

Alpaca and Pima

- the Gold of the Andes



Info Premiere in the TMC Fashion Square (Textile and Mode Centre)

For the first time the opportunity arose for SIPPO to present products and grades of material from firms in Peru and Bolivia in collaboration with the TMC Fashion Square Zurich at the trend exhibition in the foyer of the Textile and Mode Centre. The models on show were kindly provided to us for this event by various companies. We will be pleased to establish contacts for you with the manufacturers we know in the Andes region.

During the Trend-Info day of the Info Premiere on January 21, 2002, SIPPO expert Brigitte Heuser presented these excellent grades of alpaca and pima cotton in a very interesting paper. She provided the numerous buyers and agents with useful information which we would also like to make available to you. We therefore decided to prepare a summary of the paper delivered by Brigitte Heuser.

We are pleased at SIPPO to be able to familiarise you with these outstanding grades of material and hope to attract the attention of the market with this contribution. If you have any questions about this brochure or would like further information about SIPPO activities please get in touch with us.

Eve Bächtold, Project Manager
Tel: +41 1 365 5247
Email: ebaechtold@sippo.ch

Myrijam Fuchs, Project Assistant
Tel: +41 1 365 5298
Email: mfuchs@sippo.ch

We hope you enjoy reading the brochure.

Lecture

Presented by SIPPO expert Brigitte Heuser

**Exhibition in the Textile and Mode Centre Zurich,
21.-23.01.2002**

Organised by SIPPO, Eve Bächtold, in collaboration
with TMC Fashion Square Zurich



ALPACA - THE ORIGIN

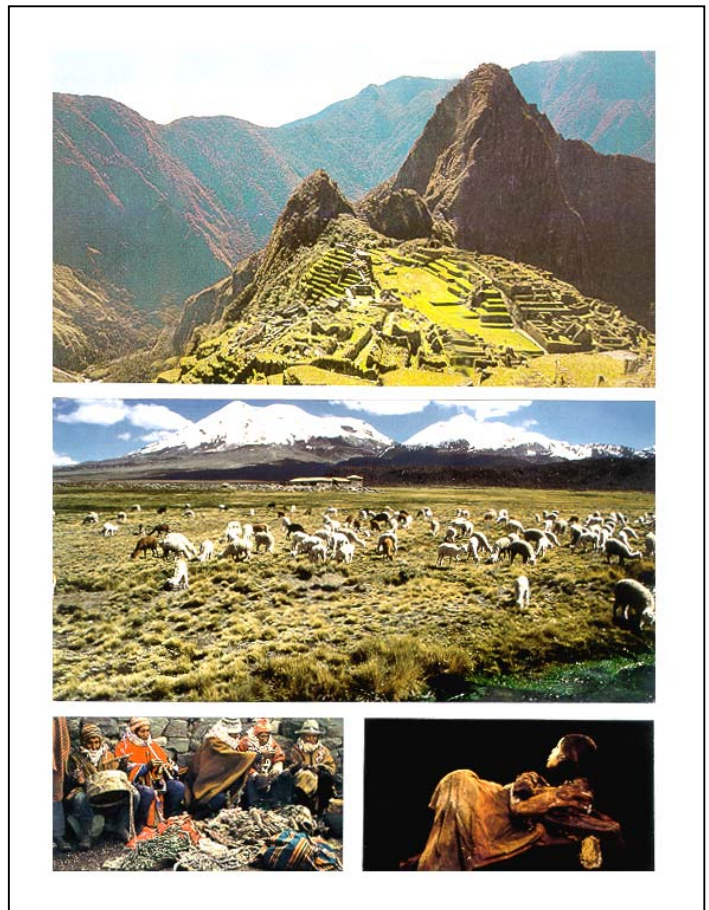
The Andes cultures of the Incas and their predecessors had to evolve in discouraging conditions – deserts, highlands, hilly pampas and tropical rainforest.

For 5000 years the people in the Andes have reared these shaggy-haired sources of wool. Alpacas and llamas do not require a lot of tending by the highland Indians – since time immemorial they have been domestic pets and thanks to the advanced Indian cultures of earlier times were thus among the first domesticated animals anywhere in the world.

The virtuosity in the art of weaving which still exists today in the Andes is based on thousands of years of experience in the textile technology in the Andes region. According to ancient tradition the type of clothing worn symbolised the most important functions of society. And still today textiles hold great significance for many Andes peoples.

In the modern world everything connected with alpaca is highly important for the economy and way of life in the alpaca countries Peru, Bolivia and Ecuador. The rearing of

alpacas and the processing of its hair is also a fine example of how a Third World country can preserve and utilise an established culture in order to make up economic ground.



ALPACA – THE ANIMAL

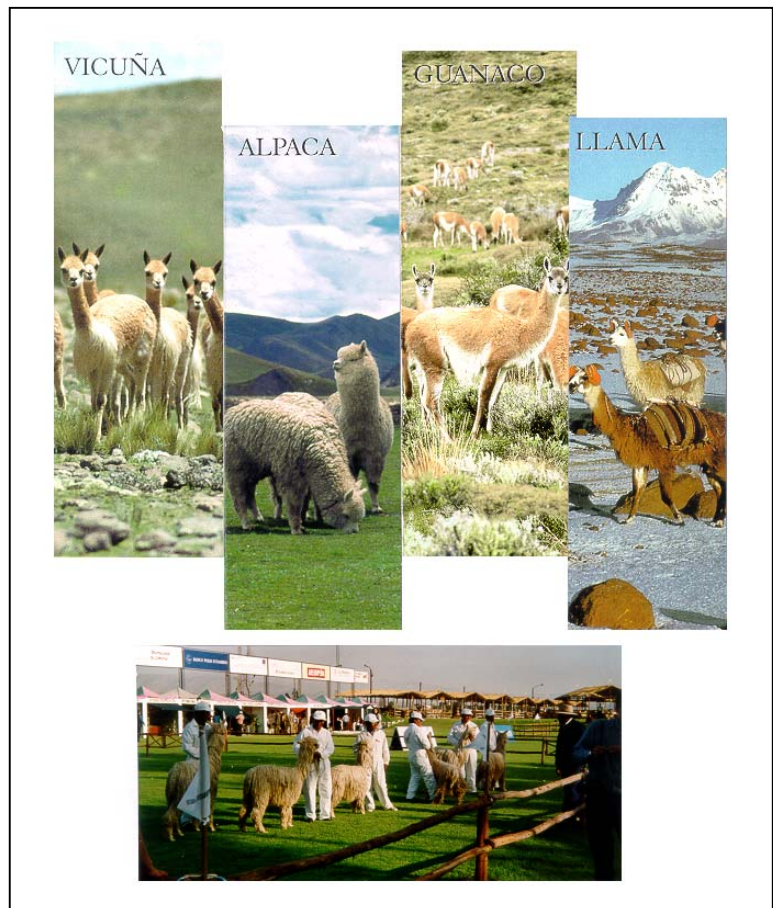
The South American small humpless camels occur in four species in the Andes regions.

GUANACO

The guanaco is the biggest South American camel and mainly lives in the southern part of South America. Approximately 500,000 of these animals live in the wilderness of the high Andes regions of Argentina and Chile. Guanacos are difficult to rear and to shear, and because of its extreme fineness (approx. 16 microns) their wool fibre is only allowed onto the international market with the express permission of CITES (international species protection convention).

VICUÑA

The vicuña is similar to the guanaco, but is smaller and a lighter, reddish-yellow in colour. Vicuñas live mainly in the puna above the tree line and below the snow line. Their wool is the finest and most expensive in the world - the April shearing produces only 200 grams per animal. At the time of the Incas wild vicuñas were caught, sheared and released again. They were strictly protected and the population remained stable at around 1.5 million. After the Spanish conquest their number declined rapidly. In 1965 there were only 10,000 left. The world trade in vicuña wool was banned in 1973 and only permitted again in 1987, subject to strict conditions. Today the number of vicuñas in the Andes has reached 150,000. Their survival is one of the few success stories of international species protection.



ALPACA

The alpaca is the sturdiest animal in the category of small camels. The population of alpacas totals around 3.5 million. About 85 per cent of them live in the region of Lake Titicaca in southern Peru. The alpaca is the only animal which can offer an enormous variety of natural colours in a soft, attractive and hardwearing animal fibre. The range of colours extends from white to black including diverse brown and grey shades. Approximately 20 shades of colour can be found in the natural wool. This extraordinary feature is unmatched by any other luxury natural fibre.

LIAMA

There are still around 3 million llamas in the Andes, where it is the ideal beast of burden – capable of carrying 50 kilograms of weight over a distance of 30 kilometres in one day at a height of 5,000 metres in thin air. Its wool is not as valuable as that of the alpaca or indeed of the vicuña, its meat is not as popular and with the spread of motor transport the llama is also becoming less important as a beast of burden. But with its friendly disposition towards people the llama remains a respected all-purpose working animal in the remote valleys of the Andes. Because in Bolivia the proportion of llamas dominates very strongly, for some time now attempts have been made with a certain degree of success to establish llama hair as a product in its own right.

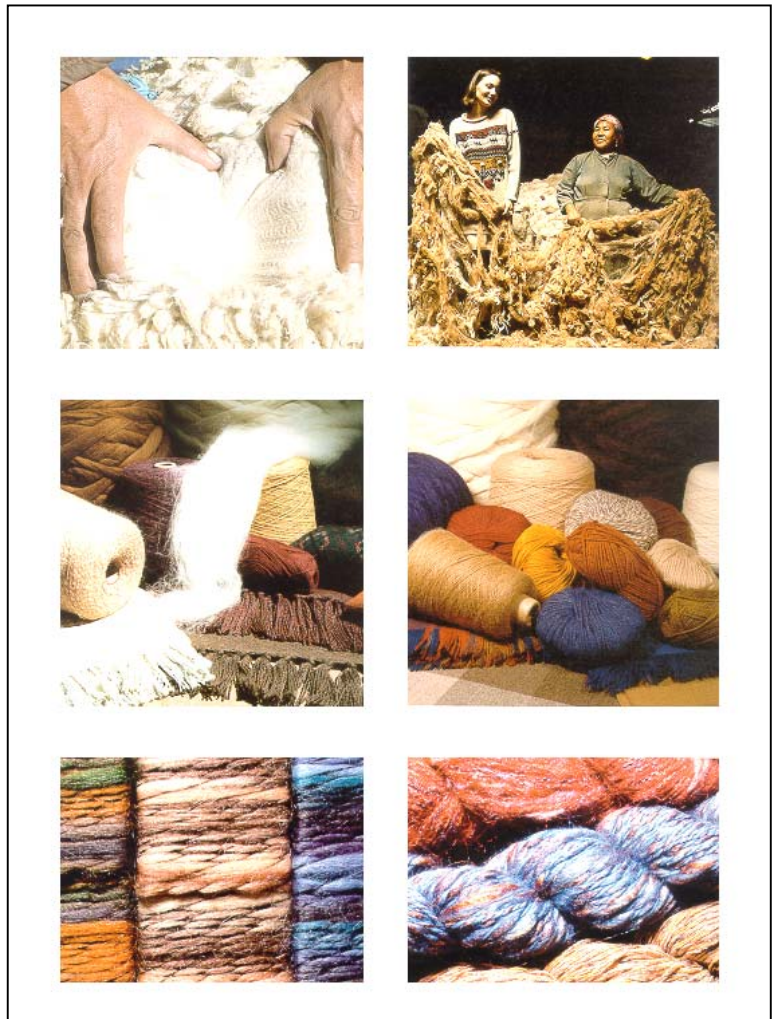
ALPACA – THE PRODUCT

The features of alpaca fibre are the result of a very long process of acclimatisation. The temperatures in the Andes at a height of 4,500 metres are subject to extreme fluctuations – they change from about minus 20 degrees at night to about 18 degrees during the day, accompanied by very strong solar radiation and an icy wind. In order to be able to survive in this harsh environment alpacas, llamas etc. are equipped with special protection. Over the course of time they have developed a very fine and lightweight fleece which is water-repellent and which can effectively withstand solar radiation. The alpaca fibre also contains microscopic airbags, which are advantageous for the production of lightweight textiles.

An alpaca can be sheared on average every 18–24 months, giving approx. 3 kg of wool.

The following figures provide a comparative overview of fibre production per year:

Alpaca	4,000 t
Cashmere	5,000 t
Llama	600 t
Vicuña	3 t
Mohair	22.000 t
Wool	1,580,000 t



The properties of alpaca hair are:

- Approx. 20 natural colours, and the white shade can be dyed in any fashionable colour
- Excellent heat insulation
- Little tendency to crease or wrinkle
- Hard-wearing
- Little pilling
- Low shrinkage values
- High flexibility
- Natural lustre
- Very comfortable to wear because of its soft feel

So you can see: For good reason this high-quality material has since way back in time been referred to as the 'fleece of the gods'.

The alpaca fibre has a fineness of 22 (young alpaca) to 32 microns and a maximum length of 60 to 70 mm. Alpaca prices range from about USD 28/kg for young alpaca to USD 22.-- for mature alpaca. The kilogram price for vicuña is five times more than that of cashmere, i.e. about USD 1,000.--/kg. The main market for exclusive haute couture items is Japan where for example gentlemen's and ladies' scarves cost from around € 450.-- to € 1,000.-- and coats made of vicuña wool cost as much as € 20,000.--. Vicuña is therefore worn only by a small minority of people.

The alpaca fibre is one of the best grades of animal hair. It is most frequently used in the mid-price range but all the product characteristics of alpaca make it well suited for use in high-quality and well established knitwear products, which up to now have apparently been the exclusive domain of cashmere.

In summary, it can be stated that alpaca either in its own rich variety or mixed with silk, Pima cotton, wool or also with artificial fibres can be used in an extremely wide range of price and application segments.

Alpaca makes it possible to make fashion statements of virtually limitless potential.

ALPACA – CLOTHING AND FASHION

Since ancient times precious articles of clothing have been woven in the

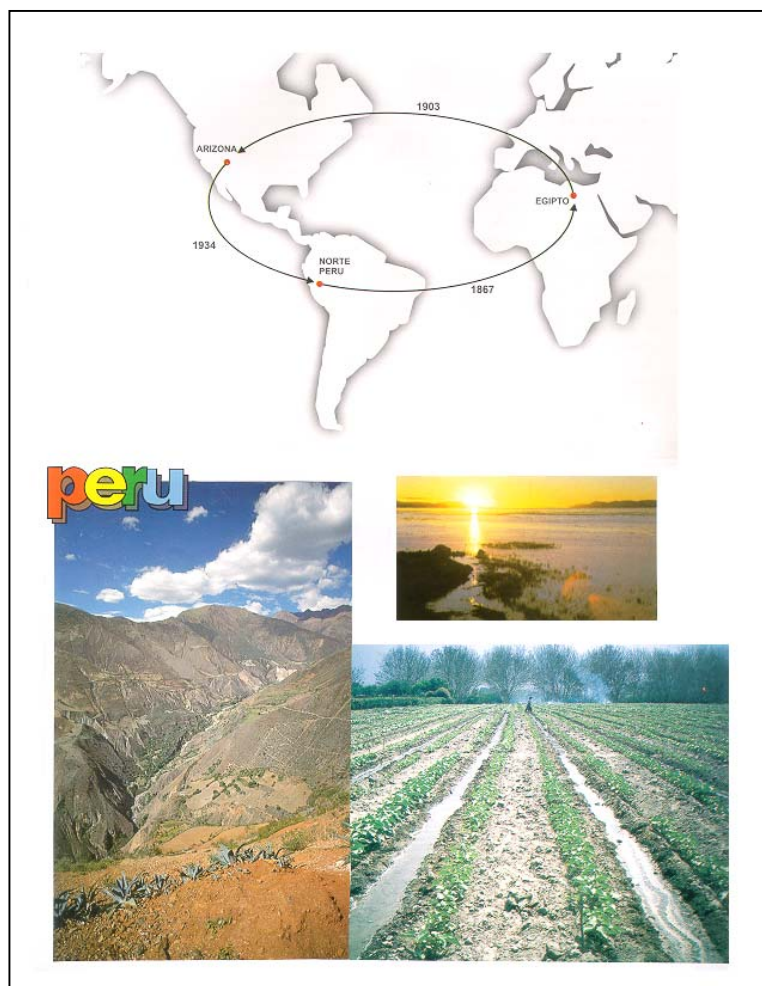
Andes regions using alpaca wool – items which were regarded as more valuable than gold. These old traditions and the craftsmanship of the South American Indians can also be applied advantageously in the world of today's fashion for the implementation of modern design specifications.



As already mentioned, Peruvian Connection and Spirits of the Andes, to quote just two examples, have recognised that with the combination of the high-quality materials from Peru, Bolivia and Ecuador, together with the impressive expert knowledge available locally, this material can be used to translate contemporary design ideas into clothing and fashion products attracting demand in Europe.

PIMA COTTON - THE ORIGIN

Gossypium. barbadense originates from northern Peru and southern Ecuador. Thanks to the quality of its fibre ***Gossypium. barbadense*** is the most popular type of cotton in the world. As the name indicates, the length of the fibre is likened to a human beard. Its fine threads have been used in Peru since ancient times and for thousands of years have been worked to create large brightly coloured, richly illustrated capes. Thanks to the favourable climatic conditions of the desert-like Peruvian coast, where it normally never rains, the artistic expression of these special articles of clothing has been retained for more than 3000 years.



Worldwide spread of barbadense cotton

At the end of the 19th century, when the French engineer Fernando de Lesseps was building the Suez Canal, another Frenchman by the name of Jumel obtained seeds from the Peruvian barbandense cotton plant during a journey through South America. He took them to Egypt where they were sown in the Nile Valley. The Royal British School for Genetics later improved them by targeted selection and cross-fertilisation and various grades were created such as Metafifi, Sakel,

Sakelaridis (Sakaridis), Karnak through to the present-day Gizah. In view of their extra-long fibres the G-45 and 70 grades of Gizah cotton are regarded as epitomising modern cotton and are referred to as **Egyptian cotton**. Dr. Lambert from the Gizah Research Institute distributed the long-fibre grades, which later became known as Lambert, Dendera, Barakat, Gezira, etc., in the Upper Nile region and in the Sudan.

Peru is also the original home of the barbadense cotton which in 1954 was grown for the first time at the Tel Aviv Research Institute and which is known as **Israeli Pima Cotton**, and whose cultivation led to the development of mechanised irrigation.

In the early 20th century the selection of barbadense cotton cultivated in Egypt was brought to the United States and planted in the desert-like South West, in the Arizona countries of Yuma and Pima, from which the designation Pima cotton resulted. In 1934 the agriculturalist Emilio Hilbck

Seminario reintroduced Pima cotton in Peru and with the aid of irrigation systems cultivated it in the desert of Piura.

As you all know, today Peru is a developing country with a rich history where the heritage of the Incas lives on – in the technical, artistic and spiritual world of their descendants.

Peru, Bolivia and Ecuador receive aid from the European Community and Switzerland. With import concessions of up to 50 per cent the competitiveness and attractiveness of the textile products from these countries is increased and the people who live there are given the opportunity to abandon the cultivation of drugs (coca leaf for cocaine) and to develop new perspectives for life.

There is no doubt that cotton, and in particular Pima cotton, holds importance for Peruvian agriculture in the export-oriented national clothing industry.

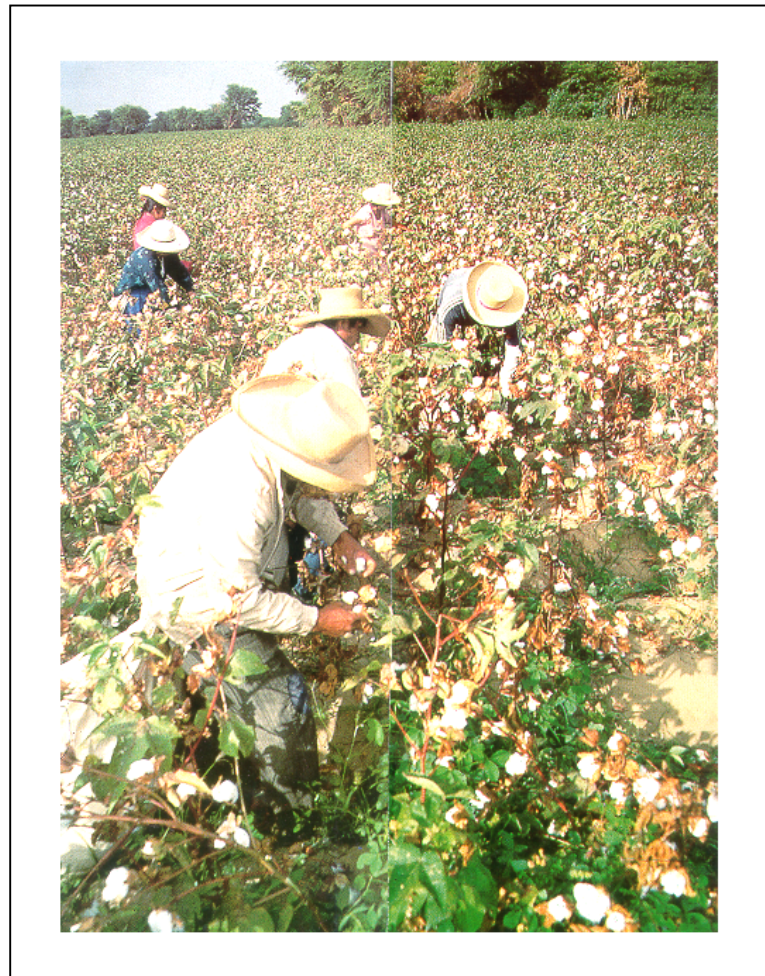
Owing to its fibre quality Pima cotton is one of the most competitive grades for export. As a result special attention and effort are devoted to it in Peru.

PIMA COTTON – THE PLANT

After the return of barbadense cotton to its country of origin, Peru, it quickly acclimatised. Pima cotton is cultivated on the northern coast of Peru in the Department of Piura, on an area measuring approx. 15,000 hectares. This represents about 21 per cent of the total area of land on which cotton is grown in Peru and it will without doubt increase because Pima cotton is the most competitive grade for export thanks to its fibre quality.

The yield amounts to approximately 95185 MT.

With a fibre length of 42.9 mm Pima cotton is recognised as the world's longest cultivated cotton fibre.



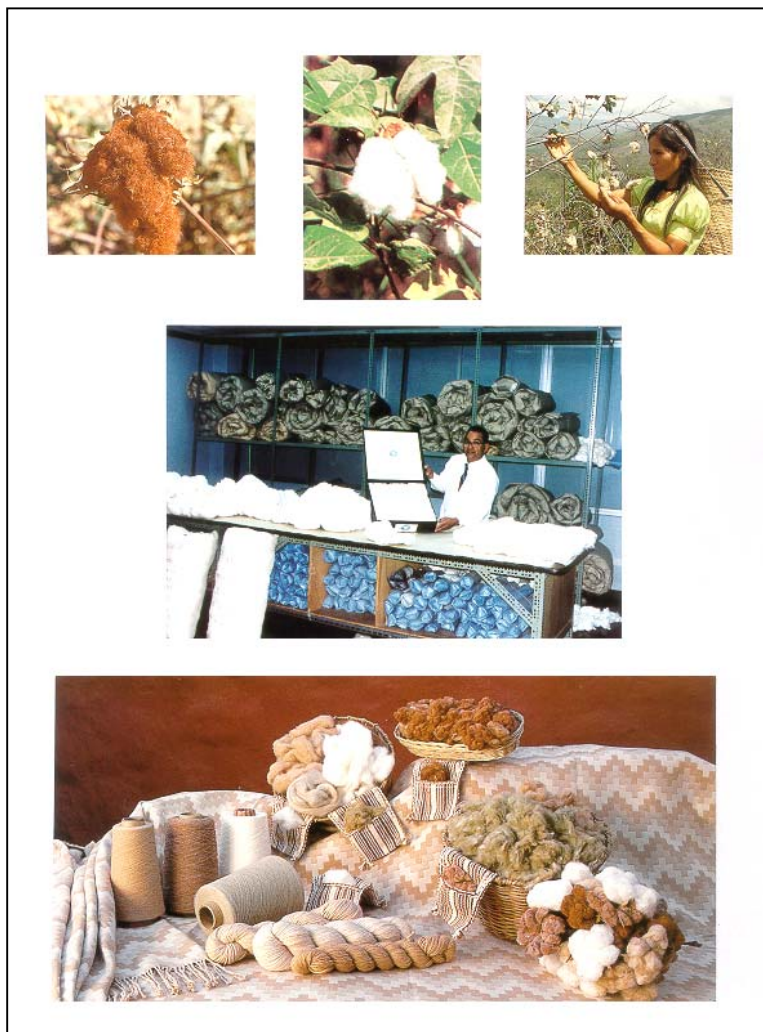
PIMA COTTON – THE PRODUCT

The special features of Pima cotton are its lustre and extreme softness.

Pima cotton is used in exclusive products with a high standard of quality which also stand out, among other things, by virtue of their handcrafted embroidery, crochet work and knitting. But every type of industrial processing on ultra-modern knitting machines is also possible.

Prices:

The prices for Pima cotton are around USD 14.50/kg and for a specially mercerised finish they are around USD 22.00/kg.



End products made of Pima cotton stand out by virtue of their special softness and natural lustre as well as their mercerised appearance, which is created by wax produced by the fibre to cover itself owing to the low level of moisture prevailing in the valleys of Piura (and which requires a different dyeing process).

This characteristic has been described by “Lands End” magazine, which has the highest catalogue sales for any magazine worldwide, with the motto: “Peruvian Pima, soft as a hair of an angel”.

PIMA COTTON - CLOTHING AND FASHION

These materials from the Andes, Pima and Alpaca, are already being used by skilled knitters, who have an impressive expert knowledge of knitting and crochet patterns and often lifelong experience, to make artistic knitwear and accessories, with which you are no doubt familiar from catalogues, such as “Peruvian Connection” or “Spirit of the Andes”.

Pima cotton offers all the features and characteristics required for inclusion in fashionable collections in the mid- to high-price range.

