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Sabrina Scherzer

NTNU, Norway

Christa Brunnschweiler

NTNU, Norway

Tiara Elgifienda

Universitas Bangka Belitung, Indonesia

Håkon da Silva Hyldmo

NTNU, Norway

Nanang Kurniawan

Universitas Gadjah Mada, Indonesia

Päivi Lujala

University of Oulu

Primi Putri

Universitas Gadjah Mada, Indonesia

Department of Economics

 Norwegian University of Science and Technology

N-7491 Trondheim, Norway

<http://www.ntnu.edu/econ/working-papers>

Making CSR work: Evidence from Indonesia's tin mining province*

Sabrina Scherzer (NTNU, Norway) - 0000-0001-9391-9734

Christa Brunnschweiler (NTNU, Norway) - 0000-0002-8610-6433

Tiara Elgifienda (Universitas Bangka Belitung, Indonesia) - 0009-0002-9536-2364

Håkon da Silva Hyldmo (NTNU, Norway) -0000-0002-7514-6878

Nanang Kurniawan (Universitas Gadjah Mada, Indonesia) - 0000-0002-7422-7166

Päivi Lujala (University of Oulu) - 0000-0002-8225-958X

Primi Putri (Universitas Gadjah Mada, Indonesia) - 0000-0001-7170-3123

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Abstract

Mineral producing countries increasingly mandate corporate social responsibility (CSR) initiatives to mitigate negative impacts of mineral extraction through local development projects, but evidence of their effectiveness is scarce. The Indonesian Program Pengembangan dan Pemberdayaan Masyarakat (PPM) requires mining firms to fund local development projects. However, its effectiveness is limited by low public awareness and governance issues. We run a survey experiment with 610 respondents in 35 tin-mining communities to test whether information on the PPM scheme and real-world examples of projects funded through it, presented through two video treatments, enhance knowledge and impact rights perceptions and behavior regarding PPM. Our findings show that a pure information treatment (T1) has a positive impact on respondents' beliefs that they have a right to benefit from mining revenues but reduces their likelihood of making a donation to an NGO that supports PPM project implementation. Adding examples of successful PPM projects to the information treatment (T2) further strengthens respondents' perceptions of their rights to benefit and influence decision-making and also increases the likelihood that they will request more information on PPM and local development, with no impact on actual behavior. We conclude that awareness of such revenue-sharing schemes like PPM could be enhanced with tailored information but whether this would be enough to increase involvement by local communities is uncertain.

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Keywords: accountability, Indonesia, tin revenues, survey experiment, information treatment

1. Introduction

The mining sector is of great economic importance worldwide and especially in developing and emerging countries. Nevertheless, local communities can see few positive socio-economic impacts of mining while experiencing substantial negative effects, e.g., deteriorating natural environments and increasing social tensions. Since the 1990s, mining companies in low- and middle-income countries have been investing in corporate social responsibility (CSR) activities such as infrastructure, education and training, and other local development projects. The reasons for CSR spending can be normative – following the belief that mining companies should directly contribute to local development – or borne from a desire to counter negative perceptions and regulatory concerns of the local impacts of mining, or from a pragmatic decision to minimize operational risk stemming from resistance of host communities (see e.g. Bezzola et al., 2022; Dashwood, 2012, 2014; G. Hilson, 2012; Matten & Moon, 2008). CSR is typically voluntary but has evolved in some host countries to include mandatory projects in communities close to commercial mining sites. The evidence so far suggests that CSR can have positive effects on local communities (e.g. Ofori & Ofori, 2014; Shubita et al., 2022), but also that it can be little more than a PR exercise (A. Hilson et al., 2019; Rajak, 2016) or, at worst, deepen local disparities and conflicts (Gilberthorpe & Banks, 2012; Rajak, 2016).

We focus on the tin mining sector in Indonesia's island province of Bangka and Belitung. Tin is an important component in electronics, lithium-ion batteries, solar panels, and many other products. Indonesia is the world's second largest tin producer, and over 90% of the country's tin comes from Bangka and Belitung Islands (Arkum et al., 2017; Pratiwi et al., 2025). In addition to a system of nationwide redistribution of taxes and royalties generated by resource extraction, the national government has enacted several laws requiring that extractive activities generate tangible benefits for mining communities. Among these obligations is the mandatory allocation of funding by mining companies for Community Development and Empowerment (PPM - *Pengembangan dan Pemberdayaan Masyarakat*), a form of obligatory CSR.¹ PPM funding should be made available upon application by residents in eligible villages surrounding mining operations, for example, for small business development, education (e.g., scholarships), or community-building projects. The types of activities and programs eligible for PPM funding are outlined in regularly updated five-year provincial government plans (called 'Blueprints'), intended to ensure that PPM programs are effective and responsive to local needs. PPM is therefore an attempt to provide mining communities with direct, tangible benefits from nearby mining activities that are tailored to local demand. This can be seen as a complement to the more

¹ Unlike regular Corporate Social Responsibility (CSR) activities which can be voluntary in Indonesia, the PPM program is a legal obligation enforced by Indonesian law and specific ministerial regulations, such as the Minister of Energy and Mineral Resources Regulation No. 41 of 2016, Government Regulation No. 25 of 2024, and Law No. 3 of 2020 on Mineral and Coal Mining. PPM regulation stipulates that companies must prepare a PPM Master Plan as part of the documentation submitted during the company's mining permit application. This is subject to government evaluation. See Section 2 for further details.

diffuse benefits coming through the central government's system of redistribution, in which the mining revenues are part of the decentralized governments' budgets (see e.g. Brunnschweiler, Kurniawan, et al., 2025). However, the success of PPM has been mixed despite its apparent immediacy: funds are often not allocated, or their allocation is decided exclusively by village heads, leading communities to frequently perceive these initiatives as regular CSR programs rather than PPM. The lack of information among the local population about PPM is a main reason why PPM does not always function as intended (BAPPEDA Provinsi Kepulauan Bangka Belitung, 2025; Haryadi et al., 2022).

In this study, we examine how people's engagement in the management of PPM can be enhanced and encouraged. We carry out a pre-registered survey experiment with 610 respondents from 35 villages on the main tin-producing island of Bangka that are eligible to receive PPM funding. In addition to providing information on PPM (T1), we analyze whether offering real-life examples of successful PPM projects affects outcomes (T2). We use two treatment videos and one placebo video, whose viewing was randomized at the individual level. Our outcomes combine survey questions on stated behavior and citizen rights, and a voluntary donation to a Bangka-based NGO that supports local development in mining communities.² We also explore heterogeneous effects across different respondent groups and possible mechanisms for our effects.

Our main findings show that the pure information treatment (T1) strengthens respondents' awareness of PPM by increasing their belief that they have a right to benefit from tin mining revenues. However, it also reduces their likelihood to donate (though it does not affect donation amounts). The role model treatment (T2), combining information about PPM with actual PPM examples, has a robust impact on all survey outcomes, positively affecting respondents' perceptions of their rights to benefit and influence decision-making, and increasing the likelihood that they will request more information on PPM and local development. However, it does not impact respondents' donation decisions. The main mechanism through which treatments affect attitudes and beliefs is by increasing the salience of PPM thanks to the provision of new and useful information. The heterogeneity analysis shows that people who are interested in politics, hold strong views on corruption and leadership, have a high willingness to help others, or are satisfied with their current economic situation respond differently to the treatments.

Our contribution is linked to several strands of literature. First, we build on and contribute to the conceptual and comparative work that investigates how CSR is shaped by institutions and political economy. The implicit and explicit CSR framework and related comparative accounts provide a basis for understanding why CSR instruments, voluntary or mandatory, differ across contexts, and how they interact with state capacity and local expectations (Campbell, 2012; Matten & Moon, 2008). Sector-focused reviews and historical treatments show how CSR in mining has evolved from paternalistic and state-mediated community programs to contemporary firm-led and multi-stakeholder initiatives. These

² We also included a virtual postcard to show interest in receiving further practical information on PPM, see Section 3 below.

studies highlight persistent gaps between CSR rhetoric and local outcomes (Dashwood, 2012, 2014; Frederiksen, 2018; G. Hilson, 2012; Jenkins & Yakovleva, 2006). Recent critical work also problematizes single-actor, strategic models of CSR and calls for multi-actor approaches that better account for governance failures and community voices (Owen & Kemp, 2023). However, while there are many qualitative case studies on the local impacts of mining CSR, there are surprisingly few quantitative assessments. This poses an important knowledge gap in the literature, given the growing policy interest in mandated CSR and community development obligations. One study by Bezzola et al. (2022) finds that CSR is often targeted toward higher-risk areas and may reduce conflict in the short term, but without producing clear long-term stability. The limited progress in the quantitative mining CSR literature is likely due to data availability constraints and the endogenous placement of CSR projects.

Second, our study contributes to the growing empirical literature that evaluates the local socio-economic and political effects of extractive activities. Quasi-experimental and spatial studies have documented heterogeneous welfare effects of mining, e.g., positive local employment and consumption spillovers in some settings and mixed effects on health, inequality, and local industrial structure in others (Aragón & Rud, 2013; Benshaul-Tolonen et al., 2019; Pelzl & Poelhekke, 2021). Similarly, several studies have examined mining's relationship to unrest and armed conflict. Exogenous commodity shocks and mine openings can raise protest and conflict risk, yet these effects vary with the context-specific forms of relative location, ownership, control, and applied transparency mechanisms (Berman et al., 2017; Christensen, 2019; Lujala, 2009).

Third, our experiment connects to previous work on public resource-revenue governance and information interventions. Prior randomized video-survey experiments in petroleum contexts, in Ghana and Indonesia, show that accessible information and trusted messengers can increase citizens' knowledge and demand for accountability, though effects may decay over time (Brunnschweiler, Edjekumhene, et al., 2025; Brunnschweiler, Kurniawan, et al., 2025). We adapt that approach to study Indonesia's much more immediate flow of revenues from extractive companies to local communities through the mandatory CSR mechanism for mining (PPM), testing whether simple informational treatments and real-world examples change perceptions of rights, willingness to engage, and observed information-seeking behavior in tin mining communities.

Overall, our paper contributes novel causal evidence to two debates: (i) whether information can strengthen citizens' perceived entitlements under mandatory CSR, and (ii) whether positive examples amplify informational effects in low-awareness settings. To our knowledge, this is the first experimental evidence on how mandatory mining CSR could be improved.

The rest of the paper is organized as follows. Section 2 describes the context of our study area; section 3 presents the experimental design; section 4 describes our data and empirical methodology; section 5 discusses the estimation results; and section 6 concludes.

2. Tin production and PPM in Bangka Belitung Province

The island province of Bangka and Belitung lies off the south-eastern coast of Sumatra (see fig. 1). The largest island in the province, Bangka, has a population of approximately 1,5 million people (BPS Provinsi Bangka Belitung, 2025) and covers approximately 11,800 square kilometers. It is divided into four regencies (i.e., districts) – Bangka, Bangka Barat, Bangka Tengah, Bangka Selatan – and a city ward, the province’s capital Pangkal Pinang. Tin mining has been an important source of livelihood on Bangka for hundreds of years. Archeological and historical evidence track small-scale tin mining back to the 7th century, with exports from the island under the Palembang Sultanate from the 13th century onwards (Ross, 2014). Extraction expanded significantly following the establishment of formal Dutch colonial rule in the area in the early 1800s (Ricklefs, 1993). Large-scale industrial mining operations on the island started in the 1860s by the Dutch mining company Billiton Maatschappij³ (Kaur & Diehl, 1996). Following Indonesian independence, the tin industry was nationalized under PN Tambang Timah Tbk (PT Timah) (Heidhues, 1991). Indonesia has remained a key global producer of tin (Pillay, 1990), with market shares around 20 percent over recent decades (Li et al., 2021). The province of Bangka-Belitung has remained the center of the Indonesian tin mining industry over this period, with an average of 90 - 95 percent of current domestic production taking place on the island and in the surrounding sea (Arkum et al., 2017; Pratiwi et al., 2025).

The long traditions and economic importance of tin mining have had a profound impact on the political, socioeconomic, and environmental conditions on Bangka. The tin industry is a dominant economic driver on the island, accounting for more than 70% of total province exports in 2024 (BPS Provinsi Bangka Belitung, 2025), with active tin mining operations across all regencies and Pangkal Pinang. Commercial and artisanal tin mining occurs both onshore and offshore throughout the largest island of Bangka, and to a lesser extent also on Belitung, the smaller of the two main islands. Vast areas on Bangka are affected by commercial tin mining, with 179 companies holding tin mining or exploration licenses on the island and 170 villages being eligible for PPM (Bangka Belitung Province, 2019). The state-owned tin mining company PT Timah is the main actor in the industry, but there are also multiple smaller mining and processing companies, a multiplicity of subcontractors, as well as large networks of local and migrant artisanal miners. Many of these actors participate in the island’s large and well-established informal tin sector, resulting in a complex landscape of industrial actors, powerful networks of local elites, police, and the military, and blurred lines between the formal and informal - and legal and illegal - parts of the industry (Diprose et al., 2022; Vela-Almeida & Karlsen, 2023). The extensive mining activities, complex

³ Today part of BHP, the world’s most valuable mining company (GlobalData, 2025).

mining sector, and limited government oversight have resulted in considerable environmental damage, including degradation of land, marine areas, and freshwater resources, which severely undermines non-tin based local livelihoods (Pratiwi et al., 2025; Rahayu et al., 2024; Rosyida et al., 2019).

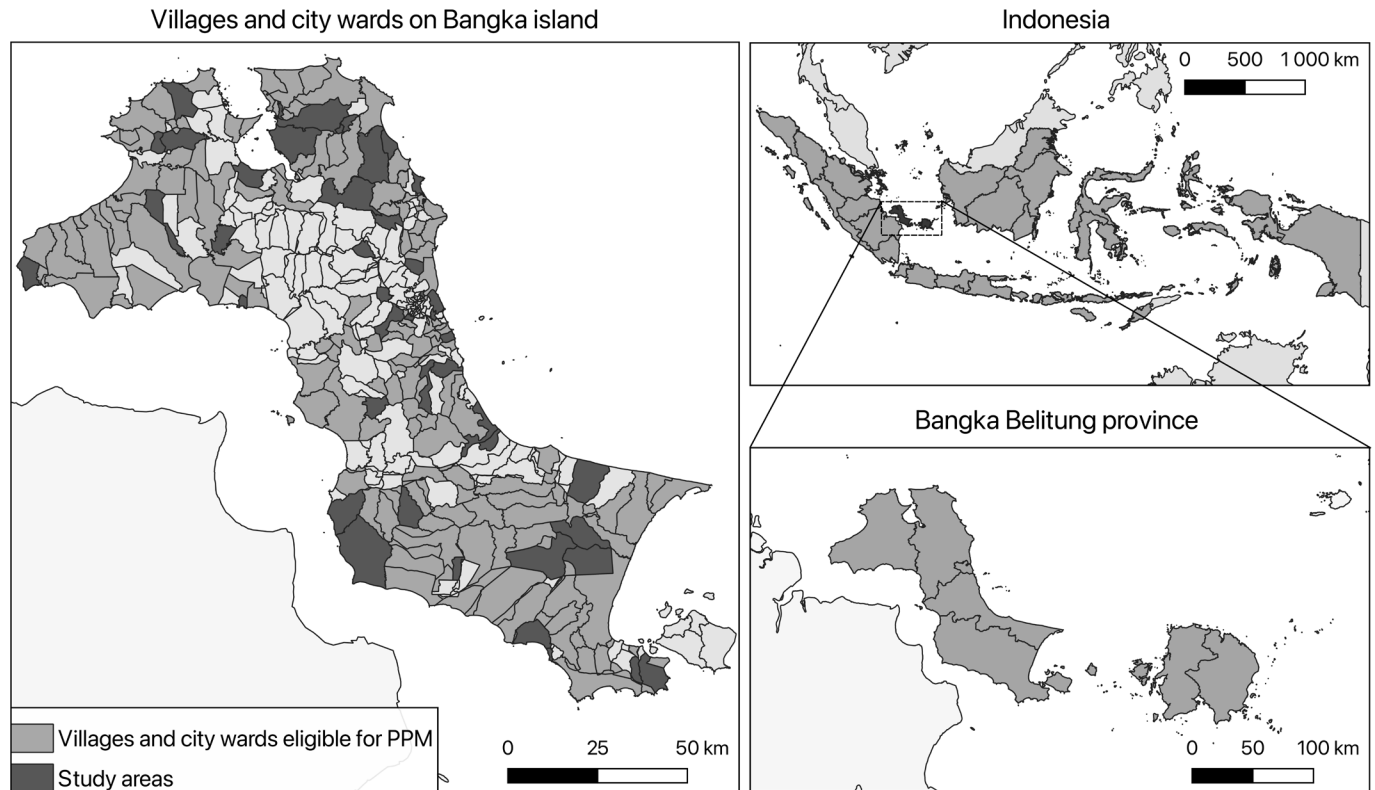


Figure 1: Map of Bangka Island (left) and its situation in Indonesia (top right) and the province of Bangka & Belitung (bottom right). All shaded areas in the left-hand map indicate villages and city wards eligible for PPM; the darker shaded areas show the study sites.

The redistribution of revenues and benefit from the extraction of raw materials is a key element of the Indonesian government's strategies to strengthen local development in areas with extractive economic activities. In Indonesia, the distribution of benefits from mineral extraction is detailed in Law 3/2020 and governed through three mechanisms: i) redistribution of taxes, royalties, rent and shared revenues to different levels of government based on their location through the Natural Resource Revenue Sharing Fund⁴ as regulated by Law No 1/2022; ii) mandatory corporate social responsibility (CSR) funds paid to the host district for redistribution to all subdistricts irrespective of mineral extraction activities, guided by general corporate law and global standards; and iii) mandatory Community Development and Empowerment Programs (PPM) in mining communities funded by mining companies.

⁴ Indonesian: *Dana Bagi Hasil Sumber Daya Alam (DBH-SDA)*.

Of these three mechanisms, PPM is unique in that it is designed to give communities in the vicinity of mining sites the opportunity to participate in designing local benefit-sharing through community development interventions. The national legal and policy framework for PPM mandates that mining companies allocate funding for programs targeting “communities affected by mining activities.” In practice, PPM operates through a demand-driven mechanism in which programs are proposed and implemented by local communities identified as beneficiaries. These programs should be designed and decided by the communities themselves and are expected to contribute to improving the quality of life, fostering economic independence and social resilience, and supporting education, health, infrastructure development, culture, and environmental sustainability. To guide the content of the funded programs, the Ministry of Energy and Mineral Resources requires the provincial government to develop a five-year PPM Blueprint that operationalizes the national regulations by identifying affected areas, categorizing levels of impact, and guiding program design and implementation. The aim is to ensure that PPM interventions address local needs and contribute to local development. In 2019, the Bangka Belitung provincial government published the 2019-2024 PPM Blueprint to guide the allocation of the tin mining funds, including a list of eligible villages. Although the 2025–2030 Blueprint is intended to feature an updated list of villages, its publication has been delayed and was not yet available at the time of writing.

Despite the potential to strengthen local participation and improve socio-economic development in a tangible and relatively accessible manner, PPM on Bangka has to date largely failed to achieve its intended objectives. Analyses of the impacts of the 2019-2024 PPM plan for the province highlight that PPM initiatives have been severely undermined by a combination of factors, including the complex landscape of actors in the mining industry, unclear boundaries between the formal and informal sector, a lack of capacity and willingness of companies to engage with PPM, and poor government oversight and disciplinary actions towards companies that fail to fulfil their commitments (BAPPEDA Provinsi Kepulauan Bangka Belitung, 2025; Haryadi et al., 2022). Both these analyses and the provincial experts interviewed as part of our scoping fieldwork (see section 3) highlight that a lack of knowledge about PPM among local communities is a key element cutting across these factors by limiting participation, increasing the risk of elite capture, and reducing the potential for positive local outcomes. Also, among our respondents, 80% did not know about PPM, and only 20% thought that tin mining companies were doing something for local community development.

Improved knowledge among local communities about PPM is a key prerequisite for strengthening positive impacts from its implementation. This emphasis of provincial experts on the importance of strengthening knowledge about PPM among local communities is reflected across the literature on natural resource governance, which stresses the relevance of accessible, understandable, and actionable knowledge for transparent and accountable revenue management (da Silva Hyldmo & Scherzer, In press). Thus, while multiple challenges currently limit the potential positive impacts of PPM programs on Bangka, the lack of knowledge about PPM plays a key role in constraining the ability of affected communities to benefit from, monitor, and shape PPM interventions. Seeking to contribute to addressing

this challenge, this article sets out to explore ways to strengthen local knowledge about the opportunities provided by PPM programs in the tin industry in Bangka.

3. The experiment

Our survey experiment was designed to test how providing information about the tin mining companies' obligation to fund PPM programs impacts community members' attitudes and behavior (Treatment 1 or T1). Further, we sought to study whether providing examples of community groups that have successfully applied for and benefited from PPM-funded livelihood programs had an additional impact on our outcomes (Treatment 2 or T2).⁵

3.1 Data collection

The experiment was carried out in Bangka (see Figure 1) in June-July 2025. The survey and experiment design were informed by previous qualitative work on the Island's history and social and economic context, and the team's scoping fieldwork in 2024, including interviews and discussions with government officials, academics, NGO representatives, and community members to understand challenges and opportunities regarding PPM in the tin industry on Bangka.

1

The fieldwork was conducted in 32 villages and 3 city wards. When choosing the villages, we used as our starting point the provincial government's 2019-2024 PPM Blueprint, which lists the villages eligible for PPM in Bangka (Bangka Belitung Province, 2019). From the list, we removed places that are not villages (N=9) because no population data could be attained for them, and villages not located on the main Bangka island (N=4). After this, we were left with 167 villages. From this list, we first randomly selected one village from each of the 28 subdistricts, weighted by population.⁶ We then selected an additional seven villages from the remaining ones, again weighting the selection by population. As one of the selected villages (Batu Beriga) was not feasible for fieldwork due to recent social unrest, we chose a nearby village as a substitute (Perlang) based on its geographic proximity. The pilot was conducted in three city wards in Pangkal Pinang (Selindung Baru, Gabek 1, and Gabek 2).

Our sample consists of 610 adults (18 years and over). Trained enumerators conducted face-to-face interviews in Indonesian, entering responses directly into handheld tablets. A team of five enumerators, led by a team leader, conducted the interviews in each village.⁷ Before going to the targeted village, the team leader used Google Maps to identify the shape of the village, which in most cases appears as a

⁵ The pre-analysis plan for this experiment was registered on the EGAP OSF registry (registration DOI: 10.17605/OSF.IO/4Z7JY) on July 1, 2025. Unless otherwise specified, our analysis follows the approach set out in the pre-analysis plan. The fieldwork followed the Ethical Research guidelines of Finland.

⁶ Indonesia is divided into 38 provinces (provinsi). These are divided into districts or regencies (kecamatan) and cities (kota). These are further subdivided into subdistricts (kecamatan). In rural areas, the subdistricts are further subdivided into villages (desa), while cities are instead further subdivided into wards (kelurahan).

⁷ Team members were Indonesian postgraduates, PhD students, and researchers from the project's lead institutions.

concentrated housing area within the village border (for an illustration of one of the villages, see Figure 2). The team leader then assigned the enumerators to cover the village using predetermined routes that transected the village. 20 interviews were conducted in each village.

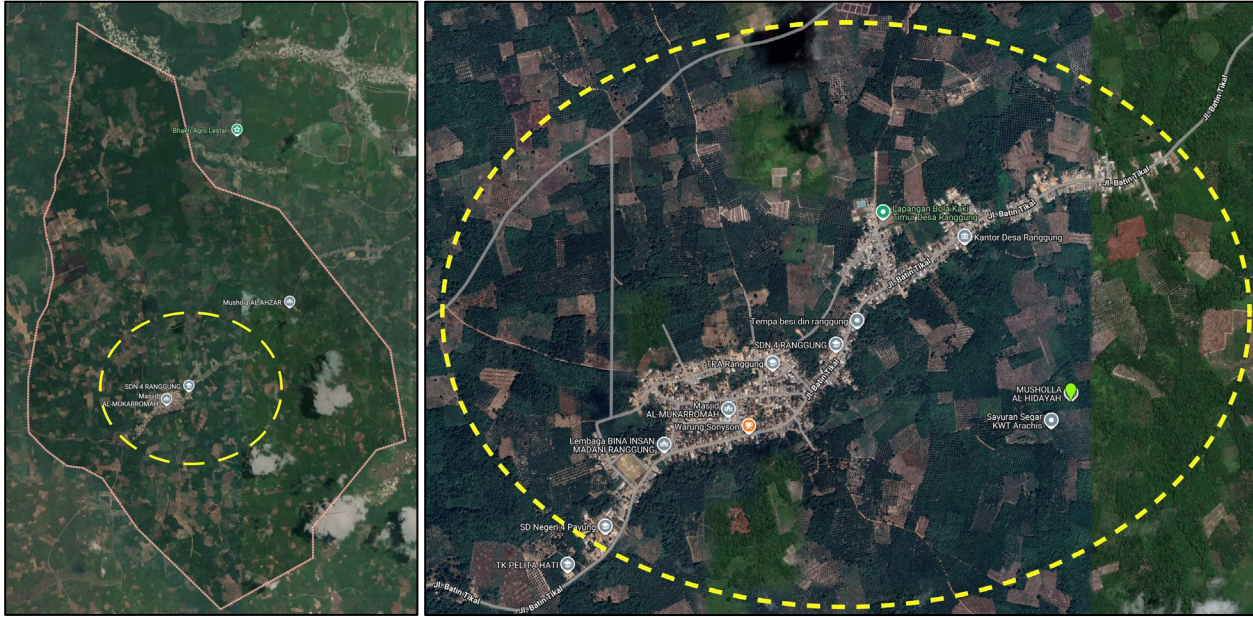


Figure 2. Location of residential area (circled in yellow) in a targeted village (outlined in red) and roads through the village. Source: Google Maps, 2025

The enumerators interviewed one household member in every fourth dwelling, alternating between female and male respondents. If no adult of the required gender was present, the enumerators were instructed to ask if one could be reached within a 10-minute walk and to conduct the interview there or arrange an appointment for an interview later the same day. If no household member of the right gender was reachable on that day, the enumerator went to the next house on their route.⁸ To preserve respondents' anonymity, we did not record the precise interview locations.

After determining eligibility (i.e., an adult household member of the right gender consented to participate), the respondent was asked a series of questions about their background and household characteristics. These were followed by a set of questions on the respondent's trust in different institutions, risk perception, and personality traits, which we use to test for potential heterogeneous treatment impacts. After viewing a placebo video or a treatment video on the tablet, the respondent was asked a few short questions about their impressions of the video and suggestions for improvement (included to reduce experimenter demand bias). These were followed by our outcome questions and our two incentive-compatible outcomes, a donation and a virtual postcard activity. The final survey questions seek to understand mechanisms behind our results.

⁸ As enumerators spent only one day in each village, they did not have the option to arrange interviews for the following day.

Prior to the fieldwork, we randomized the respondents to two treatment groups and one control group. Each enumerator received a printed randomization list specifying which video to show to a respondent. The list also indicated whether the enumerator was to interview a male or a female respondent to achieve gender balance. The enumerators moved down the list, crossing off each video shown and proceeding to the next one in the subsequent interview. Randomization is, hence, at the individual level. This procedure resulted in 204 respondents in each treatment arm and 202 in the placebo group.

3.2 Treatment videos and hypotheses

Figure 3 presents the structure of the survey experiment and the videos shown to the respondents.⁹ The control group watched a placebo video consisting of two parts: general information on Indonesia (Part 1: “Placebo”) and a short segment with a still image of the map of Indonesia and a neutral voiceover to reduce experimenter demand effects (Part 4: “Obfuscation”). Figure 4a shows a screenshot of the common placebo segment, which illustrates the favorable soil and climate conditions for agriculture in the country.

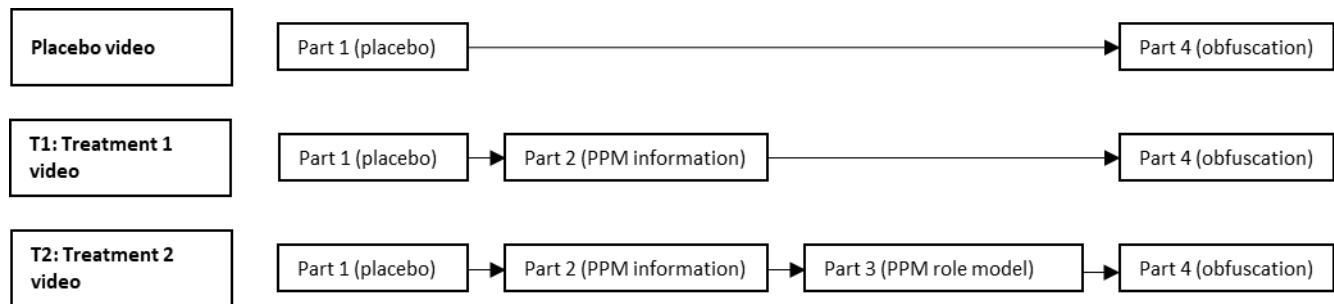


Figure 3: Survey experiment design with three videos containing two to four video segments each.

Our treatment videos T1 and T2 start with Part 1 and end with Part 4 to minimize the possible effects of viewing a very different type of video. Our first treatment group (T1) watched a video that included Part 2 (“PPM information”), a fact-based information segment on PPM in tin mining on Bangka. Our second treatment group (T2) saw a video that additionally included Part 3 (“PPM role model”), which gives several concrete examples of how community groups on Bangka have benefited from PPM-funded livelihood development projects. Figure 4b shows for what types of projects PPM funding can be used (Part 2). Figures 4c and 4d illustrate how community groups have used PPM funding to enhance their livelihood sources (Part 3). In (c), a group of women discusses their ideas for farming with the head of the village and how PPM could help them. In (d), a group of villagers has received PPM funding to buy machines for a small fruit chips enterprise.

⁹ The English language script for the videos is shown in Online Appendix OA1. The videos will be made available online upon publication of the article.

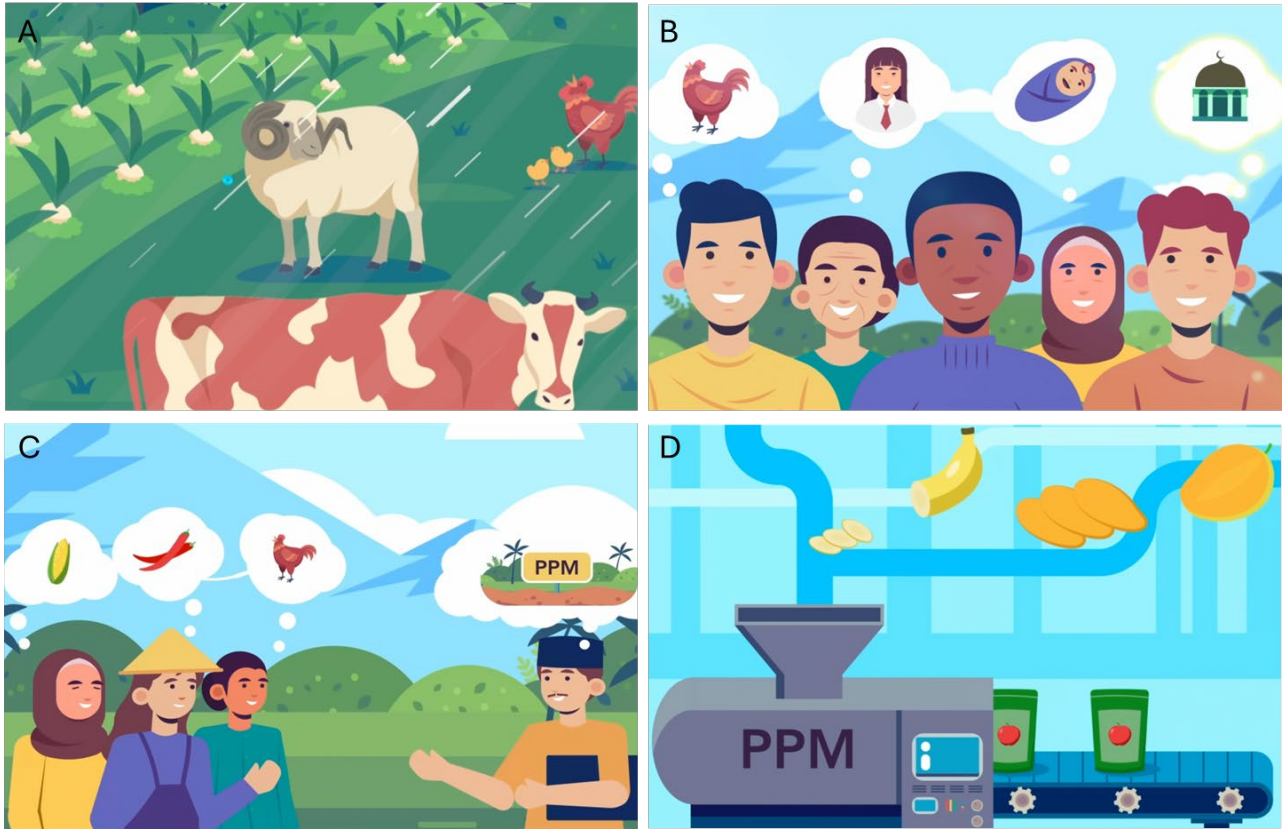


Figure 4: Screenshots of the placebo (A), treatment 1 (B), and treatment 2 (C, D) videos

We used an Indonesian company to produce the videos. All videos were animated and followed the same stylized design and color scheme. All videos were in Indonesian with a female voiceover. The animations were carefully tailored to support the script and to enhance comprehension of the message. We strived for clear and easily understood language and focused on issues that our qualitative fieldwork had indicated local community members found salient. All the statistics and examples used in videos are based on real data and case studies conducted by the team members. The placebo video is 2 minutes long, while the two treatment videos are 4 and 6 minutes long, respectively.

We expect that our PPM information treatment (i.e., Part 2 of our videos) will directly influence the respondents' perceptions of their right to benefit from and influence PPM, as well as the likelihood they will demand more information on PPM. Additionally, providing positive examples of livelihood development through PPM-funded projects (Part 3) is expected to strengthen treatment effects by offering a behavioral model and demonstrating feasible ways to act. We therefore expect both treatments to have a positive effect on our outcomes.

3.3 Outcomes

We measure respondents' attitudes and behavior regarding tin sector management and tin mining companies through survey questions on satisfaction, citizen rights perceptions, and stated behavior, and incentive-compatible behavioral measures.

Our survey-based outcome measures include respondents' agreement to three statements using a Likert scale from 1 (strongly disagree) to 5 (strongly agree). Two statements probe beliefs on peoples' right to benefit from tin revenues and influence how the revenues are spent: "You and people like you have the right to benefit from revenues generated by tin mining companies in your area" and "You and people like you have the right to influence on what tin mining companies in your area spend money". The final statement measures the stated intention to take action for better PPM management: "In the future, you will request information on what tin mining companies in your area spend money."

To include measures that are less prone to experimenter demand bias, we include two incentive-compatible behavioral measures in the survey. The first measure is a donation, which is a variation on the Dictator Game used in experimental economics.¹⁰ We offered participants the opportunity to make a voluntary donation to a local, non-profit NGO called Gubuk Foundation, which works on community development and alternative livelihoods in Bangka Belitung Province.¹¹ Each respondent received 70'000 rupiah (around USD 4.3 at the time) in an envelope in six notes (two notes of 20,000 rupiah, two notes of 10,000 rupiah, and two notes of 5,000 rupiah) as compensation for the time they used to participate in the survey. The respondents were explicitly told that the money was theirs to keep and assured that any donation to Gubuk Foundation was strictly voluntary. The donation was anonymous and made in private while the enumerator turned away.¹²

The Gubuk Foundation was described to the respondent as follows (English version): "The foundation helps mining communities to expand their livelihood sources beyond tin mining and supports locally owned business development. For example, Gubuk Foundation has helped communities to acquire land for agriculture and fisheries, helped to set up small businesses in tourism and make handicrafts from industrial waste, and provided courses to build language and computer skills." We interpret a donation as a respondent's willingness to forego some of their financial gain to support local development in tin mining communities in Bangka. In the analysis, we consider both the decision to donate and the amount donated, as these are arguably two separate decisions. 92% of participants donated some of the

¹⁰ The Dictator Game is used, for example, to measure prosocial behavior (Engel 2011) or charitable giving (Cartwright and Thompson 2023), and is widely applied in behavioral development economics (e.g., Cardenas and Carpenter 2008).

¹¹ Most respondents (92%) reported that they had not heard of Gubuk Foundation prior to the survey.

¹² To ensure anonymity, the respondent was given an empty envelope with the respondent ID on it and asked to put any amount in the empty envelope using only the notes provided. Participants were instructed to seal the envelope and then place it in a see-through box labeled "Gubuk Foundation", also in the case they decided not to make a donation. The script for the donation activity can be found in Online Appendix OA2.

compensation they received, and on average, respondents donated 23,462 rupiah or 33.5% of their endowment.¹³ See Appendix Figure 1 for an overview of donations per treatment group.

In our second behavioral measure, we asked the respondent to send a virtual postcard via WhatsApp to the Gubuk Foundation to request information on how local communities can use PPM.¹⁴ The respondent was handed a two-sided postcard with a simple message in Indonesian (see Appendix Figure 2). The postcard was anonymous, but it had an ID number at the top, allowing us to link a postcard to the survey respondent. The respondent was asked to take a photo of the front of the postcard and send it to the Gubuk Foundation by July 31st, 2025. We also provided each respondent with three additional cards that were identical to the first one. The respondent was told that they could give these to family, friends, colleagues, or anyone else if they wished to do so. Any additional postcards linked to one respondent ID are interpreted as a measure of information diffusion from the treatment. Unfortunately, we were unable to recover all postcard IDs linked to the WhatsApp messages due to technical difficulties. We therefore do not include analysis of this outcome.¹⁵

4. Data and methodology

4.1 Data description

Descriptive statistics with survey questions and coding can be found in Appendix Table 1. By design, we have almost perfect gender balance among our 610 respondents, with 304 men and 306 women. Our respondents are on average 41 years old. Most respondents (76%) live in the countryside while slightly more than 16% live in semi-urban areas, and almost 8 percent live in urban areas. Roughly half (48%) of our respondents are the heads of their households. Approximately 8% have not completed formal schooling while 31% have completed elementary school as their highest level of education, 15% middle school, 33% high school or vocational high school, and 13% some form of tertiary education. The most common form of occupation is self-employed (17%) followed by farmers (16%), daily and weekly laborers (13%), wage laborers with regular salaries (12%), small-scale miners (7%), fishers (3%), and forestry workers (1%). For the analysis, farmers, fishers and forestry workers were combined into one category. Housewives (22%) together with students (4%), retirees (2%) and unemployed individuals (2%) formed the omitted reference category in the analysis. Only slightly more than 6% of the respondents held some kind of leadership position in their community, most often as a community group leader or administrator. About 20% of the respondents reported that a member of the household engages in tin mining or a supporting activity.

¹³ Indonesians have a relatively high propensity to give, as demonstrated for example by their top score in the World Giving Index (see https://www.cafonline.org/docs/default-source/about-us-research/caf_world_giving_index_2022_210922-final.pdf, accessed 15 January 2026). Our average donation share is comparable to that found in an experiment on conservation funding in Indonesia (Nelson et al., 2018).

¹⁴ The Gubuk Foundation sent out five messages on PPM designed by the research team to all those who submitted the virtual postcard.

¹⁵ We received over 60 postcards, but we could link only 32 postcards to respondent IDs. Note however that all individuals who submitted a postcard were sent the promised WhatsApp information messages by Gubuk Foundation.

To get an impression of household wealth, we constructed three simple indices considering means of transport, household assets, and property. The transport assets index combines four dummy variables: ownership of a bicycle (29%), moped (96%), other motorized vehicle (22%) or boat (7%). Only 6 households, less than 1%, own four means of transport, while about 10% own three, 33% own two, and 53% own one. Around 3% of households are without any means of transport. The household assets index combines five dummy variables for ownership of a TV (74%), smartphone (95%) and fridge (90%), access to the internet (92%), and non-subsidized electricity (28%). Slightly more than 90% of households have 3 or more of the household assets, with 22% having a score of 5, 50% a score of 4 and 18% a score of 3. 6% have a score of 2, and 2% a score of 1; only 7 respondents (about 1%) have a score of zero. Our property index combines three dummy variables: ownership of the house the household occupies (87%), ownership of land (91%), and whether the dwelling can be classified as large (13%).¹⁶ Most households (72%) have a property score of 2, almost 12% have a score of 3, and almost 11% of 1. 31 respondents (5%) reported having no property at all.

With regard to the video treatments, 80% of the respondents indicated that the video provided them with new information, and almost all found the information provided to be useful (95%) and trustworthy (93%). Tests for balance across treatment arms are provided in Appendix Table 2. There are very few significant differences between treatment arms, suggesting that randomization was successful.

4.2 Empirical methodology

To test our hypotheses that provision of information on PPM increases people’s demand for accountability and can be further enhanced by the provision of examples of successful PPM use, we estimate the following equation using Ordinary Least Squares (OLS) regression with standard errors clustered at the village level¹⁷:

$$y_i = \alpha + \beta_{T1}T1_i + \beta_{T2}T2_i + X_i\gamma + Y_h\delta + FE_r + \varepsilon_i, \quad (1)$$

where y_i is the outcome for individual i . T1 and T2 are our main variables of interest: they take the value of one if individual i is in the respective treatment group and zero otherwise. As outlined above, our design gave the two treatment videos common elements, so it is important to test whether treatment effects are significantly different from each other to gauge whether the additional motivation to act in T2 has an additive impact to the pure PPM information treatment T1. We also estimate an alternative model that aggregates the two treatments T1 and T2 into a dummy for “any treatment”. Vectors X and Y capture individual i and household h covariates, respectively. We present results both with and without these additional variables: given successful randomization of treatment assignment, they serve to render the

¹⁶ Large dwellings are classified as those which have more rooms per person than the mean number of rooms per person in the sample plus one standard deviation.

¹⁷ The empirical approach follows the registered pre-analysis plan.

estimation of the treatment effects more precise. *FE* denotes regency *r* fixed effects (always included), and ε is the error term. All analyses were conducted using STATA MP 19.5.

5. Empirical results

5.1 Main results

Table 1 presents our main results. We ran three different model specifications for each outcome variable. The first includes a combined treatment measure (*any treatment*) that takes the value 1 if the respondent saw one of the two treatment videos (T1 or T2). The second includes both treatments separately, and the third includes both treatments and a full set of covariates. All model specifications include regency fixed effect dummies and a constant, which are not shown.

Looking at the estimates, we see a significant and positive impact of the combined treatment variable on all survey outcomes but not on the observed behavioral outcome, i.e. the donation variables. With regard to the *right to benefit* from tin mining revenues, receiving any information treatment increases the likelihood that the respondent agrees with the statement by 0.27 points on the Likert scale (column 1), whereas the likelihood of agreeing with the statements on the *right to influence* and *requesting information* increases by 0.17 and 0.16 points, respectively (columns 4 and 7). While the information treatment (T1) has a positive effect only on the *right to benefit*, increasing the likelihood of agreeing with the statement by 0.21-0.23 (columns 2 and 3), the role model treatment (T2) shows strong and robust effects on all survey outcomes. T2 increases the respondent's sense of the *right to benefit* by 0.33-0.35 (columns 2 and 3), their sense of the *right to influence* by 0.20-0.22 (columns 5 and 6), and their intention to *request information* by 0.20-0.26 (columns 8 and 9), indicating that providing concrete PPM examples had overall a greater effect than only providing information. However, it should be noted that although the treatment effect of T2 is larger than that of T1, the Wald test statistics at the bottom of the table indicate that the difference is not statistically significant. T1 is the only treatment to affect the behavioral outcome, surprisingly lowering the propensity to donate by about 5 percent (columns 11 and 12), though not affecting the amount donated (columns 14-15).

The covariates reveal that older people on average feel less entitled to benefit from or influence decision-making regarding tin mining revenues (columns 3 and 6). They are also less likely to request information (column 9). However, they tend to donate a little more (column 15). Household heads, on the other hand, seem to feel more entitled to benefit, influence, and request information (columns 3, 6 and 9). Those respondents who are involved in commercial tin mining and supporting activities themselves or have household members who are, agree more strongly with the *right to benefit*, but those working as small-scale miners or daily laborers feel less entitled (column 3). Those working in salaried jobs are more likely to request information (column 9). Lastly, among our respondents, an increase in household and transport assets results in higher donation amounts (column 15).

In sum, we find that the pure information treatment (T1) increases the respondent's awareness of PPM, strengthening their belief that they have a right to benefit from tin mining revenues, but it also lowers their likelihood to donate. The role model treatment (T2), combining information about PPM with positive PPM examples, has overall a stronger impact on the respondents' attitudes, as it also impacts their self-efficacy to influence decision-making and their intended behavior to request information. It does not, however, impact the respondent's donation decisions.

5.2 Mechanism analysis

In the survey questionnaire, we included several post-treatment questions to investigate potential mechanisms behind our treatment results. We hypothesized that our treatments could affect our outcomes in two ways: first, directly, by increasing respondents' awareness of PPM, including their rights and responsibilities; and second, indirectly, by influencing respondents' perceptions of conditions, actions and/or expectations arising from engaging with PPM (or local development more broadly).

Following the conventional approach (see e.g. Gerber & Green, 2012, chapter 10), we undertake a causal mediation analysis. We initially considered 17 mediator variables in our pre-analysis plan, but we only included seven of them in the full causal mediation analysis presented here, as only those were significantly affected by at least one of the treatments.¹⁸ To find potential mediation effects, the total treatment effects are decomposed into direct and indirect *mediating* effects. The total treatment effects are the treatment effects found in our main outcome regressions. The direct effects are captured by the treatment coefficients when a mediator variable is added to the model specification. The indirect effects are the differences between total and direct effects.¹⁹ Since we are interested in the indirect *mediating* effects, we need to consider both indirect effects and total effects. If both are statistically significant, we can argue that the treatment affects the outcome through that specific channel, i.e., the mediator. If only the indirect effect is significant, we have a partial effect that does not translate into an impact on the outcome. The results are summarized in Appendix Table 3 and discussed below.

¹⁸ Separate models were estimated regressing the mediator variables on the treatments. We concentrate in the discussion on the mechanisms for which we found significant indirect effects.

¹⁹ The causal mediation analysis was performed using the “mediate” command in Stata 19.5. Note that sample sizes vary because observations have to be consistent across both direct and total effect estimations in the overall analysis.

Table 1. Main results: treatment effects on survey and behavioral outcomes

VARIABLES	Right to benefit			Right to influence			Request information			Donation: yes or no			Donation amount		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Any treatment	0.267*** (0.097)			0.171** (0.084)			0.163* (0.090)			-0.034 (0.020)			165.871 (1,728.208)		
T1 Information		0.211* (0.112)	0.228** (0.109)		0.144 (0.103)	0.157 (0.099)		0.126 (0.110)	0.172 (0.109)		-0.054** (0.025)	-0.058** (0.026)		1,003.885 (2,357.911)	1,227.800 (2,341.914)
T2 Role model		0.326*** (0.110)	0.350*** (0.111)		0.198** (0.090)	0.222** (0.096)		0.200* (0.101)	0.256** (0.106)		-0.014 (0.023)	-0.007 (0.024)		-698.736 (1,868.056)	-146.008 (1,855.024)
Age			-0.010** (0.004)			-0.012*** (0.003)			-0.015*** (0.003)			0.000 (0.001)			214.502*** (62.906)
Gender (female = 1)			0.044 (0.109)			0.022 (0.097)			-0.108 (0.093)			0.010 (0.027)			-2,760.093 (2,085.451)
Household head			0.205* (0.118)			0.310** (0.114)			0.208** (0.087)			-0.042 (0.028)			605.988 (1,856.697)
Education elementary			0.235 (0.159)			0.218 (0.168)			0.265 (0.186)			0.050 (0.045)			1,445.273 (3,056.293)
Education middle school			0.166 (0.163)			0.323** (0.157)			0.290 (0.218)			0.052 (0.058)			-514.179 (4,224.170)
Education high school			0.112 (0.131)			0.269 (0.161)			0.300 (0.223)			0.048 (0.057)			1,846.227 (3,631.403)
Education tertiary			0.104 (0.164)			0.245 (0.197)			0.261 (0.206)			0.017 (0.054)			4,503.338 (4,283.631)
Community leader			0.038 (0.181)			0.255 (0.195)			0.326 (0.207)			-0.024 (0.054)			6,919.878* (3,768.584)
Mining			0.266** (0.107)			0.105 (0.145)			-0.026 (0.146)			0.014 (0.042)			-303.032 (2,563.713)
Occupation farming (+)			0.032 (0.128)			0.086 (0.137)			0.144 (0.138)			0.004 (0.037)			418.382 (2,451.686)
Occupation ASM			-0.369* (0.196)			0.163 (0.266)			-0.061 (0.270)			0.041 (0.062)			6,681.883* (3,835.349)
Occupation daily laborer			-0.215* (0.114)			-0.180 (0.153)			-0.049 (0.159)			-0.075 (0.048)			-3,087.335 (2,419.361)
Occupation wage labor			0.150 (0.168)			0.226 (0.136)			0.414*** (0.140)			0.043 (0.034)			4,770.039 (3,874.245)
Occupation self-employed			-0.176 (0.142)			0.029 (0.145)			-0.044 (0.146)			-0.065* (0.035)			-404.196 (1,961.750)
Transport assets index			0.046 (0.055)			-0.059 (0.062)			-0.037 (0.059)			0.015 (0.013)			3,508.976*** (1,207.418)
Household assets index			0.032 (0.043)			0.041 (0.038)			-0.026 (0.036)			0.026* (0.013)			2,820.192*** (802.735)
Property index			-0.080 (0.056)			-0.022 (0.073)			-0.035 (0.069)			-0.007 (0.019)			1,740.046 (1,322.275)
Observations	601	601	601	598	598	598	596	596	596	604	604	604	599	599	599
R-squared	0.024	0.027	0.077	0.012	0.013	0.075	0.008	0.009	0.089	0.013	0.016	0.065	0.013	0.014	0.116
Wald test: p-values (T1 vs. T2)		0.303	0.24		0.572	0.498		0.518	0.458		0.135	0.055		0.499	0.598

Note: Table shows coefficients for OLS regressions with village-clustered standard errors in parentheses. All specifications include regency dummies.

*** p<0.01, ** p<0.05, * p<0.1

The analysis shows quite clearly that both treatments increased the salience of PPM through the provision of new, useful, and trustworthy information. Having received new information mediated the treatment effect of the role model treatment (T2) on the respondents' sense of the right to influence PPM spending decisions as well as their likelihood to request information, whereas having received useful information mediated the treatment effect of T2 with regard to requesting information. Although most respondents (93%) found the information trustworthy, trustworthiness seems not to indirectly affect the treatment outcomes.

There is some evidence that our treatments also had an impact on personal beliefs and the respondents' perceptions of the management of the tin mining sector. After watching treatment video 2 with concrete examples, the importance of knowing how the tin mining sector was managed became a mediator of the treatment effects on all survey outcomes, influencing rights perceptions and intended actions. Similarly, satisfaction with the governments' handling of the tin mining sector (post-treatment) mediated T2's effects on all survey outcomes, but it also mediated the pure information treatment's (T1) effects on the right to benefit. For those who watched T2, both believing in others' support and in the feasibility of actions one could take to promote better use of local development funds mediated the treatment effects on all survey outcomes.

5.3 Heterogeneity analysis

Not all people are the same. Given pre-existing beliefs and attitudes, people will react differently to different treatments. To investigate these so-called heterogeneous treatment effects, we identified a range of variables among our pre-treatment survey questions. We test for heterogeneity by including the identified variables as well as interaction terms with all treatment variables in new model specifications. The results for all variables with statistically significant interaction terms can be found in Appendix Table 4.

Our strongest priors regarded the effects of our treatments on groups of respondents who would have a pre-existing interest in mining and its local impacts, most likely farmers, fishers, and those who are generally more aware of local issues (see Brunnschweiler, Kurniawan et al. 2025). We find no strong effects for those with a general interest in politics, but we do observe that respondents who voted in the last elections were slightly more likely to donate after having viewed the role-model video (T2), and donated significantly more after either treatment T1 or T2. The latter pattern is also visible among members of farmer and fisher associations: they are more likely to make a donation after T2 and donate significantly more after viewing either treatment video. Below, we describe our results for all remaining heterogeneous effects in more detail.

First, we consider respondents' outlook on life as well as their propensity to help others and take initiative. Respondents who are satisfied with their current economic situation react differently to the role model treatment (T2), i.e., they feel less entitled to benefit from tin mining revenues, but they are likely to donate more money. Similarly, those respondents who generally trust people also react differently to

T2, but in this subgroup, respondents are more likely to agree with the right to benefit, more likely to request information, while at the same time donating less. Looking at two subgroups of respondents who are willing to help others and to take initiative to change something in the local community, we find that they react differently to the information treatment (T1). Those willing to help others are less likely to feel they have the right to influence decision-making while donating more, whereas those who take initiative to change things are more likely to feel they have the right to influence decision-making and more likely to request information. For the latter subgroup, the initiative-takers, having received the role model treatment (T2) reduces the donation amount.

Second, we look at views of institutions. For those respondents who see government as an employee of the people – an analogy whereby government is understood as a servant and agent of the people – the effect of the role model treatment on the right to benefit is reduced; they feel less entitled compared to the other respondents. Similarly, those respondents who trust the district (provincial or national) government agree less with the right to benefit after watching T2, and those who trust their leaders to be responsive to community demands donate less money. In contrast, the subgroup of respondents who trust the tin mining companies are more likely to feel they have the right to influence decision-making after watching either treatment video. With regard to corruption, we look at two subgroups, those that believe that government officials have a right to obtain a part of public revenues as additional compensation and those who believe that corruption, in general, is a problem on Bangka. Both subgroups react differently to the role model treatment (T2). The first subgroup is less likely to believe in the right to influence decision-making; and the second subgroup, believing in the problem of corruption, is more likely to donate money to Gubuk Foundation.

6. Discussion and conclusion

Many mining companies in low- and middle-income countries have been investing substantial amounts of money in corporate social responsibility (CSR) activities such as infrastructure, education and training, and other local development projects. There is no consensus on the impact that CSR projects have had on local community development, but there are many (mostly qualitative) contributions that criticize the effects and motives behind these activities.

In this paper, we look at how CSR activities in local tin mining communities on Bangka and Belitung in Indonesia could be improved. We run a pre-registered survey experiment with 610 respondents in 35 tin-mining communities to test whether information and real-world examples, presented through two short video treatments, enhance knowledge and impact rights perceptions and intended and observed behavior. Our findings suggest that the provision of context-specific and easily understood information on PPM can go a long way in enhancing awareness and encouraging engagement, even when observed behavior is largely unchanged. This resonates with observations that communities have expectations about

company responsibilities but need clearer signals about legal rights and governance arrangements to convert expectations into claims (Hilson A. et al., 2019; Hilson G., 2012).

In our specific case, adding real-world examples of successful PPM projects to the factual information had an amplifying effect. Whereas the pure information treatment (T1) spoke to the respondents' right to benefit, the role model treatment (T2) nudged them towards engagement by positively affecting their perceived right to influence PPM-related decision-making and by increasing the likelihood of requesting information. Literature on CSR disclosure and reporting highlights that company rhetoric often exceeds delivery (Jenkins & Yakovleva, 2006; Dashwood, 2014). Role models that showcase plausible implementation avenues can counteract the resulting skepticism and increase perceived feasibility.

The modest behavioral effects we observe, with fairly strong attitudinal shifts but limited effects on donation outcomes, reflect the broader transparency and accountability literature which finds that information provision often changes knowledge and debate but does not automatically translate into sustained demand for accountability or material redistribution (Le Billon et al., 2021; Brunnschweiler et al., 2025). The distinction between changing public debate versus producing technical or enforcement reforms helps explain why increased awareness among our respondents did not translate into behavioral change. Information alone may be necessary but not sufficient for altering entrenched governance outcomes (Le Billon et al. 2021; Brunnschweiler, Edjekumhene et al., 2025; Brunnschweiler, Kurniawan et al., 2025).

The heterogeneity in responses, such as stronger effects among politically engaged respondents (through voting) and among members of fishers and farmers associations, is consistent with research showing that occupations, participation in local organizations, and prior political engagement shape how communities experience and respond to mining projects (Aragón & Rud, 2013; Benshaul Tolonen et al., 2019). These groups may have different networks and capacities to act on information, explaining their larger donations and their differing responses to the treatments.

For policymakers and regulators designing mandatory CSR schemes, our results imply that statutory programs will be more effective if accompanied by clear, locally tailored information campaigns and by showcasing credible, context relevant examples of projects. Such measures can raise perceived entitlements and spur information demand, both necessary precursors to citizen oversight (Putri & Lujala 2023; Putri 2023). However, information and role model interventions should not be viewed as substitutes for stronger institutional channels that convert awareness into accountability (e.g., accessible grievance mechanisms, participatory budgeting, transparent project pipelines). The limited behavioral change in donations and the dependence of effects on local characteristics underscore the need for complementary supply-side governance reforms (see e.g., Le Billon et al., 2021; Frederiksen, 2018). Further research is needed to test whether information interventions coupled with institutional reforms, e.g., mandated participatory planning or binding reporting standards tied to enforcement, produces larger, sustained changes in both behavior and development outcomes.

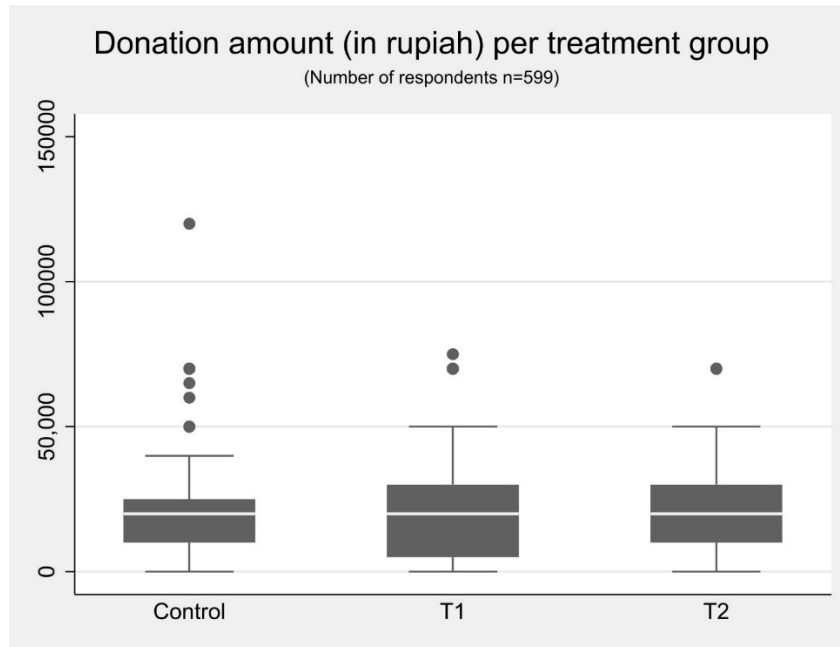
References

- Aragón, F. M., & Rud, J. P. (2013). Natural Resources and Local Communities: Evidence from a Peruvian Gold Mine. *American Economic Journal: Economic Policy*, 5(2), 1–25. <https://doi.org/10.1257/pol.5.2.1>
- Arkum, D., Kuncoro, M., & Darwin, M. (2017). THE DIRECT ECONOMIC AND FISCAL IMPACT OF TIN IN BANGKA BELITUNG ISLAND PROVINCE, INDONESIA, 2004-2013. *International Journal of Business, Economics and Law*, 14(3).
- Bangka Belitung Province. (2019). *2019-2024 PPM Blueprint*. Bangka Belitung Province.
- BAPPEDA Provinsi Kepulauan Bangka Belitung. (2025). *Diseminasi Hasil Studi PPM Sektor Tambang* [Provincial Government]. Diseminasi Hasil Studi PPM Sektor Tambang. <https://bappeda.babelprov.go.id/content/diseminasi-hasil-studi-ppm-sektor-tambang>
- Benshaul-Tolonen, A., Chuhan-Pole, P., Dabalen, A., Kotsadam, A., & Sanoh, A. (2019). The local socioeconomic effects of gold mining: Evidence from Ghana. *The Extractive Industries and Society*, 6(4), 1234–1255. <https://doi.org/10.1016/j.exis.2019.07.008>
- Berman, N., Couttenier, M., Rohner, D., & Thoenig, M. (2017). This Mine is Mine! How Minerals Fuel Conflicts in Africa. *American Economic Review*, 107(6), 1564–1610. <https://doi.org/10.1257/aer.20150774>
- Bezzola, S., Günther, I., Brugger, F., & Lefoll, E. (2022). CSR and local conflicts in African mining communities. *World Development*, 158, 105968. <https://doi.org/10.1016/j.worlddev.2022.105968>
- BPS Provinsi Bangka Belitung. (2025). *Provinsi Kepulauan Bangka Belitung Dalam Angka 2025*. BPS Provinsi Bangka Belitung. <https://babel.bps.go.id/id/publication/2025/02/28/552f2d09ab64e68fd538b737/provinsi-kepulauan-bangka-belitung-dalam-angka-2025.html>
- Brunnschweiler, C., Edjekumhene, I., Lujala, P., & Scherzer, S. (2025). “You need to have this information!”: Using videos to increase demand for accountability on public revenue management. *World Development*, 186, 106813. <https://doi.org/10.1016/j.worlddev.2024.106813>
- Brunnschweiler, C., Kurniawan, N. I., Lujala, P., Putri, P., Scherzer, S., & Wardhani, I. S. (2025). The right to benefit: Using videos to encourage citizen involvement in resource revenue management. *Journal of Economic Behavior & Organization*, 236, 107065. <https://doi.org/10.1016/j.jebo.2025.107065>
- Campbell, B. (2012). Corporate Social Responsibility and development in Africa: Redefining the roles and responsibilities of public and private actors in the mining sector. *Resources Policy, Corporate Social Responsibility in the Extractive Industries: Experiences from Developing Countries*, 37(2), 138–143. <https://doi.org/10.1016/j.resourpol.2011.05.002>
- Christensen, D. (2019). Concession Stands: How Mining Investments Incite Protest in Africa. *International Organization*, 73(1), 65–101. <https://doi.org/10.1017/S0020818318000413>
- da Silva Hyldmo, H., & Scherzer, S. (In press). Persisting challenges of transparency and accountability as governance instruments in the extractive industries – A review of the literature. In P. Lujala & C. Brunnschweiler, *Handbook on Transparency and Accountability in Natural Resource Governance*. Edvard Elgar Publishing.
- Dashwood, H. S. (2012). *The Rise of Global Corporate Social Responsibility: Mining and the Spread of Global Norms*. Cambridge University Press.

- Dashwood, H. S. (2014). Sustainable Development and Industry Self-Regulation: Developments in the Global Mining Sector. *Business & Society*, 53(4), 551–582.
<https://doi.org/10.1177/0007650313475997>
- Diprose, R., Kurniawan, N., Macdonald, K., & Winanti, P. (2022). Regulating sustainable minerals in electronics supply chains: Local power struggles and the ‘hidden costs’ of global tin supply chain governance. *Review of International Political Economy*, 29(3), 792–817.
<https://doi.org/10.1080/09692290.2020.1814844>
- Frederiksen, T. (2018). Corporate social responsibility, risk and development in the mining industry. *Resources Policy, Sustainable Management and Exploitation of Extractive Waste: Towards a More Efficient Resource Preservation and Waste Recycling*, 59, 495–505.
<https://doi.org/10.1016/j.resourpol.2018.09.004>
- Gerber, A. S., & Green, D. P. (2012). *Field experiments: Design, analysis, and interpretation*. W. W. Norton & Company.
- Gilberthorpe, E., & Banks, G. (2012). Development on whose terms?: CSR discourse and social realities in Papua New Guinea’s extractive industries sector. *Resources Policy, Corporate Social Responsibility in the Extractive Industries: Experiences from Developing Countries*, 37(2), 185–193. <https://doi.org/10.1016/j.resourpol.2011.09.005>
- GlobalData. (2025). *Top 10 Mining Companies in the World by Market Cap*. GlobalData.
[https://www.globaldata.com/companies/top-companies-by-sector/mining/global-companies-by-market-cap/#:~:text=BHP%2C%20Rio%20Tinto%2C%20Glencore%20Plc,of%20December%2031%2C%202022\).](https://www.globaldata.com/companies/top-companies-by-sector/mining/global-companies-by-market-cap/#:~:text=BHP%2C%20Rio%20Tinto%2C%20Glencore%20Plc,of%20December%2031%2C%202022).)
- Haryadi, D., Ibrahim, I., & Darwance, D. (2022). Environmental Law Awareness as Social Capital Strategic in Unconventional Tin Mining Activities in the Bangka Belitung Islands. *Society*, 10(2), 665–680. <https://doi.org/10.33019/society.v10i2.455>
- Heidhues, M. F. S. (1991). Company island: A note on the history of belitung. *Indonesia*, 1–20.
- Hilson, A., Hilson, G., & Dauda, S. (2019). Corporate Social Responsibility at African mines: Linking the past to the present. *Journal of Environmental Management*, 241, 340–352.
<https://doi.org/10.1016/j.jenvman.2019.03.121>
- Hilson, G. (2012). Corporate Social Responsibility in the extractive industries: Experiences from developing countries. *Resources Policy, Corporate Social Responsibility in the Extractive Industries: Experiences from Developing Countries*, 37(2), 131–137.
<https://doi.org/10.1016/j.resourpol.2012.01.002>
- Jenkins, H., & Yakovleva, N. (2006). Corporate social responsibility in the mining industry: Exploring trends in social and environmental disclosure. *Journal of Cleaner Production, Improving Environmental, Economic and Ethical Performance in the Mining Industry. Part 1. Environmental Management and Sustainable Development*, 14(3), 271–284.
<https://doi.org/10.1016/j.jclepro.2004.10.004>
- Kaur, A., & Diehl, F. (1996). Tin miners and tin mining in Indonesia, 1850–1950. *Asian Studies Review*. (world). <https://doi.org/10.1080/03147539608713113>
- Li, H., Qin, W., Li, J., Tian, Z., Jiao, F., & Yang, C. (2021). Tracing the global tin flow network: Highly concentrated production and consumption. *Resources, Conservation and Recycling*, 169, 105495. <https://doi.org/10.1016/j.resconrec.2021.105495>
- Lujala, P. (2009). Deadly Combat over Natural Resources: Gems, Petroleum, Drugs, and the Severity of Armed Civil Conflict. *Journal of Conflict Resolution*, 53(1), 50–71.
<https://doi.org/10.1177/0022002708327644>

- Matten, D., & Moon, J. (2008). “Implicit” and “Explicit” CSR: A Conceptual Framework for a Comparative Understanding of Corporate Social Responsibility. *Academy of Management Review*, 33(2), 404–424. <https://doi.org/10.5465/amr.2008.31193458>
- Nelson, K. M., Schlüter, A., & Vance, C. (2018). Funding Conservation Locally: Insights from Behavioral Experiments in Indonesia. *Conservation Letters*, 11(2), e12378. <https://doi.org/10.1111/conl.12378>
- Ofori, D., & Ofori, A. (2014). Mining sector CSR behaviour: A developing country perspective. *African Journal of Management Research*, 22(1), 62–84.
- Owen, J. R., & Kemp, D. (2023). A return to responsibility: A critique of the single actor strategic model of CSR. *Journal of Environmental Management*, 341, 118024. <https://doi.org/10.1016/j.jenvman.2023.118024>
- Pelzl, P., & Poelhekke, S. (2021). Good mine, bad mine: Natural resource heterogeneity and Dutch disease in Indonesia. *Journal of International Economics*, 131, 103457. <https://doi.org/10.1016/j.jinteco.2021.103457>
- Pillay, S. S. (1990). *Performance of the world tin industry: Effects of the international tin agreements, 1956-85*.
- Pratiwi, Narendra, B. H., Siregar, C. A., Iskandar, Mulyanto, B., Suwardi, Suryaningtyas, D. T., Dharmawan, I. W. S., Suharti, S., & Marsandi, F. (2025). Tin Mining and Post-Tin Mining Reclamation Initiatives in Indonesia: With Special Reference to Bangka Belitung Areas. *Land*, 14(10), 1947. <https://doi.org/10.3390/land14101947>
- Rahayu, D. P., Rustamadji, M., Faisal, & Sari, R. (2024). Illegal tin mining, policy gaps and the plight of small-scale tin miners in Indonesia. *South East Asia Research*, 32(4), 351–369. <https://doi.org/10.1080/0967828X.2025.2462727>
- Rajak, D. (2016). Hope and Betrayal on the Platinum Belt: Responsibility, Violence and Corporate Power in South Africa. *Journal of Southern African Studies*, 42(5), 929–946. <https://doi.org/10.1080/03057070.2016.1207876>
- Ricklefs, M. C. (1993). *A History of Modern Indonesia since c. 1200*. MacMillan London.
- Ross, C. (2014). The Tin Frontier: Mining, Empire, and Environment in Southeast Asia, 1870s–1930s. *Environmental History*, 19(3), 454–479.
- Rosyida, I., Ullah, W., Helmi, A., & Sasaoka, M. (2019). Adapting livelihoods to the impacts of tin mining in Indonesia: Options and constraints. *The Extractive Industries and Society*, 6(4), 1302–1313. <https://doi.org/10.1016/j.exis.2019.10.018>
- Shubita, M., Ahmed, S., & Essel-Paintsil, M. (2022). The economic impact of corporate social responsibility on the development of indigenous communities: Evidence from Ghana’s mining sector. *International Journal of Organizational Analysis*, 31(1), 196–214. <https://doi.org/10.1108/IJOA-10-2021-2985>
- Vela-Almeida, D., & Karlsen, A. (2023). Reinforcing path marginalization: Revealing the unaccounted labour organization at a mining frontier in Indonesia. *Cambridge Journal of Regions, Economy and Society*, 16(3), 481–494. <https://doi.org/10.1093/cjres/rsad018>

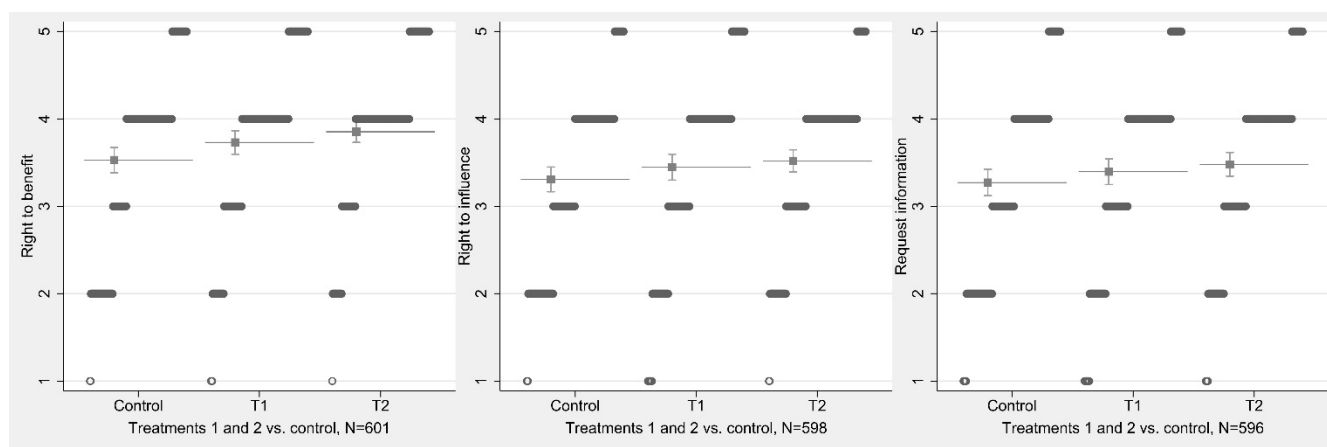
Appendix 1: Additional figures



Appendix Figure 1. Boxplots of donation amounts per treatment group



Appendix Figure 2. Design of postcard. English version (Partner logos redacted for review)



Appendix Figure 3. Mean response on survey outcomes across treatment groups

Appendix 2: Additional tables

Appendix Table 1. Descriptive statistics with questions and coding.

Variable	Obs.	Mean	Std. Dev.	Min	Max	Question (incl. variable coding)
<i>Outcome variables</i>						
Right to benefit	601	3.70	0.97	1	5	To what extent do you agree with the following statement? You and people like you have the right to benefit from revenues generated by tin mining companies in your area. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Right to influence	598	3.42	1.00	1	5	To what extent do you agree with the following statement? You and people like you have the right to influence on what tin mining companies in your area spend money. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Request information	596	3.38	1.04	1	5	To what extent do you agree with the following statement? In the future, you will request information on what tin mining companies in your area spend money. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
<i>Control variables</i>						
Donation: yes or no	604	0.92	0.28	0	1	Dummy: 1 if respondent has donated any amount
Donation amount in Rupiah	599	23462.44	21704.42	0	120000	Donated amount received (in Indonesian Rupiah)
Postcard received: yes or no	610	0.05	0.22	0	1	Dummy: 1 if postcard has been received
<i>Control variables</i>						
Age	610	41.08	14.33	18	84	How old are you?
Gender (Female = 1)	610	0.50	0.50	0	1	Dummy: 1 if respondent is female
Household head	610	0.48	0.50	0	1	Dummy: 1 if respondent is the household head
Education elementary	610	0.31	0.46	0	1	Dummy: 1 if highest level of education is elementary school

Education middle school	610	0.15	0.36	0	1	Dummy: 1 if highest level of education is middle school / lower secondary
Education high school or vocational school	610	0.33	0.47	0	1	Dummy: 1 if highest level of education is high school or vocational school
Education tertiary	610	0.13	0.34	0	1	Dummy: 1 if highest level of education is tertiary (college or university)
Community leader	610	0.06	0.24	0	1	Dummy: 1 if respondent holds any community leadership role
Mining	610	0.20	0.40	0	1	Dummy: 1 if respondent or a household member is involved in tin mining or supporting activity
Occupation farming, forestry or fishing	610	0.21	0.41	0	1	Dummy: 1 if respondent works in farming, forestry or fishing
Occupation ASM	610	0.07	0.26	0	1	Dummy: 1 if respondent works in small-scale or artisanal mining
Occupation daily or weekly laborer	610	0.13	0.33	0	1	Dummy: 1 if respondent works as a daily or weekly laborer
Occupation wage labor	610	0.12	0.32	0	1	Dummy: 1 if respondent has a position with a regular salary
Occupation self-employed	610	0.17	0.38	0	1	Dummy: 1 if respondent is self-employed
Occupation other (housewives, students, retired, unemployed)	610	0.30	0.46	0	1	Dummy: 1 if respondent is a housewife, student, retired or unemployed
Transport assets index	610	1.53	0.75	0	4	Sum of four dummy variables (1 if owned): bicycle, moped, other motor vehicle and boat)
Household assets index	610	3.80	1.00	0	5	Sum of five dummy variables (1 if owned): tv, internet, smartphone, fridge and non-subsidized electricity)
Property index	610	1.91	0.65	0	3	Sum of three dummy variables (1 if owned): land, house, large dwelling
<i>Mechanism variables</i>						
New info	606	0.81	0.40	0	1	Did the video provide you with NEW information? (1 - yes, 0 - no)
Useful info	607	0.95	0.22	0	1	Did the video provide you with USEFUL information? (1 - yes, 0 - no)
Trustworthy info	597	0.93	0.25	0	1	Do you trust the information provided in the video? (1 - yes, 0 - no)
Importance of issue after treatment	595	3.70	1.00	1	5	To what extent do you agree with the following statement? It is important for you to know how tin mining is managed on Bangka. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Trust in others' support	587	3.53	0.96	1	5	To what extent do you agree with the following statement? You are confident that others would support you if you asked for better use of these local development funds. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Feasible actions	590	3.61	0.91	1	5	To what extent do you agree with the following statement? There are actions that you could take to promote better use of these local development funds in your area. (1 - disagree very strongly, 2 -

disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)

Satisfaction with government	598	3.19	1.00	1	5	To what extent do you agree with the following statement? Our governments at all levels are doing a good job in managing the tin mining sector. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
<i>Heterogeneous effects variables</i>						<i>For the HE analysis, all disagree-agree (1-5) and distrust-trust (1-5) questions were dummy coded (agree/strongly agree = 1; some trust/great deal of trust = 1)</i>
Willingness to help (altruism2)	608	4.16	0.67	1	5	To what extent do you agree with the following statement? You are willing to undergo personal cost, in time or money, to help someone from your local community. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Satisfaction with own situation (aspiration1)	609	3.77	0.93	1	5	To what extent do you agree with the following statement? You are satisfied with your household's current economic situation. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Taking initiative to change something	610	0.91	0.29	0	1	Dummy: 1 if respondent would do one of several things to change something in the local community
Govt officials have right to additional compensation (corruption2)	600	2.56	1.04	1	5	To what extent do you agree with the following statement? I believe that politicians and government officials have a right, in addition to their salary, to obtain a part of public revenues for their personal use as compensation for their service. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Corruption is a problem (corruption3)	593	3.63	1.20	1	5	To what extent do you agree with the following statement? On Bangka, corruption is a problem. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Government as employee (govasemployee)	605	4.09	0.78	1	5	To what extent do you agree with the following statement? Government is there to serve us; the people should tell the government what needs to be done. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Member of farmer or fisher association	610	0.03	0.18	0	1	Dummy: 1 if respondent is a member of a farmer or fisher association
Interest in politics	607	2.08	1.15	1	5	How often do you discuss political matters and public affairs with friends, family or colleagues? (1 - never, 2 - rarely, 3 - sometimes, 4 - often, 5 - very often)
Responsiveness of leaders (responsiveness)	607	3.97	0.91	1	5	To what extent do you agree with the following statement? When communities ask accountability from their leaders things change. (1 - disagree very strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Trust in people (trust)	607	3.48	0.95	1	5	To what extent do you agree with the following statement? You see yourself as someone who generally trusts other people. (1 - disagree very

						strongly, 2 - disagree, 3 - neither agree nor disagree, 4 - agree, 5 - agree very strongly)
Trust in tin mining companies (trustcomp)	573	2.78	1.02	1	5	How much do you trust tin mining companies? (1 - great deal of distrust, 2 - some distrust, 3 - neither trust nor distrust, 4 - some trust, 5 - great deal of trust)
Trust in district government (trustdistleaders)	602	3.43	0.94	1	5	How much do you trust the district government? (1 - great deal of distrust, 2 - some distrust, 3 - neither trust nor distrust, 4 - some trust, 5 - great deal of trust)
Vote in general election	610	0.95	0.22	0	1	Did you vote in last year's general elections? (1 - yes, 0 - no)

Appendix Table 2: Balance tests across control (C) and treatment (T1, T2) groups

		Means			p-values			
		Control	T1	T2	C vs. T1	C vs. T2	T1 vs. T2	All
Age	mean	40.243	41.23	41.76	0.483	0.284	0.714	0.551
	se	0.971	1.018	1.026	.	.	.	.
Gender (female=1)	mean	0.505	0.49	0.51	0.767	0.922	0.693	0.802
	se	0.035	0.035	0.035	.	.	.	.
Household head	mean	0.485	0.461	0.48	0.624	0.924	0.692	0.679
	se	0.035	0.035	0.035	.	.	.	.
Education elementary	mean	0.307	0.338	0.294	0.501	0.779	0.339	0.000
	se	0.033	0.033	0.032	.	.	.	.
Education middle school	mean	0.139	0.157	0.152	0.605	0.704	0.891	0.851
	se	0.024	0.026	0.025	.	.	.	.
Education high school	mean	0.337	0.324	0.324	0.780	0.780	1.000	0.495
	se	0.033	0.033	0.033	.	.	.	.
Education tertiary	mean	0.149	0.118	0.123	0.361	0.446	0.879	0.670
	se	0.025	0.023	0.023	.	.	.	.
Community leader	mean	0.079	0.039	0.064	0.088	0.546	0.264	0.126
	se	0.019	0.014	0.017	.	.	.	.
Mining	mean	0.188	0.216	0.206	0.490	0.654	0.809	0.823
	se	0.028	0.029	0.028	.	.	.	.
Occupation farming, fishing, forestry	mean	0.203	0.245	0.176	0.310	0.497	0.090	0.294
	se	0.028	0.03	0.027	.	.	.	.
Occupation ASM	mean	0.064	0.088	0.059	0.366	0.817	0.256	0.494
	se	0.017	0.02	0.017	.	.	.	.
Occupation daily/weekly laborer	mean	0.158	0.108	0.113	0.134	0.180	0.875	0.442
	se	0.026	0.022	0.022	.	.	.	.
Occupation wage labor	mean	0.149	0.103	0.098	0.167	0.123	0.870	0.401
	se	0.025	0.021	0.021	.	.	.	.
Occupation self-employed	mean	0.163	0.167	0.191	0.929	0.464	0.520	0.626
	se	0.026	0.026	0.028	.	.	.	.
Transport assets index	mean	1.589	1.534	1.461	0.459	0.091	0.324	0.407
	se	0.053	0.051	0.054	.	.	.	.
Household assets index	mean	3.856	3.804	3.73	0.590	0.208	0.466	0.636
	se	0.068	0.07	0.073	.	.	.	.
Property index	mean	1.847	1.922	1.956	0.246	0.085	0.598	0.375
	se	0.044	0.047	0.045	.	.	.	.
N	—	202	204	204	.	.	.	.

Appendix Table 3: Mediation effects

VARIABLES	Right to benefit			Right to influence			Request information			Donation: yes or no		
	Indirect effect	Direct effect	Total effect	Indirect effect	Direct effect	Total effect	Indirect effect	Direct effect	Total effect	Indirect effect	Direct effect	Total effect
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(13)	(14)	(15)
Mediator: Video provided new information												
T1 Information	0.020 (0.017)	0.181* (0.109)	0.201* (0.112)	0.028 (0.019)	0.107 (0.096)	0.135 (0.101)	0.030* (0.018)	0.087 (0.104)	0.117 (0.110)	0.004 (0.004)	-0.058** (0.026)	-0.054** (0.025)
T2 Role model	0.039 (0.027)	0.280** (0.109)	0.319*** (0.108)	0.055** (0.027)	0.138 (0.090)	0.193** (0.090)	0.058** (0.024)	0.136 (0.095)	0.194** (0.099)	0.007 (0.007)	-0.021 (0.025)	-0.014 (0.023)
Observations	599	599	599	596	596	596	594	594	594	600	600	600
Mediator: Video provided useful information												
T1 Information	0.008 (0.006)	0.207* (0.113)	0.214* (0.111)	0.013 (0.010)	0.133 (0.100)	0.145 (0.102)	0.018 (0.013)	0.110 (0.110)	0.128 (0.108)	0.004 (0.003)	-0.059** (0.024)	-0.055** (0.025)
T2 Role model	0.012 (0.010)	0.313*** (0.110)	0.325*** (0.108)	0.022 (0.014)	0.175* (0.090)	0.197** (0.088)	0.031** (0.014)	0.170* (0.101)	0.201** (0.099)	0.007** (0.003)	-0.021 (0.023)	-0.015 (0.023)
Observations	599	599	599	597	597	597	594	594	594	601	601	601
Mediator: Video provided trustworthy information												
T1 Information	-0.006 (0.008)	0.226** (0.107)	0.220** (0.106)	0.003 (0.006)	0.165 (0.102)	0.168* (0.102)	0.002 (0.006)	0.138 (0.109)	0.139 (0.109)	0.001 (0.002)	-0.052** (0.024)	-0.051** (0.024)
T2 Role model	-0.002 (0.003)	0.326*** (0.101)	0.323*** (0.101)	0.002 (0.004)	0.181** (0.090)	0.183** (0.090)	0.001 (0.004)	0.212** (0.098)	0.213** (0.099)	0.000 (0.001)	-0.015 (0.023)	-0.015 (0.023)
Observations	588	588	588	586	586	586	583	583	583	591	591	591
Mediator: Knowing how tin mining is managed is important.												
T1 Information	0.042 (0.037)	0.163* (0.098)	0.205* (0.111)	0.034 (0.041)	0.102 (0.087)	0.136 (0.100)	0.056 (0.047)	0.078 (0.103)	0.133 (0.106)	0.002 (0.003)	-0.061** (0.026)	-0.058** (0.025)
T2 Role model	0.083** (0.035)	0.235** (0.093)	0.318*** (0.106)	0.095** (0.037)	0.083 (0.089)	0.178* (0.091)	0.116** (0.051)	0.082 (0.084)	0.197** (0.098)	0.005 (0.004)	-0.016 (0.024)	-0.011 (0.024)
Observations	592	592	592	590	590	590	588	588	588	589	589	589
Mediator: Trust in others' support if you asked for better use of local development funds												
T1 Information	-0.003 (0.027)	0.203* (0.117)	0.200* (0.121)	-0.005 (0.023)	0.140 (0.101)	0.135 (0.098)	-0.003 (0.041)	0.113 (0.110)	0.110 (0.116)	-0.000 (0.001)	-0.058** (0.026)	-0.058** (0.025)
T2 Role model	0.042** (0.019)	0.253** (0.108)	0.295*** (0.111)	0.052** (0.023)	0.126 (0.088)	0.178** (0.089)	0.056** (0.025)	0.121 (0.105)	0.177* (0.100)	0.003 (0.002)	-0.013 (0.024)	-0.010 (0.024)
Observations	585	585	585	583	583	583	580	580	580	581	581	581
Mediator: Feasible actions that you could take to promote better use of local development funds												
T1 Information	-0.025 (0.025)	0.205* (0.110)	0.180 (0.113)	-0.034 (0.029)	0.148 (0.098)	0.114 (0.099)	-0.033 (0.036)	0.138 (0.111)	0.105 (0.110)	-0.003 (0.003)	-0.054** (0.025)	-0.056** (0.025)
T2 Role model	0.058*** (0.022)	0.250** (0.112)	0.308*** (0.109)	0.059** (0.024)	0.129 (0.097)	0.187** (0.094)	0.076** (0.030)	0.112 (0.107)	0.189* (0.105)	0.004 (0.003)	-0.015 (0.025)	-0.010 (0.024)
Observations	587	587	587	587	587	587	584	584	584	584	584	584
Mediator: Our governments are doing a good job managing the tin mining sectors												
T1 Information	0.040** (0.019)	0.166 (0.115)	0.205* (0.112)	0.031* (0.017)	0.120 (0.101)	0.151 (0.097)	0.017 (0.011)	0.100 (0.112)	0.117 (0.110)	-0.002 (0.003)	-0.055** (0.025)	-0.057** (0.025)
T2 Role model	0.057*** (0.018)	0.274*** (0.106)	0.331*** (0.109)	0.047*** (0.016)	0.148* (0.086)	0.195** (0.087)	0.026* (0.015)	0.178* (0.099)	0.204** (0.099)	-0.002 (0.004)	-0.008 (0.024)	-0.010 (0.024)
Observations	594	594	594	591	591	591	591	591	591	592	592	592

Note: All estimates have been computed with STATA's mediate function. Total effect columns show coefficients for main results OLS regressions with village-clustered standard errors in parentheses. Direct effect columns show coefficients for OLS regressions that in addition to the direct effects specifications include the mediator variable. All regression specifications include regency dummies. Indirect effect columns have been calculated using the conventional Baron and Kenny (1986) method for estimating the mediation effect. p-values: *** p<0.01, ** p<0.05, * p<0.1

Appendix Table 4: Heterogeneous effects (Part 1)

VARIABLES	Right to benefit		Right to influence		Request information		Donation: yes or no		Donation amount	
	(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)
Willingness to undergo personal cost to help someone from your local community (altruism2)										
Any treatment	0.200		0.592**		0.054		-0.104		-6,781.885	
	(0.262)		(0.219)		(0.244)		(0.099)		(5,285.325)	
T1 Information		0.040		0.749***		0.204		-0.156		-9,377.014
		(0.288)		(0.233)		(0.283)		(0.110)		(6,525.794)
T2 Role model		0.500		0.279		-0.209		-0.023		-3,142.108
		(0.299)		(0.309)		(0.323)		(0.117)		(6,990.572)
Willingness to help	0.324	0.327	0.558**	0.558**	0.138	0.137	0.017	0.018	-3,606.422	-3,616.993
	(0.200)	(0.200)	(0.230)	(0.230)	(0.237)	(0.238)	(0.059)	(0.059)	(4,346.135)	(4,348.572)
Interaction with any T	0.085		-0.458		0.170		0.077		8,144.696	
	(0.268)		(0.277)		(0.258)		(0.102)		(5,681.455)	
Interaction with T1 Information		0.207		-0.668**		-0.037		0.109		11,864.264*
		(0.287)		(0.290)		(0.307)		(0.111)		(6,533.249)
Interaction with T2 Role model		-0.178		-0.093		0.486		0.017		3,387.712
		(0.292)		(0.358)		(0.340)		(0.120)		(7,489.629)
Observations	601	601	598	598	596	596	604	604	599	599
Satisfaction with household's economic situation (aspiration1)										
Any treatment	0.460***		0.296**		0.186		0.015		-3,780.068	
	(0.143)		(0.138)		(0.151)		(0.041)		(2,685.319)	
T1 Information		0.244		0.203		-0.006		0.008		-2,125.820
		(0.183)		(0.201)		(0.226)		(0.052)		(4,383.323)
T2 Role model		0.614***		0.361*		0.318		0.019		-4,899.849*
		(0.149)		(0.190)		(0.192)		(0.047)		(2,638.220)
Satisfaction with econ. situation	0.239*	0.236*	0.219*	0.217*	0.001	-0.001	0.030	0.029	-2,658.574	-2,634.173
	(0.132)	(0.131)	(0.115)	(0.116)	(0.113)	(0.114)	(0.040)	(0.041)	(3,096.100)	(3,104.452)
Interaction with any T	-0.258		-0.170		0.036		-0.067		6,033.352*	
	(0.186)		(0.164)		(0.170)		(0.049)		(3,561.652)	
Interaction with T1 Information		-0.059		-0.094		0.222		-0.088		4,581.591
		(0.241)		(0.224)		(0.269)		(0.062)		(4,768.765)
Interaction with T2 Role model		-0.386**		-0.213		-0.085		-0.038		6,858.645*
		(0.167)		(0.212)		(0.177)		(0.057)		(4,036.458)
Observations	601	601	598	598	596	596	604	604	599	599
Taking initiative to change something in local community (change)										
Any treatment	-0.016		-0.422		-0.281		-0.141*		7,562.027*	
	(0.325)		(0.272)		(0.265)		(0.079)		(3,913.099)	
T1 Information		-0.070		-0.567		-0.430		-0.204*		2,679.584
		(0.393)		(0.344)		(0.326)		(0.113)		(5,513.489)
T2 Role model		0.062		-0.221		-0.073		-0.060		13,745.554**
		(0.313)		(0.287)		(0.284)		(0.096)		(5,253.609)
Taking initiative to change sth	-0.057	-0.057	0.054	0.056	0.074	0.076	-0.020	-0.020	8,935.863***	9,009.598***
	(0.245)	(0.248)	(0.218)	(0.218)	(0.215)	(0.215)	(0.054)	(0.053)	(2,413.733)	(2,420.816)
Interaction with any T	0.330		0.662**		0.535*		0.118		-7,711.679*	
	(0.353)		(0.274)		(0.277)		(0.080)		(4,460.895)	
Interaction with T1 Information		0.328		0.796**		0.661*		0.161		-1,527.923
		(0.423)		(0.342)		(0.341)		(0.115)		(5,768.245)
Interaction with T2 Role model		0.311		0.471		0.349		0.057		-15,213.886**
		(0.345)		(0.309)		(0.295)		(0.101)		(6,059.067)
Observations	601	601	598	598	596	596	604	604	599	599
Government officials have a right to obtain a part of public revenues as additional compensation (corruption2)										
Any treatment	0.257**		0.238**		0.202*		-0.035		158.237	
	(0.109)		(0.101)		(0.107)		(0.025)		(2,013.670)	
T1 Information		0.166		0.182		0.151		-0.051		420.641
		(0.132)		(0.124)		(0.130)		(0.031)		(2,656.226)
T2 Role model		0.348***		0.293**		0.253**		-0.018		-143.269
		(0.118)		(0.108)		(0.121)		(0.027)		(2,199.571)
Right to obtain additional comp.	0.183	0.181	0.523***	0.522***	0.491***	0.491***	0.019	0.020	-2,409.426	-2,448.325
	(0.170)	(0.169)	(0.158)	(0.159)	(0.157)	(0.157)	(0.040)	(0.040)	(3,222.373)	(3,215.182)
Interaction with any T	0.114		-0.262		0.001		0.006		2,031.361	
	(0.201)		(0.182)		(0.178)		(0.052)		(3,461.708)	
Interaction with T1 Information		0.233		-0.168		0.029		-0.033		3,748.925
		(0.200)		(0.229)		(0.189)		(0.074)		(4,399.238)
Interaction with T2 Role model		-0.005		-0.357*		-0.026		0.050		132.683
		(0.265)		(0.187)		(0.226)		(0.047)		(4,324.405)
Observations	601	601	598	598	596	596	604	604	599	599

Appendix Table 4 continued: Heterogeneous effects (Part 2)

VARIABLES	Right to benefit		Right to influence		Request information		Donation: yes or no		Donation amount	
	(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)
On Bangka, corruption is a problem (corruption3)										
Any treatment	0.309*		0.254*		0.222		-0.086***		-444.017	
	(0.159)		(0.148)		(0.152)		(0.029)		(3,433.954)	
T1 Information		0.179		0.201		0.183		-0.104**		617.719
		(0.171)		(0.164)		(0.184)		(0.039)		(4,159.564)
T2 Role model		0.435**		0.307*		0.263		-0.067**		-1,500.738
		(0.174)		(0.176)		(0.171)		(0.033)		(3,678.924)
Corruption	0.231	0.234	0.217	0.219	0.277	0.280	-0.076***	-0.075***	-2,590.335	-2,627.760
	(0.144)	(0.145)	(0.163)	(0.164)	(0.171)	(0.171)	(0.023)	(0.023)	(3,474.772)	(3,486.598)
Interaction with any T	-0.026		-0.096		-0.004		0.080**		1,503.669	
	(0.174)		(0.175)		(0.206)		(0.036)		(4,505.926)	
Interaction with T1 Information		0.074		-0.067		-0.017		0.070		946.584
		(0.181)		(0.227)		(0.245)		(0.045)		(5,041.036)
Interaction with T2 Role model		-0.119		-0.124		0.010		0.091**		2,015.578
		(0.212)		(0.194)		(0.221)		(0.043)		(4,954.244)
Observations	601	601	598	598	596	596	604	604	599	599
Government should serve the people (govasemployee)										
Any treatment	0.643***		0.275		0.039		-0.066		433.013	
	(0.209)		(0.195)		(0.225)		(0.048)		(4,678.085)	
T1 Information		0.513*		0.103		-0.104		-0.155*		-647.873
		(0.262)		(0.246)		(0.241)		(0.080)		(5,790.676)
T2 Role model		0.790***		0.456		0.190		0.031		1,507.080
		(0.226)		(0.284)		(0.319)		(0.043)		(5,360.909)
Government as employee	0.604***	0.603***	0.329*	0.328*	0.076	0.075	-0.034	-0.035	-1,415.737	-1,428.007
	(0.192)	(0.192)	(0.184)	(0.184)	(0.179)	(0.179)	(0.035)	(0.035)	(4,183.421)	(4,191.225)
Interaction with any T	-0.434*		-0.111		0.202		0.039		188.299	
	(0.216)		(0.218)		(0.260)		(0.052)		(5,237.291)	
Interaction with T1 Information		-0.349		0.054		0.323		0.115		2,252.419
		(0.275)		(0.259)		(0.261)		(0.083)		(6,065.521)
Interaction with T2 Role model		-0.535**		-0.286		0.072		-0.044		-1,897.851
		(0.236)		(0.323)		(0.345)		(0.048)		(6,166.674)
Observations	601	601	598	598	596	596	604	604	599	599
Member of farmer or fisher association										
Any treatment	0.303***		0.184**		0.216**		-0.035		-374.000	
	(0.102)		(0.085)		(0.091)		(0.022)		(1,874.936)	
T1 Information		0.245**		0.147		0.172		-0.059**		142.645
		(0.115)		(0.100)		(0.109)		(0.027)		(2,446.827)
T2 Role model		0.363***		0.224**		0.261**		-0.009		-893.685
		(0.114)		(0.094)		(0.105)		(0.024)		(2,088.729)
Member of farmer/fisher assoc.	0.722**	0.725**	0.101	0.097	0.274	0.275	0.072*	0.073*	-8,169.481	-8,294.704
	(0.285)	(0.286)	(0.353)	(0.352)	(0.320)	(0.322)	(0.037)	(0.038)	(6,831.499)	(6,843.120)
Interaction with any T	-0.243		0.208		0.025		0.069		29,315.57***	
	(0.391)		(0.429)		(0.360)		(0.046)		(10,646.842)	
Interaction with T1 Information		-0.352		0.433		0.075		0.050		34,046.37**
		(0.536)		(0.370)		(0.446)		(0.057)		(14,512.349)
Interaction with T2 Role model		-0.116		-0.042		-0.028		0.092*		23,930.47**
		(0.349)		(0.538)		(0.360)		(0.047)		(11,552.451)
Observations	601	601	598	598	596	596	604	604	599	599
Interested in politics (politics)										
Any treatment	0.337***		0.190**		0.213**		-0.036		802.509	
	(0.100)		(0.085)		(0.090)		(0.023)		(1,876.883)	
T1 Information		0.258**		0.123		0.162		-0.060**		1,619.232
		(0.118)		(0.099)		(0.111)		(0.029)		(2,486.018)
T2 Role model		0.418***		0.257***		0.265**		-0.011		-44.401
		(0.108)		(0.094)		(0.099)		(0.026)		(2,102.610)
Interested in politics	0.449*	0.448*	0.194	0.191	0.263	0.262	0.068**	0.069**	-2,167.954	-2,173.973
	(0.224)	(0.225)	(0.256)	(0.256)	(0.254)	(0.255)	(0.027)	(0.027)	(4,778.868)	(4,786.243)
Interaction with any T	-0.407		-0.030		-0.019		0.014		-1,474.263	
	(0.241)		(0.308)		(0.318)		(0.038)		(5,197.129)	
Interaction with T1 Information		-0.278		0.206		0.047		0.006		-2,419.631
		(0.273)		(0.364)		(0.371)		(0.056)		(6,032.599)
Interaction with T2 Role model		-0.542*		-0.273		-0.083		0.022		-488.012
		(0.292)		(0.367)		(0.362)		(0.038)		(5,878.663)
Observations	601	601	598	598	596	596	604	604	599	599

Appendix Table 4 continued: Heterogeneous effects (Part 3)

VARIABLES	Right to benefit		Right to influence		Request information		Donation: yes or no		Donation amount	
	(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)
Leaders are responsive to community demands (responsiveness)										
Any treatment	0.257 (0.254)		0.318 (0.234)		0.195 (0.288)		-0.083** (0.036)		6,206.896* (3,365.732)	
T1 Information		-0.011 (0.255)		0.100 (0.248)		0.106 (0.296)		-0.103* (0.051)		8,128.814* (4,450.218)
T2 Role model		0.618** (0.247)		0.622** (0.247)		0.315 (0.320)		-0.056 (0.048)		3,672.804 (3,576.439)
Responsiveness	0.115 (0.223)	0.111 (0.222)	0.327 (0.226)	0.324 (0.226)	0.158 (0.255)	0.157 (0.255)	-0.036 (0.029)	-0.036 (0.029)	7,133.698** (2,631.569)	7,162.744** (2,642.812)
Interaction with any T	0.033 (0.264)		-0.170 (0.287)		0.019 (0.315)		0.063 (0.038)		-7,253.488* (3,754.608)	
Interaction with T1 Information		0.307 (0.255)		0.079 (0.286)		0.088 (0.317)		0.057 (0.058)		-8,886.832* (4,602.674)
Interaction with T2 Role model		-0.331 (0.277)		-0.500 (0.324)		-0.081 (0.361)		0.061 (0.045)		-5,032.607 (4,189.655)
Observations	601	601	598	598	596	596	604	604	599	599
Trust in people (trust)										
Any treatment	0.095 (0.154)		0.143 (0.144)		0.083 (0.162)		-0.025 (0.032)		2,548.928 (1,960.144)	
T1 Information		0.070 (0.201)		0.123 (0.196)		0.147 (0.200)		-0.063* (0.037)		1,576.907 (2,992.420)
T2 Role model		0.118 (0.152)		0.161 (0.140)		0.021 (0.174)		0.011 (0.037)		3,485.811 (2,208.235)
Trust in people	-0.178 (0.143)	-0.179 (0.144)	0.069 (0.142)	0.068 (0.143)	0.037 (0.192)	0.037 (0.192)	0.014 (0.037)	0.014 (0.037)	1,685.772 (2,475.721)	1,689.058 (2,476.527)
Interaction with any T	0.339* (0.172)		0.090 (0.174)		0.247 (0.220)		-0.014 (0.050)		-3,502.668 (2,945.303)	
Interaction with T1 Information		0.270 (0.233)		0.063 (0.230)		0.045 (0.267)		0.009 (0.055)		-476.852 (4,232.543)
Interaction with T2 Role model		0.421** (0.191)		0.126 (0.184)		0.454* (0.241)		-0.032 (0.058)		-6,676.322** (2,889.388)
Observations	601	601	598	598	596	596	604	604	599	599
Trust in tin mining companies (trustcomp)										
Any treatment	0.318*** (0.106)		0.066 (0.093)		0.181* (0.102)		-0.017 (0.019)		1,220.290 (1,877.705)	
T1 Information		0.241* (0.119)		0.006 (0.107)		0.145 (0.119)		-0.040 (0.025)		2,054.450 (2,737.974)
T2 Role model		0.400*** (0.123)		0.127 (0.109)		0.219* (0.117)		0.008 (0.022)		336.074 (2,153.094)
Trust in tin mining companies	0.341 (0.218)	0.343 (0.218)	-0.075 (0.162)	-0.072 (0.163)	0.054 (0.154)	0.054 (0.154)	-0.001 (0.044)	-0.001 (0.044)	-1,069.841 (4,226.972)	-1,081.641 (4,229.652)
Interaction with any T	-0.170 (0.233)		0.583*** (0.183)		0.149 (0.187)		-0.078 (0.058)		-2,993.586 (4,784.110)	
Interaction with T1 Information		-0.077 (0.256)		0.739*** (0.200)		0.129 (0.226)		-0.092 (0.077)		-3,993.106 (6,233.511)
Interaction with T2 Role model		-0.265 (0.258)		0.433** (0.199)		0.165 (0.234)		-0.068 (0.060)		-1,977.983 (4,903.975)
Observations	601	601	598	598	596	596	604	604	599	599
Trust in district government (trustdistleader)										
<i>(Note: Trust in provincial and national government produced similar results.)</i>										
Any treatment	0.445*** (0.142)		0.085 (0.146)		0.157 (0.137)		-0.041 (0.030)		2,090.074 (2,482.402)	
T1 Information		0.390** (0.153)		-0.029 (0.166)		0.066 (0.161)		-0.074* (0.039)		2,440.773 (3,442.950)
T2 Role model		0.501*** (0.165)		0.194 (0.158)		0.245 (0.152)		-0.007 (0.034)		1,699.940 (2,859.684)
Trust in district government	0.368** (0.149)	0.368** (0.149)	0.098 (0.157)	0.096 (0.157)	0.057 (0.165)	0.056 (0.165)	-0.017 (0.037)	-0.017 (0.037)	-2,197.254 (2,356.564)	-2,209.239 (2,353.283)
Interaction with any T	-0.353** (0.165)		0.197 (0.198)		0.110 (0.191)		0.016 (0.048)		-2,842.048 (4,007.958)	
Interaction with T1 Information		-0.363* (0.188)		0.348 (0.228)		0.203 (0.237)		0.033 (0.054)		-2,198.151 (4,590.658)
Interaction with T2 Role model		-0.340* (0.181)		0.048 (0.228)		0.020 (0.192)		0.001 (0.057)		-3,521.618 (4,597.905)
Observations	601	601	598	598	596	596	604	604	599	599

Appendix Table 4 continued: Heterogeneous effects (Part 4)

VARIABLES	Right to benefit		Right to influence		Request information		Donation: yes or no		Donation amount	
	(1)	(2)	(3)	(4)	(5)	(6)	(9)	(10)	(11)	(12)
<i>Voted in last general election (vote)</i>										
Any treatment	-0.243 (0.468)		-0.088 (0.488)		-0.114 (0.387)		-0.061 (0.055)		-16,292.549** (7,269.431)	
T1 Information		-0.294 (0.497)		0.321 (0.532)		0.236 (0.412)		-0.110 (0.087)		-18,890.304** (8,967.266)
T2 Role model		-0.194 (0.508)		-0.535 (0.568)		-0.498 (0.445)		-0.010 (0.030)		-13,417.309* (6,667.885)
Voted in last election	-0.391 (0.424)	-0.395 (0.425)	-0.231 (0.379)	-0.227 (0.378)	-0.084 (0.267)	-0.082 (0.266)	-0.092** (0.040)	-0.094** (0.040)	-14,175.897** (6,238.174)	-14,171.715** (6,295.124)
Interaction with any T	0.557 (0.487)		0.291 (0.489)		0.346 (0.379)		0.027 (0.059)		17,660.408** (7,436.347)	
Interaction with T1 Information		0.547 (0.509)		-0.179 (0.549)		-0.071 (0.420)		0.053 (0.091)		21,115.459** (9,148.836)
Interaction with T2 Role model		0.571 (0.537)		0.798 (0.574)		0.797* (0.449)		0.002 (0.043)		13,886.223* (6,995.621)
Observations	601	601	598	598	596	596	604	604	599	599

Note: Table shows coefficients for OLS regressions with village-clustered standard errors in parentheses.

All specifications include the full set of covariates and regency dummies.

p-values: *** p<0.01, ** p<0.05, * p<0.1

Online Appendix 1: Video transcripts, English version

Part 1: Placebo video

Our country, Indonesia, is rich in many different ways.

It is the world's largest island country. It extends over 5000 kilometers from east to west and nearly 1800 kilometers from north to south.

It consists of over 17 000 islands.

Half of our country is covered by forest.

Our fertile land, fed by abundant rains, provides us with food crops and grazing land for livestock.

Our sea, rivers, and lakes are sources of fish, seaweed, pearls, and drinking water.

And underneath the surface, we have the minerals, like gold, tin, and copper.

270 million people live in Indonesia. It is the world's fourth-most populous country.

Jakarta is our capital city. With its 34 million residents, it is among the largest ones in the world.

Our country is ethnically and linguistically diverse. We have around 1,300 distinct ethnic groups and over 700 different languages.

Economic and health conditions in our country have improved significantly in the last 20-30 years. But many challenges still remain, such as child malnutrition, high rate of smoking, and infectious diseases.

Indonesian nature and culture are unique. We have a warm, stable tropical climate, a vast archipelago, and a long stretch of beaches. And we have a rich cultural heritage that reflects Indonesia's history and ethnic diversity. These attract tourists from abroad.

Part 2: PPM Information

Indonesia is the second-biggest producer of tin in the world after China. Most of its tin comes from Bangka and Belitung regency, where there are large tin reserves.

Tin mining companies have 800 permit areas on Bangka Island. The permit areas are located both onshore and offshore.

Each tin mining company has to set aside money for community development and empowerment, called PPM. The PPM money must be used to develop communities affected by tin mining.

Our country's laws say that all extractive companies in Indonesia have to do PPM.

On Bangka, the PPM money can be used to

- fund new or existing small-medium scale enterprises (UMKM) for people's income
- Support schools, teachers, and religious education
- Fund public service facilities like mosques, churches, and Posyandu [integrated health service at village level]
- Fund social and cultural activities

You and your community members can influence which projects get funding.

The government of Bangka Belitung has developed a guide that provides a list of villages that can receive PPM money. Your village is one of those villages.

In 2022, PPM on Bangka was around 21.6 billion rupiah.

If you used 100'000 rupiah notes to cover a badminton field, you could cover 26 such badminton fields.

The PPM money from tin mining should be managed so that it benefits you and the other people in your community.

Mining benefits belong to us all, including our children and their children. It is what our 1945 National Constitution says.

For more information on PPM you can contact Universitas Bangka Belitung and Gubuk Foundation

Part 3: Positive motivation

In some villages, the community members have requested the village government and the company to spend PPM money to improve their life and livelihoods.

In one village in Bangka District, a group of women talked about different ways they could use PPM to improve their livelihoods. The group included 16 housewives from the village. None of the women had formal employment.

They discussed several ideas. One of them was to rent land for farming.

With support from the village head, the group submitted a proposal for PPM funding. They received PPM funding from a tin mining company to rent a piece of land.

The women used the land to cultivate peanuts, chilies, and maize. They also tried out new cultivation methods like growing vegetables in polybags. The women sold the products at local markets.

Farming has helped the women to increase their household income. The women are very happy with the farming and feel that it has been a really good thing for them and their community.

The women want to continue the farming. They are seeking new land to rent and want to secure PPM for their activities also in the future.

In another village on Bangka, the fish trap (bubu) fishing community developed floating fish nets to farm fish.

However, they lacked the money to increase their production and have more secure incomes. The fishers got together and decided to apply for PPM money to purchase fish feed and fish fry (*bibit/benih*).

The PPM money helped the fishermen to increase their fish harvest and improve their livelihoods.

A group of villagers in one coastal village of Bangka runs a small-scale enterprise of fruit-chip making.

The group received PPM to buy machines for dehydration, frying, and packaging to boost fruit chips production.

The villagers sell fruit chips in stores to increase their incomes.

Other examples of how communities have benefitted from PPM include the following: tree replanting, essential oil processing, scholarships for children, mangrove reforestation, *Posyandu*, and religious learning centers.

These examples show that people like you can make a big difference in how PPM money is spent in your community.

Part 4: Obfuscation

It is important that you are well informed about your country.

We have attempted to make the message of this video as clear to you as we can.

We hope we have succeeded in this.

We are interested in knowing how we can improve the video.

How do you think this video can be made more informative, clear, and interesting?

Thank you for your attention.