the resulting material was not up to the set standards, they would stop the product; finding launching customers and setting up a successful crowdfunding campaign. Thankfully all these stages went exceedingly well and thus, the Frisian sweater became possible.

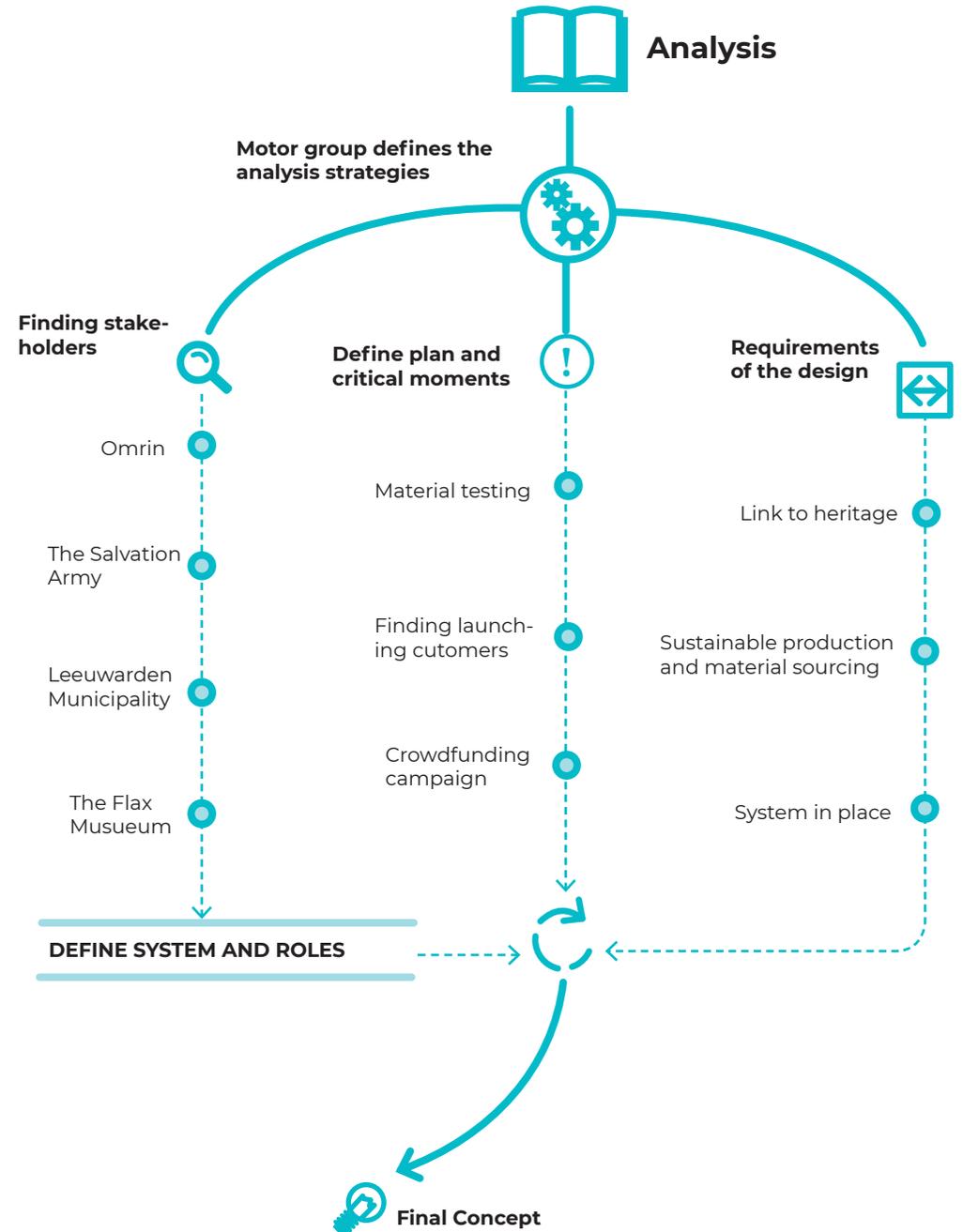
Moreover, another essential part of the project was Ellen Mensink from Loop.a life. Her experience with sustainable fashion and marketing played a key role in the development of the garments and the success of the crowd-funding.

After and in parallel to the research phase they defined a set of design criteria for the garments. The sweater had to be linked to Frisian heritage and to the Frisian people. Therefore, they decided to create garments designed to fit the average Frisian person, as they are quite tall, through the implementation of longer sleeves. Additionally, the system behind the sweater, including the sourcing of materials and production, had to be sustainable and have a lasting positive impact on the community.

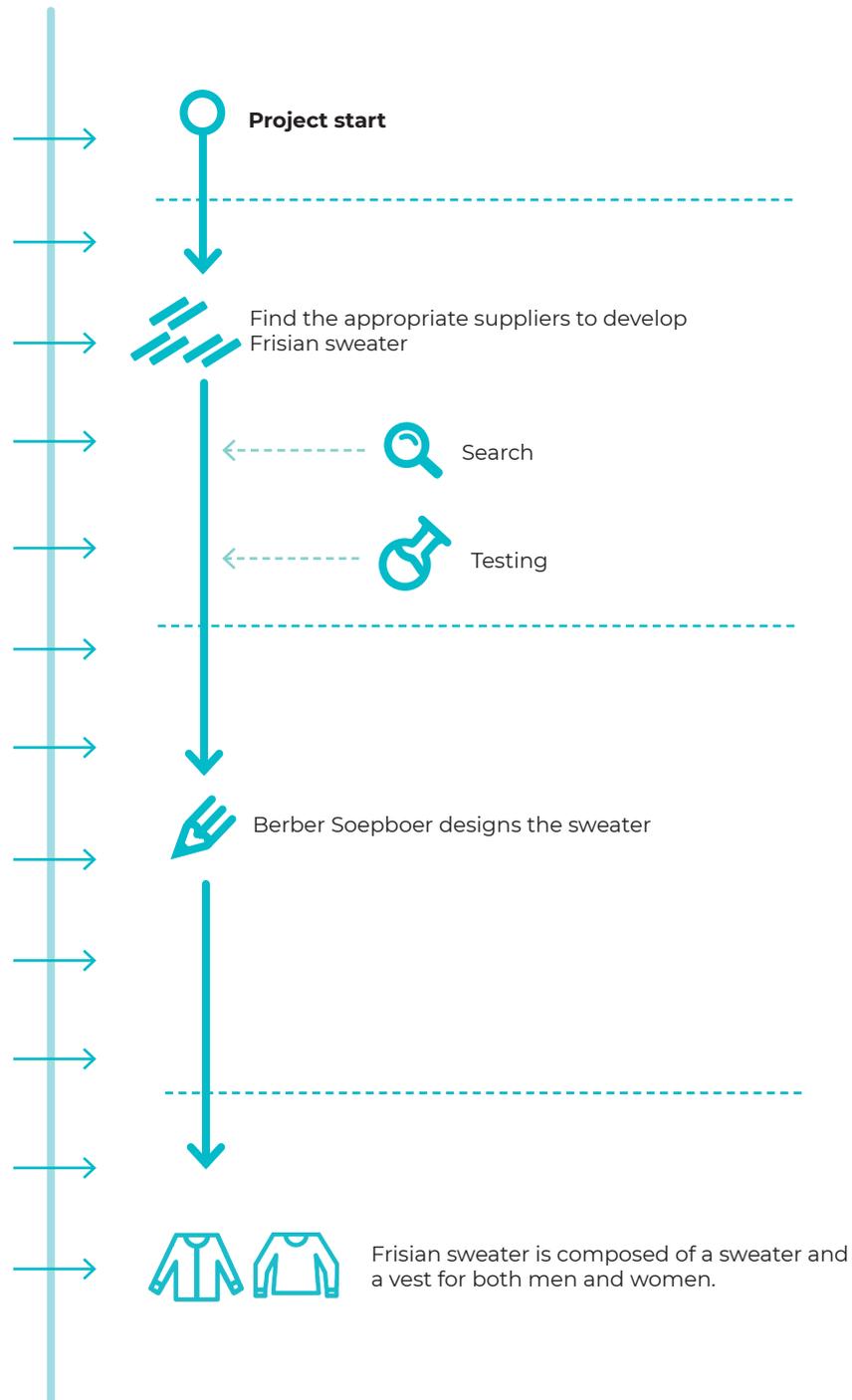
After the design criteria and the system behind the Frisian sweater started to take shape, the brief was finalised.

This was to design a sweater and vest family that was clearly linked to the heritage of Fryslân through the aesthetic inspiration for the knit provided by the traditional costume and the patterns made by drying sheaves of flax in the Frisian fields. The garments would be sustainably sourced and locally produced to the possible extent. The garment also had to reflect the sustainable aspect in order to become an icon in the community of heritage and environmental consciousness. The launch of this product should help boost the livelihoods of the locals through increasing demand for certain materials, while helping put systems in place that could ensure these practices were sustainable for their growers after the Frisian sweater was discontinued.

KEYWORDS: launching partners, crowd-funding, stakeholders, network.



The MG has the task of checking the result of each of the phases before moving on to the next



## 4. Concept

As mentioned in the previous section, the Frisian sweater required the motor group to put equal or more thought to the system that need to be in place to make it possible than the effort to develop the design itself. Fortunately, due to their background they already had a built network in the area and they quickly built their partner relationships. After specifying the participants in the system, they begun developing the right blends of material.

The wool required a bit of testing on its own due to the innovative process that was devised. After this stage new tests were carried out to achieve the right wool-linen blend.

Once these basic aspects of the Frisian sweater were resolved, Berber Soepboer was tasked with the design. This stage was done adding the Frisian part to the design through constant communication with the MG. The aim was for the Frisian sweater to cover the needs of both men and women and offer a modern design.

As a result, the Frisian sweater became a sweater and vest range for men and women respectively with a knitting pattern inspired by Frisian heritage.

KEYWORDS: Testing, blends, design, range.



Using recycled material improves the performance and quality of their product. The wool is spun twice which greatly increases its strength.



## 5. Prototyping

The design was complemented by the various tests that were performed. These consisted in testing the threads, the colours, the patterns and finally the shape of the final design.

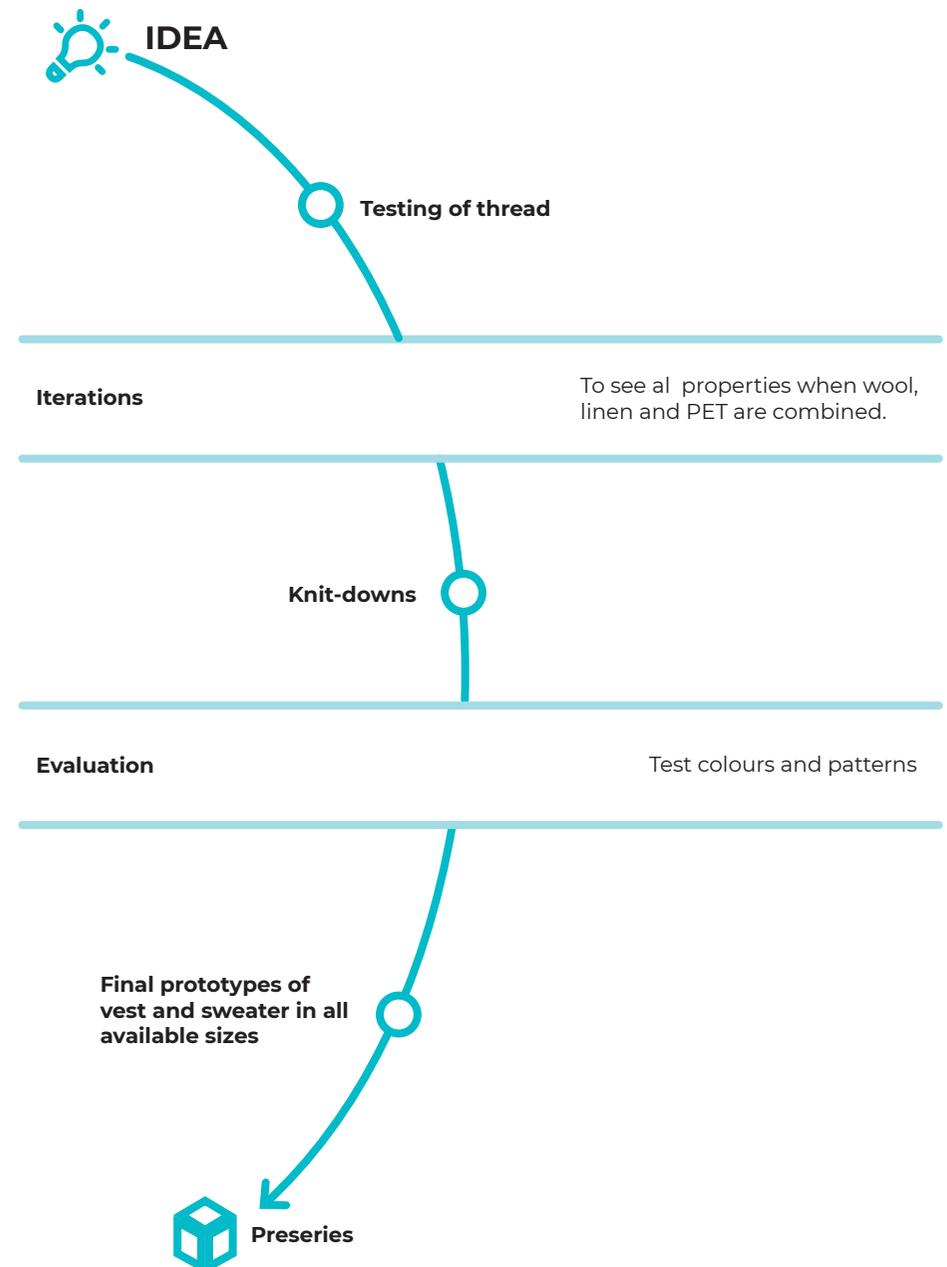
Firstly, thread tests were completed to evaluate the properties of the material resulting from a wool-linen blend with added PET to add strength and durability to the garment.

Another prototype that was tested upon was what they called "knit-downs", which consisted of creating 50x50cm textile samples in which they could evaluate colours and patterns. These were iterated until the final pattern and colour were achieved.

Once the group was satisfied with the material, the design, the colour and pattern, the final prototypes for the vest and the sweater were developed. After these were perfected, prototypes for each of the sizes in the range they offered were created. These were used for internal evaluation as well as a preseries to show to launching customers and to potential crowdfunding clients.

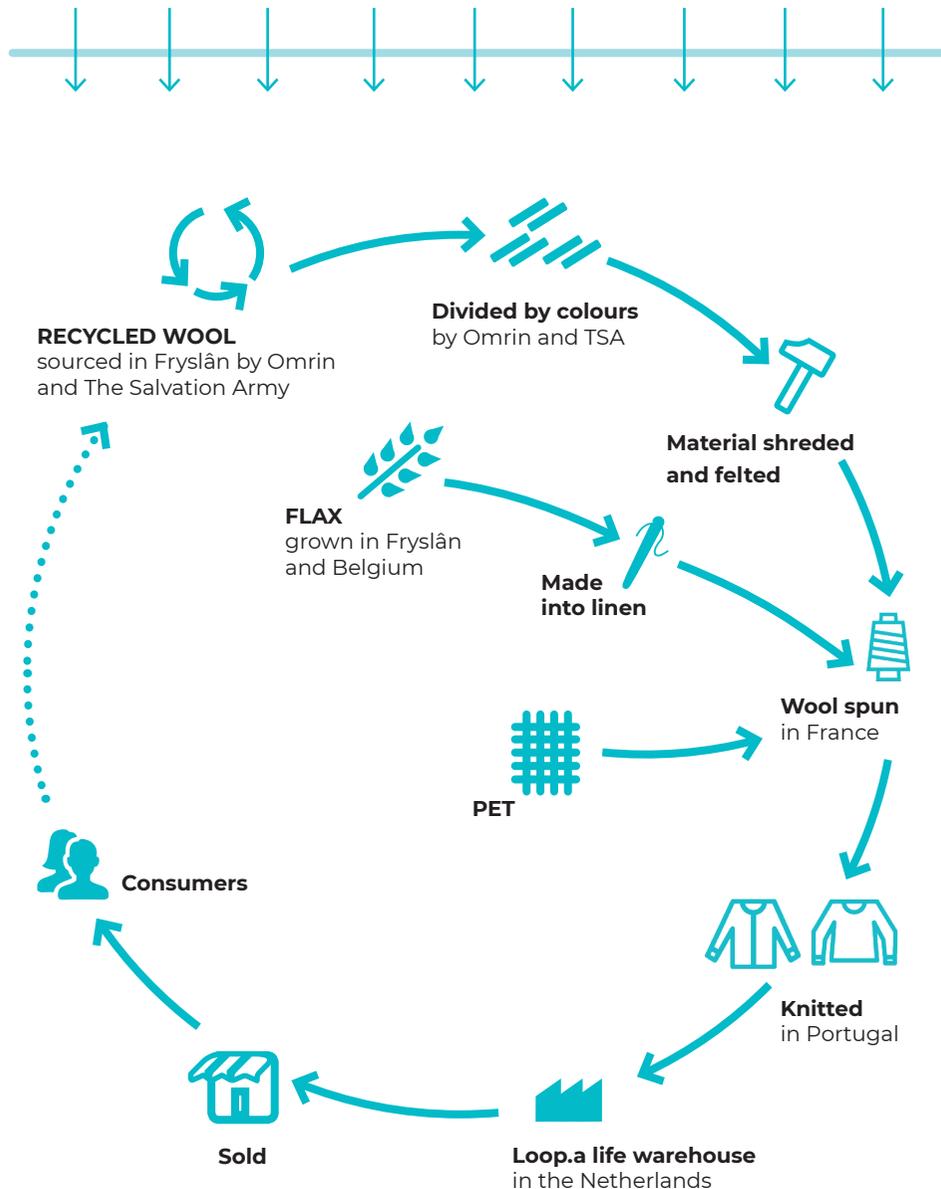
This was possible as this preseries was presented at Dutch Design Week in 2018. There, the people interested could try on all the sizes to know which one to request once the crowdfunding campaign was launched.

KEYWORDS: thread tests, knit-downs, pattern, preseries



## Erfskip and Loop.a life

The MG coordinates the project and the role of the different actors.



## 6. Project

It was equally as important for the design of the sweater and the vest to consider the sustainability of the product as it was for the design to be linked to Fryslân.

These were not meant to be parallel values of the product but rather central ones such that the unique resources of the area created a bespoke sustainable model while the sustainable production of the sweater had a positive impact on the community, both during its production and consequently after its launch.

The aim of this project was to create a sweater that represented the identity of the Leeuwarden-Frylân area as the 2018 Culture Capital of Europe. It was important for the motor group to involve as many local actors as possible, from the material production to the manufacture of the product. The sweater and vest were never meant as a mass production product, but rather as a collector's item, that could also be used to boost the local biodiversity as well as a best-practice model for future designers in the area and around the world.

The motivation for the product and one of the main focuses set by the MG for the designer, Berber Soepboer, was for the garments to have a strong link to the Frisian heritage, which inspired its name, Frisian sweater. This goal was achieved in the design through the inspiration for the patterns and shape of the items, which were referred to the traditional Frisian costumes and the shapes of flax sheaves as they were set out to dry in the area a century ago.

The sweater is made from wool which is sourced by Omrin and The Salvation Army from old sweaters from the Frisian community. These are sorted by colour to eliminate the need for posterior dyeing,

so no water or chemicals are used in the production of these garments. The material is then shredded, felted and sent to France to be spun into thread. In parallel, flax is sourced from Belgium and Fryslân, as an initiative to boost this crop in the area by Erfskip and the Flax museum, in hopes they will continue to grow it after the Frisian sweater project ends.

Multiple farmers have already pledged to do so. This flax is then made into linen and sent to Portugal along with the spun wool to be knitted into the final product with some PET to reinforce the fabric.

The success of this product has raised awareness in the area about the value of repurposing waste material and promoting renewable agricultural resources. These practices both reintroduce great value, the latter by repurposing material that would otherwise be disposed of, and the former by adding biodiversity to the area and a greater offer for the community to profit from.

The full production of these garments will have saved 750,000 L of water and 7500 kg of CO<sub>2</sub> due to their unique and efficient manufacturing process. The careful consideration at all stages of development of these garments have resulted in two products that stand for their heritage and for sustainability, in turn labelling their consumer with the same values.

Despite this, the network of material producers and people that this project has created and its impact in the community is probably an even more important result than the garments themselves.

**KEYWORDS:** Circular textiles, local production, biodiversity, waste materials.

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