

Appendices

Table A-1: Conversion efficiency of fuels used for cooking (%)

Fuel	Efficiency
Commercial	
Soft coke/coal	10
Kerosene (pressure stoves)	40
Kerosene (wick stoves)	36
LPG	60
Electric hotplates	71
Non-commercial fuels	
Firewood (closed hearth)	16
Firewood (open hearth)	13
Twigs & straw (closed hearth)	16
Twigs & straw (open hearth)	13
Charcoal	16
Dungcakes	8
Biogas stove	55

Source: Environmental Information System (ENVIS) network
http://www.terienvi.nic.in/stat_table/stat_tab.htm#1_5

Table A-2: Major source of lighting for rural households of different socio-economic classes in 2004-05 (out of 1000 households)

MPCE Calss	No Arrangement	Kerosene	Other oil	Gas	Candle	Electricity	Others	n.r	All
0-235	0	701	5	0	0	284	5	4	1000
235-270	0	687	2	0	0	309	1	2	1000
270-320	0	644	2	0	1	350	0	3	1000
320-365	0	591	2	0	1	403	1	3	1000
365-410	0	540	3	0	2	452	1	2	1000
410-455	0	503	1	0	1	492	1	2	1000
455-510	0	462	1	0	2	532	1	2	1000
510-580	0	407	2	0	1	585	2	2	1000
580-690	0	360	1	0	2	634	1	2	1000
690-890	0	272	1	0	1	723	1	2	1000
890-1155	0	192	2	1	1	802	1	2	1000
1155-more	0	137	0	1	1	858	1	2	1000
all classes	0	444	2	0	1	549	1	2	1000

MPCE is monthly per capita expenditure, n.r is not recorded

Source: (NSSO 2007, p. 15)

Table A-3: Major source of lighting for urban households of different socio-economic classes in 2004-05 (out of 1000 households)

MPCE Calss	No Arrangement	Kerosene	Other oil	Gas	Candle	Electricity	Others	n.r	All
0-335	0	361	0	0	6	621	6	5	1000
335-395	0	274	4	0	2	718	1	1	1000
395-485	0	177	1	0	2	814	1	4	1000
485-580	0	104	1	0	5	883	2	5	1000
580-675	0	87	2	1	1	908	1	0	1000
675-790	0	63	1	1	0	932	2	0	1000
790-930	0	49	2	2	0	946	1	0	1000
930-1100	0	26	0	1	1	972	0	0	1000
1100-1380	0	18	1	0	1	978	1	1	1000
1380-1880	0	8	0	0	0	990	1	0	1000
1880-2540	0	3	0	1	0	991	3	2	1000
2540-more	0	3	0	0	0	994	0	3	1000
all classes	0	71	1	1	1	923	1	2	1000

Source: (NSSO 2007, p. 15)

Table A-4: Major source of cooking for rural households of different socio-economic classes in 2004-05 (out of 1000 households)

MPCE Calss	No Arrangement	Kerosene	Other oil	Gas	Candle	Electricity	Others	n.r
0-235	85	3	784	2	0	72	0	2
235-270	12	5	819	2	0	100	0	3
270-320	5	6	828	3	0	96	0	7
320-365	7	6	818	8	1	104	0	5
365-410	4	6	815	16	0	101	0	9
410-455	7	9	797	31	2	99	0	8
455-510	1	10	800	43	1	103	0	6
510-580	6	11	793	57	2	94	0	9
580-690	7	9	764	91	2	81	0	15
690-890	12	10	686	159	6	81	1	20
890-1155	11	9	576	270	7	78	1	35
1155-more	53	5	433	392	7	64	1	33
All classes	13	8	750	86	2	91	0	13

Source: (NSSO 2007, p. 10)

Table A-5: Major source of cooking for urban households of different socio-economic classes in 2004-05 (out of 1000 households)

MPCE Calss	No Arrangement	Kerosene	Other oil	Gas	Candle	Electricity	Others	n.r
0-335	67	45	686	58	0	47	0	62
335-395	29	61	638	111	0	59	0	73
395-485	12	67	532	221	0	37	1	103
485-580	13	40	426	335	0	34	1	133
580-675	23	49	317	421	0	23	1	154
675-790	28	33	249	544	0	23	1	113
790-930	30	28	165	615	0	16	0	131
930-1100	41	18	92	704	0	7	0	127
1100-1380	52	15	66	744	0	3	0	101
1380-1880	81	9	26	783	0	3	0	84
1880-2540	78	5	17	819	0	2	0	66
2540-more	135	1	12	821	0	2	0	17
all classes	49	28	217	571	0	17	0	102

Source: (NSSO 2007, p. 10)

Table A-6: MPCE^a class wise access to MES^b for cooking in rural areas in 2003-04 (in %)

MPCE Class	1	2	3	4	5	6	7	8	9	10	11	12	All
Andhra Pradesh	0	1.3	1.6	3.4	6	9.9	8	12	16.8	24.8	40	46.7	15.2
Arunachal Pradesh	0	13.9	0	5.4	5.4	3.1	6.5	4.8	9.2	13.2	23.7	35.8	15.4
Assam	0	0	0.7	0.1	2.5	0.7	3.4	4.8	6	15	30.2	57.2	7.1
Bihar	0	0	0	0.2	0.3	0.6	2.5	1.8	4.4	8.5	15.3	16.9	1.8
Chattisgarh	0	0	0	0.7	0	0	4.4	1.4	2.1	9.9	12.8	22.2	1.9
Delhi	0	0	0	0	100	100	100	100	100	100	82.6	81.8	92.2
Goa	0	0	0	20.3	23.3	33.2	50.2	47.8	31.2	87.9	93.1	98.8	76
Gujrat	0	5.4	16.4	8.5	14.6	17	8.5	11.3	19.3	25.4	39.3	49.1	20.7
Haryana	5.6	0	0	3.8	2.6	7.5	5.2	10.9	14.3	25.6	33.8	52.4	23.5
Himachal	0	0	0	0	2.2	6.4	3.8	7.9	14.3	24.6	34.1	56.2	23.1
Jammu and Kashmir	0	0	0	0	4.4	0	0.6	5.5	7	19	29.6	31.4	15.4
Jharkhand	0	0	0	0.5	0	0.4	0.6	0.5	5.1	2.2	12.7	22.3	1.4
Karnataka	0	0.8	0	0.8	1.4	2	4	5.4	9.6	18	35.4	42.6	7.3
Kerala	5.1	0	0	2.2	1.5	5.5	4.4	5.2	7.7	12.8	22.9	37.6	18.6
Madhya Pradesh	0	0.6	0.8	0.2	1.7	2.5	1.9	3.8	7.3	13.6	31.8	32.2	4.4
Maharashtra	1	0.8	1.6	2.5	5.7	6.1	10.5	15.4	21.4	27.4	43.6	59	16.8
Manipur	0	0	0	0	0	1.5	7.2	11.7	20.7	28.7	58.5	81	19.6
Meghala	0	0	0	0	0	0.7	1.4	0.5	0.1	1.7	8.6	12.8	2.2
Mizoram	0	0	0	0	0	0	5.7	5.3	20.7	30.2	39.8	62.7	28.9
Nagaland	0	0	0	0	0	16.7	0	6.2	13.7	17	35.4	68.6	34.5
Orissa	0.3	0	0	0.7	0.3	0.8	5.6	3	9.7	15.8	27.3	31.3	3.3
Punjab	0	0	0	7.8	0	10.3	6.4	16.5	17.7	29.1	37	57.1	27.9
Rajasthan	0	0	0.9	0	3	1.1	1.5	3.9	4.3	10.7	12.4	22	5.4
Sikkim	0	0	0	14.7	1.8	12.5	12.4	16.5	31.9	45.8	75.7	86.1	39.1
Tamil Nadu	1.7	4	1.9	2.6	5.2	5.9	12.2	9.6	17.3	29.7	44.3	58.6	16
Tripura	0	0	0	0.1	0.1	2.7	6.5	4	4.7	24.1	51.2	53.5	7.5
Uttaranchal	0	0	0	2.3	1.2	4	6.3	15	16	24.7	50.3	71.3	19.5
Uttar Pradesh	0.5	0	0.1	0.7	0.5	3	3.1	3.1	6.9	10.6	13.4	23.9	5
West Bengal	2.2	0	0.2	0.3	0.1	0	0.7	0.9	3.7	6.5	24.3	33.4	4.5
Andaman Nicobar	0	0	0	0	9.1	11.1	9	23.2	10.5	19.9	52.2	64.2	37.9
Chandigarh	0	0	0	100	0	42.6	70.3	90.3	84.6	61.4	60.6	99.9	82.4
Dadar Nager Haweli	0	0	15.9	2.4	0	0	21.5	35.1	8.7	30.1	29.1	31.5	14.8
Daman and Diu	0	0	0	0	0	0	100	0	49.8	38	75	64	59
Lakshadweep	0	0	0	100	100	0	100	1	0	3.7	39.4	22.2	18.2
Pondicheri	0	0	0	0	23.5	0	10.9	20.7	0	18.3	10.7	41.3	14.6
India	0.4	0.5	1	1.3	2.5	3.9	4.9	6.6	10.6	17.9	30.5	42.5	9.9

a: MPCE is monthly per capita expenditure (in Rs). Range of MPCE for classes in rural areas are 1: Rs. 0-235, 2: Rs. 235-270, 3: Rs. 270-320, 4: Rs. 320-365, 5: Rs. 365-410, 6: Rs.410-455, 7: Rs. 455-510, 8: Rs. 510-580, 9: 580-690, 10: Rs.690-890, 11: Rs. 890-1155, 12: Rs. 1155 or more.

b: MES is Modern Energy Services. A household is defined as having access to MES for cooking if that household's major source of cooking is either Kerosene or LPG. Use of electricity in India for cooking is almost nil therefore we avoid including electricity in definition of MES for cooking. While access to MES for lighting is defined by only electricity

Source: NSSO (2007)

Table A-7: MPCE^a class wise access to MES^b for cooking in urban areas in 2003-04
(in %)

MPCE Class	1	2	3	4	5	6	7	8	9	10	11	12	All Classes
Andhra Pradesh	11.9	18	33.8	46.5	56.7	63.1	62.6	80.3	87.9	91.7	82.9	84.5	63.6
Arunachal Pradesh	4.8	30.8	46.1	59	81.8	94.6	80.9	74.8	91.9	82.7	51.2	93.3	74.9
Assam	12.5	3.3	29.9	25.7	58.6	58.7	82.9	76.6	82	87	73.7	54.3	65.3
Bihar	12.2	10.7	24.2	33.9	58.9	68.3	86.1	95.3	90.6	94.4	94.8	91.1	56.6
Chattisgarh	1.5	9	10.2	30.2	45.7	60.6	60.7	86.1	82	95.2	91.3	77.8	52.5
Delhi	49.1	42.4	86	99.7	93.9	87.4	96.3	94.4	95	87.5	91.6	93.4	92.1
Goa	22	100	47.9	60.3	83.3	91.6	84.5	97.1	92.9	96.6	100	95.5	88
Gujrat	19.5	24.1	48	45.7	68.9	76.2	84.3	93.7	82.8	82.3	86.8	66.6	76.1
Haryana	27.7	33.4	45.6	45.4	74.2	73.7	79.6	88.1	96.7	94.5	97.9	90.1	79.8
Himachal	27.1	18.6	10.9	39.7	88.5	95.5	82.4	64.3	88.7	93	86.7	77.5	84.4
Jammu and Kashmir	16.7	85.1	23	37.6	67.6	76.4	54.4	84.5	85.9	94.1	96	97.3	78.3
Jharkhand	13.1	4.3	3.2	14.3	32.2	27	34.3	57.6	68.7	63.3	78.2	92.3	44
Karnataka	4.6	15.3	30.6	40.1	60.3	73.4	82.8	85.1	87.9	83.8	85.5	74.3	66.5
Kerala	3.2	12.8	11.3	13.4	18.4	24.6	32.1	43.9	47.7	68.9	72.6	80	44.5
Madhya Pradesh	6.3	13.3	25.6	42.6	53.7	67.6	78.1	81.4	81.4	94.2	92.4	88.6	57.7
Maharashtra	21.3	41.3	50.7	61.8	72.8	83.1	89	92.8	87.9	86.2	86.7	90.4	79.2
Manipur	100	79.1	31.3	42.5	66.4	63.5	71.2	96.9	95.4	73.4	100	100	61.6
Meghala	0	69.2	5.8	24.4	55.4	47.8	49.7	73.7	69.6	81.6	92	52.8	66.8
Mizoram	0	100	57.3	58.2	73.3	81	85.9	92.5	93.7	93.2	95.2	93.3	88.7
Nagaland	0	0	0	67.2	83.8	60.9	72.3	75.6	90.7	96.8	88.9	80.7	85.4
Orissa	3.6	5.8	11.3	20.5	42.8	68.9	56.6	65.5	78	76.7	89.4	67.4	42.3
Punjab	21.5	40	49.5	69.3	69.2	81.6	83.3	92.7	92.1	94.6	98.1	67.8	83.5
Rajasthan	7.4	4.4	22.8	30.8	42.4	49.3	60.4	79.8	81.5	86.6	90.2	82.1	55.6
Sikkim	0	76	22	74	78.7	71.7	88	97	98.2	98.3	57.4	91.4	84.2
Tamil Nadu	17.3	30.5	41.1	55	61.2	65	78.5	84.9	89.8	87.8	91.1	73.4	70.8
Tripura	0	0.6	12.3	20.4	34.7	56.7	76.3	70.2	94.1	90.3	97.6	99.6	59.5
Uttaranchal	28.5	19.2	47.7	42.3	58.7	77.5	78.6	76.8	87.6	95.7	97.5	80	72.7
Uttar Pradesh	13.8	17.6	34.5	52.7	54.5	57.4	72.7	80.9	81.8	90.5	89.4	87.8	60.6
West Bengal	3.8	5.5	8.6	29.8	30.1	46	53.3	70.1	77.3	85.6	92.6	93.6	57.3
Andaman Nicobar	0	0	0	89.4	87.2	79.7	89.2	83.5	87	78.8	95.1	94.2	87.3
Chandigarh	74.1	100	100	99.1	90.8	94.7	100	86.1	97.6	100	100	95.5	96.2
Dadar Nager Haweli	0	0	0	39.4	70	85.9	100	81.4	82.2	77.2	100	98.2	76.6
Daman and Diu	0	0	0	100	67.1	100	100	100	100	95	79.7	41.4	88.5
Lakshadweep	45.2	0	13.1	12.4	33.7	11.7	42.2	58.8	64.6	61.5	84.6	88.8	57.4
Pondicheri	15	29.3	36.6	62.4	68.2	62.9	79	58.1	79	75.5	71.4	77	67.1
India	12	18.4	32.4	46.8	57.5	65.7	74.6	83.1	84.5	86.7	88.5	83.8	67.3

a: MPCE is monthly per capita expenditure (in Rs). Range of MPCE for classes in urban areas are 1:0-335, 2: 335-395 3: 395-485, 4: 485-580, 5: 580-675, 6: 675-790 7: 790-930 8: 930-1100 9: 1100-1380 10: 1380-1880 11: 1880-2540, 12:2540 or more

b: MES is Modern Energy Services. A household is defined as having access to MES for cooking if that household's major source of cooking is either Kerosene or LPG. Use of electricity in India for cooking is almost nil therefore we avoid including electricity in definition of MES for cooking. While access to MES for lighting is defined by only electricity

Source: NSSO (2007)

Table A-8: MPCE^a class wise access to MES^b for lighting in rural areas in 2003-04 (in %)

MPCE Class	1	2	3	4	5	6	7	8	9	10	11	12	All
Andhra Pradesh	69.9	68.4	72.1	77.5	75.6	79	83.7	88.1	87.4	92.5	95.4	96.2	84
Arunachal Pradesh	0	23.7	39.7	33.3	32	46.2	59.1	39.9	51	63.7	74.3	77.8	59.1
Assam	11.8	12.4	10	11	12.5	16.6	25	28.2	34.1	54.4	76.6	80.9	30.3
Bihar	5.4	1.8	2.9	7.1	8.2	8.8	12.9	18.2	18	20	28.9	25.9	10.1
Chattisgarh	37.9	44.2	45.3	66.5	67	78.2	76.4	67.9	72.6	81.5	65.6	90.9	61.9
Delhi	0	0	0	0	100	100	100	100	100	100	100	100	100
Goa	0	0	100	100	100	100	100	99.4	100	100	100	100	99.9
Gujrat	49.3	50.2	50.7	65.9	66.2	71.4	74.7	88	84.3	93.7	91.8	99.3	80.2
Haryana	41.7	55.2	58.2	61.6	78.2	75.8	80.6	89.8	92.3	92.4	97.8	99.1	89.7
Himachal	38.9	100	93.8	92.6	94.9	95.2	97.1	98.8	97.2	99.3	98	98.9	97.6
Jammu and Kashmir	100	100	91.9	91.6	87.5	89.1	93.1	96.8	97.5	98.5	99.5	100	97.3
Jharkhand	5.2	14	15.2	19.3	19.9	23.6	32.2	35.4	43.7	43.4	60.8	80.1	26
Karnataka	82.3	68	82.2	84	84.9	85.1	85.1	86.9	91	90.5	95.6	97.5	86.2
Kerala	56.7	68.7	53.1	58.2	67.9	61.7	66.8	70.5	72	81.2	84.7	91.3	79.4
Madhya Pradesh	41.1	52.4	57.5	68.7	73	76.8	78	78.7	77.9	86.4	89.2	89.8	69.2
Maharashtra	42.9	53.6	50.1	67.3	72.4	74.5	79.7	78.9	86.6	90.9	89.3	97.2	76.2
Manipur	100	100	97.6	70.7	60.1	72	80.5	88.9	92.2	92.6	97.6	97.7	87.3
Meghala	0	0	0	25.2	17.7	21.6	36.1	40.8	54.7	58.7	70.3	75.3	51.3
Mizoram	0	0	25.6	84	95.1	79.9	67.3	64.6	86.4	87.7	92.7	96.1	85.4
Nagaland	0	0	0	0	0	22.5	100	93.8	96.5	96.5	100	100	97.4
Orissa	4.2	11.6	19.9	24	30.8	37.7	52.4	57.1	70.2	77.3	83.9	81.5	31.5
Punjab	100	60.5	84.3	90.5	87.1	91.1	95.1	90.9	95.4	97.5	98	99.1	95.5
Rajasthan	3.1	19	17.6	20.7	31.4	33.9	38.4	48.8	58.9	62.6	75	73.5	47.2
Sikkim	100	0	79.8	89.1	83.7	85.3	96.3	92	96.3	95.9	97.2	100	94.1
Tamil Nadu	80.2	79.2	78.8	73.6	79.7	84.4	86	83.5	90.8	89.1	89.2	94.7	84.6
Tripura	32.6	39.6	49.9	48.9	64.6	67.9	75.6	83	78.5	86	89.1	98.2	69.1
Uttaranchal	60.4	0	45.3	49	51.1	59	59.3	62.3	72.3	78.3	85.4	94.5	67.3
Uttar Pradesh	7.2	8.7	12.5	14.3	17.8	21.4	23	26.7	27.2	37.1	41.2	50.8	24
West Bengal	9.1	11.9	14.8	17.9	21.2	21.9	31.3	34.7	41.4	52.2	69.7	71.9	34.2
Andaman Nicobar	0	0	0	0	63.7	61.1	66	70.4	53.2	78.6	93.8	95.7	81.5
Chandigarh	0	0	0	100	0	100	100	53.3	100	100	100	100	95.9
Dadar Nager Haweli	100	48	81.1	80.5	79.9	83.4	98.2	97.2	98	99.7	76.8	100	89.4
Daman and Diu	0	0	0	0	0	100	100	0	100	100	100	100	100
Lakshadweep	0	0	0	100	100	0	100	100	100	100	100	98.4	99.2
Pondicheri	0	61.6	88.7	66.5	100	85.6	100	89.8	93.9	88.6	87.3	88.4	87.3
India	28.4	30.9	35	40.3	45.2	49.2	53.2	58.5	63.4	72.3	80.2	85.8	54.9

a: MPCE is monthly Per Capita Expenditure (in Rs). Range of MPCE for classes in rural areas are 1: Rs. 0-235, 2: Rs. 235-270, 3: Rs. 270-320, 4: Rs. 320-365, 5: Rs. 365-410, 6: Rs.410-455, 7: Rs. 455-510, 8: Rs. 510-580, 9: 580-690, 10: Rs.690-890, 11: Rs. 890-1155, 12: Rs. 1155 or more.

b: MES is Modern Energy Services. A household is defined as having access to MES for cooking if that household's major source of cooking is either Kerosene or LPG. Use of electricity in India for cooking is almost nil therefore we avoid including electricity in definition of MES for cooking. While access to MES for lighting is defined by only electricity

Source: NSSO (2007)

Table A-9: MPCE^a class wise access to MES^b for lighting in urban areas in 2003-04 (in %)

MPCE Class	1	2	3	4	5	6	7	8	9	10	11	12	All
Andhra Pradesh	73.7	85.7	90.2	95.7	93.1	93.7	95.7	98.5	97.8	99.9	100	99	94.9
Arunachal Pradesh	100	100	88	85.8	95.4	96	98.2	98	99.4	96.5	100	100	95.7
Assam	36.8	44.9	58.6	49.8	88.3	66.4	98.5	98.6	99	98.9	100	100	86.2
Bihar	25.2	45.6	65.3	71.9	75.5	78.7	88.7	97.3	96.5	93.8	96	100	73.8
Chattisgarh	74.7	73.9	87.2	92.7	98.6	97.3	100	98.8	100	99.9	98.8	100	93.2
Delhi	74.1	100	91.8	98.8	96.7	97	99	99.6	99.9	100	99.5	100	98.9
Goa	100	100	89	96.2	95	93.4	97.1	100	100	100	100	100	97.9
Gujrat	87.3	55.1	84	94.2	91.5	96.1	96.3	99.5	98.8	99.4	95.8	100	95.8
Haryana	65	83.3	79.2	91.7	98.3	96.1	99.8	95.2	96.1	99.9	100	100	95.5
Himachal	100	100	100	82.6	62.2	100	69.2	100	77.1	99.9	99.6	95.1	87.7
Jammu and Kashmir	100	100	100	100	100	98.1	84.5	99.8	98.5	100	100	100	97.1
Jharkhand	50	70.5	66.7	89.7	79.7	86.8	87.9	94.1	98.7	93.7	99.9	100	87.1
Karnataka	72.1	87.1	94.2	93.1	97.8	97.3	99.4	94.9	99.1	98.5	100	100	95.9
Kerala	71.4	84.1	79.6	90.2	92	88.1	96	92.2	94	97.8	96.3	99	93
Madhya Pradesh	82.3	88.5	94.4	97.8	98.3	98.7	98.7	100	99.2	99.4	99.2	100	96.4
Maharashtra	80.8	80	88.7	92.1	93.8	94.9	95.9	98.3	97.6	99.5	100	100	95.7
Manipur	100	95.1	96.3	92	97.4	96.5	88.7	98.8	98.6	100	100	100	95.1
Meghala	0	100	92.4	89.2	97.9	95.7	98.1	100	97.9	100	100	100	98.5
Mizoram	0	100	100	92.5	100	99.5	100	100	99.8	99.5	100	100	99.7
Nagaland	0	0	0	100	87.8	100	100	98.8	99.2	100	100	100	99.4
Orissa	37.9	51.1	74.1	76.7	94.9	98.5	96.7	98.8	99.7	98.9	100	98.8	81.3
Punjab	91.9	100	91.8	95.9	97.8	99.5	99.9	99.9	97.3	100	98.7	90.6	97.8
Rajasthan	63.3	43.5	77.5	82.1	92	96.3	91.1	99.3	99.4	99.2	100	99.9	89.5
Sikkim	100	24	100	100	100	84.7	100	100	100	100	100	100	99
Tamil Nadu	74.8	86	84.5	89	91.2	97.2	95.3	96.6	99.5	99.3	99.9	100	94.6
Tripura	58.5	50.8	77.3	83.1	97.3	98.6	93.5	99.3	99.1	96.5	100	100	91.7
Uttaranchal	75.5	73.4	94	84	85.7	99.4	95.8	99.3	99.6	92.9	100	100	94.3
Uttar Pradesh	48.8	68.6	70.5	82	83.3	86.6	90.8	93	95	98.5	96.9	98.1	84.4
West Bengal	40.1	54.8	66.1	81.2	79.8	85.5	86.1	95.6	97	98.3	99.9	99.5	87.3
Andaman Nicobar	0	0	0	90.9	97.7	91.7	99.7	100	99.9	100	100	100	99.3
Chandigarh	100	0	100	100	91.2	94.9	98.2	100	100	99.2	100	100	98.8
Dadar Nager Haweli	0	50	100	100	100	100	100	100	100	100	100	100	97.4
Daman and Diu	0	0	100	100	100	100	100	100	100	100	100	100	100
Lakshadweep	100	100	100	100	100	100	100	100	100	100	100	100	100
Pondicheri	77.2	80.1	92.1	97.1	100	93.2	96.2	93.2	100	99.7	91.1	100	96.3
India	62.1	71.8	81.4	88.3	90.8	93.2	94.6	97.2	97.8	99	99.1	99.4	92.3

a: MPCE is monthly Per Capita Expenditure (in Rs). Range of MPCE for classes in urban areas are 1:0-335, 2: 335-395 3: 395-485, 4: 485-580, 5: 580-675, 6: 675-790 7: 790-930 8: 930-1100 9: 1100-1380 10: 1380-1880 11: 1880-2540, 12:2540 or more

b: MES is Modern Energy Services. A household is defined as having access to MES for cooking if that household's major source of cooking is either Kerosene or LPG. Use of electricity in India for cooking is almost nil therefore we avoid including electricity in definition of MES for cooking. While access to MES for lighting is defined by only electricity

Source: NSSO (2007)

Table A-10: Per capita net state domestic product (NSDP) and status of electrification of households, villages in 2001 (%)

	Per capita NSDP at 2003-04 Prices	Percentage of rural households electrified	Percentage of urban households electrified	Percentage of total households electrified	Percentage villages electrified	Percentage of households electrified in an electrified village
Bihar	3340	5.13	59.28	10.25	71.02	3.64
Jharkhand	6587	9.99	75.61	24.3	-	-
Assam	6122	16.54	74.29	24.9	77.05	12.74
Orissa	5803	19.35	74.08	26.91	74.98	14.51
Uttar Pradesh	5603	19.84	79.92	31.9	79.44	15.76
West Bengal	10380	20.27	79.56	37.45	78.17	15.85
Meghalaya	9905	30.26	88.15	42.74	46.52	14.08
Tripura	9664	31.75	86.36	41.84	95.09	30.19
Rajasthan	8763	44.02	89.61	54.69	96.3	42.39
Mizoram	10505	44.14	94.42	69.63	99	43.69
Arunachal Pradesh	9331	44.53	89.42	54.69	60.45	26.92
Chhatisgarh	7400	46.11	82.85	53.1	91.66	42.27
Uttranchal	8154	50.35	90.92	60.33	79.64	40.1
Manipur	7445	52.53	81.99	60.04	91.7	48.17
Nagaland	11674	56.88	90.33	63.6	99.67	56.7
Andhra Pradesh	10639	59.65	89.99	67.17	99.92	59.61
Madhya Pradesh	7708	62.32	92.26	69.98	97.07	60.49
Maharashtra	14656	65.17	94.28	77.49	99.84	65.06
Kerala	10762	65.53	84.34	70.24	100	65.53
Andaman & Nicobar	15679	68.09	95.22	76.78	-	-
Tamil Nadu	12484	71.18	88	78.18	100	71.18
Gujrat	13321	72.12	93.39	80.41	99.51	71.76
Karnatka	11857	72.16	90.53	78.55	98.87	71.34
Jammu & Kashmir	7552	74.77	97.95	80.6	97.5	72.9
Sikkim	10415	75.02	97.09	77.76	90.6	67.97
Haryana	14228	78.5	92.94	82.9	100	78.5
Pondicherry	22827	81.01	91.41	87.81	-	-
Dadar & Nagar Haweli	-	82.63	95.84	85.99	-	-
Delhi	26516	85.5	93.38	92.86	-	-
Punjab	15308	89.46	96.49	91.91	100	89.46
Goa	27603	92.43	94.73	93.57	100	92.43
Himachal Pradesh	11326	94.48	97.38	94.82	99.35	93.87
Chandigarh	-	97.41	96.7	96.77	-	-
Daman & Diu	-	97.46	98.31	97.76	-	-
Lakshadweep	-	99.74	99.67	99.71	-	-
Total	10754	43.52	87.59	55.85	86.65	37.71

Source: Reserve Bank of India¹, Planning commission (2002), Government of India (2001)

Table A-11: Details of the thermal plants and their operating margins as predicted by the model in chapter 5

Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
IPGCL	Inder Prasath Unit -2,3,4,	Steam	187.5	1332.86	4.79
IPGCL	Inder Prasath Unit - 5	Steam	60	1332.86	4.79
IPGCL	Rajghat Power Project Delhi	Steam	135	1267.36	4.89
HGPCorporation	Faridabad Thermal Power Project	Steam	180	1499.47	4.60
HGPCorporation	Tau Devi Lal TPS	Steam	500	903.35	6.27
HGPCorporation	Panipat Thermal Power Station-I	Steam	440	1044.50	5.43
HGPCorporation	Panipat Thermal Power Station-II	Steam	420	1044.50	5.43
NTPC	Badarpur Thermal Power Station	Steam	300	998.58	5.64
NTPC	Badarpur Thermal Power Station	Steam	420	998.58	5.64
NTPC	National Capital Steam Power Station , Dadri	Steam	840	890	6.39
NTPC	RihandThermal Power Station	Steam	1500	890	6.39
NTPC	Singrauli Thermal Power Station	Steam	1000	890	6.39
NTPC	Singrauli Thermal Power Station	Steam	1000	890	6.39
NTPC	Tanda Thermal Power Station	Steam	440	1014.6	5.56
NTPC	Unchahar Thermal Power Station	Steam	840	890	6.39
PSEB	Guru Nanak Dev Thermal Power Station	Steam	440	1035.25	5.47
PSEB	Guru Hargobind Thermal Power Station	Steam	420	856.89	6.68
PSEB	Roper Thermal Power Station	Steam	1260	904.60	6.26
RRVUNL	Kota Thermal Power Station	Steam	220	932.72	6.03
RRVUNL	Kota Thermal Power Station	Steam	630	932.72	6.03
RRVUNL	KOTA Thermal Power Station Stage IV Unit VI	STEAM	195	932.72	6.03
RRVUNL	Suratgarh Thermal Power Station	Steam	1000	886.44	6.42
RRVUNL	Suratgarh Thermal Power Station Stage-3	STEAM	250	886.44	6.42
UPRVUNL	Anpara Thermal Power Station Stage-I	Steam	630	935.57	6.01
UPRVUNL	Anpara Thermal Power Station Stage-II	Steam	1000	935.57	6.01
UPRVUNL	Harduaganj Thermal Power Station	Steam	100	1316.13	4.81
UPRVUNL	Harduaganj Thermal Power Station	Steam	240	1316.13	4.81
UPRVUNL	Harduaganj Thermal Power Station	Steam	110	1316.13	4.81
UPRVUNL	Obra Thermal Power Station	Steam	250	1093.99	5.26
UPRVUNL	Obra Thermal Power Station	Steam	300	1093.99	5.26
UPRVUNL	Obra Thermal Power Station	Steam	1000	1093.99	5.26
UPRVUNL	Panki Thermal Power Station	Steam	32	1134.22	5.15
UPRVUNL	Panki Thermal Power Station	Steam	220	1134.22	5.15
UPRVUNL	Paricha Thermal Power Station	Steam	220	1134.22	5.15
ChSEB	Korba Thermal Power Station(East)	Steam	200	1048.78	5.41
ChSEB	Korba Thermal Power Station(East)	Steam	240	1048.78	5.41
ChSEB	Korba Thermal Power Station(West)	Steam	840	944.47	5.94
AECO	Sabarmati Thermal Power Station(Ahmed)	Steam	60	1345.68	4.78
AECO	Sabarmati Thermal Power Station(Ahmed)	Steam	330	948.27	5.92
AECO	Sabarmati Thermal Power Station(Ahmed)	Steam	100	765.4	7.48
G.S.E.B.	Dhuvaran Thermal Power Station	Steam	254	936.636	6.00
G.S.E.B.	Dhuvaran Thermal Power Station	Steam	280	936.636	6.00
G.S.E.B.	Gandhi Nagar Thermal Power Station	Steam	240	914.208	6.18
G.S.E.B.	Gandhi Nagar Thermal Power Station	Steam	420	914.208	6.18
G.S.E.B.	Kutch Lignite Thermal Power Station	Steam	140	962.29	5.84
G.S.E.B.	Kutch Lignite Thermal Power Station	Steam	75	962.29	5.84
G.S.E.B.	Sikka Thermal Power Station	Steam	240	1041.66	5.44
G.S.E.B.	Ukai Thermal Power Station	Steam	240	977.58	5.75

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
G.S.E.B.	Ukai Thermal Power Station	Steam	400	977.58	5.75
G.S.E.B.	Ukai Thermal Power Station	Steam	210	977.58	5.75
G.S.E.B.	Wonakabori Thermal Power Station	Steam	1260	911.72	6.20
GIPCL	Surat Lignite Thermal Power Station	Steam	250	976.15	5.76
GSECL	Gandhi Nagar Thermal Power Station (Unit-5)	Steam	210	959.06	5.85
GSECL	Wanakabri Thermal Power Station	Steam	210	983.63	5.72
GMD Corpn.	Akrimopa Thermal Power Station (Lignite)	Steam	125	986.12	5.70
MPSEB	Amarkantak Thermal Power Station	Steam	60	1394.81	4.72
MPSEB	Amarkantak Thermal Power Station	Steam	240	1394.81	4.72
MPSEB	Birsinghpur Thermal Power Station (also sanjay G)	Steam	630	1045.57	5.43
MPSEB	Sanjay Gandhi Thermal Power Station Extn.	Steam	210	1007.12	5.60
MPSEB	Satpura Thermal Power Station Extn.	Steam	200	1170.53	5.06
MPSEB	Satpura Thermal Power Station Extn.	Steam	630	1170.53	5.06
Satpura (M.P.)	Satpura Thermal Power Station (M.P.)	Steam	312.5	1170.53	5.06
BSES	Dhanu Thermal Power Station	Steam	500	818.09	7.02
MSEB	Bhusawal Thermal Power Station	Steam	62.5	938.06	5.99
MSEB	Bhusawal Thermal Power Station	Steam	420	938.06	5.99
MSEB	Chandrapur Thermal Power Station	Steam	840	929.52	6.05
MSEB	Chandrapur Thermal Power Station	Steam	1500	929.52	6.05
MSEB	Khaperkheda Thermal Power Station	Steam	840	925.60	6.08
MSEB	Koradi Thermal Power Station	Steam	480	1061.24	5.37
MSEB	Koradi Thermal Power Station	Steam	200	1061.24	5.37
MSEB	Koradi Thermal Power Station	Steam	420	1061.24	5.37
MSEB	Nasik Thermal Power Station	Steam	280	943.76	5.95
MSEB	Nasik Thermal Power Station	Steam	630	943.76	5.95
MSEB	Paras Thermal Power Station	Steam	62.5	1138.49	5.14
MSEB	Parli Thermal Power Station	Steam	60	948.74	5.92
MSEB	Parli Thermal Power Station	Steam	630	948.74	5.92
TATA	Trombay Thermal Power Station	Steam	150	849.77	6.74
TATA	Trombay Thermal Power Station	Steam	1000	849.77	6.74
NTPC	Korba Thermal Power Station	Steam	600	907.80	6.23
NTPC	Korba Thermal Power Station	Steam	1500	907.80	6.23
NTPC	Vindhyachal Thermal Power Station	Steam	1260	872.20	6.54
NTPC	Vindhyachal Thermal Power Station	Steam	1000	872.20	6.54
APGENCO	Kothagudam Thermal Power Station	Steam	500	946.96	5.93
APGENCO	Kothagudam Thermal Power Station A	Steam	240	823.07	6.97
APGENCO	Kothagudam Thermal Power Station B	Steam	220	823.07	6.97
APGENCO	Kothagudam Thermal Power Station C	Steam	220	823.07	6.97
APGENCO	Nellore Thermal Power Station	Steam	30	1158.78	5.09
APGENCO	Ramagundam Thermal Power Station B	Steam	62.5	1004.63	5.61
APGENCO	Royal Seema Thermal Power Station	Steam	420	828.41	6.93
APGENCO	Vijayawada Thermal Power Station	Steam	1260	855.11	6.69
Jindal Pco	Torangallu Thermal Power Station	Steam	260	847.99	6.75
KPCL	Raichur Thermal Power Station	Steam	1260	893.20	6.36
KPCL	RAICHUR Thermal Power Station	Steam	210	893.20	6.36
NEYVELI LIGNITE	NAVELI Thermal Power Station (Ext) Unit II	Steam	210	791.43	7.25
NEYVELI LIGNITE	NAVELI Thermal Power Station (Fst) Unit O	Steam	210	791.43	7.25
NEYVELI LIGNITE	Neyveli Thermal Power Station I	Steam	300	1140.57	5.13
NEYVELI LIGNITE	Neyveli Thermal Power Station I	Steam	300	1140.57	5.13
NEYVELI LIGNITE	Neyveli Thermal Power Station II	Steam	1470	822.29	6.98
NTPC	Ramagundam Thermal Power Station	Steam	600	907.80	6.23

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
NTPC	Ramagundm Thermal Power Station	Steam	2000	607.80	6.23
NTPC	SIMADRI Thermal Power Station	Steam	500	872.20	6.54
NTPC	Simadri Thermal Power Station Unit - 2	Steam	500	872.20	6.54
at CMS Electric Company	Neyveli Thermal Power Station	Steam	250	1024.57	5.52
Tn SEB	Ennore Thermal Power Station	Steam	120	1178.00	5.05
Tn SEB	Ennore Thermal Power Station	Steam	330	1178.00	5.05
Tn SEB	Mettur Thermal Power Station	Steam	840	903.17	6.27
Tn SEB	North Madras Thermal Power Station	Steam	630	868.64	6.57
Tn SEB	Tuticorin Thermal Power Station	Steam	1050	890.71	6.38
BSEB	Barauni Thermal Power Station	Steam	100	1891.78	4.26
BSEB	Barauni Thermal Power Station	Steam	220	1891.78	4.26
BSEB	Muzaffarpur Thermal Power Station	Steam	220	1909.58	4.24
BSEB	Patna Thermal Power Station	Steam	3	1909.58	4.24
BSEB	Patna Thermal Power Station	Steam	3	1909.58	4.24
BSEB	Patna Thermal Power Station	Steam	7.5	1909.58	4.24
D.V.C	Bokaro Thermal Power Station A	Steam	172.5	1197.23	5.01
D.V.C	Bokaro Thermal Power Station A	Steam	75	1197.23	5.01
D.V.C	Bokaro Thermal Power Station B	Steam	630	1197.23	5.01
D.V.C	Chandrapur Thermal Power Station	Steam	360	1171.95	5.06
D.V.C	Chandrapur Thermal Power Station	Steam	420	1171.95	5.06
D.V.C	Durgapur Thermal Power Station	Steam	140	1305.45	4.83
D.V.C	Durgapur Thermal Power Station	Steam	210	1305.45	4.83
D.V.C	Mejia Thermal Power Station	Steam	840	1305.45	4.83
NTPC	Farakka Thermal Power Station	Steam	600	878.88	6.48
NTPC	Farakka Thermal Power Station	Steam	1000	878.88	6.48
NTPC	Kahalgaon Thermal Power Station	Steam	840	890.00	6.39
NTPC	TAALCHAR Thermal Power Station	Steam	500	890.00	6.39
NTPC	TALCHAR Thermal Power Station	Steam	2000	872.20	6.54
NTPC	Talchar Thermal Power Station Unit - 3, Stage-2	Steam	500	872.20	6.54
NTPC	Talcher Thermal Power Station Old	Steam	250	890.00	6.39
NTPC	Talcher Thermal Power Station Old	Steam	220	890.00	6.39
Jamshedpur	Jojebera Thermal Power Station(Pvt.)	Steam	240	912.07	6.20
Jh.S.E.B	Patratu Thermal Power Station	Steam	200	1505.88	4.59
Jh.S.E.B	Patratu Thermal Power Station	Steam	200	1505.88	4.59
Jh.S.E.B	Patratu Thermal Power Station	Steam	440	1505.88	4.59
Tenughat P.Co.	Tenughat Thermal Power Station	Steam	420	1505.88	4.59
OPGCL	I.B.Valley Thermal Power Station	Steam	420	863.66	6.62
C.E.S.C.	Budge-Budge Thermal Power Station	Steam	500	943.40	5.95
C.E.S.C.	New Cossipore Thermal Power Station	Steam	60	1824.50	4.32
C.E.S.C.	New Cossipore Thermal Power Station	Steam	100	1824.50	4.32
C.E.S.C.	Southern Replacement Thermal Power Station	Steam	135	1040.59	5.45
C.E.S.C.	Titagarh Thermal Power Station	Steam	240	1050.91	5.41
D.P.L.	D.P.L. Thermal Power Station	Steam	60	1181.92	5.04
D.P.L.	D.P.L. Thermal Power Station	Steam	225	1181.92	5.04
D.P.L.	D.P.L. Thermal Power Station	Steam	110	1181.92	5.04
Dishergarh	Chinakuri Thermal Power Station	Steam	20	1384.13	4.73
Dishergarh	Seebpore Thermal Power Station	Steam	1.5	2153.80	4.08
Dishergarh	Seebpore Thermal Power Station	Steam	1.875	2153.80	4.08
Dishergarh	Seebpore Thermal Power Station	Steam	2	2153.80	4.08
Dishergarh	Seebpore Thermal Power Station	Steam	3	967.25	5.81
WBPDCL	Bakreswar Thermal Power Station (WBPDCL)	Steam	630	943.40	5.95

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
WBPDC	Bandel Thermal Power Station(WBPDC)	Steam	330	1013.02	5.57
WBPDC	Bandel Thermal Power Station(WBPDC)	Steam	210	1013.02	5.57
WBPDC	Kolaghat Thermal Power Station(WBPDC)	Steam	1260	975.44	5.76
WBPDC	Santalidih Thermal Power Station	Steam	480	1044.50	5.43
A.S.E.B	Namrup Thermal Power Station	Steam	30	1162.70	5.08
Pr PCL	Pragati Power Project	Gas	180	865.05	6.61
Pr PCL	Pragati Power Project	Gas	102	865.05	6.61
Pr PCL	Pragati Power Project	Gas	104.6	583.74	9.07
Pr PCL	Pragati Power Project	Gas	104.6	583.74	9.07
Pr PCL	Pragati Power Project	Gas	121.2	583.74	9.07
J&K PDC	Pampore Gas Power Station	Gas	175	949.00	5.91
NTPC	Anta Gas Power Station	Gas	264	573.96	9.16
NTPC	Anta Gas Power Station	Gas	149	573.96	9.16
NTPC	Auriaya Gas Power Station	Gas	204	679.31	8.23
NTPC	Auriaya Gas Power Station	Gas	448	679.31	8.23
NTPC	Dadri Gas Power Station	Gas	524	647.25	8.51
NTPC	Dadri Gas Power Station	Gas	293	647.25	8.51
NTPC	Faridabad CCGT	Gas	286	622.92	8.73
NTPC	Faridabad CCGT	Gas	144	622.92	8.73
RRVUNL	KOTA Gas Power Station Stage St-II	Gas	37.5	793.80	7.23
RRVUNL	Rangarh Gas Power Station	Gas	3	793.80	7.23
RRVUNL	Rangarh Gas Power Station	Gas	35.5	793.80	7.23
RRVUNL	Rangarh Gas Power Station Stage-II	Gas	37.8	793.80	7.23
Relance Salgaocar	Salgaocar Gas Power Station	Gas	48	736.97	7.73
AECO	Vatva Gas Power Station(Ahmed)	Gas	66	668.09	8.33
AECO	Vatva Gas Power Station(Ahmed)	Gas	34	668.09	8.33
ESSAR	Essar Gas Power Station	Gas	330	668.54	8.33
ESSAR	Essar Gas Power Station	Gas	185	668.54	8.33
G.S.E.B.	Dhuvaran Gas Power Station	Gas	27	1060.56	5.37
G.S.E.G	Haziira Gas Power Station	Gas	104	1060.56	5.37
G.S.E.G	Haziira Gas Power Station	Gas	52.1	1060.56	5.37
GIPCL	Baroda Gas Power Station	Gas	54	1060.56	5.37
GIPCL	Baroda Gas Power Station	Gas	106	1060.56	5.37
GSECL	Dhuvaran Gas Power Station	Gas	38.77	923.71	6.10
GSECL	Dhuvaran Gas Power Station	Gas	67.85	923.71	6.10
GSECL	Utran Gas Power Station	Gas	99	653.59	8.46
GSECL	Utran Gas Power Station	Gas	45	653.59	8.46
Gujarat Peguthan(Gas)	Peguthan Gas Power Station	Gas	405	638.88	8.59
Gujarat Peguthan(Gas)	Peguthan Gas Power Station	Gas	250	638.88	8.59
Dabhol Pc	Dabhol Gas Power Station	Gas	480	648.00	8.51
Dabhol Pc	Dabhol Gas Power Station	Gas	260	648.00	8.51
MSEB	Uran Gas Power Station	Gas	240	748.97	7.62
MSEB	Uran Gas Power Station	Gas	432	748.97	7.62
MSEB	Uran Gas Power Station	Gas	240	748.97	7.62
TATA	Trombay Gas Power Station	Gas	60	648.00	8.51
TATA	Trombay Gas Power Station	Gas	120	648.00	8.51
NTPC	Gandhar Gas Power Station	Gas	393	636.70	8.61
NTPC	Gandhar Gas Power Station	Gas	255	636.70	8.61
NTPC	Kawas Gas Power Station	Gas	424	646.61	8.52
NTPC	Kawas Gas Power Station	Gas	220	646.61	8.52
APGPCOR	Vijeswaram(APGPCOR.)	Gas	99	668.09	8.33

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
BSES	Peddapuram Gas Power Station	Gas	142	654.97	8.45
BSES	Peddapuram Gas Power Station	Gas	78	654.97	8.45
GVKInd	Jegurupadu Gas Power Station	Gas	158.4	671.95	8.30
GVKInd	Jegurupadu Gas Power Station	Gas	77	671.95	8.30
Kondapalli Co	Kondapalli Gas Power Station	Gas	224	637.88	8.60
Kondapalli Co	Kondapalli Gas Power Station	Gas	126	637.88	8.60
SPGL (Spectrum)	Godavari Gas Power Station	Gas	141	881.00	6.47
SPGL (Spectrum)	Godavari Gas Power Station	Gas	67	881.00	6.47
Tanir Bavi Power Co.	Tanir Bavi Gas Power Station	Gas	170	672.30	8.29
Tanir Bavi Power Co.	Tanir Bavi Gas Power Station	Gas	50	672.30	8.29
BSES	Cochin Gas Power Station	Gas	39	602.01	8.91
BSES	Cochin Gas Power Station	Gas	135	602.01	8.91
PPCL (Gas)	Karaikal Gas Power Station	Gas	9.6	803.77	7.14
PPCL (Gas)	Karaikal Gas Power Station	Gas	22.9	803.77	7.14
NTPC	Kayamkulam Gas Power Station	Gas	230.6	641.59	8.56
NTPC	Kayamkulam Gas Power Station	Gas	119.4	641.59	8.56
KUTTALAM CCPP	KUTTALAM Gas Power Station	GAS	37	972.75	5.78
KUTTALAM CCPP	KUTTALAM Gas Power Station unit1	GAS	63	972.75	5.78
PPN Power Co.Ltd.	Pillaiperumalanallur Gas Power Station	Gas	225	668.09	8.33
PPN Power Co.Ltd.	Pillaiperumalanallur Gas Power Station (ST)	Gas	105.5	668.09	8.33
Aban Power Co.Ltd.,	Karuppur CCGT	Gas	70	652.21	8.47
Tn SEB	Basin Bridge Gas Power Station	Gas	120	1129.68	5.16
Tn SEB	Kovikalappal Gas Power Station	Gas	38	643.41	8.55
Tn SEB	Kovikalappal Gas Power Station	Gas	69	643.41	8.55
Tn SEB	Narimanam Gas Power Station	Gas	10	949.00	5.91
Tn SEB	VALUTHUR Gas Power Station	Gas	34	682.69	8.20
Tn SEB	VALUTHUR Gas Power Station	Gas	60	682.69	8.20
D.V.C	Maithon Gas Power Station	Gas	90	1371.14	4.75
WSEB	Haldia Gas Power Station	Gas	40	949.00	5.91
WSEB	Kasba Gas Power Station	Gas	40	949.00	5.91
WSEB	Siliguri Gas Power Station	Gas	20	949.00	5.91
A.S.E.B	Galoki(Mobile gas TG)	Gas	9	949.00	5.91
A.S.E.B	Kothalguri Gas Power Station(Mobile)	Gas	12	949.00	5.91
A.S.E.B	Lakwa Gas Power Station	Gas	60	1327.96	4.80
A.S.E.B	Lakwa Gas Power Station	Gas	60	1327.96	4.80
A.S.E.B	Namrup Gas Power Station	Gas	12.5	1113.51	5.21
A.S.E.B	Namrup Gas Power Station	Gas	69	1113.51	5.21
A.S.E.B	Wasteheat Gas Power Station(Namrup)	Gas	22	668.09	8.33
DLF Power Co.	Adamtilla Gas Power Station	Gas	6	668.09	8.33
DLF Power Co.	Adamtilla Gas Power Station	Gas	3	668.09	8.33
DLF Power Co.	Baskhandi Gas Power Station(DLF Power Co.)	Gas	10.5	668.09	8.33
DLF Power Co.	Baskhandi Gas Power Station(DLF Power Co.)	Gas	5	668.09	8.33
GOVT (Chandigarh)	Govt. Power Project	Diesel	2	6160	1.45
HGPCorporation	Ambala Power Project (Stage -I)	Diesel	0.218	6160	1.45
HGPCorporation	Ambala Power Project (Stage -II)	Diesel	0.3	6160	1.45
HGPCorporation	Ambala Power Project (Stage -III)	Diesel	0.4	6160	1.45
HGPCorporation	Ambala Power Project (Stage -IV)	Diesel	1	6160	1.45
HGPCorporation	Faridabad Diesel Power Project	Diesel	2	6160	1.45
HpSEB	Keylong Diesel Power Station	Diesel	0.13	6160	1.45
J&K PDC	Bemina Diesel Power Station	Diesel	5	6160	1.45
J & K PDC	Karnah Diesel Power Station	Diesel	0.06	6160	1.45

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
J&K PDC	Leh Diesel Power Station	Diesel	2.18	6160	1.45
J&K PDC	Upper Sindh Diesel Power Station	Diesel	1.7	6160	1.45
G.S.E.B.	Bhuj Diesel Power Station	Diesel	0.07	6160	1.45
G.S.E.B.	Bhuj Diesel Power Station	Diesel	0.3	6160	1.45
G.S.E.B.	Bhuj Diesel Power Station	Diesel	0.3	6160	1.45
G.S.E.B.	Bhuj Diesel Power Station	Diesel	8.4	6160	1.45
G.S.E.B.	Dhuvaran Diesel Power Station	Diesel	0.6	6160	1.45
G.S.E.B.	Dwarka Diesel Power Station	Diesel	0.36	6160	1.45
G.S.E.B.	Gandhi Nagar Diesel Power Station	Diesel	0.8	6160	1.45
G.S.E.B.	Mahuva Diesel Power Station	Diesel	1.28	6160	1.45
G.S.E.B.	Mandavi Diesel Power Station	Diesel	0.15	6160	1.45
G.S.E.B.	Mandavi Diesel Power Station	Diesel	1.12	6160	1.45
G.S.E.B.	Pandhana Diesel Power Station	Diesel	1.02	6160	1.45
G.S.E.B.	Uran Diesel Power Station	Diesel	1.28	6160	1.45
G.S.E.B.	Wanakbori Diesel Power Station	Diesel	1.6	6160	1.45
Surat E Co.	Surat Power Generating Co.	Diesel	0.2	6160	1.45
L.V.S. Power Corpn.	L.V.S.Diesel Power Station	Diesel	36.8	6160	1.45
Shrirayaseeme Ltd.	Bellary Diesel Power Station	Diesel	25.2	6160	1.45
TATA	Belguam Diesel Power Station (Tata)	Diesel	81.3	6160	1.45
VVNL	Yelahanka Diesel Power Station	Diesel	127.92	6160	1.45
Kasargode	Kasargode Diesel Power Station(Private)	Diesel	21.84	6160	1.45
KSEB	Brahmapuram Diesel Power Station	Diesel	106.6	6160	1.45
KSEB	Kozhikode Diesel Power Station	Diesel	128	6160	1.45
Balaji Power Corpn.	Samayanallur Diesel Power Station	Diesel	106.001	6160	1.45
GMR Vasavipower	Basin Bridge Diesel Power Station	Diesel	200	6160	1.45
Samalpatti Power Co.	Samalpatti Gas Power Station	Diesel	105.658	6160	1.45
Suryachakra PC	Bambo Flat Diesel Power Station Unit - 2&4	Diesel	10	6160	1.45
Suryachakra PC	Bambo Flat Diesel Power Station Unit - 1&4	Diesel	10	6160	1.45
GOVT.(Sikkim)	Gangtok	Diesel	4	6160	1.45
GOVT.(Sikkim)	Rampool	Diesel	1	6160	1.45
Sundeban PC	Sunderban Diesel Power Station	Diesel	0.14	6160	1.45
WSEB	Balarghat Diesel Power Station	Diesel	0.84	6160	1.45
WSEB	Coach Bihar Diesel Power Station	Diesel	1.97	6160	1.45
WSEB	Digha Diesel Power Station	Diesel	0.13	6160	1.45
WSEB	Jaidlank Diesel Power Station	Diesel	0.4	6160	1.45
WSEB	Jalpaiguri Diesel Power Station	Diesel	1.378	6160	1.45
WSEB	Kalimpong Diesel Power Station	Diesel	0.57	6160	1.45
WSEB	Kalindu Diesel Power Station	Diesel	3.07	6160	1.45
WSEB	Lelong Diesel Power Station	Diesel	0.9	6160	1.45
WSEB	Pattar Pratima Diesel Power Station	Diesel	0.29	6160	1.45
WSEB	Ramyong Diesel Power Station	Diesel	1.88	6160	1.45
WSEB	Rudranagar Diesel Power Station	Diesel	0.05	6160	1.45
WSEB	Rudre Nagar Diesel Power Station	Diesel	0.58	6160	1.45
Govt.(Arunachal Pradesh)	TOTAL DIESEL	Diesel	15.88	6160	1.45
A.S.E.B	S.E.B.Diesel Power Station	Diesel	20.69	6160	1.45
GOVT. (Manipur)	Bungpa Diesel Power Station	Diesel	0.01	6160	1.45
GOVT. (Manipur)	Chingai Diesel Power Station	Diesel	0.05	6160	1.45
GOVT. (Manipur)	Dhakpong Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Hambo Diesel Power Station	Diesel	0.02	6160	1.45
GOVT. (Manipur)	Imphal Diesel Power Station	Diesel	0.14	6160	1.45
GOVT. (Manipur)	Imphal Diesel Power Station	Diesel	0.2	6160	1.45

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Owner	Name of the Project	Type	Capacity (MW)	Fuel Cost (Rs/MWh)	Operating Margin (Million Rs/MW)
GOVT. (Manipur)	Imphal Diesel Power Station	Diesel	0.24	6160	1.45
GOVT. (Manipur)	Imphal Diesel Power Station	Diesel	2	6160	1.45
GOVT. (Manipur)	Imphal Diesel Power Station	Diesel	2	6160	1.45
GOVT. (Manipur)	Kagomkhulam Diesel Power Station	Diesel	0.05	6160	1.45
GOVT. (Manipur)	Kajirg Diesel Power Station	Diesel	0.25	6160	1.45
GOVT. (Manipur)	Khoupulam Diesel Power Station	Diesel	0.4	6160	1.45
GOVT. (Manipur)	Leimahung Diesel Power Station	Diesel	0.69	6160	1.45
GOVT. (Manipur)	Leimahung Diesel Power Station	Diesel	1.06	6160	1.45
GOVT. (Manipur)	LEINAKHONG Diesel Power Station UNIT -IV -VI	Diesel	18	6160	1.45
GOVT. (Manipur)	Limakhang Diesel Power Station	Diesel	18	6160	1.45
GOVT. (Manipur)	Limphal Diesel Power Station	Diesel	0.64	6160	1.45
GOVT. (Manipur)	Morah Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Nemgbha Diesel Power Station	Diesel	0.08	6160	1.45
GOVT. (Manipur)	None Diesel Power Station	Diesel	0.05	6160	1.45
GOVT. (Manipur)	Phengon Diesel Power Station	Diesel	0.05	6160	1.45
GOVT. (Manipur)	Porbung Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Sewdal Diesel Power Station	Diesel	0.05	6160	1.45
GOVT. (Manipur)	Tamonglong Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Teimic Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Tengnonpol Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Thanlon Diesel Power Station	Diesel	0.2	6160	1.45
GOVT. (Manipur)	Tousom Diesel Power Station	Diesel	0.03	6160	1.45
Meg.SEB	Beghmar Diesel Power Station	Diesel	0.11	6160	1.45
Meg.SEB	Dalu Diesel Power Station	Diesel	0.05	6160	1.45
Meg.SEB	Nangalbhara Diesel Power Station	Diesel	0.69	6160	1.45
Meg.SEB	Tuna Diesel Power Station	Diesel	1.12	6160	1.45
Meg.SEB	Uliarinagn Diesel Power Station	Diesel	0.08	6160	1.44
GOVT. (Mizoram)	Biate Diesel Power Station	Diesel	0.1	6160	1.44
GOVT. (Mizoram)	Biate Diesel Power Station	Diesel	0.5	6160	1.44
GOVT. (Mizoram)	Buarpui Diesel Power Station	Diesel	0.056	6160	1.44
GOVT. (Mizoram)	Buarpui Diesel Power Station	Diesel	0.1	6160	1.44

Table A-12: Average (\bar{X}_i) and inequality adjusted average (\bar{Z}_i) level of access to MES for cooking and lighting rural and urban areas

State	Rural cooking		Urban Cooking		Rural Lighting		Urban Lighting	
	\bar{X}_i	\bar{Z}_i	\bar{X}_i	\bar{Z}_i	\bar{X}_i	\bar{Z}_i	\bar{X}_i	\bar{Z}_i
Andhra Pradesh	15.2	10.1	63.6	27.8	84	65.7	94.9	77.4
Arunachal Pradesh	15.4	13.3	74.9	50.8	59.1	32.1	95.7	95.7
Assam	7.1	4.9	65.3	34.9	30.3	14.6	86.2	29.9
Bihar	1.8	1.7	56.6	12.6	10.1	8.2	73.8	28.5
Chattisgarh	1.9	1.7	52.5	11.0	61.9	43.2	93.2	71.6
Delhi	92.2	0.0	92.1	88.7	100	9.0	98.9	86.1
Goa	76	4.6	88	67.6	99.9	43.1	97.9	93.8
Gujrat	20.7	15.1	76.1	49.9	80.2	48.6	95.8	72.6
Haryana	23.5	15.9	79.8	40.4	89.7	52.8	95.5	71.1
Himachal	23.1	14.7	84.4	43.2	97.6	77.7	87.7	87.7
Jammu & Kashmir	15.4	12.1	78.3	45.5	97.3	97.3	97.1	97.1
Jharkhand	1.4	1.3	44	14.2	26	14.0	87.1	52.2
Karnataka	7.3	5.3	66.5	28.2	86.2	73.6	95.9	79.2
Kerala	18.6	15.3	44.5	19.9	79.4	61.3	93	73.6
Madhya Pradesh	4.4	3.5	57.7	16.7	69.2	46.9	96.4	84.5
Maharastra	16.8	9.7	79.2	51.1	76.2	47.5	95.7	77.9
Manipur	19.6	8.1	64.6	64.6	87.3	84.3	95.1	95.1
Meghala	2.2	2.2	66.8	43.5	51.3	20.6	98.5	55.0
Mizoram	28.9	16.2	88.7	62.9	85.4	31.2	99.7	58.3
Nagaland	34.5	20.9	85.4	21.3	97.4	0.0	99.4	0.0
Orissa	3.3	2.6	42.3	14.7	31.5	11.5	81.3	39.3
Punjab	27.9	16.9	83.5	57.0	95.5	83.0	97.8	97.8
Rajasthan	5.4	5.0	55.6	15.2	47.2	22.5	89.5	51.3
Sikkim	39.1	11.4	84.2	56.3	94.1	65.8	99	73.6
Tamil Nadu	16	9.6	70.8	41.3	84.6	74.5	94.6	74.7
Tripura	7.5	4.6	59.5	0.0	69.1	37.1	91.7	54.2
Uttaranchal	5	4.5	72.7	37.7	67.3	38.1	94.3	73.0
Uttar Pradesh	19.5	9.9	60.6	25.7	24	16.9	84.4	50.6
West Bengal	4.5	3.8	57.3	8.8	34.2	18.2	87.3	42.1
Pondicheri	14.6	12.1	67.1	49.9	87.3	54.4	96.3	82.2
India	9.9	7.3	67.3	29.1	54.9	31.6	92.3	63.6

Source: Calculations from NSSO (2007)

