

Woodfuels as Alternative Source of Energy in Rural and Urban Areas in the Philippines

Authors : R. T. Aggangan

Abstract : Woodfuels continue to be a major component of the energy supply mix of the Philippines due to increasing demand for energy that are not adequately met by decreasing supply and increasing prices of fuel oil such as liquefied petroleum gas (LPG) and kerosene. The Development Academy of the Philippines projects the demand of woodfuels in 2016 as 28.3 million metric tons in the household sector and about 105.4 million metric tons combined supply potentials of both forest and non-forest lands. However, the Revised Master Plan for Forestry Development projects a demand of about 50 million cu meters of fuelwood in 2016 but the capability to supply from local sources is only about 28 million cu meters indicating a 44 % deficiency. Household demand constitutes 82% while industries demand is 18%. Domestic household demand for energy is for cooking needs while the industrial demand is for steam power generation, curing barns of tobacco: brick, ceramics and pot making; bakery; lime production; and small scale food processing. Factors that favour increased use of wood-based energy include the relatively low prices (increasing oil-based fuel prices), availability of efficient wood-based energy utilization technology, increasing supply, and increasing population that cannot afford conventional fuels. Moreover, innovations in combustion technology and cogeneration of heat and power from biomass for modern applications favour biomass energy development. This paper recommends policies and strategic directions for the development of the woodfuel industry with the twin goals of sustainably supplying the energy requirements of households and industry.

Keywords : biomass energy development, fuelwood, households and industry, innovations in combustion technology, supply and demand

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