

Table 1: Estimated budget for the fabrication of pilot-scale dye extraction machine

S/No.	Items	Cost (Naira)
1	<b>Design, Fabrication &amp; Materials</b> <ul style="list-style-type: none"> <li>• Engineering design software &amp; simulations</li> <li>• Procurement of raw materials (mild steel, stainless steel, insulation, fittings, electrical components)</li> <li>• Fabrication (machining, welding, assembly)</li> <li>• Surface finishing &amp; safety installations</li> </ul>	35,000,000.00
2	<b>Testing, Validation &amp; Quality Assurance</b> <ul style="list-style-type: none"> <li>• Pilot extraction trials (biomass supply, solvents, utilities)</li> <li>• Performance testing</li> </ul>	5,000,000.00
3	<b>Dissemination &amp; Technology Transfer</b> <ul style="list-style-type: none"> <li>• Workshops, stakeholder engagement (SMEs, textile cooperatives)</li> <li>• Documentations (manuals, safety guidelines)</li> <li>• Journal publications and conference presentations</li> </ul>	10,000,000.00
4	<b>Logistics and personnel</b> <ul style="list-style-type: none"> <li>• Administrative overhead (Institutional support)</li> <li>• Contingency for unforeseen expenditures</li> <li>• Principal investigator and Co-investigators</li> </ul>	10,000,000.00
<b>Total</b>		<b>60,000,000.00</b>