

**Table S3.** Complete ranking of all knowledge gaps. Categories are as follows: Ecol = Ecological, Gen = General, Pol = Political and SocEc = Socio-economic knowledge gap. Code refers to the number the knowledge gap was listed within its category in the questionnaire

Category	Code	Knowledge gap	Mean
Pol	10	Strategies on how to improve justice / fairness / enforcement of laws / rules	2.69
Pol	6	Role of corruption in illegal activities (also beyond logging) and ways to reduce corruption	2.67
Ecol	1	Appropriate forest restoration methods in conjunction with biodiversity and sustainable use	2.65
SocEc	12	Economic benefits for the local small-holder farmers from biodiversity: e.g. potential of ecotourism, PES and other offset schemes on their well-being	2.61
Pol	11	Strategies on how to improve security from violence / theft / corruption	2.59
Pol	8	Strategies to improve long-term funding	2.51
Ecol	2	Appropriate livestock management practices and fire regimes	2.45
SocEc	10	Effectiveness of education and awareness raising on biodiversity conservation	2.45
Ecol	6	Ecosystem services (ES) at risk from slash-and-burn as well as associated extractive activities	2.44
Gen	4	Frequent and regular scenario updates based on long-term monitoring	2.43
SocEc	24	Traditional knowledge about sustainable natural resource use	2.43
Gen	5	Interdisciplinary work to generate more comprehensive data sets	2.41
Ecol	15	Impacts of slash-and-burn farming on climate and hydrological cycles	2.39
Ecol	17	Long-term degradation effects from slash-burn farming and associated activities on biodiversity	2.39
Pol	12	Strategies on how accountability of institutions / governments can be strengthened	2.38
SocEc	23	(Affordable) technologies which lower the impact of agriculture on biodiversity and improve yield	2.36
Gen	1	Better data quality / reliability (through meaningful baselines, long-term data and better spatial resolution and coverage, as well as ground-truthed data)	2.35
SocEc	2	Better science communication with local people, including managers (what are the best ways to build trust and respect between outside advisers and the local community?)	2.35
SocEc	3	Cultural aspects that hinder or could improve conservation efforts	2.33
SocEc	18	Potential of women empowerment concerning income diversification	2.33
Ecol	26	Time required for regeneration of dry forests, including functional aspects and ES	2.31
SocEc	16	Most economically efficient land use of already converted land	2.29
Pol	13	Strategies on how competing (land / property) rights issues can be most fairly addressed	2.27
Gen	3	Data for more (appropriate) indicators to measure achievement of goals	2.25

Category	Code	Knowledge gap	Mean
Gen	6	Landscape context data	2.24
Pol	5	Research on how polycentric governance (multi-stakeholder, including indigenous people) can improve conservation	2.24
SocEc	11	Effectiveness of payment for ecosystem services (PES), carbon offset schemes and other programs aiming to improve the well-being of small-holder farmers	2.24
Ecol	16	Interacting effects of climate change on biodiversity and food production	2.22
Pol	4	Research on what social safety-nets are needed to protect people from chronic poverty (and future threats linked to climate change)	2.22
SocEc	5	Data on illegal activities and corruption	2.18
Ecol	7	Effective buffer zone and corridor dimensions	2.16
Ecol	11	Effects of remaining forest vegetation ( high biodiversity) adjacent to crops on crop yields	2.16
Pol	3	Influence of mining companies and large plantation farmers / owners on politics	2.14
SocEc	19	Role of biodiversity protection in inequality and poverty reduction	2.12
SocEc	22	Short- / medium- / long-term costs and benefits of protecting biodiversity	2.10
Ecol	8	Effectiveness of different types of biodiversity protection (ranging from strict to multiple use conservation areas)	2.06
Ecol	9	(Spill-over) effects of increased agricultural productivity through intensification on remaining areas of native vegetation	2.06
Gen	2	Data and meta-data availability (through digitalization)	2.06
Pol	2	Effectiveness of payments for ecosystem services and certification schemes on political decisions	2.04
Pol	9	Strategies on how to avoid / minimize future political crises	2.04
Pol	14	Strategies to improve local conservation managers' access to scientific publications	2.02
Pol	1	Effects of conservation activities and sustainable use of biodiversity on political achievements (e.g. 2°C-target of the Paris Climate Agreement)	2.00
SocEc	9	Drivers of societal dynamics	2.00
SocEc	14	Impact of mining operations on small-holder farmers	2.00
SocEc	21	Short- / medium- / long-term costs and benefits of avoiding increasing land degradation	2.00
Ecol	12	Effects of climate change on biodiversity including lag effects	1.98
Ecol	20	Reaction of plant and animal species to anthropogenic as well as natural types of disturbance	1.96
Ecol	10	Effectiveness of payment for ecosystem services and other certification schemes on biodiversity protection	1.92
Gen	7	Time-lag effects analyses and simulations	1.90

Category	Code	Knowledge gap	Mean
Pol	7	Roles of World Bank, philanthropists and philanthropic foundations, as well as NGOs in mitigating poverty	1.90
SocEc	1	Alternative sources of protein for bushmeat	1.88
Ecol	21	Role of introduced species (including diseases) on ecosystem functioning	1.84
SocEc	4	Data on capacity building	1.82
Ecol	3	Best place for which type (multiple-use vs strictly protected) of protected area	1.80
SocEc	13	Health risks of traditional slash-and-burn farming vs more technologically and chemically improved farming in attempts to increase food production	1.80
SocEc	15	Impact of plantation farming on small-holder farmers	1.78
Ecol	24	Sustainable quotas for species harvesting in multiple-use protected areas	1.76
Ecol	22	Spatial ecology data for the investigation of species dynamics	1.73
Ecol	19	Nutrient cycling	1.71
SocEc	17	Potential of psychological research on motivational values of biodiversity conservation	1.71
SocEc	6	Data on inequality	1.61
SocEc	20	Role of tele-coupling / international trade in well-being of poor people	1.54
Ecol	4	Biomass data	1.51
SocEc	7	Data on international land deals	1.47
Ecol	5	Carbon stock data	1.42
Ecol	18	Multi-trophic interactions	1.42
Ecol	23	Species behavioral data	1.41
Ecol	25	Taxonomic data (particularly for groups other than higher plants and vertebrates)	1.41
SocEc	8	Data on material footprint	1.39
Ecol	14	Genetic diversity data	1.33
Ecol	13	Functional / phylogenetic data	1.22