Radio Dramas Can Build Political Support for Environmental Protection: Experimental Evidence from Rural Tanzania

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Abstract

Africa is highly vulnerable to climate change, yet voters in the region rarely prioritize environmental protection at the ballot box. Can media campaigns raise the political salience of environmental issues? We report the results of a placebo-controlled experiment conducted in Tanzania in which 1,360 respondents from 34 villages were randomly assigned to attend a screening of a radio drama designed to generate support for environmentalism. The drama follows rural villagers as they campaign against a corrupt bargain between developers and a public official to exploit the community's resources. Outcomes were assessed through a survey conducted one month later. Participants who were randomly exposed to the drama became more knowledgeable about climate change, more likely to cite environmental protection as a political priority, and more supportive of pro-environmental policies and candidates. A year later, treatment effects remain detectable for certain measures but decay for others, highlighting the importance of sustained messaging.

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1 Introduction

Africa is disproportionately likely to suffer the negative consequences of climate change, including land conflicts and environmental degradation (Collier et al. 2008). Yet public knowledge about climate change remains extremely low, with only 37 percent of Africans displaying a general understanding of the concept according to the most recent Afrobarometer data (Selormey et al. 2019). Moreover, despite the dire consequences of environmental inaction, African voters display low levels of support for candidates promising to protect the environment (Obradovich and Zimmerman 2016). How to increase knowledge about environmental issues and build political support for environmental protection is thus a vitally important question for the continent's 1.2 billion inhabitants.

In this paper, we explore one potential avenue for shifting knowledge and attitudes related to the environment: entertainment-education programs aired on the radio, the primary form of mass media in Africa. Entertainment-education (or "edutainment") interventions seek to influence audiences by embedding persuasive messages in narrative entertainment. A large body of research finds that edutainment can shape audiences' beliefs, attitudes, and behaviors in domains ranging from health (Banerjee et al. 2019) to gender (Green et al. 2020) to governance (Blair et al. 2019). As climate-related issues continue to grow in salience, studies have increasingly explored the effects of edutainment interventions on pro-environmental outcomes in Western contexts (Bilandzic and Sukalla 2019; Boze 2020; Moyer-Gusé et al. 2019; Zimmerling 2012). However, as Godfrey et al. (2012) note, "the [pro-environmental] public awareness campaigns that saturate Western media are still largely absent in Africa, especially outside major urban centers" (pg. 506). What edutainment interventions do exist typically focus on promoting climate adaptation and mitigation rather than influencing broader political outcomes such as audiences' support for environment-friendly policies or candidates (Areal et al. 2020; Clarkson et al. 2018). Even where the latter sorts of effects are plausible, researchers often neglect to include policy-relevant attitudes and behaviors as study outcomes (see Boze 2020 for an exception). This oversight is problematic given that political action represents an important collective response to environmental threats.

To this end, we present the results of a field experiment conducted in northeastern Tanzania that estimates the effects of a one-hour, Swahili-language radio drama on political priorities, attitudes, norms, knowledge, and behavioral intentions related to environmental protection. Like other climate-related edutainment interventions, ours communicates a pro-environmental message via an engaging and culturally-resonant narrative. The treatment drama, called *Mikoko Yetu* (Our Mangroves), tells the story of a corrupt bargain between a foreign developer and a local public official to sell off the natural resources of a fishing village; the hero of the story rallies villagers to reject the short-term gains of the project in favor of sustainably managing the village's natural resources. What sets this radio drama apart from many similar interventions is its emphasis on influencing not only individual-level beliefs and behaviors, but also outcomes related to collective political action, such as villagers' willingness to vote for candidates who express support for environmental protection. Substantively, the storyline focuses on the consequences of environmentally harmful policies instituted by local political leaders. The protagonists seek to shape public policy through electoral means, including office-seeking, campaigning, and voting. In this manner, the drama connects environmental protection to the political actions and policy decisions of its rural audience.

Our sample comprises 1,360 respondents from 34 villages in northeastern Tanzania, where climate change, environmental exploitation, and land conflicts are facts of life but have not necessarily become salient political issues. After completing a baseline survey, respondents were randomized at the village level to attend a communal screening of either the treatment drama, *Mikoko Yetu*, or an unrelated placebo control drama on gender-based violence. Importantly for the purposes of the experiment, the content of the placebo drama was orthogonal to that of the treatment drama. Four weeks after the experimental intervention, respondents took part in a follow-up survey in which outcomes were measured.

We measure five categories of outcomes. First, we measure the extent of respondents' climate change-related knowledge. Second, we gauge attitudes toward environmental protection, including respondents' preference for environmental protection over large-scale development,

and their support for policies to preserve and manage forests rather than sell them off; we also explore attitudes and perceived norms concerning cutting firewood without a permit. Third, we explore three measures of political priorities: respondents' vote choice in a hypothetical election featuring a pro-environment candidate, their ranking of environmental protection as a village goal, and their ranking of environmental degradation as a village issue. Fourth, we assess respondents' willingness to report farmers who start forest fires and the severity of punishment they would mete out to illegal loggers. Finally, we gauge respondents' intentions to attend workshops on environmental protection.

Before presenting the main results, we summarize descriptive findings from our baseline survey, which represents one of the few attempts to obtain public opinion data on Africans' beliefs and attitudes about the environment.[1] The respondents in our sample displayed low levels of knowledge about climate change, and while they expressed general support for environmentally-friendly policies, they tended not to rank environmental concerns among their top priorities.

Having shown that respondents have room for opinion change in a pro-environment direction, we present our midline experimental results. After four weeks, we find statistically significant effects of the treatment drama on a range of outcomes. Treated respondents became more knowledgeable about climate change on average. When it comes to policy-relevant attitudes, respondents who listened to the drama became more likely on average to prioritize environmental protection over large-scale economic development and to agree with a politician calling for forest resources to be conserved rather than sold off. We also observe substantial positive effects on measures of political priorities, with treated respondents placing environmental issues higher on a list of village priorities and becoming more likely to vote for a hypothetical candidate promising to protect the environment. That said, we observe no apparent effect on behaviors or behavioral intentions, such as willingness to attend a community meeting about environmental protection.

On the whole, the results suggest that exposure to edutainment messages can lead to meaningful shifts in policy attitudes, political priorities, and knowledge related to the environment.

[1] The Results section compares our survey results to round seven of the Afrobarometer survey, which asked a narrower range of questions concerning the environment.

The results can help inform the work of practitioners seeking to build public support for environmental protection, in particular pointing to the potential efficacy of scalable mass communication interventions. Although we find no effects on more effortful forms of political action, the results point to the potential for entertainment to shape political priorities and voting, two outcomes that receive comparatively little attention in the extant literature on edutainment effects. More broadly, our study shows how problems typically seen as "social issues" can be transofmred into political concerns that guide voters' decisions at the ballot box.

To explore the persistence of treatment effects, we returned to study villages and re-interviewed respondents 18 months later. Results of the endline survey are mixed. On the one hand, treated respondents continue to display greater knowledge about and awareness of climate change compared to their untreated counterparts, indicating that information conveyed by the narrative about climate change stuck in audiences' minds even a year and a half later. On the other hand, effects on political attitudes and priorities diminish during this period; although still positively-signed, the treatment effects now fall short of statistical significance. The results of the endline survey are consistent with theories of agenda-setting, which suggest that media exposure can shape political priorities by making certain issues "top of mind." In the absence of continual exposure to pro-environmental messages, environmental protection may diminish in salience via-a-vis other issues. These latter results are informative for practitioners weighing the relative benefits of one-time versus sustained media campaigns.

In the next section, we provide background information on environmental issues in Tanzania. We then describe the research design and the statistical model before presenting results. We conclude by discussing the implications of our findings for existing scholarship on persuasive messaging on environmental issues and suggest avenues for future research.

2 Background

A sizable body of work documents the direct consequences of climate change on the health and livelihood of people living the Global South. However, a critical but often overlooked *indirect* impact of climate change is its contribution to land conflicts in developing countries (Homer-

Dixon 1991). Global food and energy shortages have increasingly fueled efforts by foreign corporations to acquire arable land and forest and coastal resources in Africa, setting up conflicts with local communities that depend on these resources for their livelihoods. Accusations of "land-grabbing" emerge when outside entities acquire local lands in an opportunistic or inequitable manner, including bribing politicians or enticing local communities to sell off or lease communal lands and environmental reserves. The consequences of land-grabbing can include irreversible degradation of local ecosystems and long-term economic harm to local populations.

The present study takes place in rural Tanzania, where land-grabbing represents a major threat to the environment and to sustainable development. The practice has become increasingly common in recent years. For instance, in 2006, Dutch company Bioshape acquired over 27,000 hectares of village lands in Tanzania's Kilwa district ostensibly to create a biodiesel plantation; the company was later discovered to have logged timber in a rare tropical rainforest and was accused of barring villagers from accessing forest and water resources and of withholding promised economic compensation (Locher and Sulle 2013). In Tanga region, the area of northeastern Tanzania where our intervention takes place, the acquisition of village lands by Italian- and Norwegian-backed enterprises have been linked to ecosystem destruction and resource scarcity (Locher and Sulle 2013). Across Tanzania, over 1,000 cases of land conflicts pitting poor villagers against powerful investors have been documented to date, with roughly three incidents occurring every day (Kiishweko 2012; Nkansah-Dwamena 2021).

Yet villagers are not necessarily without agency in this process. In many cases, land sales must be approved locally, and villagers have been known to mobilize en masse to block deals, as in the case of Vigwaza Kidogozero village in Bagamoyo (Locher and Sulle 2013). One notable success story occurred in 2001 in the Rufiji Delta region. After allegedly bribing Land Ministry officials to sell off 20,000 hectares of protected coastal lands, foreign-backed African Fishing Company sought to build a large shrimp aquaculture facility within a mangrove forest reserve. Environmental groups objected to the project, which would have negatively impacted local endangered species, fish stocks, water and soil quality, and agricultural yields. Ultimately, the plan was aban-

doned after 2,000 Rufiji Delta villagers filed an application with the Tanzanian High Court for permission to sue the government to challenge the approval of the project. In short, villagers can and do engage in successful pro-environmental collective action when motivated to do so.

At the same time, examples abound of villagers failing to reject or acquiescing to land-grabbing deals, whether because they underestimate the long-run negative effects to the environment or because they overestimate the short-term economic returns. In Bagamoyo district, villagers complained of having been "seduced" by promises of new schools and hospitals by Swedish company EcoEnergy, which acquired 5,000 hectares of community-held lands for biofuel and bioelectricity projects in 2016, only to expel villagers from their properties without proper compensation (Makoye 2018); controversy also emerged over the negative effects of the projects on local ecosystems and wildlife sanctuaries. In Kisarawe, villagers complained that Mauritian company 30 Degree East "failed to fulfil its socio-economic promises" after acquiring thousands of hectares village lands for the purposes of establishing a jatropha plantation (Locher and Sulle 2013).

Given that mis- and disinformation about the risks associated with land deals can play a role in causing villagers to acquiesce to land-grabbing, practitioners could potentially leverage entertainment education interventions to generate local opposition to such practices. Indeed, local NGOs like the Climate Action Network have hosted workshops to inform coastal villagers about the benefits of maintaining forest and marine reserves. In addition, more and more community radio stations have sought to call attention to regional environmental issues in their programming. The community radio station Pangani FM, a popular station in the study region, airs daily climate information programs and features climate experts to inform community members about the causes and consequences of, and solutions to, local environmental problems. The growing prevalence of climate-related information campaigns in rural Tanzania serves to motivate our exploration of the causal effects of pro-environmental radio messages.

Besides exacerbating land conflicts, climate change remains a direct threat to villagers' way of life in rural Tanzania. The effects of climate change on crop yields and fish stocks in Tanzania have been well-documented (Ndesanjo et al. 2018). While climatic changes have sparked

important discussions about climate adaptation and mitigation, they also reaffirm the need to protect what natural resources do remain. In this way, interventions that increase knowledge about the seriousness of climate change may motivate citizens to support environmental protection policies, thereby complementing efforts to mobilize opposition to land-grabbing. As such, our intervention seeks not only to alert villagers to the potential dangers of land-grabbing, but also to impart greater knowledge about climate change in general. The following section describes this intervention in greater detail.

3 Research Design

3.1 Intervention

Working in partnership with a local creative agency, Khanga Rue, we designed an original 1-hour Swahili-language radio drama called *Mikoko Yetu*. The drama follows Bakari, a ranger from a coastal fishing village in Tanga, as he seeks to persuade his community to oppose a corrupt bargain between the village leader and foreign developers that would destroy the mangroves upon which the fishermen's livelihood depends. The main plotline centers on Bakari's efforts to run for office on a platform to protect the mangroves and ensure its resources are managed sustainably for the benefit of future generations; meanwhile the incumbent village leader campaigns on his plan to sell the mangroves to make way for a large-scale, foreign-owned shrimp farm. Bakari receives assistance from his enthusiastic colleague Juma, the town's restaurant-owner Mama Siti, and villagers receptive to his message; however, he encounters resistance from some villagers who believe the incumbent's spurious claims of an economic windfall from the deal. The story culminates in Bakari winning the election and the community turning its back on the former village leader after evidence of his malfeasance – including bribe-taking and violent intimidation – is revealed. Along the way, discussions between the characters make reference to other environmental issues such as the causes and consequences of climate change and the threat of illegal logging. The script of the drama can be found in Appendix F.

3.2 Site Selection and Blocking

We conducted an initial census of wards (as defined by the 2018 Tanzanian Census) with at least two villages that met the following criteria: (1) they were located at least 4 kilometres from a major town or city; (2) no main or secondary road ran through the village and its immediate surroundings; (3) at least 60 households resided within a 1,000 meter radius of the village center, as estimated from satellite images; (4) a ward contained at least two villages 2.5 kilometres from one another; and (5) the villages were unable to receive Pangani FM's radio signal.

We identified 17 wards with 34 villages in the vicinity of Tanga and Korogwe, two mid-sized cities in Tanga Region. The sample is composed of rural villages in which natural resources play a direct role in villagers' livelihoods. Of the 1,360 villagers in the sample, more than two-thirds of men and women were either farmers, herders, fishermen or fishmongers. The 34 villages comprised a mix of coastal and inland towns with a range of natural resources. Eight villages were within close proximity of the coast such that at least some villagers depended on marine and coastal resources like mangroves for their livelihood; the remaining 26 villages were located inland, where forests, rangelands, and pastures are vital for villagers' livelihoods.

3.3 Randomization

One key feature of the design is cluster randomization. Villages were blocked into 17 wards and randomly assigned with equal probability to either *Mikoko Yetu* (focusing on environmental protection) or a placebo control drama (focusing on gender-based violence).[2] This randomization strategy yielded treatment and control group of equal sizes and comparable across a large range of covariates measured at baseline. Table A8 confirms that experimental groups were balanced with respect to 89 covariates.

3.4 Data Collection Procedures

In the baseline survey, conducted prior to randomization, we targeted 1,360 surveys with respondents between 18 and 65 years of age (40 per village, for a total of 680 male and 680 female

[2]The placebo drama contained no references to the environment, land-grabbing, climate change, corruption, or elections.

respondents). Within each village, households were sampled from a circular area around the village center. The village center was identified using satellite images in QGIS. The research team picked an appropriate radius between 200 and 1,000 meters for each village based on the population density of the village inferred from satellite images. The mobilization team conducted a household census within the designated village area. To be eligible, members of the household must have resided in the village for at least six months and at least one member of the household must have been between 18 and 65 years old. The survey team then generated a list of 40 randomly selected households from the village census as well as 20 substitute households in case of ineligibility or nonresponse.

One or two days after the mobilization team conducted the household listing, the survey team visited the 40 targeted households. Surveyors and respondents were matched by gender. Upon reaching the household, the surveyor listed all household members of the designated gender between the ages of 18 and 65, and randomly selected one of them as the respondent.

In cases in which no household member were of the designated gender and age category, or in which the respondent was unable or unwilling to complete the survey, the survey team replaced them with the next randomly selected household. Only the 40 respondents who completed the survey were invited to the village screening, though respondents were told that they were welcome to bring a friend or relative to the screening if they wished.

Screenings were held one or two days later. Participants were invited to the screenings at the end of a baseline interview. They were told that the screenings feature free refreshments and that the screenings are free of charge. Importantly, respondents were not told about the content of the program. (In fact, the baseline interviewers were unaware of which villages would be assigned to treatment or placebo dramas.) A member of the screening team took attendance immediately before, during, and at the conclusion of the screening. The screening team introduced the drama as *Mikoko Yetu*, clarifying the meaning of the word "mikoko" (mangrove forest), which may have been unfamiliar to some residents of inland villages; however, the screening team otherwise provided no commentary and took care neither to moderate nor interfere in discussion if it were to

arise organically. The screening team played the radio drama on portable speakers to an audience seated on chairs in an outdoor public space, or indoors if it was raining. Compliance rates were high: across the 34 villages, 90.7% of respondents were present at the start of the screening and 91.3% were present at the end. As explained below, our experimental analysis focuses solely on "compliers," those who were present at the beginning of either the treatment or placebo audio screening. Table A8 confirms that these groups, as expected, have very similar demographic profiles and baseline views about environmental and other issues.

We visited respondents and invited them to to participate in a follow-up survey that measured outcomes 4 weeks after the audio screening and again 18 months after the screening. Attrition in both surveys was low: 98% of audio screening attendees completed the 4-week follow-up survey and 96% completed the 18-month follow-up.

3.5 Outcomes and Measurement

In keeping with our pre-analysis plan, we estimate the effect of the treatment drama on five broad categories of outcomes: environment-related attitudes and norms, political priorities, knowledge, reporting and punishment, and behavioral intentions.[3]

The first of our cognitive attitude measures asks respondents to weigh the relative benefits of environmental protection and economic development; specifically, respondents are asked whether the country should prioritize protecting the environment even if it means foregoing big economic development projects like power plants and plantations, or whether big development projects that help bring clinics and schools should be prioritized even if it means hurting the environment. The second cognitive attitude measure involves a brief vignette about a hypothetical neighboring town considering what to do with its forest lands. Respondents are asked which of the following they agree with more: a proposal by a politician to sell forest lands to developers in order to bring immediate development to the community, or a counter-proposal by a second

[3]The pre-analysis plan also calls for estimation of treatment effects on secondary outcomes, namely respondents' prioritization of corruption and bribe-taking and their feeling thermometer rating for local politicians, which plausibly could have been affected by the drama's negative portrayal of the incumbent politician. Results can be found in Appendix A; we observe no apparent effect of the drama on these more speculative secondary outcomes.

politician to turn the forest into a reserve to ensure benefits for future generations. For both cognitive attitudes measures, responses were scored 1 if respondents expressed support for the pro-environmental protection policy and 0 otherwise. We also report a cognitive attitudes index score that is the mean of the two cognitive attitudes scores. In addition, we include a conative attitudes measure that gauges respondents attitudes toward actions to manage the commons. We ask respondents which of the following they agree with more: a friend who says that it is acceptable to cut wood without a permit because everyone does it or a friend who says that it is best to pay to obtain firewood legally even if others cut wood illegally. Our perceived norms measure then asks respondents how they think most people in the community would answer. In both cases, responses were scored 1 if the respondent selected the second friend and 0 otherwise.

Next, we consider three measures of political priorities, or the importance respondents afford to environmental issues. The first measure probes respondents' voting preferences in a hypothetical election in which a candidate running on a platform to protect the environment faces off against a candidate promising to either bring roads to the community or crack down on stealing. The platform of the non-environment candidate is randomized, as is both candidates' gender and religion. Responses are scored 1 for voting for the environmental protection platform and 0 otherwise. For the second measure of priorities, respondents are given three laminated cards, each with a different policy goal: protecting the environment, improving health and clinics, and increasing agricultural equipment. Respondents are asked to rank the cards in order from their highest-priority goal for the village to their lowest-priority goal. Responses were scored 1 if environmental protection was chosen as a first priority, 0.5 if chosen as a second priority, and 0 if chosen as a last priority. The third prioritization measure presents respondents with four cards, each with a different problem facing the community: people harming the environment; men abandoning their families; people bribing public officials; and villagers not practicing their religion. Respondents are asked to put the cards in order from biggest problem in their village to smallest problem. Responses were scored 1 if environmental harm was chosen as the top problem, 0.75 if chosen as the second most important problem, and 0.25 if chosen as the third most

important problem, and 0 if chosen as the least important problem.

Our survey included three measures of climate change-related knowledge, which are modeled after the Afrobarometer survey's questions. First, we ask respondents whether they are familiar with the phrase "climate change," and if so, what it means to them. Responses were coded 0 if respondents had never heard of climate change, 1 if respondents had heard of climate change but were unable to describe the concept, and 2 if respondents had heard of climate change and were able to correctly describe it.[4] Respondents were deemed to have correctly described climate change if they referenced negative changes in temperature or weather patterns, negative changes in the health of flora and/or fauna, or gaseous emissions in the atmosphere. Next, we asked respondents to identify the causes of environmental problems in their community. To measure respondents' knowledge about the human-related causes of environmental problems, we coded responses as 0 if humans were never listed as a cause, 1 if humans were listed as a secondary cause only, and 2 if humans were listed as a primary cause. To measure knowledge about the international factors responsible for environmental problems, we coded responses as 0 if international factors were never listed as a cause, 1 if international factors were listed as only a secondary cause, and 2 if international factors were listed as a primary cause. In addition, we report a knowledge index score that is the mean of the three measures of climate change knowledge.

3.6 Estimation

Ordinary least squares regression is used to estimate the effectiveness of the audio screening treatment. For purposes of estimation, the pool of subjects is restricted to compliers, i.e., those who complied with the invitation to attend a radio screening (either the treatment screening on environmental protection or the placebo screening on gender based violence). Let Y_i denote the survey outcome for subject i, and let T_i denote this subject's assigned treatment (1 if *Mikoko Yetu*,

[4] In the endline survey, we removed the "have you heard of climate change" question because all respondents heard abotu climate change during the midline survey. The endline outcome variable takes the value 1 if the respondent correctly defined climate change and 0 if they did not.

0 if the placebo drama). The regression model

$$Y_i = \beta T_i + \gamma_1 ward_{1i} + \gamma_2 ward_{2i} \ldots + \gamma_k ward_{ki} + u_i$$

expresses the outcome as a linear function of the randomly assigned treatment, indicator variables for each of the k wards (blocks), and an unobserved disturbance term u_i. The key parameter of interest is β, which represents the complier average causal effect (CACE). Because assignment to treatment occurs at the village level, we report clustered standard errors. Exact p-values are calculated using randomization inference under the sharp null hypothesis of no treatment effect for any unit.

This regression model may also be used to confirm some basic assumptions about noncompliance and attrition. Table A10 shows that audio screening attendance is not significantly related to treatment assignment at the 0.05 level once one accounts for LASSO-selected prognostic covariates, as would be expected given that enumerators were blind to treatment condition. That said, attendance was slightly higher in the placebo condition (94.85%) than the treatment condition (91.25%) due to idiosyncratic events on the day of the screening in some treatment villages, including a job action at a nearby sisal plantation in one village and heavy rains in two villages. However, because villagers and enumerators were blind to which drama was to be presented at the screening, we attribute this difference to bad luck rather than to systematic differences between the treatment and placebo control interventions.[5] Turning from compliance to attrition, we see that missingness from the post-treatment survey is unrelated to treatment assignment (Table A10). Overall, it appears safe to assume that the placebo controlled design and outcome assessment preserves the independence of treatment assignment and potential outcomes.

In keeping with our pre-analysis plan, our analysis of the substantive outcomes also reports covariate-adjusted regression results. The LASSO procedure selects prognostic covariates from a

[5]To demonstrate that the results hold up even when noncompliers are included, Appendix E presents results showing the effects of assigned treatment, rather than actual attendance at *Mikoko Yetu* (i.e. the intent-to-treat effect); the results are scarcely different from those report in subsection . Moreover, Table A9 shows that experimental groups are still balanced across a range of covariates even when one accounts for non-compliers.

set of variables collected during the baseline survey (these variables are listed in **??**) as well as the blocking indicator variables. The number of selected covariates varies depending on the outcome, but due to the similarity across experimental groups at baseline, the estimates after adjustment resemble estimates without adjustment across all analyses.

4 Results

4.1 Baseline

Before presenting the main results, we begin by describing environmental beliefs and attitudes among respondents in the pre-treatment baseline survey or, where such data is not available, in the control group of the follow-up survey. Given the relative lack of public opinion data on environmental attitudes in Africa and the developing world, we see these descriptive findings as interesting in their own right. While Godfrey et al. (2012) and recent iterations of the Afrobarometer survey have sought to assess the state of climate change-related knowledge in Africa, few surveys have explored the extent to which Africans support and prioritize environmentally-friendly policies and candidates, especially when weighed against other concerns (for an exception, see Obradovich and Zimmerman 2016).

Our survey finds generally supportive attitudes toward environmental protection at baseline. Some propositions appear to split opinion; for instance, 65 percent of respondents in the baseline survey prioritized environmental protection over large-scale economic development.[6] Other propositions received greater support: fully 92 percent of baseline respondents agreed with a politician proposing that forest resources be turned into a reserve as opposed to a politician proposing they be sold off. While most baseline respondents said they would not log trees without a permit themselves (79%), they were less certain that others would do the same (56%).

Yet respondents' support for environmental protection did not necessarily translate into prioritization of environmental issues: on the whole, respondents did not see environmental protec-

[6]We also found that 53 percent did so in the control group of the follow-up survey; however, this question was changed between baseline and follow-up to emphasize the potential benefits of development, accounting for the drop in support for environmental protection.

tion as a top political concern given the plethora of other policy issues that demanded on their attention. Given a choice in a hypothetical election between a candidate promising to protect the environment or a candidate promising to either improve roads or improve schools, 38 percent of respondents in the control group of the follow-up survey chose the conservationist platform.[7] When respondents in the baseline survey were asked to rank seven village priorities from most important to least important, protecting the environment was listed second to last on average – ahead of reducing early marriage but behind improving access to health, water, education, roads, and electricity. Environmental concerns, in sum, are common but not predominant, in line with prior research finding that African voters do not prioritize environmental issues at the ballot box (Obradovich and Zimmerman 2016).

Knowledge gaps related to climate change are rather striking. In the control group of the follow-up survey, 44 percent of respondents had never heard of climate change and 28 percent had heard of it but could not correctly describe it; only 28 percent of baseline respondents had heard of climate change and were able to reference harmful emissions in the atmosphere, negative changes in the weather like droughts, floods, and heat, or harms to wildlife. This lack of familiarity with climate change reflects broader patterns in Africa: in Afrobarometer's 2016-2018 survey of nearly 46,000 individuals in 34 countries, 41 percent of respondents had not heard of climate change; only 37 percent had heard of climate change and were able to correctly describe it. When asked about the causes of climate change, 70 percent of respondents in the control group of our follow-up survey saw human-related activity as the primary cause, with the remainder pointing to natural variation in weather patterns, supernatural forces, or God; similarly, 73 percent of Afrobarometer respondents identified human activity as a driver of climate change. Interestingly, respondents in the control group of our follow-up survey tended to believe that people in their own village (50%) or in neighboring villages (13%) were to blame for environmental problems in their community, with only nine respondents identifying actions by people outside of Tanzania (<1%).

Still, respondents shared a general sense that the environment was in decline: fully 88 percent

[7]The pro-environmental candidate received 28 percent of the vote when running against a candidate promising to improve schools and 54 percent against a candidate running on a platform to build roads.

of baseline survey respondents said that environmental conditions had worsened in the last ten years. The proportion of respondents identifying negative environmental changes was far greater in our sample than the Afrobarometer sample (58%), perhaps reflecting rural Tangans' vulnerability to environmental threats. Overall, our findings with respect to climate change-related beliefs echo those of Godfrey et al. (2012), who find that Africans share widespread concerns about environmental issues, but that they often struggle to link the trends they observe locally to the more general concept of global climate change.

Some respondents were also willing to engage in community-level collective action to protect the environment. When they were presented with the possibility of attending up to 5 workshops about environmental protection, respondents expressed a willingness to attend 3.75 workshops on average. However, just 23 percent of respondents reported having worked with other members of their village to raise an environmental issue to government officials in the previous year.

Finally, we report respondents' views about policing the commons. Respondents appear to show some willingness to monitor, report, and punish environmental offenders without necessarily adopting a draconian approach. Thirty-one percent of respondents saw a fine as an appropriate punishment for an illegal logger; the next most popular response was no punishment (26%) and the remainder of respondents suggested prison sentences of a few days (3%), a few months (12%), one year (9%), 1-5 years (12%), and over five years (8%). Sixty-six percent of respondents thought that villagers should monitor and report farmers who start fires in dry season.

4.2 Midline results

Given the initial levels of support for environmental protection, prioritization of environmental issues, knowledge about climate change, and willingness to report and punish offenders, how did audiences respond to the treatment drama?

Beginning with the outcome of knowledge about climate change, we find that respondents who listened to the drama became more likely on average to say that they had heard about climate change and to correctly describe the concept, an effect size equivalent to about a village-level standard deviation (Table 1). However, we do not detect statistically significant effects on respon-

dents' belief that human activity and people outside of the village affect the natural environment. Overall, the average effects of the drama on an index of climate change-related knowledge is positive, marginally significant, and equivalent in magnitude to about half a village-level standard deviation. It seems that the radio drama imparted general knowledge about climate change and its consequences. That said, a drama focusing more heavily on educating audiences about climate change might lead to a more granular understanding of the causes of environmental problems in the community.

Table 1: Effect of Environmental Drama on Knowledge about the Environment
4 weeks after exposure

	Index		Climate change know		Humans affect env.		Outsiders affect env.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.043**	0.033**	0.055**	0.059***	0.035	0.015	0.001	0.001
Standard Error	0.017	0.015	0.016	0.016	0.019	0.016	0.005	0.006
RI *p*-value	0.046	0.043	0.021	0.001	0.111	0.242	0.434	0.458
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.61	0.61	0.41	0.41	0.70	0.70	0.01	0.01
Village Control SD	0.06	0.06	0.05	0.05	0.07	0.07	0.01	0.01
DV Range	[0-2]	[0-2]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	34	No	38	No	49	No	1
Adj-R^2	0.01	0.23	0.01	0.23	0.01	0.15	-0.00	0.01
Observations	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251

Note: Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply greater knowledge. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report results for responses to the questions: "Have you heard about climate change or haven't you had the chance to hear about this yet?" and "What does the phrase climate change mean to you?" Responses were scored 0 if respondent has never heard of climate change, 1 if respondent has heard of climate change but does not know meaning, and 2 if respondent knows meaning of climate change. Columns 5 and 6 report results for responses to the questions: 'What do you think is the primary cause of environmental problems in your community? By environment, we mean things from the earth like the air, water, trees, grass, animals and fish." and "Is there anything else you think contributes to environmental problems that you would like to mention?". Responses were scored 0 if humans were never listed as a cause, 1 if humans were listed as a secondary outcome only, and 2 if humans were listed as a primary and secondary outcome. Columns 7 and 8 report results for responses to the same question as columns 5 and 6. Responses were scored 0 if international factors were never listed as a cause, 1 if international factors were listed as only a secondary cause, and 2 if international factors were listed as a primary cause.

Turning to the outcome of political attitudes, we find statistically significant positive effects of the radio drama on policy attitudes related to environmental protection (Table 2). On average, treated respondents become 7.6 percentage points more likely to say that environmental protection should be prioritized over the implementation of large-scale development projects and two percentage points more likely to agree with a politician suggesting that forest lands be turned into an environmental reserve instead of a politician arguing that they be sold to developers. Combining these measures into a single index per our pre-analysis plan, the treatment drama led to a roughly 4 percentage point increase in the cognitive attitude index score on average, equivalent to about a village-level standard deviation. However, we do not observe statistically significant average effects on respondents' willingness to refrain from obtaining firewood without a permit or on respondents' perception that others in the community would do the same (Table A18). Overall, then, the intervention made respondents more supportive of policies to protect the environment without necessarily affecting attitudes and norms about individual-level behavior. At the same time, the null results for conative attitudes and norms imply that social desirability bias is fairly muted: respondents in the treatment group did not simply endorse all pro-environment stances across the board in order to please interviewers.[8]

[8]In order to minimize social desirability pressures, no respondents were interviewed by the same surveyor at baseline and endline.

Table 2: Effect of Environmental Drama on Attitudes about Environmental Conservation
4 weeks after exposure

	Index		Enviro > dev projects		Preserve forest > sell	
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	0.051***	0.044***	0.076***	0.063**	0.026***	0.018**
Standard Error	0.010	0.013	0.019	0.021	0.007	0.009
RI p-value	0.002	0.001	0.009	0.010	0.008	0.049
Hypothesis	+	+	+	+	+	+
Control Mean	0.72	0.72	0.53	0.53	0.90	0.90
Village Control SD	0.04	0.04	0.08	0.08	0.04	0.04
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No
Controls	No	19	No	26	No	23
Adj-R^2	0.00	0.07	0.01	0.08	0.01	0.06
Observations	1,251	1,251	1,251	1,251	1,251	1,251

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1 and 2 report results for an index that is the mean of the two cognitive outcomes outcomes. Columns 3 and 4 report results for responses to the question: *"People in Tanzania have different ideas about how to balance development and the environment. Please tell me which statement you agree with more: Statement 1: 'In Tanzania we must prioritize protecting the environment, even if it means giving up on big economic development projects like electricity projects or large-scale farming.' Statement 2: 'In Tanzania we must prioritize big economic development projects that help bring clinics and schools to our community, even if it means we hurt our environment."'* Responses were scored 1 if the respondent agreed with statement 1, and 0 otherwise. Columns 5 and 6 report results for responses to the questions: *"Imagine that a nearby community is considering whether to set aside some forest land to protect the environment. Two politicians are arguing about whether it is a good idea. Which politician do you agree with more? Politician 1: We should sell the forest land to bring development to our community Politician 2: Let's turn the forest land into a reserve so that in the future the village will have more resources"*. Responses were scored 1 if the respondent agreed with Politician 2, 0 otherwise.

Next, we find that the drama has statistically significant positive effects on outcomes related to political prioritization of environmental protection (Table 3). On average, treated respondents become seven percentage points more likely to vote for hypothetical candidates promising to protect the environment over candidates running on alternative platforms. The drama also increases respondents' average ranking of environmental protection as a village goal by about four points and their ranking of environmental degradation as a village issue by around six or seven points. Averaging across these three measures of political priorities, the radio drama increased respondents' index score by an amount equivalent to a village-level standard deviation. Clearly,

in keeping with research highlighting the agenda-setting effects of media (Green et al. 2021), the drama had a substantial influence on which issues villagers took to be important.

Table 3: Effect of Environmental Drama on Prioritization of Environmental Conservation
4 weeks after exposure

	Index		Vote enviro. platform		Village goal		Village problem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.060***	0.048***	0.067**	0.062**	0.045**	0.042**	0.070***	0.059**
Standard Error	0.011	0.010	0.026	0.029	0.014	0.015	0.017	0.016
RI *p*-value	0.001	0.001	0.041	0.048	0.020	0.021	0.007	0.013
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.41	0.41	0.38	0.38	0.37	0.37	0.48	0.48
Village Control SD	0.05	0.05	0.09	0.09	0.06	0.06	0.08	0.08
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	30	No	17	No	23	No	43
Adj-R^2	0.02	0.13	0.01	0.06	0.01	0.08	0.02	0.10
Observations	1,251	1,251	1,251	1,251	1,230	1,230	1,230	1,230

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental priorities. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report results for responses to the question: *"Imagine a village about one day's walk from here is having an election for village chairperson. There are two candidates giving speeches. Let me tell you about each one and you can tell me which of the two you think should be elected. The first candidate is named [randomize: Mr. Salim, Mr. John, Mrs. Mwanahidi, Mrs. Nema] and [he / she] promises to protect the environment. Their slogan is Cut Down One Tree, Plant Many Trees." The second candidate is named [randomize: Mr. Salim, Mr. John, Mrs. Mwanahidi, Mrs. Nema] and [he/she] promises to [randomize: improve roads / crack down on stealing]. Their slogan is ["Bring roads to our community" / "Stop stealing in our community"]. Which of these two candidates do you think should be elected?"* The responses are scored as 1 for voting for the environmental protection platform, 0 otherwise. Columns 5 and 6 report results for responses to the question: *"Here is a set of cards, which show different goals for your village (Protecting the environment; health and clinics; increased agricultural equipment). Now, please rank them in order from the most important to the least."* Columns 7 and 8 report results for responses to the question: *"Here is a set of cards, which show different social problems in villages in Tanzania. Now, please put them in order, from biggest problem to smallest problem. [Hurting the environment; men abandoning their families; Bribing of public officials; Not practicing religion much.]".*

Finally, we turn to the outcomes of reporting and punishing those who harm the environment. Earlier, we observed substantial effects of the drama on attitudes and priorities related to environmental protection; do these effects filter down to views about policing the commons in daily life? The answer appears to be no (Table A18). On average, we see no effect on the severity of punish-

ment respondents would mete out to an illegal logger nor on their willingness to report a farmer who sets a fire without a permit. Relatedly, treated respondents appear no more willing to attend a workshop on environmental issues than untreated respondents. In short, treated respondents do not seem to have changed their views on aspects of environmental protection not explicitly depicted in the drama, especially individual-level responsibility to protect the environment.

4.3 Endline results

Finally, we present the results of the endline survey conducted 18 months after the initial audio screening. Given the long delay between the screening and the endline survey, one might have limited expectations about the persistence of the treatment effects observed at midline. Yet, when it comes to knowledge-related outcomes, we continue to see evidence of movement (Table A3). After a year and a half, treated respondents are still about five percentage points more likely than untreated respondents to know about climate change and be able to explain its negative repercussions. This effect is equivalent to about half a village-level standard deviation. Environmental knowledge index scores are about two percentage points higher in the treatment group than the control group – a marginally statistically significant result.

However, treatment effects on political attitudes and priorities appear to decay over time. By endline, treated respondents score only about two percentage points higher than untreated respondents on the index of pro-environmental attitudes (Table A4) and the index of political priorities (Table A5). Respondents were also no more likely to have worked together with other villagers to raise an environmental issue to government officials (Table A6). Although positive, these treatment effects fall short of conventional levels of statistical significance.

5 Conclusion

Collective political action is often required to ward off environmental threats, yet such efforts run up against the generally low levels of knowledge about, electoral support for, and prioritization of environmental protection in many parts of the developing world. In northeastern Tanzania, where land-grabbing increasingly threatens rural ecosystems and livelihoods, our baseline

public opinion survey indicates that environmental protection is regarded favorably but does not necessarily take precedence when it comes to respondents' political priorities and voting decisions. This study explores whether culturally-tailored edutainment interventions can increase support for environmental protection among Tanzanians. Specifically, we employ a placebo controlled field experiment to estimate the persuasive effects of a radio drama in which villagers are depicted taking political action to protect a mangrove forest from foreign developers and local politicians.

After four weeks, we see substantial and significant effects of the drama on outcomes closely related to the main plotline. After listening to the drama, respondents became more likely on average to have heard about climate change and to be able to accurately describe it. With respect to policy attitudes, the drama elevated respondents' preference for environmental protection over large-scale economic development and increased their support for policies to create and maintain forest reserves. When it comes to measures of political priorities, the drama substantially increased respondents' propensity to vote for hypothetical candidates promising to protect the environment. It also made respondents more likely to view environmental protection as a top village priority and environmental degradation as a communal concern. In short, the drama shifted a range of politically-relevant outcomes related to environmental protection, especially support for environmental protection as a local priority. The drama also increased respondents' familiarity with the concept of climate change.

Yet in the absence of repeated messaging, some of these effect appear to decay over time. Although treated respondents retain higher levels of knowledge about the environment after a year and a half, their political attitudes and priorities become similar to those in the control group. These results point to the potential importance of repeated, sustained media campaigns rather than one-time interventions. Future studies might build upon the results presented here by randomizing exposure to pro-environmental media campaigns over a longer time period.

Moreover, the drama exerted muted effects on two sets of outcomes. The first were measures of effortful behavior such as attending community workshops on the environment or speaking

out about environmental issues in community meetings. The second were outcomes that were either the secondary focus of the drama or not mentioned explicitly in the story, including disapproval of small-scale illegal logging and willingness to report and punish local environmental offenders. In line with past findings (Green et al. 2020), these null results suggest edutainment shapes attitudes and beliefs directly related to the plot without necessarily trickling down to other outcomes. In this case, the drama's focus on collective responses to environmental issues such as policy-making and electoral participation left respondents' views on individual-level pro-environmental behavior largely unchanged.

Our study joins a growing body of experimental work finding evidence of edutainment effects across a range of substantive domains (Banerjee et al. 2019; Blair et al. 2019; Paluck and Green 2009), including environmental beliefs and behaviors (Bilandzic and Sukalla 2019; Boze 2020; Moyer-Gusé and Dale 2017; Zimmerling 2012). Yet unlike much of this literature, our study extends its focus to political outcomes such as policy priorities and voting. Our positive results are consistent with those of Green et al. (2021), who find evidence of changes in political priorities and voting following exposure to an HIV-related drama, although they contrast with the muted findings in Wilke et al. (2022) on teacher absenteeism. Taken together, the results raise the intriguing possibility that entertainment can and does shape political outcomes, especially when the drama itself depicts effective political action.

Finally, our results can help inform efforts by practitioners to combat environmental threats. Solutions to climate change often center on either micro-level efforts by individuals to reduce their carbon footprints or macro-level international policies. The edutainment intervention studied here seeks to connect the two by encouraging individuals to support pro-environmental policies at the local and national level. Moreover, the fact that our drama is carried on the radio, the most widely used and the cheapest mass communication medium in Africa, suggests the possibility of a scalable intervention. Whether the positive treatment effects we observe on policy priorities and hypothetical voting translate into real-world political outcomes is a topic worthy of future research.

References

Areal, F. J., Clarkson, G., Garforth, C., Barahona, C., Dove, M., and Dorward, P. (2020). Does TV edutainment lead to farmers changing their agricultural practices aiming at increasing productivity? *Journal of Rural Studies*, 76:213–229.

Banerjee, A., Ferrara, E. L., and Orozco-Olvera, V. H. (2019). The entertaining way to behavioral change: Fighting HIV with MTV. *NBER Working Paper*.

Bilandzic, H. and Sukalla, F. (2019). The Role of Fictional Film Exposure and Narrative Engagement for Personal Norms, Guilt and Intentions to Protect The Climate. *Environmental Communication*, 13(8):1069–1086.

Blair, G., Littman, R., and Paluck, E. L. (2019). Motivating the adoption of new community-minded behaviors: An empirical test in Nigeria. *Science Advances*, 5(3):eaau5175.

Boze, T. C. (2020). The Influence of Message Type, Environmental Attitude, and Political Ideology on Perceptions of Aquaculture in the United States. *University of Maine Digital Commons*, page 121.

Clarkson, G., Garforth, C., Dorward, P., Mose, G., Barahona, C., Areal, F., and Dove, M. (2018). Can the TV makeover format of edutainment lead to widespread changes in farmer behaviour and influence innovation systems? Shamba Shape Up in Kenya. *Land Use Policy*, 76:338–351.

Collier, P., Conway, G., and Venables, T. (2008). Climate change and Africa. *Oxford Review of Economic Policy*, 24(2):337–353.

Godfrey, A., Burton, M., and LeRoux-Rutledge, E. (2012). "Africa Talks Climate". In *The Handbook of Global Media Research*, chapter 29, pages 504–520. John Wiley & Sons, Ltd.

Green, D. P., Groves, D. W., and Manda, C. (2021). A Radio Drama's Effects on HIV Attitudes and Policy Priorities: A Field Experiment in Tanzania. *Health Education & Behavior*, 48(6):842–851.

Green, D. P., Wilke, A., and Cooper, J. (2020). Countering violence against women at scale: A mass media experiment in rural Uganda. *Comparative Political Studies*.

Homer-Dixon, T. F. (1991). On the Threshold: Environmental Changes as Causes of Acute Conflict. *International Security*, 16(2):76–116.

Kiishweko, O. (2012). Tanzania takes major step towards curbing land 'grabs'. *The Guardian*.

Locher, M. and Sulle, E. (2013). Foreign land deals in Tanzania: An update and a critical view on the challenges of data (re)production. Technical Report 13, Land Deal Politics Initiative (LDPI).

Makoye, K. (2018). The Bigger Hidden Cost Behind Tanzania's $2B Hydropower Project.

Moyer-Gusé, E. and Dale, K. (2017). Narrative Persuasion Theories. In *The International Encyclopedia of Media Effects*, pages 1–11. American Cancer Society.

Moyer-Gusé, E., Tchernev, J. M., and Walther-Martin, W. (2019). The Persuasiveness of a Humorous Environmental Narrative Combined With an Explicit Persuasive Appeal. *Science Communication*, 41(4):422–441.

Ndesanjo, R., Ngana, J. O., and Yanga, P. Z. (2018). Climate Change Impact and Adaptive Strategies in the Rufiji Delta, Tanzania. *Utafiti Journal*, 9(1&2).

Nkansah-Dwamena, E. (2021). Can large-scale land acquisition deals improve livelihoods and lift people out of poverty in sub-Saharan Africa? Empirical evidence from Tanzania. *Journal of Agriculture, Food Systems, and Community Development*, 10(3):243–264.

Obradovich, N. and Zimmerman, B. (2016). African voters indicate lack of support for climate change policies. *Environmental Science & Policy*, 66:292–298.

Paluck, E. L. and Green, D. P. (2009). Deference, Dissent, and Dispute Resolution: An Experimental Intervention Using Mass Media to Change Norms and Behavior in Rwanda. *American Political Science Review*, 103(4):622–644.

Selormey, E., Dome, M., Osse, L., and Logan, C. (2019). Change ahead: Experience and awareness of climate change in Africa. *Afrobarometer Policy Paper*, 60.

Wilke, A. M., Green, D. P., and Tan, B. (2022). Encouraging Community Action Against Teacher Absenteeism: A Mass Media Experiment in Rural Uganda. *The Journal of Development Studies*, 58(5):915–930.

Zimmerling, A. (2012). Evaluating the Relative Effectiveness of Utilitarian and Existence Value Appeals for Promoting Ecocentric Concern and Pro-Environmental Behavior. *University of Maryland Electronic Dissertations*, page 145.

Supplemental Materials for *Radio Dramas Can Build Political Support for Environmental Protection: Experimental Evidence from Rural Tanzania*

October 8, 2024

Contents

A Additional Results Tables **30**

A.1 Midline 30

A.2 Endline 32

B Balance **37**

C Compliance and Attrition **40**

D Robustness Check: Results with All Respondents **41**

D.1 Midline 41

D.2 Endline 43

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E Heterogeneous Treatment Effects: Coastal Villages **46**

F Intervention Script **47**

A Additional Results Tables

A.1 Midline

Table A1: Effect of Environmental Drama on Reporting, Punishment, and Behavioral Intentions, Four Weeks After Exposure

	Reporting and Punishment						Behavioral Intention	
	Index		Punish deforesters		Report firestarters		Meetings Would Attend	
	(1)	(2)	(3)	(4)	(5)	(6)	(5)	(6)
Enviro Treat	-0.002	-0.006	-0.046	-0.026	0.003	0.000	0.044	0.016
Standard Error	0.013	0.013	0.139	0.152	0.019	0.019	0.080	0.091
RI p-value	0.890	0.680	0.795	0.530	0.935	0.495	0.697	0.410
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.51	0.51	2.20	2.20	0.65	0.65	3.75	3.75
Control SD	0.07	0.07	0.47	0.47	0.12	0.12	0.22	0.22
DV Range	[0-1]	[0-1]	[0-6]	[0-6]	[0-1]	[0-1]	[0-5]	[0-5]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	21	No	23	No	27	No	24
Adj-R^2	0.04	0.11	0.06	0.07	0.01	0.10	-0.01	0.08
Observations	1,231	1,231	1,224	1,224	1,231	1,231	1,246	1,246

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply progressive attitudes or intentions. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report results for responses to the questions: *"Imagine you were a judge and you had to decide the sentence for certain crimes. A [randomize: poor / rich] man is brought to you who has illegally cut down [randomize: 10, 20, 30, 40, 50] trees in a protected area. How long should his punishment be?"* Responses were scored 0 to 6 based on severity of punishment. Columns 5 and 6 report results for responses to the questions: *"Imagine that two of your friends from your village are having a conversation about starting fires in the dry season without a permit. Each friend shares a different opinion about how villagers should respond. Which friend do you agree with? Friend 1: It is every villager's responsibility to monitor and report those farmers who break the rules by burning young trees in the dry season. Friend 2: Villagers should not get involved in the business of other farmers, they should let the government decide what to do."*.

Table A2: Effect of Environmental Drama on Perceptions and Prioritization of Corruption, Four Weeks After Exposure

	Index		Corrupt. perceptions		Social priority		Local leader thermo	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.013	0.013	0.024	0.023	0.078	0.078	-0.005	-0.011
Standard Error	0.013	0.012	0.026	0.024	0.053	0.065	0.021	0.018
RI *p*-value	0.218	0.215	0.246	0.229	0.151	0.148	0.564	0.669
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.82	0.82	1.28	1.28	2.21	2.21	0.63	0.63
Village Control SD	0.04	0.04	0.11	0.11	0.17	0.17	0.06	0.06
DV Range	[0-2]	[0-2]	[1-2]	[1-2]	[1-4]	[1-4]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	27	No	36	No	2	No	28
Adj-R^2	0.02	0.10	0.02	0.08	-0.00	0.02	0.01	0.12
Observations	1,251	1,251	1,251	1,251	1,230	1,230	1,229	1,229

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply progressive attitudes or intentions. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report the results of response to the question "Do you think that corruption and bribe-taking among local politicians in Tanzania is pretty widespread or pretty rare?" Responses were scored 0 for "pretty rare" and 1 for "pretty widespread." Columns 3 and 4 report results for responses to the question: *"Here is a set of cards, which show different social problems in villages in Tanzania. Now, please put them in order, from biggest problem to smallest problem. [Hurting the environment; men abandoning their families; Bribing of public officials; Not practicing religion much.]"*. Columns 7 and 8 report the results for responses to the question: *"point to the thermometer (0-100) to show how much you like the following groups: [local political leaders]"*. The score is reverse coded and divided by 100.

A.2 Endline

Table A3: Effect of Environmental Drama on Knowledge about the Environment
16-17 months after exposure

	Index		Climate change know		Humans affect env.		Outsiders affect env.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.022	0.025*	0.052***	0.054***	0.005	0.009	0.008	0.004
Standard Error	0.013	0.010	0.010	0.016	0.025	0.018	0.013	0.013
RI p-value	0.140	0.060	0.002	0.007	0.464	0.382	0.349	0.425
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.42	0.42	0.39	0.39	0.84	0.84	0.04	0.04
Village Control SD	0.06	0.06	0.10	0.10	0.09	0.09	0.04	0.04
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	38	No	28	No	32	No	12
Adj-R^2	0.05	0.15	0.03	0.09	0.03	0.13	-0.00	0.05
Observations	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223

Note: Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply greater knowledge. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report results for responses to the questions: "Have you heard about climate change or haven't you had the chance to hear about this yet?" and "What does the phrase climate change mean to you?" Responses were scored 1 if respondent does not know meaning of climate change, and 1 if respondent knows meaning of climate change (unlike the midline survey, the endline survey did not ask whether respondents had ever heard of climate change). Columns 5 and 6 report results for responses to the questions: 'What do you think is the primary cause of environmental problems in your community? By environment, we mean things from the earth like the air, water, trees, grass, animals and fish." and "Is there anything else you think contributes to environmental problems that you would like to mention?". Responses were scored 0 if humans were never listed as a cause, 1 if humans were listed as a secondary outcome only, and 2 if humans were listed as a primary and secondary outcome. Columns 7 and 8 report results for responses to the same question as columns 5 and 6. Responses were scored 0 if international factors were never listed as a cause, 1 if international factors were listed as only a secondary cause, and 2 if international factors were listed as a primary cause.

Table A4: Effect of Environmental Drama on Attitudes towards Environmental Conservation
16-17 months after exposure

	Index		Enviro > dev projects		Prefer enviro. platform	
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	0.018	0.018	0.028	0.029	0.007	0.002
Standard Error	0.017	0.016	0.020	0.030	0.025	0.027
RI p-value	0.239	0.198	0.184	0.159	0.426	0.476
Hypothesis	+	+	+	+	+	+
Control Mean	0.62	0.62	0.60	0.60	0.63	0.63
Village Control SD	0.06	0.06	0.07	0.07	0.09	0.09
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No
Controls	No	21	No	4	No	16
Adj-R^2	0.01	0.08	0.01	0.02	0.00	0.07
Observations	1,223	1,223	1,223	1,223	1,223	1,223

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1 and 2 report results for an index that is the mean of the two cognitive outcomes outcomes. Columns 3 and 4 report results for responses to the question: *"People in Tanzania have different ideas about how to balance development and the environment. Please tell me which statement you agree with more: Statement 1: 'In Tanzania we must prioritize protecting the environment, even if it means giving up on big economic development projects like electricity projects or large-scale farming.' Statement 2: 'In Tanzania we must prioritize big economic development projects that help bring clinics and schools to our community, even if it means we hurt our environment.'"* Responses were scored 1 if the respondent agreed with statement 1, and 0 otherwise. Columns 5 and 6 report results for responses to the questions: *"Imagine that a nearby community is considering whether to set aside some forest land to protect the environment. Two politicians are arguing about whether it is a good idea. Which politician do you agree with more? Politician 1: We should sell the forest land to bring development to our community Politician 2: Let's turn the forest land into a reserve so that in the future the village will have more resources"*. Responses were scored 1 if the respondent agreed with Politician 2, 0 otherwise. Columns 7 and 8 report results for for responses to the question *"Imagine that two of your friends from your village are having a conversation about cutting wood without a permit. Each friend shares a different opinion about how villagers should respond. Which friend do you agree with? Friend 1: You should cut trees for firewood without permit because everyone does it all the time Friend 2: Even if others cut trees for firewood illegally, you should still spend money to get firewood legally"*. Responses were scored 1 if the respondent answered Friend 2, 0 otherwise. Columns 9 and 10 report responses to the question *What do you think most other people in your community think about this issue?* following the conative attitudes question. Responses were scored in the same manner as the conative attitudes question.

Table A5: Effect of Environmental Drama on Prioritization of Environmental Conservation
16-17 months after exposure

	Index		Vote enviro. platform		Village goal		Village problem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.024	0.020	0.032	0.029	-0.001	-0.000	0.042	0.044*
Standard Error	0.017	0.015	0.028	0.029	0.019	0.017	0.024	0.022
RI p-value	0.175	0.178	0.225	0.224	0.525	0.513	0.124	0.080
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.42	0.42	0.38	0.38	0.36	0.36	0.50	0.50
Village Control SD	0.06	0.06	0.09	0.09	0.08	0.08	0.08	0.08
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	27	No	13	No	21	No	16
Adj-R^2	0.02	0.12	0.01	0.05	0.02	0.11	0.00	0.05
Observations	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1 and 2 report results for an index that is the mean of the two cognitive outcomes outcomes. Columns 3 and 4 report results for responses to the question: *"People in Tanzania have different ideas about how to balance development and the environment. Please tell me which statement you agree with more: Statement 1: 'In Tanzania we must prioritize protecting the environment, even if it means giving up on big economic development projects like electricity projects or large-scale farming.' Statement 2: 'In Tanzania we must prioritize big economic development projects that help bring clinics and schools to our community, even if it means we hurt our environment."'* Responses were scored 1 if the respondent agreed with statement 1, and 0 otherwise. Columns 5 and 6 report results for responses to the questions: *"Imagine that a nearby community is considering whether to set aside some forest land to protect the environment. Two politicians are arguing about whether it is a good idea. Which politician do you agree with more? Politician 1: We should sell the forest land to bring development to our community Politician 2: Let's turn the forest land into a reserve so that in the future the village will have more resources"*. Responses were scored 1 if the respondent agreed with Politician 2, 0 otherwise. Columns 7 and 8 report results for for responses to the question *"Imagine that two of your friends from your village are having a conversation about cutting wood without a permit. Each friend shares a different opinion about how villagers should respond. Which friend do you agree with? Friend 1: You should cut trees for firewood without permit because everyone does it all the time Friend 2: Even if others cut trees for firewood illegally, you should still spend money to get firewood legally"*. Responses were scored 1 if the respondent answered Friend 2, 0 otherwise. Columns 9 and 10 report responses to the question *What do you think most other people in your community think about this issue?* following the conative attitudes question. Responses were scored in the same manner as the conative attitudes question.

Table A6: Effect of Environmental Drama on Collective Action Behaviors
16-17 months after exposure

	Raised Issue in Meeting			
	Environment		Corruption	
	(1)	(2)	(3)	(4)
Enviro Treat	0.012	0.018	-0.003	0.001
Standard Error	0.019	0.022	0.009	0.009
RI p-value	0.331	0.267	0.588	0.464
Hypothesis	+	+	+	+
Control Mean	0.23	0.23	0.03	0.03
Village Control SD	0.08	0.08	0.03	0.03
DV Range	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No
Controls	No	23	No	20
Adj-R^2	0.01	0.07	-0.00	0.04
Observations	1,163	1,163	1,163	1,163

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1-4 report the results to the question: "During the past year, have you gotten together with others in your village to raise an [environmental / corruption] issue to government officials? Results are scored 1 if yes and 0 if no.

Table A7: Effect of Environmental Drama on Corruption Perceptions
16-17 months after exposure

	Index		Corrupt. perceptions		Social priority		Local leader thermo	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	-0.009	-0.009	-0.021	-0.017	0.008	0.007	0.008	0.005
Standard Error	0.012	0.013	0.027	0.026	0.045	0.056	0.012	0.012
RI p-value	0.702	0.705	0.718	0.700	0.463	0.465	0.321	0.385
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.86	0.86	1.38	1.38	2.23	2.23	0.65	0.65
Village Control SD	0.06	0.06	0.12	0.12	0.17	0.17	0.07	0.07
DV Range	[0-1]	[0-1]	[1-2]	[1-2]	[1-4]	[1-4]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	21	No	26	No	0	No	43
Adj-R^2	0.03	0.17	0.02	0.14	-0.00	-0.00	0.02	0.11
Observations	1,223	1,223	1,213	1,213	1,223	1,223	1,212	1,212

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply progressive attitudes or intentions. Columns 1 and 2 report results for an index that is the mean of the other responses in the table. Columns 3 and 4 report the results of response to the question "Do you think that corruption and bribe-taking among local politicians in Tanzania is pretty widespread or pretty rare?" Responses were scored 0 for "pretty rare" and 1 for "pretty widespread." Columns 3 and 4 report results for responses to the question: *"Here is a set of cards, which show different social problems in villages in Tanzania. Now, please put them in order, from biggest problem to smallest problem. [Hurting the environment; men abandoning their families; Bribing of public officials; Not practicing religion much.]"*. Columns 7 and 8 report the results for responses to the question: *"point to the thermometer (0-100) to show how much you like the following groups: [local political leaders]"*. The score is reverse coded and divided by 100.

B Balance

Table A8: **Balance**, Compliers

Variable	Treatment	Comparison	RI p-value	Observations
Tribe: Wadigo	0.285	0.259	0.100	1,264
Pay attention to the news	3.181	3.011	0.100	1,210
Listen to Taifa FM	0.320	0.291	0.100	675
Gender equality: equal jobs	0.503	0.450	0.100	1,264
Reject IPV	2.408	2.290	0.100	1,264
Number of people known in village	2.611	2.523	0.200	1,263
Listen to TBC	0.204	0.265	0.200	675
Feeling thermometer: Boda boda drivers	64.253	59.554	0.200	510
Feeling thermometer: People from Kenya	38.421	42.965	0.200	227
Assets: Metal roof	0.761	0.809	0.200	1,264
Listen to social programs on radio	0.155	0.123	0.200	1,264
Prefer state to solve disputes: divorce	0.295	0.273	0.200	1,264
Should get permit for firewood	0.774	0.811	0.200	1,264
Assets: Cell phone	0.806	0.776	0.200	1,264
Political preference ranking: water	4.889	4.652	0.300	1,264
Risk prevention activities: send others on errands	0.527	0.457	0.300	1,260
Hard environmental changes: Low land productivity	0.456	0.548	0.300	1,264
Mosque/Church visits per week	6.086	5.194	0.300	1,253
Feeling thermometer: Muslims	89.417	91.058	0.300	1,261
Others would get permit for firewood	0.421	0.396	0.300	1,264
Head of household	0.479	0.470	0.400	1,264
Gender equality: equal earning ok	0.360	0.337	0.400	1,264
Number of kids in household	3.940	4.071	0.400	1,264
Is it safe: riding boda alone	0.166	0.207	0.400	1,264
Primary language is swahili	0.527	0.599	0.400	1,264
Risk prevention activities: go home early	0.630	0.566	0.400	1,262
Political preference ranking: GBV	2.627	2.523	0.400	1,264
Muslim	0.798	0.755	0.400	1,264
Political preference ranking: environment	3.011	3.120	0.500	1,264
Has significant other	0.711	0.744	0.500	1,264
Gender equality: women can lead	0.690	0.666	0.500	1,264
Political knowledge index	1.410	1.373	0.500	1,264
Has seen police this year	2.342	2.491	0.500	1,252
Feeling thermometer: CCM	85.932	87.660	0.500	1,258
Age	39.961	40.553	0.500	1,264
Should be equal female and male leaders	0.658	0.651	0.500	1,264
Partner would support daughter entering politics	0.738	0.704	0.500	941
Is it safe: walking home after dark	0.669	0.703	0.500	1,264
Job: Farming	0.682	0.728	0.600	1,264
Ever visited town	2.821	2.966	0.600	1,262
Feeling thermometer: Female bartenders	19.435	21.269	0.600	254
Hard environmental changes: Droughts	0.411	0.388	0.600	1,264
Gender equality: no reject forced marriage	0.845	0.824	0.600	1,263
Environment more important than development	0.631	0.660	0.600	1,264
Feeling thermometer: Samia Hassan	83.495	82.156	0.600	1,258
Has visited court ever	0.288	0.315	0.600	1,261
Assets: Radios (number)	0.447	0.419	0.600	1,264
Listen to sports on radio	0.385	0.408	0.600	1,264
Religious school	0.642	0.625	0.600	1,263
Feeling thermometer: People from Dar	70.887	69.293	0.600	1,225
Would support son entering politics	0.863	0.856	0.700	1,264
Assets: TV	0.174	0.160	0.700	1,264
Assets: Radios	0.400	0.387	0.700	1,264
Education: finished standard 7	0.768	0.761	0.700	1,264
Would support daughter entering politics	0.766	0.741	0.700	1,264
Political preference ranking: health	4.739	4.797	0.700	1,264
Environment: Getting worse	0.873	0.888	0.700	1,264
Listened to radio ever	0.529	0.539	0.700	1,264
Listen to romance programs on radio	0.129	0.118	0.700	1,264
Feeling thermometer: Christians	70.220	71.576	0.700	1,254
Reject early marriage: religion	0.794	0.784	0.700	1,264
Causes of environmental problems: humans	0.582	0.570	0.700	1,264
Speaks non-swahili language	0.835	0.818	0.700	1,264
Lived in village since 16	0.594	0.580	0.800	1,263
Hard environmental changes: Burning forest	0.332	0.315	0.800	1,264
Tribe: Wazigua	0.089	0.107	0.800	1,264
Accepts PPE	0.455	0.494	0.800	1,264
Political preference ranking: Electricity	3.844	3.901	0.800	1,264
Reject early marriage: pregnancy	0.615	0.621	0.800	1,264
Ever listen to RFA	0.439	0.419	0.800	1,224
Tribe: Sambaa	0.437	0.446	0.900	1,264
Feeling thermometer: Chinese people	47.504	47.701	0.900	1,142
Identify with tribe or nation	2.358	2.348	0.900	1,264
Hard environmental changes: Water scarcity	0.327	0.349	0.900	1,264
Political preference ranking: education	4.506	4.598	0.900	1,264
Feeling thermometer: Doctors	86.202	86.983	0.900	250
Listened to radio in last two weeks	0.763	0.725	0.900	1,264
Hard environmental changes: Unsual heat	0.113	0.120	0.900	1,264
Prefer state to solve disputes: court	0.534	0.530	0.900	1,264
Job: small business	0.173	0.160	0.900	1,264
Tribe: Other	0.189	0.188	1.000	1,264
Political preference ranking: roads	4.384	4.410	1.000	1,264
Hard environmental changes: Unpredictable rains	0.608	0.606	1.000	1,264
Causes of environmental problems: outsiders	0.232	0.230	1.000	1,264
Listen to gospel on radio	0.237	0.242	1.000	1,264
How doing today	1.435	1.436	1.000	1,264
Feeling thermometer: Local government officials	75.468	75.537	1.000	1,263
Community thinks should be equal female and male leaders	0.489	0.484	1.000	1,264
Number of people in household	5.047	5.053	1.000	1,264

Note: *p*-values are the result of a grouped F-test across both treatment groups.

Table A9: **Balance**, All Respondents

Variable	Treatment	Comparison	RI p-value	Observations
Reject IPV	2.421	2.300	0.100	1,360
Number of people known in village	2.616	2.530	0.100	1,359
Partner would support daughter entering politics	0.742	0.697	0.100	1,010
Pay attention to the news	3.217	3.024	0.100	1,305
Tribe: Wadigo	0.278	0.260	0.100	1,360
Listen to social programs on radio	0.151	0.119	0.200	1,360
Hard environmental changes: Low land productivity	0.447	0.549	0.200	1,360
Political preference ranking: water	4.913	4.643	0.200	1,360
Gender equality: equal jobs	0.494	0.450	0.200	1,360
Feeling thermometer: People from Kenya	39.073	43.136	0.200	242
Feeling thermometer: Muslims	89.071	91.060	0.200	1,357
Age	39.662	40.390	0.300	1,360
Listen to Taifa FM	0.313	0.289	0.300	731
Others would get permit for firewood	0.415	0.394	0.300	1,360
Mosque/Church visits per week	5.825	5.065	0.300	1,349
Assets: Metal roof	0.768	0.809	0.300	1,360
Should get permit for firewood	0.771	0.806	0.400	1,360
Head of household	0.482	0.474	0.400	1,360
Feeling thermometer: CCM	85.695	87.567	0.400	1,352
Is it safe: riding boda alone	0.172	0.212	0.400	1,360
Has seen police this year	2.372	2.513	0.400	1,347
Risk prevention activities: send others on errands	0.517	0.457	0.400	1,356
Muslim	0.794	0.750	0.400	1,360
Feeling thermometer: Samia Hassan	83.597	81.997	0.400	1,353
Feeling thermometer: Boda boda drivers	63.638	60.296	0.400	555
Gender equality: equal earning ok	0.365	0.338	0.400	1,360
Gender equality: women can lead	0.688	0.665	0.500	1,360
Has significant other	0.710	0.744	0.500	1,360
Number of kids in household	3.868	4.049	0.500	1,360
Identify with tribe or nation	2.362	2.338	0.500	1,360
Risk prevention activities: go home early	0.619	0.566	0.500	1,358
Feeling thermometer: People from Dar	70.612	69.254	0.500	1,319
Political knowledge index	1.415	1.382	0.500	1,360
Political preference ranking: environment	3.043	3.140	0.500	1,360
Primary language is swahili	0.543	0.606	0.500	1,360
Gender equality: no reject forced marriage	0.853	0.831	0.500	1,359
Listen to TBC	0.214	0.262	0.500	731
Listen to romance programs on radio	0.125	0.113	0.500	1,360
Should be equal female and male leaders	0.656	0.643	0.500	1,360
Education: finished standard 7	0.771	0.760	0.600	1,360
Lived in village since 16	0.590	0.573	0.600	1,359
Reject early marriage: religion	0.800	0.781	0.600	1,360
Political preference ranking: GBV	2.624	2.532	0.600	1,360
Feeling thermometer: Female bartenders	19.375	21.903	0.600	270
Is it safe: walking home after dark	0.674	0.701	0.600	1,360
Assets: Radios (number)	0.457	0.426	0.600	1,360
Has visited court ever	0.289	0.314	0.600	1,357
Job: Farming	0.676	0.726	0.600	1,360
Assets: Cell phone	0.804	0.784	0.600	1,360
Tribe: Wazigua	0.088	0.107	0.600	1,360
Religious school	0.643	0.623	0.600	1,359
Environment: Getting worse	0.874	0.890	0.600	1,360
Feeling thermometer: Christians	70.230	71.561	0.600	1,349
Would support son entering politics	0.860	0.853	0.600	1,360
Causes of environmental problems: humans	0.578	0.565	0.600	1,360
Ever visited town	2.840	2.976	0.600	1,358
Political preference ranking: health	4.756	4.810	0.700	1,360
Would support daughter entering politics	0.766	0.737	0.700	1,360
Feeling thermometer: Doctors	86.000	86.423	0.700	270
Tribe: Other	0.199	0.185	0.700	1,360
Hard environmental changes: Unpredictable rains	0.616	0.604	0.700	1,360
Prefer state to solve disputes: divorce	0.287	0.281	0.700	1,360
Listen to sports on radio	0.396	0.409	0.700	1,360
Assets: Radios	0.412	0.394	0.700	1,360
Community thinks should be equal female and male leaders	0.490	0.482	0.800	1,360
Number of people in household	5.025	5.044	0.800	1,360
Causes of environmental problems: outsiders	0.226	0.229	0.800	1,360
Political preference ranking: roads	4.357	4.406	0.800	1,360
Hard environmental changes: Droughts	0.407	0.393	0.800	1,360
Hard environmental changes: Burning forest	0.331	0.318	0.800	1,360
Listened to radio in last two weeks	0.791	0.732	0.800	1,360
Accepts PPE	0.451	0.497	0.800	1,360
Political preference ranking: Electricity	3.785	3.882	0.800	1,360
Feeling thermometer: Local government officials	74.750	75.626	0.900	1,358
Political preference ranking: education	4.522	4.587	0.900	1,360
Listened to radio ever	0.535	0.540	0.900	1,360
Environment more important than development	0.641	0.654	0.900	1,360
Assets: TV	0.175	0.165	0.900	1,360
Reject early marriage: pregnancy	0.622	0.625	0.900	1,360
Prefer state to solve disputes: court	0.535	0.534	0.900	1,360
Hard environmental changes: Water scarcity	0.331	0.353	0.900	1,360
Tribe: Sambaa	0.435	0.447	0.900	1,360
Hard environmental changes: Unsual heat	0.122	0.119	1.000	1,360
Job: small business	0.165	0.160	1.000	1,360
Listen to gospel on radio	0.249	0.247	1.000	1,360
Ever listen to RFA	0.440	0.426	1.000	1,317
Speaks non-swahili language	0.819	0.821	1.000	1,360
How doing today	1.437	1.444	1.000	1,360
Feeling thermometer: Chinese people	47.500	47.545	1.000	1,231

Note: *p*-values are generated using Randomization Inference with 10,000 re-randomizations

C Compliance and Attrition

Table A10: **Compliance and Attrition**, Full Sample

	Attended Any Screening		Midline Attrition		Endline Attrition	
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	-0.037	-0.039	0.002	0.002	-0.007	-0.009
Standard Error	0.011	0.014	0.004	0.006	0.007	0.009
RI p-value	0.100	0.100	0.300	0.300	0.900	0.800
Hypothesis	Two-sided	Two-sided	+	+	+	+
Control Mean	0.95	0.95	0.01	0.01	0.04	0.04
Control SD	0.05	0.05	0.02	0.02	0.03	0.03
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	Yes	Yes	Yes	Yes	Yes
Controls	No	21	No	0	No	7
Adj-R^2	0.04	0.06	0.01	-0.00	0.00	0.03
Observations	1,359	1,359	1,264	1,264	1,264	1,264

Note: p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Compliance takes a value 1 if respondent was marked as present at the start of the audio screening, and 0 otherwise. Attrition takes the value 1 if the respondent was not interviewed in the midline survey.

D Robustness Check: Results with All Respondents

D.1 Midline

Table A11: Effect of Environmental Drama on Environmental Knowledge, All Respondents

	Index		Climate change know		Humans affect env.		Outsiders affect env.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.043**	0.033**	0.055**	0.059***	0.035	0.015	0.001	0.001
Standard Error	0.017	0.015	0.016	0.016	0.019	0.016	0.005	0.006
RI p-value	0.046	0.043	0.021	0.001	0.111	0.242	0.434	0.458
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.61	0.61	0.41	0.41	0.70	0.70	0.01	0.01
Village Control SD	0.06	0.06	0.05	0.05	0.07	0.07	0.01	0.01
DV Range	[0-2]	[0-2]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	34	No	38	No	49	No	1
Adj-R^2	0.01	0.23	0.01	0.23	0.01	0.15	-0.00	0.01
Observations	1,251	1,251	1,251	1,251	1,251	1,251	1,251	1,251

Note: Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Question wording is presented above.

Table A12: Effect of Environmental Drama on Environmental Attitudes, Four Weeks After Exposure

	Index		Enviro > dev projects		Prefer enviro. platform	
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	0.051***	0.044***	0.076***	0.063**	0.026***	0.018**
Standard Error	0.010	0.013	0.019	0.021	0.007	0.009
RI p-value	0.002	0.001	0.009	0.010	0.008	0.049
Hypothesis	+	+	+	+	+	+
Control Mean	0.72	0.72	0.53	0.53	0.90	0.90
Village Control SD	0.04	0.04	0.08	0.08	0.04	0.04
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No
Controls	No	19	No	26	No	23
Adj-R^2	0.00	0.07	0.01	0.08	0.01	0.06
Observations	1,251	1,251	1,251	1,251	1,251	1,251

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Question wording is presented above.

Table A13: Effect of Environmental Drama on Environmental Priorities, Four Weeks After Exposure

	Index		Vote enviro. platform		Village goal		Village problem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.060***	0.048***	0.067**	0.062**	0.045**	0.042**	0.070***	0.059**
Standard Error	0.011	0.010	0.026	0.029	0.014	0.015	0.017	0.016
RI p-value	0.001	0.001	0.041	0.048	0.020	0.021	0.007	0.013
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.41	0.41	0.38	0.38	0.37	0.37	0.48	0.48
Village Control SD	0.05	0.05	0.09	0.09	0.06	0.06	0.08	0.08
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	30	No	17	No	23	No	43
Adj-R^2	0.02	0.13	0.01	0.06	0.01	0.08	0.02	0.10
Observations	1,251	1,251	1,251	1,251	1,230	1,230	1,230	1,230

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Question wording is presented above.

Table A14: Effect of Environmental Drama on Perceptions of Corruption, Four Weeks After Exposure

	Index		Corrupt. perceptions		Social priority		Local leader thermo	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.013	0.013	0.024	0.023	0.078	0.078	-0.005	-0.011
Standard Error	0.013	0.012	0.026	0.024	0.053	0.065	0.021	0.018
RI p-value	0.218	0.215	0.246	0.229	0.151	0.148	0.564	0.669
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.82	0.82	1.28	1.28	2.21	2.21	0.63	0.63
Village Control SD	0.04	0.04	0.11	0.11	0.17	0.17	0.06	0.06
DV Range	[0-2]	[0-2]	[1-2]	[1-2]	[1-4]	[1-4]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	27	No	36	No	2	No	28
Adj-R^2	0.02	0.10	0.02	0.08	-0.00	0.02	0.01	0.12
Observations	1,251	1,251	1,251	1,251	1,230	1,230	1,229	1,229

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Question wording is presented above.

D.2 Endline

Table A15: Effect of Environmental Drama on Environmental Knowledge, All Respondents

	Index		Climate change know		Humans affect env.		Outsiders affect env.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.022	0.025*	0.052***	0.054***	0.005	0.009	0.008	0.004
Standard Error	0.013	0.010	0.010	0.016	0.025	0.018	0.013	0.013
RI p-value	0.140	0.060	0.002	0.007	0.464	0.382	0.349	0.425
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.42	0.42	0.39	0.39	0.84	0.84	0.04	0.04
Village Control SD	0.06	0.06	0.10	0.10	0.09	0.09	0.04	0.04
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	38	No	28	No	32	No	12
Adj-R^2	0.05	0.15	0.03	0.09	0.03	0.13	-0.00	0.05
Observations	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223

Note: Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply greater knowledge. Question wording is presented above.

Table A16: Effect of Environmental Drama on Environmental Attitudes, 18 months After Exposure

	Index		Enviro > dev projects		Prefer enviro. platform	
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	0.018	0.018	0.028	0.029	0.007	0.002
Standard Error	0.017	0.016	0.020	0.030	0.025	0.027
RI p-value	0.239	0.198	0.184	0.159	0.426	0.476
Hypothesis	+	+	+	+	+	+
Control Mean	0.62	0.62	0.60	0.60	0.63	0.63
Village Control SD	0.06	0.06	0.07	0.07	0.09	0.09
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No
Controls	No	21	No	4	No	16
Adj-R^2	0.01	0.08	0.01	0.02	0.00	0.07
Observations	1,223	1,223	1,223	1,223	1,223	1,223

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1 and 2 report results for an index that is the mean of the two cognitive outcomes outcomes. Question wording is presented above.

Table A17: Effect of Environmental Drama on Environmental Priorities, 18 months After Exposure

	Index		Vote enviro. platform		Village goal		Village problem	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	0.024	0.020	0.032	0.029	-0.001	-0.000	0.042	0.044*
Standard Error	0.017	0.015	0.028	0.029	0.019	0.017	0.024	0.022
RI p-value	0.175	0.178	0.225	0.224	0.525	0.513	0.124	0.080
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.42	0.42	0.38	0.38	0.36	0.36	0.50	0.50
Village Control SD	0.06	0.06	0.09	0.09	0.08	0.08	0.08	0.08
DV Range	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	27	No	13	No	21	No	16
Adj-R^2	0.02	0.12	0.01	0.05	0.02	0.11	0.00	0.05
Observations	1,223	1,223	1,223	1,223	1,223	1,223	1,223	1,223

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Question wording is presented above.

Table A18: Effect of Environmental Drama on Collective Action Behaviors, 16-17 months after exposure

	Raised Issue in Meeting			
	Environment		Corruption	
	(1)	(2)	(3)	(4)
Enviro Treat	0.012	0.018	-0.003	0.001
Standard Error	0.019	0.022	0.009	0.009
RI p-value	0.331	0.267	0.588	0.464
Hypothesis	+	+	+	+
Control Mean	0.23	0.23	0.03	0.03
Village Control SD	0.08	0.08	0.03	0.03
DV Range	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No
Controls	No	23	No	20
Adj-R^2	0.01	0.07	-0.00	0.04
Observations	1,163	1,163	1,163	1,163

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply progressive attitudes or intentions. Question wording is presented above.

Table A19: Perceptions of Corruption, Four Weeks After Exposure

	Index		Corrupt. perceptions		Social priority		Local leader thermo	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enviro Treat	-0.009	-0.009	-0.021	-0.017	0.008	0.007	0.008	0.005
Standard Error	0.012	0.013	0.027	0.026	0.045	0.056	0.012	0.012
RI p-value	0.702	0.705	0.718	0.700	0.463	0.465	0.321	0.385
Hypothesis	+	+	+	+	+	+	+	+
Control Mean	0.86	0.86	1.38	1.38	2.23	2.23	0.65	0.65
Village Control SD	0.06	0.06	0.12	0.12	0.17	0.17	0.07	0.07
DV Range	[0-1]	[0-1]	[1-2]	[1-2]	[1-4]	[1-4]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No	Yes	No
Controls	No	21	No	26	No	0	No	43
Adj-R^2	0.03	0.17	0.02	0.14	-0.00	-0.00	0.02	0.11
Observations	1,223	1,223	1,213	1,213	1,223	1,223	1,212	1,212

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Question wording is presented above.

E Heterogeneous Treatment Effects: Coastal Villages

Table A20: Perceptions of Corruption, Four Weeks After Exposure

	Midline Indices			Endline Indices		
	Knowledge	Attitudes	Priorities	Knowledge	Attitudes	Priorities
	(1)	(2)	(3)	(4)	(5)	(6)
Enviro Treat	0.103***	0.063***	0.059***	0.129***	0.036**	0.003
Standard Error	0.018	0.011	0.015	0.038	0.020	0.028
p-value	<0.001	<0.001	<0.001	0.001	0.039	0.463
Coastal District	0.103***	0.107***	0.092***	0.129***	0.071	0.052
Standard Error	0.018	0.019	0.012	0.038	0.059	0.068
p-value	<0.001	<0.001	<0.001	0.001	0.122	0.222
Enviro Treat X Coastal	-0.129***	-0.026	0.001	-0.021	-0.039	0.046
Standard Error	0.018	0.019	0.023	0.025	0.034	0.031
p-value	<0.001	0.190	0.957	0.399	0.257	0.154
Hypothesis	+	+	+	+	+	+
Control Mean	0.61	0.61	0.41	0.42	0.62	0.42
Village Control SD	0.06	0.06	0.05	0.06	0.06	0.06
DV Range	[0-2]	[0-2]	[0-1]	[0-1]	[0-1]	[0-1]
Blocked FE	Yes	No	Yes	No	Yes	No
Controls	No	No	No	No	No	No
Adj-R^2	0.01	0.00	0.02	0.05	0.01	0.02
Observations	1,251	1,251	1,251	1,223	1,223	1,223

Note: * p < 0.1, ** p < 0.05, and *** p < 0.01. Standard errors are clustered at the village level and "Control SD" refers to the village-level standard deviation. Positive coefficients imply pro-environmental attitudes. Columns 1-3 report the effects of the environment drama on Knowledge, Attitudes, and Priorities indices at midline. Columns 4-6 report the same results at endline. The interaction term takes the value 1 if the village resides in a coastal district and 0 if the village does not.

F Intervention Script

Part 1 - A Tale of Two Friends

Scene 1 (Mangroves + Sele's Office)

SFX: Afternoon. We hear birds chirping. Far away, we hear men talking and cutting down trees.

BAKARI: (whispering) There are the illegal loggers (to a subordinate) get your pangas ready. This may get messy.

BMU MEMBER 1: Ready boss Bakari.

BMU MEMBER 2: Ready when you are boss.

BAKARI: We jump them on 3. 1…2….3!

SFX: We hear the BMU members chasing away the illegal loggers. We should hear a lot of commotion, men running away, we can hear 'It's the BMU!' 'Run'. This should last about 15 seconds.

BMU MEMBER 2: This is the third time we have chased away illegal loggers this month.

BAKARI: We should be more vigilant gentlemen.

BMU MEMBER 1: But why is this becoming more common?

BAKARI: The farmer's harvest has been declining for the past few years due to climate change. You see, factories in other countries have been polluting the atmosphere so much that it is causing all kinds of changes to the environment around the world, like more frequent droughts and rising sea levels that make the soil very salty and reduce the crop yield. I take it a few of the farmers have had enough and have turned to illegal logging to make ends meet… climate change is a dangerous thing. Let's collect whatever they left behind and head back to the village.

BAKARI'S MONOLOG: My name is Bakari and I am the BMU leader here in the village of Bushini. Our main job and my personal mission is to protect our environment and that includes our precious mangroves. The presence of the illegal loggers was a very worrying trend and I knew I had to call Sele, our village leader, to let him know. I knew where to find him.

SFX: We hear the ambience of Sele's office. We hear a creaky old fan.

SELE: Bushini's champion.

BAKARI: I am no champion. Just a humble servant.

SELE: The man who has defended our mangroves from illegal loggers! There was a time people were afraid to go there alone. Now it's completely safe. And it's all thanks to you.

BAKARI: Not completely Sele. We interrupted another group of illegal loggers today. With the lack of rains and the low harvest, people in our district are struggling, turning some into amatuer illegal loggers. We have to be more vigilant. We need some more funding for better equipment to fight this.

SELE: Aha. We're tight with money right now Bakari, especially with the election coming up. But I have another solution in mind.

BAKARI: What's that?

SELE: In preparation for the elections, I've been making some connections in the big city. I met a developer who wants to purchase our mangroves. He will buy them for twice their market value to build a state of the art commercial prawn farm. As a gesture of good faith to the community, they will also renovate the primary and secondary schools and make a sizable cash donation.

BAKARI: That's a bad idea. How many times have we seen foreign and local BIG developers buy a piece of land in a village promising lots of development, only for the village to lose its economic wealth and the environment suffering along with it? If you destroy this natural resource, there is no getting it back.

SELE: We can be smarter than they were..learn from that. Anyway, we will be tabling it to the council to get their vote.

BAKARI: Okay. I'd advise you to look way beyond the money. There is always a catch.

BAKARI'S MONOLOG: I was slightly worried. We've received many such offers in the past but the people have been against it. But times are tough and people have a lot less. Sele can be very persuasive - he's the youngest leader in the line of village leaders since I can remember, and he has brought many developments to the village in this time of need. Still, I hoped the council would see reason and reject the deal. But little did I know this was just the beginning.

SFX: We hear a phone ringing. Sele picks it up.

SELE: (picks up the phone) Yes Mr Developer

DEVELOPER: Mr Village Leader. Have you had time to think over our deal?

SELE: I have..If you want to get these mangroves to develop your commercial prawn farm… it will be very hard to convince the council and the people…very very difficult… (tone changes) but not impossible. But perhaps we can help each other.

DEVELOPER: Nothing is impossible under the sun.

SELE: Well, you know we have an election coming up?

DEVELOPER: Yes yes, I remember you mentioning it..

SELE: Now elections are expensive…it is very difficult to win without any funds, you see? So if you help me with some funds then I can persuade our village to accept this deal. Plus, with those funds I will become village leader for another term ensuring the long term sustainability of your project - A bonus for you!

DEVELOPER: Right..right…You have yourself a deal Mr Village Leader.

BAKARI'S MONOLOG: And just like that - Sele sold his soul and the future of our village. If only he knew who he was dealing with.

SFX: We hear the call end and we can now hear from the developer's end of the line.

HENCHMEN: Do you think he can deliver boss?

DEVELOPER: I've been trying to get these mangroves for years. He may be just the person to deliver them to me. I have faith in the young man.

Scene 2 (Sele's office)

SFX: Stuffy office, boardroom. We hear an old fan whirring in the background.

BAKARI'S MONOLOG: In order to get anything passed in our village, it has to be approved by the council - a group of 5 featuring 4 council members and the village leader. The council members are usually respected elders in our community, some of whom have been in the council for decades. Even though Sele was the youngest member in the council, being the village leader he had the most power and had the shrewdness to match.

COUNCIL MEMBER 1: Next item on the agenda today is…a new future?? Mr Village Leader is this from you?

SELE: Yes. I wanted us to talk about the future of our village.

SFX: We hear council members murmuring excitedly.

SELE: I want to discuss a potential deal that can change our community for the better. A developer has approached me to buy the land of the mangroves. Rather than me trying to explain it to you, I want to welcome this brilliant man to tell you himself. He is an influential business man and we are privileged to have him with us. Please let him in.

SFX: We hear the door opening. Council members murmuring, hear creaking of chairs as some shift uncomfortably on their seats.

SELE: Welcome sir. The floor is yours.

DEVELOPER: Thank you Mr Village Leader. . Ladies and gentlemen, my name is Mr Moshi and I am a businessman, mainly focusing on agriculture, growing crops and selling abroad. You have a piece of land here with enormous potential...the mangroves. I have a vision of transforming these mangroves into a state of the art commercial prawn farm. If successful, this would be one of the largest prawn farms in Tanzania. Right here in Bushini. I want you to sell me your mangroves (SFX:Murmurings growing louder) to take hold of this opportunity.

COUNCIL MEMBER 2: So you just want to buy the land and employ us?

DEVELOPER: Not employ you..work with you. And I don't just want to come here and profit. I want to invest in this community (SFX: We hear people murmuring excitedly). yes!…We want to renovate the primary school and make it a place where children will learn and thrive. No child should be left behind!

COUNCIL MEMBER 3: That would really modernize our village and give our kids a better future.

COUNCIL MEMBER 4: Does he have any experience doing this?

DEVELOPER: Yes sir. I have done projects like this across Tanga region specifically, but also a few places here and there across Tanzania.

COUNCIL MEMBER 4: And Sele you verified all this?

SELE: Completely verified.

COUNCIL MEMBER 2: But what about the mangroves!? Won't this destroy the mangrove forest and the fish species that need it to survive?

SELE: I understand what you're saying. But think about it - the mangroves are depleting and so is our economy. I care about the mangroves just as much as you - it provided my father with his livelihood. But we have to think about the future, and sell them when someone offers a very good price.

COUNCIL MEMBER 1: Mr Village Leader makes a point. Plus, when has he ever steered us wrong? Remember when we had to walk 10 kilometers just to go to the nearest clinic but in his first year he managed to get funding and we built a clinic. How many lives have been saved? Why should he mislead us now? I support him!

BAKARI'S MONOLOG: The council had a vote and it was 3-2 in favor of going ahead with the deal. A deal that would slowly start to bleed our community dry. The work would begin in a few days. After the meeting, Sele had a side chat with the developer and his henchmen to iron out their devious details.

DEVELOPER: Mr Village Leader, that wasn't too bad.

SELE: Yes, don't worry. I can handle those people. Now to focus on the villagers. We'll need them on board as well if I'm to win the election.

DEVELOPER: Yes, we need you in power for our project to be protected. You must work your magic and bring the people over. We have a lot of money behind this commercial farm and everything needs to go right.

SELE: Don't worry. This deal is as good as done. You have the council's support. your men can start reconnaissance on the mangroves.

DEVELOPER: I knew you were the man for the job.

Scene 3 (Mangroves)

SFX: Afternoon. We hear birds chirping. Juma and Bakari are patrolling the mangroves.

BAKARI: Hurry up Juma !

JUMA: Why are we pushing ourselves this much boss Bakari when people don't even appreciate what we do?

BAKARI: Because we don't do what we do out of popularity. The mangroves have sustained our people for generations. And even with modernization, it still has a role to play in our livelihood.

JUMA: Yes boss.

BAKARI: (asks rhetorically) Do you know what our purpose is as BMU? To protect our environment..our village's livelihood. And what I've learnt from my many years is that what is good for the environment is good for the economy. The wood from these mangroves is an important source of fuel, the fish our local fishermen catch depend on the mangroves to spawn and grow. The mangroves are the heartbeat of our village. And our role in protecting it is more important than ever.

JUMA: Why did you join the BMU boss?

BAKARI: My father was a fisherman and when I was a young boy, I would accompany him fishing. He's the one who taught me about the importance of the mangroves. I grew up understanding the important role the mangroves play in our village's livelihood. So when the BMUs were first established a few years ago, I decided to join. The title is not very glamorous..Beach Management Unit…but our purpose is crucial.

JUMA: I know boss. I've heard the recent stories of illegal loggers stealing from our mangroves so I want to do my part of chasing them away from our mangroves. Become a hero for the people!

BAKARI: I'm afraid it's not that glamorous. Most of our time is spent patrolling mangroves, collecting tax from the fishermen and environmental protection..that sort of thing (SFX: We hear men laughing in the distance and the sound of a chainsaw) shhhh quiet!

JUMA: (whispering) Who are those thugs with the chainsaws? I've never seen them around…They look like illegal loggers.

BAKARI: (Muttering to himself) Yes but they usually have pangas not chainsaws..

JUMA: Let's go take a look boss.

BAKARI: Wait! They could be dangerous.

SFX: We hear sound of cutting down trees growing louder.

JUMA: HEY! What are you doing?

HENCHMEN: What does it look like we are doing? Who are you?

JUMA: I'm the BMU, this is public land, you illegal loggers should scram!

BAKARI: (under his breath so only Juma can hear) Shut up!

HENCHMEN: What? You disrespectful little rodent! I should beat you for that!

BAKARI: No one is beating anybody. My name is Bakari and I am the local BMU representative in this village. What my colleague is trying to say is these mangroves are public property and only villagers are allowed to cut down wood here. So I'm asking you respectfully to stop cutting down these trees.

HENCHMEN: Or else what? (short pause) You're the Bakari Sele has spoken about. Hasn't he told you?

BAKARI: Told me what?

SFX: Henchmen laughing, as if they know something Bakari doesn't know.

HENCHMEN: Sele and the village council have sold these mangroves to my boss to start developing a commercial prawn farm.

BAKARI: What?

HENCHMEN: Yes…and in light of that I am going to have to ask you and your little rodent to leave these PRIVATE premises or my men will have to assist you.

BAKARI: (to juma) Juma let's go (to henchmen) this isn't over.

HENCHMEN: Sure it is. Money talks my friend.

SFX: We hear Bakari and Juma walking away.

JUMA: Eish did you see the muscles on that guy? Built like a bull! Is it true that Mr Village Leader sold the mangroves.

BAKARI: ' (Angrily) Never disobey my orders again, you understand Juma? That could have turned dangerous very quickly, You hear me!?

JUMA: Yes bossy I'm sorry.

BAKARI: Alright, go home. I'll see you later.

BAKARI'S MONOLOG: I couldn't believe it. How could Sele and the village council sell off this precious resource without consulting the community? I was furious - livid actually. And I took all that anger to the one person who could give me an answer.

Scene 4 (Sele's Office)

SFX: Office ambience. We hear Sele humming to himself as he works.

SELE: (SFX: hear loud knocking on the door)..(Sele shouts at the door) I'm busy. Please come back later. (SFX: hear a loud knocking and we hear bakari shout outside 'It's Bakari') Come in.

SFX: Door opens.

SELE: Hey Bakari. What's so important that you couldn't wait?? Can't you see I'm busy?

BAKARI: Have you sold the mangroves?

SELE: (sighs) Bakari listen…

BAKARI: (Bakari interrupts) Why are there thugs in the mangroves cutting down the trees saying YOU gave THEM permission to do so? That you sold the mangroves without informing anyone! What were you thinking!?

SELE: It was the council's decision and WE were prioritizing our future not some mangroves that aren't worth a damn! Those aren't thugs. They are our new developer's workers. He will develop those mangroves into one of the biggest commercial farms in our country.

BAKARI: Just like that? What about the villagers? Have you thought about them or their livelihoods? You guys just made this decision by yourselves?

SELE: (In a smug way) Isn't that why people elected us? To lead? I built this village a clinic, worked with the government to bring electricity. What's with all this doubting now eh? Not only will the farm provide jobs that will pay better than anything people in this village have earned, they will renovate our schools. This obsession you have with the mangroves because it meant a lot to your father is an emotional issue you have to deal with. I have to worry about our villagers' well being.

BAKARI: (seething inside) What about the fishermen? Who depend on the fish they catch or families that depend on firewood?

SELE: Bakari, stop being an idealist. Our fathers fished these waters for decades, I remember them coming back with catches so big, the net would almost break. But what good did that do to our community? We are still where we were a few years ago. Actually we are in a worse condition. Look at the fishermen now, barely getting enough to eat.

BAKARI: The whole reason the fish catch is low is BECAUSE the mangroves have been degraded. We need to protect them MORE not less.

SELE: Think what you will. But I would give you one warning. Do not interfere with this deal. It will not end well for you my friend.

BAKARI: (in disbelief) Sele…you're threatening me now?

SELE: No one is threatening you. But you have to pick a side. And for your sake, I hope you choose wisely.

BAKARI'S MONOLOG: I can't explain the range of emotions I felt - anger, betrayal. I had a gut feeling these so-called developers had paid him off and I wasn't too optimistic about all their promises. But Sele did get one thing right - I had to pick a side…

Part 2 - Friendship falling apart

Scene 5 (Mama Siti's Restaurant)

SFX: Restaurant ambience. We hear fish frying, men talking with a football match in the background.

MAMA SITI: Here's some fried fish gentlemen.

JUMA: (jokingly) Mama siti if you were only a few years younger, i would marry you!

MAMA SITI: (joking back) It's not too late! Just bring the bride price!

BAKARI: Thank you mama. The best fish in Pangani.

MAMA SITI: You boys enjoy. Waitress will bring you some drinks. (SFX: we hear her voice fading out as she leaves.)

BAKARI: (to Juma) I can't believe he sold the mangroves!

JUMA: Boss, why are you surprised? When he became leader he was so humble but what about now? Talking down to people…thinking he is better than everybody.

BAKARI: I hear you. I guess sometimes I am blinded because I've known him since we were boys. And when I went to see him, I noticed he had a new smartphone and watch…he couldn't buy that with his salary. He's definitely taking a bribe.

JUMA: Even a blind man can see that. Question is what to do about it?

BAKARI: The only way to stop it is to cancel the deal..but only the village council can do that.

JUMA: What about the upcoming elections? Someone can beat him and cancel the deal!

BAKARI: That's a great idea! But who?

JUMA: What about you?

BAKARI: (adamantly) Never. I'm not a politician Juma.

JUMA: Boss, you are well respected, well known, people look up to you..you are not a good speaker as me but we can work on that. I can be your campaign manager boss!

SFX: We hear drinks being set on the table. And a sound of drinks being opened.

MAMA SITI: Here are your drinks boys.

JUMA: Mama I know you would vote for me. But would you vote for Bakari as the village leader?

MAMA SITI: Juma you? Not even to lead my house! (laughing) Bakari may be..if he buys more sodas!

BAKARI: (laughing) thank you mama. But I am just a lowly BMU member. That's enough for me. (to Juma) I appreciate your belief in me but it ain't happening. We need to think of something else.

JUMA: Okay boss. (SFX: Suddenly stands up and cheers as we hear the TV football commentator shouting 'Gooooooooaaal'. We hear men shouting and cheering).

BAKARI'S MONOLOG: I appreciate Juma's confidence in me but there was no way that I could ever run for election. It just wasn't happening. But I had to do something about it, so I went to the one person who could give me an answer.

Scene 6 (Street, a few hundred meters from Sele's office)

SFX: We hear the deadness of night. Crickets chirping. Dogs barking in the background. We hear footsteps.

BAKARI: Juma I'll leave you here. We will catch up tomorrow. Be safe.

JUMA: Okay boss. Tomorrow.

BAKARI: See you tomorrow.

SFX: We hear Juma walking for about 5 secs. Then we hear murmurs in the distance.

JUMA: (whispering to himself) What's this?

SFX: The voices become clearer. We recognize Sele and the Developer and henchman's voices.

SELE: You are asking me a very hard thing..

DEVELOPER: All I am asking is a few more acres…

SELE: Including the land on Mama Siti's restaurant?

HENCHMEN: It's just some old woman.

SELE: Who is genuinely loved in our community. You get the land and chase her off and you will not run your farm in peace. That I can assure you.

DEVELOPER: I hear you. Look, we can add a little extra to your pot. 5 million shillings for you. This is more money than you have ever seen. And to make it easier, we will wait until after the election.

SELE: (Long hesitation, we hear him gulp) Okay..but you will have to double it.

DEVELOPER: (chuckles to himself) You drive a hard bargain Mr chairman. (to henchmen) Give him the package.

SFX: We hear henchmen throw a stack of cash on the table. This is interrupted by the sound of Juma stepping on a twig. Sele, Developer and Henchman are surprised.

HENCHMAN: THERE'S SOMEONE OUTSIDE!

JUMA: (to himself) gotta go!

SFX: We hear him run outside. We hear Juma's footsteps as he runs away from Sele's office. He runs until he is out of breath..gasping for air.

JUMA: I have to tell Bakari. They've paid him off!

BAKARI'S MONOLOG: Juma was only able to see what happened but couldn't hear much. But from his accounts it was clear Sele was in the developer's pocket. I wanted to let the council and the people know and stop his plans. But we couldn't prove Sele had taken any money so we had to try a different tactic - perhaps we could sway public opinion.

Scene 7 (Town Square + Sele's house)

SFX: People in a town square. We hear them murmuring amongst each other.

BAKARI'S MONOLOG: Now that construction had begun in the mangroves, it was only a matter of time before they announced it to the villagers. And I was right. A few days after, they called a village meeting.. and I made damn sure that I was there.

SELE: Calm down everyone! Calm down!

SFX: Crowd quiets down a bit.

SELE: My people! I know…I know you have many questions! I know you may feel that I have gone behind your back with this deal for the mangroves!

CROWD MEMBER 1: Shame on you for betraying the fishermen!

SELE: Betraying the fishermen? My father was a fisherman...a nobody....you all know that. And day after day he would come back home with so much fish, but we were still poor. Nowadays, the catch is so small. (to a member of the crowd) Sir, how much fish did you catch last night?

FISHERMAN 1: Only a few small fish. It's getting bad.

SELE: I know because I talk to fishermen. When we were kids, you remember we didn't even have desks! Do we want that for our children?

CROWD: NO!

SELE: Exactly! That is why we have gone with this deal. Through MY connections in the city, I found this developer who wants to TRANSFORM the mangroves into a state of the art prawn farm. And who do you think he will look to employ? YOU! You will be making more than you ever made before. And not only that, he will build schools with all modern equipment, desks

for every child..and even some computers! Some of us only touched a computer after growing a beard (SFX: Crowd erupts in laughter)! This is for our future! This is for our children!

BAKARI: But what about the mangroves?

SELE: Bakari are you trying to keep your job? (SFX: crowd laughing) Don't worry you can come work on the farm!

BAKARI: We've heard many stories of developers promising so many things only to not follow through. What if that happens to us and we've already sold our mangroves? We would be finished! And when you talk about our fishermen catching less fish, let's remember why - It is the toxic factories in places like China, Europe and America that destroy the atmosphere and we are feeling it here too.

CROWD MEMBER 2: What people want is to have a stable and good living and for our children to get a good education. How will mangroves help with that?

CROWD MEMBER 3: I don't want my children to become fishermen. I want them to become a big man like the developer or Sele!

SFX: We hear the crowd starting to come over to Sele's side.

BAKARI'S MONOLOG: I was furious. They were playing with people's livelihood. Little did i know that wasn't the only thing I should have been worried about.

SFX: We hear dead of night. We are in Sele's house. Phone ringing.

SELE: (picks up) Mr Developer.

DEVELOPER: Sele, I hear things went well at the town meeting.

SELE: Yes yes..All is well…the village is on your side.

DEVELOPER: Not all of the villagers though…I hear that Bakari is still chirping..

SELE: He's harmless…just a man with his head in the clouds.

DEVELOPER: Then perhaps we should bring him back to reality. Let him know who he is dealing with.

SELE: (long pause)...do you think that's necessary?

DEVELOPER: You give a man an inch and he will take a foot. Let's give him a lesson to remember

(hangs up the phone).

Scene 8 (Mangroves)

SFX: By the sea ambience. We hear the waves crashing on the shore, the sound of birds (the kind that live by the ocean).

BAKARI'S MONOLOG: Tired and exhausted with work all that's been going on with Sele's plan with the developer, I needed some time to clear my head. I sent Juma home and headed back to the shore to check on the fishermen.

FISHERMAN 1: (jokingly) Ohooo hide your wallets! The tax man is here!

BAKARI: (laughing) If you were not so dirt cheap you would catch more fish!

SFX: Fishermen 1 and 2 laughing.

FISHERMAN 2: Here Bakari.

BAKARI: Where's the money gents?

FISHERMAN 1: Here you go

SFX: We hear them giving Bakari some coins.

FISHERMAN 2: We've heard about the new commercial prawn farm. Big things are happening in the village.

BAKARI: Yes unfortunately.

FISHERMAN 1: It is what it is, Bakari. (somewhat nostalgically) perhaps our time is coming to an end. We have to modernize.

BAKARI: (Wanting to change the subject) Where's Tuma?

FISHERMAN 1: He's over there. He's crankier than usual today.

SFX: We hear Bakari walking away from fisherman 1 and 2 and towards Tuma (3rd fisherman).

BAKARI: (shouting to someone ahead) Tuma! How are you?

FISHERMAN 3: (Cranky) You've come to collect your tax Bakari? Why don't you just have mercy on us eh? There is barely any fish we catch yet here you are.

BAKARI: Yes, you have to pay a little bit now. But in return we can protect the mangroves, which will increase the number of fish and means we all make more money next year.

FISHERMAN 1: (We hear him from afar) That one never stays with money for long. Gets today spends today. Doesn't think about tomorrow.

FISHERMAN 3: (Interrupting Bakari) But the mangroves have been sold off anyway so what's the point?

BAKARI: (muttering under his breath but loud enough for Fisherman 3 to hear) Not this again

FISHERMAN 3: Why are you so against this?

BAKARI: Not sure I can keep explaining why anymore. I worry we are being sold a pipe dream. How sure are we that this developer will employ people here or will build a school as he says? Even this farm may never see the light of day.

FISHERMAN 3: How sure are we that we can keep making a living doing this? The way our daily catch is dwindling...I may have to quit and go get a job on this farm. At least then I'll stop paying tax and save my money. You yourself say climate change is destroying our environment so better to get rid of these mangroves and cash in now.

BAKARI: Yes climate change is affecting us but the solution IS keeping the mangroves. They are a gift in so many ways. Not only do they provide a breeding ground for fish so that there's always plenty for us to catch, but they also PROTECT us from climate change. The mangroves help prevent salty water from coming inland and destroying our soil, and they also protect us against big storms. On top of that, they help take carbon dioxide out of atmosphere, slowing down global warming.

FISHERMAN 3: Maybe all that is too technical for me. I'm sorry Bakari. I can't pay the tax for mangroves that won't be here in a few months time.

BAKARI'S MONOLOG: People had had their heads turned. And it was getting harder and harder to keep their heads from turning. I understood where they were coming from, I really did. But I wasn't ready to let them give up and give in. After visiting other fishermen in the area, I made my way home.

SFX: We hear sounds of night time. We hear footsteps of Bakari walking and whistling.

HENCHMEN 2: There he is!

HENCHMAN: (calling out to him) Bakari!

BAKARI: What do you and your goons want?

HENCHMAN: I thought Sele told you to shut your mouth! Now you're stirring up trouble with the fishermen!

BAKARI: Who the hell are you to tell me to shut my mouth?

HENCHMAN: You know what your problem is, you talk too much. You should have kept quiet and just let development take its course. You could even have gotten a little something for your troubles. You are an enemy of progress Bakari. And we'll show you what we do to enemies of progress (to his goons) get him!

SFX: We hear sounds of Bakari being beaten.

Part 3 - *Breaking Point*

Scene 9 (Bakari's home)

SFX: We hear noise from outside. Someone passing by the window shouting at the top of his voice about the upcoming election. We hear Bakari groaning.

BAKARI'S WIFE: Lay back down. You need to rest.

BAKARI: I'll be fine (They hear voice of Juma and Bakari's child playing in living room). Is that Juma?

BAKARI's WIFE: Yes, he's playing with the baby. (suspiciously) And you say you didn't see who did this to you?

BAKARI: (lame excuse). It was quite late. (changing the topic) Let me go see Juma.

BAKARI'S WIFE: And this has nothing to do with this new deal with the developer?

BAKARI: Nah nah. Let me go see Juma.

BAKARI'S WIFE: (SFX: As Bakari walks away) Be careful Bakari.

BAKARI: (affectionately) I will. Always.

SFX: We hear the door open as Bakari steps out of the room and into the living room. As he steps into the living room, we hear the sounds of Juma and Bakari's child grow louder.

JUMA: (playing with the child then suddenly sees Bakari) Eh boss! They really did a number on you?

BAKARI: (tries to tell Juma to hush so his wife doesn't hear) Shhhh! I'm stronger than I look..

JUMA: So what's the plan? What are we going to do about this?

BAKARI: I don't know…I truly don't know.

BAKARI's CHILD: (interrupts Bakari) Baba! Beeba!

BAKARI: (to child) okay toto (back to Juma) these men are dangerous.

JUMA: Boss, you have to run in this election (Bakari scoffs) I'm serious boss. I believe you can win this. You already have some respect among the population.

BAKARI: Let me stop you right there. The answer is no.(with a bit of fear in his voice) These men almost broke my leg. I am lucky to be alive. I don't want to hear that again, you hear.

JUMA: Yes boss.

BAKARI's MONOLOG: If they beat me this bad for just speaking up, imagine what would happen if I decide to run…in an election that I have no chance of winning.

Scene 10 (Bakari's home)

SFX: We hear a loud banging of a door.

MAMA SITI: (we hear her from outside) Bakari Bakari!

SFX: We hear the door open.

BAKARI's WIFE: Mama Siti! What's wrong?

MAMA SITI: (sounding desperate) Is Bakari in?

BAKARI's WIFE: Yes yes please come in.

SFX: We hear the door close in behind them. Mama Siti and Bakari's wife enter the living room

BAKARI: What's going on Mama Siti?

MAMA SITI: (panicking) They've closed my restaurant! They've closed my restaurant!

JUMA: Who mama?

BAKARI: Calm down Mama Siti. Take a deep breath. Who closed your restaurant?

MAMA SITI: Some thugs from the developer. They always come drink at my restaurant in the evening..very troublesome fellows. A few days ago one of them blurted out whether I would sell my restaurant to their boss and of course I said over my dead body. My late husband started that restaurant and I cannot ever sell it to anyone - much less those brutes! Now today morning, I came in and found a lock on my door and two of the developers' henchmen there. I asked them what is this? Then they said the developer has bought the land around my restaurant. That they will have to take it down! If I don't move out in the next week, they will destroy my house.

BAKARI: What!? How can Sele do this?

JUMA: He's corrupt boss. Boss remember what I told you last week, after we left Mama's restaurant, on my way home, I saw the developer and his main henchman discussing something. I couldn't quite make out what they were saying but I heard something about needing more land. I guess when they realized Mama wouldn't sell them the restaurant, Sele gave them more land.

MAMA SITI: When I get my hands on that fool…

BAKARI: Mama try to calm down..

MAMA SITI: Please help me Bakari..Please..there's no one else I can turn to.

BAKARI: Juma, take Mama Siti home (to mama) Mama let me figure out what to do about this.

SFX: Juma and Mama leave the house. We hear the door close.

BAKARI's WIFE: What are you gonna do?

BAKARI: I think…I have to run in this election…I don't want to do it but there's no other way of stopping this. It will be dangerous. These men have threatened my life. But I have to do this.

BAKARI's WIFE: I believe in you. You are a born leader. You can show your people the way.

BAKARI'S MONOLOG: With the decision to run for the election, I knew I had to protect my family first because I couldn't guarantee their safety. I sent my wife and child to my aunts in the next village. Then I had to figure out how to win the election.

Scene 11 (Villagers' houses - montage)

BAKARI'S MONOLOG: First, I had to build a team. I brought in Juma to help organize the campaign, Mama Siti helped us reach out to the women, and some of the BMU members and villagers

supported where they could. We had a good team, but to win we needed to convince the ones with the power. We needed to talk to the people. Some were easy to convince.

SFX: We hear knocking on the door. This scene should be accompanied with dramatic music/sound effect.

BAKARI: Hello sir, I'm running for village leader and I want to talk to you about how we will bring development and protect our mangroves and make a better future for our village.

FISHERMAN 1: Yes, Bakari! Come on inside..

SFX: We hear the door open and close as Bakari enters the house.

BAKARI: Look, I know the fish resources have been dwindling… I want to fix that by protecting the mangroves. As you know, mangroves provide a safe place for fish to spawn. But the increase in illegal logging in recent years has been degrading the mangroves and causing fish to die out… and this problem that will get even worse if we sell the mangroves to foreign developers. Instead, I believe we should protect the mangroves. This will support the spawning of fish and, though we won't see it at first, soon we'll see the fish population balloon.

FISHERMAN 1: Okay, I trust you Bakari. You've always been a stand up guy. Plus, I don't trust Sele.

BAKARI'S MONOLOG: Others took a bit more effort to convince.

FARMER: I don't care about the mangroves Bakari. I'm just interested in retiring to my potato farm. And Sele told me he is going to help me find a good market for my products.

BAKARI: But your yield must have been poor this year?

FARMER: Yes it was...the soil is very salty nowadays..but I'm hoping it gets better.

BAKARI: I hope so too…but it won't unless we protect the mangroves.

FARMER: Why do I care about the mangroves? What do they have to do with my farm?

BAKARI: Let me explain. You might have heard people talking about this term "climate change". It is happening when countries all over the world pollute the air, which causes big changes in our environment: rain is less predictable, drought is more common, and sea levels are rising all over the world, including here in Bushini. When sea levels rise, they bring salty water inland, which

ruins your crops. All of this because other countries are not controlling their pollution!

However, mangroves are important to stopping this. They act as a shield and that stops salty sea water from ruining your soil. If we protect the mangroves, we will be able to deal with the effects of climate change and increase crop yield for you and all the farmers in our village. But instead of protecting mangroves, Sele wants to sell the mangroves to the very same people who are polluting our planet!

FARMER: (shocked) I had no idea pollution so far away could affect my harvest… and that the solution is right here in our village! Thank you Bakari. You have my vote.

BAKARI'S MONOLOG: However, some villagers couldnt be convinced.

JUMA: Mama, what's wrong with your roof?

VILLAGE MAMA: Last night's storm blew it off. I'm here trying to fix it. Seems like these storms are getting worse and worse.

JUMA: You know mama, thats because in the past the mangroves were many and would shield you and your neighbours from the storms. But now the mangroves are dwindling and you and your neighbors are exposed to the elements. But Bakari wants to protect the mangroves. If you vote for him…

HUSBAND: (we hear him from inside/living room interrupting Juma) Bakari? I don't want to hear a single word about that troublemaker.

VILLAGE MAMA: Sorry my husband doesn't approve of that man (whispering) but he has my vote.

JUMA: (Pretending) That's a shame sir (whispering) thank you mama.

BAKARI'S MONOLOG: And at the end of every night, we would meet back home, a place which we had turned to our headquarters.

BAKARI: Juma tomorrow I need you and your crew to go to the neighborhood around Mama Tunu's. Mama Siti, I need your help reaching out to some of the women from your VICOBA group for their support.

MAMA SITI JUMA: Okay.

BAKARI'S MONOLOG: Day after day, our following grew. We still felt we would need to go on to the last day to really be in a strong position, but we were starting to see hope on the horizon.

Scene 12 (Sele's Office)

BAKARI'S MONOLOG: We were making good progress on the election campaign. It was only a matter of time before our opposition gained notice.

SFX: In Sele's office. We hear a phone ringing.

SELE: Mr developer. What's up?

DEVELOPER: How is the preparation for the election?

SELE: Going well. My opposition have no chance.

DEVELOPER: Really? I've heard some disturbing news..seems you have a new challenger in the opposition..your friend Bakari.

SELE: Yes, I'm aware..and like I said there's nothing to worry about.

DEVELOPER: Are you sure? I sense Bakari is the type of person who will still be a thorn on our side even if he loses.

SELE: (slightly frustrated) If you have a problem with my methods, you're more than welcome to take back your money and give us back our mangroves.

DEVELOPER: No need for hostility. I bring a proposition. Perhaps there's a way we can deter his campaign and send him a message.

SELE: How?

DEVELOPER: Leave that to us. Best to distance you from this.

SFX: Hangs up the phone.

Scene 13 (Bakari's Home)

SFX: We hear knocking on the door and Bakari opens it.

BAKARI: What do you want?

SELE: I heard you're running too. Is this what it has come down to?

BAKARI: You're the one who wanted it to go this far.

SELE: Can I come inside?

BAKARI: Sure.

SELE: I see you sent the wife and baby away. Smart.

BAKARI: What's up Sele?

SELE: I came to bring you this..for your troubles.

BAKARI'S MONOLOG: He pulled out more money than I had ever seen in my life. Money that would have helped do so much in our community. I considered taking it. I wanted to take it. Not for myself though. That money would do so much for the BMU. But it is dirty money.

BAKARI: No thank you.

SELE: Don't be stubborn. You're in way over your head. Take the money and cancel this campaign. You don't know what you're up against.

BAKARI: I used to respect you..making a better life for your people. Now, you've turned into this power hungry maniac who is willing to risk his people for money.

SELE: I should have just let the developer kill you. But no need. I see you're hell bent on losing.

Part 4 - Election Day

Scene 14 (Town Square)

SFX: Noise of people in the town square.

BAKARI'S MONOLOG: Election day is a pretty big day in our village. And when the day arrived, all the villagers were gathered in the town square. I don't remember the election race ever being this competitive. Along with me and Sele, there were two other candidates from the village council. All candidates would be given a chance to speak before voting took place. I was nervous to be honest..this isn't something I'm used to and I couldn't seem to get a hold of Juma today, which was worrying.

MODERATOR: People of Bushini. Welcome to today's election where we will choose our leader for the next term. Before we go into voting, I will invite all the candidates to give their speeches and after that we will head to the polls for voting.

BAKARI'S MONOLOG: The first two candidates went quite quickly. And as they spoke, I knew they were probably not going to be chosen. I felt like my only real challenge was Sele. As I looked in the crowd I saw my entire team but not Juma. I started to get worried where he could be. I caught eyes with one member of my team and I mouthed 'Juma' for him to go looking for him. If I win, it will most likely be because of him. Next up to give his speech was Sele.

SELE: My people! During my term, we have brought many developments to Bushini. We were able to rebuild our clinic so that our mothers and sisters don't have to walk 10 kilometers to the next village to get the service they desperately need. And now we are building a state of the art commercial prawn farm that will be exporting prawns all over the world. If you elect me, I will make sure that the farm will prioritize hiring our people and supervise the renovation of our schools. If the people of Bushini want to build a better future, I am the best candidate for that!

SFX: Crowd erupts in cheers and applause.

MODERATOR: Our last candidate, this is their first time running. You all know him. He is a very respected man. Welcome Bakari!

SFX: We hear the crowd cheering, though not as much as Sele. The cheers transition to a stillness and we can hear Bakari's heart pounding in his chest.

BAKARI: (Clears his throat) Ahem (SFX: taps the mic). Hi everyone…Um my name is Bakari as the moderator has said…

SFX: We hear an eerie silence from the crowd.

BAKARI'S MONOLOG: You could hear a pin drop and I could feel the nervousness creeping up and a small bead of sweat flowing down my back. But I had come this far. It was too late to cower now. I had to go for it.

BAKARI: People of Bushini! Most of you know me as a member of the BMU, and it must be very strange to see me here running to be your village leader. It is strange for me too. But I decided to run because of this shady deal that our current village leader, and the council members, have signed us up for. I did some research on this developer and what I realized is this developer has been doing this for many communities in different regions. Do you remember the story we heard

on the radio about the investors who bought a thousand acres to develop sugar cane farming in Bagamoyo promising to build schools and clinics? (SFX: Crowd shouts yes) the investor took the land and they did not build any school or clinic. Or how about the story of a developer who bought 2000 acres in a village in Mtwara to cultivate plants for biofuels and they ended up chasing away those people from their ancestral lands? (SFX: Crowd shouts yes) Do you know who the investor in both of these projects was? This same Chinese company that has proposed the same thing to us. (SFX: We hear the crowd murmuring) Now this developer has come to us and promised the same sweet things to us, how sure are we that he will follow through. And how can we trust a leader who did not even bother to do simple research on who we are getting in bed with? Either they are incompetent, which I dont believe he is, or they got a little something. . . .If you elect me as your leader, I will make sure that every decision I make is for the betterment of our village and not myself.

CROWD: We hear the crowd cheering and shouting for Bakari. More than Sele.

MODERATOR: Thank you Bakari. We are going to take a break and voting will open in an hour.

SFX: We hear a whistle piercing the crowd noise, getting louder and louder.

BMU MEMBER 1: Juma is dead! Juma is dead!

SFX: The crowd is surprised and angry at hearing this.

BAKARI's MONOLOG: My heart tightened in my chest, when I heard that.

BAKARI: Wait wait WAIT!!!! (SFX: Crowd quiets down) What do you mean? What happened?

BMU MEMBER 1: Last night, Juma went to the mangroves to investigate - the henchmen are very talkative so he thought if he gets close to them we could overhear something that could help our campaign. He told me it was going to be very dangerous, so if he doesn't come back by morning, I should go check the mangroves. When I didn't hear back from him this morning, I snuck into the mangroves and saw the henchmen dumping the body in an unmarked grave (starting to sob) in the mangroves!

BAKARI: (to the crowd) You see? Are these the people we want to be in bed with? (to Sele) Sele! Is this the development you wanted to bring us? Death and the destruction of the environment

on our doorstep (to BMU member) please take a few men and go retrieve the body. I will meet up with you later.

SFX: Crowd agreeing with Bakari. We hear shouts of 'traitor', 'corrupt'. We hear a general tone of anger from the crowd.

BAKARI'S MONOLOG: With what transpired, it really wasn't a shock when it was announced I had won the election. Sele didn't even wait to hear the results. A few villagers spotted him boarding a bus for the city. The developer and his henchmen left just as quickly, leaving all their equipment, which we happily sold to bring in some money for the villagers. The people of Bushini had won. But, there was very little celebrating to do. We had lost a friend, a colleague..a brother. I would give it all back, if only he could still be here with us.

Scene 15 (Bakari's Office)

SFX: We're at Bakari's office (formerly Sele's office). We hear a creaky fan whirring in the background.

COUNCIL MEMBER 2: We welcome our village leader to our first council meeting for this term. Congratulations Bakari.

SFX: We hear the council members clapping.

BAKARI: Thank you council member. As you all know, I am not a politician but a humble son of a fisherman. And my plan for my term is to restore and protect our precious mangroves. I believe this initiative will benefit our people in the long term. That begins with canceling this shady deal with this developer.

COUNCIL MEMBER 2: What about Sele? We should bring him to the police to answer for his role in this deal.

COUNCIL MEMBER 3: Do we have any information on his whereabouts?

BAKARI: All we know is he was spotted sneaking out of the village on a bus. I don't think we will be hearing from him again. Him or the developer. BMU members went to the site where they were building the farm and it was deserted. We can at least sell those equipment to support

Juma's family and start restoring the mangroves. COUNCIL MEMBER 1: Shall we take a vote? By show of hands who is for canceling the deal? (Counting hands) one two..a nunanimous decision then. The deal to sell the mangroves is hereby cancelled.

BAKARI'S MONOLOG: This was a bittersweet moment. I wish Juma was here to see this moment when the deal was cancelled. It was a bi

Scene 16 (Villagers' houses)

BAKARI'S MONOLOG: After a year in charge, we were making progress in protecting the mangroves. And I wanted to see whether the people were seeing any difference in their day to day lives. So I went door to door in the village, starting with the fishermen.

BAKARI: How has your catch been these days?

FISHERMAN: Much better Bakari. We've been catching more fish recently.

BAKARI: See? I told you, mangroves help fish spawn. So if we protect the mangroves..

FISHERMAN: The fish will increase.

BAKARI: That's great to hear. And don't forget to pay your tax to the BMU. It supports them in protecting the mangroves.

BAKARI'S MONOLOG: It was encouraging to hear the fishermen increasing their daily catch. I wondered if the local farmers had a better harvest than last year.

BAKARI: Seems like I caught you in a bad time.

FARMER: We're just getting ready to go to the market. I can always make time for you.

BAKARI: Is that all you harvested this year? Very impressive.

FARMER: Yes the harvest this year has been very big. We haven't had a harvest this big in years. You were right, Bakari. Whatever you did to protect the mangroves, has been doing wonders..not just for me but other farmers too.

BAKARI'S MONOLOG: It was great to see farmers with big harvests. Slowly people were turning into believers of the importance of protecting our mangroves. The next stop was visiting the people living near the mangroves to see how their lives have changed.

VILLAGE MAMA: Bakari, come in!

BAKARI: I'm just passing by to check on your family. Last night's storm was very bad but I see your roof is fine.

VILLAGE MAMA: Yes! The storms don't cause any damage like they used to. Your plan to project the mangroves has really helped to shield us from the effects.

HUSBAND: (we hear him for inside the house) Is that Bakari? Invite him in for a beer!

BAKARI: Thank you sir but I have to be going! Mama thank you! You have a good day.

SFX: Restaurant ambience. We hear fish frying, men talking with a football match in the background.

MAMA SITI: Here is your food gentlemen.

BMU MEMBER 1 & 2: Thank you mama.

MAMA SITI: Bakari, how are you?

BAKARI: I am managing Mama.

MAMA SITI: I've seen the new school being built. It looks like it's coming along very well.

BAKARI: Yes, it was great to see people coming together to build the school. If we dont do it, who will?

BMU MEMBER 1: Very true. It's good to see all the progress you've done in just one year. Fishermen are catching more fish, there are no more illegal loggers. Cheers to you Bakari.

BAKARI: Thank you my friend. It's true, the future of our village looks hopeful. But there will always be foreign developers trying to tempt us to sell our lands. In fact, I recently heard of a village in the mountains west of here that sold its forests to a European logging company. The company destroyed the entire forest in a year, and now the village has no firewood!

BMU MEMBER 1: You're right, there will always be a threat from developers. But we are awake to the danger now, and we will teach our children to be vigilant as well.

BAKARI: I just wish Juma was here to see this. I don't think I would be in this position if it wasnt for him.

MAMA SITI: Yes..he was a shining light. All our progress is in Juma's memory.

BAKARI: In Juma's memory.

BAKARI'S MONOLOGUE: Juma my friend, we will make sure that your death was not in vain. We are building a better future for our people, one that involves protecting our environment - our most precious resource. It is truly a new dawn in the village of Bushini.

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