Cogeneration or Combined Heat and Power (CHP), is the simultaneous production in the same facility of two different forms of useful energy-electric and mechanical power plus useful thermal energy from a single primary energy source and same technological process. The principal advantage of cogeneration is that, the amount of fuel needed to produce both heat and power, is much less than total fuel needed to produce electricity and thermal energy through separate technologies. The overall efficiency of energy use in cogeneration mode can be as high as 85% or higher depending on the plant use. The units can also utilize a variety of fuels. These include solid and gaseous biomasses, natural gas, coal, light fuel oils, waste fuels and energies from industrial processes. In this study, technical and economic analysis of biomass based cogeneration in KTDA managed tea factories was carried out. The results showed that it is technically and economically viable to carry out biomass based cogeneration in the tea factories under various conditions as presented in this book.

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Biomass Cogeneration in KTDA Factories

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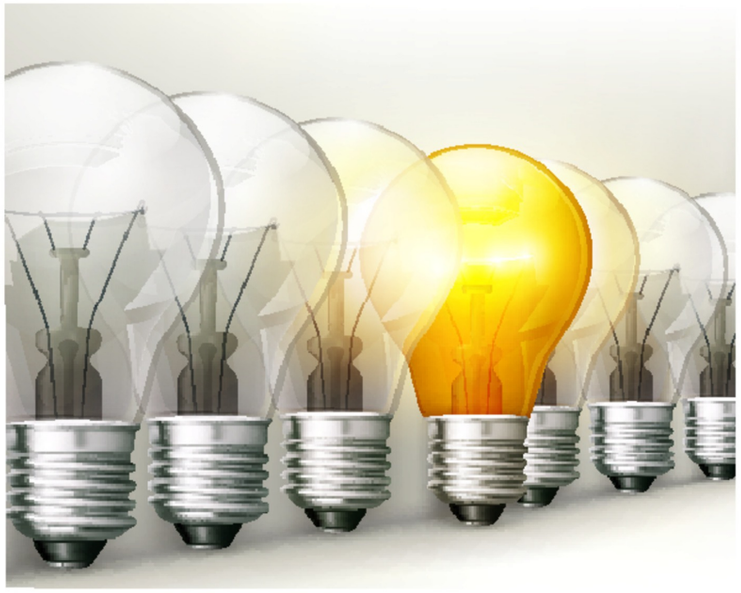

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