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AN ECONOMIC ANALYSIS OF *JATROPHA* BIO-DIESEL PRODUCTION IN SRI LANKA

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In the recent years there has been an increasing trend in investments in renewable energy sources in. Locally, there is a growing interest to find alternative sources aiming to reduce the heavy dependence on fossil fuels and to achieve energy security. In this context, this study assesses the economic and financial feasibility of *Jatropha curcas* L. (commonly known as 'Jatropha' or 'Physic nut') cultivation and 'Jatropha' bio-diesel production in Sri Lanka under the current policy regime. The nominal protection coefficient and effective protection coefficients were used to determine the level of protection for biodiesel production using Jatropha in Sri Lanka. The cost benefit analysis was performed to assess the feasibility of 'Jatropha' bio-diesel production in Sri Lanka. The conventional measures like NPV (Net Present Value), BCR (Benefit Cost Ratio), and IRR (Internal Rate of Return) were used in financial and economic terms. Nominal Protection Rate (NPR) was calculated by dividing the local 'Jatropha' bio-diesel price by the border price of bio-diesel. The NPR for biodiesel implies that nearly 47 % of protection at local market level. Effective Protection Rate (EPR) for seed production is 90 %, while it is for oil extraction and bio-diesel processing is 128 %. Implication of this is that the producers will be protected and they will receive 47 % greater than in comparison to earnings under free market conditions. Except for the benchmark situation, all other considered scenarios produce a favorable NPV, BCR and IRR for 'Jatropha' bio-diesel production.

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