The biogas technology is attributed with dual benefits in the form of supply of a clean and high calorific fuel to meet the domestic fuel needs of rural areas and provision of anaerobically digested slurry with high manurial value. In addition to this, it is known to reduce the pathogenic load of night soil at a substantial level when toilets are attached to the biogas plants. Hence, it is an eco-friendly technology helping to reduce the destruction of forests by offering a fuel alternative to wood at the doorstep of the house and accruing a social benefit in way of alleviation of the drudgery of women in collection of firewood and cooking. It is also an environmentally sound technology as it provides a safe method for disposal of organic waste, preventing spread of diseases and controlling pollution. Considering all these attributes together, the nutrient recovery through anaerobic digestion in biogas plant represents a more economic and efficient option in obtaining good quality manure for our farming system.

1. **Name of the Product** : Enriched Bio-Manure

2. **Project Cost** :

   (a) **Capital Expenditure**
   
   Land : Own
   Building Shed 3000 sq.ft. : Rs. 600000.00
   Equipment : Rs. 1275000.00
   Biogas Plant (3-145Cum, 1-60 Cum & 1-25 Cum), Shovel for Mixing, Sieving M/c., Cutter & Blender, Sewing M/c., Breeder Box, Tractor & Truck
   Total Capital Expenditure : Rs. 1875000.00
   
   (b) **Working Capital** : Rs. 425000.00

   **TOTAL PROJECT COST** : Rs. 2300000.00

3. **Estimated Annual Production of Enriched Bio-Manure** : (Value in 1000)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>Capacity (M.tonne)</th>
<th>Rate</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Enriched Bio-Manure</td>
<td>1000.00</td>
<td>26.135</td>
<td>2613.50</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>1000.00</td>
<td>26.135</td>
<td>2613.50</td>
</tr>
</tbody>
</table>
4. Raw Material : Rs. 860000.00
5. Labels and Packing Material : Rs. 30000.00
6. Wages (Skilled & Unskilled) : Rs. 615000.00
7. Salaries : Rs. 186000.00
8. Administrative Expenses : Rs. 30000.00
9. Overheads : Rs. 550000.00
10. Miscellaneous Expenses : Rs. 25000.00
11. Depreciation : Rs. 157500.00
12. Insurance : Rs. 18750.00
13. Interest (As per the PLR)
   (a) Capital Expenditure Loan : Rs. 243750.00
   (b) Working Capital Loan : Rs. 55250.00
   Total Interest : Rs. 299000.00
14. Working Capital Requirement
    Fixed Cost : Rs. 503500.00
    Variable Cost : Rs. 2110250.00
    Requirement of Working Capital per Cycle : Rs. 425625.00
15. Estimated Cost Analysis

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Particulars</th>
<th>100%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Fixed Cost</td>
<td>503.50</td>
<td>302.10</td>
<td>352.45</td>
<td>402.80</td>
</tr>
<tr>
<td>2.</td>
<td>Variable Cost</td>
<td>2110.00</td>
<td>1266.00</td>
<td>1477.00</td>
<td>1688.00</td>
</tr>
<tr>
<td>3.</td>
<td>Cost of Production</td>
<td>2613.50</td>
<td>1568.10</td>
<td>1829.45</td>
<td>2090.80</td>
</tr>
<tr>
<td>4.</td>
<td>Projected Sales</td>
<td>3500.00</td>
<td>2100.00</td>
<td>2450.00</td>
<td>2800.00</td>
</tr>
<tr>
<td>5.</td>
<td>Gross Surplus</td>
<td>886.50</td>
<td>531.90</td>
<td>620.55</td>
<td>709.20</td>
</tr>
<tr>
<td>6.</td>
<td>Expected Net Surplus</td>
<td>729.00</td>
<td>374.00</td>
<td>463.00</td>
<td>552.00</td>
</tr>
</tbody>
</table>

Note:
1. All figures mentioned above are only indicative and may vary from place to place.
2. If the investment on Building is replaced by Rental Premises-
   (a) Total Cost of Project will be reduced.
   (b) Profitability will be increased.
   (c) Interest on Capital Expenditure will be reduced.