

ENERGY PRICING AND DEMAND MANAGEMENT:

Petroleum Products

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Abstract:- Adoption of a proper pricing policy is an important tool for demand management. The policy adopted should provide economic growth and give due recognition to the social objectives and the basic rights of the citizen. Pricing policy adopted should ensure that in the overall operation of meeting the demand for all petroleum products, surplus funds are generated to ensure an acceptable rate of return on the investments in the supply sector and funds are available for financing of at least part of the future investments. While providing relief to the poor consumers by subsidies on products like kerosene, due attention must be paid to adulteration and other misuse possibilities. This problem has partly been overcome in Sri Lanka by the issue of Kerosene Stamps.

INTRODUCTION

Energy Pricing is a very important tool for demand management. Energy demand is greatly influenced by pricing policy. Investment on energy supply systems are influenced by demand and usually require large capital investment and long lead times. Any ad-hoc changes in policy in the short term could result in supply shortages on one hand and on other hand it could also result in redundant uneconomic supply facilities which could push the unit price of energy upwards. The pricing policy adopted should promote economic growth and development in the country. It should also recognise the social objectives and basic rights of the citizen to be supplied with certain minimum energy requirements at affordable prices.

The other objectives are that the energy price adopted should enable the supply agency to obtain acceptable rate of return on the investments for future development and the pricing policy should be such that energy waste is not encouraged and that energy is used in an efficient manner.

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When formulating a Pricing Policy for the oil consuming sector, we are compelled to look at global supply and demand balance for oil, as we are an oil importing country with no known resources of indigenous oil. What happens elsewhere in the world as regards prices will have a direct bearing on the local supply position and prices. If a commodity becomes short supply then, naturally, that commodity will command a premium prices. As all petroleum products used in the country are imported either as crude oil or refined products, we cannot look at pricing in isolation.

GLOBAL SUPPLY AND DEMAND OUTLOOK FOR PETROLEUM

Crude oil production and consumption in the non-communist world was about 41 million barrels per day in 1970 and consumption reached 50 million barrels per day by 1973. With the first price shock in 1974, consumption decreased and started to increase once again after 1976. As consumption started to increase, the world went through a second oil crisis in 1979 and consumption peaked at about 53 million barrels per day in 1980 in the non communist world. At the time of the 2nd crisis the OPEC's share of the market was around 31 million barrels per day while their combined total production capability was around 33.5 million barrels per day. The price of oil reached US\$ 35.0 per barrel in 1981. The reasons for price hike by OPEC countries were political rather than any economic considerations. When the price increased from US\$ 2.71 per barrel in 1973 to US\$ 10.78 in 1974 and subsequently the price went up from US\$ 13.00 per barrel in 1978 to US\$ 35.00 per barrel in 1982 (in a few steps). Opportunity was afforded to the consumers world over to look for alternatives and to embark on a massive conservation programme by installation of energy efficient equipment among other things. The combined effect of these worldwide efforts was to depress the demand for OPEC oil and the collapse of the price of crude oil from US\$ 35.00 per barrel in stages to reach US\$ 12.00 per barrel in 1986. The demand for OPEC oil decreased due to substitution, conservation and the discovery of additional sources of

supply outside the reign of the OPEC Cartel. The demand for oil from OPEC reduced to about 16.8 million barrels per day by 1986. Today, OPEC has managed to curtail production to about 18.0 million barrels per day to prop up the prices to around US\$ 16.0 per barrel. Presently at least 15.0 million barrels per day of oil production capacity is available in OPEC countries unutilised due to lack of demand. World consumption is not expected to increase rapidly in the next decade even if prices remain below US\$ 20.0 per barrel. Of the oil reserves in the World at present OPEC controls 68% of the reserves and supply about a third of the World's oil requirements. However, production is expected to exceed new discovery in the next decade and conventional oil production is expected to plateau out shortly after the turn of the century.

PRESENT INTERNATIONAL PRICING POLICY

As stated earlier OPEC controls a majority share of the oil that is traded and does not increase prices in an orderly manner or based on production costs of oil. Today prices are held at the present levels by organised production curtailment. When demand for OPEC oil increases above 20 million barrels per day it is expected that pressure will build up for prices to increase and the price will increase to keep up with inflation. When demand for OPEC oil increases above 25 million barrels per day in 1990's price increases can be expected to be faster than inflation.

DEMAND PATTERN FOR PETROLEUM PRODUCTS IN SRI LANKA

The historical consumption of Petroleum product wise is given in table 1 of appendix. LPG is a fuel used in domestic sector for cooking. The urban households are increasingly becoming dependent on LPG for cooking. After the price increase of kerosene in 1982, LPG consumption started to increase more rapidly and today it is growing at the rate of about 8% per annum (average in the last 3 years).

Consumption of gasoline decreased in 1972 to 1977 period due to forced conservation from price increases and the low economic growth. Thereafter, gasoline consumption increased once again and decreased soon after in 1980, with the price increases in 1979/1980. Thereafter, consumption has steadily increased. Its consumption is influenced by price and economic activity in the country and is presently growing at the rate of about 7% annum in the absence of a price hike after 1983.

Kerosene consumption increased up to 1973, and decreased soon after the price increase in 1974 and then remained stagnant until 1977. Consumption increased once again in 1978, and took a down turn again in 1979 following price increases. Consumption decreased drastically after 1982, with the introduction of kerosene stamp scheme and the increase of retail price to be above that of furnace oils. Past high consumptions were influenced by low retail prices which also opened up opportunities for adulteration and misuse. Consumption is sensitive to retail price as it is used mainly by rural folk for illumination purposes. The present consumption growth is low and is less than 1.0% per annum.

Auto Diesel is predominantly a transportation fuel used for mass transit purposes. Its consumption has grown steadily until 1973. Thereafter consumption dropped slightly with the price increase in 1974 and showed a low growth profile until 1977, reflecting also the low economic activity during the period. After 1977, with the liberalization of the economy and the rapid increase in construction activity, consumption started to increase at the rate of 20% per year initially. In the last two years, consumption has shown a tendency to plateau out with the decrease in economic activity and completion of much of the construction associated with the accelerated Mahaweli Scheme. Auto diesel being a mass transportation fuel is less sensitive to price hikes and its consumption has been influenced mostly by economic activity. Presently, the growth in consumption is less than 1.0% per annum.

Heavy Diesel is an industrial heating fuel. Its consumption has decreased over the years due to substitution from fuelwood and furnace oils. Peaks in the consumption during 1981-1983 and in 1987 were due to its use for power generation during periods of drought. Decrease in consumption (excluding use for power generation) seems to have bottomed out and the consumption is presently stagnating. Any future increase in consumption will depend on industrial activity.

Fuel oil consumption has shown much fluctuation over the years. This is both due to its use for power generation during periods of shortages in hydropower and production of urea fertilizer in the period 1981 to 1984. Substitution of coal in the cement industry and the closing down of fertilizer plant has reduced its consumption after 1984. If the consumption for cement production and power genera-

tion are excluded then the consumption by the rest of the industry can be considered to be almost stagnant.

Consumption of Naphtha has been indicated only from 1980-1984 when a certain quantity of Naphtha was used as a fuel in the manufacture of urea. The Naphtha consumption indicated in table 1 excludes that used as petrochemical feed stock for production of urea fertilizer.

Hence, it would be concluded that demand for LPG is increasing rapidly at present but the rate of growth will slowdown in the next 5 years. Kerosene demand is stagnant while future consumption growth depend on retail prices. Gasoline consumption will continue to grow with economic growth, in the absence of a large price hike. Auto diesel consumption will grow at the rate of about 2-3% depending on the scale of economic activity. If economic growth exceeds 5% the demand increase for

auto diesel too will increase more rapidly. Heavy diesel demand is not expected to increase rapidly and industrial consumption of fuel oil excluding that used for cement and power generation will depend on the industrial policy followed and consumption will continue to increase as shortage of firewood can be expected in the short term.

FUTURE CONSUMPTION SCENARIOS

Table II in appendix gives a high demand scenario while table III gives a low economic growth and low demand scenario. In computing and forecasting the expected demand from 1989 to 1995, evaluation and product wise consumption trends in some sectors have been modified with data gathered from specific micro studies. Expected changes in each sector due to known future demand changes as a result of changes within a sector has been taken into account.

Year	LPG	Gasoline	Kerosene	Auto Diesel	Heavy Diesel	Furnace Oil	Naphtha
1960		151.7	139.1	94.2	89.9	60.0	
1961		143.9	152.1	102.6	83.3	76.2	
1962		142.3	165.1	135.5	81.7	78.4	
1963		139.8	173.9	129.9	87.9	75.6	
1964		142.5	176.8	152.3	85.4	93.1	
1965		140.3	181.8	164.6	83.9	128.0	
1966		138.8	202.1	181.5	82.8	148.3	
1967		139.6	218.6	204.6	90.0	173.7	
1968		143.3	231.8	215.0	97.3	176.4	
1969		147.8	247.5	232.3	98.0	173.3	
1970	.03	148.3	272.5	254.5	87.3	208.8	
1971	.10	137.5	269.3	249.6	84.5	136.5	
1972	.16	131.7	278.1	264.2	71.2	178.6	
1973	0.26	129.2	269.6	260.9	67.9	234.9	
1974	0.56	94.9	212.7	243.9	44.4	168.8	
1975	0.58	95.1	209.8	245.5	37.3	143.6	
1976	0.60	101.1	206.6	257.6	35.7	125.6	
1977	1.63	111.5	212.9	262.0	46.2	135.5	
1978	3.60	139.0	244.8	308.8	62.0	162.6	
1979	4.86	115.1	229.9	349.4	64.2	183.5	
1980	5.67	107.7	188.3	397.7	64.0	193.8	34.4
1981	5.49	109.0	168.3	420.9	105.0	240.3	60.0
1982	7.17	114.2	174.1	464.5	143.1	247.1	98.3
1983	8.67	117.5	162.5	472.7	278.6	252.2	77.3
1984	11.63	118.8	150.9	495.7	64.2	218.9	78.4
1985	12.95	121.5	153.7	502.0	23.6	142.7	7.5
1986	15.94	130.2	154.5	503.3	20.0	129.3	-
1987	19.34	140.6	155.9	516.2	131.9	123.1	-

Table 1 - Consumption Product Wise (Thousand Metric Tons)

Product	Annual Average growth rate (1980 - 1987)	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
LPG	6.4%	15.94	19.34	21	22	23	24	25	27	29	31	6% p.a. increase.
Gasoline	1.6%	130.26	140.07	145	150	155	159	163	167	171	175	3.5% p.a. upto 1990 and
Naphtha	-1.2%	154.53	155.92	159	162	165	168	171	174	177	181	2% p.a. increase.
Auto Diesel	1.6%	503.31	516.28	529	542	556	570	584	599	614	629	2.5% p.a. increase.
Heavy Diesel	-5.0%	20.10	22.33	23	23	23	23	23	23	23	23	2% p.a. increase.
Heavy Diesel (for electricity generation)	14.0%	-	109.4	75	75	75	-	-	-	-	-	
Fuel Oil	-1.6%	128.13	123.14	129	135	142	149	156	164	172	18	5% p.a. increase.
Residual Fuel (for electricity generation)		0.88	44.27	40	40	40	40	215	215	215	350	CEB estimates.
Sub Total:		953.15	1130.82	1121	1149	1179	1133	1337	1369	1401	1570	
<u>Bunkers and Aviation - Local</u>												
Heavy Diesel	-4.8%	2.14	2.12	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	5% p.a. increase.
Fuel Oil	-20.8%	0.71	0.30	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	5% p.a. increase.
Avtur	3.3%	45.56	38.52	40	42	44	46	48	50	53	56	5% p.a. increase.
Sub Total:		48.41	40.94	42.5	44.6	46.7	48.8	50.9	53.0	56.1	59.2	

Table II - Petroleum Products forecast by weight 1987-1995 (Thousand Metric Tons)

FACTORS INFLUENCING PRICING POLICIES IN SRI LANKA AND ITS INFLUENCE ON DEMAND MANAGEMENT

All petroleum products used in the country are either directly imported or refined from imported crude oil or both.

The pricing policy adopted for locally consumed petroleum products depend on a number of factors. The factors that influence pricing policy are:-

- (a) The border prices or import parity prices of individual products or the transfer price ex-refinery if refined locally.
- (b) Providing adequate revenue to the state through duties (customs duty) pipe line charges, taxes (BTT for each product) and other dues. Although customs duties are uniform for all petroleum products BTT is different for individual products (eg for gasoline the BTT is 20%, LPG 10%, kerosene 5% etc.).
- (c) Consumers ability to pay the price stipulated. eg. gasoline used by the affluent for their personalised transport. Hence, this group is able to pay high price for gasoline compared to the kerosene used by the rural population predominantly for lighting and the need to subsidise the price of kerosene.
- (d) Influence it has on the cost of living, economic development and the development strategy. The price of auto diesel if priced high can have an adverse effect on the cost of living as goods transport and public transport can become costly.
- (e) Influence on the manufacturing costs and its effect on exports and import substitution industries. eg If fuel oil prices are higher than international prices then locally manufactured goods will be at a disadvantage when competing with imports. Exports also will be at a disadvantage in the international market.
- (f) Maintaining of relative price differentials between different fuels to prevent misuse, abuse or fuel switching possibilities with financial loss to the state and the supply organisation. eg When retail price of kerosene was lower than fuel oil there was a loss of revenue and foreign exchange and the wasting of a valuable commodity. Hence the price has to be higher than fuel oil and close to or above auto diesel to prevent it being blended into auto diesel with any monetary advantage.

- (g) The social objectives have to be considered. In this case the right of every citizen to be supplied with certain minimum of energy quantum has to be considered. The majority of the households do not have access to electricity, and depend on kerosene for illuminating purposes. About 85% of total kerosene consumed is used by the rural population for lighting. The price has to be sufficiently low and should take into account the ability of this majority sector of the community to pay for this commodity. Hence the price has to be low, but if it is too low, then the problem discussed under (e) comes into effect. Hence price has to be fixed at a level high enough to prevent misuse but at the same time protect the poor consumer. This has been achieved by the kerosene stamp scheme.
- (h) Provide sufficient revenue for expansion and future development in the supply sector. Have the ability to self finance projects. In the overall operation the supply organisation should generate a net operating margin after taxes.

Pricing has to be such that demand management is accomplished within the supply constraints. Low prices for kerosene could encourage the use of kerosene for domestic cooking and LPG which is more efficient in achieving the same goal will not be used for this purpose. Price of gasoline has to be high enough to discourage unwanted travel and increase the efficiency of utilisation in the motor cars. If fuel price is low, conservation cannot be encouraged.

DETERMINANTS USED IN THE STRUCTURING OF PRICING FOR PETROLEUM PRODUCTS IN SRI LANKA AND AN ANALYSIS OF THE PRESENT PRICING STRUCTURE

As all crude oil or petroleum products are imported to the country international prices have a direct bearing on local prices.

Product pricing has not been carried out depending on the energy content of each product either in the international market place or locally. International pricing has depended on how versatile the fuel is and the nature and complexity of the processing required to process a particular product (see table IV).

Product	Calorific Value (kCal/kg.)	Retail price Rs./MT	Rs/Million kCal	US\$/Million kCal
LPG	10955	11150.00	1018	22.8
Gasolene	10631	18589.50	1749	18.8
Naphtha	10716	5929.00	553	15.6
Kerosene	10390	8376.34	806	16.9
Auto diesel	10182	9609.66	944	16.7
Heavy diesel	10193	9294.21	912	16.7
Fuel oil	9833	3924.60	399	8.8
Residual fuel	9750	3081.00	316	8.5

Table IV - Cost per Unit Energy of Petroleum Products

	LPG	Gasolene	Kero	Auto Diesel	Heavy Diesel	Fuel Oils		
						500"	800"	1000"
1977	2.50	3.92	0.95	1.36	1.31	1.05	1.02	0.99
1978	2.50	5.89	0.95	2.70	1.31	1.05	1.02	0.99
1979	2.50	8.80	2.94	2.70	2.63	2.24	2.20	2.07
1980	5.38	11.73	3.76	5.40	5.32	4.67	4.63	4.49
1981	5.38	13.33	4.86	6.94	6.60	4.67	4.63	4.49
1982	5.38	13.33	4.86	6.94	6.60	4.67	4.63	4.49
1983	8.23	18.00	6.98	9.50	9.10	5.50	5.12	4.94
1984	11.15	18.00	6.98	9.50	9.10	5.50	5.12	4.94
1985	11.15	18.00	6.98	9.50	9.10	5.50	5.12	4.94
1986	11.15	18.00	6.98	9.50	9.10	4.44	4.07	3.89

Table V - Prices of Petroleum Products in Rupees Per Kilogram

The most important determinant when pricing of petroleum products in Sri Lanka are:

- Import parity price of a particular product or the ex-refinery price is the most important determinant. Ex-refinery prices or refinery border prices can differ from import parity prices (based on Singapore Postings) in absolute terms but the relative prices between different fuels are normally the same in both cases. Ex-refinery prices depend on crude oil price and local production costs while ex-refinery price of LPG has no relationship to import parity price of LPG. It is closely related to refinery fuel prices.
- Duties levied by the state (customs duties) which is uniform for all products.
- Taxes levied by the State through the Department of Inland Revenue (BTT) which is selective.
- Working capital based on bank borrowing and hence the bank interest has to be recouped (included in cost of supply).
- Local handling costs.

All the above when taken together, will constitute the cost of supplies and they should meet the economic efficiency objective.

Once cost of supply is known the retail prices are computed.

This step consist of adjusting these efficient prices to meet all other objectives. This is generally a systematic procedure and the extent of adjustment of the individual prices is greatly influenced by the relative importance attached to the various objectives and the adjustment are carried out with due consideration to the following :

- As it is not a good practice to adjust retail prices regularly (in the absence of a price upheaval in the international market), long term movement of the exchange rate (i.e. rupee against the dollar) has to be considered. The present selling prices were fixed in 1983 (except for fuel oil where the price was revised and reduced in 1986 when exchange rate was 1 US\$ = Rs.23.52). For every rupees

appreciation of the US Dollar the loss of revenue to CPC (Supply agency) is approximately Rs. 190 million when average price of oil is US\$ 17.0 per barrel CIF.

- (b) Unit weight of LPG could replace about 2 1/2 to 3 times that weight of kerosene in domestic cooking due to the higher overall thermal efficiency of LPG cookers (hence the LPG price could be higher than kerosene and until break even price is reached with kerosene).
- (c) Kerosene retail price to be as close to the cost of supply to prevent adulterations and misuse and the loss of revenue. Price of kerosene maintained below cost of supply and cushion the poor further by the issue of kerosene stamps to those eligible for food stamps (the cost of kerosene stamps is borne by CPC and is around Rs.271 million per year). The retail price maintained below the cost of supply for social and political reasons to afford relief to the lower middle income groups, who use it for lighting and in some instances for cooking as well.
- (d) Industries with low energy inputs and should not be entitled to fuel at prices below cost of supply.
- (e) Large industries with almost hundred percent foreign inputs and those industries with high energy inputs, competing with imported goods, the petroleum fuel prices should be based on import parity or export realisation, if the fuel consumed is an exportable item from the refinery.

(f) Cross Subsidy on products. eg High Gasoline price to subsidise the losses on kerosene.

(g) Generate a surplus of funds from the overall operation or revenue for future development.

Let us look at the present pricing structure. See table V for the present price structure of petroleum products traded in Sri Lanka. The last price adjustment was carried out in July 1983 except for fuel oil.

Presently kerosene is retailed at Rs. 6.58 per litre (Rs. 8.25/kg) and at this price level it will be advantageous to switch to LPG for cooking when overall efficiency of cooking with LPG is compared with that of kerosene. Further the price of kerosene is higher than furnace oils. The retail price of kerosene is however, lower than the cost of supply and hence CPC stands to loose on the sale of this product.

Auto diesel sales account for nearly 50% of the total internal sales or demand for this product. This product was originally priced so that retail price was above the cost of supply and that CPC could make a small margin from its sales. As the product was used in mass transport and public transport the margin was kept low. The use of auto diesel by the affluent for personalised transport has been discouraged by the imposition of an annual "diesel tax" on private motor cars. This has

Product	Annual Average growth rate (80-87)	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	
LPG	6.4%	15.94	19.34	20	21	22	23	24	25	26	27	5% p.a.
Gasoline	1.6%	130.26	140.07	143	146	149	152	155	158	161	164	5% p.a.
Naphtha					159	161	163	165	167	169	171	1% p.a.
Kerosene	-1.2%	154.53	155.92	157	532	540	548	556	564	572	581	1.5% p.a.
Auto diesel	1.6%	503.31	516.28	524	23	23	23	23	23	23	23	1% p.a.
Heavy diesel	-5.0%	20.10	22.33	23	75	75	75	-	-	-	-	
Heavy diesel (for electricity generation)	14.0%	-	109.47	75	75	75	-	-	-	-	-	
Fuel oil	-1.6%	128.13	123.14	126	129	132	135	138	141	144	147	2% p.a.
Residual fuel (for electricity generation)		0.88	44.27	40	40	40	40	215	215	215	350	CEB estimates
Sub Total:		953.15	1130.82	1108	1125	1142	1094	1276	1293	1310	1463	
<u>Bunkers and Aviation-Local</u>												
Heavy diesel	-4.8%	2.14	2.12	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	5% p.a.
Fuel oil	-20.8%	0.71	0.30	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	5% p.a.
Avtur	3.3%	45.56	38.52	40	42	44	46	48	50	53	56	5% p.a.
Sub Total:		48.41	40.94	42.5	44.6	46.7	48.6	50.9	53.0	56.1	59.2	

Table III - Petroleum Products forecast by weight 1987 -1995 (Thousand Metric Tons)

been partly defeated by the purchase of small vans or small commercial vehicles which do not carry this tax.

Furnace oil price were originally set at the supply cost at the revision carried out in 1983. But in April 1986, prices were revised when world oil prices declined although cost of supplies were still the same (as the state imposed an import duty on all products and crude oil). The price of all grades of furnace oil were reduced by Rs. 1.00 per litre to help the local industries. The low price of fuel oil also should discourage use of firewood to a large extent in industrial boilers or furnaces, especially in firewood deficient areas. If industries too compete for the limited firewood available then cost of firewood would rise to the domestic sector there by pushing specially lower middle class urban households to use kerosene for cooking. The net result would be an additional consumption of high value kerosene and net outflow of foreign exchange. The furnace oil prices to industries is dependent on foreign inputs like Urea Fertilizer Plant was based on the export realisation on fuel oil, as the product in excess of the local demand was directly exported from the refinery.

In the overall operation of meeting the demand of petroleum products CPC has to make sufficient surplus revenue for future development and the final adjustment has to be done with the selling price of gasoline. Gasoline constitutes only about 15 % of total inland sales and the selling price has to be adjusted in such a way to cover up the losses on the sale of kerosene and fuel oil and still leave a reasonable revenue surplus. The present annual turnover of the CPC is in the region of Rs. 13 billion.

IMPACT OF OIL PRICING POLICIES ON VARIOUS SECTORS

As 65% of the commercial energy used in the country is supplied by petroleum a high price of oil will have a direct effect on the economy. If the government taxes petroleum products by imposing a common duty on crude oil as it is done now, the cost of supply of each product will increase. When kerosene prices increases suddenly the demand will depress and this has been amply demonstrated when analysing past trends. When price of kerosene is increased this has adverse political and social consequences. If selective taxing is practiced, then tax may be imposed on gasoline only or on gasoline and diesel

together. Increase in gasoline prices will mostly effect the affluent while the diesel increase will result in an increase in the cost of living and will again effect the wage earner as public transport and goods transport will be costly. If the gasoline price increase is too steep, the demand will be depressed as some of the motor car users will shift from personalised transport to public transport in the short term. This will mean additional pressure on the already stretched public transport system and the demand for auto diesel will also increase. There will also be a loss of revenue from the lower gasoline consumption as happened in 1974. Further, there will be a shift to diesel cars to take advantage of lower prices and higher efficiency.

Fuel oil prices should relate to international prices specially if it is to be used for power generation. Then the generated cost of power will reflect actual cost of electricity from thermal generation and also the industrial heat available to industrialist will reflect international prices. If the price is too high and industries switch to firewood and a consequential price increase in firewood will push the domestic sector to use more kerosene for cooking. Hence low-value fuel oil will finally replace high value kerosene. This could also lead to increase deforestation.

FUTURE OUTLOOK AND ANTICIPATED DEVELOPMENTS

Although the international price of crude oil is not expected to increase rapidly in the next 5-6 years, it is inevitable that local prices will have to increase if present taxation continues. The constant devaluation of the rupee against the dollar will necessitate price increases well into the future.

State will continue to pass on price increases predominantly to gasoline in relation to both auto diesel and kerosene. Kerosene will continue to be subsidised to some degree until the living standards of the poor improve or until alternative source of rural lighting could be made available cheaply. Future electricity generation and supply costs will be related to the price of fuel oil in the short term as more thermal generation is resorted to meet the increasing demand for electricity.

Even if we continue to refine crude oil to produce the refined products requirement of

the country it is unlikely that in the near future the import parity prices for petroleum products could be far less than ex-refinery prices as long as crude oil supply remain in excess of the world demand. The present modernisation undertaken at the refinery to process a greater variety of crude oil in the future will improve the advantages of refining crude oil locally further and more balanced

refinery operations to match production to demand may become possible if crude oil prices favour.

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