ABSTRACT

Energy is one of the fundamental requirements of human life. Since the very existence of human beings on this planet, they are using it to fulfill their necessities of life. With the saga of development, its demand is increasing day by day. Now, countries based their economy on supply and demand of energy in a way to go on the path of sustainable development. For energy economy, mapping of energy balance is very essential and helpful. Pakistan is basically an agrarian country and its economy is heavily dependent upon export of agricultural commodities in addition to industrial goods. For past some decades, it is facing energy crisis which is now on its peak and paralyzed the economic growth as well as daily life. Currently, the supply and demand gap for electricity is high; 5000-7000 MW. To cope with this energy crisis, proper planning and strategy is required for which mapping of energy balance can be a very effective tool. Unfortunately, in Pakistan such data is not present or sufficient especially for rural areas which comprise of 67% of total population and hub of agriculture. Therefore, this research work selected a small village named as Hanjanwali situated 13-15 Kilometers away from Narowal-Muridke road within the boundaries of the Gujranwala District and field survey was conducted to gather primary data for mapping rural energy balance. It also analyzes the linkage of energy with social, economic and environmental spheres of community and how it can play role for the uplift and development of the community. Statistical analysis showed that energy consumption and energy expenditure of the community is dependent upon no. of electrical appliances and monthly income of households in addition of having correlation for living and educational standard of households. This work gives suggestions for keeping energy supply and demand in balance in rural areas for pushing these on the path of sustainable development. It is also suggested in this work that alternative renewable resources can be effectively utilize for in rural community to cater their energy needs.