

VI-10c Net Present Value (NPV) and Payback Period at Different Interest Rates for the Three Models[\N]
 [\B]With Revenues of Rs 20,000 from Sales of Rice Husk Cement[\N]

Note: NPV in rupees is listed first. Calculations assume a 15-year life of the system.
 Payback period in years is in parentheses. If the system will not pay back over 15 years, (0) is listed.

| INTEREST RATE OF THE LOAN (R_LC) | BIOGAS PRICE (Rs/[m.sup.3]) | MODEL ONE COOKING & LIGHTING | | MODEL TWO COOKING, LIGHTING & INDUSTRY | | MODEL THREE LIGHTING & INDUSTRY | |
|--|-----------------------------------|---------------------------------|---------------------|--|---------------------|------------------------------------|---------------------|
| | | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model |
| 4% | 0.00 | | | 121,849 (0) | 138,220 (0) | 107,546 (0) | 145,066 (0) |
| 4% | 0.25 | | | | 152,803 (0) | | 178,560 (12) |
| 4% | 0.74 | | | | 181,384 (11) | | 244,210 (1) |
| 4% | 1.48 | | | | 224,547 (7) | | 343,354 (1) |
| 10% | 0.00 | | | 112,941 (0) | 128,354 (0) | 101,405 (0) | 136,549 (0) |
| 10% | 0.25 | | | | 142,936 (0) | | 170,044 (14) |
| 10% | 0.74 | | | | 171,518 (13) | | 235,693 (1) |
| 10% | 1.48 | | | | 214,681 (8) | | 334,837 (1) |

4% = Interest rate charged to associations. 10% = Higher interest rate.

Rs 0/[m.sup.3] assumes no revenues from the sale of biogas; Rs 0.25/[m.sup.3] = Equivalent price of electricity;

Rs 0.74/[m.sup.3] = One-half Equivalent price of diesel fuel; Rs 1.48/[m.sup.3] = Equivalent price of diesel fuel.

[\B]Table VI-10d Net Present Value (NPV) and Payback Period at Different Interest Rates for the Three Models
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[\B]With Revenues of Rs 30,000 from Sales of Rice Husk Cement[\N]

Note: NPV in rupees is listed first. Calculations assume a 15-year life of the system. Payback period in years is in parentheses. If the system will not pay back over 15 years, (0) is listed.

| INTEREST RATE OF THE LOAN (R _{LC}) | BIOGAS PRICE (Rs/[m.sup.3]) | MODEL ONE COOKING & LIGHTING | | MODEL TWO COOKING, LIGHTING & INDUSTRY | | MODEL THREE LIGHTING & INDUSTRY | |
|--|-----------------------------------|---------------------------------|---------------------|--|---------------------|------------------------------------|---------------------|
| | | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model |
| 4% | 0.00 | | | 197,910 (7) | 214,281 (7) | 183,607 (1) | 221,127 (1) |
| 4% | 0.25 | | | | 228,864 (1) | | 254,621 (1) |
| 4% | 0.74 | | | | 257,445 (1) | | 320,271 (1) |
| 4% | 1.48 | | | | 300,608 (1) | | 419,415 (1) |
| 10% | 0.00 | | | 189,002 (8) | 204,415 (9) | 177,466 (1) | 212,610 (7) |
| 10% | 0.25 | | | | 218,998 (7) | | 246,105 (1) |
| 10% | 0.74 | | | | 247,579 (1) | | 311,754 (1) |
| 10% | 1.48 | | | | 290,742 (1) | | 410,899 (1) |

4% = Interest rate charged to associations. 10% = Higher interest rate.

Rs 0/[m.sup.3] assumes no revenues from the sale of biogas; Rs 0.25/[m.sup.3] = Equivalent price of electricity;

Rs 0.74/[m.sup.3] = One-half Equivalent price of diesel fuel; Rs 1.48/[m.sup.3] = Equivalent price of diesel fuel.

[\B]Table VI-11a Net Present Value (NPV) and Payback Period at Different Cement Revenue and Interest Rates[\N]
 [\B]With the Cost of the Digester Reduced by One-half[\N]

Note: NPV in rupees is listed first. Calculations assume a 15-year life of the system.
 Payback period in years is in parentheses. If the system will not pay back over 15 years, (0) is listed.

| REVENUE FROM CEMENT SALES (Rs) | INTEREST RATE OF THE LOAN (R _{LC}) | BIOGAS PRICE (Rs/[m.sup.3]) | MODEL ONE | | MODEL TWO | | MODEL THREE | |
|--|---|-----------------------------------|--------------------|---------------------|---------------------------------|---------------------|---------------------|---------------------|
| | | | COOKING & LIGHTING | | COOKING, LIGHTING & INDUSTRY | | LIGHTING & INDUSTRY | |
| | | | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model |
| 0 | 0.04 | 0.00 | 19,641 (0) | 42,566 (0) | -24,468 (0) | -5,348 (0) | -42,835 (0) | 1,497 (0) |
| 0 | 0.04 | 1.48 | | 141,740 (0) | | 80,978 (0) | | 199,785 (8) |
| 0 | 0.10 | 0.00 | 12,899 (0) | 34,737 (0) | -32,364 (0) | -13,723 (0) | -48,672 (0) | -5,528 (0) |
| 0 | 0.10 | 1.48 | | 133,411 (0) | | 72,603 (0) | | 192,760 (9) |
| 10,000 | 0.04 | 0.00 | | | 51,593 (0) | 70,713 (0) | 33,226 (0) | 77,558 (0) |
| 10,000 | 0.04 | 1.48 | | | | 157,039 (0) | | 275,846 (1) |
| 10,000 | 0.10 | 0.00 | | | 43,697 (0) | 62,338 (0) | 27,389 (0) | 70,533 (0) |
| 10,000 | 0.10 | 1.48 | | | | 148,665 (0) | | 268,821 (1) |

4% = Interest rate charged to associations. 10% = Higher interest rate.

Rs 0/[m.sup.3] assumes no revenues from the sale of biogas; Rs 0.25/[m.sup.3] = Equivalent price of electricity;

Rs 0.74/[m.sup.3] = One-half Equivalent price of diesel fuel; Rs 1.48/[m.sup.3] = Equivalent price of diesel fuel.

Table VI-11b Net Present Value (NPV) and Payback Period at Different Cement Revenue and Interest Rates
 With the Cost of the Digester Reduced by One-half

Note: NPV in rupees is listed first. Calculations assume a 15-year life of the system. Payback period in years is in parentheses. If the system will not pay back over 15 years, (0) is listed.

| REVENUE FROM CEMENT SALES (Rs) | INTEREST RATE OF THE LOAN (R _{LC}) | BIOGAS PRICE (Rs/[m.sup.3]) | MODEL ONE | | MODEL TWO | | MODEL THREE | |
|--|---|-----------------------------------|--------------------|---------------------|---------------------------------|---------------------|---------------------|---------------------|
| | | | COOKING & LIGHTING | | COOKING, LIGHTING & INDUSTRY | | LIGHTING & INDUSTRY | |
| | | | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model | Min Cost Model | Max Output Model |
| 20,000 | 0.04 | 0.00 | | | 127,654 (0) | 146,774 (0) | 109,288 (0) | 153,619 (0) |
| 20,000 | 0.04 | 1.48 | | | | 233,100 (1) | | 351,907 (1) |
| 20,000 | 0.10 | 0.00 | | | 119,759 (0) | 138,339 (0) | 103,450 (0) | 146,594 (0) |
| 30,000 | 0.10 | 1.48 | | | | 224,726 (7) | | 344,882 (1) |
| 30,000 | 0.04 | 0.00 | | | 213,715 (1) | 222,835 (1) | 185,349 (1) | 229,680 (1) |
| 30,000 | 0.04 | 1.48 | | | | 309,162 (1) | | 427,969 (1) |
| 30,000 | 0.10 | 0.00 | | | 195,820 (7) | 214,460 (7) | 179,511 (1) | 222,655 (1) |
| 10,000 | 1.10 | 1.48 | | | | 300,787 (1) | | 420,943 (1) |

4% = Interest rate charged to associations. 10% = Higher interest rate.

Rs 0/[m.sup.3] assumes no revenues from the sale of biogas; Rs 0.25/[m.sup.3] = Equivalent price of electricity;

Rs 0.74/[m.sup.3] = One-half Equivalent price of diesel fuel; Rs 1.48/[m.sup.3] = Equivalent price of diesel fuel.