

Global Climate Action and Local Rights: Survey

Experimental Evidence on Public Support for

Carbon Offsetting in Liberia*

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Abstract

Carbon offset deals can cover vast areas of forested land, yet little is known about public support in host countries. We conducted a pre-registered survey experiment ($N \approx 2,000$) in Monrovia, Liberia, in December 2023, while a proposed deal covering 10% of Liberia's land was publicly debated. Respondents received positive information (emphasizing benefits), negative information (emphasizing land dispossession), both, or neither. We find an asymmetry: negative information reduces support for government involvement, but contrary to expectations, positive information has limited effects; receiving both messages yields effects close to zero. These effects are largest among respondents with family or friend ties to forest-dependent communities. This is among the first experimental studies of climate policy attitudes in a host country for forest-carbon projects. The results suggest that concerns about local costs are more salient than promises of global benefits, particularly for those with material stakes in affected industries.

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1 Introduction

Climate change mitigation policies can impose costs on local communities, especially where land and resource rights are contested. Carbon offsetting is one such approach: companies or countries compensate for emissions by funding projects such as reforestation or forest conservation (Piris-Cabezas, Lubowski, and Leslie, 2023).¹ Carbon markets include both voluntary offset systems and cap-and-trade schemes, and debates continue over their effectiveness and distributional impacts. Concerns about effectiveness partly stem from evidence that apparent emission reductions may reflect pollution offshoring rather than genuine environmental improvement (Bernauer, Böhmelt, and Henninger, 2025).

Liberia is one case where these debates have been active. In 2023, Blue Carbon, a Dubai-based company, signed carbon offsetting agreements or memoranda of understanding with several African governments, covering areas larger than the United Kingdom.² In Liberia, the government signed a memorandum of understanding with Blue Carbon in March 2023 (Canby, 2024). The agreement would grant exclusive rights to generate carbon credits from roughly 10% of Liberia's land for 30 years, with the company retaining 70% of revenue from credit sales. The deal has been presented as an economic opportunity by political leaders and international firms. However, civil society organizations (CSOs) and experts warn of potential adverse effects, including land dispossession, forced displacement, and inadequate compensation for forest-dependent communities (Dolsak and Prakash, 2022; Stokes, 2016; Bolet, Green, and González-Eguino, 2023). Similar concerns have been documented in carbon off-

¹Carbon offsetting can be understood as a form of “moral trade,” in which the Global North finances carbon sequestration abroad while host countries pursue economic development (Pelc, 2024). Such exchanges may offer macro-level gains but can also shift ecological or social costs onto vulnerable local communities.

²AP News, 2023, “A Dubai company’s staggering land deals in Africa raise fears about risks to Indigenous livelihoods” (Accessed on August 19, 2024)

set projects elsewhere: forceful eviction of local residents in Uganda (Cavanagh and Benjaminsen, 2014) and substantially lower-than-expected compensation for Kenyan farmers (Cavanagh et al., 2021). Research on environmental migration (Nguyen et al., 2024) suggests that populations experiencing environmental disruptions may relocate, raising concerns about potential displacement from carbon offset restrictions on forest access.

A key question is when citizens in host countries support carbon offsetting projects (Klenert et al., 2018; Bechtel and Scheve, 2013; Bechtel, Scheve, and van Lieshout, 2022; Gaikwad, Genovese, and Tingley, 2022, 2023). Most evidence on public support for climate mitigation policies comes from the Global North or from specific stakeholders (notably fossil fuel communities) (Gaikwad, Genovese, and Tingley, 2022, 2023; Mohlakoana et al., 2023; Blankenship et al., 2022). We therefore know less about opinion in settings that host forest-carbon projects, including how competing claims about benefits and harms shape support and whether responses differ for citizens with ties to forest-dependent livelihoods. Concerns about land rights, benefit-sharing, and the credibility of forest-carbon claims are documented in external reporting and market analyses beyond Liberia (Deutsche Welle, 2025; Human Rights Watch, 2024; Greenfield and Laville, 2023; Ecosystem Marketplace, 2024).

To study these questions, we conducted a survey experiment with roughly 2,000 respondents in an urban neighborhood of Monrovia, Liberia. We fielded the survey in December 2023, while the Blue Carbon memorandum of understanding was publicly debated and key implementation details (including community consent and benefit-sharing arrangements) were not yet resolved (Hearst, 2023; Siakor, 2023; Canby, 2024). We interpret our results as reflecting opinion during this pre-implementation period, when key details remained unresolved.

We cross-randomized positive and negative information about carbon offset projects (Druckman, 2004; Chong and Druckman, 2013). After a common narrative, respon-

dents were randomly assigned to receive a positive message (emphasizing benefits), a negative message (emphasizing harms such as land dispossession), both messages,³ or no additional information (control). Our estimand compares support in each treatment condition to the control.

We pre-registered two hypotheses in the AEA RCT Registry (AEARCTR-0012752).⁴ First, positive (negative) information should increase (decrease) support, and presenting both messages together should yield effects close to zero. We find asymmetric effects consistent with the negative prediction but not the positive: negative framing reduces perceived benefits and support for government involvement, while positive framing produces small and imprecise effects; presenting both messages yields effects near zero. Contrary to our expectation, positive information about benefits did not increase support, suggesting that abstract promises of economic gains may be less persuasive than concrete warnings about costs. Second, these framing effects should be larger among respondents with personal ties to forestry-related industries. Consistent with this, the asymmetry is more pronounced in this subgroup. Exploratory analyses by candidate support and climate awareness appear in Appendix A.

This study adds evidence on public support for climate mitigation policies in a host-country setting. First, departing from much of the work on developed countries (Anderson and Bernauer, 2016; Bayer and Ovodenko, 2019; Bayer and Schaffer, 2024; Bayer and Genovese, 2020; Bechtel and Scheve, 2013; Aklin and Urpelainen, 2013), we examine public support for carbon offset projects in a developing-country context. Second, consistent with prior research, our results point to the role of perceived costs, rights, and fairness in shaping support (Bechtel and Scheve, 2013; Bechtel, Genovese,

³We further cross-randomized the order between the positive and negative narratives.

⁴Registry record: <https://doi.org/10.1257/rct.12752-1.0>. The primary outcomes are four indices constructed from eight Likert-scale items using inverse covariance weighting (Anderson, 2008). We also pre-registered the order randomization within the combined-treatment condition. Supporting tables appear in Appendix A; any analyses beyond these two hypotheses are labeled exploratory.

and Scheve, 2019; Gaikwad, Genovese, and Tingley, 2022, 2023). Third, we document an asymmetry: while negative information about local harms reduces support, positive information about global benefits does not increase it. This finding suggests that emphasizing benefits may be insufficient to build support when local costs are salient.

2 Public Support for Global Climate Action

The broader discussion about climate change mitigation increasingly emphasizes the importance of international cooperation (Andre et al., 2024; Bechtel, Scheve, and van Lieshout, 2022). While formulating effective climate policies is a significant challenge, securing public support for these policies domestically is equally important: global climate action must be politically sustainable to be implemented by governments in the long run (Klenert et al., 2018; Peng et al., 2021).

Despite growing concerns over climate change (Bergquist and Warshaw, 2019; Egan and Mullin, 2012) and strong global support for climate action (Andre et al., 2024; Mildenberger and Tingley, 2017), public opinion literature suggests two key barriers to building support for international climate policy: collective action problems and distributional conflicts. Climate change mitigation is a global public good, requiring countries to overcome collective action problems. And because mitigation is costly, distributional conflicts between and within countries are a significant barrier (Aklin and Mildenberger, 2020; Bechtel, Scheve, and van Lieshout, 2022; Gaikwad, Genovese, and Tingley, 2022; Colgan and Hinthon, 2023).

Notably, Gaikwad, Genovese, and Tingley (2022) distinguishes two groups of “climate losers” from which mitigation schemes should secure buy-in: those whose livelihoods are threatened by climate change, and those who may bear the material costs of mitigation policies. Public opinion among these groups matters for two reasons. First, whether climate policies reflect their preferences has direct effects on electoral

outcomes (Bolet, Green, and González-Eguino, 2023; Stokes, 2016). Second, whether compensation mechanisms are perceived as fair by affected parties has indirect effects on broader public support.

Yet most existing studies focus on distributional conflicts in the Global North or on specific stakeholders such as fossil fuel communities (Gaikwad, Genovese, and Tingley, 2022, 2023; Mohlakoana et al., 2023; Blankenship et al., 2022). We know surprisingly little about public opinion in other communities in the Global South, such as forest-dependent communities, despite their importance for carbon offset efforts.

3 Our Approach

In this paper, we study how information about carbon offsetting projects influences public support for government involvement. Consistent with our pre-registration, we focus on two hypotheses: framing effects and heterogeneity by respondents' personal ties to forestry-related industries.

3.1 Issue Framing Effects

Prior research shows that issue framing can shape citizens' policy preferences by directing attention to certain considerations (Druckman, 2004). Building on this, we expect positive (negative) information to increase (decrease) support for carbon offsetting projects among Liberian citizens. Yet policy debates typically involve two-sided arguments, and carbon offsets in the Global South are no exception. Citizens are simultaneously exposed to political elites' endorsements and civil society's critiques. Framing theory emphasizes such competitive contexts, where counterframes often offset each other's influence (Chong and Druckman, 2007, 2013). Thus, we anticipate that presenting both positive and negative information together will have no net effect on public support.

Hypothesis 1 (Framing effects) *The positive (negative) information treatment increases*

(decreases) public support for the government's carbon offsetting policy. Receiving both together yields no net change in support.

3.2 Interest-Driven Reasoning

Research on climate change highlights that material interests strongly shape voter attitudes toward mitigation, as citizens generally resist policies that impose personal or group costs (Dechezlepretre et al., 2024; Christenson, Goldfarb, and Kriner, 2017; Aklin, 2021; Bechtel, Genovese, and Scheve, 2019; Stokes, 2016). Identifying acceptable compensation mechanisms (Gaikwad, Genovese, and Tingley, 2022) or linking climate action with broader economic and social policies can increase support (Bergquist, Mildenberger, and Stokes, 2020). Building on this literature, we hypothesize that respondents are more responsive to framing when material costs and benefits are salient: urban respondents with family or friend ties to forestry-related industries should respond to the treatment, while those without such ties may remain unresponsive.

Hypothesis 2 (Interest-driven reasoning) *The positive (negative) information treatment increases (decreases) public support for the government's carbon offsetting policy only among respondents with personal ties to forestry-related industries (family or friends).*

3.3 Exploratory Heterogeneity Analyses

We additionally examine heterogeneity by candidate support, climate change awareness and concern, education, and ethnicity. These analyses are not pre-registered; we treat them as exploratory and avoid strong claims about underlying mechanisms.

Prior research suggests two reasons these dimensions may matter. First, politically motivated reasoning can shape how individuals process policy-relevant information: voters who are copartisan or coethnic with the incumbent may respond differently to positive versus negative frames (Hart and Nisbet, 2012; Bolsen, Druckman, and Cook,

2014; Druckman and McGrath, 2019). Second, prior knowledge may moderate framing effects, with effects strongest among those with less prior understanding (Druckman, 2004; Lecheler and De Vreese, 2011). We examine these patterns descriptively.

4 Data and Experimental Design

4.1 Study Context: Liberia

Liberia, a West African country rich in natural resources and biodiversity, is a useful case for studying the dynamics of carbon offsetting and local support for climate action. In March 2023, Liberia entered a memorandum of understanding with Blue Carbon, a company based in the United Arab Emirates (Canby, 2024). The agreement covers roughly one million hectares of forested land, primarily through conservation projects designed to generate carbon credits for sale in international markets.

The implications of this deal are significant for Liberia's counties, particularly those heavily forested and dependent on forest resources for local livelihoods. While the deal promises potential economic benefits through conservation jobs and carbon credit revenue, it also raises concerns about local communities. Enforcing conservation measures could restrict access to forest resources that are vital for livelihoods in logging, farming, and other forest-dependent activities. These tensions make Liberia a useful setting for studying how citizens weigh competing claims about carbon offset projects.

4.2 Data Collection

To study the research question, we fielded a survey with 2,072 respondents in an urban neighborhood of Monrovia, Liberia, in December 2023.⁵ The pre-registered target sample size was roughly 2,000; the realized sample slightly exceeded this target due to field logistics. The sample is an in-person, neighborhood-based urban sample (Peace

⁵Appendix A reports sample composition descriptives (Table A11) and a post-stratification weighting check (Table A12).

Island, Monrovia; Appendix C). We chose an urban site because this neighborhood has a high proportion of internal migrants from inland forest communities, allowing comparison between urban residents with and without family or friend ties to forest-dependent livelihoods. We interpret the findings as evidence about opinion formation among urban residents in this setting; generalization to rural Liberia or other contexts is suggestive rather than definitive. Survey enumerators received training for two full days before the fieldwork. The response rate was approximately 87%, with non-response primarily due to absence rather than refusal.

4.3 Experimental Design

We conducted a survey experiment in which we cross-randomized different narratives about carbon offsetting and measured their effects on attitudes and support. Table 1 illustrates the experimental design.

First, to ensure all participants had a basic understanding of carbon offsetting, we provided a “common narrative” that was neutral and informative. This narrative explained the concept of carbon offsetting and its relevance to Liberia.

As described in the pre-registration, enumerators also showed single-page cartoon visuals to accompany the narratives. In the field these visuals were printed in black-and-white; Appendix A reproduces representative digital versions for reference.

Common narrative. *“Climate change is making our weather unpredictable, like unexpected heavy rains or long dry spells, and causing sea levels to rise. This often happens because of carbon emissions – gases from burning things like oil and coal. These gases make the Earth warmer. It’s a big problem for Africa, and Liberia feels it strongly. Our farming and coasts are suffering from droughts, land turning into desert, and food shortages.*

There’s an idea to help with this called carbon offsetting. It’s like a trade. People and companies who release gases that warm the planet can pay for projects that help

reduce these gases somewhere else. For example, a company from another country might make a deal with Liberia. They would take care of a big area of our forests – about 10% of Liberia’s land – for 30 years. They do this to earn ‘carbon credits’, which are like points for helping lower global emissions. In this deal, Liberian government wouldn’t manage these forests, but Liberia can earn from the carbon credits.’

Following the common narrative, participants were randomly assigned to receive either a positive or negative description of carbon offsetting, or both. These narratives were crafted to highlight the potential benefits or risks associated with carbon offsetting projects. The cross-randomization of positive and negative narratives, based on claims commonly made in public debates, enables us to examine how different framings influence support and whether effects differ by respondents’ material stakes.

Table 1: Experimental Design

		Positive narrative	
		No	Yes
Negative narrative	No	Common narrative	Common narrative Positive narrative
	Yes	Common narrative Negative narrative	Common narrative Positive narrative Negative narrative

Note: When presenting both positive and negative narratives, we further randomized the order between positive and negative narratives.

Positive narrative. “Carbon offsetting projects can be good for countries like Liberia. They bring in money from other countries, help us take care of our environment and all the different plants and animals, and can even bring in new, cleaner ways of doing

things.”

Negative narrative. “*Carbon offsetting projects can cause problems. Sometimes, they can take away land that local people have always used, forcing them to move. People who depend on the forests for their living might lose out. Also, these projects don’t always cut down on the gases that cause climate change as much as they should.”*

The negative narrative refers to concrete harms (dispossession, job loss) while the positive narrative relies on more abstract benefits (money, environment). This asymmetry reflects the real-world information environment, in which local costs are often salient while benefits are diffuse and future-oriented.

4.4 Respondent Characteristics and Experimental Balance Check

Table A1 presents summary statistics and an experimental balance check. The average age of respondents is about 33 years. About 63% of respondents are female, with an average of 9.05 years of education. Thirteen percent of respondents are from counties affected by Blue Carbon projects, and 46% report family or friend ties to forestry-related industries. Prior awareness of the Blue Carbon deal was low: only 7% of respondents reported knowing about the issue before the survey, suggesting that our treatments provided new information for most respondents. The experimental groups are balanced on these characteristics, with small differences that do not follow a clear pattern.

5 Results

5.1 Primary Outcomes (Pre-registered)

Once respondents were presented with the narratives, we asked questions to measure our primary outcomes: (1) perceptions of carbon offsetting benefits and concerns, (2) views on the government’s role, and (3) perceptions of global climate action. Outcomes

were measured on a 1–5 Likert scale. We report effects on individual items as well as on the four pre-registered outcome indices constructed using inverse covariance weighting (Anderson, 2008) (see Appendix A).⁶

Next, we examine the effects of the (1) *positive* (pro), (2) *negative* (con), and (3) *combined* narratives (pro & con). We estimate average treatment effects using OLS. The main item-level results are presented in Figure 1. Index results and the pre-registered order-effect test are reported in Appendix A.⁷

The results show a clear asymmetry, broadly consistent with Hypothesis 1 and with research on negativity bias in information processing (Soroka, 2014). On individual items, the *positive* narrative produces small and imprecise changes. By contrast, the *negative* narrative reduces *Perceived benefit* and *Support for government involvement* in carbon offsetting. This asymmetry may reflect concreteness as much as valence: the negative narrative refers to specific harms (land dispossession, job loss) while the positive narrative emphasizes more abstract benefits (economic gains, environmental protection). The *combined* narrative (positive and negative together) yields estimates close to zero across outcomes, consistent with the expectation that opposing frames offset each other. Across the pre-registered indices, effects are generally modest; both

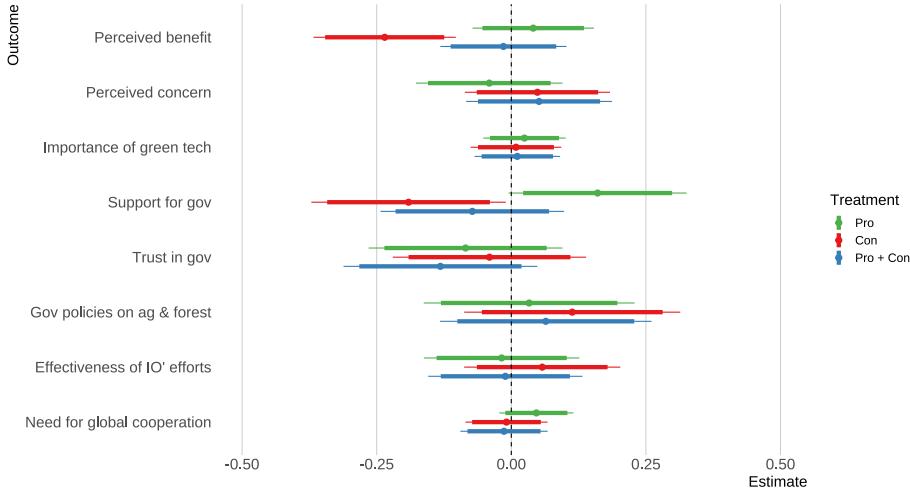
⁶We estimate intention-to-treat (ITT) effects by comparing each treatment arm to the control condition (common narrative only) using OLS with enumerator fixed effects and heteroskedasticity-robust standard errors. Figures report 90% and 95% confidence intervals. Because enumerators could interview up to two adults per household and household identifiers are not consistently available, we do not cluster standard errors at the household level; we interpret marginal results cautiously. The number of observations varies across outcomes due to item nonresponse. To address concerns about multiple outcomes, we report effects on the four pre-registered indices (Appendix A Table A5) and the pre-registered order randomization test (Appendix A Table A6).

⁷Appendix A reports (in order): the pre-registered indices and order-effect test (Tables A5 and A6); heterogeneity by forestry ties (pre-registered moderator) and its covariate robustness (Tables A8 and A9); additional robustness checks (Table A10 and Table A12); and exploratory subgroup analyses (e.g., Tables A13, A15, and A16).

the positive and negative narratives reduce the Global Climate index, and the negative narrative marginally reduces the Government & Policy index (Appendix A Table A5).⁸ As pre-registered, we also tested whether presentation order matters within the combined-treatment arm; we find little evidence that it does, with one marginal exception: presenting the positive narrative first (Pro→Con) slightly increases *Perceived benefit* relative to the reverse order (Appendix A Table A6). The negative treatment effects of roughly 0.10–0.15 standard deviations are comparable to framing effects documented in other developing-country survey experiments (Chong and Druckman, 2013) and represent a meaningful shift in attitudes given that most respondents had no prior awareness of the Blue Carbon deal.

⁸The negative effect of the positive narrative on the Global Climate index may reflect a ceiling effect (baseline support for global cooperation is already near the scale maximum), increased skepticism when benefits are emphasized, or a shift in perceived locus of action: emphasizing *local* economic benefits may reduce perceived need for *global* cooperation. The Global Climate index is dominated by the “worldwide problem” item (“Climate change is a worldwide problem that needs countries to work together”), which shows a significant negative effect from the positive narrative.

Figure 1: Framing Effects on Perceptions on Carbon Offsetting



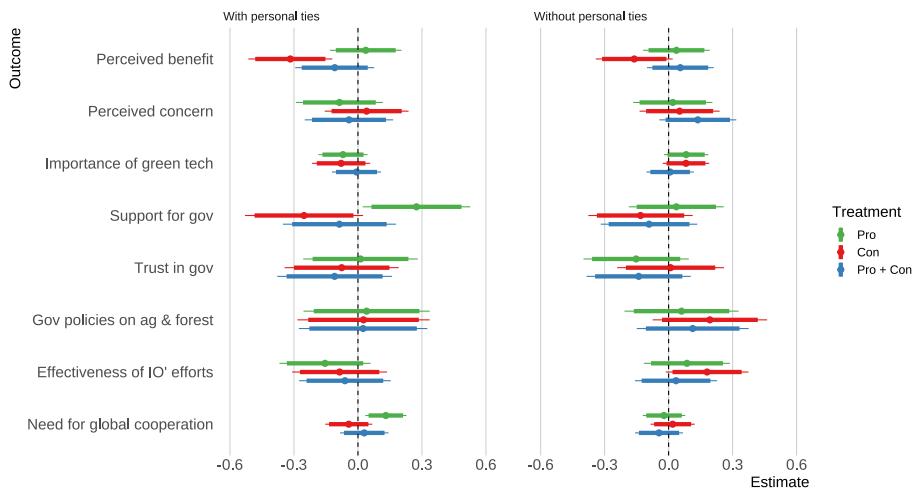
Note: The x-axis shows the average treatment effects of the positive and negative narratives on the primary outcomes, while the y-axis shows the primary outcomes being examined. The thicker bar indicates 90% confidence intervals, and the narrower bar indicates 95% confidence intervals.

Next, we examine heterogeneity by personal ties to forestry-related industries, our pre-registered moderator (Hypothesis 2). The results, shown in Figure 2, are broadly consistent with the hypothesis. On the left-hand side panel (no forestry ties), most effects are small and imprecise. Interestingly, the negative narrative increases *Importance of green technology* and *Effectiveness of international organizations* in this group, possibly because criticism of carbon offsetting increases demand for alternative solutions.

In contrast, on the right-hand side panel for those with forestry ties, treatment effects are larger and more precisely estimated. The *negative* narrative significantly reduces *Perceived benefit* and *Support for government*. The *positive* narrative shows a positive but imprecise effect on *Support for government* and significantly increases *Need for global cooperation*. Effect magnitudes are larger than in the pooled analysis

(Figure 1). These patterns broadly confirm Hypothesis 2: among respondents with forestry ties, information treatments have more pronounced effects on support-related outcomes, consistent with interest-driven reasoning. One interpretation is that social networks help information spread and make the risk feel more personally relevant (Granovetter, 1973). Because forestry ties are measured rather than randomized, these results show *when* framing effects are larger, not the causal effect of having such ties.

Figure 2: Heterogeneity by Personal Ties to Forestry-related Industries



Note: The left panel presents the information treatment effects among the respondents who do not have personal ties (family or friends) to forestry-related industries. The right panel presents the treatment effects among the respondents who have personal ties (family or friends) to forestry-related industries. The x-axis shows the average treatment effects of the positive and negative narratives on the primary outcomes, while the y-axis shows the primary outcomes being examined. The thicker bar indicates 90% confidence intervals, and the narrower bar indicates 95% confidence intervals.

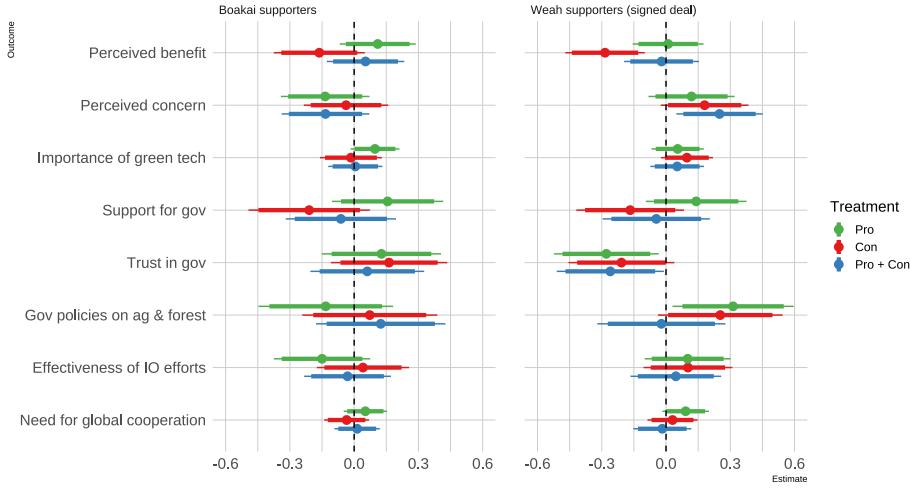
As an exploratory analysis (not pre-registered), we examine heterogeneous treatment effects by respondents' candidate support to probe whether politically motivated reasoning shapes responses. The key distinction is that President George Weah's gov-

ernment signed the Blue Carbon memorandum of understanding in March 2023, while challenger Joseph Boakai (who won the October 2023 election) was not party to the deal. The results, shown in Figure 3, reveal an unexpected pattern. Among Boakai supporters (left panel), none of the information treatments yields statistically significant effects.

In contrast, among supporters of President Weah, whose government signed the deal (right panel), the negative information treatment significantly decreases perceived benefits, increases perceived concerns, and reduces support for government involvement. The positive treatment also increases ratings of government policies on agriculture and forestry among this group.

These patterns do not support classic motivated reasoning, which would predict that supporters of the deal-signing government respond favorably to positive information or defensively to criticism. Instead, Weah supporters appear more responsive to negative information about the deal their leader signed. One interpretation is that supporters of the deal-signing government pay closer attention to policy details; another is that negative information creates cognitive dissonance. We caution that this subgroup analysis is descriptive and exploratory, and we avoid strong claims about these mechanisms.

Figure 3: Heterogeneity by Support for Incumbent President



Note: This figure reports exploratory subgroup estimates by candidate support during the December 2023 survey period. The thicker bar indicates 90% confidence intervals, and the narrower bar indicates 95% confidence intervals.

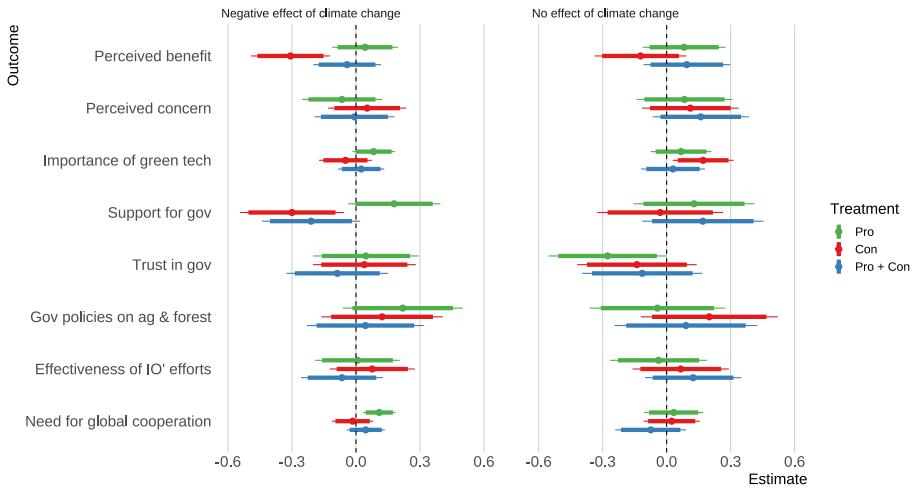
Finally, as an exploratory analysis (not pre-registered), we examine heterogeneity by respondents' prior perception of climate change.⁹ The results, shown in Figure 4, are mixed.

Among respondents who think climate change is making life in Liberia better or about the same (left panel), treatment effects are generally small and do not follow a clear pattern. Among respondents who think climate change is making life in Liberia worse (right panel), the negative information treatment significantly decreases Perceived benefit and Support for government, while the positive treatment increases Need for global cooperation. These patterns suggest that respondents with greater

⁹The full wordings were, "Do you think climate change is making life in Liberia better or worse, or haven't you heard enough to say?" with the response options: Much better / somewhat better / Neither - no change - about the same / Somewhat worse / Much worse.

prior concern about climate change may be more responsive to framing, though we avoid strong claims given the exploratory nature of this analysis.

Figure 4: Heterogeneity by Prior Perception of Climate Change



Note: The left panel presents the information treatment effects among the respondents who answered climate change did not make life in Liberia worse (no prior awareness or knowledge). The right panel presents the treatment effects among the respondents who answered climate change made life in Liberia worse (prior awareness or knowledge). The x-axis shows the average treatment effects of the positive and negative narratives on the primary outcomes, while the y-axis shows the primary outcomes being examined. The thicker bar indicates 90% confidence intervals, and the narrower bar indicates 95% confidence intervals.

6 Conclusion

Several limitations warrant mention. First, our sample is an urban convenience sample, and generalization to rural Liberia or other countries is uncertain. Second, the negative narrative is more concrete than the positive narrative, so we cannot fully separate “negative vs. positive” from “concrete vs. abstract.”

Our study examines public support for carbon offsetting projects in Liberia. We

find that negative information about potential harms (especially land dispossession and doubts about project effectiveness) reduces support, particularly among respondents with ties to forest-dependent communities. By contrast, positive information has limited effects, and presenting both messages together tends to cancel out the separate effects. These findings align with broader evidence that policies perceived as detrimental to local livelihoods face substantial resistance, regardless of their purported economic or environmental benefits. Exploratory subgroup analyses (reported in Appendix A) suggest additional patterns by candidate support and climate awareness, though we avoid strong claims about these mechanisms.

This study adds to a growing literature on public support for climate mitigation by providing evidence from a developing-country context where land-based carbon projects are actively debated. Our results highlight a basic political constraint: public support depends on whether people believe local rights and livelihoods will be protected. The asymmetry we document suggests that positive messaging about broad benefits may be less effective than addressing specific concerns about land rights and compensation. For carbon markets to gain public acceptance in host countries, project developers and international organizations may need to design credible consent and benefit-sharing arrangements that directly address local costs, rather than relying on abstract appeals to global environmental benefits. Since our survey, the Blue Carbon deal has stalled amid continued public debate, underscoring the political sustainability challenges we study. Future research can examine whether these patterns hold in other settings and how opinions change once projects move from agreements to implementation.

Data Availability Statement

The data, replication instructions, and the data's codebook will be deposited on the BJPolS Dataverse upon acceptance. The data citation will be provided here once the

DOI is available.

Competing Interests

The author(s) declare none.

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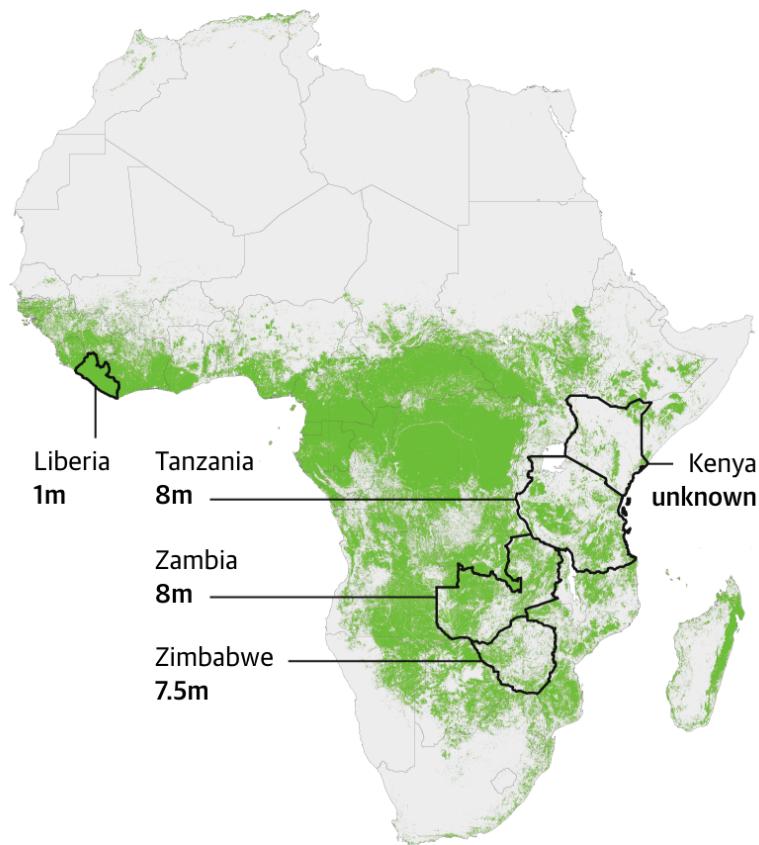
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Appendix A. Additional Results

Blue Carbon deals in Africa

■ Tree cover in 2021
□ Countries with deals, deal size in hectares



Guardian graphic. Source: Guardian Research, Impact Observatory for Esri, Sentinel-2

Figure A1: Blue Carbon Deals in Africa. Source: Guardian Research, Impact Observatory for Esri, Sentinel-2. Liberia's 1 million hectare deal is among several large-scale carbon offset agreements in the region.

A.1 Sample descriptives and experimental balance

Table A1: Summary Statistics and Experimental Balance

	(1) Mean (SD)	(2)	(3)	(4)
		Coefficient on Difference (Treatment - Control)		
Common Narrative Group		Positive narrative	Negative narrative	Positive + Negative
Panel A. Respondent background				
Age	32.94 (12.21)	-0.41 (0.62)	-0.03 (0.66)	0.59 (0.64)
=1 if female	0.63	0.01 (0.02)	-0.01 (0.02)	0.03 (0.02)
Years of education	9.05 (4.47)	-0.47** (0.23)	0.02 (0.24)	0.19 (0.23)
=1 if Christian	0.98	-0.02* (0.01)	0.01 (0.01)	-0.01 (0.01)
=1 if has a paid job	0.48	0.01 (0.03)	-0.04 (0.03)	0.01 (0.03)
Income (USD, monthly)	89.21 (98.48)	-11.29* (6.32)	10.81 (8.18)	-1.50 (7.04)
Value of durables (USD)	151.93 (385.78)	6.22 (20.04)	0.70 (19.04)	-9.55 (18.26)
=1 if from county affected by Blue Carbon	0.13	0.02 (0.02)	-0.00 (0.02)	-0.00 (0.02)
=1 if has family ties to forestry-related industry	0.46	0.00 (0.03)	0.03 (0.03)	-0.04 (0.03)
Panel B. Baseline understanding about climate change				
=1 if heard about climate change	0.71	-0.01 (0.02)	0.01 (0.02)	-0.01 (0.02)
Climate change impact on Liberia (1-5, 5=very negative)	3.46 (1.46)	-0.02 (0.07)	-0.13* (0.08)	0.10 (0.08)
Concerned about drought, flood, etc. (1-5, 5=very concerned)	4.50 (0.98)	-0.10* (0.05)	0.04 (0.05)	0.10** (0.05)
Role of ordinary Liberians (1-5, 5=very important)	3.81 (1.46)	-0.11 (0.08)	0.04 (0.07)	0.10 (0.07)
Imminent government action (1-5, 5=very important)	4.25 (1.27)	0.01 (0.06)	-0.01 (0.06)	0.06 (0.06)
=1 if thinks gov't has primary responsibility ³⁰	0.74	0.02 (0.02)	-0.01 (0.02)	0.01 (0.02)
=1 if knew about Blue Carbon	0.08			

Table A2: Perceptions on Climate Actions (Control Group only)

	(1) Mean	(2) SD
Perceptions on carbon offsetting		
1. Perceived benefit of carbon offsetting	4.43	(1.04)
2. Perceived concern about carbon offsetting	4.23	(1.21)
3. Importance of green technology	4.51	(0.73)
Views on government role		
4. Support for government	4.08	(1.48)
5. Trust in government	3.40	(1.50)
6. Government policies on agriculture & forestry	3.13	(1.75)
Perceptions on global climate action		
7. Effectiveness of international organizations' efforts	3.62	(1.21)
8. Need for global cooperation	4.78	(0.69)
Observations	538	

Note: 1-5 scale, where 1=lowest and 5=highest.

Table A3: Prior Knowledge and Awareness (Descriptives; Exploratory)

	N	%
Awareness of Climate Change		
No, never heard	604	29.5%
Yes, heard	1439	70.3%
Awareness of Blue Carbon Deal		
No, not aware	1895	92.6%
Yes, fully aware	27	1.3%
Yes, heard but no details	119	5.8%

A.2 Experimental materials and design

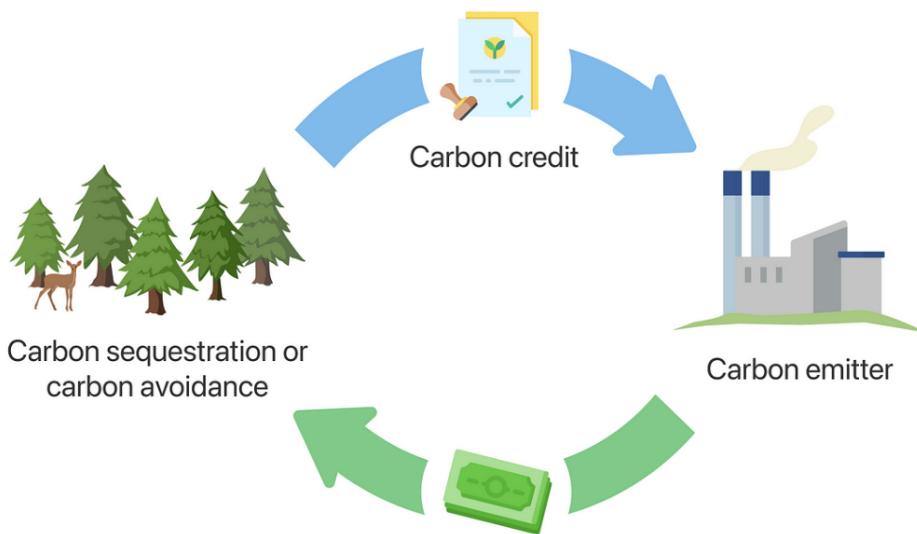


Figure A2: Visual Aid: Common Narrative (representative digital version)



Figure A3: Cartoon Illustrations Presented to Respondents. Left: Positive narrative (economic benefits, community gains). Right: Negative narrative (land restrictions, community concerns). Field copies were printed in black-and-white.

A.3 Primary outcomes and order test (pre-registered)

Table A4: Framing Effects on Perceptions on Carbon Offsetting (Item-level)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Pro	0.05 (0.06)	-0.00 (0.07)	0.05 (0.04)	0.14 (0.09)	-0.08 (0.09)	0.11 (0.11)	-0.03 (0.08)	0.07* (0.04)
Con	-0.22*** (0.07)	0.07 (0.07)	0.05 (0.05)	-0.19* (0.10)	-0.05 (0.09)	0.17 (0.11)	0.06 (0.08)	-0.00 (0.04)
Pro + Con	0.02 (0.06)	0.04 (0.07)	0.03 (0.05)	-0.05 (0.09)	-0.10 (0.09)	0.05 (0.11)	-0.00 (0.07)	-0.01 (0.04)
Control mean	4.43	4.23	4.51	4.08	3.40	3.13	3.62	4.78
Control SD	1.04	1.21	0.73	1.48	1.50	1.75	1.21	0.69
Observations	2,045	2,046	2,044	2,044	2,039	2,034	2,043	2,041

Note: Outcome variable is on a 1-5 scale, where 1=lowest and 5=highest. Robust standard errors in parentheses.

***, **, and * represent significance at 1%, 5%, and 10%, respectively.

Table A5: Pre-registered Primary Outcome Indices (Inverse Covariance Weighting)

	(1)	(2)	(3)	(4)
	Index 1: Government & Policy	Index 2: Env. & Investment	Index 3: Social Concerns	Index 4: Global Climate
Positive Narrative	-0.10 (0.06)	-0.09 (0.06)	0.06 (0.06)	-0.11** (0.06)
Negative Narrative	-0.11* (0.06)	-0.02 (0.06)	0.04 (0.06)	-0.11* (0.06)
Combined Narrative	-0.07 (0.06)	-0.04 (0.06)	0.00 (0.06)	-0.10* (0.06)
Constant	0.07 (0.04)	0.04 (0.04)	-0.03 (0.04)	0.08** (0.04)
Observations	2,043	2,043	2,043	2,043
R-squared	0.002	0.001	0.001	0.002

Note: Indices constructed using inverse covariance weighting (Anderson, 2008), as pre-registered.

Standard errors in parentheses. * p<0.1, ** p<0.05, *** p<0.01.

Table A6: Order Effects in Combined Treatment (Pre-registered)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Pro → Con	0.12*	-0.04	0.05	0.01	-0.13	-0.03	-0.04	-0.00
	(0.07)	(0.09)	(0.05)	(0.11)	(0.11)	(0.13)	(0.09)	(0.05)
Con → Pro	-0.09	0.14	0.01	-0.10	-0.07	0.12	0.04	-0.01
	(0.08)	(0.08)	(0.06)	(0.11)	(0.11)	(0.13)	(0.09)	(0.06)
Control mean	4.43	4.23	4.51	4.08	3.40	3.13	3.62	4.78
Control SD	1.04	1.21	0.73	1.48	1.50	1.75	1.21	0.69
Observations	1,039	1,039	1,037	1,038	1,033	1,035	1,038	1,036

Note: This table corresponds to the pre-registered order randomization within the combined-treatment condition.

Table A7: Framing Effects (Including Order-Specific Combined Treatment; Descriptive)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Pro	0.05 (0.06)	0.00 (0.07)	0.05 (0.04)	0.15* (0.09)	-0.08 (0.09)	0.11 (0.11)	-0.03 (0.08)	0.07* (0.04)
Con	-0.22*** (0.07)	0.07 (0.07)	0.05 (0.05)	-0.19* (0.10)	-0.05 (0.09)	0.17 (0.11)	0.06 (0.08)	-0.00 (0.04)
Pro → Con	0.12* (0.07)	-0.04 (0.09)	0.05 (0.05)	0.01 (0.11)	-0.13 (0.11)	-0.03 (0.13)	-0.04 (0.09)	-0.00 (0.05)
Con → Pro	-0.09 (0.08)	0.14 (0.08)	0.01 (0.06)	-0.10 (0.11)	-0.07 (0.11)	0.12 (0.13)	0.04 (0.09)	-0.01 (0.06)
Control mean	4.43	4.23	4.51	4.08	3.40	3.13	3.62	4.78
Control SD	1.04	1.21	0.73	1.48	1.50	1.75	1.21	0.69
Observations	2,044	2,045	2,043	2,043	2,038	2,033	2,042	2,040

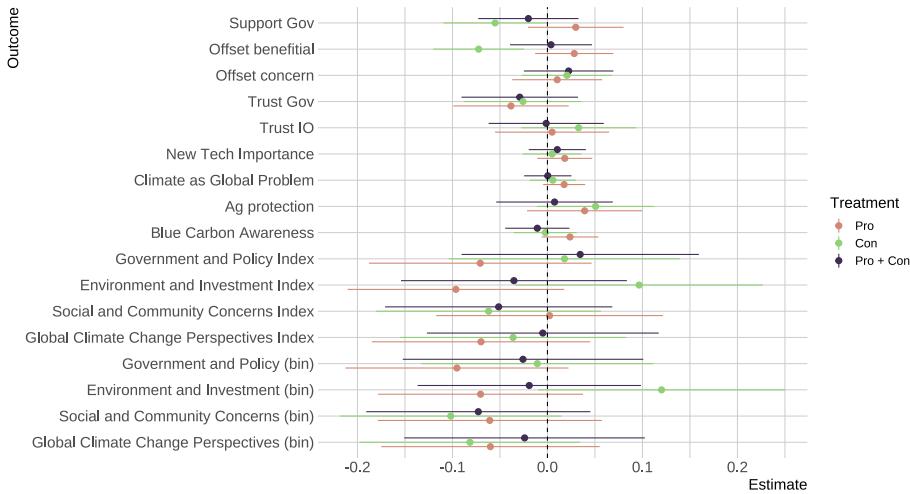


Figure A4: Framing Effects on Indices and Binary Outcomes (Alternative Visualization; Descriptive)

A.4 Heterogeneity by forestry ties (pre-registered moderator) and robustness

Table A8: Heterogeneity by Personal Ties to Forestry-related Industries (Pre-registered moderator)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Panel A. Personal ties to forestry-related industries								
Pro	-0.02 (0.09)	-0.08 (0.11)	-0.02 (0.06)	0.20 (0.13)	-0.01 (0.14)	0.19 (0.16)	-0.17 (0.11)	0.11** (0.05)
Con	-0.33*** (0.10)	0.09 (0.10)	-0.05 (0.07)	-0.28** (0.14)	-0.11 (0.13)	0.18 (0.16)	-0.08 (0.11)	-0.04 (0.06)
Pro + Con	-0.10 (0.10)	-0.07 (0.11)	0.04 (0.06)	-0.08 (0.14)	-0.05 (0.14)	0.07 (0.17)	-0.05 (0.11)	0.04 (0.06)
Control mean	4.50	4.31	4.60	4.08	3.38	3.17	3.73	4.80
Control SD	1.02	1.15	0.62	1.50	1.49	1.80	1.20	0.65
Observations	935	936	935	934	935	931	934	936
Panel B. No personal ties								
Pro	0.11 (0.09)	0.07 (0.10)	0.11* (0.06)	0.10 (0.12)	-0.15 (0.13)	0.04 (0.14)	0.10 (0.10)	0.03 (0.06)
Con	-0.13 (0.10)	0.05 (0.10)	0.14** (0.06)	-0.10 (0.13)	0.00 (0.13)	0.16 (0.15)	0.18* (0.10)	0.03 (0.06)
Pro + Con	0.11 (0.08)	0.14 (0.10)	0.03 (0.06)	-0.02 (0.12)	-0.14 (0.13)	0.03 (0.14)	0.05 (0.10)	-0.04 (0.06)
Control mean	4.37	4.17	4.44	4.08	3.42	3.10	3.52	4.77
Control SD	1.06	1.25	0.81	1.47	1.51	1.71	1.22	0.72
Observations	1,110	1,110	1,109	1,110	1,104	1,103	1,109	1,105

Note: Outcome variable is on a 1-5 scale, where 1=lowest and 5=highest. Robust standard errors in parentheses.

***, **, and * represent significance at 1%, 5%, and 10%, respectively.

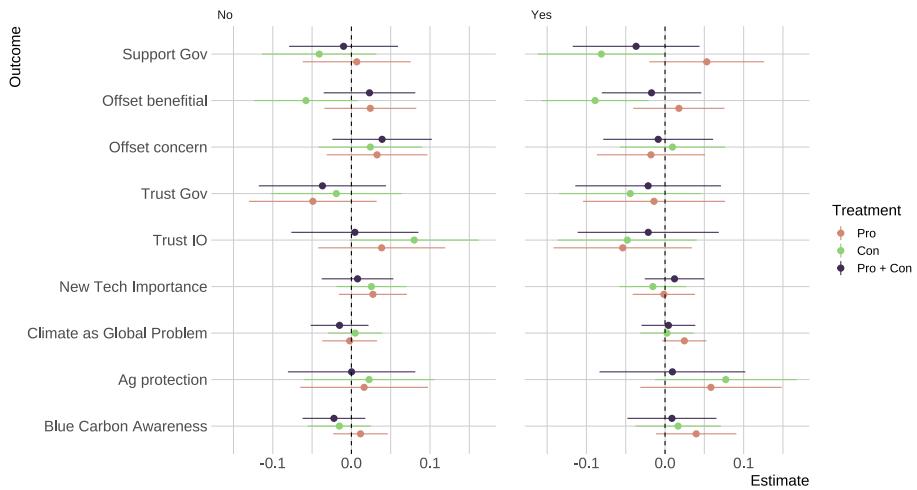


Figure A5: Heterogeneity by Forestry Ties (Including Indices/Binary Outcomes; Descriptive)

Table A9: Heterogeneity by Forestry Ties with Covariates (Robustness Check)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Panel A. Personal ties to forestry-related industries								
Pro	0.13 (0.12)	-0.11 (0.15)	0.05 (0.08)	0.45*** (0.16)	0.12 (0.19)	0.05 (0.21)	0.01 (0.15)	0.15* (0.08)
Con	-0.25* (0.13)	0.12 (0.14)	-0.01 (0.10)	-0.20 (0.18)	0.11 (0.18)	-0.08 (0.22)	-0.08 (0.16)	-0.01 (0.09)
Pro + Con	-0.10 (0.13)	-0.03 (0.16)	-0.04 (0.09)	-0.15 (0.17)	-0.04 (0.18)	0.20 (0.21)	-0.00 (0.15)	0.10 (0.08)
Panel B. No personal ties								
Pro	0.07 (0.12)	0.08 (0.15)	0.14* (0.08)	-0.18 (0.17)	-0.11 (0.21)	-0.09 (0.21)	0.00 (0.16)	0.07 (0.06)
Con	-0.20 (0.15)	0.04 (0.16)	0.12 (0.09)	-0.22 (0.20)	-0.08 (0.22)	-0.07 (0.23)	0.18 (0.16)	-0.04 (0.08)
Pro + Con	0.16 (0.12)	0.01 (0.15)	0.05 (0.08)	-0.12 (0.18)	0.08 (0.20)	-0.20 (0.21)	-0.10 (0.16)	-0.01 (0.07)
Covariates				Yes				
Observations				2,000				

A.5 Robustness checks (not pre-registered)

Table A10: Framing Effects with Individual Covariates (Robustness Check)

	Support for gov't	Perceived benefit	Perceived concern	Trust in gov't	Effect of IO's	Need for green tech	Need for global coop	Gov't policies on ag & forest
Pro + Con	-0.098 (0.119)	0.034 (0.087)	-0.060 (0.109)	-0.038 (0.137)	-0.090 (0.107)	0.012 (0.058)	0.042 (0.051)	-0.026 (0.148)
Con	-0.238* (0.131)	-0.248** (0.098)	0.028 (0.105)	-0.038 (0.137)	0.031 (0.111)	0.051 (0.065)	-0.043 (0.057)	-0.077 (0.157)
Pro	0.121 (0.118)	0.104 (0.082)	-0.078 (0.104)	-0.021 (0.137)	-0.023 (0.107)	0.087* (0.053)	0.090* (0.051)	-0.059 (0.146)
Control mean	4.29	4.42	3.94	3.36	3.59	4.47	4.77	3.10
Control SD	1.43	1.06	1.40	1.47	1.22	0.76	0.71	1.70
Covariates					Yes			
Observations					2,000			

A.6 Robustness to sample composition (exploratory)

Our urban sample overrepresents the Gio ethnic group (24.8% vs. 9.0% nationally) and underrepresents the Kpelle (17.7% vs. 28.0%). Table A11 compares national and sample ethnic composition. We then conduct a post-stratification weighting exercise and re-estimate the main treatment effects using weighted least squares (WLS); Table A12 reports results for a representative outcome.

Table A11: Ethnic Composition: National vs. Study Sample

Ethnic Group	National %	Sample N	Sample %	Difference
Kpelle	28.0	362	17.7	-10.3
Bassa	18.0	364	17.8	-0.2
Gio (Dan)	9.0	507	24.8	+15.8
Mano	7.0	254	12.4	+5.4
Grebo	5.0	101	4.9	-0.1
Kru	6.0	60	2.9	-3.1
Krahn	4.0	73	3.6	-0.4
Loma	5.0	92	4.5	-0.5
Kissi	2.5	53	2.6	+0.1
Gola	3.0	11	0.5	-2.5
Other groups	12.5	170	8.3	-4.2
Total	100.0	2,047	100.0	

Note: National percentages from Liberia 2008 Census and 2022 estimates.

Sample collected in Monrovia (December 2023). Gio overrepresentation reflects urban migration from Nimba County to the capital. Kpelle underrepresentation reflects their predominantly rural distribution in central Liberia.

Table A12: Robustness of Framing Effects to Population Weighting (Exploratory)

	(1)	(2)
	Unweighted	Weighted (National)
Outcome: Perceived Benefit		
Pro Frame	0.047	0.067
	(0.062)	(0.069)
Con Frame	-0.223***	-0.195**
	(0.071)	(0.081)
Pro + Con	0.018	0.011
	(0.063)	(0.073)
Observations	2,045	2,045
R^2	0.010	0.009

Note: OLS/WLS estimates with robust standard errors.

Column (2) applies post-stratification weights to match
the national ethnic distribution (Census 2008/2022).

Significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

A.7 Exploratory subgroup analyses (not pre-registered)

Table A13: Heterogeneity by Candidate Support (Exploratory; not pre-registered)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Panel A. Supporters of President-Elect (Joseph Boakai)								
Pro	0.11 (0.09)	-0.13 (0.10)	0.07 (0.06)	0.16 (0.13)	0.15 (0.14)	-0.14 (0.16)	-0.16 (0.11)	0.05 (0.05)
Con	-0.16 (0.11)	-0.04 (0.10)	-0.01 (0.07)	-0.20 (0.14)	0.16 (0.14)	0.07 (0.16)	0.03 (0.11)	-0.04 (0.05)
Pro + Con	0.06 (0.09)	-0.14 (0.10)	0.02 (0.06)	-0.06 (0.13)	0.07 (0.14)	0.10 (0.15)	-0.05 (0.10)	0.01 (0.05)
Control mean	4.39	4.36	4.54	4.07	3.27	3.22	3.68	4.81
Control SD	1.08	1.12	0.69	1.50	1.55	1.80	1.20	0.61
Observations	959	959	957	958	956	956	957	957
Panel B. Supporters of Outgoing President (George Weah)								
Pro	-0.08 (0.11)	0.20 (0.13)	-0.01 (0.08)	0.01 (0.15)	-0.15 (0.16)	0.45** (0.19)	0.05 (0.13)	0.04 (0.06)
Con	-0.24** (0.11)	0.31** (0.13)	0.04 (0.07)	-0.33** (0.16)	-0.17 (0.16)	0.34* (0.19)	0.11 (0.13)	-0.04 (0.07)
Pro + Con	-0.12 (0.11)	0.21 (0.13)	0.00 (0.08)	-0.10 (0.16)	-0.15 (0.16)	-0.04 (0.20)	-0.06 (0.14)	-0.07 (0.08)
Control mean	4.53	4.14	4.55	4.18	3.52	2.95	3.63	4.83
Control SD	0.93	1.28	0.69	1.39	1.44	1.72	1.19	0.60
Observations	636	636	637	637	636	632	635	635

Note: Outcome variable is on a 1-5 scale, where 1=lowest and 5=highest. Robust standard errors in parentheses.

***, **, and * represent significance at 1%, 5%, and 10%, respectively.

Table A14: Heterogeneity by Prior Perception of Climate Change (Exploratory; not pre-registered)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Perceived benefit	Perceived concern	Importance of green tech	Support for gov't	Trust in gov't	Gov't policies on ag & forest	Effectiveness of IO's efforts	Need for global cooperation
Panel A. Who think climate change is making life in Liberia worse								
Pro	0.05 (0.08)	-0.06 (0.10)	0.06 (0.05)	0.18* (0.11)	0.06 (0.13)	0.21 (0.14)	-0.00 (0.10)	0.11*** (0.04)
Con	-0.31*** (0.09)	0.06 (0.09)	-0.05 (0.06)	-0.29** (0.12)	0.01 (0.12)	0.14 (0.15)	0.07 (0.10)	-0.02 (0.05)
Pro + Con	-0.04 (0.08)	-0.03 (0.09)	0.01 (0.06)	-0.19 (0.12)	-0.08 (0.12)	0.02 (0.14)	-0.08 (0.10)	0.03 (0.05)
Control mean	4.47	4.29	4.59	4.18	3.29	3.01	3.62	4.82
Control SD	1.00	1.17	0.67	1.40	1.50	1.75	1.22	0.62
Observations	1,169	1,168	1,167	1,167	1,164	1,165	1,166	1,165
Panel B. Not worse								
Pro	0.05 (0.10)	0.08 (0.11)	0.06 (0.07)	0.13 (0.14)	-0.30** (0.14)	0.01 (0.16)	-0.04 (0.11)	0.02 (0.07)
Con	-0.11 (0.11)	0.11 (0.11)	0.18** (0.07)	-0.01 (0.15)	-0.15 (0.14)	0.20 (0.16)	0.06 (0.11)	0.02 (0.07)
Pro + Con	0.12 (0.10)	0.16 (0.12)	0.04 (0.08)	0.19 (0.14)	-0.12 (0.14)	0.11 (0.17)	0.13 (0.12)	-0.07 (0.08)
Control mean	4.37	4.15	4.41	3.93	3.56	3.28	3.61	4.73
Control SD	1.10	1.26	0.80	1.58	1.47	1.74	1.20	0.78
Observations	866	868	867	867	865	860	867	866

Note: Outcome variable is on a 1-5 scale, where 1=lowest and 5=highest. Robust standard errors in parentheses.

***, **, and * represent significance at 1%, 5%, and 10%, respectively.

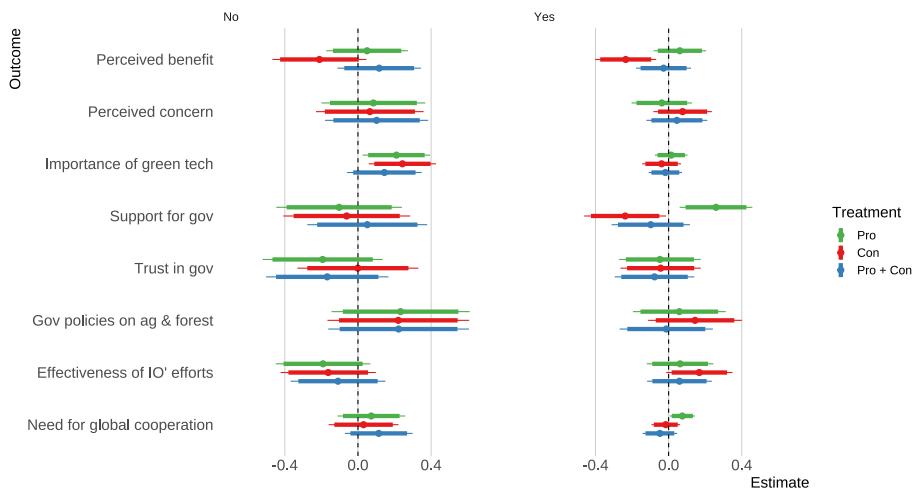


Figure A6: Heterogeneity by Prior Awareness of Climate Change (Exploratory; not pre-registered)

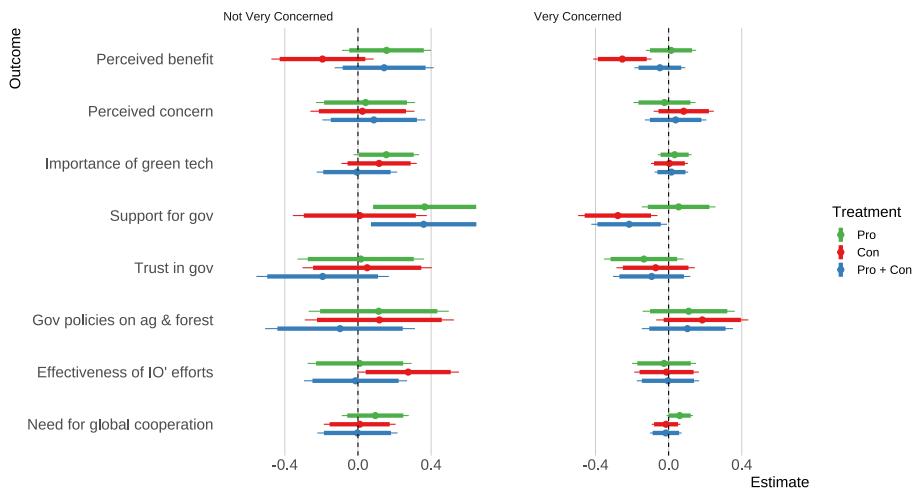


Figure A7: Heterogeneity by Climate Change Concern (Exploratory; not pre-registered)

Table A15: Heterogeneity by Education (Exploratory; not pre-registered)

								Gov't forest
	Support for gov't	Perceived benefit	Perceived concern	Trust in gov't	Effect of IO's	Need for green tech	Need for global coop	policies on ag & forest
Panel A: High Education (Secondary or Above)								
Pro + Con	-0.074	0.022	0.067	-0.126	0.022	0.038	-0.009	0.142
	(0.101)	(0.069)	(0.083)	(0.104)	(0.085)	(0.045)	(0.050)	(0.122)
Con	-0.248**	-0.242***	0.103	-0.091	0.078	0.040	0.022	0.237*
	(0.109)	(0.080)	(0.081)	(0.105)	(0.087)	(0.050)	(0.044)	(0.124)
Pro	0.119	0.013	-0.037	-0.109	-0.040	0.043	0.082**	0.174
	(0.099)	(0.069)	(0.083)	(0.107)	(0.088)	(0.046)	(0.041)	(0.123)
Panel B: Low Education (Below Secondary)								
Pro + Con	0.006	-0.020	0.051	-0.052	-0.028	-0.024	0.028	-0.247
	(0.221)	(0.164)	(0.167)	(0.208)	(0.162)	(0.133)	(0.092)	(0.235)
Con	0.038	-0.160	-0.005	0.140	0.066	0.100	-0.074	-0.138
	(0.209)	(0.158)	(0.169)	(0.203)	(0.160)	(0.122)	(0.097)	(0.231)
Pro	0.270	0.223	0.129	-0.041	0.087	0.209**	0.044	-0.180
	(0.203)	(0.140)	(0.163)	(0.201)	(0.153)	(0.105)	(0.091)	(0.222)

Table A16: Heterogeneity by Ethnicity (Exploratory; not pre-registered)

								Gov't policies on ag & forest
	Support for gov't	Perceived benefit	Perceived concern	Trust in gov't	Effect of IO's	Need for green tech	Need for global coop	
Panel A: Bassa Respondents (N=364)								
Pro + Con	0.235	0.107	0.068	0.199	0.271	0.013	0.079	-0.255
	(0.206)	(0.128)	(0.168)	(0.213)	(0.169)	(0.103)	(0.102)	(0.252)
Con	-0.160	-0.427**	-0.121	0.060	-0.028	-0.040	0.054	0.223
	(0.232)	(0.170)	(0.189)	(0.232)	(0.180)	(0.127)	(0.099)	(0.265)
Pro	0.278	-0.015	0.003	0.053	-0.065	0.159*	0.156*	0.124
	(0.213)	(0.148)	(0.178)	(0.220)	(0.187)	(0.094)	(0.089)	(0.257)
Panel B: Non-Bassa Respondents (N=1,683)								
Pro + Con	-0.125	-0.016	0.075	-0.176*	-0.054	0.028	-0.012	0.121
	(0.103)	(0.073)	(0.082)	(0.104)	(0.084)	(0.051)	(0.049)	(0.121)
Con	-0.195*	-0.193**	0.109	-0.064	0.080	0.057	-0.013	0.157
	(0.106)	(0.079)	(0.079)	(0.103)	(0.084)	(0.052)	(0.044)	(0.121)
Pro	0.119	0.068	0.014	-0.130	-0.007	0.053	0.053	0.127
	(0.098)	(0.069)	(0.081)	(0.105)	(0.084)	(0.048)	(0.042)	(0.119)

Appendix B: Survey Questions on Outcomes

Climate change background understanding

1. Have you heard about climate change, or haven't you had the chance to hear about this yet?
[Yes/No]
2. Do you think climate change is making life in Liberia better or worse, or haven't you heard enough to say?
[5-point Likert scale]
3. How concerned are you about the effects of heat waves, severe drought or lack of rainfall on your community (the locality where you live)?
[5-point Likert scale]
4. How much do you agree with the following statement: "Ordinary Liberians can play a role in limiting climate change."
[5-point Likert scale]
5. How much do you agree with the following statement: "It is important for our government to take steps now to limit climate change in the future, even if it is expensive or causes some job losses or other harm to our economy."
[5-point Likert scale]
6. Who do you think should have primary responsibility for trying to limit climate change and reduce its impact?
[Ordinary citizens / Business and industry / The government / Rich or developed countries / Traditional leaders / Someone else / No one - it cannot be stopped.]
7. Do you think each of the following are doing enough to limit climate change, or do they need to do more, or haven't you heard enough to say?
[Doing enough / Need to do somewhat more / Need to do a lot more / I haven't heard enough to say]
 - Ordinary citizens?
 - Business and industry?
 - Government?
 - Developed countries?

Perceptions towards climate change governance

1. How much do you support the government's involvement in carbon offsetting projects, like letting foreign companies manage our forests for carbon credits?
[5-point Likert scale]

2. Carbon offsetting projects will bring good investments and help protect our environment.
[5-point Likert scale]
3. How worried are you about local communities losing their homes and land rights because of carbon offsetting projects?
[5-point Likert scale]
4. How much trust do you have in our government's ability to effectively handle environmental issues?
[5-point Likert scale]
5. How well do you think international organizations are dealing with climate change?
[5-point Likert scale]
6. How important is it for countries like Liberia to get new, green technologies to help with climate change?
[5-point Likert scale]
7. How much do you agree with the following statement: "Climate change is a worldwide problem that needs countries to work together."
[5-point Likert scale]
8. Some people think the government shouldn't make policies that hurt jobs in agriculture and forestry, like rubber, cocoa, coffee, palm oil, rice, cassava, maize, and others, because it could harm the workers' identities and their communities connected to forests and land.
[5-point Likert scale]
9. Before this survey, did you know about the issues with a company called Blue Carbon, involved in carbon offsetting and forest management in Liberia?
[Yes, fully aware / Yes, but didn't know the details / No]

Appendix C. Sampling

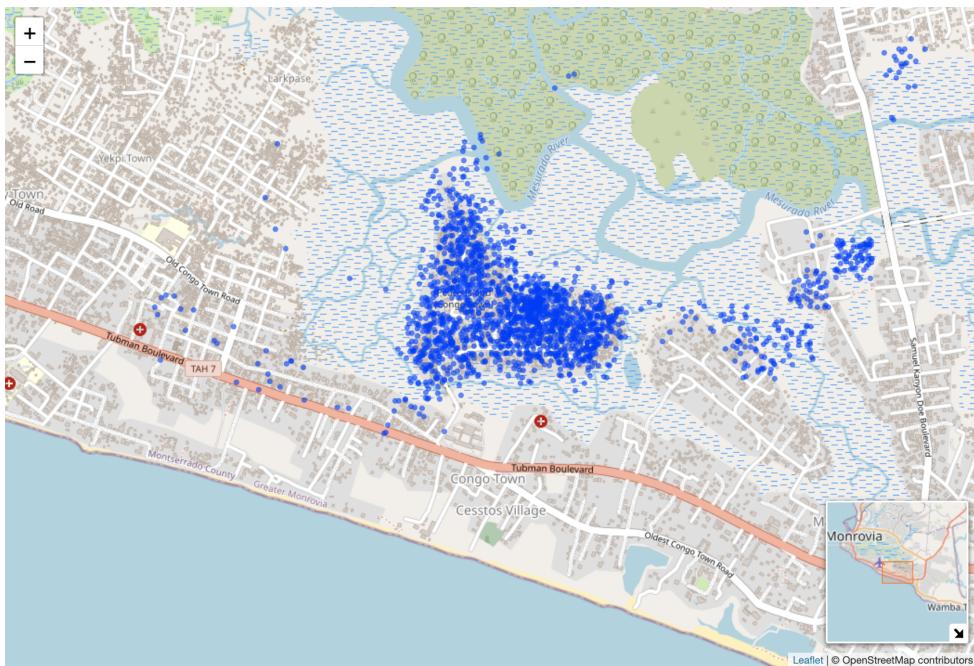


Figure C1: Location of survey respondents

We conducted an in-person survey in December 2023 in Peace Island, an urban neighborhood in Monrovia, Liberia. The study was approved by institutional review boards in Liberia and the United States. The fieldwork was carried out over approximately one week, with a response rate of approximately 87% (non-response was primarily due to absence rather than refusal). Enumerators visited households within the community and interviewed up to two adult members per household, selected through a convenience sampling approach. Each interview was conducted face-to-face at the respondent's residence. Enumerators used tablet computers to administer the survey and recorded responses directly on the device. The geographic distribution of respondents is presented in the map above. For confidentiality, respondent locations in the map are spatially jittered within a 100-meter radius and do not represent exact household positions.



Figure C2: Enumerator training (left) and fieldwork (right)

Appendix D. Descriptive Statistics

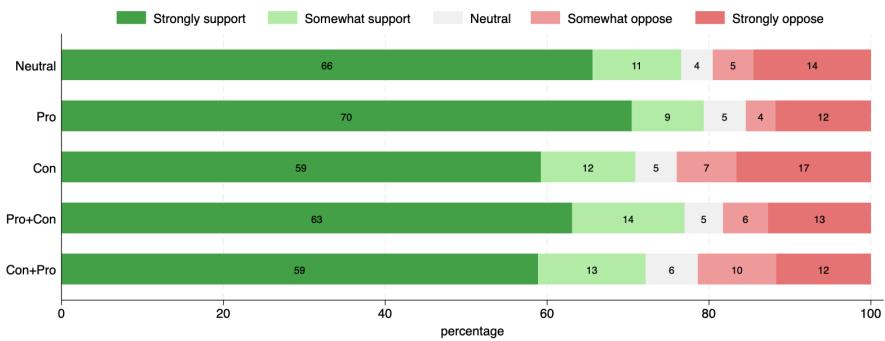


Figure D1: How much do you support the government's involvement in carbon offsetting projects, like letting foreign companies manage our forests for carbon credits? [5-point Likert scale]

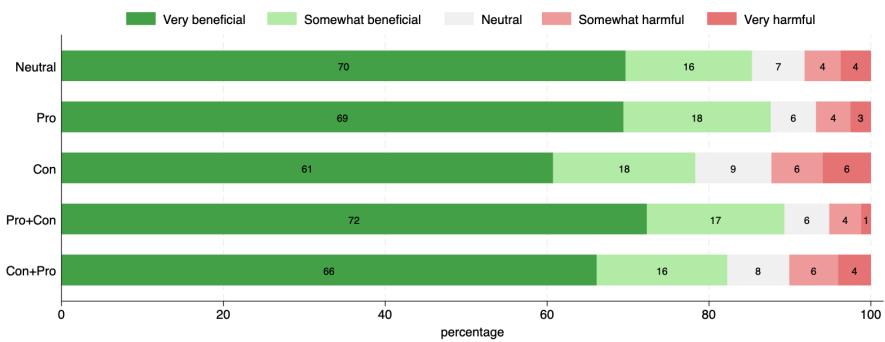


Figure D2: Carbon offsetting projects will bring good investments and help protect our environment. [5-point Likert scale]

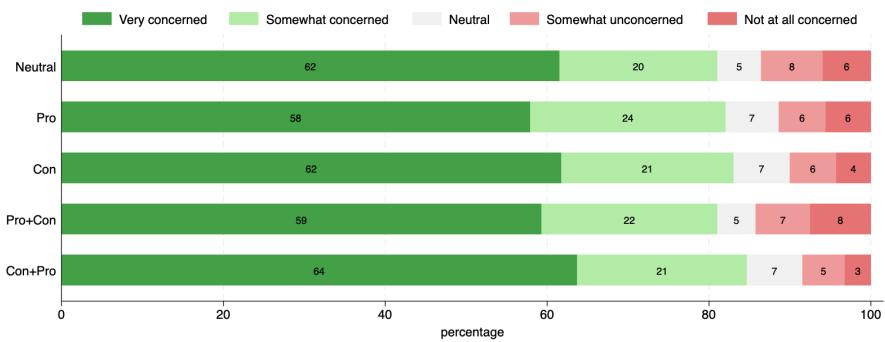


Figure D3: How worried are you about local communities losing their homes and land rights because of carbon offsetting projects? [5-point Likert scale]

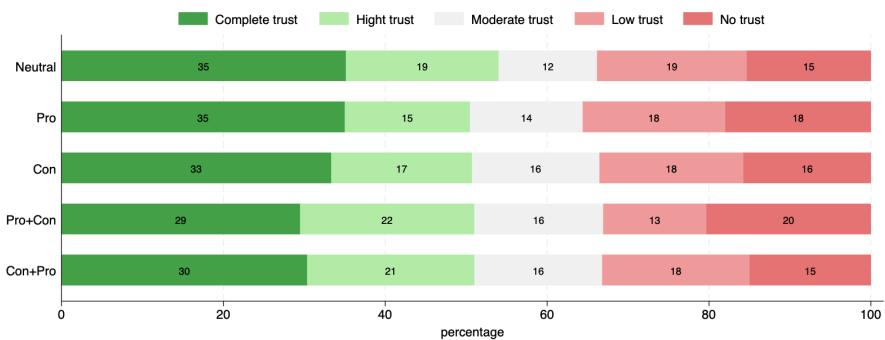


Figure D4: How much trust do you have in our government's ability to effectively handle environmental issues? [5-point Likert scale]

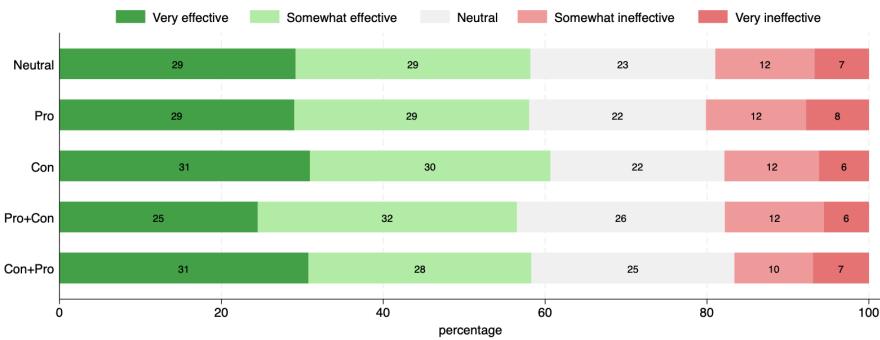


Figure D5: How well do you think international organizations are dealing with climate change? [5-point Likert scale]

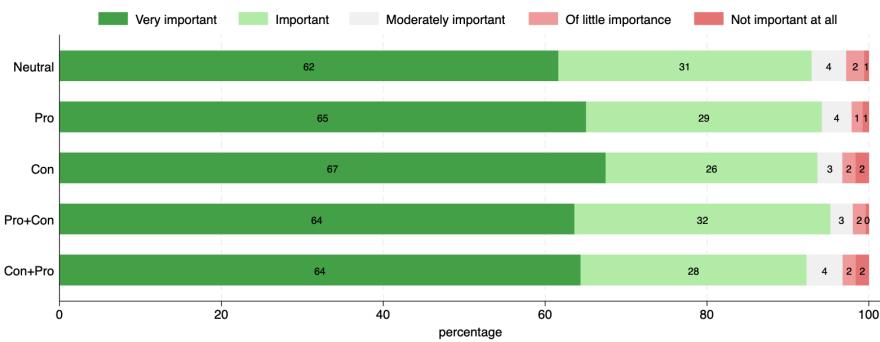


Figure D6: How important is it for countries like Liberia to get new, green technologies to help with climate change? [5-point Likert scale]

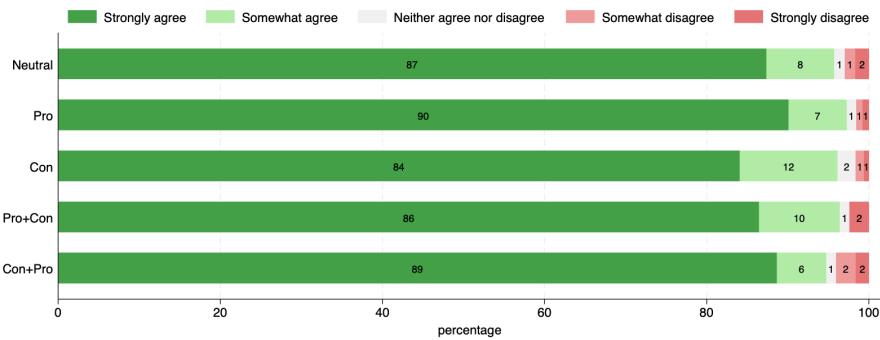


Figure D7: Climate change is a worldwide problem that needs countries to work together? [5-point Likert scale]

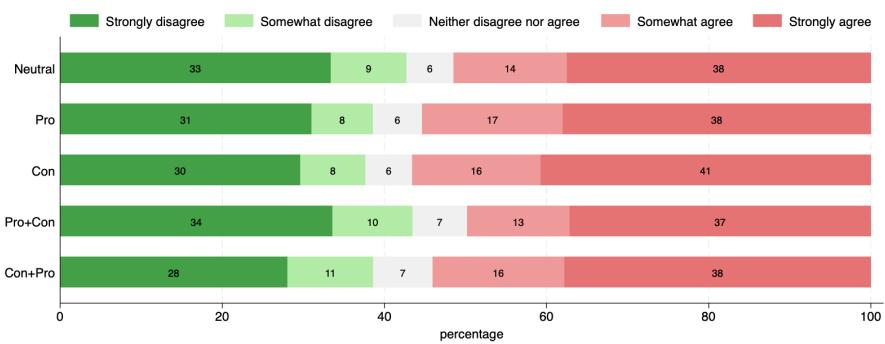


Figure D8: Some people think the government shouldn't make policies that hurt jobs in agriculture and forestry, like rubber, cocoa, coffee, palm oil, rice, cassava, maize, and others, because it could harm the workers' identities and their communities connected to forests and land. [5-point Likert scale]