

CONCLUSIONS OF A STUDY OF "CHANGES IN DEMAND FOR ENERGY IN THE HOUSEHOLD SECTOR SINCE 1973" — AN EXTRACT

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- (1) The household sector is the largest consumer of energy in Sri Lanka and is ranked ahead of Industry, Transport and Agriculture the other major sectors which consume energy in large quantities.
- (2) Per capita requirements of energy, necessary to ensure a minimum standard of living, has been estimated at 325 kilograms per annum of oil equivalent (Kg. o.e) according to a recently conducted ILO survey. The lowest consumption according to this survey appears to be in Asia (13 to 269 Kg. o.e.) In Sri Lanka the per capita consumption of energy by the household sector is estimated to be within the range of (200-250 Kg.o.e.) per annum. Despite the absence of space heating in terms of the warm climate prevalent in the country the household energy consumption level in Sri Lanka seem to be relatively higher than most of Asian countries.
- (3) The bulk of the energy requirements is met by the use of firewood and hence wood fuel account for about 60 per cent of total requirements of the country. The estimate of fuel-wood consumption per annum based on 1981/82 data is 757,300 metric tons for the household sector.
- (4) More than 85 per cent of households use Firewood for cooking purposes, and this percentage was observed to be higher in the Rural and Estate Sectors.
- (5) 1.78 per cent of the physical quantities of firewood consumed by households is collected free from the neighbourhood. Therefore, apart from the Urban Sector where fire-wood requirements are generally purchased, the consumption levels depend on the problems faced in the manner of gathering fuel-wood rather than on the price level itself.
- (6) Firewood was the source of energy for cooking for almost 100 per cent of households which belong to the poorest 40 per cent. Poorest groups would be the worst affected in a situation where fuel-wood resources are declining and access to fuel sources are eroded through over exploitation. fuel-wood scarcities may also impede income generating opportunities of household members, particularly of women due to the long hours that have to be spent for collection of firewood and its preparation.
- (7) Demand for firewood by the household sector is basically inelastic and therefore a decrease in domestic use may not be practical in the absence of other indigenous substitutes.
- (8) Therefore an option which could provide a significant pay-off is the efficient use of fuel-wood through mass popularisation of energy efficient cooking stoves.
- (9) Demand for electricity in the household sector has increased significantly over the last 15 years owing to a combination of factors including rising income levels, rapid urbanisation and commissioning of Rural Electrification Schemes. Electricity is available in 16 per cent of households in the country, whereas only 8 per cent enjoyed this facility in 1973. Availability of electricity is concentrated among the affluent households, as 70 per cent of the households which had electricity facility belong to the top most income quintile.
- (10) Twenty eight per cent of households which had access to electricity has also used it as the energy for cooking. A significant increase in the usage of electricity as the energy source for cooking was observed between 1978/79 and 1981/82.
- (11) It is possible that in the Urban Sector in particular, a shift from kerosene to electricity would have occurred due to relative price movement in favour of electricity, and consequent to the removal of kerosene price subsidy.
- (12) Kerosene is the main source of energy used for lighting in Sri Lanka. Even among the richest 20 per cent, 56 per cent of households use kerosene for lighting. Meanwhile among the poorest 40 per cent, 97 per cent of households have resorted to kerosene for lighting purposes.
- (13) Consequent to the upward revision of kerosene prices in 1979, the price relative for energy equivalent of fire-wood and kerosene has been on the uptrend, owing to the substitution effect the consumption of kerosene for cooking purposes seem to have declined, thereby decreasing the per capita consumption levels from 2.00 litres in 1978/79 to 1.22 litres per month.
- (14) Consumption of kerosene is approximately 0.5 liters per day for lighting a pressure lamp for 3 hours. Quality of lighting would have deteriorated among the poorer groups due to the increase in kerosene oil prices.