

Participatory Mapping for Strengthening Governance on Infrastructure Impacts in the Amazon: Lessons to Improve Tools and Strategies

Table S1. List of stakeholder participants per mosaic, including government, indigenous or community representatives, non-profit organizations (NGO), and academia. The number of participants per institution is shown in parenthesis ().

	Bolivia	Brazil	Colombia	Peru (n = 31)
Government		SEMA - Secretaria de Estado do Meio Ambiente de Boca do Acre (1)	Ministerio del Ambiente (4)	DIRCETURA - Dirección Regional de Turismo y Artesanía (1)
		IDAM - Instituto de Desenvolvimento Agropecuário e Florestal Sustentável do Estado do Amazonas (1)	Ministerio de Transporte (2)	GOREL (2)
			Instituto Sinchi (1)	Gerencia de Planificación y Presupuesto (1)
			Fondo Acción	SERNANP - Servicio Nacional de Áreas Naturales Protegidas (2)
			Gobernación del Guaviare (1)	GERFOR - Gerencia de Desarrollo Forestal de Flora y Fauna Silvestre (2)
			CorpoAmazonia - Corporación para el Desarrollo Sostenible del Sur de la Amazonía (1)	DECDB - Dirección Ejecutiva de Conservación y Diversidad Biológica (1)
			CDA - Corporación para el Desarrollo Sostenible del Norte y el Oriente Amazónico (2)	GRAI - Gerencia mosaical de Asuntos Indígenas (1)
		STTR - Sindicato dos Trabalhadores e Trabalhadoras Rurais de Lábrea (1)	Resguardo Indígena de Yunguillo (1)	Coordinadora Regional de Pueblos Indígenas de San Lorenzo, CORPI SL (1)
		ASAEX - Associação dos Seringueiros Agroextrativistas da	Representante Pueblo Inga (1)	Comité de Gestión del Área de Conservación mosaical Alto Nanay
Indigenous/Community representatives	Comité de Protección Cachuela Esperanza (1)			
	Pescador de comunidade de Porto Velho (2)			

	Reserva do Rio Ouro Preto (1)	Veeduría Carretera Mocoa (1)	Pintuyacu Chambira (2)
	OCMA - Organización Comunal Mujer Amazónica (4)	OCMA - Organización Comunal de la Mujer Amazónica	Consejo Comunal de la Reserva Nacional Pucacuro (1)
	OPIPAM - Organização do Povo Indígena Parintintin do Amazonas (1)	APIJ - Associação do Povo Indígena Jiahui (1)	
		OPIPAM - Organização do Povo Indígena Parintintin do Amazonas (1)	
		KANINDÉ - Associação de Defesa Etnoambiental Kanindé (1)	
NGO	WCS - Wildlife Conservation Society (1)	ACT - Amazon Conservation Team (1)	TNC - The Nature Conservancy (2)
	FCDS - Fundación para la Conservación y Desarrollo Sostenible (1)	IDESAM - Instituto de Conservação e Desenvolvimento Sustentável da Amazônia (1)	WCS - Wildlife Conservation Society (3)
	IMV - Instituto Madeira Vivo (1)	IPÊ - Instituto de Pesquisas Ecológicas (2)	DAR - Derecho, Ambiente y Recursos Naturales (2)
	CEDLA - Centro de Estudios para el Desarrollo Laboral y Agrario (1)	FCDS - Fundación para la Conservación y el Desarrollo Sostenible (5)	CSF - Conservation Strategy Fund (1)
	IEB - Instituto Internacional de Educação do Brasil (1)	WWF- World Wildlife Fund (3)	SPDA - Sociedad Peruana de Derecho Ambiental (3)
	FAUNAGUA - Instituto de Investigaciones Aplicadas de los Recursos del Agua (1)	ACT - Amazon Conservation Team (2)	CEDIA - Centro para el Desarrollo del Indígena Amazónico (1)
		Fondo Acción (1)	TNC - The Nature Conservancy (1)
			NCI - Naturaleza y Cultura Internacional (1)
			Field Museum of Chicago (1)
			WWF - World Wildlife Fund

Academia	UNIR - Universidade Federal de Rondônia (3)	UNIR - Universidade Federal de Rondônia (6)	Universidad del Rosario (1)	(Brazil) (1) PUCP - Pontificia Universidad Católica del Perú (1)
	USP - Universidade Federal de São Paulo (1)	UEA - Universidade Estadual do Amazonas (Humaitá) (1)		UTEC - Universidad de Ingeniería y Tecnología (2)
	UAB-JB - CIRA - Universidad Autónoma del Beni José Ballivian (2)	UFAM - Universidade Federal do Amazonas (1)		
	UAP - Universidad Amazónica de Pando, Área de Ciencias Biológicas y Naturales (7)			
	IHH - UMSA - Instituto de Hidráulica e Hidrología (1)			

Table S2. Categories for the Areas of Value and Concern.

Categories	Description
Indigenous Territories	all kinds of indigenous territories
Protected Areas	national, federal, municipal and private protected areas (parks/reserves) for conservation and sustainable development
Roads	road influence and expansion
Dams	hydroelectric dams
Hydroways	hydroways
Mineral Extractivism	mining and oil extraction areas
Larger landscapes	corridors, frontier areas, and other large areas that are not defined by administrative boundaries
Administrative boundaries	specific cities, provinces, districts or settlement areas
Rivers and Watersheds	specific river names or river basins

Table S3. Categories and subcategories of participants' "explanations" of why the areas selected are of value and concern.

Why	Categories	Subcategories	Description
Value	Environment	Forest	Environmental, forest carbon, conservation, wildlife, territory, landscapes, forest production
Value	Environment	Hydrological	Springs, water-resources, waterbodies, wetlands, oxbow-lakes, hydric richness
Value	Environment	Biodiversity	or biological
Value	Social	Human capacities	Research, monitoring, management, institutional capacity and strengthening
Value	Social	Community Forest	Forest livelihoods, timber and non-timber forest products, agroforestry
Value	Social	Cultural, Spiritual	cultural, spiritual, sacred, indigenous,
Value	Social	Socioeconomic	both, or economic or social
Value	Social	Fisheries	for livelihoods
Value	Social	Touristic	touristic

Value	Social	Other	Agriculture, logging, mining, hydroelectric, road
Concern	Resource extraction	Aquaculture	fish and crustaceans farming impacts
Concern	Resource extraction	Agriculture	extensive agricultural expansion, and cattle ranching impacts
Concern	Resource extraction	Illegal Logging	logging and illegal logging impacts
Concern	Resource extraction	Mining	Mining impacts
Concern	Resource extraction	Oil-gas	oil-gas impacts
Concern	Infrastructure	Dams	dams, hydroelectric plants' impacts
Concern	Infrastructure	Roads	road and highway expansion impacts
Concern	Infrastructure	Hydroways	hydroways and hydrological value
Concern	Environmental	Biodiversity-loss	connectivity-loss, biodiversity loss and value, socio-biodiversity impacts, hunting and fauna killings through turnover
Concern	Environmental	Deforestation	Forest loss, deforestation and fragmentation
Concern	Environmental	Water	pollution, sedimentation, erosion, dredging, and river dynamics
Concern	Environmental	Human capacities	lack of environmental management, governance, research, support, institutional strengthening
Concern	Environmental	Other environmental impacts	Protected area impacts, conservation, illegal activities, natural-resources extraction, waste, toxic materials
Concern	Socio-economic	Socio-cultural impacts	socioeconomic, cultural impacts and values, indigenous livelihoods and territories, diseases, corruption
Concern	Socio-economic	Social conflicts	social conflicts and violence
Concern	Socio-economic	Land conflicts	land-invasion, insecure tenure, conflicts
Concern	Socio-economic	Narcotrafficking and arms	drug trade, coca, armed groups, and arm trade
Concern	Socio-economic	flooding	impacts from flooding
Concern	Socio-economic	fisheries	fishery stocks depletion, illegal fishing
Concern	Socio-economic	seismic	seismic impacts

Table S4. CMP Conservation Actions Classification v.2.0 (Conservation Measures Partnership, 2016).

Classification Levels	Definition
CMP 1 - Land/Water Management	Actions directly managing or restoring sites, ecosystems and the wider environment
CMP 2 - Species Management	Actions directly managing or restoring specific species or taxonomic groups
CMP 3 - Awareness Raising	Actions making people aware of key issues and/or feeling desired emotions, leading to behavior change
CMP 4 - Law Enforcement and Prosecution	Actions monitoring and enforcing compliance with existing laws and policies at all levels to deter threats or compel conservation action
CMP 5 - Livelihood, Economic and Moral Incentives	Actions using livelihood, other economic and moral incentives to directly influence attitudes and behaviors
CMP 6 - Conservation Designation and Planning	Actions directly protecting sites and/or species
CMP 7 - Legal and Policy Frameworks	Actions developing and influencing legislation, policies and voluntary standards affecting conservation
CMP 8 - Research and Monitoring	Actions collecting data and transforming it into information to support conservation work
CMP 9 - Education and Training	Actions enhancing the knowledge and skills of specific individuals
CMP 10 - Institutional Development	Actions creating the institutions needed to support conservation work

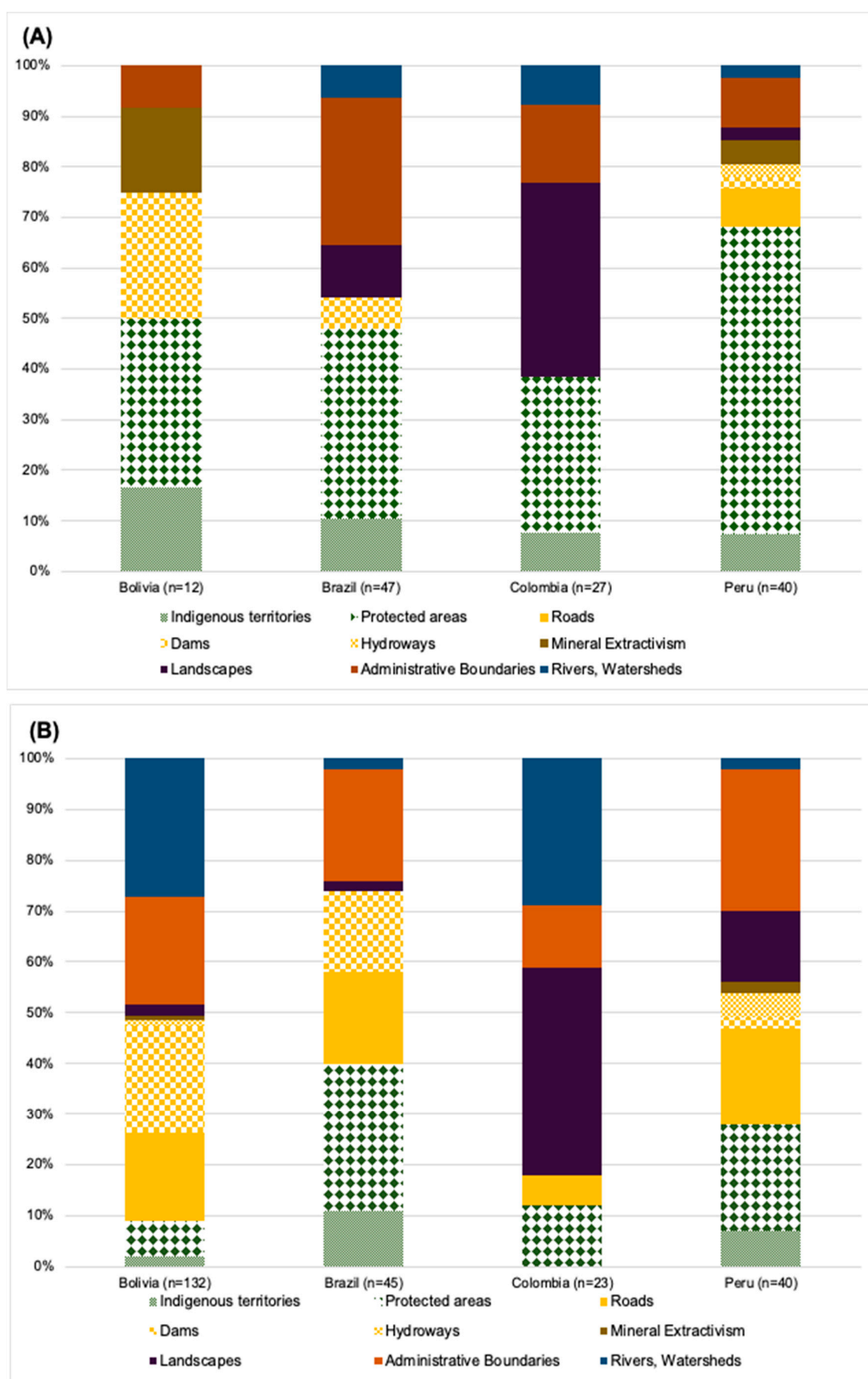


Figure S1. Percentages per category of areas of value (A) and concern (B) per mosaic.