

Forest resources for energy: environmental and social dimensions in four countries of Latin America

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"...la FAO consideró necesario señalar otra crisis energética: la crisis de la leña, que afecta el aprovisionamiento energético cotidiano de importantísimas poblaciones rurales del tercer mundo" (de Montalembert y Clements 1983)

Is Fuelwood Use = Degradation, Deforestation and Shortage?

FAO - Programa de Acción Forestal Tropical, A.C. México - Programa Social Agropecuario, Argentina

Study Cases

Case	Fuelwood consumption (m3/year)	Supply-demand balance (m3/year)	Type of Fuelwood	Fuelwood shortage
HONDURAS Tegucigalpa City	190 thou	No data	<ul style="list-style-type: none"> •24% sawmill residues •49% residues of pine forests thinning •27% <i>Quercus</i> forests 	No reported
HONDURAS San Lorenzo City	18 thou	Mangrove +2 thou Secondary forest +10 thou	<ul style="list-style-type: none"> •54% from Mangrove - 100% from cutting of live trees •46% from Secondary forest - mainly from branches 	No reported
CUBA Guantanamo Province	548 thou	No data	<ul style="list-style-type: none"> •75% from anthropic vegetation •98% from branches and dead trees 	No reported
MEXICO Pajapan Municipality, Veracruz	8 thou	+11 thou	<ul style="list-style-type: none"> •85% anthropic vegetation •97% from branches and dead trees 	500 families in two towns
MEXICO Calakmul Municipality, Campeche	36 thou	+5,500 thou	<ul style="list-style-type: none"> •61% anthropic vegetation •100% from branches and dead trees 	350 families in one town
ARGENTINA Yacutinga Village	170	-133	<ul style="list-style-type: none"> •semideciduous forest •secondary vegetation 	10 families

Sources: Arias 1999, Núñez et al 2001, Arias 2002, Arias and Bacalini 2003

Conclusions

Impact on forests

- Not all fuelwood extraction causes a negative impact
- A sizable fraction can be obtained in sustainable ways
- Trees-out-of-the-forest are important for fuelwood supply
- The knowledge of the amount of fuelwood used is not enough to estimate its impact on forest resources

Shortage of fuelwood

- Physical shortage of fuelwood rarely occurs
- Shortage due to inaccessibility does occur at local scale
- Social causes generate actual fuelwood inaccessibility for some parts of the population