

Assessing impacts of environmental peacebuilding in Caquetá, Colombia: a multistakeholder perspective

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If efforts to establish peace are to be sustainable, they must take into account many factors, especially given that the risk of violence recurring is highest in the immediate postwar period.¹ According to Collier and colleagues, 50 per cent of peace processes fail within ten years.² The UN Secretary-General's Policy Committee defines peacebuilding as 'a range of measures targeted to reduce the risk of relapsing into conflict by strengthening national capacities at all levels for conflict management and to lay the foundations for sustainable peace and development'.³ The main trend in supporting post-conflict societies is framed as the so-called state-building or liberal peace.⁴ Liberal peace is constructed under the assumption of a well-functioning state, the rule of law, economic growth, and democratic accountability between state and civil society. However, this approach has been criticized on the grounds that the processes of state-building are typically carried out by external actors, thus diminishing local ownership and the very values of liberal peace.⁵

The UN adopted the concept of *sustaining peace* in 2018 after revising its peace operations in 2016. At the core of this concept is the recognition that peacebuilding encompasses a number of different dimensions and is a political activity that, as

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¹ Christian Webersky and Marc Levy, 'Reducing the risk of conflict recurrence: the relevance of natural resource management', in Carl Bruch, Carroll Muffet and Sandra S. Nichols, eds, *Governance, natural resources, and post-conflict peacebuilding* (London: Earthscan, 2016), pp. 2–12.

² Paul Collier, V. L. Elliot, Håvard Hegre, Anke Hoeffler, Marta Reynal Querol and Nicholas Sambanis, *Breaking the conflict trap: civil war and development policy* (New York: Oxford University Press and World Bank, 2003).

³ UN Secretary-General's Policy Committee, *Conceptual basis for peacebuilding for the UN system* (New York: UN, 2007).

⁴ Oliver P. Richmond, 'The problem of peace: understanding the "liberal peace"', *Conflict, Security and Development* 6: 3, 2006 pp. 291–314; Finn Stepputat, 'Pragmatic peace in emerging landscapes', *International Affairs* 94: 2, March 2018, pp. 399–416.

⁵ Lise Philipsen, 'When liberal peacebuilding fails: paradoxes of implementing ownership and accountability in the integrated approach', *Journal of Intervention and Statebuilding* 8: 1, 2014, pp. 42–67.

well as avoiding templates and one-size-fits-all solutions, should also take advice from local leaders and support existing institutions.⁶ The revision of peacebuilding operations has brought the opportunity to reframe their practices, integrate fresh approaches and expertise from other sectors, and work on better ways of monitoring and evaluating the practice of sustaining peace. De Coning describes a new approach called *adaptive peacebuilding*, which departs from traditional liberal peace approaches in the type of involvement of missions. To consolidate peace, he argues, it is necessary to approach the existing governance mechanisms and capacities within a society with the aim not just of enhancing social cohesion and resilience, but also of addressing the inequalities at the root of conflict.⁷ For the field of environmental peacebuilding (EP), this approach offers an opportunity to better integrate dimensions of peacebuilding into programmes that manage natural resources, focusing on those that encourage the resilience of the population in practical ways.⁸

A critical dimension of peacebuilding is the promotion of economic growth to secure people's livelihoods, while also promoting sustainable resource use.⁹ The biophysical environment and natural resources provide the fundamental underpinning for livelihoods. Land, water, timber and minerals sustain communities and societies. Therefore, managing natural capital is crucial for promoting stabilization and recovery following armed conflict.¹⁰ A growing number of scholars are studying the extent to which the environment might play a role in post-conflict contexts, by helping in the rebuilding of livelihoods after violent conflict and reinforcing peace processes.¹¹ The UN Environment Programme (UNEP) has undertaken work on the issue of natural resource management in post-conflict peacebuilding settings in intrastate, bilateral and regional contexts.¹² Weinthal and Johnson also highlight the importance of research on how renewable and non-renewable natural resource management interplay with reducing poverty as well as fostering trust and enhancing human development following war.¹³

⁶ 'Secretary-general's remarks to the Peacebuilding Commission', ambassadorial-level meeting on 'Leadership, accountability and capacities', New York, 7 Sept. 2018, <https://www.un.org/peacebuilding/news/secretary-generals-remarks-peacebuilding-commission>; Louise Riis Andersen, 'The HIPPO in the room: the pragmatic push-back from the UN peace bureaucracy against the militarization of UN peacekeeping', *International Affairs* 94: 2, 2018, pp. 343–62. (Unless otherwise noted at point of citation, all URLs cited in this article were accessible on 29 Sept. 2020.)

⁷ Cedric de Coning, 'Adaptive peacebuilding', *International Affairs* 94: 2, March 2018, pp. 301–17.

⁸ De Coning, 'Adaptive peacebuilding'.

⁹ Ken Conca and Jennifer Wallace, 'Environment and peacebuilding in war-torn societies: lessons from the UN Environment Programme's experience with postconflict assessment', *Global Governance* 15: 4, 2009, pp. 485–504.

¹⁰ Carl Bruch, Carroll Muffett and Sandra S. Nichols, 'Natural resources and post-conflict governance: building a sustainable peace', in *Governance, Natural Resources, and Post-Conflict Peacebuilding* (Abingdon and New York: Earthscan, 2015), pp. 1–32.

¹¹ Erika Weinthal and McKenzie F. Johnson, 'Post-war environmental peacebuilding: navigating renewable and non-renewable resources', in Ashok Swain and Joakim Øjendal, eds, *Routledge handbook of environmental conflict and peacebuilding* (Abingdon: Routledge, 2018), p. 87.

¹² Päivi Lujala and Siri Aas Rustad, eds, *High-value natural resources and post-conflict peacebuilding* (Abingdon: Routledge, 2012); David Jensen and Steve Loneragan, eds, *Assessing and restoring natural resources in post-conflict peacebuilding* (Abingdon: Routledge, 2013).

¹³ Weinthal and Johnson, 'Post-war environmental peacebuilding'.

Land-use systems and the associated changes in land cover have been a visible indicator of the human footprint and the most important driver of loss of biodiversity and land degradation around the globe.¹⁴ In response, global initiatives have been developed with the aspiration of achieving land-based emissions reductions (the Paris Agreement of 2015) and restoring damaged landscapes (the Bonn Challenge of 2011). Furthermore, land-use patterns and land-use changes are considered critical for the sustainable development of developing countries.¹⁵

Land is one of the most important resources in postwar contexts. Authors such as Unruh emphasize the importance of managing land access and use to ensure sustainable peace.¹⁶ In the push to rebuild the economy and generate revenues after conflict, governments with weak state capacity are often unable to control rent-seeking behaviours that involve violence in gaining and/or controlling access to land. The literature shows not only that governments in multiple locations have failed to protect communities' access to lands held under customary tenure, but also that the rapid proliferation of natural resource concessions has led to claims of land grabbing and localized conflict in Liberia, South Sudan, Peru, Afghanistan, Timor-Leste and other post-conflict contexts. Furthermore, in some postwar environments governments can generate land-use conflicts by encouraging commercial investment in the mining, energy and agricultural sectors, often with deleterious consequences such as deforestation.¹⁷

In Colombia, decades of land-use systems based on logging and cattle ranching, as well as crops that are transformed into illegal products to sell in global markets (such as coca), are the main causes of deforestation.¹⁸ The cultivation of illegal crops has fuelled violent conflict by providing resources to sustain armed actors. Peace processes offer opportunities to develop EP projects that promote new schemes of land use, including natural resource governance to improve the welfare and resilience of local communities.¹⁹ In fact, studies suggest that peacebuilding activities are conducive to establishing conditions in which conflict-affected farmers look favourably on forest conservation if this can be done in a way that is compatible with respective livelihood priorities, for example through more

¹⁴ Ephraim Nkonya, Alain Karsenty, Siwa Msangi, Carlos Souza Jr, Mahendra Shah, Joachim von Braun, Gillian Galford and SooJin Park, *Sustainable land use for the 21st century* (New York: United Nations Department of Economic and Social Affairs, 2012), https://www.zef.de/fileadmin/media/news/cc8c_esof_nkonya.pdf.

¹⁵ Pytrik Reidsma, Hannes König, Shuyi Feng, Irina Bezlepina, Ingrid Nesheim, Muriel Bonin, Mongi Sghaier, Seema Purushothaman, Stefan Sieber, Martin K. van Ittersum and Floor M. Brouwer, 'Methods and tools for integrated assessment of land use policies on sustainable development in developing countries', *Land Use Policy* 28: 3, 2011, pp. 604–17.

¹⁶ Jon Unruh and Rhodri C. Williams, eds, *Land and post-conflict peacebuilding* (Abingdon: Routledge, 2013).

¹⁷ Jon Unruh and Rhodri C. Williams, 'Lessons learned in land tenure and natural resource management in post-conflict societies', in Unruh and Williams, eds, *Land and post-conflict peacebuilding*.

¹⁸ Carolin Hoffmann, Jaime Ricardo García Márquez and Tobias Krueger, 'A local perspective on drivers and measures to slow deforestation in the Andean–Amazonian foothills of Colombia', *Land Use Policy* 77: 9, special section on 'Dynamics of land policies—triggers and implications', 2018, pp. 379–91.

¹⁹ Maximilian Graser, Michelle Bonatti, Luca Eufemia, Hector Morales Muñoz, Marcos Lana, Katharina Löhr and Stefan Sieber, 'Peacebuilding in rural Colombia: a collective perception of the integrated rural reform (IRR) in the department of Caquetá (Amazon)', *Land* 9: 2, 2020, p. 36; P. Zúñiga-Upegui, C. Arnaiz-Schmitz, C. Herrero-Jáuregui, S. Smart, C. López-Santiago and M. F. Schmitz, 'Exploring social-ecological systems in the transition from war to peace: a scenario-based approach to forecasting the post-conflict landscape in a Colombian region', *Science of the Total Environment*, vol. 695, Dec. 2019.

sustainable forms of cattle ranching.²⁰ In this sense, sustainable land-use systems (SLUS) emerge as an approach to the technical management of land-use issues that may have an impact on peacebuilding. Such a system can be implemented at the scale of a single farm or an entire landscape. At the farm level, it promotes both sustainable agriculture options for rural livelihoods and measures to stop deforestation, while encouraging resource efficiency and carbon sequestration (e.g. through agroforestry cocoa cultivation and silvopastoral systems).²¹ Across a landscape, according to the UN Food and Agriculture Organization (FAO), it involves the allocation of land to different uses in a way that balances economic, social and environmental values.²²

According to Bruch and colleagues, international agencies, national governments and non-governmental organizations alike explicitly recognize the importance of natural resources when designing and implementing peacebuilding and post-conflict programmes.²³ These efforts are constructed in the changing reality that development aid has to acknowledge, in which climate change not only influences conflict but also increases the vulnerabilities of some populations.²⁴ Nevertheless, other authors, such as Ide, note potential risk factors emerging from environmental peacebuilding practices at the project level, including depoliticization, deterioration into conflict or displacement of populations, among others.²⁵ He claims that more systematic knowledge should be developed through monitoring and evaluation missions in order to mitigate such risks.

Research and practice on the monitoring and evaluation of environmental peacebuilding practices are scarce.²⁶ Matthew has done initial work on integrating peacebuilding programming and climate change adaptation, considering dimensions such as socio-economic recovery, politics and governance, and security, as well as the rule of law and human rights.²⁷ Some approaches to operationalization are presented in the EP training manual published by Conservation International, which focuses on conflict management in conservation projects and avoiding its unintended consequences;²⁸ and the toolkit jointly produced by Adelphi and UNEP presents approaches for monitoring climate fragility risks and peacebuild-

²⁰ Augusto Castro-Nunez, Ole Mertz and Marcela Quintero, 'Propensity of farmers to conserve forest within REDD+ projects in areas affected by armed conflict', *Forest Policy and Economics* 66: C, 2016, pp. 22–30.

²¹ Maria Eliza Villarino, Centre for International Tropical Agriculture (CIAT), *Sustainable land use systems: a way to help achieve Colombia's climate change mitigation and peacebuilding goals*, CIAT blog (Palmira: CIAT, 2019), <https://blog.ciat.cgiar.org/sustainable-land-use-systems-a-way-to-help-achieve-colombias-climate-change-mitigation-and-peacebuilding-goals/>; P. K. Ramachandran Nair, B. Mohan Kumar and Vimala D. Nair, 'Agroforestry as a strategy for carbon sequestration', *Journal of Plant Nutrition and Soil Science* 172: 1, 2009, pp. 10–23.

²² FAO, *Guidelines for land-use planning*, FAO development series (Rome, 1993).

²³ Bruch et al., 'Natural resources and post-conflict governance'.

²⁴ Dan Smith and Janani Vivekananda, *A climate of conflict: the links between climate change, peace and war* (London, International Alert, 2007).

²⁵ Tobias Ide, 'The dark side of environmental peacebuilding', *World Development* 127: C, 2020, loc. 104777.

²⁶ Ide, 'The dark side'; Jeremy Moore, *The urgency and complexity of environmental peacebuilding* (Washington DC: United States Institute of Peace, 13 Feb. 2020), <https://www.usip.org/blog/2020/02/urgency-and-complexity-environmental-peacebuilding>.

²⁷ Richard A. A. Matthew, 'Climate change adaptation and peacebuilding', in Swain and Øjendal, eds, *Routledge handbook of environmental conflict and peacebuilding*, pp. 108–20.

²⁸ Brittany Ajroud, Nathalie Al-Zyoud, Lydia Cardona, Janet Edmond, Danny Pavitt and Amanda Woomer, *Environmental peacebuilding training manual* (Arlington, VA: Conservation International, 2017).

ing.²⁹ However, there is a gap in the literature regarding frameworks for assessing the impacts of EP projects, especially in respect of contexts where multiple stakeholders may have different perspectives on which aspects should be prioritized, and tracing their effects in sustaining peace.

In setting out to fill this gap, this article asks: what are the possible impacts of SLUS projects on peacebuilding? We address this question by discovering in the literature the dimensions of peacebuilding, understood as the sub-areas of the field (e.g. governance, transitional justice, socio-economic inclusion, security, peace culture), and the mechanisms (the processes through which a possible peace outcome takes place within a dimension) that could be used to assess the impacts of SLUS in postwar peacebuilding, as a representative practice of EP. We validate the dimensions and mechanisms identified with reference to experts in the fields of EP and natural resource management. The article contributes to the field of EP by promoting the prioritization of certain dimensions within the peacebuilding field through the implementation of environmental and agricultural projects. Furthermore, the article adds to our knowledge about actors' perspectives, an approach still marginalized in EP research. The research presented here clearly shows a heterogeneity and richness among actors involved in EP projects, with distinct divisions both between international and local experts and between implementers and local communities in respect of assessments of priorities and understanding the impact of SLUS practices on peacebuilding. Thus our findings strengthen the call for more focus on local perspectives, on differences in perceptions and interests, and on power relations (for example, avoiding depoliticization and promoting decolonization).³⁰ The article contributes not only to the field of EP but also to related areas including peace and conflict studies, development studies, natural resource management and governance. It provides insights for practitioners of EP programmes that will help to improve the design of such programmes and the targeting of the appropriate dimensions in the monitoring and evaluation of projects that seek to deliver SLUS practices with the aim of contributing to climate change mitigation and adaptation, the rebuilding of livelihoods and peacebuilding efforts.

The article continues as follows. The next section presents our methodology, including a description of the case-study, the data collection methods and the limitations to which the study was subject. The following section presents the results of the exercise in prioritizing the dimensions of peacebuilding, as discovered in the literature, and its validation with experts; it also covers the explanatory mechanisms identified by the stakeholders. The next section discusses the contributions of this research to the EP literature, and a final section concludes.

²⁹ UNEP and Adelphi, *Addressing climate-fragility risks* (Nairobi, 2019), <https://www.unenvironment.org/resources/toolkits-manuals-and-guides/addressing-climate-fragility-risks>.

³⁰ Roger Mac Ginty, 'Where is the local? Critical localism and peacebuilding', *Third World Quarterly* 36: 5, 2015, pp. 840–56; Caroline Hughes, Joakim Öjendal and Isabell Schierenbeck, *The struggle versus the song—the local turn in peacebuilding: an introduction* (Abingdon: Taylor & Francis, 2015); Karin Aggestam and Anna Sundell, 'Depoliticizing water conflict: functional peacebuilding in the Red Sea–Dead Sea water conveyance project', *Hydrological Sciences Journal* 61: 7, 2016, pp. 1302–12; Ide, 'The dark side'.

Methodology

Case-study description: the department of Caquetá in Colombia

Colombia is an interesting case-study for EP because it represents an illustrative example of the overlapping challenges of postwar peacebuilding, including economic development and climate change mitigation as well as adaptation in rural areas.³¹ However, few existing analyses concentrate on EP in Colombia.³²

After the peace agreement between the Revolutionary Armed Forces of Colombia (FARC) guerrillas and the Colombian state was signed in 2016, several measures were taken to achieve sustainable peace. Some authors consider the Colombian peace agreement as a great opportunity because it seeks to close the agrarian frontier, preventing cultivation encroaching further on the Amazon rainforest, and to promote the eradication of coca from Colombian natural parks.³³ The agreement aims to tackle some of the root causes of the conflict, including social and political exclusion, unequal or lack of access to land, and low levels of economic development in peripheral areas.

However, in the three years after its signature, up to 2019, between 397 and 555 social leaders and environmental activists were assassinated in conflict-affected regions.³⁴ The hypothesis is that criminal gangs are filling the void left by the guerrillas and trying to control informal mining and drug trafficking.³⁵ Furthermore, a number of dissident FARC factions are absorbing smaller groups in the south, while attacks on civil society and the armed forces by the National Liberation Army are continuing across the country.³⁶ Also, forest areas that were previously subject to security restrictions are increasingly accessible, with the side-effect of increasing deforestation rates (by 44 per cent in 2017) and land degradation.³⁷

One region prioritized by both the Colombian government and international projects is Caquetá in the Colombian Amazon. This region has three elements that make it a particularly interesting case-study for assessing EP projects. First,

³¹ Augusto Castro-Nunez, Ole Mertz and Chrystian C. Sosa, 'Geographic overlaps between priority areas for forest carbon-storage efforts and those for delivering peacebuilding programs: implications for policy design', *Environmental Research Letters* 12: 5, 2017.

³² Exceptions include Brigitte Baptiste, Miguel Pinedo-Vasquez, Victor H. Gutierrez-Velez, Germán I. Andrade, Pablo Vieira, Lina M. Estupiñán-Suárez, Maria C. Londoño, William Laurance and Tien Ming Lee, 'Greening peace in Colombia', *Nature Ecology and Evolution* 1, article number 0102, 2017.

³³ Pedro Valenzuela and Servio Caicedo, 'Environmental peacebuilding in post-conflict Colombia', in *Routledge handbook of environmental conflict and peacebuilding* (Routledge, 2018).

³⁴ There is no agreement on the number of social leaders killed: the UN High Commissioner for Human Rights reports 397 and a Colombian national authority called Defensoría del Pueblo reports a total of 550. UNHCR, *Informe de La Alta Comisionada de Las Naciones Unidas Para Los Derechos Humanos sobre la situación de derechos humanos en Colombia durante el año 2019* (New York, 25 Feb. 2020); Defensoría del Pueblo de Colombia, *Al menos 555 líderes sociales han sido asesinados entre 2016 y 2019* (Bogotá: Defensoría del Pueblo, 2019), <https://www.defensoria.gov.co/es/nube/enlosmedios/8996/Al-menos-555-lideres-sociales-han-sido-asesinados-entre-2016-y-2019-Defensoria-del-Pueblo.htm>.

³⁵ Serena Simoni, 'Queens of narco-trafficking: breaking gender hierarchy in Colombia', *International Affairs* 94: 6, Nov. 2018, pp. 1257–68.

³⁶ International Crisis Group, *The missing peace: Colombia's new government and last guerrillas* (Brussels, 2018), <https://www.crisisgroup.org/latin-america-caribbean/andes/colombia/68-missing-peace-colombias-new-government-and-last-guerrillas>.

³⁷ Sara Reardon, 'Peace is killing Colombia's jungle—and opening it up', *Nature* 558: 7709, 2018, pp. 169–70.

historically FARC was heavily involved in this area.³⁸ Its location, with the deeper Amazon to the east, close to the Ecuadorian border on the Putumayo river in the south and with the rugged Andean cordillera to the west, made Caquetá strategically important for the guerrillas.³⁹ FARC was also involved in social, military and economic control, especially in rural areas, where its members even operated informal justice mechanisms. According to Meza, they controlled income and land uses in rural zones.⁴⁰ Guerrillas also controlled coca production and trafficking,⁴¹ through the domination of and extortion from farmers and merchants.⁴² After the peace agreement was signed, former FARC combatants started living in special zones designed for the demobilization process. Here they are developing alternative livelihoods, including agricultural production, crop substitution and other activities such as guiding tourists in nature expeditions and extreme sports.⁴³ However, decisions on sustainable land uses will affect their relationships with local communities and the process of building social cohesion. For example, after some strategic areas were liberated from guerrilla control, multinational corporations began entering the region to invest in mining and agribusiness.⁴⁴ Furthermore, FARC dissidents and other criminal gangs are now present in Caquetá, aiming to control coca, gold and timber production.⁴⁵

Second, Caquetá is situated in the Amazon basin, at the entry point to the Amazon, adjacent to the Andes mountains. It has unique biological corridors with vast varieties of flora and fauna native to Caquetá, making it one of the most massively biodiverse departments in Colombia. Four national natural parks are located in Caquetá, safeguarding about 25,000 square kilometres of rich biodiversity and abundant sources of water feeding the Amazon basin, including large parts of the iconic Serranía de Chiribiquete.⁴⁶

Third, Caquetá is a peripheral region, with poverty levels showing stark inequalities. In 2018, poverty affected 40.1 per cent of Caquetá's citizens, compared to 27.0 per cent nationwide.⁴⁷ It is characterized by a lack of job opportunities, poorly

³⁸ Ana María Díaz and Fabio José Sánchez Torres, *Geografía de los cultivos ilícitos y conflicto armado en Colombia* (Bogotá: Universidad de los Andes, Facultad de Economía, 2004).

³⁹ Graser et al., 'Peacebuilding in rural Colombia'.

⁴⁰ María Carolina Meza, Jéniffer González and Ariel Ávila, *Recursos y retos para el postconflicto en la región Huila y Caquetá* (Bogotá: Fundación Ideas para la Paz, 2015).

⁴¹ Camilo Echandía, 'Expansión territorial de las guerrillas Colombianas: geografía, economía y violencia', in Malcolm Deas y María Victoria Llorente, eds, *Reconocer la guerra para construir la paz* (Bogotá: CEREC, 1999), pp. 99–149.

⁴² Unidad para la Atención y Reparación Integral a las Víctimas, *De Caquetá y Huila 'Reparamos a las Víctimas, Aquí Comienza la Paz'* (Bogotá, 2015).

⁴³ UN Verification Mission in Colombia, *Former FARC-EP combatants certified as rafting guides in the Amazon jungles of Caquetá, Colombia*, 29 Nov. 2018, <https://colombia.unmissions.org/en/former-farc-ep-combatants-certified-rafting-guides-amazon-jungles-caquetá-colombia>.

⁴⁴ Astrid Ulloa and Sergio Coronado, *Extractivismos y posconflicto en Colombia: retos para la paz territorial* (Bogotá: Universidad Nacional de Colombia, 2016).

⁴⁵ Dolores Armenteras, Laura Schneider and Liliana María Dávalos, 'Fires in protected areas reveal unforeseen costs of Colombian peace', *Nature Ecology and Evolution* 3: 1, 2019, pp. 20–23.

⁴⁶ Guillermo Martínez, *Construyendo Agenda 21 para el Departamento de Putumayo: una construcción colectiva para el desarrollo sostenible de la Amazonia Colombiana* (Bogotá: Instituto Amazónico de Investigaciones Científicas SINCHI, 2007).

⁴⁷ Departamento Administrativo Nacional de Estadística de Colombia, *Boletín técnico pobreza monetaria departamental año 2018* (Bogotá, 2019), https://www.dane.gov.co/files/investigaciones/condiciones_vida/pobreza/2018/

developed markets and a difficult environment for private enterprise, partly because of the presence of armed actors and poor infrastructure. Around 122,000 people are registered in the region as victims of forced displacement.⁴⁸ Caquetá is historically known as a 'reception region', both temporarily and permanently, for people who have suffered the ravages of war. In fact, Caquetá's population growth was fuelled by dispossessed farmers who moved there with plans to cut down trees in the Amazonian jungle, where they could then make settlements or farms (*fincas*), hoping to gain officially recognized title to the land.⁴⁹ The region's main economic activity is cattle ranching, a problematic activity in the Amazon basin. The land-use systems adopted were based on exploitation of natural resources, for example extracting wood, rubber and exotic animal furs; furthermore, the land 'cleaned' by deforestation became the foundation of extensive livestock farming (which yields low productivity per animal and per hectare, with small amounts of inputs and labour relative to the area farmed) and coca cultivation.⁵⁰ Civil society actors recognize the major challenges Caquetá faces, including conflicts over land use and the ongoing ecological devastation that accompanies the rise of deforestation, threatening water bodies and the biodiversity of the Amazonian rainforest. Further, the importance of cattle culture in Caquetá and the growing interest in expanding the agricultural frontier since the peace agreement are increasing regional tensions.⁵¹

The shift from older land-use systems, based on extraction, to SLUS is being supported by several development programmes, especially (but not only) since the peace agreement. International organizations such as the United States Agency for International Development, the German Agency for International Development, the Centre for International Tropical Agriculture and the Global Environmental Facility, among many others, are implementing programmes with related objectives, such as to improve sustainable land-use management and its governance mechanisms around natural parks; to take stock of ecosystem services; to contribute to climate change mitigation (by slowing down deforestation and reducing the related emissions) and food security; and to prevent land degradation through sustainable agricultural practices.⁵² The national development plan also incorporates an element of productive reconversion within the 'green growth' framework: article 249 provides for the implementation of the National Reconversion Programme to Sustainable Livestock, aimed at reconverting productive areas dedicated to extensive cattle ranching and associated deforestation patterns, which conflicts with land-use suitability in the Amazon. The programme will promote the implementation of systems of sustainable agriculture, such as silvo-pastoral arrangements, in a way that is conducive to the conservation, recovery,

bt_pobreza_monetaria_18_departamentos.pdf.

⁴⁸ Unidad para la Atención y Reparación Integral a las Víctimas, *Dt Caquetá y Huila 'Reparamos a las Víctimas, Aquí Comienza la Paz'*.

⁴⁹ Graciela Uribe, *Veníamos con una manotada de ambiciones* (Bogotá: MISEREOR, 1992).

⁵⁰ Cesar Augusto Murad and Jillian Pearse, 'Landsat study of deforestation in the Amazon region of Colombia: departments of Caquetá and Putumayo', *Remote Sensing Applications: Society and Environment*, vol. 11, 2018.

⁵¹ Armenteras et al., 'Fires in protected areas'.

⁵² Villarino, *Sustainable land use systems*; Deutsche Gesellschaft für Internationale Zusammenarbeit, *Beneficios de la naturaleza en la altillanura* (Bogotá, 2020).

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rehabilitation and restoration of natural ecosystems, ecological corridors and degraded soils in agricultural landscapes.⁵³ However, it is important to note that several references are made to mining and agribusiness as the motors of development within the governmental discourse.⁵⁴

This combination of initiatives entails a change from a merely exploitative model and from extensive cattle ranching to land uses that incorporate the farmers' cultural practices while also improving them according to sustainability criteria such as low environmental impact, social awareness and inclusion, and the development of value chains that have horizontal relations among the stakeholders, promoting inclusive agreements and that are financially sustainable.⁵⁵ The process of designing SLUS is heralded as an approach that supports the peace process in Caquetá. However, such programmes did not start after the peace agreement, and questions remain about the specific sub-areas of peacebuilding that such an approach prioritizes, which mechanisms and existing local institutions it supports, and whether or not such programmes are likely to affect the political dynamics and power struggles that have historically affected this region.⁵⁶

Data collection methods

We chose a mixed methods research approach, combining four qualitative and quantitative methods to triangulate results (see figure 1 overleaf). First, we undertook a systematic literature review; second, we conducted a number of individual semi-structured interviews with experts in the areas of peacebuilding and natural resource management at the global, national (Colombia) and local (Caquetá) levels. These interviews were complemented by three experts' and practitioners' workshops; and finally, the data were verified through a questionnaire survey. We conducted the research using the case of Caquetá, Colombia, to provide a contextual basis for documentation and analysis of the process under examination.⁵⁷ The complex nature of EP renders the field particularly appropriate to the use of case-studies to describe holistically why a project works and how it does so.⁵⁸

The aim of the literature review is to explore the current state of the art related to peacebuilding approaches, in particular those dimensions that assess the impact of natural resource management programmes in postwar settings, and to identify gaps in knowledge.⁵⁹ Furthermore, by applying a transparent process for identify-

⁵³ C. J. G. Jiménez, C. L. M. Mantilla and G. J. A. Barrera, *Enfoque agroambiental: una mirada distinta a las intervenciones productivas en la Amazonia. Caquetá y Guaviare* (Bogotá: Instituto SINCHI, 2019).

⁵⁴ Mariel Aguilar-Stoen, 'Global forest conservation initiatives as spaces for participation in Colombia and Costa Rica', *Geoforum*, no. 61, May 2015, pp. 36–44.

⁵⁵ CIAT, *CIAT leads €5.2 million project for forest conservation, climate protection and peace in Colombia*, CIAT blog (Palmira, 2019), <https://blog.ciat.cgiar.org/ciat-leads-e5-2-million-project-for-forest-conservation-climate-protection-and-peace-in-colombia/>.

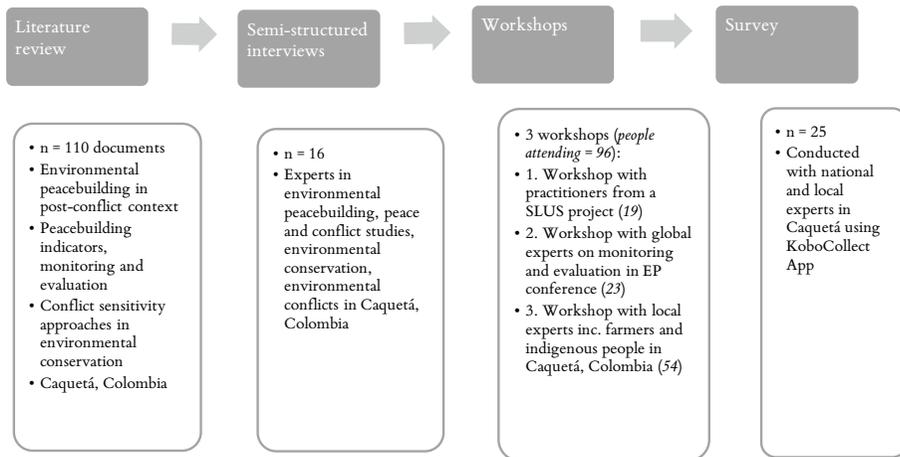
⁵⁶ Torsten Krause, 'Reducing deforestation in Colombia while building peace and pursuing business as usual extractivism?', *Journal of Political Ecology* 27: 1, April 2020, pp. 401–18.

⁵⁷ Robert K. Yin, *Applications of case study research* (Newbury Park, CA: Sage, 2011).

⁵⁸ Palena Neale, Shyam Thapa and Carolyn Boyce, *Preparing a case study: a guide for designing and conducting a case study for evaluation input* (Watertown, MA: Pathfinder International, 2006).

⁵⁹ Harsh Suri and David Clarke, 'Advancements in research synthesis methods: from a methodologically inclusive perspective', *Review of Educational Research* 79: 1, 2009, pp. 395–430.

Figure 1: Data collection methods



ing studies, the review has the potential to guide practitioners in planning effective interventions.⁶⁰ We began the review by searching for relevant keywords and combinations (environmental post-conflict peacebuilding, environmental peacebuilding indicators, peacebuilding monitoring and evaluation, peacebuilding assessment, conflict management, natural resource management, land-use conflict management and Caquetá, Colombia) in search engines such as Scopus and Google Scholar. Within these databases, several journals were cited; for example, the *Journal of Peace Research*, *International Affairs*, *Cooperation and Conflict* and *Peace and Development*. Second, we extended the review to encompass grey literature such as policy briefs, and reports written by researchers and practitioners from international agencies and governments (e.g. the UN Security Council, the FAO, UNEP and the Colombian government). In total over 110 publications were identified and analysed using MAXQDA software for coding the relevant peacebuilding dimensions. From this review, five dimensions (socio-economic inclusion; peace culture and conflict management; transitional justice; governance; and security: see table 1 below) were derived for discussion with experts during individual interviews and workshops.

Based on the dimensions derived from the literature review, an interview guide was developed and used for a total of 16 individual semi-structured interviews. The interviews took place in California during the First Environmental Peacebuilding Conference, on site in Bogotá and Florencia, Caquetá (August–November 2019), and through online channels. Interviews lasted an average of 40 minutes. Experts in peacebuilding, environmental peacebuilding, agricultural systems, political science and political ecology were interviewed. From an initial pool of expertise in these disciplines, we employed snowball sampling, identifying experts who met the eligibility criteria.⁶¹ These criteria were based on: presence

⁶⁰ Mark Petticrew and Helen Roberts, *Systematic reviews in the social sciences: a practical guide* (Chichester: Wiley, 2008).

⁶¹ Patrick Biernacki and Dan Waldorf, 'Snowball sampling: problems and techniques of chain referral sampling', *Sociological Methods and Research* 10: 2, 1981, pp. 141–63.

(minimum five years of work in the areas of study); professional career (scholar/researcher and/or practitioner with experience in the intersections between natural resource management and peacebuilding); and knowledge of the region. Each interview started with an introduction to the field of EP and a description of the objectives of a SLUS project. Thereafter, the experts were asked to talk about current challenges and socio-environmental conflicts present in Caquetá. Then the selected dimensions were presented and described, and the experts were asked to prioritize them. Finally, experts were asked to explain the impact they thought the project could have on these dimensions, and through what mechanisms.

Three workshops were conducted with stakeholders in the fields of agricultural and environmental sciences, peacebuilding and EP to prioritize the set of dimensions. The first two were conducted with, respectively, SLUS practitioners (19 participants) in Cali, Colombia, in March 2019, and global experts (23 participants) in California in November 2019. Each comprised two parts. The first was prioritization of dimensions through anonymous voting (two votes per person). We used a tool called *sli.do*,⁶² by which participants in a meeting can simultaneously vote with their mobile phones, to prioritize what they consider to be the dimensions in which the SLUS project under consideration would have the greatest impact. In the second part, participants described the mechanisms through which the project would have these impacts, again using *sli.do*. The third workshop was a ‘World Café’ in Florencia, Caquetá, in November, 2019, which brought together 54 local experts (including representatives of governmental organizations, farmers’ associations and indigenous communities, along with local experts in environmental conservation and peacebuilding). The ‘World Café’ approach is widely used as an assessment tool in community development and organizational change processes to facilitate the maximum input from stakeholders. Participants can also benefit from it since it permits constructive dialogue and mutual learning.⁶³ Each workshop lasted five hours and had three stages. The first introduced the participants, the methodology and a glossary of terms (including environmental peacebuilding, socio-environmental conflict, community governance and SLUS). In the second stage, the participants were asked to rotate through three panels/subjects (environmental peacebuilding, community governance and SLUS). The first round focused on a scenario in the past and present, focusing on current socio-environmental conflicts and ways to solve them. In the third stage, a second round explored the future scenario, and the prioritization (two votes per person) and explanatory (impact of SLUS on local conflicts) exercise was repeated.

To verify data obtained through the interviews and workshops, a survey was conducted on a sample of 25 individuals in Caquetá. Following the snowball system sampling method and criteria used for the individual semi-structured interviews, 20 experts (at national and local levels) and five farmers⁶⁴ were asked

⁶² <https://www.sli.do/>.

⁶³ Katharina Löhr, Michael Weinhardt and Stefan Sieber, “‘World Café’ as a participatory method for collecting qualitative data”, *Journal of Qualitative Research*, publ. online April 2020.

⁶⁴ The farmers interviewed were selected according to their previous experience of the implementation of SLUS in Caquetá.

to prioritize the dimensions and to respond to the indications of how they could solve conflicts over natural resources.

Finally, the data were analysed using qualitative content analysis. The method is used to discover existing structures within texts and other qualitative material.⁶⁵ MAXQDA software was used for coding. In the first round, a system of codes (for the five selected peacebuilding dimensions) was created to analyse the bibliographic documentation following an inductive category development extracted from the literature of peacebuilding, EP assessment and the research questions. Second, the codes were refined to generate sub-codes for mechanisms (e.g. livelihoods, dialogue spaces, victim's compensation, etc.). Third, the data from the individual interviewees and workshop participants were analysed using direct content analysis from the pre-selected dimensions; at this stage, some new codes emerged (e.g. new explanatory mechanisms; socio-ecological uses of land). A fourth round, integrating the World Café responses, resulted in more new sub-codes (e.g. land-use conflict prevention and solution; generating knowledge). The coding served to cluster the findings in the literature and cross-relate their application to the knowledge gained from the case.

Limitations on the study

The limitations faced by this study are mainly related to the circumstances of the fieldwork, such as access to and the duration of time with interview partners. Given the lack of knowledge of EP concepts and initiatives in Colombia, it proved very challenging to identify EP programmes and practices that targeted simultaneously SLUS and peacebuilding in Caquetá, and even more challenging to access remote areas to talk with stakeholders. Thus, most interviews were conducted with experts present at the international conference or based in urban areas, such as Bogotá, Cali and Florencia (Caquetá), while stakeholders in remote areas are under-represented. Rural communities were, however, represented at the World Café workshop and in the survey. The moderator of the panel tried to give equal voice to all group participants. However, it is important to note the constraints on the research resulting from power inequalities and the so-called social desirability bias.⁶⁶ These take effect when a representative has more knowledge or a position of power in a particular context, or when people answer questions by saying what they think is socially acceptable. The results of the workshop were compared with the survey—and some contrasting views were present—however, to verify the findings and extrapolate from them, the voices of significantly more stakeholders in rural areas of Caquetá should be heard, and a quantitative survey with a larger response base should be conducted.

⁶⁵ Hsiu-Fang Hsieh and Sarah E. Shannon, 'Three approaches to qualitative content analysis', *Qualitative Health Research* 15: 9, 2005, pp. 1277–88.

⁶⁶ Rachel Aldred, 'From community participation to organizational therapy? World Café and appreciative inquiry as research methods', *Community Development Journal* 46: 1, July 2009, pp. 57–71; Pamela Grimm, 'Social desirability bias', in *Wiley international encyclopedia of marketing* (Chichester: Wiley, 2010).

Results

Peacebuilding dimensions and definitions for environmental peacebuilding assessment

As noted above, we selected five dimensions of peacebuilding with the potential to be affected by SLUS: socio-economic inclusion; peace culture and conflict management; governance; transitional justice; and security (see table 1).

Table 1: Selected dimensions and mechanisms for assessing SLUS project impacts in peacebuilding

<i>Dimension of peacebuilding</i>	<i>Definition</i>	<i>Mechanisms of SLUS</i>
1. Socio-economic inclusion	Natural resource management programmes can grant sustainable access to secure livelihoods for vulnerable populations after war	1.1. Alternative livelihoods 1.2. Employment generation 1.3. Food security 1.4. Associativity and collective action 1.5. Social cohesion
2. Peace culture and conflict management	Building capacities for addressing conflict in a systematic way, thus fostering dialogue and negotiation skills	2.1. Environmental cooperation creates neutral spaces 2.2. Increasing trust and understanding 2.3. Building dialogue and negotiation capacities
3. Transitional justice	Includes elements such as trials, truth commissions, compensation to victims, reintegration and reconciliation initiatives	3.1. Compensation of victims by recovering ecosystems 3.2. Reintegration of ex-combatants in ecological activities for livelihoods 3.3. Land access and use programmes for victims and ex-combatants
4. Governance	The way societies make decisions regarding collective problems, thereby creating norms, rules and institutions. Governance is a concept for improving the participation of the public sphere in decision-making processes. In postwar environments, governance faces the challenge of balancing short-term economic needs and the sustainable management of resources	4.1. Opening scenarios for inclusive decision-making 4.2. Political participation 4.3. Building institutions for environmental management 4.4. Equal resource distribution
5. Security	Security sector reform has been traditionally treated in postwar peacebuilding literature as important to the stabilization of land grants and the monopoly of violence by the state	5.1. Cooperation with other actors to enforce protected areas 5.2. Reducing risk and threats in the territory 5.3. Environmental management and security coordination

Socio-economic inclusion and governance are the dimensions of peacebuilding that appear most frequently in the literature on EP in postwar contexts, while a culture of peace, dialogue and trust as a result of environmental cooperation is one of the results expected within the EP framework.⁶⁷ The aspects of security and transitional justice are part of the so-called 'liberal peace' agenda promoted by the UN. Most of the frameworks for assessing peacebuilding interventions and the indicators operationalizing them take account of the so-called 'negative peace' or absence of violence,⁶⁸ as well as the importance of state-building processes, including security sector reform, transitional justice mechanisms and legitimacy.⁶⁹

Prioritizing peacebuilding dimensions: practitioners and global, national and local experts

Figure 2 shows the results of the stakeholders' prioritization of the dimensions, presented in percentages representing the votes of each group. (As noted above, each participant had two votes to prioritize the dimensions they considered to be most affected by SLUS.)

Interestingly, interviewees markedly prioritized socio-economic inclusion, governance, and peace culture and conflict management over transitional justice and security (see figure 2). Experts at the global and national levels and the SLUS project practitioners all agreed in giving highest priority to socio-economic inclusion and governance. However, the results of the workshop with local experts yielded significantly different results; these participants gave higher priority (35 per cent) to the development of a culture of peace and capacities for dialogue and negotiations than to governance mechanisms (22 per cent). Furthermore, respondents to the survey implemented in Caquetá prioritized governance and peace culture (both 36 per cent) over socio-economic inclusion (24 per cent).

The biggest discrepancy arises between the prioritization of the SLUS practitioners, the vast majority of whom (95 per cent) prioritized socio-economic inclusion as the dimension that the SLUS project would most affect, and that of the farmers in the Caquetá workshop (29 per cent) and the survey respondents (24 per cent), showing a striking disconnect between the results expected by those implementing the programme and the perceptions of the local community.

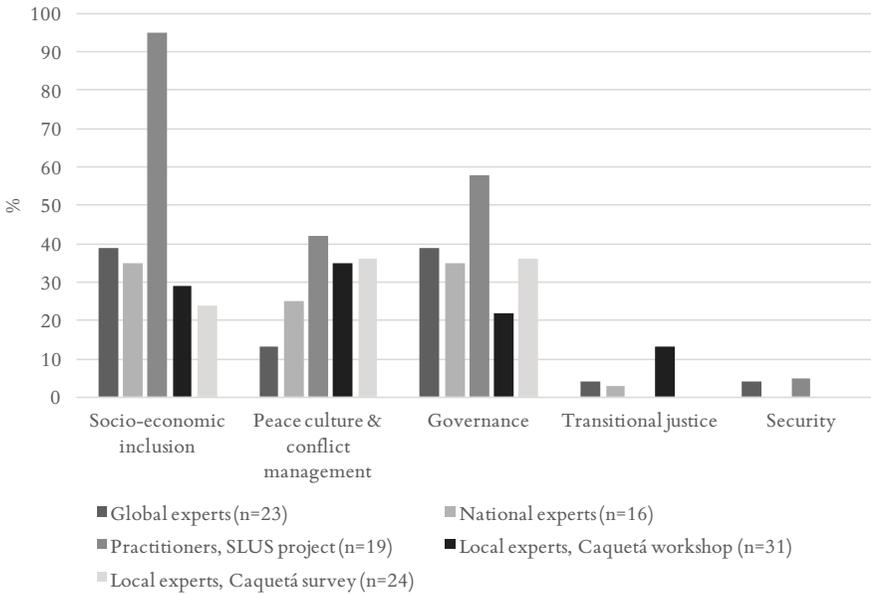
Another interesting result is that almost all stakeholder groups did not prioritize security in considering the potential impacts: only 9 per cent in total voted for this dimension. Similarly, transitional justice attracted few votes among global experts (4 per cent), an outcome confirmed by local experts in the workshop (13 per cent).

⁶⁷ Anaïs Dresse, Itay Fischhendler, Jonas Østergaard Nielsen and Dimitrios Zikos, 'Environmental peacebuilding: towards a theoretical framework', *Cooperation and Conflict* 54: 1, 2018, pp. 99–119.

⁶⁸ Johan Galtung and Dietrich Fischer, *Positive and negative peace* (Berlin: Springer, 2013), pp. 173–8.

⁶⁹ For examples of such indicators, see e.g. UN Department of Economic and Social Affairs, Sustainable Goal 16 (New York, 2015).

Figure 2: Stakeholders' prioritization of peacebuilding dimensions affected by SLUS



Mechanisms: how SLUS could affect peacebuilding

This article shows that it is not always clear to project stakeholders how intervening on a specific variable might affect a specific dimension of peacebuilding.⁷⁰ In respect of promoting SLUS for peacebuilding, this is a major challenge. Table 2 (overleaf) shows the explanatory mechanisms put forward by experts to clarify the impacts of implementing SLUS on the prioritized dimensions of peacebuilding in Caquetá. The table clusters seven mechanisms in columns organized from left to right showing higher response frequencies on the left. The answers are given in the form of statements constructed as a summary of causal and relational explanations given by the individuals in each group of research participants.

The majority of the explanatory mechanisms concern the creation of livelihoods, reflecting the dimension of socio-economic inclusion. However, within this theme there are differences among the groups of participants. The global respondents said that livelihood creation should address issues of equity and be inclusive, while national experts and practitioners referred to its role in detaching communities from illegal economic activities. Interestingly, during the workshop, local experts (including farmers and indigenous representatives) mentioned that the establishment of peasant markets and social welfare would have a significant impact on peacebuilding through creating social cohesion.

⁷⁰ Ken Menkhaus, 'Impact assessment in post-conflict peacebuilding: challenges and future directions' (Geneva: Interpeace, 2004).

Table 2: Mechanisms by which SLUS has impacts on peacebuilding, with explanations by experts and practitioners

<i>Expert type</i>	<i>Mechanisms</i>						
	<i>Generating livelihoods and income (f = 17)</i>	<i>Increasing trust and reconciliation (f = 9)</i>	<i>Building governance and dialogue spaces (f = 8)</i>	<i>Building capacities and generating knowledge (f = 8)</i>	<i>Enabling participation and ownership (f = 7)</i>	<i>Preventing and solving conflicts over land use (f = 6)</i>	<i>Generating environmental awareness and protection (f = 5)</i>
Global expert	If these are sustainable and are implemented in an inclusive and equal manner	Reconciling differences; equitable distribution of resources	Non-violent systems of cooperation over land use	–	Co-design and co-management of various stakeholders	Renegotiation between land users	Environmental sustainability to bring people together
National expert, Colombia	Livelihoods would detach populations from illegal economy; include vulnerable population through entrepreneurship; build value chains	Trust in institutions	Coordination between institutional stakeholders; redesign of informal governance mechanisms	Leadership skills; understanding practices of the communities with natural resources, their use systems and cycles	Participation in governance mechanisms; create common policy agendas	Should address the socio-ecological uses of the land; sustainable use of resources	Recognize and address natural damage; understand the socio-ecological uses of land
Practitioner, SLUS project	Generating employment and roots in the land; cutting dependence on illicit activities	Building social fabric	Citizen participation in decision-making platforms; redesign of governance mechanisms	Increasing local capacity to manage conflict	Get the vision of all actors; decision-making about production	Transforming land uses that have been associated with illegal economic activities that fuelled war	Understand environmental chain factors
Local expert, Caquetá	Occupation; enhancing social welfare; building peasant markets	A sense of belonging, confidence in returning to the countryside	Land-use planning	Organizational capacities; recognition of ancestral knowledge; knowledge generation	Protection of the territory	Prevention of conflicts due to environmental degradation; agrarian reform	Ecological planning; eco-tourism

Note: f = number of responses

Increasing trust and reconciliation was highlighted as another mechanism of how SLUS affects peacebuilding. On this topic, different groups of experts seemed to refer to different dimensions of trust. Global experts talked about reconciling differences and equitable uses of resources, while practitioners and local experts focused on how an SLUS project could build a sense of belonging and confidence in returning to the countryside. National experts referred to trust-building between citizens and governmental institutions, indicating an approach more in line with the 'liberal peace'.

The third mechanism identified is building governance and dialogue spaces. Here, global and local experts referred to the creation of cooperation mechanisms over land-use planning, which aligns with the focus of practitioners and national experts on the redesign of governance mechanisms with greater coordination.

One interesting finding is that the global experts did not refer to capacity building as a mechanism that affects peacebuilding, perhaps reflecting the suggestion by Duffy that this kind of language has led to a depoliticized discussion of community involvement in environmental projects such as peace parks.⁷¹ One Colombian scholar and several actors at the local workshop stressed the importance of recognizing ancestral knowledge and the historic socio-ecological practices in relation to land-use systems that were destroyed by the war. For them, SLUS could foster knowledge creation, restorative justice and ownership, and these outcomes should be measured.

Equally important is that experts at all levels recognized the importance of enabling participation and ownership, acknowledging that co-design and co-implementation of SLUS projects in an inclusive manner can bring various stakeholders together and build trust.

Discussion

The results show that SLUS stakeholders prioritize socio-economic inclusion, governance scenarios and conflict management. This outcome is in line with the assumptions of Nichols and colleagues, and Milburn, that the promotion of socio-economic development through the improvement of livelihoods (payment for ecosystem services and improved sustainable production systems), and the opening up of spaces for dialogue through the neutrality of scientific work in conservation projects, helps to build trust between the parties.⁷² It also corroborates the findings of Tubi and Feitelson, who explain how initial cooperation between Muslim Bedouin herders and Jewish agricultural settlers in Israel to manage water access evolved into a joint complaint to Israeli authorities seeking to limit discrimination against the Bedouins,⁷³ citing this as an example of political cooperation.

⁷¹ Rosaleen Duffy, 'Global politics and peace parks', working paper (Washington DC: Woodrow Wilson International Center for Scholars, 2005), p. 6.

⁷² Sandra Nichols, Päivi Lujala and Carl Bruch, 'When peacebuilding meets the plan: natural resource governance and post-conflict recovery', *Whitehead Journal of Diplomacy and International Relations* 12: 1, 2011, pp. 11–27; Richard Milburn, 'Mainstreaming the environment into postwar recovery: the case for "ecological development"', *International Affairs* 88: 5, Sept. 2012, pp. 1083–100.

⁷³ Amit Tubi and Eran Feitelson, 'Drought and cooperation in a conflict prone area: Bedouin herders and Jewish

However, our findings also emphasize a potential mismatch in stakeholders' perceptions of which peacebuilding dimensions are most relevant and indicates potential frictions that could detract from the effectiveness of EP processes. For example, while in the peacebuilding literature it is recognized that building capacities for dialogue and negotiation is one of the main tasks of peacebuilding projects,⁷⁴ this is not an issue addressed by global experts in our case. Furthermore, the SLUS practitioners remarked that environmental and agricultural experts lack the capacities to transfer dialogue and negotiation skills to the project stakeholders. Even though the EP literature shows that nature conservation projects emerge as a neutral arena where parties to conflict can gather to talk and resolve conflicts in a peaceful manner,⁷⁵ it is important to note that environmental cooperation does not spontaneously increase dialogue capacities, and that it is neither a homogeneous nor a power-neutral space. Local experts in Caquetá are aware of this, and accordingly prioritize the development of negotiation capacities over governance mechanisms, recognizing that environmental cooperation processes are a result of the long-term development of societal cooperation among groups that want to cooperate with respect to common environmental challenges.⁷⁶ Local communities in Caquetá emphasize the importance of increasing spaces and capacities for inclusive dialogue around land use. For example, in a location where an environmental programme is introduced with a commitment to leave the forest untouched, an indigenous community will become dependent on that programme and not on using natural resources in their land, which affects their traditions and their way of life.⁷⁷ However, for peasants, whose customary practice in land use was to create pastures for cattle ranching, these programmes may create a good incentive for conservation. In a political scenario, in combination with the demands from civil society to protect social leaders and stop land grabbing by illegal groups, this represents immense challenges. Thus, it is important to recognize the political dimensions of the situation as an opportunity to reconcile visions for land use and ways of life that offer livelihoods, creating resilience against illegal economic activity at the same time as serving conservation goals.

Our research shows that EP programmes should prioritize dialogue facilitation embracing local institutions, with experts trained in conflict management to foster recognition of shared interests.⁷⁸ The field of EP could profit from fostering the promotion of peace and dialogue culture, incorporating modules of conflict

farmers in Israel's northern Negev, 1957–1963', *Political Geography*, vol. 51, 2016, pp. 30–42.

⁷⁴ Norbert Ropers, 'From resolution to transformation: the role of dialogue projects', in Alex Austin, Martina Fischer, Norbert Ropers, eds, *Transforming ethnopolitical conflict* (Wiesbaden: VS Verlag für Sozialwissenschaften, 2004).

⁷⁵ Milburn, 'Mainstreaming the environment into postwar recovery'.

⁷⁶ Tobias Ide, 'The impact of environmental cooperation on peacemaking: definitions, mechanisms, and empirical evidence', *International Studies Review* 21: 3, 2019, pp. 327–46.

⁷⁷ 'Los descontentos con la cumbre mundial de gobernadores en Caquetá', *El Espectador*, 1 April 2019, <https://www.elespectador.com/noticias/medio-ambiente/los-descontentos-con-la-cumbre-mundial-de-gobernadores-en-caqueta/>.

⁷⁸ Lorena Cantillo, Hilka Langohr, Juanita Méndez, Héctor Morales Muñoz, Tatiana Pineda, María Paula Prada and Myriam Sánchez, 'Comités territoriales de justicia transicional y mesas de participación de víctimas escenarios que favorecen el diálogo entre estado y sociedad civil para la inclusión social y la construcción de paz en Colombia' (Bogotá: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, 2014).

assessment, conflict management, the 'do no harm' approach and the design of dialogue processes, while also promoting SLUS. Also, an institutionalized integration of conflict prevention in project design could facilitate increased awareness of project-related challenges and help to manage power differences or cases of conflict.⁷⁹ Capacity building through dialogue processes could lead to increased trust and social cohesion as a spillover effect.⁸⁰ As one local expert explained in our research: 'State efforts to stop deforestation and promote reforestation are providing incentives for farmers to cooperate as new governance mechanisms open and dialogue processes help build social cohesion that protects the territory from foreign actors.'

An important result of this research is the unanimous acknowledgement that local ownership of the projects is fostered by working with existing structures, by the co-designing of SLUS and by working with communities to improve their resilience capacities. This confirms developments in the peacebuilding literature such as De Coning's adaptive peacebuilding approach and the focus on bottom-up or local peacebuilding initiatives. All these approaches note that a common framework of understanding should be co-created with local communities, incorporating the aspects they consider most important.⁸¹

With regard to assessing EP projects effectively, our study reveals that to this end it is important to prioritize the dimensions or sub-areas of peacebuilding in which projects aim to have impacts. Furthermore, it encourages work to understand and reconcile the different stakeholders' perspectives about the mechanisms through which change can be brought about within each dimension.⁸² This complements the existing literature on the definitions and mechanisms of EP,⁸³ introducing a new approach in which we explore the traditional areas of peacebuilding more deeply by examining them in the light of the various actors' different interpretations of implementation mechanisms, giving importance to local context.

Questions arise with regard to the extent of the impact of SLUS projects on the more political dimensions of peacebuilding, such as transitional justice. None of our participating experts, at any level, gave priority to transitional justice as a dimension worth assessing in the case of SLUS in Caquetá, arguing that it lies beyond the scope of SLUS from a technical perspective. However, participants in the local workshop did refer to the importance of agrarian reform and land restitution programmes as elements of transitional justice and as aspects of the historical struggle to end the armed conflict comprehensively. This is recognized in the

⁷⁹ Katharina Löhr, Michael Weinhardt, F. Graef and Stefan Seiber, 'Enhancing communication and collaboration in collaborative projects through conflict prevention and management systems', *Organizational Dynamics* 47: 4, 2018, pp. 259–64.

⁸⁰ Stuart Schoenfeld, Asaf Zohar, Ilan Alleson, Osama Suleiman and Galya Sipos-Randor, 'A place of empathy in a fragile contentious landscape: environmental peacebuilding in the eastern Mediterranean', in Nick Megoran, Fiona McConnell and Philippa Williams, eds, *Geographies of peace: new approaches to boundaries, diplomacy and conflict resolution* (London: I. B. Tauris, 2014), pp. 171–93.

⁸¹ De Coning, 'Adaptive peacebuilding'; Roger Mac Ginty and Oliver P. Richmond, 'The local turn in peace building: a critical agenda for peace', *Third World Quarterly* 34: 5, 2013, pp. 763–83.

⁸² Jörn Grävingholt, Julia Leininger and Christian von Haldenwang, 'Effective statebuilding? A review of evaluations of international statebuilding support in fragile contexts', *SSRN Electronic Journal*, July 2013.

⁸³ Ide, 'The impact of environmental cooperation'.

literature as an important area in which natural resource management can play a role.⁸⁴ Furthermore, Ide and others argue that the implementation of programmes conceived of as purely technical projects may have unintended consequences, such as the depoliticization of conflict and failure to recognize its root causes.⁸⁵ Therefore, those planning and implementing EP projects should include political factors in their theories of change, recognizing the potential for the beneficiaries of a project to scale up technical arrangements into decision-making scenarios.

Conclusions

EP assessments in postwar scenarios are complex practices, especially in resource-dependent countries. Our aim in this article has been to conduct a prioritization exercise of the many different dimensions comprising peacebuilding that should be addressed to evaluate the effect of SLUS implementation (as an EP practice) in postwar scenarios. We have also sought to understand the mechanisms through which SLUS may affect these different peacebuilding dimensions from a multi-stakeholder perspective.

We found that experts and practitioners at global, national and local levels gave highest priority to socio-economic inclusion as the dimension that should be used to assess the impacts of SLUS projects on peacebuilding, focusing on the provision of diverse, inclusive livelihoods as a mechanism to create peace. In the long run, this is related to improving the incomes of vulnerable populations and creating a sustainable environment, thus reducing the community's exposure to illegal economic activity. The second most highly prioritized dimension is governance. All stakeholders perceived that co-designing and co-implementing such projects facilitates the creation of cooperative networks involving many actors, ultimately resolving land-use conflicts and building trust. Third, practitioners and local experts—including farmers and indigenous communities—recognize that there is a lack of capacity in conflict transformation and negotiation. This is important when it comes to planning, implementing and assessing EP projects, because environmental cooperation alone cannot have the desired long-term impacts on peacebuilding if its dialogue mechanisms are not structurally incorporated with the ownership of local communities.⁸⁶ To foster a peace culture, specific attention should be given to designing capacity-building elements in negotiations and structuring dialogue processes around political discussions.

In order to improve planning and implementation, then, it is crucial to establish a sound understanding of the dimensions, mechanisms and scope of impact of EP, based on multiple actors' perceptions and taking into account their various needs, interests and power relations. While the case of Caquetá in Colombia has provided an ideal context in which to study the link between SLUS and peacebuilding, evidence from this article could serve as a theoretical base for EP programming,

⁸⁴ UN Development Group, *Natural resource management in transition settings*, UNDG-ECHA guidance note (New York, 2013), http://postconflict.unep.ch/publications/UNDG-ECHA_NRM_guidance_Jan2013.pdf.

⁸⁵ Ide, 'The dark side'.

⁸⁶ Ropers, 'From resolution to transformation'.

monitoring and evaluation in other regions emerging from war, especially where agriculture is the main source of income and land use is a cause of local disputes.⁸⁷ Finally, this research shows the importance of selecting and refining the most credible mechanisms as criteria by which to assess the impacts of EP projects: first, to align local stakeholders' priorities with those of international development donors, because ultimately the sustainability of state-building and EP efforts lies in the hands of the local community;⁸⁸ and second, to avoid unintended consequences of EP practices such as depoliticization or the delegitimization of the state.⁸⁹

Our results encourage further work to develop monitoring and evaluation frameworks that are comprehensive enough to prioritize dimensions and describe mechanisms that SLUS could use to foster peace. In particular, such frameworks should include indicators of evidence that a dialogue process has been created, rather than simply enumerating products such as the number of workshops delivered.⁹⁰ To achieve this, further research should be done to develop a contextualized typology of conflicts and possible solutions, taking into account the different stakeholders' conceptualization of mechanisms and of existing institutions. For example, pilot studies could be implemented around trust-building mechanisms and the creation of dialogue spaces for policy negotiations around alternative livelihoods that match different cultural practices with conservation goals.

⁸⁷ Unruh and Williams, 'Lessons learned in land tenure'.

⁸⁸ Peace Direct and Alliance for Peacebuilding, *Local peacebuilding what works and why* (London, 2019), <https://www.peaceinsight.org/reports/whatworks>.

⁸⁹ Ide, 'The dark side'.

⁹⁰ Menkhaus, 'Impact assessment in post-conflict peacebuilding'.