

**Budget Estimate and Justification for the Development of an Affordable Solar Photovoltaic Powered Vehicle-Trailed System for Rice Threshing Machine for Off-Grid Farming Communities**

<b>S/N</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Unit Cost (₦)</b>	<b>Total (₦)</b>
<b>1</b>	Solar panels (300W each)	4	500,000	2,000,000
<b>2</b>	Battery (12V, 100Ah, deep cycle)	4	400,000	1,600,000
<b>3</b>	MPPT Charge Controller	2	300,000	600,000
<b>4</b>	DC Electric Motor (1–2 HP)	1	450,000	450,000
<b>5</b>	Fabrication of trailer/chassis	1	3,700,000	3,700,000
<b>6</b>	Rice threshing unit (custom-built)	1	4,400,000	4,400,000
<b>7</b>	Inverter	1	1,200,000	1,200,000
<b>8</b>	Wiring, switches, and mounting hardware	-	500,000	500,000
<b>9</b>	Awareness, training, and dissemination	-	3,500,000	3,500,000
<b>10</b>	Contingency 10%			1,754,500
<b>11</b>	<b>Total cost</b>			<b>₦19,299,500</b>