A Decision Support System for trade-off analysis and dynamic evaluation of forest ecosystem services iForest – Biogeosciences and Forestry – doi: 10.3832/ifor2416-010

Supplementary Material

Tab. S1 - Additional TOOFES economic output (data processed with a rotation period of 100 years, without thinning and discount rate of 2%). (*): Examples of Break Even Prices (BEP), Annual Value (AV) and Net Present Values (NPV) for the case study.

Economic index*	Value	Notes or computation
Carbon BEP	12.6 € t ⁻¹	Price to set VPS=VRS
Biodiversity BEP	335.11 € ha ⁻¹ year ⁻¹	Price to set VPS=VSS
Touristic-recreational BEP	622.23 € ha ⁻¹ year ⁻¹	Price to set VPS=VCS
AV_{ps} (provisioning services)	281 € year ⁻¹	$AV_{ps} = VPS \cdot r$
AV_{rs} (regulating services)	156 € year ⁻¹	$AV_{rs} = VRS \cdot r$
AV_{ss} (supporting services)	38 € year ⁻¹	$AV_{ss} = VSS \cdot r$
AV_{cs} (cultural services)	12 € year ⁻¹	$AV_{cs} = VCS \cdot r$
AV_{es} (ecosystem services)	487 € year ⁻¹	$AV_{es} = VES \cdot r$
NPV _{ps} (provisioning services)	12,108 €	$NPV_{ps} = \left[\sum_{x=0}^{\omega} \frac{\rho_x + w_x - \sum_{\alpha} K_{\alpha,x} - D_x - Ad_x - I_x - S_x - z_x}{(1+r)^x}\right] \cdot s$
$\mathrm{NPV}_{\mathrm{rs}}$ (regulating services)	6,723 €	$NPV_{rs} = \left[\sum_{x=0}^{\omega} \frac{\left(C_{AG,x} + C_{BG,x}\right) \cdot \psi \cdot \sigma}{(1+r)^{x}}\right] \cdot s$
NPV _{ss} (supporting services)	1,626€	$NPV_{ss} = \left[\sum_{x=0}^{\omega} \frac{biod_x}{(1+r)^x}\right] \cdot s$
NPV _{cs} (cultural services)	525€	$NPV_{cs} = \left[\sum_{x=0}^{\omega} \frac{tr_x}{(1+r)^x}\right] \cdot s$
NPV _{es} (ecosystem services)	20,982 €	$NPV_{es} = NPV_{ps} + NPV_{rs} + NPV_{ss} + NPV_{cs}$