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Title: Delineating key determinants of domestic fuelwood consumption of rural households in western Himalaya-policy implications

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Abstract

A study was carried out in district Samba of Western Himalayan province of Jammu and Kashmir of India. The data were collected in an interview schedule in personal interview with 180 household heads. The association between the level of fuelwood consumption (low *versus* high consumption) and different factors, each individually, was investigated using chi-square test of association at 0.001 level of significance. It was found that out of 25 socio-economic, biophysical and alternate fuel factors, 15 factors (each individually) significantly influenced the domestic fuelwood consumption. Logistic regression models of alternate fuel use, social, economic and biophysical factors were developed to identify key variables influencing fuelwood consumption levels within each respective category. A composite model was also developed to identify key factors when all variables in all the pre-said categories were considered simultaneously. Surprisingly, in contrast to expectation the model with alternate fuel use did not provide a good fit. The biophysical model also did not provide a good fit. The economic and composite models were the same with equal level of accuracy of predication. This implies that economic aspects, rather than the availability of alternate fuels, dominate fuelwood consumption levels of rural households. Strategies to increase the exposure of the head of household to outside world needs to formulated to reduce the domestic fuelwood consumption levels of alternate fuels is not a necessary condition to decrease household level domestic fuelwood consumption. Economic factors needs to be considered in des. Households nearer to state forests are to be educated about efficient use of fuelwood and be encouraged to intensify use of *Liquified Petroleum Gas*. The wider implications of study are: the availability igning strategies to reduce fuelwood consumption. Increased employment opportunities would increase the opportunity cost of fuelwood collection and this would reduce its use.