

Technical Report

## COMPARATIVE ACCOUNT ON THE TECHNO-ECONOMICS OF THE AUTOMATIC AND MULTIEND SILK REELING FILATURES IN THE PRESENT INDIAN CONTEXT

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## ABSTRACT

The technological advantages of automatic silk reeling machinery package vis-à-vis multiend silk reeling machinery package in terms of cocoon processing, economic parameters of silk reeling units, including break even point (BEP), return on investment (ROI), net present value, (NPV) and internal rate of return (IRR); technical aspects of silk reeling viz., consumption of cocoons, productivity, labour requirement, cost of production, quality of raw silk etc., were studied. The automatic silk reeling machinery package was noticeably superior in terms of bulk quantity of superior grade raw silk production ( $3A \sim 4A$  grade) at less cost, using comparatively less labour. However, multiend silk reeling technology package also helps the marginal reelers for the production of  $2A \sim 3A$  grade raw silk and consumes large quantities of cocoons presently. Further, the automatic silk reeling technology package ensures higher returns for the investment and net profit is almost doubled compared to multiend reeling technology. The reelers are of the opinion that with the current set up and availability of quality bivoltine cocoons, it is more advantageous to invest on automatic silk reeling technology package in view of better returns. Thus, the Indian silk reeling industry is presently equipped to produce international grade raw silk as import substitute to enable the weavers to produce quality fabrics of both domestic and export requirements.

**Key words:** Automatic silk reeling, break even point (BEP), multiend silk reeling, net present value (NPV), return on investment (ROI).