ENERGY USE PATTERNS IN SELECTED URBAN CENTRES

BACKGROUND

There are only a limited number of urban studies in India which have looked at energy use patterns in households in a comprehensive way, covering all major forms of energy. In 1981 about 24% of the population of India lived in urban centres. This number is likely to go up to 40% of the total population by the year 2000. In other words, between 350-400 million persons will be living in congested urban centres by 2000. Large scale urbanization has resulted in mushrooming growth of urban settlements. This growth has immense implications since the slum dwellers are mainly poor income households and they do not have sufficient income to purchase commercial forms of energy. Large scale urbanization is likely to change the energy use patterns considerably. Very little information is available on these issues.

OBJECTIVES

The objectives of this research study will be:

1. To collect details of energy use in selected urban centres and analyse the energy use patterns in relation to major economic parameters.

2. To estimate the trends in usage of specific fuels using economic estimation methods.

3. To derive policy implications for energy decision makers and urban planners in terms of an intervention strategy.

CITIES TO BE SELECTED

This study will cover six urban areas (major cities and smaller towns). Different types of urban centres will be selected and the energy use patterns will be studied. Some examples from which the final selection will be done are:

- Sholapur
- Madras
- Delhi
- Vizag
- Indore
- Ajmer
- Varanasi
- Goa
- Darjeeling
- Meerut
- Bhopal

METHODOLOGY

1. A detailed analysis of commercial forms of energy (coal, petroleum products, electricity) will be made using data directly from the concerned agencies.

2. A detailed analysis of biomass will be made through the following:

   - analysis of arrivals of fuels
   - analysis of sale data from wholesalers
   - analysis of use data from households

   Since this information will not be readily available sample surveys will be conducted. Energy balances of major non commercial fuels in each city will be prepared to give the nature of energy flows in a city. Sampling will be based on stratified random methods covering different income users and different commercial users (such as hotels, bakeries, hostels, marriage halls, industries, packing units).

3. The data collected will be processed using statistical packages. Economic estimation of demand for each fuel also will be made, using multiple regression.

INSTITUTIONS INVOLVED

The study will be done jointly by Tata Energy Research Institute and other institutions close to the centres proposed to be covered in the study.

DURATION

One year and three months.