## Toxic chemicals may be used in silk production

- Formalin and bleach powders may be used as general disinfectants in all stages of sericulture.
- Toxic chemicals may be used during reeling and materials processing to both clean the silk and remove sericin.
- It is not uncommon for untreated wastewater to be dumped directly into groundwater, which not only contains chemical toxins, but also biological waste that can contribute to land degradation and eutrophication.
- Although the use of chemical finishes is relatively low for silk, the use of dyes is high. Silk is a great candidate for using natural dye. Unfortunately, most commercially available silk uses chemical dyes and finishes.
- Suggestions: The chemical processes involved in silk production are far lower impact that those in conventional cotton production or synthetics. That said; work with your suppliers to eliminate toxic chemicals from your supply chain. Also, ensure that all water is being treated before it is dumped into groundwater. Opt for more sustainable dyes and dye processes.

## Silk production impacts workers and communities

- Silk production is labor intensive and tends to take place in countries with low labor costs.
- Exposure to chemicals through breathing and skin contact during production and material processing can be extremely harmful to workers' health if proper equipment and safety precautions are not used.
- There is evidence of child labor in silk production.
- That said, silk production is an important livelihood for farmers around the world and can be empowering for workers. As Annie Gullingsrud points out, the silk sector employs about 1 million workers in China, provides income for 700,000 households in India and 20000 weaving families in Thailand. Wild silk can provide a year-round income for tribal people in India and some areas of China. In The Villages of Mexico silk production provide economic freedom for women and boost family income. Efforts to mechanize the production of silkworms could have a pronounced Impact on regions that have traditionally relied on hand labor to produce silk.
- Suggestions: Work with ethical, fair trade producers, and at the very minimum develop a personal relationship with your suppliers.