

## Budget for: Development and Commercialization of a Sustainable UAV from Hybrid Biocomposite

Category	Description	Estimated Cost (₦)	Estimated Cost (USD)
<b>1. Materials &amp; Consumables</b>	Epoxy resins, hardeners, Sterculia fibre, Pterocarpus wood particle, mould fabrication materials, adhesives, fasteners	₦21,600,000	€12000
<b>2. Equipment Access &amp; Usage</b>	Laboratory use, Vacuum Bagging Machine- €500 Composite testing (UTM, TGA, DMA), Rental of curing ovens, 3D printing- €7000	₦25,000,000	€14,000
<b>3. Avionics &amp; Systems</b>	Flight controller- €600 GPS- €200 Telemetry- €200 Motors- €150 Batteries- €500 Transmitter- €500 Receiver- €400 communication units- €1000 Servo Motor- € 100	₦ 6,570,000	€3650
<b>4. Personnel</b>	Research assistant (24 months) and technical staff (fabrication & testing)-4, stipends, field support	₦21,600,000	€12,000
<b>5. Prototyping &amp; Testing</b>	Multiple prototype iterations- €28,000 Ground tests, wind tunnel rental, flight tests, certification support	₦50,400,000	€28,000
<b>6. Commercialization Activities</b>	Patent filing- €500 market studies, stakeholder engagement workshops, business plan development, outreach- €2000	₦4,500,000	€2500
<b>TOTAL</b>		₦129,670,000	€72,150

**Total Estimated Budget (24 months): ₦ 129,670,000 (~€72,150)**