**Appendix:**

**Participation, Development, and Accountability: A Survey Experiment on Democratic Decision-Making in Kenya**

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**Adherence to APSA’s Principles and Guidance for Human**

**Subjects Research**

This study was approved by IRBs at the University of Miami and Maseno University in the United States and Kenya. All research subjects were explicitly informed that they were taking part in a research study prior to taking the survey, that their responses would be strictly confidential, and that no identifying information for respondents would be saved by the researchers. Participants were then asked to provide explicit acknowledgement that they wished to participate by verbally affirming their desire to participate after reading informed consent forms and before beginning the survey. All respondents gave their consent before taking the survey. These respondents were balanced across gender, age, and location. They include low-income respondents, but not lower income overall than would be expected through a random sample of rural Kenyan participants in local budget processes. No deception was involved in the study, as participants were given real information about government spending and development project completion that was publicly available. The study did not intervene in any political process and respondents were given a snack and a drink for their time.

Elite interviews occurred with public officials and leaders of civil society organizations under the above IRB protocols. All interview subjects read and signed informed consent forms and answered a series of open-ended questions on public participation in budget processes contingent on responses being kept confidential and all data stored in anonymized form. The interviews did not intervene in any political process and elite interview subjects were not given any compensation for their time.

**Human Subjects Research Statement:** The authors declare the human subjects research in this article was reviewed and approved by the Maseno University IRB (Kenya) and the University of Miami IRB. Certificate numbers are MSU/DRPI/MUERC/00612/18 for Maseno and 20180535 for Miami.

**Ethics & Conflicts of Interest Statement:** The authors declare no ethical issues or conflicts of interest in this research. The research was funded by the World Bank and implemented in conjunction with Innovations for Poverty Action (Kenya); the authors received no payments as consultants and are co-owners of all data.

**Survey Instrument**

\*Note: The focus of this article is on treatment 3. The results from the full battery of survey experiments will be presented as separate chapters in a book manuscript.

|  |  |  |
| --- | --- | --- |
| Questionnaire Number | |  |
| Enumerator details (tick appropriately) |  | |
| Interview Time | Start |  |
| End |  |
| Location of survey | Ward |  |
|  | Village |  |

Respondent details

1. Respondent’s home

County \_\_\_\_\_\_\_\_\_\_\_\_\_\_Ward\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Village \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Gender (Enumerator selects)

|  |  |
| --- | --- |
|  |  |
| *Female* | *Male* |

1. Age\_\_\_\_\_\_\_\_
2. Level of education

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| *No formal education* | *Some Primary Education* | *Completed Primary Education* | *Some Secondary Education* |
| *Completed Secondary Education* | *Some University* | *Completed University* |  |

1. Monthly Household income

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

0-5,000 KSH 5001-10,000 KSH 10,001-20,000 KSH[[1]](#footnote-1)

20,001-30,000 KSH 30,001-50,000 KSH Above 50,000 KSH

1. Do you belong to a community organization? (CBO or NGO) Circle one

Yes No

1. If so, do you hold a leadership position in your community organization?

Yes No

1. Have you attended a community forum on the budget in the last two years?

Yes No

1. If not, why didn’t you attend?

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

The forum was too The forum interrupted work I was too busy

far away

I’m not interested in the budget. I had no information Other reason

about a meeting (Describe:\_\_\_\_\_\_\_\_)

1. To what extent do you agree with your county government’s spending choices? Select only one.

Strongly Agree – Agree – No Opinion– Do Not Agree – Strongly Do Not Agree

1. In your village/ward, what *one* sector do you think should receive more funding? Please select one from the following list.

\_\_\_\_\_\_ Water

\_\_\_\_\_\_ Education

\_\_\_\_\_\_ Health Services

\_\_\_\_\_\_ Roads

**Information**

Control: No treatment

How would you spend development funds in your county?

|  |  |  |
| --- | --- | --- |
|  | Your selections |  |
| Education | \_\_\_\_\_% | #17 |
| Health Services | \_\_\_\_\_% | #18 |
| Roads | \_\_\_\_\_% | #19 |
| Water | \_\_\_\_\_ % | #20 |
| Total | Should add up to roughly 100% |  |

Treatment #3A: Actual Information

Here is how your county government spends development funds. How would you spend the funds?

|  |  |  |  |
| --- | --- | --- | --- |
| Actual % |  | Your selections |  |
| % | Education | \_\_\_\_\_% | #21 |
| % | Health Services | \_\_\_\_\_% | #22 |
| % | Roads, | \_\_\_\_\_% | #23 |
| % | Water | \_\_\_\_\_\_% | #24 |
| 100% | Total | Should add up to roughly 100% |  |

Treatment #3B: No information, followed by actual information

How would you spend development funds in your county?

|  |  |  |
| --- | --- | --- |
|  | Your selections |  |
| Education | \_\_\_\_\_% | #17 |
| Health Services | \_\_\_\_\_% | #18 |
| Roads | \_\_\_\_\_% | #19 |
| Water | \_\_\_\_ % | #20 |
| Total | Should add up to roughly 100% |  |

Here is how your county government spends development funds. How would you spend the funds?

|  |  |  |  |
| --- | --- | --- | --- |
| Actual % |  | Your selections |  |
| % | Education | \_\_\_\_\_% | #25 |
| % | Health Services | \_\_\_\_\_% | #26 |
| % | Roads, | \_\_\_\_\_% | #27 |
| % | Water | \_\_\_\_\_\_% | #28 |
| 100% | Total | Should add up to roughly 100% |  |

**Collective Action**

Treatment #4: PB projects are more likely to be successful if community members provide **labor/contribute money to a Harambee**[[2]](#footnote-2) to help build the project.

Control: PB projects are no more likely to be successful if community members provide **labor/contribute money to a Harambee** to help build the project.

1. Are you willing to volunteer 1 day a week for 3 months to help complete the project?

Yes NO

29A. If yes, please provide your phone number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. Are you willing to contribute 100 KSH per month for 3 months to help complete the project?

Yes NO

30A. If yes, please provide your phone number\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Social Inclusion and Social Justice**

Treatment #5: The challenges facing youth/women/people with disabilities (rotate these) in this county means they deserve additional development funds through Participatory Budgeting.

Control: No treatment.

Please identify the extent to which you agree with the following statements. Circle only one choice after each statement.

Participatory Budgeting projects provide support for disadvantaged communities the entire community.

Strongly Agree – Agree – No Opinion– Do Not Agree – Strongly Do Not Agree

PB allows people from disadvantaged groups to influence the spending of development funds.

Strongly Agree – Agree – No Opinion– Do Not Agree – Strongly Do Not Agree

*Results for Baringo County*

Baringo’s actual development budget allocation varied considerably from Makueni and Elgeyo-Marakwet. Hence, the treatment in Baringo is distinct from that for Makueni and Elgeyo-Marakwet and the responses are in comparison to that treatment. Here the information provided was the previous year’s actual development budget allocation of 50% for water, 20% for health, 15% for education, and 15% for roads.

Table 1

Effects of Information Treatment on Preferred Allocation of the Baringo County Development Budget, by sector and percentage.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment Condition | Health  Mean Allocation (SE) | Education  Mean Allocation (SE) | Water  Mean Allocation (SE) | Roads  Mean Allocation (SE) |
| Control (No Information) | 25.36  (0.25) | 27.90  (0.28) | 28.51  (0.33) | 18.49  (0.21) |
| Actual County Budget Allocations | **23.31\*\***  **(0.55)** | **23.29\*\***  **(0.59)** | **34.79\*\***  **(0.72)** | 18.69  (0.45) |
| No Information Followed by Actual Budget Allocations | **21.64\*\***  **(0.28)** | **18.72\*\***  **(0.32)** | **43.37\*\***  **(0.53)** | **16.81\*\***  **(0.28)** |
| N: | 2,936 | 2,938 | 2,944 | 2,663 |

\* indicates P> t for difference in means between treatment and control less than 0.05.

\*\* indicates P> t for difference in means between treatment and control at less than 0.01

In Baringo County, like in Elgeyo-Marakwet and Makueni, we find treatment effects across all issue-areas based on the provision of actual budget information. On their own, respondents allocate budgets fairly evenly across sectors, with a preference for water (29% for water, 27% for education, 26% for health, and 19% for roads). Revealing the previous year’s budget distribution increases funding for water and decreases funding for education and health relative to respondents with no information and those that received the information before re-allocating their budgets. The treatment does not alter funding for roads. these results provide evidence of anchoring to government budget allocations in general, as well as a persistent interest in matching elites’ preferences. They also provide a robustness check on the results from Elgeyo-Marakwet and Makueni Counties, where health-related spending comprised the bulk of the development budget. In Baringo, water-related spending comprised the plurality of the development budget and education and health spending comprise similar, relatively equal portions. Thus, similar results in Baringo suggest that a desire to match elites’ preferences in any spending areas is driving the results, as opposed to the potential desire for more health spending in the other counties.

Table 2

Effects of Information Treatment on Preferred Allocation of Baringo County’s Development Budget, by sector and percentage. This table presents estimates of budget allocations for those in the control group (no budget information) and compares them with conditional estimates for those who believe each sector deserves more funding in the control and the treatment groups. The variable “Sector Deserving More Funding” is coded as four binary variables, one each for health, education, water, and roads. It then compares these estimates with the original responses for each treatment condition. 54% of Baringo respondents listed water as deserving the most funding, followed by 15% for health, 15% for education, and 10% for roads. The actual county development budget devoted 50% to Water, 20% to Health, 15% to Education, and 15% to Roads.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment Condition | Health  Mean Allocation (SE) | Education  Mean Allocation (SE) | Water  Mean Allocation  (SE) | Roads  Mean Allocation (SE) |
| No Information\*Sector Deserving More Funding | **31.89\*\***  (0.72) | **30.49\*\***  (0.63) | **31.09\*\***  (0.50) | **21.75\*\***  (0.97) |
| Control (No Information) | 25.36  (0.25) | 27.90  (0.28) | 28.51  (0.33) | 18.49  (0.21) |
| Actual County Budget  \*Sector Deserving More Funding | **25.14\*\***  (1.00) | **24.57\*\***  (2.23) | **39.25\*\***  (1.23) | **19.67\*\***  (1.87) |
| Actual County Budget Allocations | **23.31\*\***  **(0.55)** | **23.29\*\***  **(0.59)** | **34.79\*\***  **(0.72)** | 18.69  (0.45) |
| No Information, Followed by Actual Budget Allocations  \*Sector Deserving More Funding | **25.96\*\***  (0.81) | **27.09\*\***  (0.47) | **42.24\*\***  (0.80) | **19.69\*\***  (1.23) |
| No Information, Followed by Actual Budget Allocations | **21.64\*\***  **(0.28)** | **18.72\*\***  **(0.32)** | **43.37\*\***  **(0.53)** | **16.81\*\***  **(0.28)** |
| N: | 703 | 1,020 | 2,486 | 287 |

\* indicates P> t for difference in means between treatment and control less than 0.05.

\*\* indicates P> t for difference in means between treatment and control at less than 0.01.

Table 3

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models use OLS.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Actual County Budget Allocations | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| No Information Followed by Actual Budget Allocations |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| CSO Leadership | 2.42  (2.30) | -1.70  (1.51) | -5.11\*\*  (1.73) | -1.36  (0.97) | 5.20\*\*  (2.01) | 2.89\*\*  (1.15) | -2.43\*\*  (1.05) | 0.21  (0.55) |
| Age | -0.28  (0.15) | -0.34\*\*  (0.05) | -0.11  (0.11) | 0.07  (0.03) | 0.40\*\*  (0.12) | 0.21\*\*  (0.04) | -0.01  (0.07) | 0.06\*\*  (0.02) |
| Gender | 2.31  (2.20) | 1.80  (1.54) | -5.63\*\*  (1.58) | -2.74\*\*  (1.01) | 2.85  (1.84) | 1.47  (1.18) | 0.18  (1.05) | -0.47  (0.58) |
| Education | -3.68\*\*  (1.75) | -1.26\*\*  (0.48) | 2.23\*\*  (0.99) | 0.93\*\*  (0.31) | 1.00  (1.07) | 0.30  (0.35) | 0.36  (0.70) | 0.05  (0.17) |
| Constant | 57.09\*\*  (7.66) | 62.52\*\*  (3.38) | 25.44\*\*  (5.76) | 15.88\*\*  (2.25) | 7.91  (5.68) | 13.47\*\*  (2.26) | 8.51\*\*  (3.15) | 6.26\*\*  (1.25) |
| R2 | 0.03 | 0.05 | 0.05 | 0.02 | 0.07 | 0.05 | 0.01 | 0.01 |
| Observations | 402 | 766 | 402 | 766 | 402 | 766 | 402 | 766 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

Table 4

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for participants in meetings.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\* Participants | -5.96 (4.21) |  | 1.87  (2.81) |  | 4.54  (3.31) |  | -0.23  (1.19) |  |
| Treatment2\*Participants |  | 3.09  (2.67) |  | -1.39  (2.00) |  | -2.07  (2.07) |  | 0.64  (0.82) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Participants | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| CSO Leadership | 2.82  (3.94) | 1.44  (2.41) | -1.21  (2.84) | -4.46\*\*  (1.82) | 0.94  (0.79) | 2.85  (1.71) | -2.35\*  (1.15) | 0.19  (0.75) |
| Age | -0.19  (0.30) | -0.45\*\*  (0.09) | -0.09  (0.19) | 0.11  (0.07) | -0.23  (0.21) | 0.24  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Gender | 4.02  (4.55) | 2.25  (2.34) | -2.09  (3.10) | -1.23  (1.66) | 1.08  (1.00) | -0.59  (1.78) | 0.65  (1.29) | -0.65  (0.83) |
| Education | -3.72  (3.14) | -0.91  (0.81) | 3.13  (2.07) | 1.02  (0.61) | 0.39  (0.39) | -0.12  (0.57) | -0.65  (0.77) | -0.02  (0.27) |
| Constant | 57.83\*\*  (15.86) | 62.71\*\*  (5.94) | 17.29  (10.84) | 17.03\*\*  (4.58)) | 19.19\*\*  (12.79) | 14.74\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.23) |
| R2 | 0.05 | 0.07 | 0.02 | 0.03 | 0.02 | 0.05 | 0.05 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

Table 5

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for CSO Leadership.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\* CSO Leadership | 2.82 (3.95) |  | -1.21  (2.83) |  | 0.97  (3.40) |  | 0.65  (1.29) |  |
| Treatment2\*CSO Leadership |  | 1.44  (2.41) |  | -4.46\*\*  (1.82) |  | 2.85  (1.71) |  | 0.19  (0.76) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| CSO Leadership | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| Participants | -5.96  (4.21) | 3.09  (2.67) | 1.87  (2.81) | -1.39  (2.01) | 4.53  (3.30) | -2.07  (2.07) | -0.23  (1.20) | 0.64  (0.82) |
| Age | -0.19  (0.30) | -0.44\*\*  (0.09) | -0.09  (0.19) | 0.11  (0.06) | 0.16  (0.24) | 0.24\*\*  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Gender | 4.02  (4.54) | 2.24  (2.34) | -2.09  (3.11) | -1.23  (1.65) | -2.92  (3.54) | -0.59  (1.78) | 0.65  (1.29) | -0.65  (0.83) |
| Education | -3.72  (3.13) | -0.91  (0.81) | 3.14  (2.07) | 1.02  (0.61) | 0.95  (2.41) | -0.12  (0.57) | -0.64  (0.77) | -0.02  (0.28) |
| Constant | 57.83\*\*  (15.86) | 62.71\*\*  (5.94) | 17.29\*\*  (10.84) | 17.04\*\*  (4.58) | 19.19\*\* (12.79) | 14.73\*\*  (4.05) | 5.81  (4.19) | 4.00  (2.23) |
| R2 | 0.04 | 0.07 | 0.03 | 0.03 | 0.02 | 0.05 | 0.05 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 6

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for gender.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\* Gender | 4.02 (4.53) |  | -2.09  (3.11) |  | -2.92  (3.54) |  | -0.24  (0.36) |  |
| Treatment2\*Gender |  | 2.25  (2.34) |  | -1.23  (1.65) |  | -0.59  (1.78) |  | -0.65  (0.83) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Gender | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| CSO Leadership | 2.35 (3.21) | 1.44  (2.11) | -1.36  (2.83) | -4.33\*\*  (1.26) | 0.91  (3.45) | 2.85  (1.74) | -2.35\*  (1.15) | 0.19  (0.75) |
| Participants | -5.95  (4.61) | 3.96  (2.73) | 1.86  (2.83) | -1.39  (2.02) | 4.55  (3.59) | -2.08  (2.08) | -0.22  (1.19) | 0.24\*  (0.12) |
| Age | -0.18  (0.10) | -0.45\*\*  (0.10) | -0.09  (0.18) | 0.11  (0.06) | 0.16  (0.24) | 0.23\*\*  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Education | -3.55  (3.07) | -0.90  (0.81) | 3.09  (2.06) | 1.14  (0.68) | 0.95  (2.05) | -0.12  (0.57) | -0.65  (0.77) | -0.02  (0.27) |
| Constant | 57.83\*\* (15.84) | 62.71\*\*  (5.92) | 17.20 (10.03) | 17.03\*\*  (4.46) | 19.19  (12.04) | 14.74\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.23) |
| R2 | 0.04 | 0.07 | 0.03 | 0.03 | 0.02 | 0.05 | 0.03 | 0.05 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 7

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for age, divided by youth (age 35 and younger, which is the official classification for youth in Kenya, vs. 35 and older).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*Age | -0.16 (8.09) |  | 0.42  (6.65) |  | -1.63  (7.13) |  | 1.60  (2.36) |  |
| Treatment2\*Age |  | -0.13  (3.71) |  | 1.87  (2.64) |  | -0.60  (2.33) |  | -1.56  (1.23) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Age | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| Gender | 4.02  (4.54) | 2.24  (2.34) | -2.09  (3.11) | -1.23  (1.65) | -2.92  (3.54) | -0.59  (1.78) | 0.65  (1.29) | -0.65  (0.83) |
| CSO Leadership | 2.35 (3.21) | 1.44  (2.11) | -1.34  (2.83) | -4.33\*\*  (1.26) | 0.91  (3.45) | 2.85  (1.74) | -2.35\*  (1.15) | 0.19  (0.75) |
| Participants | -5.95  (4.61) | 3.96  (2.73) | 1.86  (2.83) | -1.39  (2.02) | 4.56  (3.59) | -2.08  (2.08) | -0.22  (1.17) | 0.24\*  (0.12) |
| Education | -3.55  (3.07) | -0.91  (0.81) | 3.09  (2.06) | 1.14  (0.68) | 0.95  (2.05) | -0.10  (0.57) | -0.65  (0.77) | -0.02  (0.27) |
| Constant | 57.83\*\* (15.84) | 62.71\*\*  (5.92) | 17.20 (10.03) | 17.03\*\*  (4.46) | 19.19  (12.04) | 14.74\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.24) |
| R2 | 0.04 | 0.07 | 0.03 | 0.03 | 0.02 | 0.05 | 0.03 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

Table 8

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for education, divided by median education in the sample.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*Education | -10.74\*\*  (4.67) |  | 8.23\*\*  (2.70) |  | 2.67 (3.68) |  | -0.53  (1.39) |  |
| Treatment2\*Education |  | 0.93  (3.13) |  | 2.04  (2.23) |  | -2.26  (2.39) |  | -0.87  (1.11) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Education | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| Age | -0.18  (0.10) | -0.44\*\*  (0.10) | -0.09  (0.18) | 0.11  (0.06) | 0.17  (0.24) | 0.23\*\*  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Gender | 4.03  (4.54) | 2.24  (2.34) | -2.08  (3.11) | -1.23  (1.65) | -2.92  (3.54) | -0.60  (1.78) | 0.65  (1.29) | -0.65  (0.81) |
| CSO Leadership | 2.35 (3.21) | 1.44  (2.11) | -1.34  (2.83) | -4.31\*\*  (1.26) | 0.94  (3.45) | 2.85  (1.74) | -2.35\*  (1.15) | 0.19  (0.75) |
| Participants | -5.95  (4.61) | 3.96  (2.73) | 1.85  (2.83) | -1.39  (2.02) | 4.56  (3.59) | -2.08  (2.08) | -0.22  (1.17) | 0.24\*  (0.12) |
| Constant | 57.84\*\* (15.84) | 62.71\*\*  (5.92) | 17.20 (10.03) | 17.03\*\*  (4.46) | 19.19  (12.04) | 14.74\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.24) |
| R2 | 0.04 | 0.07 | 0.03 | 0.03 | 0.02 | 0.05 | 0.03 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 9

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for income, divided by median income in the sample. Education is removed as a control in these models.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*Income | 4.63  (7.94) |  | 4.66  (4.70) |  | -8.57\*\*  (3.56) |  | -0.31  (2.43) |  |
| Treatment2\*Income |  | 0.54  (3.00) |  | -1.25  (2.15) |  | 0.55  (2.02) |  | 0.25  (1.02) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Income | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| Age | -0.18  (0.10) | -0.44\*\*  (0.09) | -0.09  (0.18) | 0.11  (0.07) | 0.18  (0.24) | 0.23\*\*  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Gender | 4.03  (4.54) | 2.24  (2.34) | -2.08  (3.12) | -1.23  (1.65) | -2.92  (3.54) | -0.61  (1.78) | 0.63  (1.29) | -0.65  (0.81) |
| CSO Leadership | 2.35 (3.20) | 1.44  (2.11) | -1.34  (2.83) | -4.31\*\*  (1.26) | 0.94  (3.45) | 2.85  (1.74) | -2.35\*  (1.14) | 0.19  (0.75) |
| Participants | -5.95  (4.61) | 3.96  (2.73) | 1.85  (2.84) | -1.39  (2.02) | 4.56  (3.60) | -2.08  (2.08) | -0.22  (1.18) | 0.24\*  (0.12) |
| Constant | 57.85\*\* (15.84) | 62.70\*\*  (5.93) | 17.21 (10.03) | 17.03\*\*  (4.46) | 19.19  (12.06) | 14.73\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.24) |
| R2 | 0.04 | 0.07 | 0.03 | 0.03 | 0.03 | 0.05 | 0.03 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

Table 10

The Effects of Information Treatment on Preferred Allocation of the Elgeyo-Marakwet and Makueni County Development Budgets, by sector. These models include interaction terms for previous attendance of budget meetings.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\* Previous Attendance | -5.96 (4.21) |  | 1.87  (2.81) |  | 4.54  (3.31) |  | -0.23  (1.19) |  |
| Treatment2\*Previous Attendance |  | 3.09  (2.67) |  | -1.39  (2.00) |  | -2.07  (2.07) |  | 0.64  (0.82) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Previous Attendance | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| CSO Leadership | 2.82  (3.94) | 1.44  (2.41) | -1.21  (2.84) | -4.46\*\*  (1.82) | 0.94  (0.79) | 2.85  (1.71) | -2.35\*  (1.15) | 0.19  (0.75) |
| Age | -0.19  (0.30) | -0.45\*\*  (0.09) | -0.09  (0.19) | 0.11  (0.07) | -0.23  (0.21) | 0.24  (0.06) | 0.09  (0.08) | 0.09\*\*  (0.03) |
| Gender | 4.02  (4.55) | 2.25  (2.34) | -2.09  (3.10) | -1.23  (1.66) | 1.08  (1.00) | -0.59  (1.78) | 0.65  (1.29) | -0.65  (0.83) |
| Education | -3.72  (3.14) | -0.91  (0.81) | 3.13  (2.07) | 1.02  (0.61) | 0.39  (0.39) | -0.12  (0.57) | -0.65  (0.77) | -0.02  (0.27) |
| Constant | 57.83\*\*  (15.86) | 62.71\*\*  (5.94) | 17.29  (10.84) | 17.03\*\*  (4.58)) | 19.19\*\*  (12.79) | 14.74\*\*  (4.05) | 5.81  (4.19) | 3.99\*\*  (2.23) |
| R2 | 0.05 | 0.07 | 0.02 | 0.03 | 0.02 | 0.05 | 0.05 | 0.03 |
| Observations | 138 | 324 | 138 | 324 | 138 | 324 | 138 | 324 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

Table 11

Effects of Information Treatment on Preferred Allocation of Nairobi County’s Development Budget, by sector and percentage. This table presents estimates of budget allocations for those in the control group (no budget information) and compares them with conditional estimates for those who believe each sector deserves more funding in the control and the treatment groups. It then compares these estimates with the original responses for each treatment condition. The variable “Sector Deserving More Funding” is coded as four binary variables, one each for health, education, water, and roads. 42% of Nairobi respondents listed health as most deserving of additional funding, 26% listed water, 23% listed education, and 8% listed roads. The actual county development budget devoted 60% to Health, 25% to Water, 10% to Education, and 5% to Roads.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Treatment Condition | Health  Mean Allocation (SE) | Education  Mean Allocation (SE) | Water  Mean Allocation  (SE) | Roads  Mean Allocation (SE) |
| No Information\*Sector Deserving More Funding | 28.21  (1.92) | **27.06\***  (0.92) | **22.58\*\***  (1.85) | **19.90\***  (1.47) |
| Control (No Information) | 28.74  (0.44) | 26.37  (0.67) | 26.19  (0.53) | 19.00  (0.53) |
| Actual County Budget  \*Sector Deserving More Funding | **29.44\***  (0.33) | **25.49\*\***  (1.20) | 23.49  (2.14) | **30.06\*\***  (0.58) |
| Actual County Budget Allocations | **30.42\*\***  (0.52) | **23.92\*\***  (0.53) | **23.03\*\***  (0.61) | **29.50\*\***  (0.51) |
| No Information, Followed by Actual Budget Allocations  \*Sector Deserving More Funding | 28.05  (1.26) | **31.00\*\***  (1.45) | **31.38\*\***  (1.14) | **24.76\*\***  (1.34) |
| No Information Followed by Actual Budget Allocations | **31.90\*\***  (0.49) | **29.36\*\***  (0.62) | **32.72\*\***  (0.57) | **26.02\*\***  (0.58) |
| N: | 744 | 399 | 401 | 99 |

\* indicates P> t for difference in means between treatment and control less than 0.05.

\*\* indicates P> t for difference in means between treatment and control at less than 0.01.

Table 12

The Effects of Information Treatment on Preferred Allocation of the Nairobi County Development Budget, by sector. These models use OLS estimation.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Actual County Budget Allocations | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| No Information Followed by Actual Budget Allocations |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| CSO Leadership | 3.27  (2.46) | 0.66  (1.23) | 3.22  (2.21) | -0.56  (2.15) | -2.51  (2.50) | 2.20  (2.41) | -2.42  (1.48) | -1.56  (1.24) |
| Age | 0.03  (0.09) | 0.08\*\*  (0.03) | 0.13  (0.07) | 0.05  (0.04) | -0.22\*\*  (0.08) | -0.28\*\*  (0.04) | 0.002  (0.06) | 0.15\*\*  (0.02) |
| Gender | 1.80  (1.44) | -1.28  (0.71) | 2.12\*  (1.09) | -1.74  (1.09) | -6.67\*\*  (1.42) | -1.57  (1.26) | -1.39  (0.95) | 4.20\*\*  (0.67) |
| Education | -1.09  (1.44) | 1.01\*\*  (0.37) | -3.46\*\*  (1.12) | -1.83  (0.47) | 1.74  (1.40) | 0.31  (0.62) | 1.60\*  (0.77) | 0.60  (0.33) |
| Constant | 29.50\*\*  (3.48) | 16.37\*\*  (1.27) | 26.10\*\*  (1.12) | 34.47\*\*  (2.11) | 31.00\*\*  (3.48) | 41.78\*\*  (2.56) | 27.14\*\*  (2.37) | 17.31\*\*  (1.33) |
| R2 | 0.05 | 0.05 | 0.05 | 0.09 | 0.07 | 0.11 | 0.01 | 0.13 |
| Observations | 387 | 600 | 387 | 600 | 387 | 600 | 387 | 600 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 13

The Effects of Information Treatment on Preferred Allocation of the Nairobi County Development Budget, by sector. These models include an interaction term for participating in PB meetings.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*Participants | -15.51\*\* (1.77) |  | 6.99\*\*  (1.36) |  | 0.16  (1.75) |  | 3.66\*\*  (1.28) |  |
| Treatment2\*Participants |  | -6.85\*\*  (0.77) |  | 3.87\*\*  (1.07) |  | 0.94  (1.29) |  | 1.73\*  (0.76) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Participants | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| CSO Leadership | -4.14  (2.67) | 0.63  (1.12) | 6.57\*\*  (2.25) | -0.55  (2.14) | -2.43  (2.62) | 2.20  (2.40) | -0.67  (1.82) | -1.55  (1.29) |
| Age | -0.07  (0.07) | -0.03  (0.03) | 0.18  (0.08) | 0.11\*  (0.04) | -0.21\*\*  (0.08) | -0.27\*\*  (0.04) | 0.03  (0.06) | 0.17\*\*  (0.03) |
| Gender | 0.97  (1.19) | -2.27\*\*  (0.66) | 2.5\*0  (1.09) | -1.19  (1.09) | -6.64\*\*  (1.43) | -1.43  (1.27) | -1.19  (0.97) | 4.45\*\*  (0.66) |
| Education | 2.66  (1.49) | 0.28  (0.38) | -5.16\*\*  (1.15) | -1.45\*\*  (0.50) | 1.70  (1.47) | 0.41  (0.64) | 0.71  (0.88) | 0.79\*  (0.33) |
| Constant | 38.68\*\*  (3.27) | 26.87\*\*  (1.82) | 21.96\*\*  (3.25) | 28.54\*\*  (2.52) | 30.91\*\*  (3.70) | 40.31\*\*  (3.19) | 24.98\*\*  (2.62) | 14.64\*\*  (1.73) |
| R2 | 0.25 | 0.18 | 0.11 | 0.10 | 0.07 | 0.11 | 0.04 | 0.13 |
| Observations | 387 | 600 | 387 | 600 | 387 | 600 | 387 | 600 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 14

The Effects of Information Treatment on Preferred Allocation of the Nairobi County Development Budget, by sector. These models include an interaction term for CSO Leadership.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*CSO Leaders | -4.14 (2.67) |  | 6.57\*\*  (2.26) |  | -2.43  (2.62) |  | -0.67  (1.82) |  |
| Treatment2\*CSOLeaders |  | 0.63  (1.12) |  | -0.54  (2.13) |  | 2.20  (2.40) |  | -1.54  (1.23) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| CSO Leadership | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| Participants | -15.55\*\*  (1.77) | -6.85\*\*  (0.77) | 6.99\*\*  (1.35) | 3.87\*\*  (1.07) | 0.16  (1.75) | 0.94  (1.30) | 3.65\*\*  (1.28) | 1.73\*  (0.76) |
| Age | -0.07  (0.07) | 0.63  (1.12) | 0.18  (0.08) | 0.11\*  (0.04) | -0.21\*\*  (0.08) | -0.27\*\*  (0.04) | 0.03  (0.06) | 0.17\*\*  (0.03) |
| Gender | 0.97  (1.19) | -2.27\*\*  (0.66) | 2.5\*0  (1.09) | -1.19  (1.09) | -6.64\*\*  (1.43) | -1.43  (1.27) | -1.19  (0.97) | 4.45\*\*  (0.66) |
| Education | 2.66  (1.49) | 0.28  (0.38) | -5.16\*\*  (1.15) | -1.45\*\*  (0.50) | 1.70  (1.47) | 0.41  (0.64) | 0.71  (0.88) | 0.79\*  (0.33) |
| Constant | 38.68\*\*  (3.27) | 26.87\*\*  (1.82) | 21.96\*\*  (3.25) | 28.54\*\*  (2.52) | 30.91\*\*  (3.70) | 40.31\*\*  (3.19) | 24.98\*\*  (2.62) | 14.64\*\*  (1.73) |
| R2 | 0.25 | 0.18 | 0.11 | 0.10 | 0.07 | 0.11 | 0.04 | 0.13 |
| Observations | 387 | 600 | 387 | 600 | 387 | 600 | 387 | 600 |

\* indicates p < 0.05.

\*\* indicates p < 0.01

Table 15

The Effects of Information Treatment on Preferred Allocation of the Nairobi County Development Budget, by sector. These models include an interaction term for gender.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | Health Allocation  (SE) | | Education Allocation  (SE) | | Water Allocation (SE) | | Roads  Allocation (SE) | |
| Treatment1\*Gender | 0.97 (1.19) |  | 2.49\*  (1.08) |  | -6.64\*\*  (1.43) |  | -1.20  (0.95) |  |
| Treatment2\*Gencer |  | -2.27\*\*  (0.66) |  | -1.19  (1.09) |  | -1.43  (1.27) |  | 4.45\*\*  (0.66) |
| Treatment1 | Omitted |  | Omitted |  | Omitted |  | Omitted |  |
| Treatment2 |  | Omitted |  | Omitted |  | Omitted |  | Omitted |
| Gender | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted | Omitted |
| CSO Leadership | -4.14  (2.67) | 0.63  (1.12) | 6.57\*\*  (2.25) | -0.55  (2.14) | -2.43  (2.62) | 2.20  (2.40) | -0.67  (1.82) | -1.55  (1.29) |
| Participants | -15.55\*\*  (1.77) | -6.85\*\*  (0.77) | 6.99\*\*  (1.35) | 3.87\*\*  (1.07) | 0.16  (1.75) | 0.94  (1.30) | 3.65\*\*  (1.28) | 1.73\*  (0.76) |
| Age | -0.07  (0.07) | 0.63  (1.12) | 0.18  (0.08) | 0.11\*  (0.04) | -0.21\*\*  (0.08) | -0.27\*\*  (0.04) | 0.03  (0.06) | 0.17\*\*  (0.03) |
| Education | 2.66  (1.49) | 0.28  (0.38) | -5.16\*\*  (1.15) | -1.45\*\*  (0.50) | 1.70  (1.47) | 0.41  (0.64) | 0.71  (0.88) | 0.79\*  (0.33) |
| Constant | 38.68\*\*  (3.27) | 26.87\*\*  (1.82) | 21.96\*\*  (3.25) | 28.54\*\*  (2.52) | 30.91\*\*  (3.70) | 40.31\*\*  (3.19) | 24.98\*\*  (2.62) | 14.64\*\*  (1.73) |
| R2 | 0.25 | 0.18 | 0.11 | 0.10 | 0.07 | 0.11 | 0.04 | 0.13 |
| Observations | 387 | 600 | 387 | 600 | 387 | 600 | 387 | 600 |

\* indicates p < 0.05.

\*\* indicates p < 0.01.

1. These categories are roughly equivalent to 0-$50 USD, $50-100 USD, and $100-200 USD [↑](#footnote-ref-1)
2. A harambee means “all pull together” in Ki-Swahili and is part of a tradition of community self-help to organize labor or fundraising activities in support of community projects. [↑](#footnote-ref-2)