**Energy Consumption Pattern In Nepal**

Name – Pragyan Khati

Roll no – 26

Subject – Physics

**Background**

Energy is a prime requirement for the economic prosperity of a nation; it also holds a significant role in upgrading quality of life and boosts the human development in a nation. Energy resources play a very important role in facilitating energy. Consumption pattern of energy is closely linked with rural and household areas. Resources like oil, gas, electricity etc are quintessential in determining the quality life of households. The composition of energy use in rural and urban areas has an enormous impact on the household income and the welfare of the people living there. [1]

There are lots of factors that affect energy consumption in general. The traits of the households such as family size, educational level, their lifestyle in general affect energy consumption. Also, the price and availability of energy resources are important in identification of affordability factor of a particular household. [2] Electricity is used quantitatively more in urban areas as compared to rural due to which rural areas thrive on biomass, fuel wood, charcoal, kerosene. Hence, topographical variations are important in identifying consumption pattern in different places. To elaborate the imbalance between use of energy resources, around the globe; 1.06 people don’t have access to electricity and more than 3 billion people are accustomed with resources like wood, charcoal and dung for cooking and heating. [3] However, developing countries are prioritizing the use of modern fossil fuels and electricity over biomass-based fuel energy. [4]

Nepal is one of the least developed nations with 81% of its household in rural areas. Facilitation of clean energy in rural areas seems to be nothing but a myth despite its genuine accessibility in urban areas. It may come off as a surprise but households in Nepal constitute nearly 87% of the total energy in Nepal. [5] In spite of the convenience of Hydro power in Nepal, biomass still remains to be the most important primary source of energy. Nepal does have high potential in terms of Hydro power due to glaciers in The Himalayas, regular monsoon rain and the general local topography. So, it becomes a big question as to why we aren’t able to surplus from hydropower. One of the prime reasons is that Himalayan Rivers consist of large quantity of sediment with hard particles, which is a hurdle for the economic exploitation of hydropower resource [6].

Nepal is poor in terms of resources such as oil, gas or coal reserves and the positioning of Himalayas makes it difficult to approach remote and extremely remote communities inflicting unavailability of energy there. On account of resources, Nepalese have historically attended their needs with the help of resources like: biomass, imported kerosene, traditional water-powered vertical axis mills. This situation has led to experts labeling the country’s energy consumption ‘Medieval’ and if this wasn’t enough; load shedding that occurs throughout Kathmandu has given rise to more problems for the nation to overcome. The electricity crisis started way back in 2006. Back then, the NEA (Nepal Electricity Authority) settled down the situation with excuse of “No water in rivers”. However, the crisis took a huge turn in 2011 where it gained a skeptical popularity among consumers. This led to people turning their heads to kerosene, charcoal and fuel wood etc. Despite of our nation’s overwhelming availability in hydro power, our government’s defective vision and improper initiation has led to corrosion of energy availability throughout the nation. [7]

For a developing country like Nepal, the demand for energy increases day by day due to the rapid growth in urbanizing rate. The electricity use and the number of consumers increase at a rate of approx. 9% each year. [8] If our government officials continue disregarding the vastness of our resources, it’ll inflict severe damages upon the nation’s energy consumption pattern and heavily affect the socio-economic growth of the nation. Hence, proper awareness regarding the utilization of resources should be spread. Government must initiate accomplished workers, engineers to tackle the hurdles arising throughout the process of energy extraction from available resources. Households should be conspicuous about the employment of energy. Sincere initiation of such ideas can replenish energy and boost consumption pattern all over the nation.

**Objective**