The Ananas Anam Company has developed an innovative, natural and sustainable non-woven textile called Piñatex™ made from leaf fibres of the pineapple plant, which are the by-product of the pineapple harvest and an agricultural waste.

This natural leather was created in the Philippines, rescuing traditional knowledge of the population that in the past produced clothes using fibres from the leaves of the pineapple plant. The textile expert Carmen Hijosa, with Spanish origins, consultant in both the design and manufacture of leather goods in the Philippines, realized that from the fibres of the pineapple leaves a big quantity of pulp could be extracted to be transformed by physical and chemical processes into a flexible and resistant textile, very similar to the leather. Also she found that the conditions of constant humidity and temperature of this tropical country facilitate the removal of all pulp from pineapple leaves without these become unplayable.

Her work and research of a natural and sustainable alternative to the animal leather resulted in the creation of Piñatex fabric, and the Ananas Anam Company. Piñatex™ is a branded natural and sustainable material which can be used as an alternative to existing leathers. This innovative leather is a strong, versatile, breathable, soft, light, flexible textile that can be used for the production of shoes, bags, clothes and hats. It can also be used in interiors, furnishings and the car and aeronautic industries.

Piñatex™ has been tested according to ISO international standards for: Seam rupture; Tear & tensile strength; Light & colour fastness; Water spotting; Flexing endurance; Abrasion resistance; Resistance to ignition by cigarettes.

The pineapple wastes are extracted following a process called decortication, cut into layers and processed as a textile. Philippine farmers are responsible for scraping the fibres from the pineapple leaves at the plantation, whilst the transformation process and the Pinatex production take place in other headquarters of the company, based in Spain and the UK.

This natural fabric and the methods of its production have significant environmental, economic and social advantages.
The fabric is produced using the leaves of pineapples in the harvesting process, a waste that needs to be eliminated. In pineapple plantations it remains on the ground or can be converted into organic fertilizer or biogas. By the use of leaves to produce leather it is possible to value this waste in a perspective of circular economy, saving environmental costs and bringing advantages to the local economy. To produce one square meter of leather approximately 480 leaves are required, the fallout of about 16 pineapples. This production process can be a great economic advantage for a tropical country like the Philippines, where almost three million tonnes of pineapple are produced annually.

The leather production process is environmentally friendly and sustainable: besides taking advantage of crop wastes, it does not require the use of more water or fertilizers or pesticides to produce fibres from pineapple leaves. The Company estimates the pollution of this natural leather production 20% less than the production of animal leather. Furthermore, wastes produced in the process of transformation represent 5% of the feedstock, in comparison to 25% of the animal leather and vegetable wastes are transformed into biogas and compost devoted to local farmers. Based on the data of the Company, the Piñatex final price is 23 euros per square meter, while the price of animal leather is between 25 and 38 euros per square meter.

The aim of the Ananas Anam Company is to provide an innovative textile that promotes social, cultural and ecological development, establishing a circular economy by developing a commercially successful business that supports local farming communities. The Ananas Anam Company supports pineapple-farming communities in the Philippines, developing a new industry that will enhance the social network in rural areas as farmers will be able to sell fibres as a commercial and viable proposition. Furthermore, the farming communities will benefit from the potential output of natural fertilizer/biogas which is the by-product of fibre extraction.

Created in 2013, the Ananas Anam Ltd Company has been recognized within the fashion industry as a pioneer in the development of innovative and sustainable textiles. The Company have received the Award for Material Innovation from the Arts Foundation UK (2016); the Innovation Award (2015) of PETA (People for the Ethical Treatment of Animals), and was amongst the world finalists of the Cartier Women's Initiative Awards (2015).

To know more

Ananas-Anam website
Pinatex in Facebook.com
Article in nonwovens-industry.com