

<b>Ecosystem Service</b>	<b>Mass movement control</b>
<b>CICES class name</b>	Buffering and attenuation of mass movement
<b>CICES Section</b>	Regulation & Maintenance (Biotic)
<b>CICES Class code</b>	2.2.1.2

## Sample Indicators









Indicator values from			
Experiment or direct measurement		Survey	
Expert assessment		Statistical- or census data	
Model or GIS		Literature values	
Stakeholder participation		Not provided	

Table 1: Regional Scale








Indicator	Unit	Indicator values from
<sup>[1]</sup> Spring litter in un-mown plots (alpine grasslands; high amounts of litter increase risk of snow gliding)	Not specified	
<sup>[2]</sup> Number of landslide per year	#	 ,  , 
<sup>[2]</sup> Area affected by landslide	ha	
<sup>[3]</sup> Supply of landside regulation, based on: 1.) deriving a formula for calculating landslide risk by using an Analytic Hierarchy Process (AHP) 2.) creating an ES potential map (high risk= low potential, low risk = high potential) (Expert assessment was used to assign discrete values for each class of variables in AHP process and mapping of ES potential).	Index 0 - 5	

Table 2: National Scale

Indicator	Unit	Indicator values from
<sup>[4]</sup> Expert assessment for each land use class based on the indicators: soil cover; trees; landslides; flooding; debris flow (units not given)	very negative (-3) to very positive (+3)	
<sup>[5]</sup> Density of hedgerows	Not specified	

## References

No.	Citation
1	Quétier F, Lavorel S, Daigney S, de Chazal J (2009) Assessing ecological and social uncertainty in the evaluation of land-use impacts on ecosystem services. <i>Journal of Land Use Science</i> 4(3): 173-199. DOI: 10.1080/17474230903036667
2	Adhikari S, Baral H, Nitschke CR (2018) Identification, Prioritization and Mapping of Ecosystem Services in the Panchase Mountain Ecological Region of Western Nepal. <i>Forests</i> 9(9): 554. DOI: 10.3390/f9090554
3	Dang KB, Burkhard B, Muller F, Dang VB (2018) Modelling and mapping natural hazard regulating ecosystem services in Sapa, Lao Cai province, Vietnam. <i>Paddy and Water Environment</i> 16(4): 767-781. DOI: 10.1007/s10333-018-0667-6
4	Helfenstein J, Kienast F (2014) Ecosystem service state and trends at the regional to national level: A rapid assessment. <i>Ecological Indicators</i> 36: 11-18. DOI: 10.1016/j.ecolind.2013.06.031
5	Maes J, Liqueste C, Teller A, Erhard M, Paracchini ML, Barredo JI, Grizzetti B, Cardoso A, Somma F, Petersen JE, Meiner A, Gelabert ER, Zal N, Kristensen P, Bastrup-Birk A, Biala K, Piroddi C, Egoh B, Degeorges P, Fiorina C, Santos-Martín F, Naruševičius V, Verboven J, Pereira HM, Bengtsson J, Gocheva K, Marta-Pedroso C, Snäll T, Estreguil C, San-Miguel-Ayanz J, Pérez-Soba M, Grêt-Regamey A, Lillebø AI, Malak DA, Condé S, Moen J, Czúcz B, Drakou EG, Zulian G, Lavalle C (2016) An indicator framework for assessing ecosystem services in support of the EU Biodiversity Strategy to 2020. <i>Ecosystem Services</i> 17: 14-23. DOI: 10.1016/j.ecoser.2015.10.023