

Book Review

Dhungel, Kamal Raj (2010), *Energy Issues in Nepal: A Macro Level Analysis*, VDM Verlag Dr. Muller, Germany, 167 pages including Appendices. Price: \$95.

The book under review is an excellent work in the widely discussed and most important area of energy economics. The production and consumption of energy that has an immediate effect on the way of life of the human being can be considered as the fuel of economic development. Congratulation to the author for this commendable publication having international recognition.

The book contains altogether ten chapters. The fourth chapter titled, 'Energy Consumption Pattern in Nepal' is the largest one. The assessment of the energy consumption pattern, energy resource base potential and nation's future energy plan are the main focus of the book, as the author claims.

The reader will be benefited with various aspects related to energy in general and Nepalese situation in particular. The main issues discussed in the book are the overall energy situation in Nepal, energy consumption pattern, energy resource base, the potentiality, problems related to the production as well as consumption of the energy, energy intensity, poverty reduction through the development of energy, income elasticity and price elasticity of commercial energy.

The book also highlights the alternative sources of traditional energy. The development of the projects such as biogas, micro hydro, solar, wind energy and improved cooking stoves in rural areas would be the best options for the substitution of the traditional sources of energy like firewood, animal dung and agricultural waste which constitute over 85 percent of total energy consumption in Nepal. The other source of energy consumption in Nepal is the commercial energy. The sources are coal, petroleum product and electricity. High dependence on traditional sources of energy will contribute to health hazards, climate change and environmental degradation.

Energy issue has been inseparable part of human civilization since the invention of fire by the ancient man through the modern sophisticated machines. Energy is an essential commodity that satisfies human wants. The demand for this commodity is growing day by day. Energy can also be considered as the factor of production. But the point is that the depletion of nonrenewable energy sources is an irreversible process that must be taken up into serious consideration while relating energy consumption with economic development. Energy consumption is supposed to reflect the development and advancement of the country. For example, Nepal, the developing country has low per capita energy consumption with only 335.89 kgoe (kg oil equivalent) whereas Canada, the developed one has 8240.31 kgoe in the year 2003.

The book has used simple bivariate and multivariate econometric models to analyze the relationship between various quantities and concepts related to energy issues in Nepal, such as- energy and economic growth, energy and price level, productivity of energy

use/energy efficiency/energy intensity, energy demand function, energy income elasticity and energy price elasticity. The study estimates the price and income elasticities of commercial energy demand in Nepal using the Almon polynomial distributed lag model. This model examines the trend and pattern of energy consumption during the period 1980-1999. The result finds that the demand for commercial energy is more sensitive to the change in price and income. **Emphasis is given to the generation of electricity because the finding reveals that the income elasticity of electric energy is more sensitive than the price changes which imply that 'more generation of electricity will create its own demand'.** There is high domination of traditional energy sources but the trend of use is decreasing. The study claims that the price of energy is regulated by the government, ignoring the market mechanism and remarks that the price should be determined on the basis of long run average cost of production.

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