

## *Peace Silk • The Loveliest way to wear silk*

To dress fashionably, we have put the biodiversity of the earth in great danger. The increase in mass production is one of the causes of the destruction of biodiversity of the earth. Most rivers and groundwater in Asia are polluted due to high demand for cheap textiles. Fashion and textile production are currently synonymous with the destruction of nature.

The quest for luxury silk fabrics coupled with the demand for social and responsible entrepreneurship led to the founding of the COCCCON project. The development of ecologically produced silk, which does not disrupt the metamorphosis of silkworms, has a major impact on the biodiversity of the Jharkhand region. Coccccon is an example of how fashion and nature can go hand in hand. The project stands for "Fashion4Biodiversity".

### **The Enterprise**

My partner is the fastest-growing manufactory of biological production of non-violent silk in India. The German-Indian project was founded in 2011 in the East Indian state of Jharkhand to create an economic perspective for poor people in rural areas. A modern form of co-operation leaves much of the production in the hands of local villagers. Currently, more than 300 people are employed and enjoy economic independence.

### **Ecological Aspects**

A particular challenge was to avoid the use of toxins. Excessive use of gene chemicals in silkworm breeding has destroyed or threatened the existence of many species of plants, animals and insects. The lack of pollination of many fruits and flowers in the silk-growing areas leads to lower yields in agriculture.

When Coccccon took over the conventional silk farm in 2012, the soil was completely barren due to the excessive and unnecessary use of chemicals due to the lack of microorganisms.

The project has stopped the use of all of these so-called high-yielding silk sprays and banned them on its land. From plants with medicinal properties, a liquid solution has been developed which produces 80% similar results to chemical fungicides and pesticides, but without toxic side effects on the ecosystem. As a substitute for synthetic fertilizers, a natural compost of leaves and dung of silkworms is used. With a view to sustainable development, innovative methods have been developed for control-



ling pests and fungi on the host tree: it is covered with a large net to improve the protection of silkworms from potential enemies. This does not require the use of insecticides.

### Peace Silk Rearing (non-violent silk)

The motto "Creativity Can Care" describes the philosophy of how to design a product: Coccon cares about the effects on man and nature. Creativity does not affect the environment. The silk crop is again operated as in times of pre-industrialization and takes place in the wild. Once the caterpillars spin the cocoons, they are placed in huts on bamboo trays or hung on the ceiling with jute straps. After a few weeks the silk butterflies hatch. Occasionally, cocoons must be pierced by well-trained personnel to ensure safe hatching. We make sure that every silk moth survives. That is why our silk is known as "Peace Silk" or non-violent silk.



After checking, the empty cocoons are degummed. The silk glue (sericin) and the impurities are removed from the silk cocoons. This is done by adding natural soap in boiling water. Occasionally, hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) is used to balance the different shades of the silk yarn. This is environmentally friendly and approved by REACH & GOTS. The use of toxic metals (heavy metals) to make silk yarns heavier is absolutely forbidden in our production.



### Innovative Technology

As far as possible, Coccon uses renewable energy sources. The spinning, winding and plying of the yarns is carried out with solar powered machines. So far, four of our 20 looms have already been upgraded with solar motors. Thus, 70% of our spinning and weaving processes are CO<sub>2</sub> neutral.

Thanks to intelligent water management, water consumption in our production process is minimized by our own Bio-ETP (Effluent Treatment Plant) system. This allows us to recover wastewater for reuse so that no wastewater gets into the ground.

Now in the seventh year, the project has significantly improved the living conditions of employees.



The weavers have an above-average lifestyle and their children attend local schools. The women enable their professional activities to gain social and economic independence.

### **Our claim**

The goal of COCCCON and SEIDENTRAUM is to create awareness of sustainable clothing and show that we can dress fashionably and take care of the environment and our planet. Fashion and destruction of ecology are not opposites. Our aim is to produce textiles with responsibility for our next generations: sustainable, ecologically and economically efficient.

