

**Table S1.** Economic analysis of Aashkol based jute fiber retting

Parameters	Unit	Cost
Purchase price of Engine	USD	412.74
Purchase price of Chassis	USD	648.58
Purchase price of Aashkol	USD	1061.32
Total purchase Price	USD	2122.64
Annual use of Aashkol	h	320
Effective operation time	h day <sup>-1</sup>	8
Working day in a year	day	40
Economic life, L		
Economic life of chassis	yr	7
Economic life of Engine	yr	7
Economic life of Aashkol	yr	7
Machine capacity	t h <sup>-1</sup>	5
Fixed cost		
Salvage value (10% P)	USD	212.26
Depreciation, D	USD yr <sup>-1</sup>	272.91
Interest on Investment, I, (12%)	USD yr <sup>-1</sup>	140.09
STI (Tax, Shelter and Insurance), (2.5%)	USD yr <sup>-1</sup>	53.07
Repair and Maintenance (3.5%*P)	USD yr <sup>-1</sup>	74.29
Total Fixed cost	USD yr <sup>-1</sup>	540.36
Total Fixed cost (FC)	USD h <sup>-1</sup>	1.69
Variable cost		
Labour cost	USD h <sup>-1</sup>	2.36
Fuel cost	USD h <sup>-1</sup>	0.92
Total variable cost (VC)	USD h <sup>-1</sup>	3.28
Total cost, (FC+VC)	USD h <sup>-1</sup>	4.97
Extraction cost	USD t <sup>-1</sup>	0.99
Service rate		
Service rate	USD h <sup>-1</sup>	154.78
Service rate	USD t <sup>-1</sup>	2.06
Profit		
Profit	USD t <sup>-1</sup>	1.07
Profit	USD h <sup>-1</sup>	5.35
Payback period		
Payback period	yr	1.24