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# Independent Evaluation of the Kosovo Threshold Program Transparent and Accountable Governance (TAG) Project

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## Acronyms

| | |
|---|---|
| ASHI | Agency for Information Society |
| AQ | air quality |
| BTX | benzene, toluene and xylene |
| CAPT | contribution analysis with process tracing |
| CBA | cost-benefit analysis |
| CMIS | Case Management Information System |
| CSO | civil society organization |
| CSGD | Center for the Study of Governance and Democracy |
| CTM | case tracking mechanism |
| EDC | Environmental Data Collection |
| EQ | evaluation question |
| ERO | Kosovo Energy Regulatory Office |
| FGD | focus group discussion |
| GDP | gross domestic product |
| GLPS | Group for Legal and Political Studies |
| GoK | Government of Kosovo |
| IT | information technology |
| ITT | indicator tracking table |
| JICA | Japan International Cooperation Agency |
| KEK | Kosovo Energy Corporation |
| KEPA | Kosovo Environmental Protection Agency |
| KHMI | Kosovo Hydrometeorological Institute |
| KII | key informant interview |
| KJC | Kosovo Judicial Council |
| KLI/IKD | Kosovo Law Institute |
| KLSC | Kosovo Legal Services Company |

**Acronyms**

| | |
|---|---|
| KODC | Kosovo Open Data Challenge |
| KPC | Kosovo Prosecutorial Council |
| KPP | Kosovo Public Pulse |
| KTV | Kohavision Television |
| MCC | Millennium Challenge Corporation |
| MEE | Ministry of Economy and Environment |
| MESPI | Ministry of Environment and Spatial PlanningM&E monitoring and evaluation |
| MFK | Millennium Foundation Kosovo |
| MOJ | Ministry of Justice |
| MOU | memorandum of understanding |
| NGO | nongovernmental organization |
| NIPH | National Institute of Public Health |
| NORAD | Norwegian Agency for Development Cooperation |
| ODP | open data platform |
| PAJI | Public Access to Judicial Information |
| PDF | portable document format |
| PPS | Public Pulse Survey |
| TAG | Transparent and Accountable Governance |
| TOC | theory of change |
| UNDP | United Nations Development Programme |
| USAID | United States Agency for International Development |
| VPN | virtual private network |

# Executive Summary

## A. Overview

Since Kosovo asserted its independence in 2008, its gross domestic product (GDP) has grown at an average rate of 4.3 percent per year, outperforming most Organisation for Economic Co-operation and Development countries. However, Kosovo's 2023 GDP per capita of U.S. $15,029 (in purchasing power parity) lags behind neighboring Balkan states such as Albania, Montenegro, North Macedonia and Serbia (World Bank 2024a). In a recent analysis of key macroeconomic factors that limit Kosovo's economic growth, Zogaj et al. (2017) identified unreliable electricity supply, weak rule of law and pollution and poor air quality (AQ) as among the most significant constraints to Kosovo attracting foreign investment and increasing trust in its democracy.

To address these challenges hindering Kosovo's economic development, the Millennium Challenge Corporation (MCC) partnered with the Government of Kosovo (GoK) on the Kosovo Threshold Program, a collaboration with a $49 million budget that entered into force in September 2017 and closed in September 2022. Millennium Foundation Kosovo (MFK) is the organization chartered by MCC and the GoK to implement the Threshold Program. The Threshold Program included two projects, the Reliable Energy Landscape Project, designed to reduce the imbalance between energy demand and supply, and the Transparent and Accountable Governance (TAG) Project, which aimed to increase the availability and accessibility of data to the general public, encourage its analytical use and ultimately promote data-driven decision-making.

The three activities of the TAG project are the Public Access to Judicial Information (PAJI; U.S. $4 million) Activity, the Environmental Data Collection (EDC; $3 million) and the Kosovo Open Data Challenge (KODC; $1.3 million). These three activities sought to be synergistic, each contributing to the objective of establishing a financially sound, transparent and accountable institutional basis for data delivery and economic expansion for Kosovar households, civil society actors and firms. TableII.1 summarizes the key components of each activity, which we describe in greater detail below.

**Table E.1. TAG activities and their key components**

| Activity | Key components |
|---|---|
| PAJI  | • Creating an online data platform (ODP) to enable public access to aggregate judicial data and data disaggregated by demographics and other relevant dimensions<br>• Launching a case tracking mechanism (CTM) that provides individual access to case information for authorized public users<br>• Supporting Kosovo Judicial Council (KJC) communication, outreach, and publication |
| EDC  | • Renovating and upgrading a network of AQ sensors for monitoring and conducting emissions inventory<br>• Launching an AQ monitoring and forecasting platform with websites and downloadable phone apps in partnership with Kosovo Hydrometeorological Institute (KHMI)<br>• Training GoK staff and civil society on platforms and conducting communications campaigns to inform residents about AQ and AQ data to promote behavior change |
| KODC  | • Assembling data sets in four DigData Challenges (Judicial, Air, Energy, Labor Force) for civil society organizations (CSOs) and companies to develop data-driven solutions to complex problems<br>• Disbursing up to $1.3 million in total to DigData grantees to develop data analysis products for government agencies and/or the public to promote data-based decision-making |

## B. Evaluation

This report presents findings from Mathematica's mixed-methods pre-post performance evaluation design of the TAG investments. We structured the evaluation as four distinct components, consisting of three activity-specific evaluations along with one cross-cutting evaluation to examine synergies among the activities and other dimensions of TAG that extend beyond the scope of any individual activity. Similar yet differentiated research questions characterize the four components of the TAG performance evaluation. Accordingly, the methodologies and data sources for the four components are similar and nuanced. Table E. summarizes how evaluation components correspond to each evaluation question.

**Table E.2. Summary of evaluation questions for each evaluation component**

| Simplified evaluation questions* | PAJI | EDC | KODC | Cross-cutting |
|---|---|---|---|---|
| **1.** Was the activity implemented according to plan (in terms of quantity and quality of outputs)? | X | X | X | |
| **2a.** Did the project achieve its stated objective in the time frame and magnitude expected? Why or why not? | | | | X |
| **2b.** Did the activity achieve its targeted outcomes in the time frame and magnitude expected? Did the project achieve its cross-cutting outcomes in the time frame and magnitude expected? Why or why not?<br>*Plus, for cross-cutting: Do the results of the program justify the allocation of resources for it?* | X | X | X | X |
| **3a.** Is there any increase in the GoK's use of analyses done by nongovernmental entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making? | X | X | X | X |
| **3b.** Did publishing data through relevant government websites result in increased analysis done by nongovernmental organizations (NGOs) or CSOs? | X | X | X | X |
| **3c.** Did the activity or project result in increased engagement between government and civil society and the media? | X | X | X | |
| **4.** How has the activity contributed to residents' use of government data in advocating for change?<br>*Alternative for cross-cutting: Is there a change in government employees' perceptions of government data as a public good or as a resource to be shared?* | X | X | X | X |
| **5.** Did the activity contribute to increasing trust and understanding of the relevant government system's functions?<br>*Plus, for EDC: Did the activity's interventions incentivize behavior change among residents to protect their health?* | X | X | X | |
| **6a.** Does the availability of government-produced AQ data reduce the adversarial relationship between civil society and the GoK? | | X | | |
| **6b.** Have interministerial communication and collaboration (between institutions working on air quality data) changed? | | X | | |
| **6c.** Are air pollution data continuously available and updated, and how accurate are the air pollution forecasts provided through the government platform? | | X | | |

*We simplified and made uniform the evaluation questions here for summary purposes. The full set of questions include more sub-questions and vary more across activities. Table III.1 provides a complete list of evaluation questions, methods, data sources, and key indicators for each activity.

This evaluation used a mix of analytical methods to generate insights that would answer the evaluation questions. Our **contribution analysis** framework enabled us to integrate insights from all research

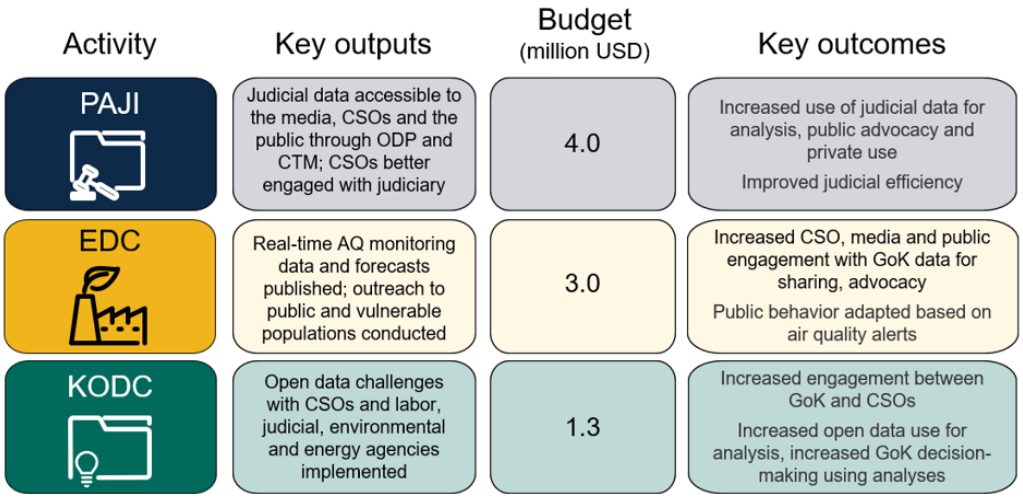
methods into a single interpretation of the extent to which each TAG activity contributed to its intended outputs and outcomes. The data collection approach and analysis methodology are as follows.

- We collected qualitative data from 47 interviewees and 24 focus group participants across various types of respondents connected to TAG in two rounds of post-project data collection. The first (and larger) round of qualitative data collection was conducted in person in early 2023, while the second, smaller round of follow-up data collection in early 2024 was conducted remotely. To analyze these data, we used a **qualitative thematic assessment and triangulation** approach. A systematic coding and querying process enabled us to identify themes emerging for each activity, actor and anticipated impact pathway. We also used a **political economy analysis** framework for PAJI and KODC to characterize the relationships and power dynamics between GoK agencies and nongovernmental actors and movements.
- We used **descriptive trends analysis** to extract insights from a variety of data sources over the period from early 2023 to early 2024:
  - Google Trends data (to understand residents' searches for project-related keywords before, during, and after the project's implementation)
  - Google Analytics data (to understand user traffic patterns on key project-funded open data websites)
  - Judicial and AQ data directly from the new open data platforms
  - United Nations Development Programme (UNDP) Public Pulse Survey (PPS) data related to satisfaction of residents of Kosovo with various government institutions over time
- In late 2023, we deployed retrospective **network analysis** of 2022 social media data to explore interactions and engagement across governmental and nongovernmental actors in the judicial space.

## C. Summary of implementation and outcomes findings

This section summarizes key findings identified through evaluation of each activity's implementation and outcomes, findings on the outcomes of TAG overall and policy implications of the findings. For ease of interpreting these findings and identifying deviations from plans, we present two figures. Figure E.1 summarizes the activities' planned outputs, allocated budgets and desired outcomes.

**Figure E.1. Overview of TAG activities and key outcomes**




USD = U.S. dollars. Note: This figure varies slightly from the version in the Evaluation Design Report (EDR). Rather than short-term outcomes, this version emphasizes medium and long-term target outcomes, which are the topic of evaluation questions 3-6.

Figure E.2 depicts a simplified and generalized pathway of all three activities' implementation and outcomes in four steps: data access, awareness and support, data use and social benefits. In each of the following activity-specific pathways, we use this model to show where challenges arose.

**Figure E.2. Generalized impact pathway of TAG activities**

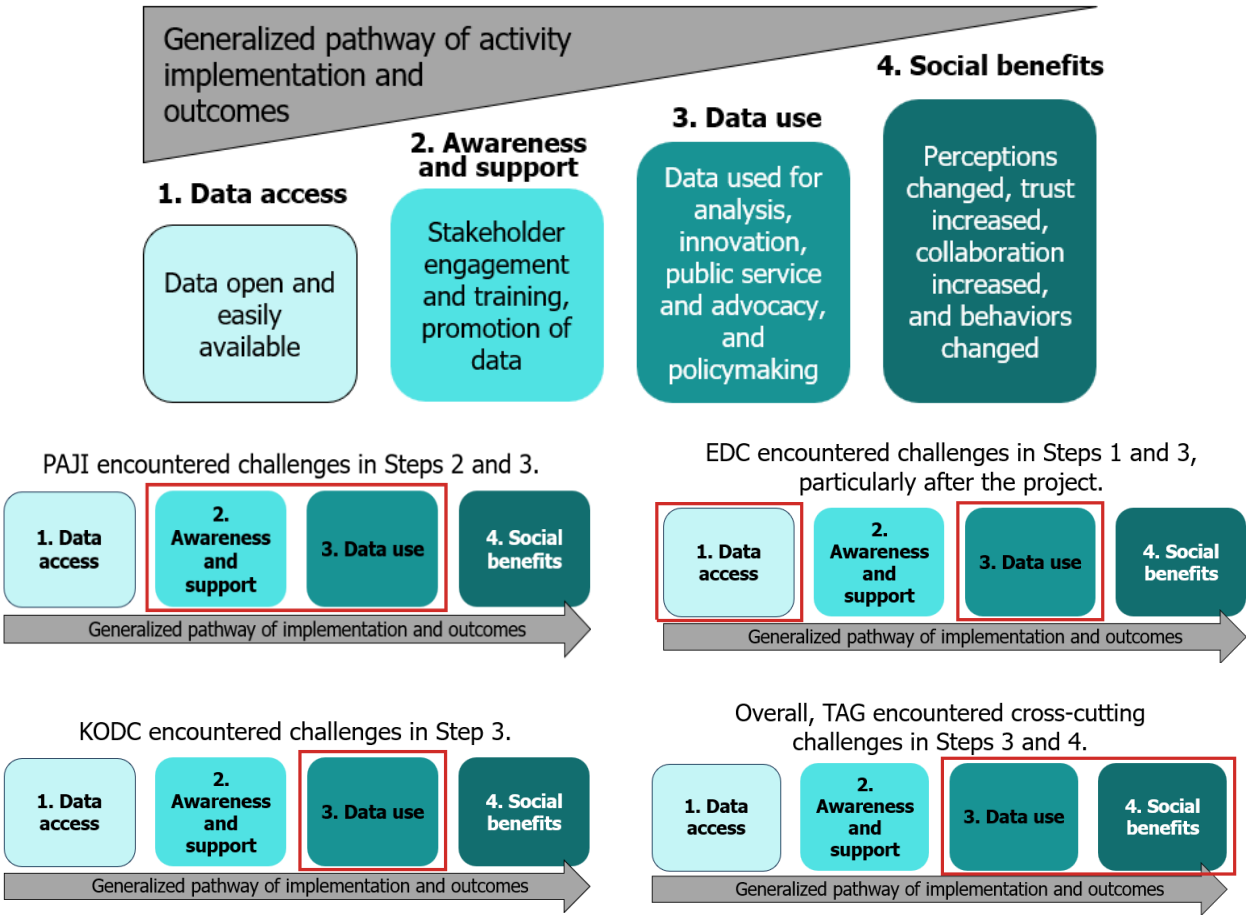



Table E.3 summarizes key findings pertaining to each evaluation question for each relevant evaluation component: PAJI, EDC, KODC, and cross-cutting.

**Table E.3. Summary of evaluation findings**

| Findings by research question and activity | | | |
|---|---|---|---|
| **1.** Was the activity implemented according to plan (in terms of quantity and quality of outputs)? | | | |
| **No**, PAJI did not produce all outputs according to plan. Early disagreements among MFK and partners produced substantial delays, meaning the ODP and CTM platforms launched only at the closure of TAG and causing the activity to skip important trainings on the ODP platform with CSOs. | **Yes**, EDC produced all planned outputs, such as *forecasting system functional* and *outreach (behavior change) campaigns*, during the activity. Toward the end of the project, EDC also successfully transitioned the website and app ownership to the beneficiary institution. | **Yes**, despite some delays**, KODC** produced all planned outputs, including *judicial, air quality, labor force, & energy data are prepared for KODC*, during the activity. KODC grantees were generally successful in using newly available government data to produce innovations for the public and government actors. | |
| **2a.** Did the project achieve its stated objective in the time frame and magnitude expected? Why or why not? | | | |
| **Yes**, the TAG project did achieve its objective, which was *to improve the public availability and analytical use of judicial, air quality, and labor force data by civil society, business, and the Government, thus promoting data driven decision-making* in the **time frame** (by October 2022) and **magnitude** expected, given that "the only expectation is that there is a change, no matter how small" (MFK M&E Plan, 2021, pp. 22, 31). The evaluation found evidence that the project did contribute to limited changes in civil society and private sector actors using open government judicial and air quality data in their work. | | | |
| **2b.** Did the activity achieve its targeted outcomes in the time frame and magnitude expected? Did the project achieve its cross-cutting outcomes in the time frame and magnitude expected? Why or why not?<br>*Plus, for cross-cutting: Do the results of the program justify the allocation of resources for it?* | | | |
| **No**, PAJI did not achieve its target outcomes in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator). Because of early implementation delays and other factors, PAJI made only limited progress toward outcomes such as *data literacy by non-GoK actors improved* and *public advocacy for targeted reform* by the end of the project. Answers to questions 3a-5 further expand these outcome findings. | **Yes**, EDC achieved targeted outcomes such as *public is informed regarding AQ health impacts* in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator) during the project. However, delays and confusion in the process of procuring and supporting an AQ platform maintenance operator caused lapses in the platform's functionality (and all the outcomes that stem from that output) after the project concluded. Answers to questions 3a-6c further expand these outcome findings. | **Yes**, KODC achieved its targeted outcomes in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator) during the project. GoK institutions used several KODC grantees' solutions, and some pairings of grantees and GoK institutions produced stronger links between civil society and government actors, though the relationships faded after the project ended. Answers to questions 3a-5 further expand these outcome findings. | **No**, though cross-cutting outcomes had no target magnitudes specified, TAG did not achieve substantial progress across its cross-cutting target outcomes, such as *increased consumption by GoK of analyses and projects generated by civil society and private sector using publicly available data,* by October 2022 or beyond that. The collective results of the activities do not appear durable enough to justify the allocation of resources to the project. Answers to questions 3a, 3b, and 4 further expand these findings. |

| | | | |
|---|---|---|---|
| **3a. Is there any increase in the GoK's use of analyses done by nongovernmental entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?** | | | |
| **No**, PAJI made limited progress increasing GoK's use of CSOs' analyses, and there is little evidence that those analyses factored into policy decision-making | **No**, while some GoK institutions use NGO analysis of air quality data to help make decisions, there is little concrete evidence the GoK increased that use during or because of the project. | **No**, while some GoK institutions are aware of analyses produced by CSOs under KODC (and hopeful about their application), there was no clear evidence that GoK institutions have used those specific analyses to inform policy decisions. | **No**, there was little evidence that the project contributed to an increase in government use of nongovernment analyses. Multiple stakeholders pointed to GoK institutional norm as a barrier to evidence uptake in decision-making. |
| **3b.** Did publishing data through relevant government websites result in increased analysis done by nongovernmental organizations (NGOs) or CSOs? | | | |
| **No**, relevant NGOs/CSOs generally cited skepticism of the data's quality and did not substantially increase their analysis of judicial data. | **Yes**, EDC dissemination of AQ data stimulated CSOs and media to conduct analyses and offer data-based insights to the public on air quality conditions and health. | **Yes**, all KODC grantees were successful in using government data to develop tools and analyses. | **Yes**, The TAG project created avenues for direct engagement between GoK entities and civil society and the media, but this evaluation found no clear evidence of increasing engagement between GoK institutions and CSOs and media organizations after the end of the TAG. |
| **3c.** Did the activity or project result in increased engagement between government and civil society and the media? | | | |
| **Yes, PAJI** increased engagement between those parties during the project, but post-project evidence suggests the engagement has not persisted. | **Yes**, EDC increased engagement between those parties during the project, but post-project lapses in the platforms' functions have threatened those connections. | **Yes**, KODC successfully facilitated engagement between GoK entities and CSOs, though most engagement has faded since the activity concluded. | |
| **4.** How has the activity contributed to residents' use of government data in advocating for change?<br>*Alternative for cross-cutting: Is there a change in government employees' perceptions of government data as a public good or as a resource to be shared?* | | | |
| PAJI **contributed** to public use of data for advocacy by allowing residents visibility of judicial processes and trends. | There is **little concrete evidence** EDC increased public use of data for advocacy, likely because of limited platform functionality and user traffic. | KODC grantees got members of the public, researchers, and the private sector to use their tools, but there is **little evidence** of impacts on advocacy at the population level. | **Yes**, the activities together produced a modest positive change in government employees' perceptions of data as a public good. |
| **5.** Did the activity contribute to increasing trust and understanding of the relevant government system's functions?<br>*Plus, for EDC: Did the activity's interventions incentivize behavior change among residents to protect their health?* | | | |
| **Yes**, PAJI contributed to increased understanding of government functions, but the activity **did not** appear to stimulate trust in the judiciary or relevant institutions. | **No**, given that the data were not continuously available (see 6c), the activity did not contribute to lasting increases in trust and understanding of government system's functions, nor did this evaluation find evidence that the activity incentivized behavior change. | **Yes**, stakeholders reported observing modest improvements to government transparency resulting from KODC, but the activity's effects on trust and understanding of the government's function are less evident. | |

| |
|---|
| **6a.** Does the availability of government-produced AQ data reduce the adversarial relationship between civil society and the GoK? |
| **No**, short-term improvements that EDC stimulated in CSO-GoK relationships were not maintained given that data for CSOs to use were not continuously available (see 6c). |
| **6b.** Have interministerial communication and collaboration (between institutions working on air quality data) changed? |
| **No**, because while communication and coordination were facilitated by EDC implementers during the project itself, connections between the relevant institutions were unchanged after the project. |
| **6c.** Are air pollution data continuously available and updated, and how accurate are the air pollution forecasts provided through the government platform? |
| **No**, data are not continuously available. When the project closed, the GoK beneficiary institutions had difficulty funding and procuring a third-party maintenance operator, which was a condition from MCC. The selection process took longer than anticipated and the selected operator did not have the supports or capacity to quickly rebuild the site's functionality. These challenges produced a long post-project gap in site and app functionality. Further, even during the project, many observations were missing in the AQ monitoring data. These factors mean the accuracy of forecasts cannot be credible assessed. |

## Implications for policy and practice

*Integrating activities*

Findings on TAG suggest that projects with activities that are not well integrated with one another might miss potential synergies and mutual reinforcement of outcomes. For example, the Judicial and AQ Challenge grantees in the KODC activity could not use PAJI's ODP and EDC's AQ platform, respectively, which was in part due to delays in the PAJI activity. Instead, grantees used earlier versions of the GoK's data portals, or even static data sets. This meant KODC grantees missed opportunities to learn about the open data platforms that would be available to the public going forward and give feedback to the other activities' implementing partners that could have strengthened the platforms' operation and usefulness. Given this, MCC might wish to review policies and guidelines on designing multi-activity projects to encourage cross-activity connections. In doing so, MCC may also wish to "plan for delays", allowing adequate time in project plans for activities which depend on one another to catch up and re-integrate if they run into early challenges.

*Strengthening institutional capacity*

TAG built beneficiary institutions' capacity during the project through supports for trainings and co-development of the open data platforms. But without ongoing supports, those institutions might not be able to maintain and improve the outputs after the project. For example, a variety of EDC stakeholders commented that the information technology (IT) capacity of the KHMI was inadequate for the institute to effectively negotiate the AQ platform transfer and support the new contractor on its own. This capacity gap contributed to delays and lapses in the functionality of the platform. Accordingly, MCC might wish to review policies and processes related to capacity building supports for beneficiary institutions that endure beyond the project's closure.

*Procuring services in a timely manner*

Delayed procurement processes and slow contract scope negotiations can threaten project achievements. For example, KHMI launched the procurement process for AQ platform maintenance close to the end of the TAG project, late enough to contribute to lapses in the platform's functionality. Beneficiary

institutions might wish to review and strengthen internal policies governing procurement processes. In a similar issue, MFK's longer-than-anticipated negotiations with PAJI contractors set back the start of the activity and contributed to the decision to skip trainings for CSOs planned for the end of the activity, which likely hindered the overall impacts of PAJI. MCC might wish to update its contracting procedures to help prevent or address delays from negotiations on scope, perhaps by allowing exceptions from certain contracting steps for procurements under a certain amount.

*Planning for continuity*

Activities without clear continuity plans that all stakeholders have agreed on could be more likely to produce confusion and lapses in service at the end of the project. For TAG, MCC established a Conditions Precedent (CP) requiring that GoK maintain data platforms post-project, but that plan proved difficult to implement given GoK's constraints. Donors might wish to strengthen their requirements for projects' results persistence plans, developing a template to capture details on which project outputs to transfer, to whom, when, and how, given any possible constraints. Donors, beneficiary institutions, and core implementers could then publish this filled-out continuity plan and disseminate it to project stakeholders—and other actors, if relevant—to improve each party's accountability for their commitments. For projects involving outputs like open data platforms, it might also help to have an IT specialist review the continuity plans alongside the project's technical team to make sure there is uniform understanding of the code-sharing, server access, and other factors needed.

*Planning open data challenges*

Grantees might be able to easily build useful technology-based innovations using government-provided data sets, but that does not guarantee the innovations will necessarily achieve satisfactory levels of usership, which has implications for other outcomes. Hosts of future open data challenges might wish to probe assumptions about the competitions and the innovations more deeply at the design stage. These assumptions could relate to the anticipated willingness of data-providing organizations to cooperate; the number, type and capacity of likely grant applicants; the level of grant funding innovators need to pursue post-project revenue sources; and the level of demand across potential user groups for the types of innovations grantees are likely to develop. Having examined these assumptions, hosts can adjust the size, number and supports of grants accordingly.

## D. Next steps and future analysis

MCC, TAG implementers and TAG beneficiary institutions will review this report and offer comments, which we will use to revise the report when necessary and offer responses to comments. When approved by MCC, it will publish this evaluation on the MCC website along with an evaluation brief. The evaluation team will also present findings to MCC and separately to local stakeholders in Kosovo, with the aim of sharing key findings and contextualizing them with any additional information MCC or other stakeholders can provide. All report and presentation deliverables will be complete by November 2024. This report can provide valuable lessons for stakeholders involved in the new compact recently launched by MCC and the GoK.

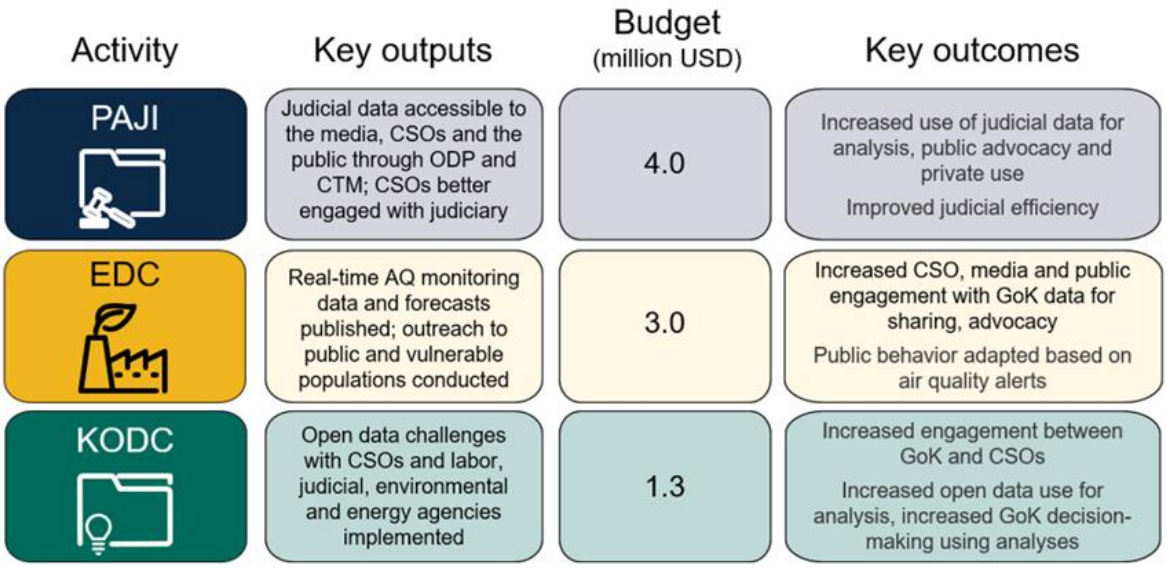
# I. Introduction

Since Kosovo asserted its independence in 2008, its gross domestic product (GDP) has grown at an average rate of 4.3 percent per year, outperforming most Organization for Economic Co-operation and Development countries. However, Kosovo's 2023 GDP per capita of U.S. $15,029 (in purchasing power parity) lags behind neighboring Balkan states such as Albania, Montenegro, North Macedonia and Serbia (World Bank 2024a). In a recent analysis of key macroeconomic factors that limit Kosovo's economic growth, Zogaj et al. (2017) identified unreliable electricity supply, weak rule of law and pollution and poor air quality as among the most significant constraints to Kosovo attracting foreign investment and increasing trust in its democracy.

To address these challenges hindering Kosovo's economic development, the Millennium Challenge Corporation (MCC) partnered with the Government of Kosovo (GoK) on the Kosovo Threshold Program, a collaboration with a $49 million budget that entered into force in September 2017 and closed in September 2022. Millennium Foundation Kosovo (MFK) is the organization chartered by MCC and the GoK to implement the Threshold Program. The Threshold Program included two projects, the Reliable Energy Landscape Project, designed to reduce the imbalance between energy demand and supply, and the Transparent and Accountable Governance (TAG) Project, which aimed to increase the availability and accessibility of data to the general public, encourage its analytical use and ultimately promote data-driven decision making.

The TAG project comprised three activities (Figure I.1): (1) the Public Access to Judicial Information (PAJI) activity, which aimed to support the GoK's efforts to improve decision-making and accountability by increasing the accessibility and public use of judicial data; (2) the Environmental Data Collection (EDC) activity, which aimed to improve the quality and availability of air quality data to support data-driven decision making; and (3) the Kosovo Open Data Challenge (KODC) activity, which aimed to foster a productive partnership between the GoK, the private sector and civil society by supporting innovations in the use of government data.

**Figure I.1. Overview of TAG activities and key outcomes**




USD = U.S. dollars. Note: This figure varies slightly from the version in the Evaluation Design Report (EDR). Rather than short-term outcomes, this version emphasizes medium and long-term target outcomes, which are the topic of evaluation questions 3-6.

In September 2021, MCC contracted with Mathematica to conduct an independent evaluation of the TAG project to determine how project activities and subactivities contributed to improving the availability and use of public data and promoting transparency and data-informed policymaking. In the following chapters, we provide context for the evaluation and describe the planned evaluation design.

- **Chapter II provides a detailed description of the TAG project** and its three activities, along with a discussion of the theory of change (TOC), which summarizes how project components contribute to achieving the intended outcomes. Chapter II also contains highlights from recent literature on open data initiatives' judicial and pollution transparency efforts to contextualize the key research contributions of this evaluation.
- **Chapter III presents the evaluation methodology**, describing the evaluation questions, methods, data sources, and analytical processes for evaluating PAJI, EDC and KODC activities as well as the project as a whole.
- **Chapter IV presents the results of our evaluation** and discusses the policy implications of our findings.
- **Chapter V summarizes next steps** for disseminating these findings.

# II. Threshold Program Overview

This chapter provides an overview of the TAG project and details about the three relevant activities. We also discuss the TOC and the causal pathways driving the program logic. In Section C, we provide a brief summary of the literature relevant to TAG's three activities and discuss the contribution of this evaluation to the literature.

## A. Overview of the project and implementation plan

The objective of the TAG project was to improve judicial, air quality and labor force data, making the data more accessible to the public to increase the use of data by civil society, business and the government to support decision-making. The three activities of the TAG project are the PAJI (U.S. $4 million) Activity, the EDC ($3 million) and the KODC ($1.3 million). These three activities sought to be synergistic, each contributing to the objective of establishing a financially sound, transparent and accountable institutional basis for data delivery and economic expansion for Kosovar households, civil society actors, and firms. Table II.1 summarizes the key components of each activity, which we describe in greater detail below.

**Table II.1. TAG activities and their key components**

| Activity | Key components |
|---|---|
| PAJI | • Creating an online data platform (ODP) to enable public access to aggregate judicial data as well as data disaggregated by demographics and other relevant dimensions<br>• Launching a case tracking mechanism (CTM) that provides individual access to case information for authorized public users<br>• Supporting Kosovo Judicial Council (KJC) communication, outreach and publication |
| EDC | • Installing network of air quality (AQ) sensors for monitoring and conducting emissions inventory<br>• Launching an AQ monitoring and forecasting platform with websites and downloadable phone apps<br>• Training GoK staff and civil society on platforms and conducting communications campaigns to inform residents about AQ and AQ data to promote behavior change |
| KODC | • Assembling data sets in four DigData Challenges (Judicial, Air, Energy, Labor Force) for civil society organizations (CSOs) and companies to develop data-driven solutions to complex problems<br>• Disbursing up to $1.3 million in total to DigData grantees to develop data products for government agencies or the public |

### PAJI activity plans

The PAJI activity aimed to increase public awareness of and access to judicial information, thereby enabling civil society to advocate for judicial reform more effectively. The activity sought to build on prior and ongoing judicial reform efforts by the KJC, Kosovo Prosecutorial Council (KPC) and Ministry of Justice (MoJ) with support from the U.S. Agency for International Development (USAID) and the Norwegian Ministry of Foreign Affairs. MFK implemented PAJI through three subactivities. The first subactivity was to create an ODP with the aim of enabling public users, from media outlets to private citizens, to view and download anonymized judicial data, supporting transparency and accountability in the judiciary. The activity's plans indicated the ODP would also allow disaggregation by case type and demographic characteristics such as sex, ethnicity and geographic location to support analyses of judicial statistics for marginalized groups. The second subactivity was to develop a CTM to provide individual users access to their case information (such as case status and court dates) online. Parties to court cases previously had to seek this information by visiting the relevant court in person. Both ODP and CTM

aimed to draw data from the Case Management Information System (CMIS), developed with support from the Norwegian government to increase judicial efficiency by helping judges manage their extensive caseloads. The third subactivity was to support outreach and training efforts to stimulate engagement between civil society, the public, and judicial institutions. PAJI sought to engage CSOs that led efforts to increase judicial transparency, raise public awareness of problems in the judiciary and improve judicial outcomes for marginalized groups. MFK contracted with Kosovo Legal Services Company (KLSC) in consort with B&S Europe to deliver the assessment and supervision of PAJI activity, whereas InfoSoft Systems sh.p.k, (in joint venture with Edusoft d.o.o., Nextsense Ltd. and Infosoft Systems sh.p.k. Albania) were contracted to implement hardware and software components of these subactivities. PAJI implementers had scheduled the ODP launch for October 2020 and the CTM launch for March 2021. Following the end of the Threshold Program, KJC was to assume responsibility for maintaining the CTM and ODP along with the trainings and engagement with public stakeholders.

### EDC activity plans

The EDC activity aimed to improve the quality and availability of AQ data, thereby informing the public of their health risks from pollution exposure and supporting air quality analyses by civil society and government. To strengthen the quality of Kosovo's AQ data, the EDC activity sought to improve the AQ monitoring network's hardware and software through collaboration with the Kosovo Environmental Protection Agency (KEPA), the Kosovo Hydrometeorological Institute (KHMI) and the National Institute of Public Health (NIPH). This network would generate the data fed to a new KHMI AQ platform. To promote awareness and use of the data across relevant ministries, the MFK planned to conduct a needs assessment of data used by NIPH and KEPA. The activity's main contractor would also conduct an emissions inventory of Kosovo to identify sources and types of pollutants, information which could then help generate forecasts of future AQ. The built-for-purpose AQ website and mobile app would enable government agencies, civil society and residents of Kosovo to view near real-time AQ data and forecasts in their location, thereby helping users make more informed decisions. Along the same lines, the activity aimed to conduct AQ outreach and behavior change activities, from AQ information days and trainings with public officials and civil society to media appearances to promote behavior change based on AQ reports. On days of particularly poor AQ, the public would be advised to either avoid strenuous physical activities outdoors or at least minimize time spent engaging in such activities. These campaigns would identify groups particularly vulnerable to air pollution, such as pregnant women, and developed messaging and outreach to engage those groups. The activity's long-term goal was to foster greater awareness about AQ and its impacts, with the intent of spurring greater collaboration between civil society and the GoK on issues related to AQ. In particular, EDC aimed to engage CSOs and media outlets that focused on pollution mitigation and public awareness of pollution issues.

### KODC activity plans

The KODC activity aimed to foster a more productive partnership among Kosovo's government, private sector and civil society by supporting data-driven innovation and promoting information-sharing and evidence-based decision-making. The activity sought to award up to $1 million in grants through a competitive process to individuals, private companies or organizations[1] with innovative ideas about how to use, analyze and present GoK data for public consumption or to support the government's analytical and public communication needs. In KODC's plans, MFK would

[1] Eligibility restrictions excluded only organizations that the World Bank or U.S. federal government have barred from procurement, or anyone prohibited from commercial relations with Kosovo.

offer grants for either data communication and outreach efforts to engage residents and civil society or proof-of-concept projects for grantees to develop innovative data products for government institutions, their partners in the private sector and the broader public. Open data challenges, branded as DigData Challenges, would support grantees in three areas: (1) time use and labor force data, with an emphasis on analyzing sex-specific barriers to career opportunities through the DigData Labor Force Challenge; (2) judicial data through the DigData Judicial Challenge; and (3) air quality data through DigData Air Quality Challenge. (MFK added a fourth challenge, DigData Energy, after KODC had begun.) In cases where GoK agencies would not be able to absorb and maintain solutions at the end of the grant, MFK planned to encourage grantees to maintain their products and seek other funding sources to scale up their solutions.

## B. Theory of change

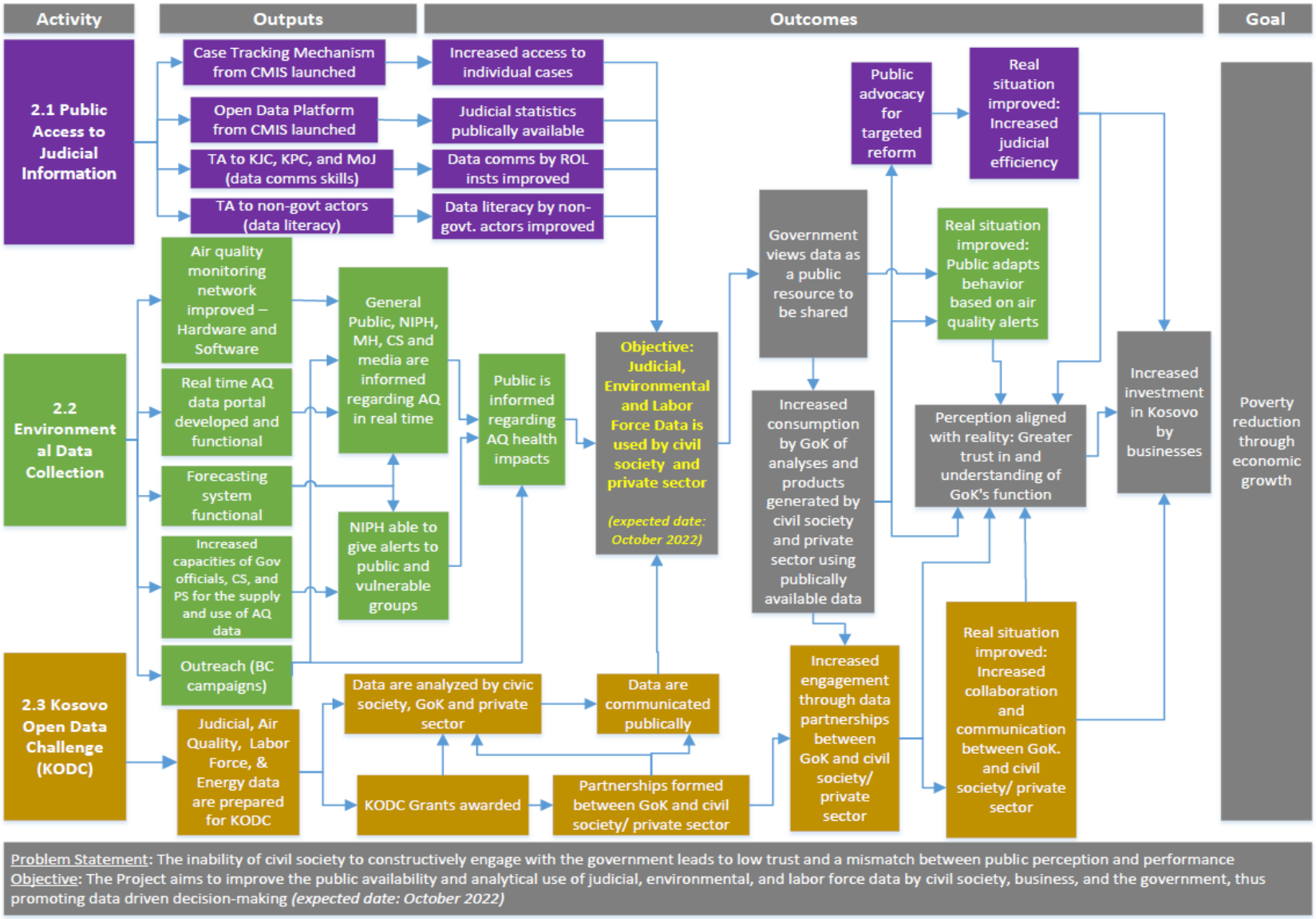
The TOC illustrates how activities and sub-activities of the TAG project contribute along causal pathways to the overall goal of the Threshold Program (Figure II.1). It gives an overview of the key sub-activities, their anticipated outcomes and how those results support TAG's long-term outcome of increasing business investment in Kosovo and the project's broader goal of reducing poverty through economic growth.

The TOC posits that providing data from government agencies will improve public perceptions of the government's effectiveness and responsiveness. These data will help address real and perceived weakness in the rule of law and government accountability and transparency in Kosovo. The current reality is that there is a disconnect between the laws in place mandating government transparency and the ability of civil society to constructively engage with the government. This has led to low public trust and incongruence between perceptions and performance, regardless of the government's actual performance.

Through complementary investments in open data, dissemination and learning activities, the project theory anticipated that civil society and other beneficiaries would access, analyze and publish findings using judicial, air quality, energy and labor force data, thereby increasing trust in government and aligning public perception and trust in government institutions with reality. Access to AQ data in real time and access to personal case information or anonymized, disaggregated judicial data would enable individuals and the public and private sectors to interface with government information and potentially improve public perceptions of government institutions. By offering access to labor force data and analysis, KODC DigData Challenge solutions could improve public understanding of unemployment, other labor dynamics and government policy responses. Similarly, DigData products that draw on energy data could improve public understanding of Kosovo's energy mix and consumption, in turn stimulating resident and civil society engagement on energy issues.

The TOC relies on a few key assumptions, including that the usefulness of these open data sources would be clear and that civil society and the private sector would have incentives and capacity to use the data for their purposes. As the public and private sectors used the data, the GoK would view these data as a "public resource to be shared" and would use the data-driven analysis and reports from civil society to inform government reforms and policies. This logic is in accordance with the KODC efforts to increase data partnerships between the GoK and civil society through the exchange of data and subsequent data analyses. For this to happen, the TOC assumes the data sources would present the data in a way that is useful to project beneficiaries and generates action.

**Figure II.1. TAG theory of change**




Source: MCC 2022

## C. Highlights from recent contributions to the relevant literatures

In 2022, Mathematica reviewed the existing evidence relevant to the key TAG interventions, which we summarized in our evaluation design report (D'Agostino et al. 2022). In this section, we update our review with more recent studies relevant to TAG's areas of work. We also briefly describe how this independent evaluation of the TAG project will contribute to the existing literature.

**Open data.** Our earlier review of the literature found that open data interventions designed to increase trust in government were more effective when paired with public engagement strategies, and that factors such as age and prior satisfaction with government mediated the effects of open data offerings on public trust in government. More recent research from Kazakhstan confirmed these patterns (Tubekova et al. 2023). Another study suggested that simply opening government data might not produce targeted results. Almuqrin and colleagues (2022) explored what made an open data platform contribute to public trust by breaking down the characteristics of open data offerings into system, service and data quality. System quality is represented by its availability, performance, responsiveness and documentation. Service quality relates to a user's judgment or impression of the overall delivery of the good, including a sense of assurance and value. Data quality is represented by its completeness, accuracy and timeliness. Almuqrin and colleagues (2022) showed that the level of public trust in governments' open data offerings depended on the perceived quality of relevant open data systems and services, as well as the quality of the data themselves. This implies that public perceptions of low quality in open data platforms might affect trust in the broader open data effort and limit public uptake and use of the data, thereby inhibiting advances toward public trust and understanding of government functions.

**Judicial transparency and efficiency.** Our earlier review of the literature on judicial transparency and efficiency found that Kosovo had an overburdened judicial system that could not consistently provide efficient or transparent services to the public or businesses. However, evidence showed that Kosovo was advancing in its process of digitizing records, which other studies suggested could improve court efficiency and opportunities for public access to statistics and private access to case information. In a more recent study, World Bank development economists Maroz and coauthors (2024) complicated that theory. They used a global panel data set to show how countries accelerated the digitization of their court systems during the pandemic and how that digitization can be linked to improved access to and transparency of the judiciary. However, their research showed that digitization alone is not enough to improve efficiency of the courts, particularly if systems are too complex or too simple, or have inadequate adoption. Indeed, the study found no strong correlation at the global level between judicial digitization and the speed of dispute resolution processes, and the authors recommended holistic supports to accompany digitization, including trainings for nongovernment actors, simpler procedural laws and investments in court personnel.

**AQ.** Our earlier review of the literature on AQ summarized research on the adverse impacts of air pollution on health, social and economic indicators; the seasonally variable air pollution profile of Kosovo; evidence on common interventions to reduce air pollution and inform the public on its levels; and psychological aspects of behavior change resulting from public information campaigns. More recent studies have augmented this evidence base. A 2023 study of the distributional consequences of air pollution in Tblisi, Georgia confirmed findings in the prior evidence, showing how air pollution negatively affects health, labor productivity and economic outcomes, and how poorer and less educated individuals were more likely to be exposed to both indoor and outdoor air pollution, particularly given their lower ability to change behaviors and obtain protective devices such as air filters and masks (Fuchs

Tarlovsky et al. 2023). These findings reinforced the motivations of the TAG project by showing the broad and negative impacts of air pollution. Researchers in France evaluated how exposure to personalized (household-specific) and general indoor AQ information affected households' awareness of and behaviors related to indoor air pollution (J-PAL 2023). (Much like Kosovo, France has high levels of indoor wood burning, which contributes to indoor $PM_{2.5}$ pollution). The study found that both interventions increased household awareness of indoor air pollution, but only personalized information was associated with actual reductions in indoor air pollution, and neither intervention changed participants' views of the health risks associated with air pollution (J-PAL 2023). This suggests that targeted and detailed AQ and public health information is necessary to produce behavior change. Although not a not a core goal of the Kosovo TAG project, Xie and Yuan (2023) explored how regulators in China could use monitors to reduce the public's exposure to pollution. The researchers showed how a pollution control program involving urban AQ monitoring stations—and allowing local government discretion in enforcing AQ regulations—reduced air pollution from upwind industrial firms and thus public exposure to air pollution in cities.

**Open data challenges.** Our earlier review of the literature on open data challenges found that governments and foundations (including in the Balkan and Black Sea states) tend to use open data challenges to draw attention and innovative problem-solving to difficult social, economic and pollution issues, but there was little rigorous research on the impacts of such challenges. There is still little rigorous evidence there, but rich qualitative data continue to emerge from the field of open data challenges. Similar open data challenge launched in May 2020 in response to COVID-19 by Data.org produced new lessons on good practices for successful open data challenges. The challenge focused on stimulating the development and use of data-driven solutions to difficult problems in agriculture, urbanization and development and youth unemployment, among other topics. An early implementation report found that eight initial awardees each had uneven capacity across domains such as data, talent, technology and partnerships, and that using assessments can help the challenge organizers provide suitable supports to help awardees maximize their impacts. Organizers also noted that the project's early successes were due in part to enthusiastic collaboration across sectors (including non-awardees from the private and nonprofit worlds) and across disciplines (DataKind 2021). The project's impact report described how the organizers and supporting partners offered tailored technical support, feedback, and expert guidance to the awardees, helping them reach their greatest potential impacts. With their data-driven solutions, awardees helped farmers reduce food losses, women build energy generation businesses and policymakers predict and manage outmigration and economic instability. Eight of the nine eventual awardee organizations secured follow-on funding to continue and scale their data-driven innovations, collectively sourcing $30 million and offering a strong example of impactful open data challenges (Data.org 2023).

**Contribution of this evaluation.** This evaluation provides new evidence of the contributions of open data interventions on the mindsets and behaviors of members of the government, public and civil society. Our findings also explore the persistence of changes resulting from those contributions and show how contextual factors in young countries such as Kosovo—including informality of relationships between government institutions—can affect the achievements of open data projects. MCC can use these findings to strengthen the design of future Threshold Programs and compacts with components related to open data and governance, particularly in countries with still-maturing institutional structures. Practitioners in the open data space can draw lessons from the experience of TAG implementers, who faced challenges related to contracting and partner capacity. Beneficiary governments, the public and civil society can find insights in this report on the pathways and barriers to improved government–civil society relations, the

factors that influence uptake and use of open data for advocacy and behavior change and the factors that influence public trust in government.

# III. Evaluation Design

This chapter describes our mixed-methods, pre-post performance evaluation design of the TAG investments. We structured the evaluation as four distinct components, consisting of three activity-specific evaluations along with one cross-cutting evaluation to examine synergies among the activities and other dimensions of TAG that extend beyond the scope of any individual activity. Similar yet differentiated research questions characterize the four components of the TAG performance evaluation. Accordingly, the methodologies and data sources for the four components are similar and nuanced. Table III.1 includes the evaluation questions, key indicators and data sources for all four components of the performance evaluation.[2]

The rest of this chapter describes the four components of this performance evaluation, including their data sources, data collection, evaluation timeline, analysis methodologies and challenges.

[2] In-depth information on data sources and research methodologies at the level of the individual evaluation question is available in the evaluation design report for this study (D'Agostino et al. 2022).

**Table III.1. Evaluation questions, data sources, methods, and key indicators**

| Methods | Evaluation questions | Data sources | Key indicators |
|---|---|---|---|
| **PAJI** | | | |
| • Implementation analysis<br>• Descriptive trends analysis<br>• Political economy analysis<br>• Qualitative thematic analysis and triangulation (pre-post) | **1.** Was the activity implemented according to plan (in terms of quantity and quality of outputs)?<br>**2.** Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?<br>**3a.** Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?<br>**3b.** Did publishing judicial data through relevant government websites (particularly KJC) result in increased analysis done by non-governmental organizations (NGOs) and CSOs?<br>**3c.** Did PAJI result in increased engagement between government and civil society and the media?<br>**4.** How has the project contributed to residents' use of judicial data in advocating for change?<br>**5.** Did PAJI contribute to increasing trust and understanding of the judiciary system's functions? | **Qualitative**<br>• Key informant interviews (KIIs) and focus group discussions (FGDs)<br>• Implementation documentation<br>**Quantitative**<br>• Google Trends for judicial-related searches<br>• Google Analytics for ODP and CTM<br>• Data from ODP<br>• MCC Kosovo TAG indicator tracking table (ITT)<br>• Social media interactions between CSOs and other stakeholders in their networks<br>• UNDP Public Pulse Survey (PPS) | • Key indicators and program outcomes listed in the measurement and evaluation (M&E) plan<br>• Stakeholders' reported use of the CTM and ODP portals<br>• Residents' perceptions of and trust in the justice system<br>• Residents' participation in judicial advocacy efforts<br>• Government use of data or CSO analyses for decision-making<br>• Increased advocacy, collaboration, and communication between civil society and judiciary<br>• Changes in judicial efficiency<br>• Government employees' perception of data as a public good |

| Methods | Evaluation questions | Data sources | Key indicators |
|---|---|---|---|
| **EDC** | | | |
| • Implementation analysis<br>• Descriptive trends analysis<br>• Political economy analysis<br>• Qualitative thematic analysis and triangulation (pre-post) | **1.** Was the activity implemented according to plan (in terms of quantity and quality of outputs)?<br>**2.** Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?<br>**3a.** Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?<br>**3b.** Did the dissemination of AQ data through government websites affect activities by NGOs and CSOs and, if so, why?<br>**3c.** Did EDC result in increased engagement between government and civil society and the media?<br>**4.** How has the project contributed to residents' use of air quality data in advocating for change?<br>**5.** Does the existence of transparent, government-produced AQ data, health advisories and a national outreach and behavior change campaign create enough incentive for civilians to change their behavior (for example, take actions to reduce the negative health impacts of air pollution)? If evidence of changed behaviors exists, who is adapting and how and why have they adapted?<br>**6a.** Does the existence of transparent, government-produced AQ data reduce the adversarial relationship between civil society and the GoK? If yes, whose attitudes and behaviors are likely contributors to these reductions?<br>**6b.** Has interministerial communication changed—for example, between KEPA and NIPH and, if so, why and how?<br>**6c.** Are air pollution data available on a continuously updated basis? How accurate are the air pollution forecasts provided through the NIPH portal? What percentage of time does AQ exceed given thresholds?<br>**7.** Did EDC contribute to increasing trust and understanding of government's function? | **Qualitative**<br>• KIIs and FGDs<br>• Implementation documentation<br>**Quantitative**<br>• Google Trends for AQ-related searches<br>• Google Analytics for the KHMI and NIPH websites<br>• KHMI AQ monitor and forecast readings<br>• MCC Kosovo TAG ITT | • Key indicators and program outcomes listed in the M&E plan<br>• Stakeholders' reported use of the KHMI AQ monitoring platform and NIPH microsite<br>• Frequency with which the AQ monitoring and forecasting platforms are updated<br>• Downtime for the AQ monitoring portal and stations<br>• Residents' participation in advocacy efforts related to AQ<br>• CSO and media use of the AQ portals to conduct analyses<br>• Government use of data or CSO analyses for decision-making<br>• Increased advocacy, collaboration, and communication between civil society and GoK actors related to AQ<br>• Government employees' perception of data as a public good<br>• Public perceptions of and trust in the government with respect to pollution policymaking |

| Methods | Evaluation questions | Data sources | Key indicators |
|---|---|---|---|
| **KODC** | | | |
| • Implementation analysis<br>• Descriptive trends analysis<br>• Political economy analysis<br>• Qualitative thematic analysis and triangulation (pre-post) | **1.** Was the activity implemented according to plan (in terms of quantity and quality of outputs)?<br>**2.** Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?<br>**3a.** Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?<br>**3b.** Did publishing energy, labor force, AQ and judicial data through relevant government websites result in increased analysis done by NGOs and CSOs?<br>**3c.** Did KODC result in increased engagement between government and civil society and the media?<br>**4.** How has the project contributed to residents' use of open data in advocating for change?<br>**5.** Did KODC contribute to increasing trust and understanding of government's function? | **Qualitative**<br>• KIIs and FGDs<br>• Implementation documentation<br>• Publicly available analyses by KODC grantees<br>**Quantitative**<br>• Google Trends for data-related searches<br>• Google Analytics for grantee-produced websites<br>• MCC Kosovo TAG ITT<br>• UNDP PPS<br>• Grantees' financial information | • Key indicators and program outcomes listed in the M&E plan<br>• Stakeholders' reported use of data portals<br>• Residents' perceptions of and trust in civil society organizations<br>• Residents' understanding of and trust in the government's performance<br>• Increased data-sharing between CSOs and GoK institutions<br>• Government use of data or CSO analyses for decision-making<br>• Increased advocacy, collaboration, and communication between civil society and GoK institutions related to labor, the judiciary, AQ, or energy<br>• Government employees' perception of data as a public good |

| Methods | Evaluation questions | Data sources | Key indicators |
|---|---|---|---|
| **Cross-cutting** | | | |
| • Implementation analysis<br>• Descriptive trends analysis<br>• Political economy analysis<br>• Qualitative thematic analysis and triangulation | **1.** Did the program achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?<br>**2.** Do the results of the program justify the allocation of resources for it?<br>**3a.** Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?<br>**3b.** Has engagement between government and civil society and the media increased?<br>**4.** Is there a change in government employees' perceptions of government data as a public good or as a resource to share? If yes, how are government employees sharing data with the public (open data, website and reports)? If no, why? | **Qualitative**<br>• KIIs and FGDs<br>• Implementation documentation<br>**Quantitative**<br>• Google Trends for data-related searches<br>• MCC Kosovo TAG ITT<br>• Financial data for activities | • Key indicators and program outcomes listed in the M&E plan<br>• Government use of data or CSO analyses for decision-making<br>• Increased advocacy, collaboration, and communication between civil society and GoK institutions related to labor, the judiciary, AQ, or energy<br>• Stakeholders' impressions of project impacts on transparency<br>• Increased data-sharing between CSOs and GoK institutions<br>• Government employees' perception of data as a public good |

## A. Data sources and data collection

We combined primary and secondary data sources to answer the evaluation questions. This section describes the quantitative and qualitative data sources, along with their important characteristics (such as temporal coverage, granularity and available indicators) and relevant limitations stemming from data availability and interpretability issues.

### 1. Quantitative data

A key focus of the evaluation is understanding whether and how civil society and relevant branches of the GoK use open data. We used the quantitative data sources summarized in Table III. to answer those questions.

**Table III.2. Overview of quantitative data sources, information sought, coverage period, and related evaluation**

| Data source | Unit of analysis | Information gained | Coverage period | Evaluation | | | |
|---|---|---|---|---|---|---|---|
| | | | | PAJI | EDC | KODC | Cross-cutting |
| Google Analytics<br>NIPH microsite<br>KHMI AQ monitoring and forecasts platform<br>CTM<br>ODP<br>Select KODC grantee sites and apps | Total daily unique visitors; average daily engagement time; total number of interactions; country of origin for Internet traffic[3] | Tracking public awareness of TAG-supported data transparency products | NIPH: January 2021–April 2024<br>KHMI: January 2022–June 2024<br>CTM and ODP: February 2023–April 2024<br>KODC grantees: Various | ✓ | ✓ | ✓ | |
| Google Trends<br>AQ-related searches<br>Judiciary-related searches<br>Searches related to open data | Weekly averages | Tracking changes in residents' interest in key areas related to data and governance related to TAG activities | June 2019–June 2024 (allowing for a pre-post assessment) | ✓ | ✓ | ✓ | ✓ |
| Facebook activity by key CSOs | For the CSOs tracked, coding every fifth post made by the organization# | Interactions between CSOs and their networks, including with other CSOs, GoK institutions, the media, academic institutions and donors | January 1, 2021–December 31, 2022 | ✓ | | | ✓ |

[3] A "user" is a unique person who accesses the site. "Engagement time" is the length of time that a user is actively using the site. "Interactions" are actions users take on the site, like clicks or form submissions.

| Data source | Unit of analysis | Information gained | Coverage period | Evaluation | | | |
|---|---|---|---|---|---|---|---|
| | | | | PAJI | EDC | KODC | Cross-cutting |
| UNDP PPS | Survey-weighted national-level percentages | Tracking changes in public trust in the government, judiciary, and civil society | June 2010–April 2023 (semi-annual, 24 rounds, allowing for a pre-post assessment) | ✓ | | ✓ | ✓ |
| Judicial ODP | Annual aggregated statistics | Tracking changes in judicial efficiency over time | 2020–2023 | ✓ | | | |
| KHMI AQ monitoring station data | Hourly pollution readings for $PM_{2.5}$, $PM_{10}$, $SO_2$, $NO_2$, CO, and $O_3$ | Tracking AQ over time and data missingness (as a result of platform or AQ monitoring station outages) | January 2019–March 2024, with intermittent outages | | ✓ | | |

[#] Resource limitations prevented us from reviewing every single post by selected CSOs. Using a sample coverage period, we examined trends in connections when viewing only every third or fifth post against trends in connections evident when viewing every post and found we could conduct the social network analysis without losing accuracy or substantial information about the extent of a CSOs' connections.

The primary means of assessing interest in newly available open data sets and data portals was through the **Google Analytics** website traffic data generated for a site or a phone app (Android and iOS). Relevant indicators included the number of daily visits to a web page, the number of app downloads and regularity of app use, the number of daily downloads of a report or data set and the average number of (active) minutes spent browsing web pages on the portal. We also obtained the country of origin for Internet traffic to assess the geographic concentration of site visits. We obtained Google Analytics data for all platforms supported by EDC and PAJI, as well as multiple platforms developed by KODC grantees.

We used **Google Trends** data to assess changes in Internet search intensity for keywords that are relevant to TAG programming, and to help determine whether such changes coincided with specific TAG-related milestones, such as the launch of an information campaign or the release of a new data product. We conducted searches in English and Albanian. Google Trends data do not provide actual counts of search queries, but rather convert those counts into a 0 to 100 integer range by normalizing each week's values against the maximum weekly value in the defined period of interest and multiplying by 100. Consequently, there will always be at least one week with a Google Trends value of 100. We used Google Trends data from 2019 onward to compare pre-intervention baseline data against search habits after TAG.[4] Doing so enabled us to interpret search intensities for all other weeks as a percentage of that week of maximum search intensity.

We obtained data from public-facing open data portals funded by TAG activities to inform our analysis of PAJI and EDC. For PAJI, we obtained **aggregate data on court cases and case parties from ODP**. In the case of EDC, TAG invested in refurbishing and deploying a network of AQ monitors at 13 sites (12 fixed locations and one mobile, displayed in Annex B) throughout the country, which feed hourly

[4] Although Google Trends data are available from 2013 onward, Google updated its data collection system on January 1, 2016. By dropping pre-2016 values from our analysis, we will avoid concerns about methodological differences in data collection potentially contributing to any of our findings.

pollution values of ambient air pollution into the KHMI AQ monitoring and forecasting site.[5] We accessed **AQ monitoring data** from the KHMI platform to measure changes in pollutant concentrations and assess platform performance. AQ forecast data were not available for our use in this evaluation due to several factors described in greater detail in the EDC results in Section IV.

The UNDP has conducted the **Kosovo Public Pulse Survey (PPS)** biannually since 2010. It conducts these opinion surveys with a representative sample of Kosovar adults and they include questions related to satisfaction with leaders and institutions, perceptions of safety and perceived rankings of the most important domestic problems. Because most of the survey questions appear in each survey round, the PPS is the only recurring survey conducted in Kosovo to offer a longitudinal view of public attitudes on social matters. However, the Data Quality Review (DQR) commissioned by MCC for MFK showed that the PPS survey questions do not perfectly align with the research objectives of the TAG evaluation, particularly regarding the EDC activity (IDRA 2022). For example, one question asks respondents about their "awareness regarding their right to live in a healthy and clean environment" (UNDP Kosovo 2022), which does not directly respond to potentially relevant EDC evaluation questions (EQs) 5, 6 or 9. Still, we could use trends from this data set to contextualize our data collection against broader developments among Kosovar residents, and to shed light on prevailing trends in public trust in the judiciary, civil society organizations and the government at large. We obtained the data by manually recording data values for indicators of interest from the Public Pulse site for Kosovo.

We used **social media content, particularly Facebook posts**, to describe the ecosystem of engagement between key CSOs active in judicial advocacy with one another, as well as engagement with government agencies and donors. Because Facebook's terms of use restrict web scraping, we manually reviewed and recorded Facebook activity for the two-year period from January 1, 2021, to December 31, 2022, from a select group of beneficiary institutions and CSOs that were peripherally engaged in the TAG project.[6] We reviewed each Facebook post and recorded whether it was an original post or had been reshared. We also recorded all organizations tagged in the post, including the original poster for posts that had been reshared. We sampled one in every five posts due to the high volume of Facebook posts. Due to the limited set of CSOs and beneficiary institutions active in pollution issues on Facebook, we limited the social media data collection and social network analysis to the PAJI activity.

### 2. Qualitative data

Our qualitative data collection combined document review with in-person and remote interviews and discussions with TAG stakeholders. For KODC, we used **grantee documentation**, including concept notes, milestone reports, annual reports and budgets and work plans to gather information on the implementation and impacts of the four DigData Challenges. Because these materials contained limited quantitative information (and the available data were not comparable across grantees or had other challenges to interpretability), we examined the qualitative information in the documents related to risks and assumptions, implementation challenges and successes and achievements and plans for long-term impact. These documents were part of our broader collection of **program documentation,** which

[5] As of July 2024, the 12 stationary sites submitting data to KHMI's air quality network are Brezovica, Dardhishtë, Drenas, Gjilan, Hani I Elezi, Mitrovica, Obiliq, Palaj, Peja, Prishtina (KHMI), Prishtina (Rilindja) and Prizren. There is also one mobile site, which is primarily based within Prishtina.

[6] The final list of Facebook pages from which we collected data included KJC, NGO Activ, Kosovo Law Institute, and Qendra për Ndihmë Juridike, Center for Social Group Development, Lëvizja FOL, Balkan Investigative Research Network, and Group for Legal and Policy Studies.

informed the implementation analysis. Our efforts focused on project timelines and work plans, progress reports, and analyses undertaken to guide key implementation decisions.

We conducted **KIIs** with a range of stakeholders who, because of their various levels and types of involvement with the project, had distinct perspectives to share. Interviewees included representatives from GoK beneficiary institutions, civil society and media organizations, academic institutions, members of the Kosovo judiciary, other GoK institutions, staff of MFK and MCC and donors not involved with the TAG program. Most interviewees were specifically relevant to one of the three Threshold Program activities, but a subset had experience with two or more of the activities. Because outcomes achieved in each activity could contribute to TAG-level outcomes, KIIs with a variety of actors also supported the cross-cutting evaluation. We used **FGDs** to stimulate dialogue among civil society representatives involved in multiple activities and among Kosovar residents to generate insights that one-on-one conversations might not have elicited. Each group consisted of three to eight participants and addressed relevant themes for the PAJI, EDC, and KODC activities.

***Beneficiary institutions*** are state institutions and government offices directly targeted in TAG's capacity building and open data activities. They include:

- Kosovo Judicial Council (KJC)
- Kosovo Prosecutorial Council (KPC)
- National Institute of Public Health (NIPH)
- Kosovo Hydrometeorological Institute (KHMI)
- Energy Regulatory Office (ERO)

For KIIs and FGDs, we developed guides and protocols informed by our review of the relevant literature on open data for judicial systems and AQ monitoring and information communication, project documents, interviews we conducted during a June 2022 mission trip and our initial analysis of the UNDP data sets. For all interviews and focus groups, we obtained participants' consent to record the conversation and use non-identifiable quotes and sentiments. For interviewees and FGD participants not comfortable speaking in English, we used materials and conducted conversations in Albanian and had all transcripts and notes translated to English by a professional translator. All individuals' statements were anonymized and quotes in the results section identify individuals only by their stakeholder type. Table III.3 provides a high-level overview of the participants in our qualitative data collection, summarized at the stakeholder category to protect participants' anonymity.

**Table III.3. Summary of KII and FGD participants by stakeholder group**

| Stakeholder categories | PAJI-related stakeholders | EDC-related stakeholders | KODC-related stakeholders | Total individual stakeholders |
|---|---|---|---|---|
| **Key informant interviewees** | | | | |
| MFK and MCC | 7 | 6 | 6 | 8 |
| Beneficiary institution | 4 | 5 | 3 | 11 |
| Other GoK institution | | 1 | 1 | 2 |
| Judiciary | 2 | | | 2 |
| Implementer | 6 | 1 | | 7 |
| CSO and academic | 3 | 6 | | 9 |
| Media | 1 | 2 | | 2 |
| Non-TAG donor | 3 | 1 | 1 | 4 |
| **Total interviewees** | **26** | **22** | **13** | **47** |
| **FGD participants** | | | | |
| CSO and academic | | 1 | 1 | 2 |
| KODC grantee | | | 7 | 7 |
| Kosovo resident | 8 | 7 | | 15 |
| **Total focus group discussion participants** | **8** | **8** | **8** | **24** |

Note: Multiple interviewees had knowledge of and spoke about multiple TAG activities and are thus double-counted between categories. The far-right column tallies the number of individuals that participated in interviews and focus group discussions.

We conducted the first round of qualitative data collection for all activities in person in Kosovo from January to April 2023. Two team members traveled to Kosovo in January 2023 to conduct the bulk of the English-language interviews. For interviewees who were less comfortable speaking in English, our Kosovar consultants conducted the interviews in Albanian. We recorded all interviews and translated Albanian transcripts into English for analysis.

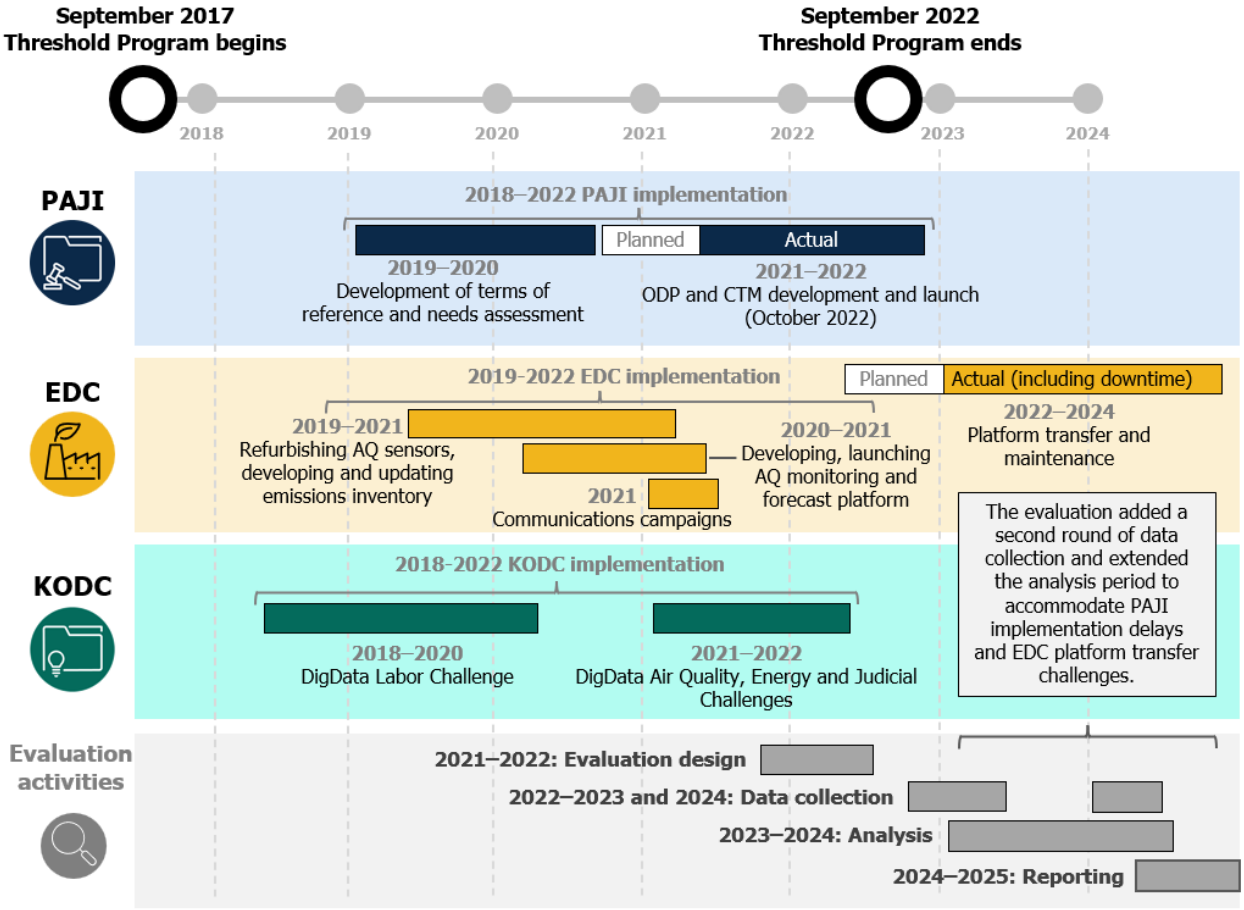
For KODC grantees, we used the initial FGDs to identify grantees across multiple DigData Challenges to feature in case studies. We prioritized selection of case studies in consultation with MFK. For the selected grantees, we conducted virtual or in-person interviews to supplement the insights we gained via the FGDs.

Due to the delayed launch of the PAJI-supported platforms and continued challenges with maintaining the EDC-supported platforms, we conducted a second round of qualitative data collection in February and April 2024 for PAJI and EDC, respectively. The purpose of this delayed data collection was to assess whether additional time had allowed for further changes to take place in terms of key outcomes in the TAG TOC. In the second round of data collection, we re-interviewed some of the same stakeholders—in particular beneficiary institutions and key CSO partners—as well as other key CSOs active in the judicial sector and the new contractor responsible for maintenance of the KHMI platform.

## B. Timeline and exposure period

The evaluation team designed this evaluation to align with the end of the TAG program to capture insights on the achievement and persistence of outcomes. Figure III.1 shows a timeline of PAJI, EDC and KODC selected subactivities and key evaluation activities.

**Figure III.1. Timeline of selected TAG sub-activities and evaluation phases**




Note: For ease of interpretation, this graphic does not include all sub-activities for each of TAG's three main activities. We selected the sub-activities presented here because of their relevance to the timing of evaluation phases.

We noted in our evaluability assessment (D'Agostino et al. 2022) that changes in participants' behaviors (such as CSOs using new analyses to engage with government on judicial issues) would depend on changes in those participants' capabilities, opportunities and motivations, which could take time to accrue. Because the implementation of **PAJI** was delayed and the CTM and ODP platforms were launched in October 2022, just as the Threshold Program ended (in September 2022), we conducted most data collection activities for PAJI in 2023 to increase the activity's exposure period, the richness of qualitative responses, and the number of observations in quantitative data sets. We also collected follow-up data in February 2024 to assess the extent to which PAJI outcomes were durable over time.

For **EDC**, we collected an initial set of data from October 2022 to April 2023. This allowed for about two years of exposure for some of the activity's key components, enabling us to observe project effects, especially those related to behavioral responses to the AQ monitoring platforms. Due to challenges in maintenance and functionality of the AQ forecasting features in the KHMI platform, we also conducted a second round of data collection in April 2024 to address program issues. As with the PAJI activity, we analyzed the first round of data collection and used outputs to inform our second round of data collection.

The implementation of **KODC** varied by DigData challenge area, with the Labor Challenge taking place in 2018 and 2019 and the Air Quality, Energy, and Judicial Challenges taking place in 2021 and 2022.

Given this staggered approach, our data collection in January through April 2023 enabled us to gather insights on programs that concluded up to three years ago and as late as August 2022.

## C. Analysis methodology

**Qualitative thematic assessment and political economy analysis**

Our qualitative data process followed the qualitative thematic assessment and triangulation approach as well as the political economy analysis described in our evaluation design report (D'Agostino et al. 2022). We coded KII and FGD transcripts in NVivo using a structure that enabled us to systematically extract data relevant to (1) each of the three project activities and the overall project, (2) anticipated pathways from interventions to impact, (3) the actors involved in those pathways, (4) the effects of the activities that actors observed, and (5) the valence (positive or negative) of those actors' sentiments about any effects observed. We queried the coded data and synthesized themes emerging for each activity, actor, and anticipated impact pathway. We used a political economy analysis framework for PAJI and KODC to characterize the relationships and power dynamics between GoK agencies as well as the actors and movements (including in civil society) operating outside the agencies who were directly and indirectly involved with TAG activities. The resulting insights fed into our responses to evaluation questions.

**Descriptive trends analysis**

We conducted descriptive trends analyses of Google Trends search intensity from June 2019 to June 2024. We used the full duration of data and compared the timings of above-average search activity against important project-related events (such as KJC's announcement of the ODP launch or a prominent CSO's publication of an investigation into judicial backlog) to assess whether contemporaneous media coverage and analyses drove Internet search patterns for judiciary-related keywords.

We also applied descriptive trends analysis on Google Analytics website traffic data for project-supported portals between the time frames described in Table III.2. As only post-treatment data were available for PAJI, we could not conduct a pre-post analysis of trends. However, with the extended data collection strategy described before, we could document how usage patterns changed in the six months after the portal launched, helping us interpret how various tasks—such as outreach and training for civil society, platform maintenance, the release of new videos on MFK's YouTube channel and so on—might have affected CSO and resident engagement.

We analyzed data collected directly from the new open data systems. For ODP, we constructed annualized data for the years 2020 through 2023 to explore changes in judicial processes and efficiency over time. Specifically, we visualized average case duration, percentage of cases resolved, newly incoming cases, total decisions, total judges and total unresolved cases. For our analysis of the KHMI AQ monitoring platform, we analyzed hourly pollution values to determine the reliability of the platform and assess whether AQ was poor enough that we would expect to see widespread use of the platform by residents. We used hourly pollution values for three of the pollutants measured by KHMI that are most hazardous to human health ($PM_{2.5}$, $NO_2$ and $O_3$) to calculate the rate of data missingness and the rate of exceedances of the European Union (EU) legal air quality limit values for the protection of human health.

We also produced a descriptive analysis using data from July 2014 to April 2023 from the UNDP PPS related to satisfaction with government institutions. The findings from this analysis served as a proxy to assess whether PAJI and KODC activities had influenced the public's trust in the judiciary and other institutions.

**Social network analysis**

We used social media data from Facebook to explore the network and strength of public-facing relationships between key CSOs and GoK actors. Civil society and government bodies in Kosovo typically use Facebook to share updates and engage with other actors. We combined interactions these entities had with others via Facebook posts and classified the interactions as posts or reposts. We developed a social network map demonstrating the directionality of interactions (posts versus reposts) and the links between specific actors, as well as the density of interactions over the two-year period of measurement (January 1, 2021, through December 31, 2022).

**Contribution analysis and process tracing**

Finally, we brought these analyses together under the contribution analysis and process tracing (CAPT) framework described in the evaluation design report (D'Agostino et al. 2022). CAPT served as the overarching analytical approach used to answer EQs, as it enabled us to integrate insights from all research methods into a single interpretation of the extent to which each TAG activity contributed to its intended outputs and outcomes.

## D. Limitations

There are three broad categories of limitations to this evaluation and its findings. The first encompasses challenges related to evaluating the TAG project vis-à-vis the project's implementation timeline. The second encompasses challenges related to the quality and availability of data sources. The third category relates to non-TAG data sources that might compete with TAG-supported platforms.

### 1. Limitations stemming from project implementation and timeline factors

This evaluation could not gather and use the entire body of data we had hoped to use, given distinct challenges with each activity. First, PAJI's implementation was delayed and the platforms were released in October 2022, just a few months before data collection began. Even with the extended data collection period, we could not gather as much information on the activity's long-term effects as we could have had implementation occurred earlier during the Threshold Program, as planned. Second, after EDC closed, gaps in the functionality of monitoring stations and the AQ platform itself meant there were fewer data available for this evaluation (and the public) to take up and use. Third, many of the KODC grantees completed their projects years before this evaluation, and staff turnover or dissolution of grantee organizations impeded our ability to collect data. This included recruiting participants in FGDs and obtaining Google Analytics data and other metrics of engagement with KODC grantees' online products. Combined, these factors challenged our ability to get a full view of each activity's impacts. However, the evaluation team took steps to fill in information gaps and offer rich insights in this report by extending data collection and providing deep dives into the causes and consequences of the implementation and timing challenges.

### 2. Data-related limitations

The use of Google Analytics data is helpful for understanding platform engagement but has limitations when seeking to understand the geographic concentration of users. Google Analytics data sets link the country of origin to the Internet Protocol address of the device. Site visitors using a virtual private network can route their Internet traffic through servers in another country, thus masking their web address. This has the effect of limiting our ability to use Google Analytics data to assess the prevalence of

*residents of Kosovo* using TAG-supported data platforms. Regardless, we can still track usage over time—a more important metric—as long as the share of true users who disclose Kosovo as their location is relatively constant over time.

There are also data quality and availability issues related to the UNDP PPS data set. First, the survey sample is a representative of the Kosovar population, not a stratified sample with selection based on recent, direct experience with specific government services (IDRA 2022). This could affect the types of perceptions reported by respondents. For example, assuming that a minority of residents are personally involved in a lawsuit at any given point in time, the PPS perceptions might be more a reflection of media portrayals of landmark cases because relatively few respondents drew upon direct experience when responding. As a result, aggregate numbers are more likely to represent attitudes about salient media events than firsthand (or related) experience as a plaintiff or defendant in an ongoing or recent legal case. A second limitation is the role that COVID-19 has played on many public perceptions, affecting several indicators that would otherwise be of use to the evaluation. We analyzed some of the most pertinent indicators and found large swings that coincided with the onset of COVID-19, which indicates that changes in public attitudes cannot be linked exclusively, or primarily, to TAG activities. Despite these limitations, we believe the Public Pulse data support the contribution analysis. A third limitation is that some of the KPP survey questions align poorly with the objectives of this evaluation. For example, the most pertinent survey questions for EDC included "C5. To what extent are you aware of potential environmental threats on your health/your family health?" and "C5a. How much do you think you know your rights to live in a healthy and cleaner environment?" (UNDP 2021). The limitation with C5 is that there are numerous potential environmental threats that respondents face—waterborne, soil-based, airborne, weather-based and so on—and therefore it lacks the granularity to decisively link responses to air pollution exposure, which is the focus of EDC. Question C5a speaks to a respondent's perceptions of their rights, which is a domain outside the scope of EDC activities or anticipated impacts.

### 3. Limitations related to prevalence of non-TAG data sources

Services other than the KHMI AQ platform also provide easy online access to AQ information for Kosovo and can contribute to public awareness, advocacy and behavior change in the same way that the EDC-funded site could.[7] This makes more difficult the task of assessing public interest in AQ information using KHMI site traffic, because user activity on EDC-funded information outlets does not capture all queries made by Kosovo residents about AQ. The availability of several other AQ sites also makes it more difficult to attribute changes in AQ-related public behavior or CSO advocacy to the EDC-funded platform. To try to parse public engagement with EDC sites versus others, we paired relevant Google Analytics (site traffic) with Google Trends (web search) data and qualitative queries to learn more about the platforms and information sources on AQ that are commonly relied upon for individual and policy-level decision-making.

[7] These sites include the Up-to-date air quality data page hosted by the European Environment Agency and the AirNow U.S. Department of State site for Kosovo which is no longer functional as of March 2025.

# IV. Results

## A. PAJI activity findings

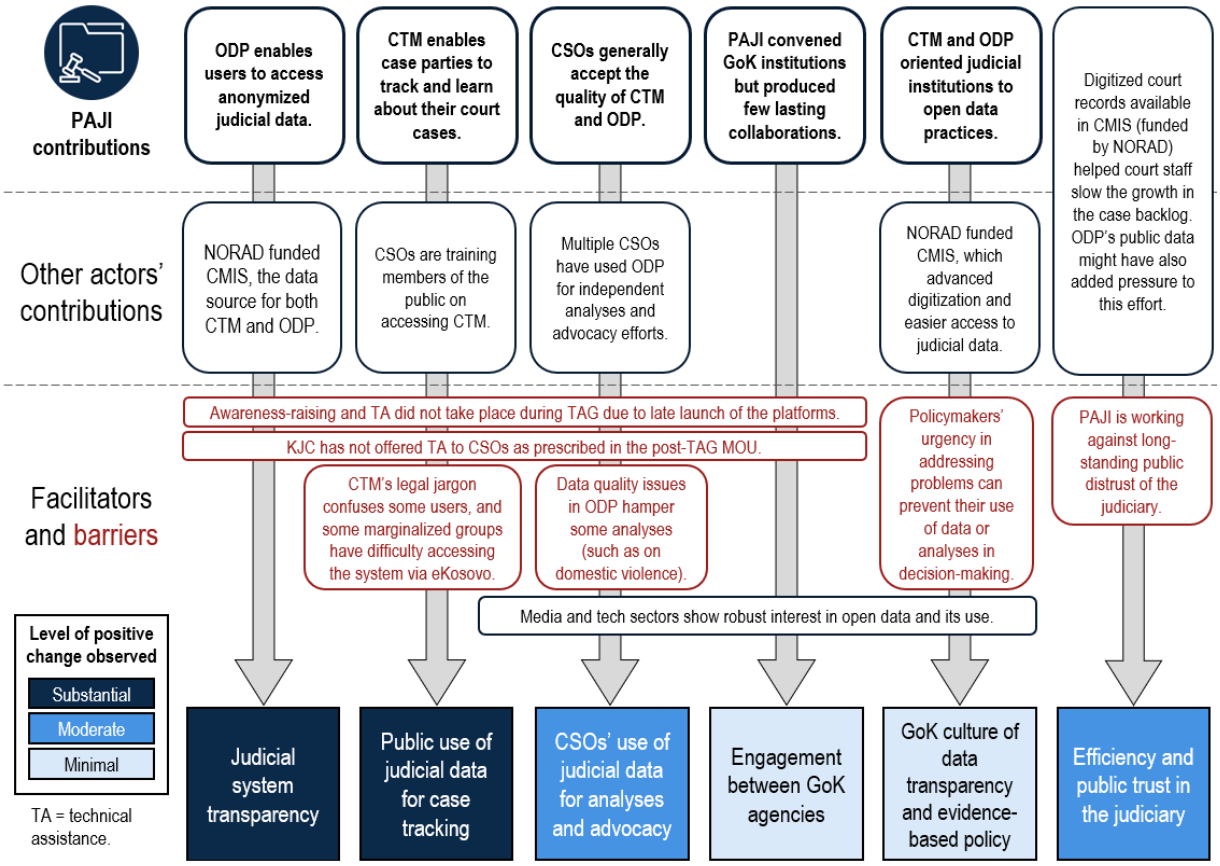
### Key takeaways

- MFK and implementing partners produced most of the activity's planned outputs (such as a needs assessment and the data portals) and made limited progress toward the targeted outcomes (such as the GoK's use of CSOs' analyses).
- Early contracting difficulties among MFK and implementing partners produced lengthy delays in PAJI's implementation.
- As a result, the implementing partner launched the ODP and CTM platforms more than a year later than planned, at the closure of TAG, and never completed the trainings on the ODP platform with CSOs.
- Among other factors, the absence of trainings with civil society limited uptake of the open judicial data for analysis and advocacy.

The generalized pathway of activity implementation and outcomes shows where PAJI encountered its main challenges.


This chapter presents findings for each of the evaluation questions corresponding to the PAJI activity. Figure IV.3 summarizes the findings using a contribution analysis diagram. The model shows how TAG project efforts—and those of other actors—advanced outcomes along impact pathways targeted by the PAJI activity, moving from the top of the diagram to the bottom. The figure also visualizes how outside facilitators and barriers, including those that arose after MFK's closure, affected the degree and persistence of those achieved outcomes. Dark boxes at the bottom of the figure indicate an outcome for which the evaluation observed substantial positive change, medium-tone boxes show which outcomes saw moderate positive change, and light boxes signal that the evaluation detected minimal positive change on that outcome. For example, PAJI's open data offerings, ODP and CTM, contributed to substantial positive changes in judicial system transparency and the use of judicial data for case tracking. However, data quality issues and the absence of training for CSOs limited positive changes related to another key outcome, nongovernmental use of judicial data for analyses and advocacy. The EQ 2 section of this chapter summarizes and describes in full the achievement and persistence of outcomes.

**Figure IV.3. Contribution analysis diagram for key PAJI outcomes**




*EQ 1: Was the activity implemented according to plan?*

**PAJI resulted in the successful launch of the data platforms: the CTM and the ODP.** Both were designed to rely on data from the Case Management Information System (CMIS), a digital platform for streamlined management of court cases within Kosovo's judiciary developed through support from the Norwegian Agency for Development Cooperation (NORAD) beginning in 2013. The CTM platform enables Kosovar residents to access specific records and documents related to any court cases in which they have been involved. Residents can access CTM through a secure, single sign-on with their eKosova identification number. The CTM provides case-level data to help people involved in a case navigate the judicial system and the ODP provides aggregate statistics on judicial processes at the court level to support transparency of court performance. ODP users can access predefined reports, which provide tabulations of commonly sought judicial data points, as well as dynamic reports, which allow customized views of user-selected data. Both report interfaces enable users to download data in Microsoft Excel and portable document format (PDF) files. The ODP also includes downloadable user manual, which is available in Albanian, Serbian, and English. The launches of both CTM and ODP were delayed: although CTM was scheduled to launch in March 2021 and ODP had a launch date of October 2020, both were launched in October 2022 just as the Threshold Program ended. These both remain operational; in November 2023, MCC noted no concerns in a post-project assessment related to maintenance of CTM and ODP (Amponsah 2023).

**PAJI successfully conducted training and capacity-building among beneficiary institution staff on the use and upkeep of CTM.** KLSC implemented capacity-building activities with staff members from KJC and KPC (22 from KJC and six from KPC), with the goal of helping trainees communicate better about the importance of data transparency and the usefulness of the CTM tool to their colleagues within the institutions. Despite some difficulties gaining familiarity with the new platforms—one beneficiary institution staff member complained that one of the implementing contractors declined to give a demonstration—KJC and KPC staff felt the trainings improved their ability to use the platforms. One stakeholder from MFK noted that PAJI underperformed against its training targets, but attributed this to an unrealistic target, highlighting the improbability of recruiting 100 trainees from KJC and KPC.

**GoK staff's knowledge of the platform might not last without ongoing trainings for current and new staff.** MCC's post-project assessment of the project did not find evidence that KJC had conducted additional trainings with GoK staff since the closure of the Threshold Program, nor that the platform training materials had been transferred to Kosovo Academy of Justice to orient future actors in the judiciary to the platforms.

**Contracting challenges and supply chain issues delayed work to develop and launch the platforms.** MFK contracted with KLSC and B&S Europe to assess the training needs of beneficiary institutions and contracted with Infosoft to build the platforms. It took several months (much longer than allocated in the project timeline) to mediate the needs of all parties, including the beneficiary institutions, and finalize contracts. These delays had knock-on effects: the ODP had a target release date of October 2020 and KLSC scheduled its work overseeing the ODP launch and follow-up to conclude in September 2021. However, the contracting delays meant KLSC did not deliver its initial design report for supervising and verifying the ODP and CTM platforms until April 2022. External to the project, the hardware provider for the two new platforms had COVID-19-related issues with its global supply chain, which delayed delivery of computer systems needed to host the platforms and train GoK institution staff.

**The delayed launch of the platforms prevented key awareness-raising among CSOs, journalists and academia from taking place during the PAJI activity**. PAJI's implementers engaged with CSOs before designing the platforms to gather their data needs and held a public launch of the ODP and CTM, but the activity did not deliver its planned trainings on the platforms to members of civil society, media, or other relevant stakeholders. One CSO stakeholder expressed frustration that because communities or the CSOs serving them did not receive training in how to use CTM, their organization had to use its own resources to sign up more than 10,000 members of the Roma, Ashkali, and Egyptian communities. The post-project memorandum of understanding (MOU) between MFK and KJC stipulated that the council would assume responsibility for further awareness-raising activities for both platforms, but one year after project closeout, most interviewees said KJC had done little or no work in that area. As noted in our literature review, open data interventions designed to increase trust in government are more effective when paired with public engagement strategies. The limited nature of public outreach and training from PAJI stakeholders could impede downstream outcomes, such as increased public trust in the judiciary.

**Stakeholders had mixed opinions on the quality of the platforms.** Multiple stakeholders noted that the persistent judicial backlog has meant the CMIS is often two or more months out of date, which also causes the CTM and ODP to be outdated. One journalist tasked with monitoring court activity noted that CTM is full of legal jargon, which could make it difficult for many residents to understand what is happening with their court cases. In contrast, beneficiary institution staff and some residents reported that CTM is a great success considering that before the platform's launch, people had to call or physically go to the courthouse to obtain basic details about their cases. Regarding ODP, several CSOs and journalists

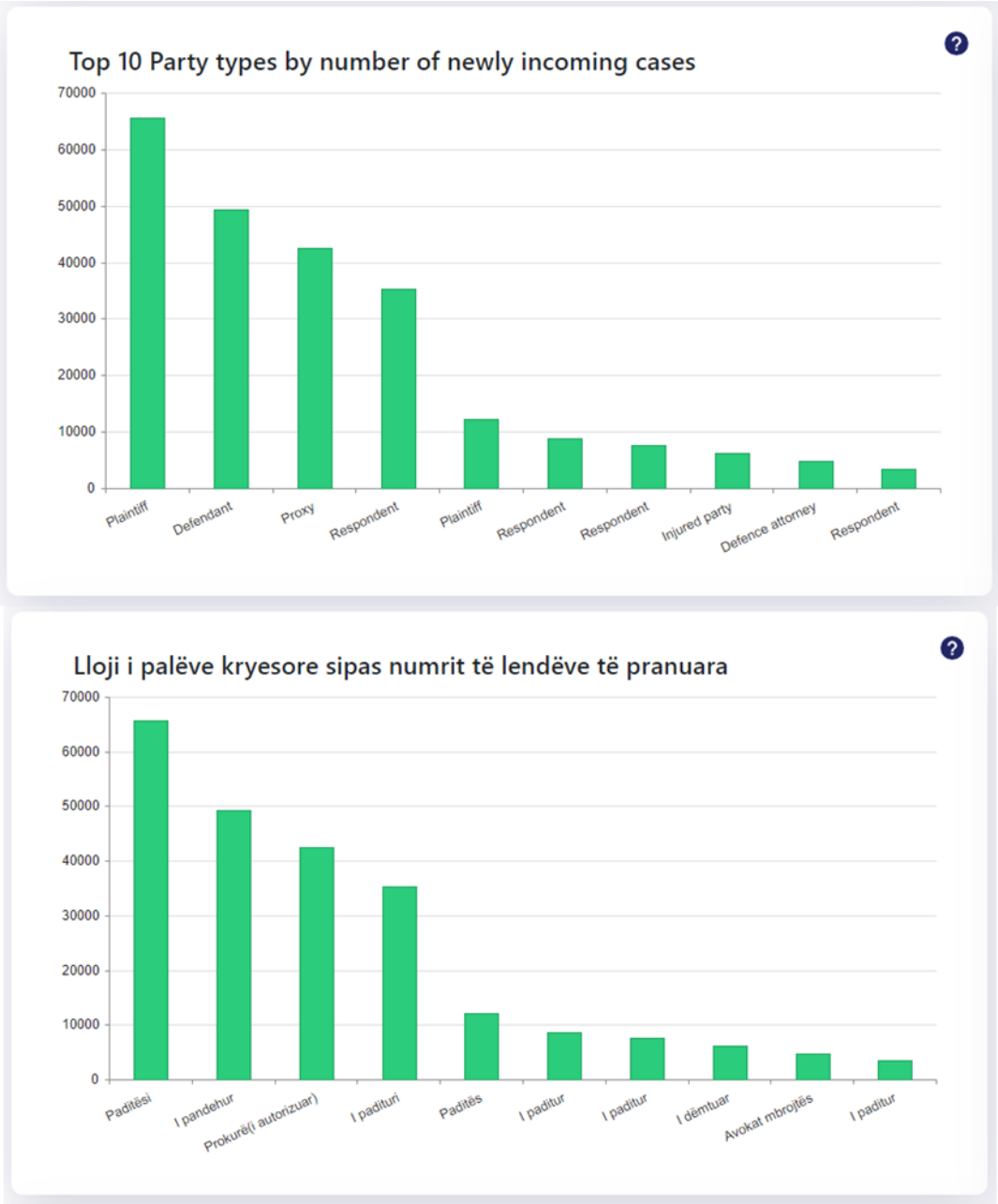
noted that the platform was inaccurate or presenting out of date data (only one journalist out of four CSO and media respondents said unequivocally that they have found the platform to be useful in their reporting). Critically, Almuqrin and coauthors (2022) showed that perceptions of poor quality in the systems, services or data in open data portals—such as those perceptions expressed by stakeholders here—can limit public trust in the government's open data offerings. That, in turn, likely constrained PAJI's contributions to changes in public trust and understanding of GoK judicial functions (EQ 5).

**Some CSO and media stakeholders noted that the ODP has limited utility for reporting on judicial processes related to certain types of crimes and infractions; judicial institutions acknowledged there is room for improvement.** First, the Kosovar judicial classification system does not align neatly with the classification system in the ODP database. For example, one CSO stakeholder highlighted the challenge in using ODP to report statistics related to domestic violence because the system categorizes those cases only by type of violence (assault or murder), leaving out the intimate or familial nature of the victim–perpetrator relationship. Second, as pointed out by a media stakeholder, ODP is not yet equipped to include data from civil cases, which compromises its usefulness of the system for businesses and other actors interested in learning more about civil litigation. Apart from the ODP, the KJC homepage offers Judicial Performance Dashboard which depicts case clearance rates and other basic statistics for "major case types [including] criminal, serious crimes, juveniles, civil contested, commercial and administrative [cases]." Because the ODP does not include all those case types, none of the two systems' statistics align.[8] One beneficiary institution stakeholder acknowledged these limitations and noted that the judicial system has had a hard time calibrating the balance of the ODP service between providing sufficient data to support useful analyses and providing an overwhelming amount of data that would be difficult for most users to manipulate. Nonetheless, numerous interviewees, including GoK and CSO staff, expressed confidence that the platforms will improve judicial accountability and efficiency, especially if the system is refined.

**Some characteristics of the ODP can also affect users' trust in the veracity or completeness of the data and might also limit the platform's utility for advanced users.** For example, the platform includes predefined data visualizations generated automatically based on the latest data. One of these visualizations on the "Residents" tab of the platform is a bar chart of the top 10 party types by number of newly incoming cases. Our assessment of the site showed that this chart includes multiple columns for plaintiff, respondent and proxy, with no explanation for why it repeats these categories or what the distinctions are for different columns (Figure IV.4). On the dynamic ODP interface, users seeking more granular information can export data into an Excel spreadsheet or PDF file, but the data export often produces a complex pivot table with columns and rows that do not clearly indicate how data have been aggregated across multiple categories, reducing the degree to which platform data exports can support analyses. As shown in our literature review, public perceptions of low quality in ODPs can affect trust in the broader open data effort and limit public uptake and use of the data (Almuqrin et al. 2022).

[8] The Judicial Performance Dashboard is at https://www.gjyqesori-rks.org/performance-dashboard/?lang=en. Though the ODP only includes criminal cases (a fraction of what the dashboard supposedly represents), many more cases appear in the ODP than the Judicial Performance Dashboard when users query for the same statistic, such as number of cases received or resolved. This evaluation was not able to establish the reason for that unexpected result.

**Figure IV.4. Screen captures of a data visualization on the ODP predefined reports page**




Source: Captured from the ODP website: https://odp.gjyqesori-rks.org/PredefinedReports/CitizensSubmitted.

Note: There are multiple columns with labels that are indistinct from one another: the *Patidesi* (plaintiff), *i padituri* or *i paditur* (respondent) and *Prokerue (i autorizuar)* (proxy) categories. The Serbian interface of the ODP website shows the same issue.

**The final cost of the PAJI activity was $2.6 million, below the targeted amount of investment of $4 million.** These costs included the KLSC and B&S Europe contract for the needs assessment and supervision of the CTM and ODP launch (about $434,000), the contract with Infosoft for hardware and the CTM and ODP software (about $2.1 million) and promotion events for PAJI (about $95,000). Remaining funds were unspent largely due to delays and the fact that PAJI did not conduct trainings with CSOs on the platform after its launch.

*EQ 2: Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?*

PAJI did not achieve its target outcomes in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator). Because of early implementation delays and other factors, PAJI made only limited progress toward outcomes such as *data literacy by non-GoK actors improved* and *public advocacy for targeted reform* by the end of the project.

EQ 2 encompasses EQs 3a through 5, which each focus on a subset of outcomes under the PAJI program logic. Table IV.1 provides the targeted outcomes in PAJI's program logic, its achievements, and the evaluation question that addresses it. Readers can use this table to navigate the following sections to explore specific outcomes of interest. Note that EQs 3a, 3b, and 3c appear in a different order in the main body of this chapter to better align with the order of outcome achievement we observed.

**Table IV.1. Summary of PAJI outcomes and high-level results**

| | Targeted outcomes | High-level results |
|---|---|---|
| 1 | Publishing data through the ODP and CTM is expected to lead to:<br>• A rise in analyses of judicial data conducted by CSOs, media actors and academia (**EQ3b**)<br>• An increase in the public's use of judicial data to advocate for change (**EQ4**) | The release of **ODP** has led to a moderate increase in CSOs, academics, and media organizations using judicial data to inform analyses.<br>Quantitative data indicate that public use of **CTM** is increasing, though there is little qualitative evidence available on users' experience. |
| 2 | The increase in CSO, media, and academic analyses under Outcome (1) is expected to contribute to:<br>• An increase in GoK institutions' usage of these analyses to inform decision-making (**EQ3a**)<br>• Increased engagement between GoK institutions and CSOs and the media. (**EQ3c**) | There are very few documented cases in which GoK institutions used analyses of judicial data conducted by CSOs, academics, or media organizations to inform decision-making.<br>Civil society actors report having positive and strained working relationships with GoK institutions; the quality of relationships does not appear attributable to PAJI. |
| 3 | Taken together, outcomes (1) and (2) are expected to contribute to increases in the public's trust and understanding of the judicial system's function (**EQ5**). | According to the UNDP PPS, there has not been a marked increase in public trust in the judiciary during or after PAJI implementation; the research design does not enable us to isolate impacts of PAJI from other sociopolitical factors. |

Note: EQs associated with each outcome appear in bold text in parentheses.

*EQ 3b: Did publishing judicial data through relevant government websites (particularly with ODP and CTM) result in increased analysis done by CSOs or NGOs or in streamlined access to court case information for Kosovo residents?*

**Several CSOs and media outlets are adapting to using the ODP platform to inform advocacy.** Google Analytics for the ODP website indicate there have been more than 40,000 users of ODP and nearly 400,000 individual interactions with the platform in 2023.[9] An average of 130 people used the platform on a daily basis in the year from March 2023 to March 2024 (Figure IV.5).[10] We might

[9] A "user" is a unique person who accesses the site. "Interactions" are actions users take on the site, like clicks or form submissions.

[10] Information on the geographic distribution of ODP users is available in Appendix B, Figure B.1.

reasonably expect a recognizable upward trend in daily usage statistics during this period—from six months after platform launch (October 2022) until 18 months after its launch—but such a trend is not apparent. Nonetheless, staff of one beneficiary institution felt this level of use reflected well on the platform, and one stakeholder from MFK expressed similar sentiments. In addition, beneficiary institution staff noted that since the launch of ODP, individual requests for data have declined from several per day to several per month, which they interpret as a sign that civil society, journalists, and academic researchers have begun to make use of ODP. Indeed, one journalist used ODP to develop at least 10 reports and had used data from the platform to develop television news segments.

**CTM has seen stronger daily use patterns than ODP, likely because Kosovar residents involved in court cases found immediate utility in accessing the system to track their cases.** Indeed, use increased substantially over the year from March 2023 to March 2024, with more than 600 visitors accessing the platform daily by April 2024 (Figure IV.5).

**Figure IV.5. Rolling daily mean of CTM and ODP platform users, March 2023 to March 2024**


Source: Mathematica's calculations using CTM and ODP Google Analytics.

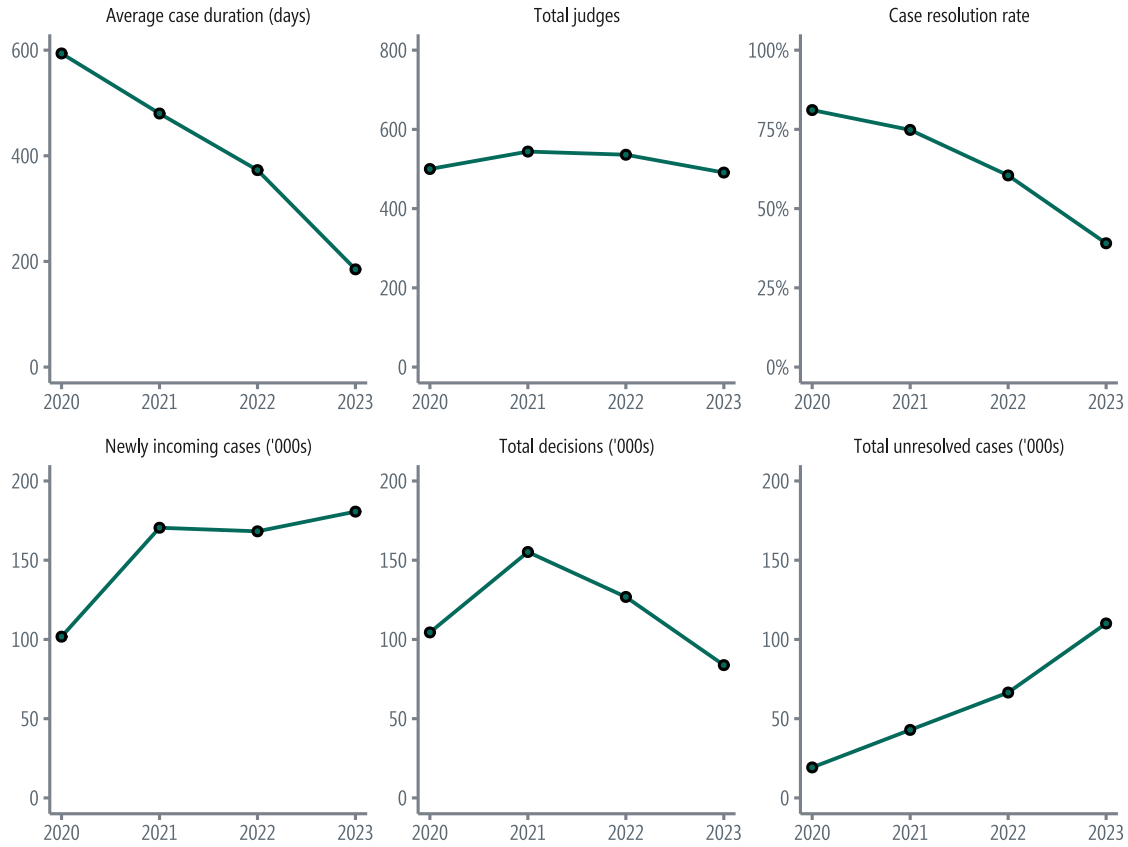
Note: Dramatic drops in usage are connected to CMIS outages. There was a confirmed system outage in January 2024 and a suspected (but unconfirmed) system outage in April 2023.

**ODP and CTM have achieved only partial success in improving judicial data literacy and sparking analyses conducted by CSOs.** Implementers felt they had designed a platform the public and CSOs would find useful, and beneficiary institution staff believed it would lead to the desired project outcomes. CSOs and journalists, however, had mixed perspectives on ODP. Multiple interviewees described how the judicial backlog has meant that ODP's data might not be a reliable source for current information on how frequently certain crimes, such as domestic violence, take place. Nonetheless, several CSO and media interviewees appreciated the existence of the ODP and said they used it in their work. One journalist, for example, uses ODP to monitor individual judges' activity and refine requests for more specific information from the judiciary. One CSO described using ODP similarly to refine its data requests of relevant institutions. However, another journalist felt that ODP was unreliable and continued to use individual relationships with GoK judicial staff to get information they trusted for their investigative reporting. In addition, a CSO program officer had barely registered the existence of ODP.

This interviewee wrote in an email message, "We do not use this platform [ODP], [but] we do not have a reason why not … maybe [due to] its lack of promotion … on what types of data they are gathering.… At present, [we] usually gather data directly from institutions." This practice underscores the effects that not implementing the CSO training activities had on awareness and use of the platform. MCC's post-project assessment in November 2023 found no evidence that KJC had conducted trainings with CSOs after the Threshold Program closure, nor that KJC had made efforts to maintain open dialogue with civil society more generally.

**PAJI contributed to improvements in judicial efficiency, but the backlog issue is not resolved.** Improvements in efficiency began before PAJI with the NORAD-supported implementation of CMIS. Multiple stakeholders noted that the introduction of the CMIS improved judicial efficiency by streamlining documentation and centralizing information on court cases. A member of the office of the ombudsperson noted that although CMIS enabled the judicial system to centralize its data, CTM and ODP represent tools that enable the general public and other external parties to scrutinize judges' performances and hold them accountable to reducing their paper backlog. However, as the judiciary has transferred case files from paper to digital records, this appears as a growth in the backlog of unresolved cases in CMIS. One stakeholder from a non-MCC donor agency mentioned that an appeals court posted to social media that its case clearance rate had improved to 92 percent, but the donor pointed out that a clearance rate lower than 100 percent meant the case backlog continued to grow. Data available through the ODP provide a clear view into the backlog issue: over the past four years, the average duration of criminal cases has declined by more than 400 days, but the number of incoming cases has risen dramatically over the same period, and the percentage of resolved cases has decreased (Figure IV.6). This likely does not point to a crime wave, but instead to the fact that digitizing cases on CMIS has both built up a stock of unresolved cases in the system and enabled courts to move with greater efficiency in processing cases.

**Figure IV.6. Evolution of judicial processes across Kosovo's basic courts**




Source: Mathematica's calculations using data from ODP.

Note: The ODP launched in October 2022, so its influence on public advocacy to reduce the judicial backlog would likely not be apparent in the data visualized in this figure.

*EQ 3c. Did PAJI result in increased engagement between government and civil society/media?*

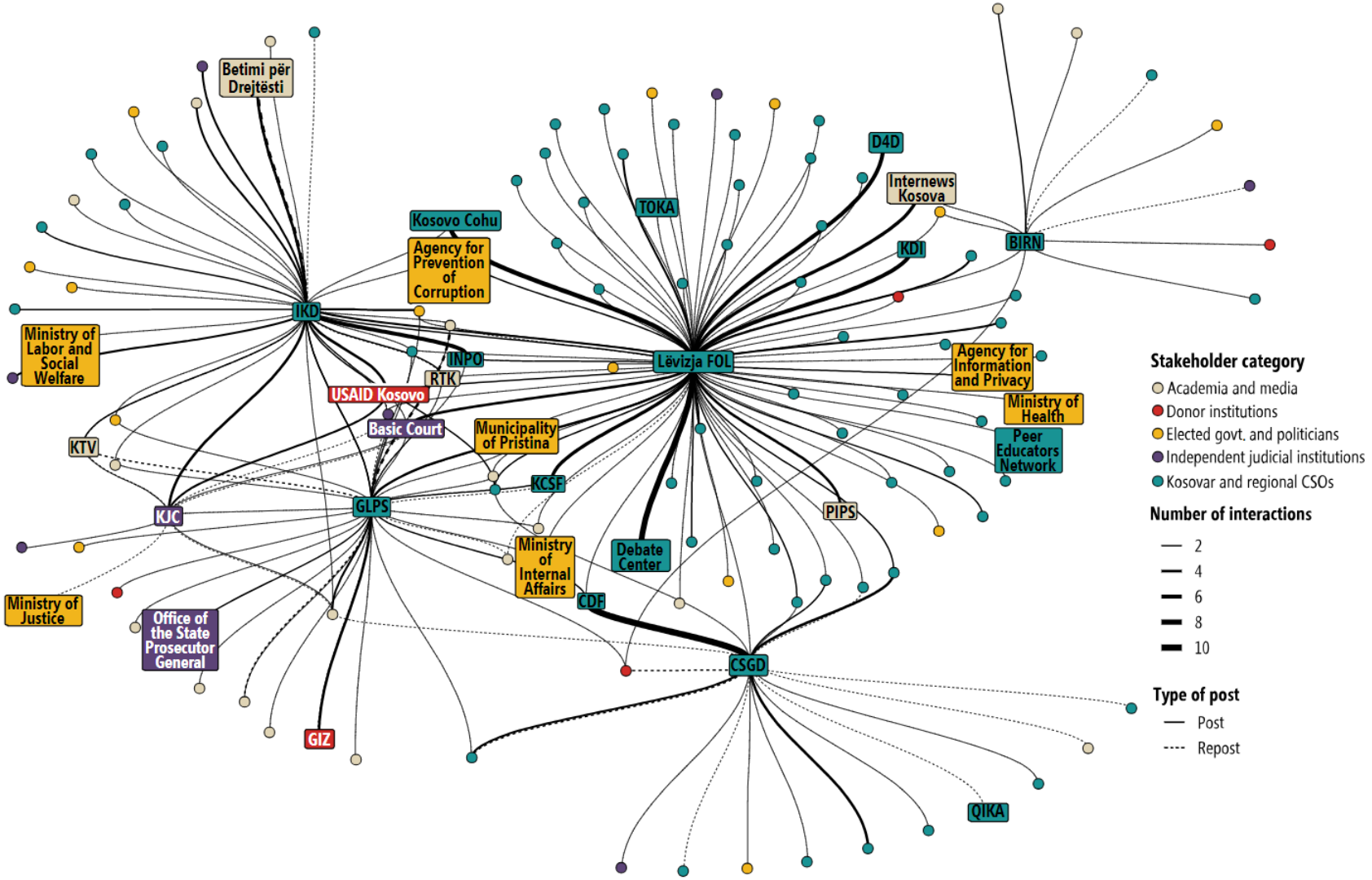
**Kosovo implemented PAJI amid an active landscape of judicial advocacy by CSOs and the media, with strained and at times even antagonistic relationships between civil society and GoK institutions.** For example, a group of CSO and media organizations have monitored court activities for years, observing the conduct of judges on the bench and serving as watchdogs for judicial corruption. The Kosovo Ombudsperson's office noted that the most common complaint it receives regarding the judicial system related to the backlog of cases, though some CSOs also highlighted frustrations about what they perceive to be a lack of transparency from judicial institutions. One CSO stakeholder, interviewed shortly after PAJI ended, specifically faulted the current elected government for the uneasy relationship, saying "The government came to power with a promise they would be transparent and have excellent cooperation with civil society, but this remained only on paper. I can say that we have never had worse relations."

**Project implementation brought together GoK judicial institutions with CSOs and media, but the two groups provide divergent accounts of the quality of engagement since the PAJI activity ended.** One year after project close-out, some CSOs reported having close collaboration with institutions on their court monitoring work, including at least one CSO that reported having an MOU with KJC on monitoring

domestic violence cases. Other CSOs and media organizations reported feeling stymied or ignored by judicial institutions. One stakeholder from a media organization described productive engagements with judicial institutions in some municipalities—namely Peja and Ferizaj—but said the basic court and Special Prosecutor's office in Pristina were difficult to engage. In contrast to civil society and media outlets, MoJ and KJC report positive developments in their relations with civil society. One KJC interviewee, speaking more than a year after PAJI ended, said the institution was proud of its accomplishments in promoting data transparency among civil society and the public. According to an MoJ interviewee, working groups have been set up to engage CSO and media stakeholders to inform policy in key areas. However, no CSOs or journalists interviewed for this evaluation reported participating in these working groups, though some had heard of the working groups.

**Social network analysis shows that online, public-facing interactions between CSOs and GoK entities are limited.** The social network map in Figure IV.7 depicts the directionality (posts versus reposts) and density of Facebook interactions among 134 selected CSO, GoK, media, and donor entities involved in judicial issues over the two-year period from January 2021 to December 2022 (covering the ODP and CTM launch in October 2022). The map is anchored by some of the organizations most active Facebook, including Lëvizja FOL, Kosovo Law Institute (KLI/IKD), the Center for the Study of Governance and Democracy (CSGD) and Group for Legal and Political Studies (GLPS). Our analysis shows that CSOs appeared to be more strongly connected with one another than with government bodies. For example, KLI/IKD had only four interactions with KJC over the two-year period, whereas GLPS had one and CSGD had none. GLPS interacted more regularly with GIZ (a donor) and KLI/IKD interacted more regularly with Iniciativa për Progres (another CSO). Lëvizja FOL posted relatively frequently with Kosovo Cohu and the Debate Center (both CSOs), as did CSGD with the Community Development Fund. Notably, both Lëvizja FOL and GLPS interacted more (four times each) with the Municipality of Pristina than with any national-level elected government bodies.

**Figure IV.7. Social network analysis of select judicial CSOs, January 2021–December 2022**




Source: Evaluator visualizations using manually-acquired Facebook interaction data.

Note: See quantitative data sources in Chapter III for more detail on the social network analysis approach.

*EQ 3a: Is there any increase in the GoK's use of analyses done by nongovernmental entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?*

**Stakeholders reported a range of experiences relating to the use of nongovernmental analyses by GoK actors.** Among all CSOs interviewed, only one mentioned that it disseminated findings to KJC, which led to changes in judges' behavior on the bench. Other CSO and media interviewees either indicated they had not published analyses of data from ODP or judiciary institutions did not use their analyses. According to one CSO staff member, MoJ will accept CSO analyses but does not provide comments or feedback as to whether and how it uses the findings to inform policy decisions. However, a representative from MoJ said ODP has been tremendously helpful for decision support and, by monitoring CSO activity and reading their reports, the ministry has identified policies that need updating to align with best practices in the judicial sector. Another GoK interviewee was less optimistic about the ability for government institutions to use ODP-informed analyses to support decisions due to urgency, pointing out that government employees "… appreciate [the idea of] decision-making based on data, but sometimes the decision-making is so fast that you forget about the data on your table." A staff member from another (non-TAG-involved) donor echoed this sentiment, mentioning that KJC staff would "love" to make data-driven decisions. Among resident focus group discussants, there is a perception that the GoK does not make data-driven decisions, which is a source of frustration for some.

**There is also mixed evidence on whether GoK judicial institutions and policymakers use ODP to directly access data needed to inform decision-making.** Before the launch of ODP, MoJ staff had to make repeated requests from KJC to access data. With the introduction of the platform, an MoJ interviewee noted that they no longer need to make these requests. However, a KJC interviewee reported that MoJ staff still regularly request data that are available on ODP, representing a significant time burden, even as CSOs and media organizations have begun making fewer data requests. The contradiction between these two institutions indicates a lack of communication among public institutions, the fact that ODP has not been fully socialized among GoK policymakers or both.

**MFK was unable to monitor progress in terms of the GoK using ODP data for decision-making.** Despite the presence of two performance indicators to track the use of data in policy decisions,[11] the late launch of the platforms virtually guaranteed that no CSOs could produce analyses using ODP data during the TAG implementation window. Thus, there was no possibility for GoK institutions to make policy decisions based on ODP-informed analyses during TAG that MFK could record.

*EQ 4. How has the project contributed to residents' use of judicial data? What about their use of judicial data in advocating for change?*

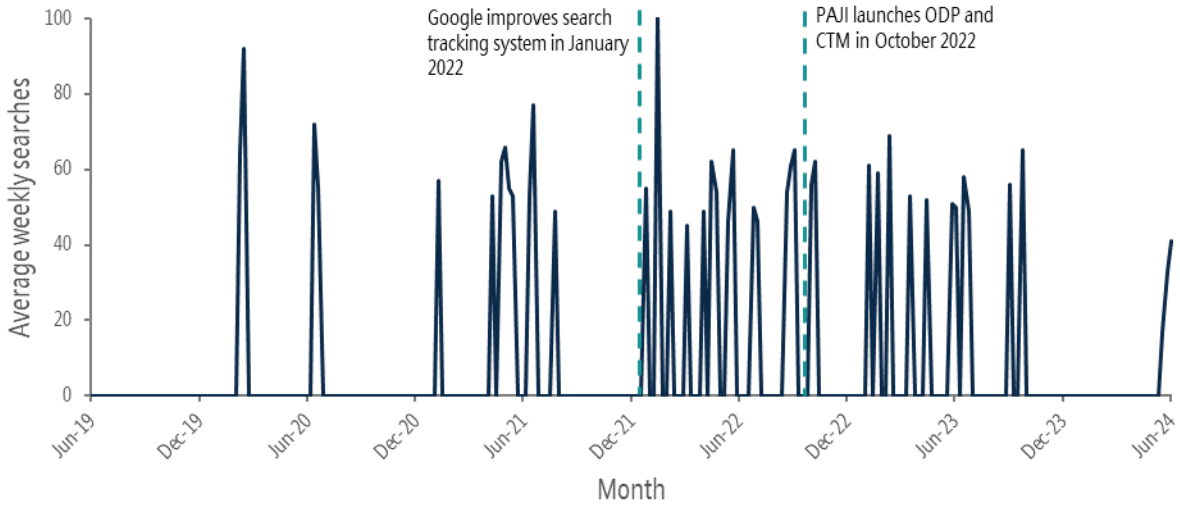
**Various stakeholders reported seeing a higher level of advocacy for judicial reform after PAJI's implementation, and attribute that to the launch of the platforms under PAJI.** Qualitative data suggest CSOs are the primary channel through which residents engage in judicial advocacy, and the instances we recorded of increased advocacy took place among CSOs. One beneficiary institution staff member with direct knowledge of neighboring countries' judiciaries argued PAJI had stimulated CSO advocacy in Kosovo, noting, "If you compare [our] civil society organizations with [those in] other countries in the region … here they are cooperating with the institutions, and criticizing … for

[11] PAJI 11.0: Data-driven policy process (judicial); PAJI 12.0: Judicial public data are used.

improvement in the sector," and attributed the difference to Kosovo's norms of open data and the new platforms. Some CSOs continue advocating for reducing the judicial backlog, though it is not clear how much they rely on ODP for this advocacy. One media outlet has used ODP to examine individual judges' conduct on the bench and request consequences for judges who appear to have not followed the penal code. One CSO engaged in advocacy used ODP to analyze outcomes of prosecutions of perpetrators of domestic abuse. Multiple CSOs and journalists use ODP to refine their requests for additional data, which they use to inform their advocacy campaigns. Others work to train students, other young people and members of marginalized ethnic groups in using the new data platforms so they are more informed about the judicial sector and can join advocacy efforts themselves. However, ODP does not support some forms of judicial activism that CSOs engage in, such as tracking and advocating for specific outcomes in particular high-profile criminal cases.

**Residents and CSOs interested or engaged in judicial advocacy might reasonably increase their web activity on the topic, and web search data appear to show more frequent web activity during and after the PAJI activity.** Google Trends data (Figure IV.8) show that web users in Kosovo searched for the term *KGJK* (KJC in Albanian)[12] with greater frequency from January 2022 to October 2023 than in periods before or after. This high-frequency period covers the launch of the platforms in October 2022, suggesting the PAJI activity either helped generate interest and expectations from the public or at least aligned well with it. However, many weeks between June 2019 and June 2024 showed zero searches for the KGJK, and web searches for the term appear to drop off precipitously in November 2023. This could mean web users lost interest in KJC's work or they began navigating directly to their preferred sources of information rather than searching the council in each web session.

**Figure IV.8. Average weekly searches for KGJK (the acronym for Kosovo Judicial Council in Albanian)**




Source: Google Trends.

Note: Google applied an improvement to its search tracking system on January 1, 2022. In Google Trends, "numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term" (Google).

[12] Other terms, such as Kosovo Judicial Council, or its equivalent in Albanian, Këshilli Gjyqësor i Kosovës, did not yield meaningful web search data.

*EQ 5. Did PAJI contribute to increasing trust and understanding of the judiciary system's functions?*

**CTM use has risen since PAJI launched it, but there remain barriers for use among the general population.** Since CTM launched, more than 68,000 users have accessed the platform as of March 2024, according to Google Analytics data, with about 500,000 page views among those users. This rate of CTM usership has risen over the year since the platform's launch, with the exception of a period in January 2024 in which the platform was down for a few days. From March 2023 to March 2024, the platform had an average of 320 daily visitors (Figure IV.8).[13] In focus groups for this evaluation with participants recruited for their interest in judicial issues, only one discussant had an active case in court, and they had not used the CTM platform. Stakeholders from two CSOs noted that members of marginalized ethnicities often had issues accessing CTM because they did not have eKosovo numbers, a crucial prerequisite to accessing the data portal.

**Despite the shift toward data transparency, a rapid or widespread improvement in public trust in the judiciary has not accompanied changes in access.** Numerous members of the public shared their perceptions of corruption and ineptitude in the judicial system or negative experiences with the judicial system they attributed to corruption. One focus group participant discussed a nearly-20-year labor dispute they fought against a powerful former employer, in which they claim their lawyer misrepresented their interest, a judge told them to drop the case because the former employer was too powerful, and the Office of the Ombudsperson ignored their complaints. One judicial-sector CSO informant noted that the general public considers judicial opacity to be a symptom of corruption. Along those lines, members of the public and CSO staff viewed the CTM and ODP as important steps toward transparency and as a way to see the depth of challenges related to ineptitude or corruption, and not an actual fix to the problem. An MFK staff member acknowledged that the intent of PAJI was not to reduce corruption and that Kosovo had made limited progress on certain indicators of corruption during the TAG project period.[14] The UNDP's PPS data from Kosovo reflect the public's relatively poor perceptions of the judiciary: satisfaction in the performance in the courts reached a high point of 39.1 percent of Kosovars in May 2022 (before the launch of the platforms in October 2022), but reduced to 26.9 percent by April 2023 (Table IV.2). These findings align with our earlier review of the literature, which found that open data interventions designed to increase trust in government were more effective when paired with robust public engagement strategies (PAJI lacked adequate public engagement efforts and skipped the ODP trainings meant to engage members of civil society).

**Table IV.2. Public perceptions of the Kosovo judiciary**

| Indicator | July 2014 | April 2023 | Trend line 2014–2023 |
|---|---|---|---|
| Percentage satisfied with the performance of the Prosecutor's Office | 11.4% | 25.9% |  |
| Percentage satisfied with the performance of the courts | 16.8% | 26.9% |  |
| Percentage that believe corruption is prevalent in the courts | 56.0% | 37.7% |  |
| Percentage that believe the judiciary renders decisions without bias | 18.1% | 31.3% |  |

Source: Mathematica's visualizations using UNDP PPS data.

Note: PAJI work began in 2020 and the CTM and ODP platforms launched in October 2022.

[13] Appendix B provides information on the geographic distribution of CTM users.

[14] Kosovo's score on the Transparency International Corruption Perceptions Index improved slightly (from 37 to 41) during the project's duration, ending higher than Serbia and lower than Montenegro, but staying close to the scores of neighbors Albania and Macedonia.

## B. EDC activity findings

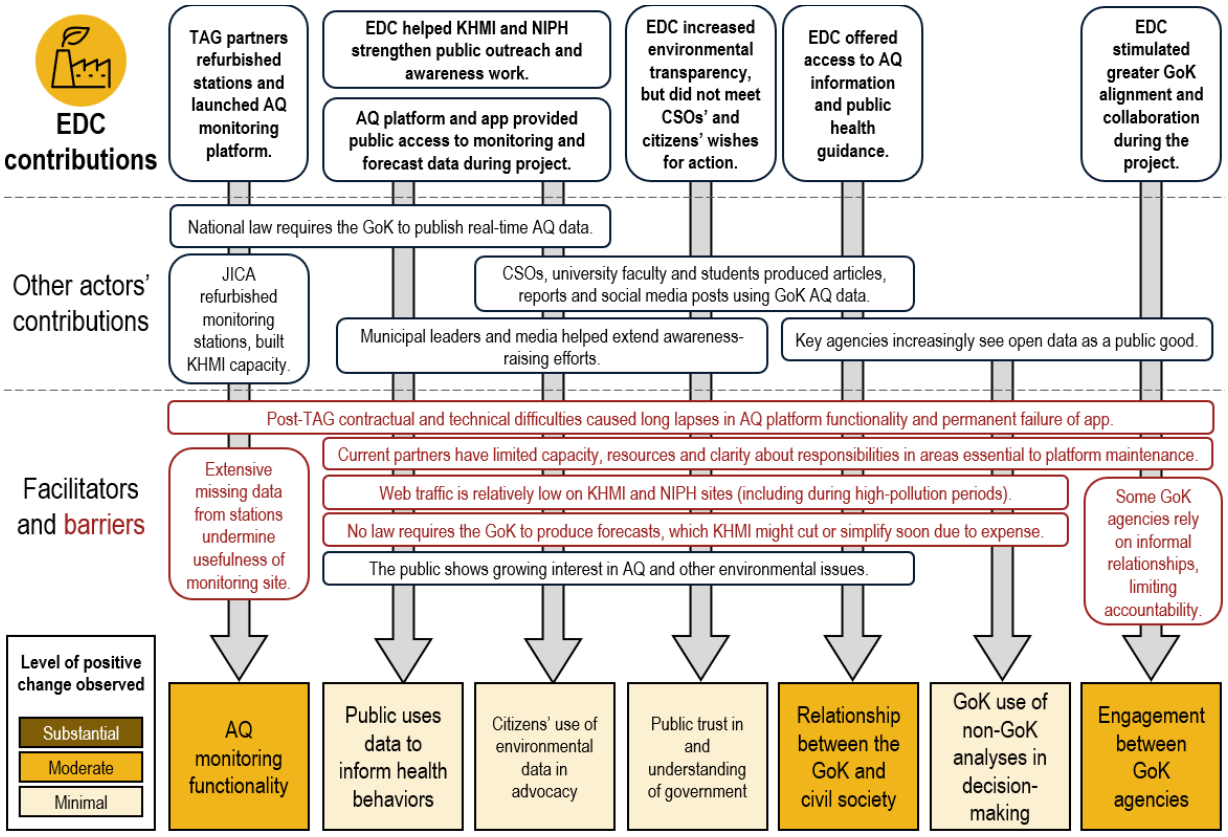
### Key takeaways

- MFK and implementing partners generally produced planned outputs (such as the emissions inventory, a live AQ platform, and trainings) and achieved targeted outcomes (such as increased CSO–GoK engagement) during the EDC activity.
- Post-activity challenges in transferring the AQ platform to a new operator caused long lapses in functionality of the platform.
- These lapses in platform's operation affected the persistence of EDC outcomes, including uptake and use of the AQ data by CSOs and the public for analyses, advocacy and behavior change.

The generalized pathway of activity implementation and outcomes below shows where EDC encountered its main challenges (though they arose mostly after the project ended).


This chapter presents findings for each of the EQs corresponding to the EDC activity. Figure IV.9 summarizes the findings using a contribution analysis diagram. The model shows how TAG project efforts—and those of other actors—advanced the outcomes along impact pathways targeted in the EDC activity. The figure also visualizes how outside facilitators and barriers, including those that arose after MFK's closure, affected the degree and persistence of those achieved outcomes. Dark boxes at the bottom of the figure indicate an outcome in which the evaluation observed substantial positive change, medium-tone boxes show which outcomes saw moderate positive change and light boxes signal that the evaluation detected minimal positive change on that outcome. For example, in the first column, MFK and Japan International Cooperation Agency (JICA) collaborated to refurbish monitoring stations and EDC implementing partners launched a functional AQ monitoring and forecasting platform. However, extensive missingness in the monitoring data (EQ 6c) and lapses in the AQ platform's operation after the project (EQ 1) meant this evaluation observed only moderate positive change in the outcome related to AQ monitoring functionality. Table IV.3 summarizes the achievement and persistence of outcomes; the EQ2 section of this chapter describes them in full.

**Figure IV.9. Contribution analysis diagram of key EDC outcomes**




*EQ 1: Was the activity implemented according to plan?*

This section summarizes the achievement of EDC outputs against what was planned and assesses the quality of each output and the implementation details that contextualize the outcome assessments provided under EQ 2.

**MFK and technical partners generally implemented the EDC activity and achieved desired outputs according to plan.** The EDC activity's planned duration of 24 months (from September 2019 to September 2021) extended for seven months (April 30, 2022) to accommodate minor delays stemming from the COVID-19 pandemic and challenges in procuring and finalizing the terms of reference for a contractor. NIRAS (not an acronym) and Atmoterm, EDC implementing partners, completed the AQ forecasting model in December 2020 and launched the monitoring and forecasting platform and app with KHMI by April 2021. The AQ outreach and behavior change activities, including public-facing AQ information days hosted across Kosovar municipalities, in-school outreach efforts, trainings for civil society and media appearances concluded in 2021 as well. MFK personnel stated that achieving outputs justified the activity's cost. With a $3 million budget target, the EDC activity disbursed $3.14 million (or 105 percent of the target amount) in implementation contracts by the end of the Threshold Program. Following the end of the Threshold Program, KHMI assumed responsibility for maintaining the AQ network, along with all software connections to websites and phone apps.

**The EDC activity updated and improved the network of KHMI's AQ sensors but encountered difficulties in transmitting complete data.** In 2019, EDC supported technical partners in refurbishing and upgrading 13 AQ monitoring stations. Improvements included moving several stations to more

suitable locations, adding fencing and other structures to protect the sensors and deploying new sensor equipment to all stations. Vitech, an EDC partner, refurbished eight monitoring stations throughout the country and JICA refurbished five in Pristina. Newly installed wireless technologies enabled the refurbished stations to transmit data on $PM_{2.5}$, $PM_{10}$, $NO_2$, $O_3$ and $SO_2$ pollutants directly to GoK Agency for Information Society (ASHI) servers, which KHMI and NIRAS staff could access. However, the stations did not transmit AQ data consistently, which led to substantial gaps in the air pollution record and limited the value of the AQ data for analysis (EQ 6c).

**EDC also encouraged KHMI to measure other pollutants—beyond those reported on the platforms.** During the project, KHMI sent AQ samples to Gradko Laboratory in the United Kingdom to analyze for heavy metals and volatile organic compounds benzene, toluene and xylene (BTX). Since then, the GoK purchased new equipment to monitor heavy metals and BTX and NIRAS provided training to KHMI on using the equipment.

**The emissions inventory successfully identified and documented emissions sources in Kosovo.** In 2019 and 2020, NIRAS led an inventory of emissions sources in Kosovo for airborne pollutants, including $PM_{10}$, $PM_{2.5}$, $NO_2$, $SO_2$, CO, non-methane volatile organic compounds, arsenic, cadmium, mercury and lead. The inventory used granular data from a variety of repositories on the emissions characteristics of industry, transport, energy generation, residential heating and other emissions sources. It categorized emissions into line sources (such as roads), point sources (including industrial sites) and area sources (such as agriculture), and modeled them using appropriate techniques. For example, the inventory used road location, traffic and speed data along with emissions factors for specific kinds of fuel to build a line source model that computed emissions from vehicles. The inventory detailed the principal sources of each of the pollutants and, in some cases, helped correct commonly held assumptions. For example, the inventory showed the main contributors of $PM_{10}$ and $PM_{2.5}$ were small combustion sources (such as household heating), followed by industry and energy generation (the country's coal-fired power plants were widely assumed to be the main cause of poor winter AQ). To improve the usefulness of the emissions inventory, NIRAS held three workshops with staff from beneficiary institutions, training participants on interpreting the inventory and potential abatement approaches. NIRAS updated the inventory in early 2021.

**The activity successfully conducted communications campaigns to inform residents about AQ issues and data to promote positive behavior change.** The EDC outreach and behavior change campaign started in February 2021 and concluded in July of that year, covering multiple audiences through a variety of channels. NIRAS, KHMI, and NIPH collaborated in developing and delivering at least five health advisories that provided early warning notices regarding AQ for health professionals and sensitive groups, such as children and pregnant women, elderly people and people with chronic diseases. This involved providing links to AQ index information along with health recommendations tailored to different levels of AQ and their impact on the general population and sensitive groups. MFK worked with television stations to help them use EDC-funded data and visited communities to share AQ information leaflets and answer questions. One MFK staff member noted that most residents who approached them on those visits were pregnant women and children, the elderly and groups with chronic conditions—most of whom did not have information on pollution sources or AQ levels before. Finally, the project worked with JICA to construct and maintain multiple digital information kiosks around Pristina that displayed the latest AQ data and its health implications. MFK and partners complemented these efforts with social media campaigns.

**EDC contractors successfully developed and launched AQ monitoring and forecast tools with KHMI.** NIRAS and Atmoterm developed the AQ monitoring and forecast platform throughout 2020 and launched the system in collaboration with KHMI in April 2021.[15] The platform's offerings were unprecedented in Kosovo. NIRAS also developed a smartphone application for iOS and Android systems to display AQ monitoring and forecast data in a user-friendly format. After multiple rounds of review with MFK and other stakeholders, NIRAS released the smartphone app to the public in May 2021. The development, format and functionality of the NIRAS-built platform generally satisfied KHMI and KEPA, as it synthesized information on six pollutants—more than any other existing monitoring system in Kosovo. NIRAS also exceeded its targets for providing training on the platforms to beneficiary institutions and civil society and media—hosting at least 35 trainings covering 209 participants, according to MFK's final round of program monitoring. MFK extended the original NIRAS contract twice, in six-month increments, to support the transfer of the forecast services to a new vendor.

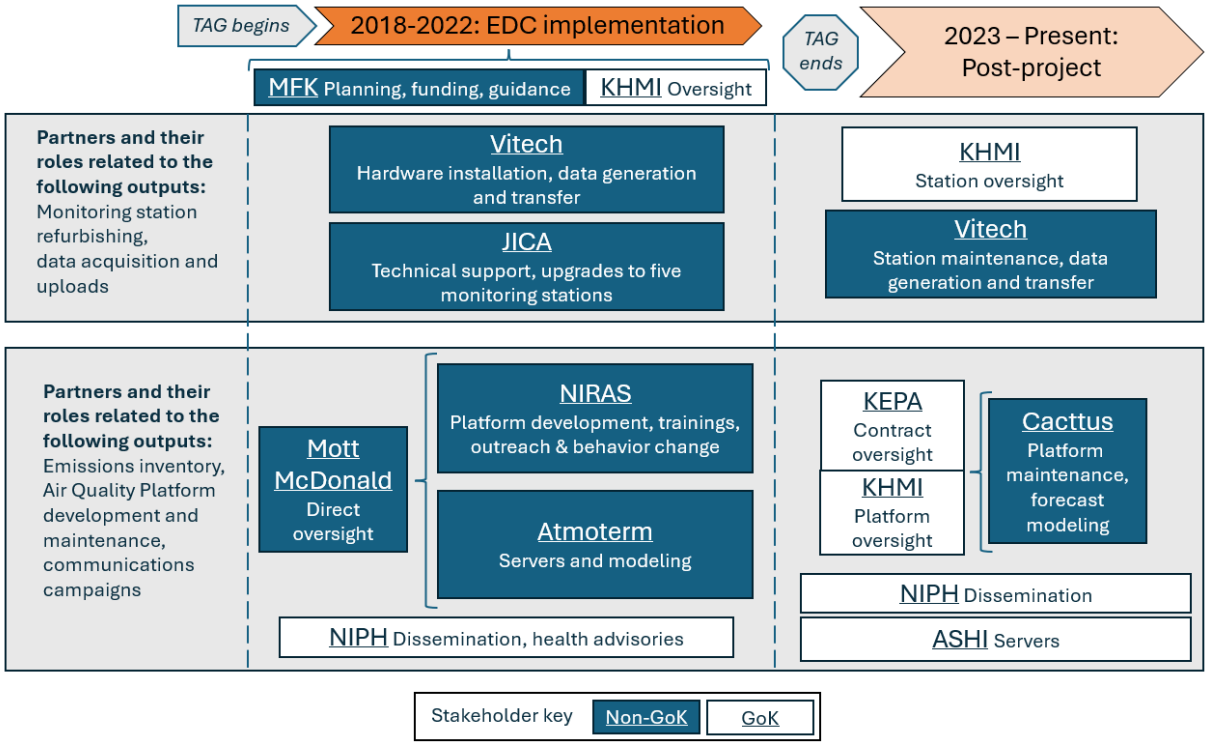
**"[The EDC activity] was one of the best [projects in Kosovo] for informing the public about air quality issues."**

***Beneficiary institution staff member***

As part of the EDC activity plans, MCC laid out requirements for GoK to maintain the platform after the MFK project concluded. MFK and KHMI planned that KHMI and KEPA would procure maintenance services for the AQ platform that would begin at the closure of the NIRAS contract. MFK and the GoK also planned that the platform's main developer, NIRAS, would transfer ownership of all platform components to KHMI. Figure IV.10 provides orientation to the principal actors related to the EDC activity over time, including after TAG ended. The lower row in the diagram shows the actors and roles related to the AQ platform.

[15] KHMI. "Air Quality in Kosovo." 2021. https://airqualitykosova.rks-gov.net/

**Figure IV.10. Key EDC stakeholders and relationships**




However, as the project ended in 2022, **challenges arose in transferring the platform from NIRAS to the new contractor, which negatively affected the reliability of the platform and the persistence of EDC's achievements.** These challenges stemmed largely from procurement issues, contract disagreements and absence of technical inputs and low capacity among key actors.

**The GoK faced delays and disputes in procuring a platform maintenance contractor.** As the project ended, KEPA initiated the process to procure a contractor to maintain the AQ platform, including the website and app. Several stakeholders involved in that procurement reported a contested process, which delayed the issuance of the maintenance contract with Cacttus. Several stakeholders involved in the project were also concerned that the procurement process began too late and too close to the end of the Threshold Program. These factors contributed to the ensuing gap in the maintenance of the AQ platform and app.

**"For a while, it felt almost like the source codes were lost."**

***Beneficiary institution staff member***

**As the post-project platform maintenance firm began its work, disagreements and technical issues continued to threaten continuity of the platform.** The incoming contractor did not have access to the materials it needed from the outgoing contractor, particularly the source code to produce AQ forecasts. Stakeholders began negotiation over the materials, but correspondence was slow and the contractors could not come to an agreement. The new contractor then tried to access the forecast code by purchasing the three servers in Poland that held the models and software during the project, but that effort also did not yield all the materials necessary. **This period of negotiation and problem-solving efforts lasted more than eight months, during which the**

**forecast pages on the KHMI website were down. After exhausting all apparent options to acquire the existing forecast code**, Cacttus hired additional personnel with meteorological expertise and began to develop AQ forecast code on their own.

Inadequate capacity of GoK agencies and partners also affected post-project maintenance of the platform and the availability of usable AQ information.

**"… On the digital side of government, there are big problems … in terms of people leaving the government. All [personnel] who know … coding and who can work in these positions of IT, maintenance and management are leaving the government and going for the private sector. So, I've heard from several government sources that we are quite depleted in that field. So overall, I think this is going to be a problem not only for our projects but for [the] government."**

***MFK staff member***

- KHMI staff signaled that their institute does not have the technical capacity to maintain the AQ platform without outside help. Various stakeholders suggested that KHMI's lack of a robust IT team meant the institute could not easily negotiate with NIRAS about the AQ platform forecast code, and Cacttus staff indicated they could not easily problem-solve technical issues with KHMI because the institute lacked the expertise in software development and IT processes more generally. The process itself that KHMI and Cacttus used to troubleshoot technical issues was informal and slow, and the platform's lapses in functionality often took weeks or months to resolve. According to KHMI staff, the institute would need to hire at least four IT-focused staff to maintain the AQ platform going forward without outside help, but the respondents explained that GoK salaries are low and do not attract people who have those skills. Staff turnover issues have also produced delays and challenges in the form of lost institutional knowledge and misplaced platform credentials. For example, the AQ mobile applications are no longer available on the Apple App Store and Google Play store because a KHMI staff member originally published them using their private credentials and then left the institution. Since then, the institute has not been able to obtain the log-in credentials or maintain the apps and, as of June 2024, neither version of the app worked.
- **ASHI** did not have capacity to host the forecast modeling software early in the EDC activity, so NIRAS and Atmoterm built and housed the forecast model on servers in Poland. However, after the MFK project closed, Cacttus and KHMI had to work with ASHI to host the forecast model on local servers. Some project stakeholders suggested that ASHI took on more than it could handle and that KHMI, despite having strong meteorological and AQ expertise, had low IT capacity and could not facilitate problem-solving between ASHI and Cacttus.
- **NIPH**, like KHMI, appears to have IT-related capacity challenges that reduce the navigability of the NIPH AQ site (NIPH, n.d.), as described in response to EQ 6c. This poor user interface could reasonably impede visitors from gathering information they need and could also negatively affect users' impression of the credibility and professionalism of the NIPH system and services, a risk described by Almuqrin and colleagues (2022) in our literature review.

In sum, lapses in the platform's functionality stemming from procurement challenges, contract disagreements, absence of technical inputs and low capacity among key actors characterize the two years after EDC's conclusions. Because outputs related to the functionality of the AQ platform and app were achieved only temporarily during the activity, outcomes such as the ability of residents, CSOs, and media organizations to take up and use the open data resources have been significantly curtailed. As of August 2024, the platform's AQ monitoring and forecast maps were not functioning.

*EQ 2: Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?*

EDC achieved targeted outcomes, such as *public is informed regarding AQ health impacts,* in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator) during the project. However, delays and confusion in the process of procuring and supporting an AQ platform maintenance operator caused lapses in the platform's functionality (and all the outcomes that stem from that output) after the project concluded.

The broad framing of EQ 2 encompasses EQs 3a–7, which each focus on a subset of outcomes under the EDC program logic. Table IV.3 provides a high-level overview of the targeted outcomes in EDC program logic, its achievements and the EQ section that discusses outcomes in greater detail. Readers can use this table to navigate the following sections to explore specific outcomes of interest. Note that EQs 3a, 3b and 3c appear in a different order in the main body of this chapter to better align with the order of outcome achievement we observed.

**Table IV.3. Summary of EDC outcomes and high-level results**

| | Targeted outcomes and evaluation questions | High-level results |
|---|---|---|
| 1 | Publishing accurate, reliable AQ data through the KHMI platform and app and the NIPH site (**EQ6c**) and delivering awareness campaigns is expected to lead to:<br>• Uptake of the data by CSOs, media and academia (**EQ 3b**)<br>• An increase in the public's use of air quality data to advocate for change (**EQ 4**)<br>• The public adapting behavior based on AQ alerts (**EQ 5**) | The AQ platform has experienced long periods of downtime, which affected downstream outcomes.<br>CSOs, media and academia used open data from the AQ platform (when it was available) in their work.<br>EDC-funded platforms had relatively low web traffic over time and there were few signs of changes in public advocacy or behavior change because of the platforms or public awareness campaigns. |
| 2 | The increase in CSO, media and academic analyses under Outcome Group (1) is expected to contribute to:<br>• Increased engagement between GoK institutions and CSOs and media (**EQ 3c**)<br>• An increase in GoK institutions' usage of CSO analyses to inform decision-making (**EQ 3a**)<br>• A reduction in the adversarial nature of the relationship between civil society and the GoK (**EQ 6a**) | GoK–CSO engagement increased during the project, as set out in the project plan. However, low functionality of the platform threatens the persistence of those relationships.<br>Some GoK institutions use outside analyses in their decision-making, but there is no evidence that use has increased because of the project.<br>The EDC activity reduced the adversarial nature of some GoK–CSO relationships, but barriers to full cooperation remain. |
| 3 | Taken together, outcomes under Groups (1) and (2) are expected to contribute to:<br>• An increase in the public's trust and understanding of the GoK's functions, particularly related to air quality issues (**EQ 7**)<br>• Improved interministerial communication within the GoK (**EQ 6b**) | EDC increased public trust and understanding of GoK functions to a limited extent, but challenges remain.<br>Interministerial communication improved, but agencies' limited capacities and informality of relationships remain challenges. |

Note: EQs associated with each outcome appear in bold text in parentheses.

*EQ 3b. Did the dissemination of AQ data through government websites affect activities by NGOs or CSOs and, if so, why?*

**Qualitative data suggest that the dissemination of AQ data through the KHMI and NIPH websites improved CSOs' access to AQ information for their programs and publications.** Multiple CSOs

mentioned using the newly published AQ data as a source in their publications and indicated they engaged with KHMI when they had questions on how the data are generated. KHMI noted that when the open data platform launched under NIRAS, the volume of individual requests for AQ data dropped considerably. As CSOs gained greater access to the raw data, NIPH and other stakeholders with expertise in air quality health factors indicated they had seen an increase in media and CSO requests for help interpreting the data. NIPH also observed an uptick in its web traffic after the launch of the EDC platform and app. KEPA, a key government partner in the EDC activity, said the project produced "many opportunities for the NGOs to use the data and, based on this, to do a kind of activism." Notably, although some CSOs indicated the availability of these EDC-supported data helped them conduct their activities with improved information and efficiency, this evaluation did not find evidence that the data (or access to them) changed the overall *goals* of their activities, such as advocating for cleaner energy policy or building public awareness of the impacts of wood- and coal-fired home heating.

**Quantitative data shows CSOs and the media used data from the platform to produce public-facing articles, reports and social media posts**. From January 2020 to December 2022, MFK's media monitoring process captured 93 instances of CSOs and media using open air quality data[16] to publish articles, reports and social media posts. Of those, 68 instances occurred from October 2020 to December 2021, with the highest volumes in the early winter of each year. Published pieces ranged widely in content and intended audience, from news articles critical of government policy to public service announcements about AQ for specific municipalities. Without data from a counterfactual (an identical period in which EDC did not exist), we cannot rule out the possibility that these CSO and media publications might have simply used other data from other sources (such as the U.S. Embassy AQ monitor in Pristina or other non-GoK sources of AQ data) to publish similar types and numbers of pieces. However, the fact that CSOs and media organizations chose to use the data from the KHMI AQ platform for their work suggests they saw advantages to the platform over other systems, including the ability to access data from a variety of monitors at once.

**It is unclear whether EDC increased CSO (and civilian) interest in AQ issues.** If the activity increased residents' interest in AQ issues over time, we might expect those residents to try to inform themselves by conducting more online searches for relevant phrases, such as "air quality today" over the same period. However, this evaluation's analysis of Internet searches in Kosovo shows no overall change in search volume for *air quality*, $PM_{2.5}$, *air pollution* and *smoke* (using Google Trends data) from June 2020 to June 2024 Figure IV.15). This could suggest that resident, CSO and media interest in those topics did not dramatically increase at or after the launch of the platform, or could simply indicate that Internet users, once they have established their preferences, navigate directly to trusted information sources without searching when they have questions or concerns about AQ (EQ 4 discusses web traffic on the KHMI AQ platform). Qualitative data from interviews and focus groups support that second explanation for the lack of change in search trends. Respondents generally agreed that Kosovo residents' interest in AQ issues has risen over time (including before and after the TAG project), but that spikes in interest in AQ information occur when AQ is poor (observed as haze, smell or negative health effects) or when there is a major change in the weather. For example, one media stakeholder who presents AQ information from the KHMI platform to the public described how their outlet's viewership is lower on visually clearer days than on days with high levels of particulate matter, even when less-visible pollutants like ozone are

[16] The indicator EDC13 is defined as the *number of analytical articles and reports generated by domestic civil society and NGOs based on the air quality data that have been made public.* MFK began tracking this indicator in January 2019.

actually high. The outlet is making efforts to improve public interest in and understanding of air pollution, even on clear days, but this media interviewee described how lapses in the AQ platform's function threatens that goal: "This lack of data in these past months … it's pretty stressful. [If the platform is not] going to be functional, then what am I going to do about my show? Where will I get the data?"

*EQ 3c. Did EDC result in increased engagement between government and civil society and media?*

**During the project, MFK facilitated closer civil society relationships and engagement with government.** For example, Science for Change, a CSO focused on residents' education, partnered with NIRAS, KEPA, KHMI and NIPH during the Air Quality Days intervention to deliver play-based learning activities. More broadly, most government stakeholders—and some of the CSOs—involved in EDC indicated they perceive improved relationships with the other group (government and civil society), as well as more positive attitudes toward transparency and open data principles. However, some staff at KHMI and KEPA believe the project has had negligible effects on relations with pollution focused CSOs and media and that it is not possible to determine whether there was an increase or decrease in data uptake and use.

**Some CSOs wanted more engagement from GoK agencies involved in EDC.** For example, before the EDC project began, one pollution CSO had collected AQ data through a network of concerned residents with portable sensors. When KHMI and KEPA launched the formal AQ platform during the project, they suggested data from other sensors, such as those used by the CSO, was untrustworthy because experts had not calibrated them. But one government staff member suggested the government could have taken a more supportive stance, pointing out that "Those portable sensors mean a lot for residents who don't have monitoring stations in their area." Interviewees from the GoK and CSOs, as well as residents in focus groups, also expressed that they needed and wanted more training from KHMI on how to use the platform, despite its user-friendly design.

**Lapses in functionality of the platform and app since MFK closed also threatens robust engagement with CSOs.** Because they could not rely on the platform consistently, some CSOs have turned to the European AQ portal for a reliable source of data instead. The data on the EU site for Kosovo are the same as those that are intermittently available on the KHMI portal, because Vitech gathers monitoring data from stations and pushes it out to the EU platform and the Kosovo AQ platform. It is inarguably good that organizations and private residents in Kosovo can still access AQ data from the European platform during the lapses in the function of the MFK-funded platform. However, EU systems do not generate local AQ forecasts, which was a key accomplishment of the EDC activity.

*EQ 3a. Is there any increase in the Government's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?*

**Some GoK institutions use nongovernmental analysis of air quality data to help make decisions, but there is little concrete evidence the GoK has *increased* that use during or because of the project.** Government stakeholders connected to the EDC activity confirmed that their offices use analyses produced by Kosovar and international NGOs alongside official, government-sourced data to support informed decision-making. One GoK stakeholder noted they specifically sought analyses from well-respected local CSOs (even going so far as to partner with them) and international institutions (such as the World Bank and the European Bank of Reconstruction and Development) to help make decisions because "… there is a lack of [official] data in this country." However, this evaluation did not find that EDC

interventions *increased* the government's use of analyses done by nongovernment entities. Some government stakeholders suggested the AQ platform and related trainings increased the government's use of its own AQ data (without NGOs as an intermediary step between generation and use of data). CSO and GoK stakeholders interviewed for this evaluation could not point to clear evidence that the GoK used nongovernment analyses *more* than before—or because of—the project. Indeed, although one beneficiary institution stakeholder asserted that academics and students can now analyze and publish AQ analyses more easily, some nongovernmental said the GoK did not adequately engage academics and other field experts to learn from these analyses for relevant pollution rulemaking.

*EQ 4. How has the project contributed to residents' use of air quality data in advocating for change?*

**Beneficiary institutions and members of the public both indicated the EDC activity had potential to increase public awareness in a way that could feed advocacy and greater civil society activity on AQ issues.** One FGD participant said "When an issue is discussed among residents, it becomes a point of discussion, even among nongovernmental organizations. Therefore, increasing awareness among residents led to more engagement from these organizations in this field, so I believe they have played a significant role." Likewise, KEPA suggested the EDC activities improved residents' *ability* to advocate for change on AQ issues, but noted their office did not gather information on changes in advocacy work among residents or civil society more broadly. Some KHMI staff believe pollution is lower due to improved awareness and action on the part of the public and politicians, but could not provide data linking those outcomes, nor connecting them to the EDC project specifically. Given the seasonality of Kosovo's air pollution, particularly in terms of $PM_{2.5}$, milder winters with lower heating demands are likely a more significant explanation for reduced pollution.

**"We are aware not everyone uses Internet, and we need to focus on them too."**
***Beneficiary institution staff member***

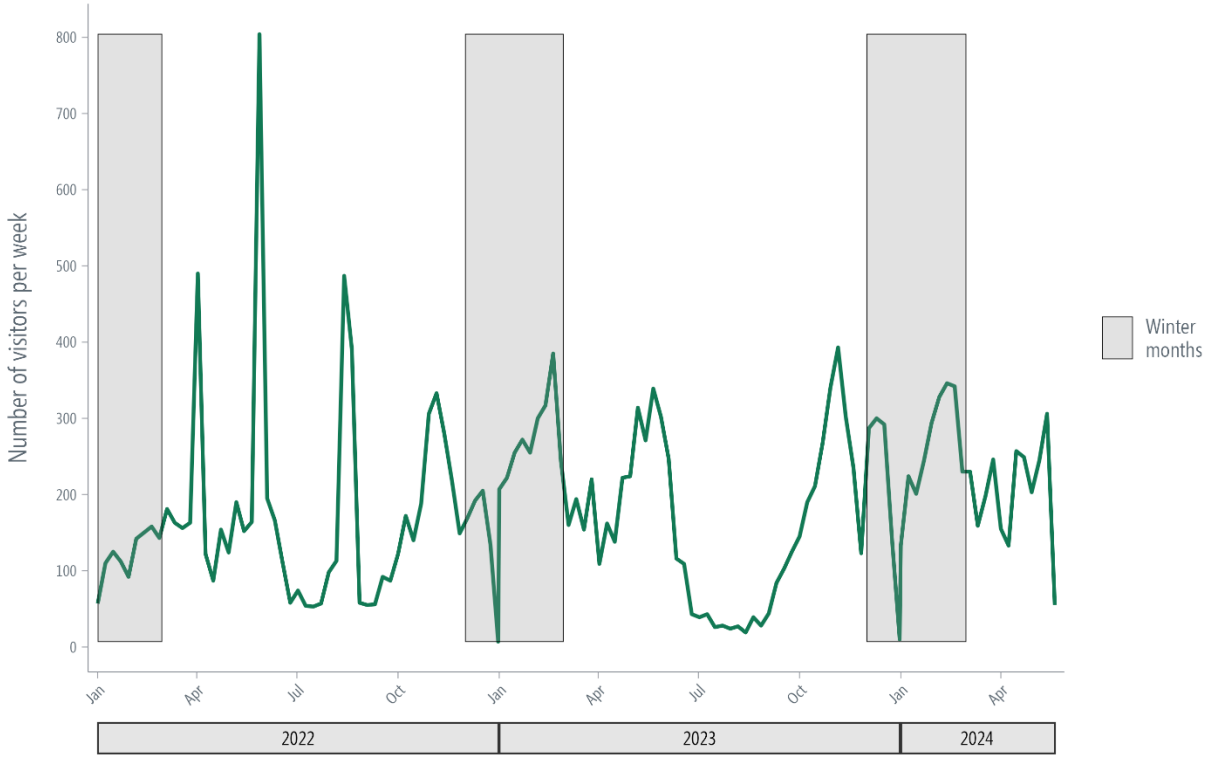
**There is little evidence that CSOs and the public used the platform's data for advocacy purposes. Limited platform functionality and reach could help explain why**. As of early 2023, multiple civilians and CSO stakeholders cited familiarity with the KHMI AQ platform, but its inconsistent operation (including the app being down or pages on the website not working) disappointed those who has used it. In terms of reach, one KHMI staff member recognized that residents with fewer resources and less access to technology would not benefit as easily from digitally disseminated AQ information. EDC's AQ outreach events did reach residents in person who might not have had access to or familiarity with the online platform, but this evaluation found no evidence that those efforts contributed to advocacy work either. One focus group participant who had used the AQ app argued that that even when it was functional, the mobile technology was not enough to promote action across Kosovar society, principally because so few people knew about it or had downloaded it.

**Visitor traffic on the KHMI and NIPH sites did not increase over time, suggesting limited uptake of the data over time.** This could help to explain why the project's contribution to residents' use of air quality data in advocating for change is not readily evident.[17] Available web traffic data for KHMI (Figure IV.11) show high variation from week to week and month to month, with no significant increase

[17] Traffic data does not indicate where in Kosovo the site's visitors are, and AQ data are available for only select locations where there are monitoring stations, so this evaluation did not combine AQ data with traffic and engagement data to look for patterns. Instead, we focus on highlighting the winter months, when average pollution levels are higher, in the subsequent web traffic figures.

in platform use from January 2022 to May 2024. Weeks with low or zero visitors likely reflect periods when either the entire platform or specific functions (such as the AQ monitoring station map) were unavailable, when the system could not register visitors or when few visitors bothered checking the site with frequency. Notably, there is also no clear association between platform visits and the winter months when AQ tends to be worse and public concern about AQ tends to increase. Similarly, the time visitors spent on the site (their engagement time) does not appear to vary during high pollution periods (Figure IV.12).[18]

**Figure IV.11. Weekly visitors to the KHMI AQ platform website, January 2022 through June 2024**

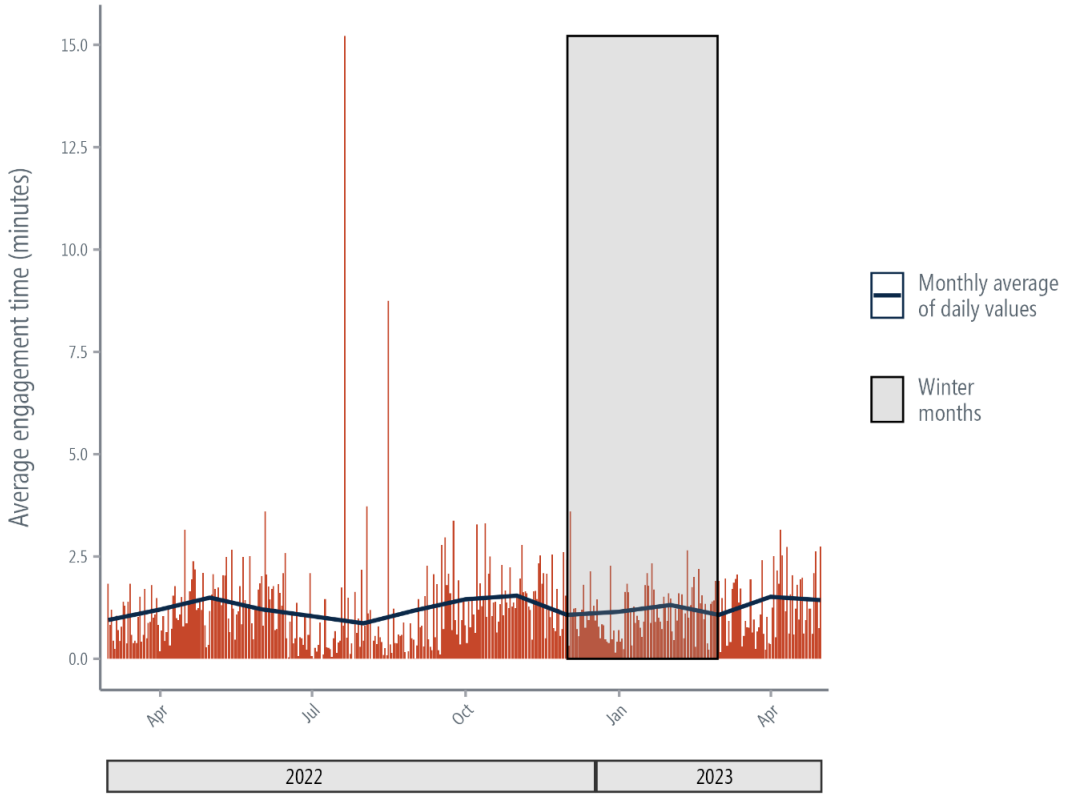



Source: Mathematica's calculations using Google Analytics data shared by NIRAS and Cacttus.

Note: Winter months appear in gray bars to indicate the periods when pollution levels tend to be the highest because of indoor heating demand.

[18] Geographic distribution of KHMI and NIPH portal users is available in Appendix B.

**Figure IV.12. Engagement on KHMI AQ platform website March 2022 through May 2023**

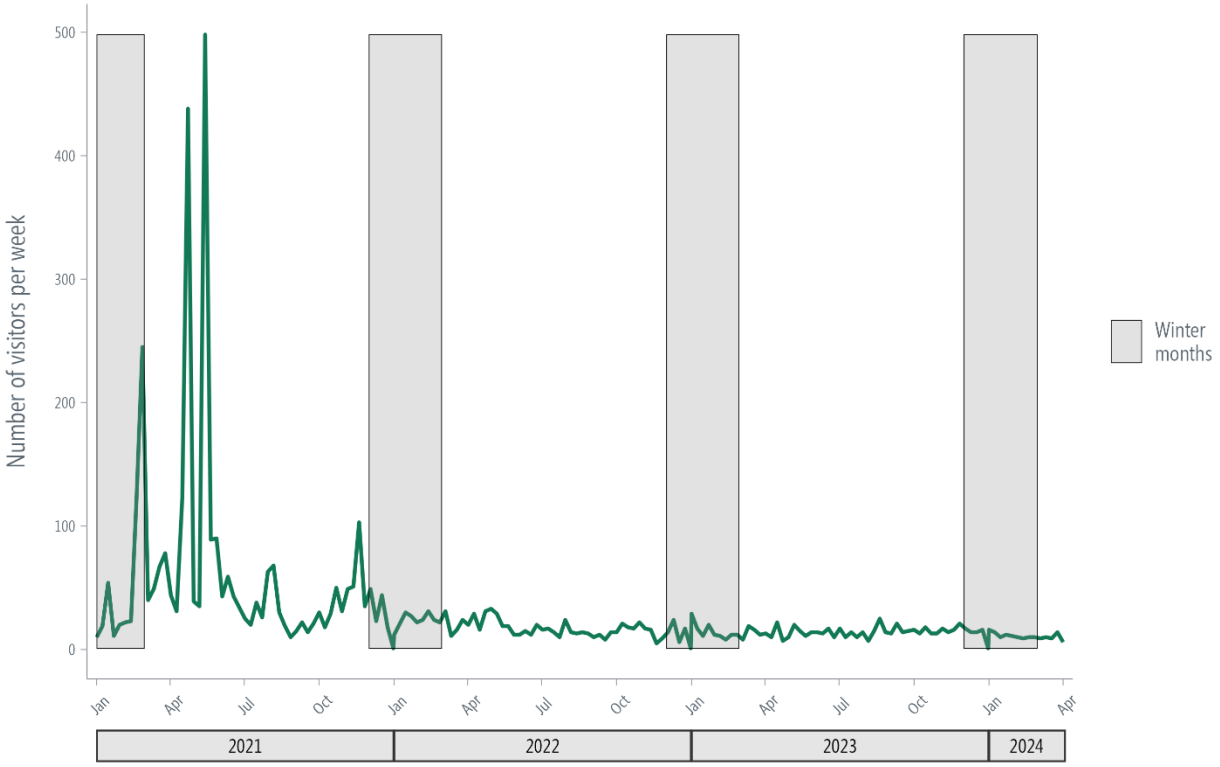



Source: Mathematica's calculations using Google Analytics data shared by NIRAS and Cacttus.

Note: Winter months appear in gray bars to indicate the periods when pollution levels tend to be the highest because of indoor heating demand.

**Another EDC-funded platform, the NIPH microsite, shows a decline in traffic over time.** The site, which originally launched in December 2020, saw a large spike in traffic from March to May 2021, which overlapped with the EDC project communication campaigns that ran from February through July 2021 and the completion of the KHMI AQ platform and app launches in April 2021. However, the NIPH microsite has seen very little traffic after that initial set of visits (Figure IV.13 ). Similarly, the monthly average time that visitors spent on the site daily has trended downward since the site launched (Figure IV.14). There does not appear to be a strong association between winter months and the time users spend on the NIPH site. On a more granular level, evidence does not suggest an association between $PM_{2.5}$ levels and the number of visitors to the NIPH site on a given day (Appendix B, Figure B.6). Without a strong systematic positive correlation between $PM_{2.5}$ (at least for Pristina), and without fixes to the site (EQ 6c) and additional public outreach, the NIPH site would be unlikely to see large increases in traffic in the future, even when air pollution levels are high.

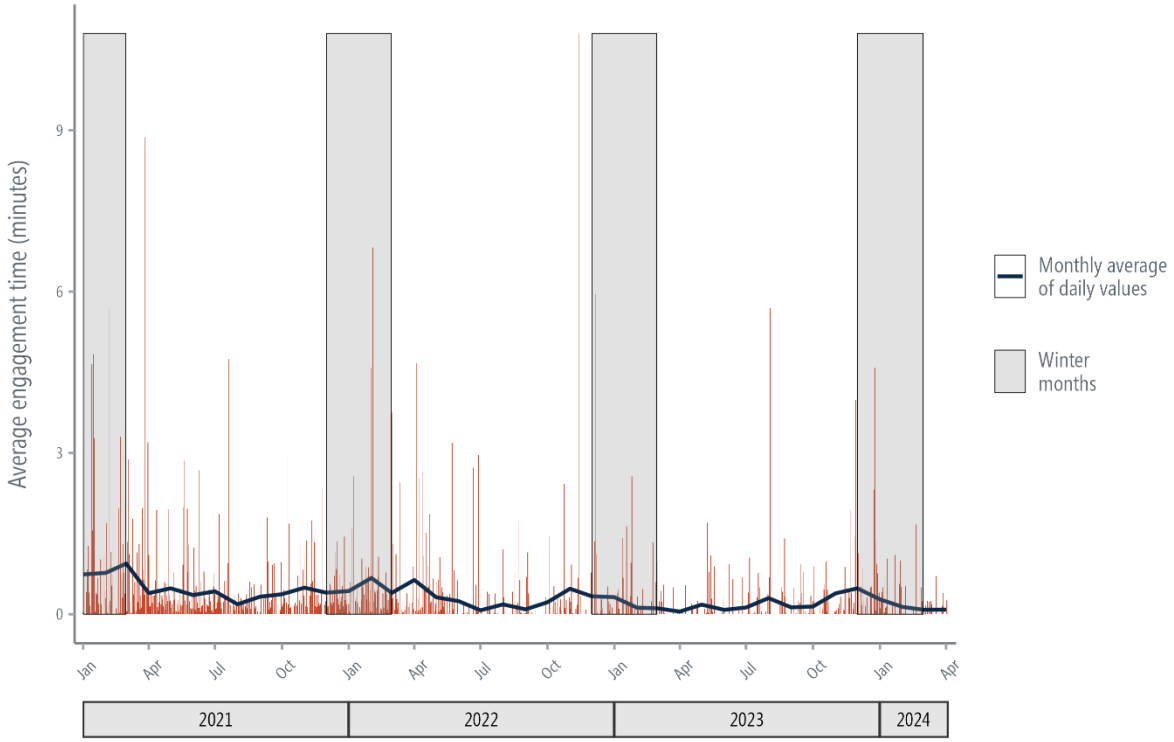
**Figure IV.13. Weekly visitors to NIPH AQ microsite, January 2021 through April 2024**




Source: Mathematica's calculations using Google Analytics data shared by NIPH.

Note: Winter months appear in gray bars to indicate the periods when pollution levels tend to be the highest because of indoor heating demand.

**Figure IV.14. Average visits engagement time on NIPH AQ microsite January 2021 through April 2024**




Source: Mathematica's calculations using Google Analytics data shared by NIPH.

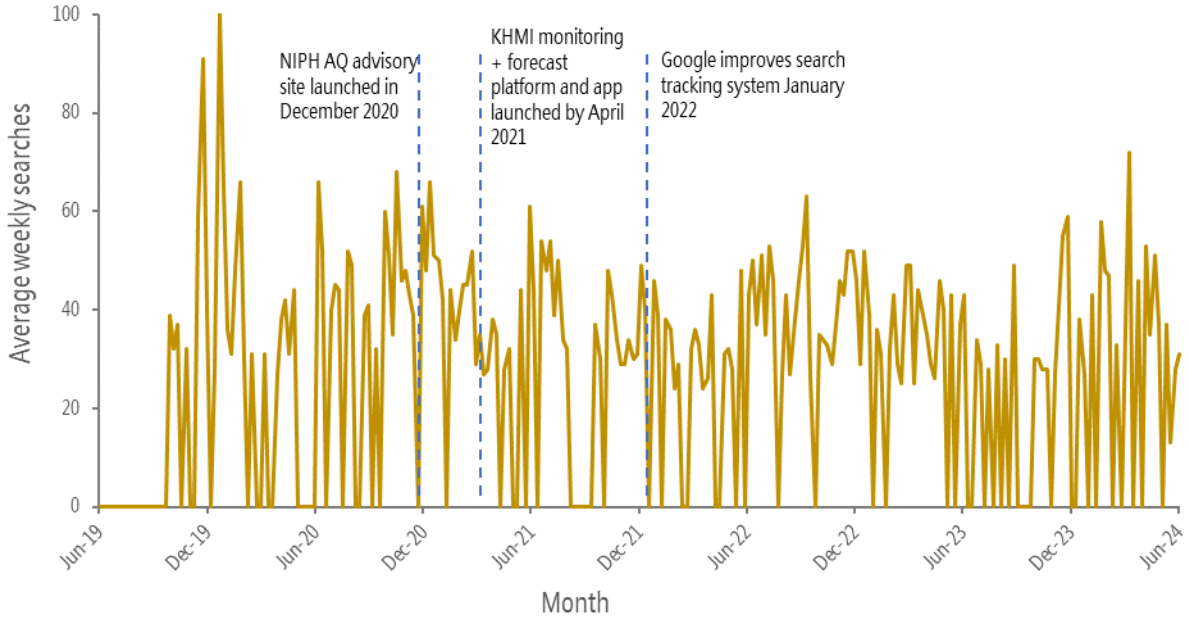
Note: Winter months appear in gray bars to indicate the periods when pollution levels tend to be the highest because of indoor heating demand.

**The mobile application also has low uptake.** For example, as of February 2024, the app on Android had fewer than 5000 downloads and was no longer available for download or use. The Apple version is also unavailable. These apps are no longer available likely because KHMI no longer has the log-in credentials to access and update the apps on the Android and Apple application stores.

**Public interest in AQ data did not appear to increase meaningfully over the life of the EDC activity (or in the period following the activity), according to Google search data in Kosovo.** If public interest in AQ information increased during (or as a result of) the EDC activity, we might expect to see increasing Google searches in Kosovo for phrases including terms such as "air quality", "$PM_{2.5}$", "air pollution" or "smoke".[19] However, the Google Trends tool shows that searches for phrases that include those terms appear to be fairly consistent across the EDC implementation and post-activity period (Figure IV.15). The highest search intensity for those terms in the past five years occurred before the activity's launch in December 2019 and January 2020, likely reflecting winter pollution concerns.

[19] Other potential search terms, including options in Albanian such as "cilësinë e ajrit" or "cilesia e ajrit" (both meaning AQ), did not in fact yield meaningful web search data.

**Figure IV.15. Combined average weekly searches for "air quality", "$PM_{2.5}$", "air pollution" and "smoke" in Kosovo**




Source: Google Trends

Note: Google improved its search tracking system on January 1, 2022. In Google Trends, "numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term" (Google).

*EQ 5. Does the existence of transparent, government-produced AQ, health advisories and a national outreach and behavior change campaign create enough incentive for civilians to change their behavior (for example, take actions to reduce the negative health impacts of air pollution)? If evidence of changed behaviors exists, who is adapting, how have they adapted and why?*

**The EDC activities had the potential to influence residents' behavior, but there is little evidence they did so on a large scale.** The lack of observable change is likely due to limited functionality of the online AQ tools (EQs 4 and 6c), limited-duration awareness-raising work and the confounding influence of outside factors.

**The current AQ forecast system is not as useful as the model built by NIRAS and Atmoterm.** All parties believe Cacttus generates the AQ forecasts in the same way that NIRAS had generated them, because Cactuss collects the data from the same data containers and processes them using the same specifications. However, NIRAS provided forecasts at a pixel and raster level and Cacttus now provides forecasts only at a municipality level. These are less precise, and thus less useful for residents in large municipalities, and the system is not as user friendly as the NIRAS-developed one.

**The GoK and nongovernmental respondents disagreed regarding the influence of EDC efforts on behavior change.** The GoK implemented the health advisories and outreach and behavior change campaign generally according to plan, and some GoK personnel believed those efforts had influenced the public's behaviors. At least three stakeholders mentioned they had seen more civilians wearing masks outdoors on poor AQ days in recent winters than in years past. However, these stakeholders readily noted

it was not possible to attribute those behavior changes to the project, given that the recent COVID-19 pandemic increased mask use generally and multilateral organizations, CSOs and other entities in Kosovo led several other non-EDC AQ awareness efforts. But interviewees and focus group participants from the public, academia, civil society and MFK lamented that those efforts were not enough. One CSO staff member mentioned that a key "… difficulty is the issue of reaching the public because … the campaign is not continuous and not given greater attention." An MFK staff member wished the content of the campaign had been more dramatic and striking—such as using graphic images of people suffering from air pollution-related diseases—to make a strong impression on the conscience of the viewer. In its final post-project assessment in November 2023, MCC noted communications campaigns dropped off with the end of the NIRAS contract and there was no indication that NIPH updated health advisories regularly. MCC recommended in its post-project assessment that KHMI and partners "develop a communication plan to reengage with stakeholders and promote traffic" to the portals after the relaunch, but there is no evidence of such a plan.

*EQ 6a. Does the existence of transparent, government-produced AQ data reduce the adversarial relationship between civil society and the GoK? If yes, whose attitudes and behaviors are likely contributors to these reductions?*

**Availability of GoK-produced AQ data somewhat reduced the adversarial relationship between civil society and the GoK.** CSOs focused on pollution issues are quite active in Kosovo and their relationships with the GoK have improved moderately since the project began. One independent pollution expert stated that organizations' trust in government has increased, and adversarial attitudes decreased, simply because readily available AQ data means those organizations no longer have to submit (and wait for) individual requests for data. Another academic expert on pollution issues agreed that some CSOs "… are completely basing their studies, publications, and their work on data from public or government institutions."

**However, there are still barriers to full cooperation.** One MFK staff member had observed an unintended consequence resulting from CSOs' easy access to AQ data: CSOs no longer had to engage with GoK institutions directly to secure information, precluding development of dialogue and personal relationships. Multiple interviewees from CSOs suggested that working with government agencies was not as straightforward as they would like. For example, certain CSOs created air quality data products for government agencies but encountered difficulties coming to an agreement with those GoK partners on how to maintain the products. Another CSO described how a city leader had expressed interest in meeting with them to discuss pollution issues, but that after months of follow-up and waiting, the meeting just "doesn't happen." Another pollution-focused CSO indicated there had simply been no change in its relationships with government agencies because of the project. Multiple CSOs expressed disappointment that information on air pollution was often unavailable (with the platform down) and that GoK authorities did not develop open data portals for land or water pollution, which are also areas of pollution concern in Kosovo (World Bank 2018; Ministry of Environment, Spatial Planning, and Infrastructure [MESPI] 2020; Democracy Plus 2023). Finally, some CSOs simply bypassed potential engagement with the GoK, referring to multilateral institutions to get information they could have accessed instead through open data offerings from the GoK. For example, CSOs and experts in Kosovo reported using the European AQ portal, which draws data from KHMI monitoring stations, and the European Commission Progress Reports, which extract information from GoK reports. Whether this information bypass comes from a lack of trust or poor understanding of the data sources, it is a missed opportunity for civil society to directly engage with GoK's institutions and websites for relevant data and reports.

*EQ 6b. Has interministerial communication changed—for example, between KEPA and NIPH—and, if so, why and how?*

**Most stakeholders agreed that the EDC activity improved working relationships between certain GoK agencies.** Before the project, as KIIs from both institutions confirmed, NIPH and KEPA had several misunderstandings. NIPH previously had an MOU with KEPA and KHMI, but a stakeholder in NIPH felt that "KHMI didn't accept the possibility of giving us data … [including] data we wanted to [share with] the public." Miscommunications and misunderstandings of the division of roles and responsibilities in data-sharing were common before the project. One CSO leader noted that this lack of interaction was concerning because AQ issues affect everyone. Most stakeholders agreed that MFK and the EDC project improved relationships between these agencies through new MOUs, collaborations on project components, and joint trainings. As one NIPH staff member noted "Through this project, [KHMI] understood that we didn't want to report their work but just incorporated it into our report, and now everything is clear. The data are open for everyone, not just for health but anyone interested in seeing the data." An MFK staff member echoed that sentiment, describing how they had seen government staff connected to EDC become more confident in their data and more interested in sharing it with other institutions and the public.

**Several GoK agencies mentioned that simply working together in joint committees and campaigns led to a stronger sense of coordination and alignment.** For example, under EDC, NIPH and KEPA collaborated to create fact sheets for AQ awareness days; NIPH staff suggested those joint endeavors helped KEPA "… think in different ways, build accurate data, and … use different methodologies for [their] needs." One KEPA staff member echoed that positive framing, suggesting they promoted a highly engaged partnership with NIPH, including through workshops, awareness campaigns and project committees.

**Even public institutions that were not central to the project appeared to be more engaged in AQ and pollution issues and with one another.** For example, the city of Pristina and other municipalities have developed new city-specific AQ plans using KHMI data, and municipalities also began drawing more data from the Kosovo Agency of Statistics. MESPI is reviewing its countrywide AQ plans as well, and the Ministry of Economy and Environment (MEE) is exploring ways to subsidize business actions that reduce negative impacts on pollution. A leader of an pollution focused CSO contended that city and ministry officials used to act ineffectually—and alone—on AQ issues in years past, but those entities began collaborating on AQ issues after the media put the spotlight on AQ issues during the EDC project.

**Most stakeholders interviewed from the GoK, MFK and CSOs described improved relationships and collaboration between the agencies, but some disputed that characterization.** In contrast to NIPH's more positive framing of interagency coordination, several (not all) interviewees from KHMI and KEPA thought their relationship with NIPH had not changed substantially since before the project began, and they expressed concerns about NIPH's past and current data practices. For example, several KHMI and KEPA staff suggested NIPH has not always properly assessed AQ levels and posted appropriate information about health impacts of different AQ levels. Staff at KHMI and KEPA also suggested that, at least at some points in time, NIPH used AQ data from uncalibrated portable monitoring equipment and from the U.S. Embassy, instead of the KHMI site. It is worth recalling that NIPH could not always rely on data from the KHMI AQ platform data, which experienced periods of downtime from late 2022 to mid-2024 (EQ 6c).

**Nearly all stakeholders described broader challenges to interministerial communication and relationships in Kosovo.** A Pristina municipal leader connected these challenges for EDC partners to a countrywide issue. They contended that "there is a low level of coordination between institutions" in Kosovo and noted that although that coordination is improving, the relationships are not improving at "a level we want." Informality of relationships between parties poses a challenge: organizations do not have robust formal relationships for collaborating or sharing information at the institutional level, but rather just between individuals. As the municipal leader argued, that informality in institutional relationships means staff members do not efficiently pass on knowledge or ownership of relationships to other personnel within their institution, and institutions can reject requests from partners for support or information without any formal recourse. One contractor involved in the AQ platform echoed that concern, adding that a government agency might deny a request for data or support simply because the agency might not have adequate internal records to contextualize and respond to the ask.

**Government, implementer and CSO representatives agreed that interministerial coordination between key agencies could be untenable in the absence of a convening project, continued public attention and more formality in relationships.** For example, some staff at KEPA, KHMI and NIPH believed that although they would maintain their interagency relationship after the project, the level of cooperation between them would decline without a convening and planning body such as MFK. Similarly, the leader of an pollution-focused CSO observed that since the project ended and media attention on AQ issues has declined, collaborations between government agencies at the city and ministry levels seem to have waned. Finally, one contractor involved in the AQ platform warned that without formal relationships and knowledge management, cooperation between government bodies (and their contractors) is precarious: "Tomorrow, an informal request [to a government agency] can just be rejected, and somebody will close the door. And [even] a formal request of the Ministry will not be followed because they don't have a clue what we are talking about."

*EQ 6c. Is air pollution data available on a continuously updated basis? How accurate are the air pollution forecasts provided through the NIPH portal?*[20] *What percentage of time does air quality exceed given thresholds?*

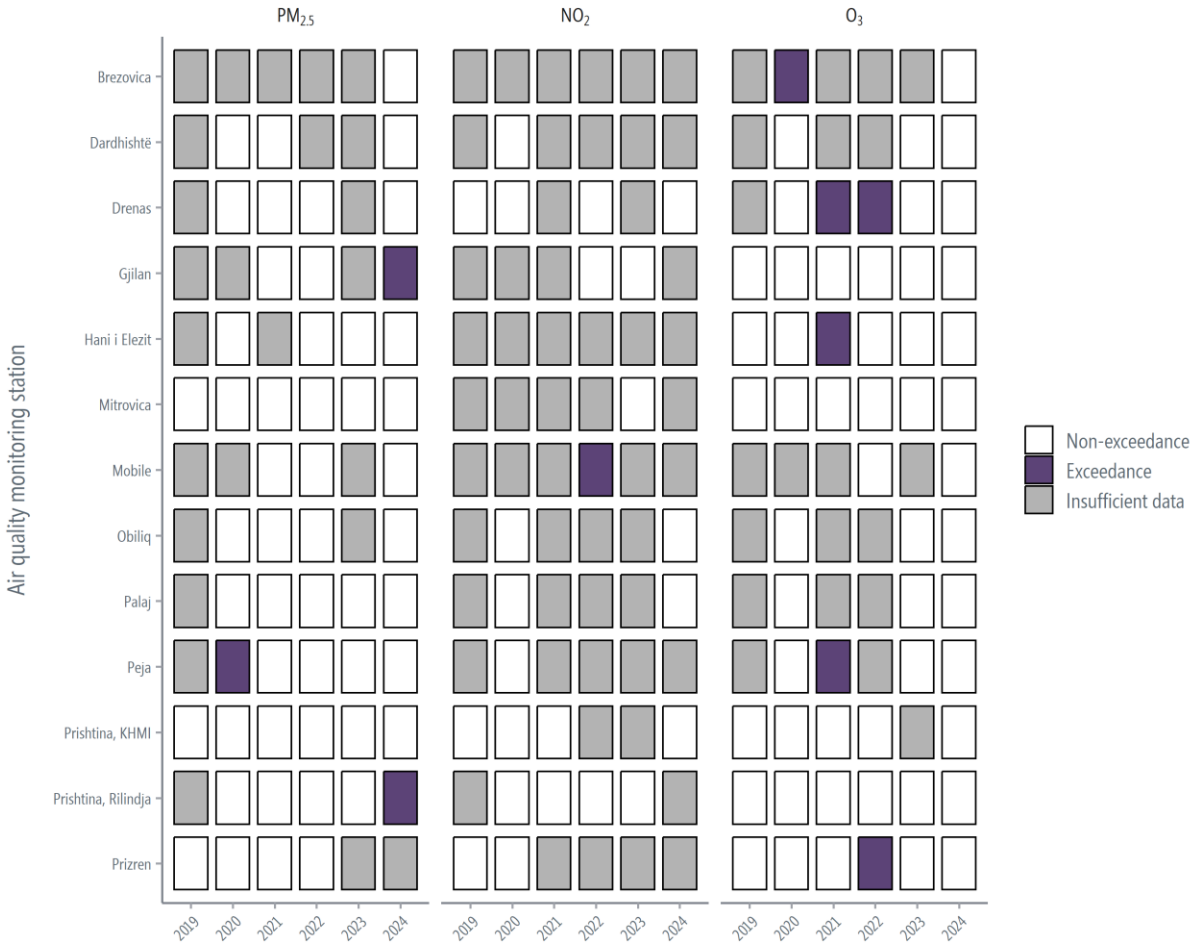
**Air pollution data has not been available on a continuously updated basis.** The AQ Platform experienced long periods of downtime due to capacity and contractual issues among partners. In addition, the AQ monitoring stations themselves frequently did not capture or send data to the platform properly and continuously, leaving gaps in the availability of data. At times, the platform will synchronize all the data on a delayed basis, but the following figures demonstrate that recurring data missingness problems affect nearly all stations across several pollutants. For example, Figure IV.16 shows exceedances of AQ limit values established by the European Parliament (2008) for three key pollutants. However, the EU standards require relatively complete data to carry out AQ assessments; minimum data capture values are 75 percent for winter ozone and nitrous oxide readings and 90 percent for winter readings and $PM_{2.5}$ measurements in all seasons. When data capture rates fall below these minima, it is impossible to credibly

[20] This evaluation originally aimed to compare forecasts to actual monitoring data, both during and after the TAG project, to assess the accuracy of forecasts over time. Of particular interest was the accuracy of the forecasts after NIRAS transferred the models to Cacttus because that could inform a view of the utility of the forecasts. However, the analysis requires generating the forecast and monitoring data at the same unit level. Cacttus produces forecasts at the municipality level, whereas monitoring stations provide data representing only specific geographic points. Without forecasts for those specific points (or forecast raster files from which those monitoring station points could be extracted), the comparison of values is meaningless.

compare AQ to safe-level standards because omitted measurements can mask periods of high pollution. Figure IV.17 shows this issue on a seasonal basis, visualizing the time of year in which each station failed to capture and upload sufficient data on specific pollutants to calculate limit value exceedances.[21]

Because so many stations have insufficient data for so many seasons, years and pollutants, it is not possible to draw definite conclusions about pollutant exceedances from these data.

**Figure IV.16. Exceedance of annual AQ limit values**

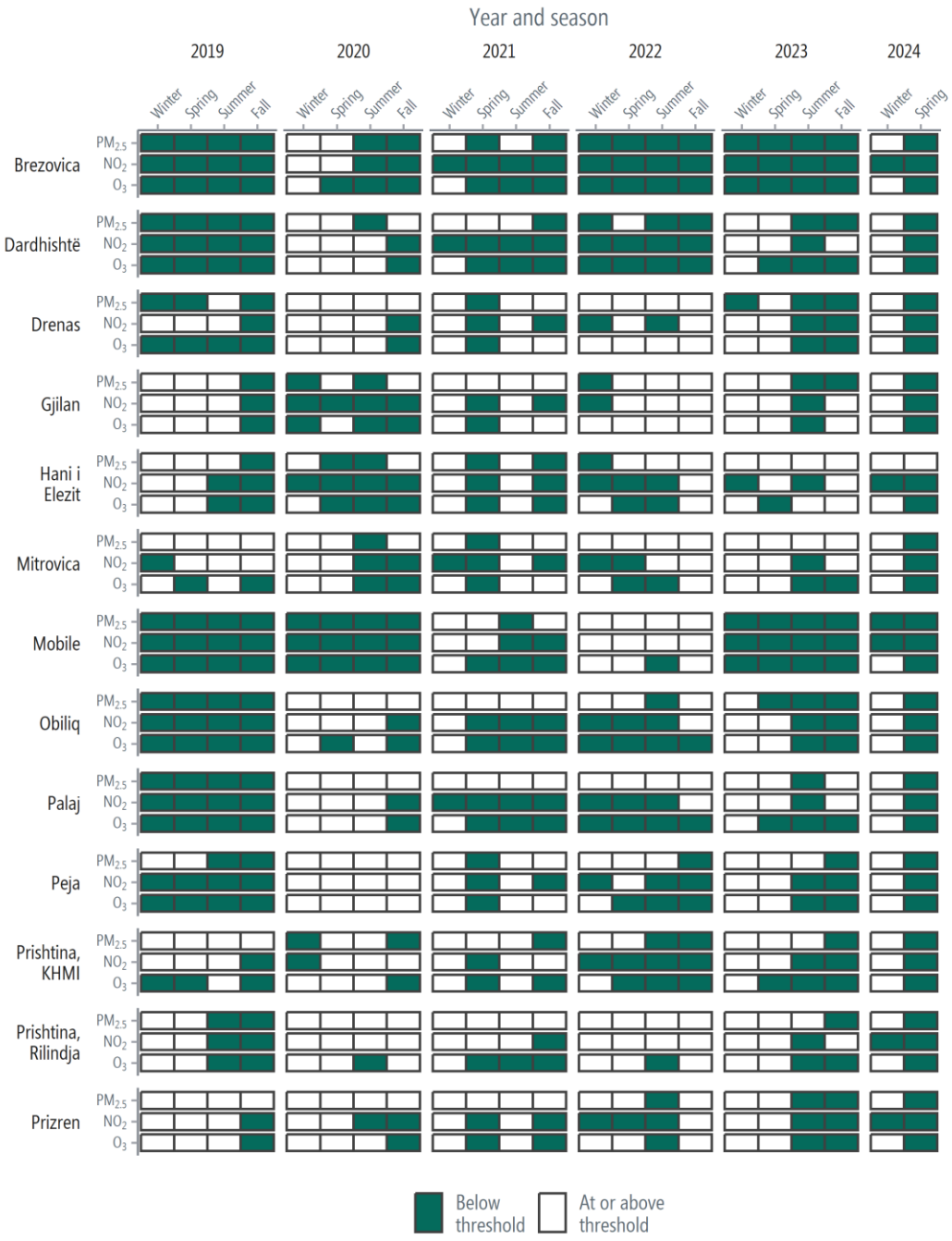



Sources: Mathematica's calculations using KHMI air quality station data and European Parliament (2008).

Note: We used guidelines from EU directives on AQ to calculate exceedances of limit values for pollutant concentration. We used these levels because Kosovo aspires to join the EU. Limit value for $PM_{2.5}$ is annual average of 25 micrograms/$m^3$, for $NO_2$ is annual average of 40 micrograms/$m^3$ and for $O_3$ is 25+ days per year with a maximum eight-hour average of 120 micrograms/$m^3$. Insufficient data indicate there were too many missing observations to calculate whether the limit value was exceeded. $O_3$ threshold for satisfactory data capture rate set at > = 90% in summer, > = 75% in winter. $PM_{2.5}$ and $NO_2$ threshold set at > = 90% in all seasons.

[21] Appendix B, Figure B.5 depicts data missingness for all KHMI AQ stations and all pollutants.

**Figure IV.17. Instances of the capture rate for AQ monitoring station data falling below EU threshold for data quality**

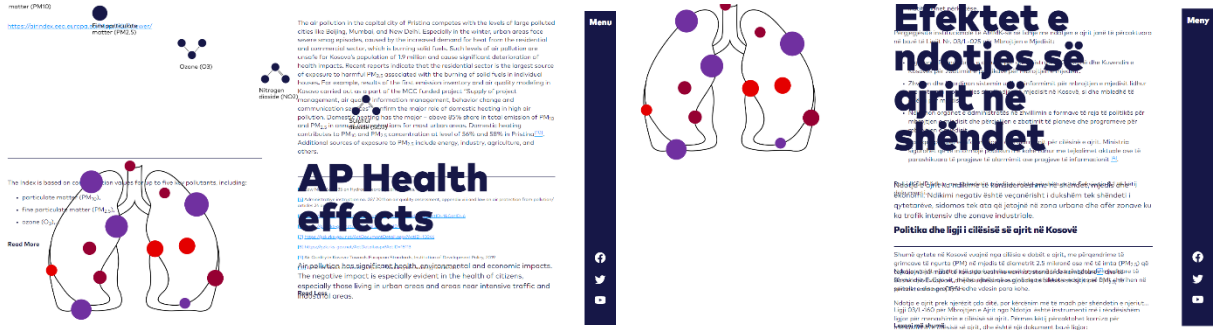



Source: Mathematica's calculations using KHMI air quality station data.

Note: We used guidelines from EU directives on AQ to calculate exceedances of limit values for pollutant concentration. We used these levels because Kosovo aspires to join the EU. Insufficient data indicate there were too many missing observations to calculate whether the limit value was exceeded. $O_3$ threshold for satisfactory data capture rate set at > = 90% in summer, > = 75% in winter. $PM_{2.5}$ and $NO_2$ threshold set at > = 90% in all seasons.

**Staff at beneficiary institutions and implementing partners seemed to be only partially aware of the degree of problems (past and current) with the KHMI AQ platform and NIPH AQ microsite.** When this evaluation conducted follow-up interviews with core EDC stakeholders in the second quarter of 2024, staff from KHMI, KEPA and Cacttus believed the KHMI AQ platform operated properly, but the evaluation team found that in fact it was still not fully functional. For example, monitoring and forecast maps still worked only intermittently—sometimes they did not load at all. Some platform functions worked correctly in one language, but not others. Forecast data were often not available for download or did not download from the platform properly. One KHMI staff member recognized the precarity of the platform: "I'm anxious it will collapse due to the lack of [technical expertise]." Similarly, some staff believed the Apple iOS version of the platform app was functional, but others knew both the Apple and Android versions of the app were nonfunctional and unavailable for download from the respective app stores. The NIPH AQ site (NIPH, n.d.) was also not suitable for navigation as of June 2024. It showed errors in the scrolling function, cut off text and images and figures blocked text. These errors appear in any language at any zoom setting, as shown in the English and Albanian examples in Figure IV.18.

**Figure IV.18. Screenshot of English- and Albanian-language pages on the NIPH portal**




**The forecast model faces additional challenges to its persistency.** KHMI and KEPA actors noted that Kosovo law requires the government make AQ monitoring information available to the public. The GoK has approved budget increases to maintain the monitoring stations, "keeping the promise to continue investing [in this issue]," as one MESPI stakeholder described it. Forecasts were a key component of the MFK-funded activity, but KHMI and KEPA noted they are not required by law; several staff saw them as less essential than real-time monitoring data. Forecasts, these staff pointed out, add to the expense and time burden of their work and require KHMI and its contractors to depend on other institutions and offices for their data (for example, emissions data). These outside data sources could be interrupted, meaning the forecast system is more vulnerable to interruptions in function than the monitoring system. After the three-year contract with Cacttus closes, KHMI plans to review the terms of reference for AQ platform maintenance and explore how it could maintain the system with lower costs and without relying on other institutions. Staff members suggested they might try to generate and display simpler forecasts or drop forecasts from the KHMI AQ platform altogether. The forecast might also become less accurate over time if the emissions assumptions underpinning its models become out of date. As of November 2023, MCC had not seen evidence KHMI had updated the emissions inventory annually since the platform launch, as originally planned.

*EQ 7. Did EDC contribute to increasing trust and understanding of government's function?*

**There is limited evidence to suggest EDC contributed to increased trust and understanding of the government's function.** Several GoK, MFK and CSO staff, as well as some residents included in FGDs,

said EDC did or could have a positive influence on public trust and understanding in the government's function. For example, NIPH staff stated the EDC project had increased their institute's visibility and helped it become a more trusted figure in AQ issues; an MFK leader expressed optimism about the influence of EDC, suggesting the public tends to trust data more when they know it came from a U.S. government investment. A former MESPI staff member (and current CSO leader) reasoned more generally that the GoK's recently opened data should promote more public trust in government and its activities, but the interviewee did not have concrete data to back up that logic. Along similar lines, several residents in the focus groups claimed that open data means government corruption would be unable to reach "elevated levels." Another noted that MESPI, which houses KEPA and KHMI, is more active in AQ issues now than before the project began.

**Other residents and GoK stakeholders expressed skepticism about the impact of EDC on public trust and understanding.** For example, one resident in an FGD described research they had seen showing the Kosovar government had sour relationships with CSOs and used data and analyses from CSOs only to support its own goals. Residents across focus groups also tended to agree that CSOs were more responsible in terms of actually acting on AQ issues than the government. Similarly, some current KHMI and KEPA leaders believe the delays and periods of time when the platform was not functional had damaged the institute's overall image. One staff member remarked, "trust was broken" and described how some media outlets that previously used the KHMI site have not come back to use the site again. This concern aligns with findings identified in our literature review that showed the level of public trust in governments' open data offerings depended on perceived quality of relevant open data systems and services, as well as the quality of the data themselves (Almuqrin et al. 2022). Low system reliability can affect trust in the broader open data effort and limit public uptake and use of the data, thereby inhibiting advances toward public trust and understanding of government functions.

**Stakeholders from civil society and academia also shared that residents need more visible pollution action from the GoK.** For example, one CSO leader noted that residents in the area they serve seem to trust GoK institutions generally but expect more from government agencies—in terms of leadership and action on pollution issues—than they currently get. An MFK staff member shared the same perspective, noting that "EDC was not designed to solve AQ problems. People wish it was." Similarly, one academic respondent commended the government for increasingly using data in its communications with the public, but noted that residents need to see visible, constructive actions to accompany that rhetoric. This professor also noted that key GoK institutions did not consult academic experts who could provide high-quality analyses and useful perspectives to aid in decision-making.

## C. KODC activity findings

### Key takeaways

- MFK generally delivered planned KODC outputs, including publishing data sets in collaboration with GoK institutions and awarding and managing grants to CSOs and other private actors.
- KODC grantees were generally successful in using newly available government data to produce innovations (termed *solutions* in the KODC program) for the public and government actors. GoK institutions used several grantees' solutions and some pairings of grantees and GoK institutions resulted in stronger relationships.
- However, several years after the activity concluded, many grantees' innovations are no longer active and their relationships with GoK institutions can be more difficult to maintain without MFK's convening power.

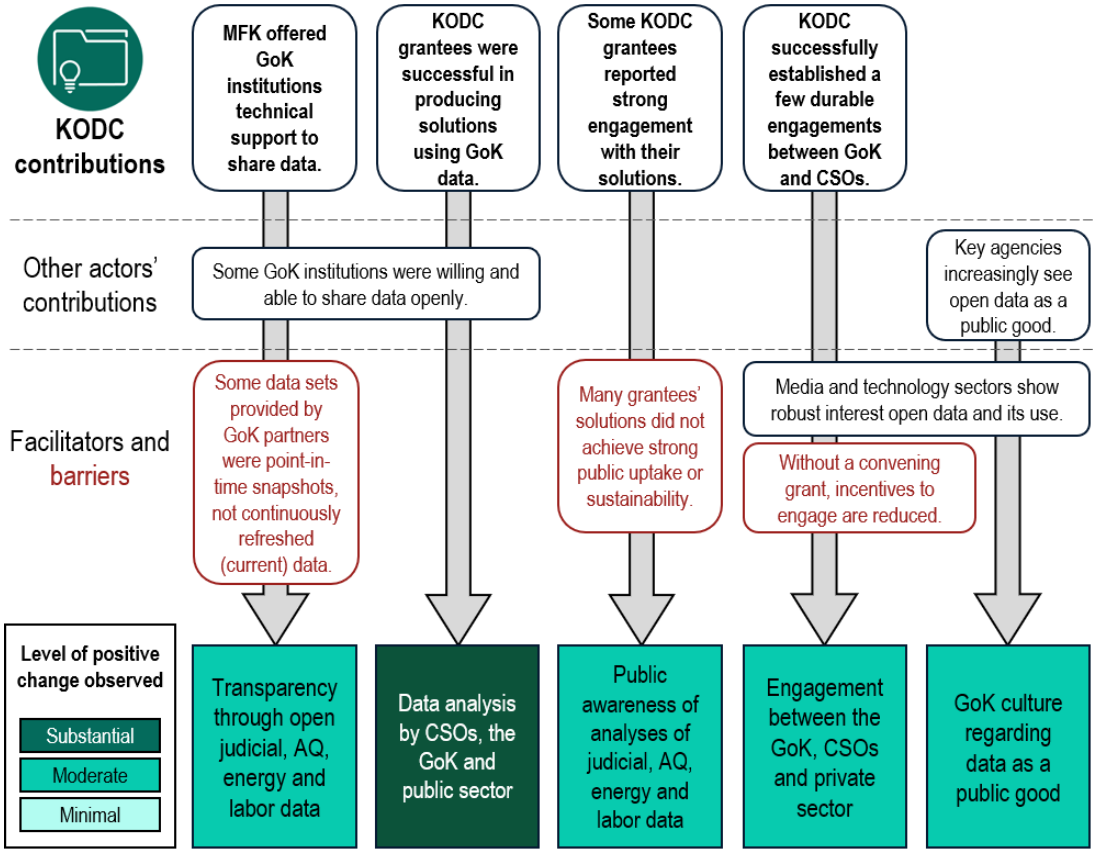
The generalized pathway of activity implementation and outcomes below shows where KODC encountered its main challenges (including those that arose after the activity's end).


This chapter presents findings for each of the evaluation questions corresponding to the KODC activity. Figure IV.19 summarizes the findings using a contribution analysis diagram. The model shows how TAG project efforts—and those of other actors—advanced the outcomes along impact pathways targeted in the KODC activity. The figure also visualizes how outside facilitators and barriers, including those that arose after MFK's closure, affected the degree and persistence of those achieved outcomes. Dark boxes at the bottom of the figure indicate an outcome for which the evaluation observed substantial positive change, medium-tone boxes show which outcomes saw moderate positive change and light boxes signal that the evaluation detected minimal positive change on that outcome. For example, KODC grantees produced novel solutions using GoK data, showing substantial positive change in the outcome related to data analysis by civil society actors. But many of the grantees struggled to achieve public uptake of their solutions, demonstrating only moderate positive progress toward the outcome of public awareness of the analyses. Table V.2 summarizes the achievement and persistence of outcomes and the EQ 2 section of this chapter describes them in full.

Throughout this chapter, we use case examples of KODC grantees and their work to provide deep dives into the implementation and results of specific projects under the activity.[22]

[22] Moonshot Global, a consultancy supported by USAID, also conducted a study of the KODC activity. Its research products relied on information collected in July 2022 and are available on the MFK website. These items include journey maps for Bonevet's "Breath Data" FRYMO app and SpaceSyntaKs' ENERGOMETER project, as well as a "periodic table of open data", none of which are still available online as of March 2025.

**Figure IV.19. Contribution analysis diagram of key KODC outcomes**




*EQ 1: Was the activity implemented according to plan?*

**Under KODC, MFK awarded 23 grants and disbursed a total of €943,746 (about $1,053,976).** Ultimately, MFK successfully coordinated the completion of 21 grants. Among the completed projects were seven DigData Labor grants, four DigData Air Quality grants, five DigData Energy grants and five DigData Judicial grants. Awardees received grants ranging from €3,150 to €70,000 to support their activities. Table IV.4 provides a full list of completed grants and Figure IV.20 shows the award amounts by DigData Challenge type.

**Table IV.4. List of KODC grantees**

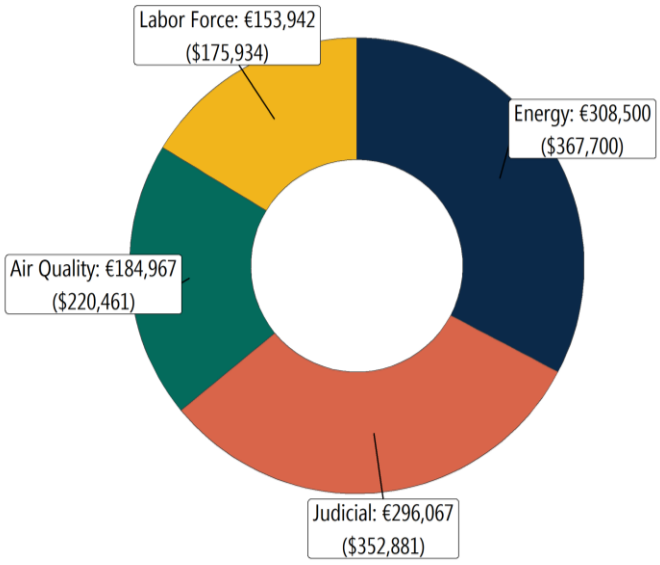
| DigData Challenge | No | Grantee | Project name | Grant amount (exchange rates as of award date) | Partnering GoK entity |
|---|---|---|---|---|---|
| Labor Force | 1 | Rrotull | Determining Factors and Trends of Female Participation in the Market | €3,800 ($4,343) | Kosovo Business Registration Agency |
| Labor Force | 2 | Endrit Pllashniku (Individual - LF) | KosovoData | €4,000 ($4,571) | Kosovo Customs, Kosovo Employment Agency, NIPH |
| Labor Force | 3 | Gezim Basha | DigStories | €3,150 ($3,600) | Ministry of Education, Science, and Technology; Kosovo Agency of Statistics |

| DigData Challenge | No | Grantee | Project name | Grant amount (exchange rates as of award date) | Partnering GoK entity |
|---|---|---|---|---|---|
| Labor Force | 4 | Urban FM | *Not provided* | €3,900 ($4,457) | *Not provided* |
| Labor Force | 5 | TOKA | Girl Power UP Toolkit | €49,142 ($56,162) | Ministry of Education, Science and Technology |
| Labor Force | 6 | ICK | *LInkMe* | €37,980 ($43,406) | Kosovo Tax Administration; Kosovo Employment Agency |
| Labor Force | 7 | Open Data Kosovo | The Future Workplace | €44,950 ($51,371) | Ministry of Trade and Industry; Ministry of Education, Science and Technology; Kosovo Tax Administration |
| Labor Force | n.a. | Business Development Group | Linkage: Talent Management and Business Community | Canceled after €6,750 ($7,714) disbursed due to implementation delays | University of Pristina, Ministry of Labor and Social Welfare |
| Air Quality | 8 | Rea | AQ monitoring and health recommendation mobile application | €47,350 ($56,436) | MEE |
| Air Quality | 9 | BONEVET | Breath Data | €49,317 ($58,781) | MEE |
| Air Quality | 10 | Internews | Using media to raise awareness of the main causes of air pollution in Kosovo | €41,500 ($49,464) | MEE |
| Air Quality | 11 | LLOGARITE | Airbot | €46,800 ($55,781) | MEE |
| Energy | 12 | ProCon Group LLC | Energy efficiency with efficient household appliances | €63,626 ($75,836) | Ministry of Trade and Industry; MEE; ERO; Kosovo Energy Efficiency Agency |
| Energy | 13 | Women in Data Kosovo | Energy Stats | €68,100 ($81,168) | KOSST (electricity transmission system operator); ERO |
| Energy | 14 | Institute for Free Market Economy | Kosovo Structure of Energy Production in Real Time (App) | €67,000 ($79,857) | ERO; Kosovo Electricity Distribution Company; KOSST (electricity transmission system operator) |
| Energy | 15 | Loop SMC | LOOP Doku-Seri. Season 1—ENERGY | €49,760 ($59,309) | ERO; Kosovo Energy Efficiency Agency; MEE; Kosovo Electricity Distribution Company |
| Energy | 16 | Space SyntaKs | ENERGOMETER | €60,014 ($71,530) | ERO; Kosovo Energy Efficiency Agency |
| Judicial | 17 | QIKA | "1 ≠ 1", a platform visualizing domestic violence data | €42,899 ($51,131) | KPC; Agency for Free Legal Aid |
| Judicial | 18 | BIRN & D4D | Data for fighting harmful narratives on the judiciary | €69,975 ($83,403) | KJC; KPC, Legal Aid Agency |

| DigData Challenge | No | Grantee | Project name | Grant amount (exchange rates as of award date) | Partnering GoK entity |
|---|---|---|---|---|---|
| Judicial | 19 | PEN Strategic Group | Commercial Case-law Data Access Dashboard Project | €70,000 ($83,433) | KJC; MEE |
| Judicial | 20 | INJECT | Increase Judiciary Transparency and Severity of Punishments for Domestic Violence Cases | €40,143 ($47,846) | KJC |
| Judicial | 21 | Çohu | Open Justice | €49,650 ($59,178) | KJC |
| Judicial | n.a. | Dita Dobranja | Data Against Domestic Violence | Canceled after €3,510 ($4,184) disbursed due to implementation delays | KJC |

n.a. = not applicable. BIRN: Balkan Investigative Reporting Network. BONEVET: from the Albanian "Do It Yourself". Çohu: from the Albanian "Arise". D4D: Democracy for Development. ICK: Innovation Center Kosovo. LLOGARITE: from the Albanian "Calculation. QIKA: Qendra për Informim, Kritikë dhe Aksion (Center for Information, Critique, and Action). TOKA: Organizata Kosovare per Talent dhe Arsim (Kosovar Organization for Talent and Education).

**Figure IV.20. Summary of KODC grants by DigData Challenge**




Source: MFK. U.S. e awarded.

**DigData grantees would have a positive impact on** r grantee created a toolkit for job training that the Ministry of Education put into use. One grantee under the DigData Judicial Challenge accessed data to publish articles on how the judiciary processes cases of domestic abuse, while another grantee developed a web-based free legal aid chat feature for women experiencing domestic violence. For the DigData Energy Challenge, the Energy Regulatory Office (ERO) discussed at length how useful the platform was for aggregating data from numerous sources in one place. As noted in our

literature review, organizers and partners of open data challenges can use tailored technical support, feedback and expert guidance to help grantees reach their greatest potential impacts (Data.org 2023). MFK indicated it provided grantees with these types of supports, including coordination with GoK institutions.

**MFK implemented the Labor Force Challenge according to the original project schedule, but the three other challenges experienced delays; still, those delays did not appear to impede the overall achievements of the KODC activity.** In July 2018, MFK released a call for Labor Challenge grantees and provided a two-month window for submission. After judging submissions, MFK awarded seven Labor Challenge grants in October 2018 and grant implementation began in November of the same year, as planned. But three factors delayed the Air Quality and Judicial Challenges, planned to start in 2019 and 2020, respectively. First, MFK and partnering government institutions took more time than planned to prepare and launch the hub of data sets for the DigData Challenges. Second, COVID-19 caused interruptions in the workflow and availability of some of KODC's partners. Third, MFK experienced minor contracting delays on some grants. MFK released a call for applications for the Air Quality, Judicial and Energy Challenges in January 2021—adding the Energy Challenge to the portfolio when KODC implementation was underway—and again gave applicants a two-month window to submit their materials. Among the awarded projects were eight DigData Labor grants, four DigData Air Quality grants, five DigData Energy grants and six DigData Judicial grants. MFK cancelled two of the original grants (one in the Labor Force Challenge and one in Judicial) when the grantees could not meet implementation milestones. In each of these cases, MFK cancelled the grants after disbursing only 15 percent of the allocated funds.

**The activity's plans included limited steps to support the persistence of the solutions.** Grant agreements stipulated that after the challenges ended, the GoK would receive a royalty-free license to use and maintain the functionality of grantees' products, though the intellectual property rights would remain with the grantees. When MFK and grantees determine the GoK would not have the capacity or interest to maintain the products, MFK planned to encourage grantees to maintain their products and seek additional funding to scale up their solutions after their grant with MFK ended.

**Multiple stakeholders expressed concerns about the persistence of solutions developed by the KODC grantees and their impacts on Kosovar society.** Some of these concerns related to the structure of the KODC grants. In the case of one grant, the GoK beneficiary institution expected the grantee to continue maintaining and updating the platform for some time after KODC ended, but the grantee had no funding for this. The grantee turned over the source code and documentation for the platform to the beneficiary institution, but GoK counterparts did not have the expertise, time or resources to maintain it. Both the grantee and the GoK beneficiary institution expressed disappointment that the contract did not support more of a transition phase. As part of its post-project assessment, MFK recommended that relevant GoK agencies publicly commit to publishing timely, machine-readable data, and suggested that the GoK increase human resources for publishing data and staff training on data preparation, publishing, communication and use, but this evaluation found no evidence that relevant agencies took those steps. One MCC staff member also questioned whether KODC had funded grants that had the potential to affect Kosovar society in a deep way. This stakeholder brought up an Open Data Challenge from the MCC Data Collaboratives for Local Impact that took place in Tanzania as an example of grantees that more effectively integrated data innovations into everyday life. In that context, one grantee designed kitenge fabrics (a local style of fabric used for clothing) with data-driven messaging, which allowed for smoother integration of the innovation into existing economic practices.

However, KODC's primary outcomes focused on building data partnerships that would increase collaboration and communication between the GoK and civil society and the private sector. Though most KODC-funded solutions had limited reach and have lapsed since funding ended, **the activity did increase exposure of the GoK and civil society and the private sector to one another and provide opportunities for both groups to learn about the potential impacts and the challenges of collaborating to create data-driven public goods** (EQs 2–5).

*EQ 2: Did the activity achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?*

KODC achieved its targeted outcomes in the expected time frame (by October 2022) and expected magnitude (which varied by outcome indicator) during the project. GoK institutions used several KODC grantees' solutions, and some pairings of grantees and GoK institutions produced stronger links between civil society and government actors, though the relationships faded after the project ended.

The broad framing of EQ 2 encompasses EQs 3a–5, which each focus on a subset of outcomes under the KODC program logic. Table IV.5 provides a very high-level overview of the targeted outcomes in KODC's program logic, its achievements, and the EQ section discusses outcomes in greater detail. Readers can use this table to navigate the following sections to explore specific outcomes of interest. Note that EQs 3a, 3b and 3c appear in a different order in the main body of this chapter to better align with the order of outcome achievement we observed.

**Table IV.5. Summary of KODC outcomes and high-level results**

| Targeted outcomes and evaluation questions | | High-level results |
|---|---|---|
| 1 | Publishing energy, labor force, AQ and judicial data through relevant government websites is expected to lead to:<br>• Increased engagement between GoK institutions and CSOs and the media (**EQ 3c**)<br>• A rise in CSOs and media organizations publishing analyses of data and other data-driven products (**EQ 3b**) | Some KODC grants helped form successful working relationships between civil society and media organizations and GoK institutions.<br>21 KODC grantees completed grants, developing analyses, data platforms or other data-driven tools. |
| 2 | The increase in analyses and data-driven products under Outcome (1) is expected to contribute to:<br>• An increase in GoK institutions' usage of these analyses to inform decision-making (**EQ 3a**)<br>• An increase in the public's use of open data to advocate for change (**EQ 4**) | There have been few documented cases in which GoK institutions have used analyses conducted by CSOs, academics or media organizations as part of KODC to inform policy changes.<br>Qualitative evidence indicates that members of the public have been engaged in KODC-supported products, but quantitative evidence provides mixed evidence on whether interest has grown or waned over time. |
| 3 | Taken together, Outcomes (1) and (2) are expected to contribute to increases in the public's trust and understanding of the government's function (**EQ 5**). | According to the UNDP PPS data, there has not been an increase in public satisfaction in the government during or after KODC implementation, which might be due to sociopolitical factors beyond the scope of the project. |

Note: EQs associated with each outcome appear in bold text in parentheses.

*EQ 3b: Did publishing energy, labor force, AQ and judicial data through relevant government websites result in increased analysis done by CSOs?*

**All KODC grantees were successful in using government data to develop tools and analyses.** Tools were generally online systems, such as an energy-use platform that displayed real-time electricity generation in Kosovo including the mix of energy sources used. Grantees conducting analyses aimed to produce public goods, as well. For example, they worked to integrate AQ forecasts into daily weather broadcasts, assess domestic violence reporting within the judicial system and identify job preparedness needs to develop a toolkit for students entering the workforce. In some cases, there were synergies between grantees in which one grantee would gain access to data to build a platform and conduct an analysis, and another grantee would use the results to develop a training platform for other GoK stakeholders or the public.

### Box IV.1. KODC grant case study: Rea

**Using technology to build awareness of AQ and public health**

| Grantee name | Grant amount | DigData Challenge | Grant timeline |
|---|---|---|---|
| Rea Company | €47,340 | Air Quality | May 2021 to January 2022 |

What problem did the grant seek to address? Kosovo has experienced some of the poorest AQ in the world due to lignite-fed power plants and widespread use of inefficient methods of household heating, among other factors. Many Kosovars were aware of the general AQ issues, but most lacked regular access to real-time AQ information and knowledge about how exposure to high pollutant concentrations could affect their health.

Scope of the grant. To address these problems, Rea proposed to develop Ajri ("Air" in Albanian), a mobile app that would provide users with real-time information (from KHMI) on AQ in Pristina, Kosovo, as well as information about health implications of AQ conditions and suggestions for protecting users' health. Rea intended the app to be similar to the NIPH platform supported by EDC but designed and operated by the private sector.

What the grant achieved, and what enabled it. In August 2021, Rea successfully launched the Ajri app. It built the app using a "freemium" model, in which all users can see real-time AQ. Users with paid subscriptions had access to premium features such as warnings about high pollutant concentrations and recommendations for minimizing risk tailored to users' health conditions (that is, pregnancy or underlying heart or lung issues). Paid users also had access to discounts for health products and additional story-telling features that would weave AQ education into stories for various audiences (including children). Rea credited a positive relationship with KHMI as a primary factor that enabled it to access data and successfully design its app.

Barriers to success. Soon after the launch, the Ajri app began to crash due to interruptions in the flow of data from KHMI. Rea designed the app to pull data from KHMI using an application programming interface maintained by NIRAS (the KHMI contractor responsible for maintaining the platform), but that contract ended just one month after the Ajri launched. The Rea team worked to establish a new dataflow from KHMI, but technical issues continued to disrupt the app's reliability. In addition to issues with the data pipeline, socioeconomic factors limited the app's reach. According to a Rea team member, middle- and higher-income Kosovars are more likely to download third-party apps on their smart phones and pay for premium features compared to people in lower socioeconomic groups. This meant lower-income residents would also have less AQ information and be less likely to take action to reduce their exposure to air pollution. ◢

Box IV.1 contains the first of three case studies of KODC grantees and their work. It provides a deep dive into the implementation and results of the Ajri project under the REA grantee and highlights the grantees' successes and challenges in accessing and analyzing GoK data to produce a solution for the public.

*EQ 3c. Did KODC result in increased engagement between government and civil society and media?*

**KODC successfully facilitated engagement between the government and CSOs**. Interviewees across stakeholder groups described how some CSOs and media experienced antagonistic relationships with GoK institutions that predated KODC. According to one MFK staff member, one contributing factor was that certain rules have historically impeded government agencies from opening their data. For example, some institutions permitted sharing data with outside parties only in PDF, not in XLSX, CSV, or other

manipulable or machine-readable formats. Responding to data requests was also laborious and time consuming for GoK agencies because staff often had to use USB drives to gather data from computers and servers across multiple physical locations. This meant response times for data requests from civil society would often exceed two weeks. Through KODC, MFK and government partners tested solutions to that problem by setting up a hub of downloadable, manipulable, and relevant data sets easily accessed by CSOs. By the time the KODC's implementation was fully underway, relations between the two groups had improved, partially due to MFK's coordination. For example, MFK developed data-sharing MOUs between GoK beneficiary institutions and KODC grantees, then revised them with feedback from GoK stakeholders. When signed, MFK helped ensure parties' compliance with those MOUs and successfully mediated the establishment of functional relations between beneficiary institutions and grantees.

**Some KODC grantees formed positive working partnerships with government counterparts.** MFK sought to connect every KODC grantee with a GoK agency partner to help build productive partnerships that would enable grantees to access data and improve the GoK's use of data in decision-making. However, this did not always happen. One DigData Judicial grantee recounted the chief prosecutor describing an analysis as one of the most useful research products they had seen, and another grantee reported the Ministry of Justice did not even acknowledge their analysis. In contrast to the experiences of GoK stakeholders in the legal system, the ERO was highly engaged with the energy generation tool that one of the grantees developed. The grantee reported developing a strong rapport with the ERO and noted they could iterate on the platform multiple times. The ERO invited the grantee to give a presentation of the tool to other staff of ERO and partner agencies, signaling its satisfaction with the platform and interest in using it. An MFK staff member noted that ERO had continued to use the app informally to check production, imports and energy generation, and reflected more broadly that "Some of the tools we've developed … can have a role to not only substitute [for], but be embedded in the practices and the work of the institutions."

**Other KODC grantees described continued antagonistic relationships with GoK counterparts.** One DigData Labor grantee encountered major challenges in establishing a functional relationship with the Ministry of Education. This grantee recalled having to wait weeks—and sometimes months—to get the Ministry to respond to basic inquiries, which hindered the grantee's ability to build its data tool. In addition, one DigData Judicial grantee noted that although KODC had improved government–CSO relations for many groups, their organization still had an unsatisfactory relationship with judicial institutions. "We have to protest sometimes in front of their doors … because they are not transparent. They are not cooperative enough. We have to beg them to come to a meeting or something else. And when they come, we have to be very thankful and do the talking." As noted in our literature review, open data challenges are more successful when grantees can count on enthusiastic collaboration across sectors, including from partner institutions (DataKind 2021).

**Most stakeholders doubted that the KODC-facilitated engagement between civil society and the GoK would produce lasting changes in government transparency and relations between the two groups.** Various DigData grantees and other interviewees felt that public pressure on GoK institutions was still the most effective tool for improving transparency. For example, one MFK staff member suggested that KODC's work to build CSO–GoK engagement might have had less effect on transparency than existing CSO pressure campaigns. Moreover, this interviewee questioned whether the GoK institutions shared data in the interest of building relationships with CSOs or if they were more preoccupied with reducing workload. "They need to see the value in data beyond seeing it as a tool for a CSO to remove some of the work from their back.… They've seen value in publishing data because it

doesn't require them to go analyze the numbers and give the answer…" Instead, this interviewee suggested, the institutions can simply point to the open data set and tell a CSO to find answers themselves. To try to combat the potential atrophying of GoK–CSO relationships, MCC recommended in its post-project assessment that the GoK continue engagement with grantees when possible, including by actively using and disseminating their solutions. MCC also suggested that relevant GoK agencies carry on a dialogue with civil society, private sector, media and other actors about their data needs from government. However, we uncovered little evidence that GoK agencies made such coordinated efforts to maintain engagement and carry forward that dialogue.

*EQ 3a: Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?*

**This evaluation found some evidence that certain GoK institutions are aware of analyses produced by CSOs under KODC, but it found no clear evidence that GoK institutions have used those specific analyses to inform policy decisions.** One DigData Judicial grantee had assumed from previous experiences that the government would shun its analysis of domestic violence cases and was pleasantly surprised by the government's response. "My concern was how these [findings] would be accepted by the officials.… Usually what happens is they kind of fight back and don't accept the results. But it didn't happen like that … they said they were going to change the way they were working." However, this grantee did not know whether those officials made policy changes based on the analysis. Another DigData Judicial grantee developed a database to help the MoJ establish evidence-driven policies, but noted that after the database was published, MoJ proposed changes to the penal code that were out of step with the latest evidence the grantee and other CSOs had produced. In the energy sector, ERO appeared to be very interested in adopting KODC-funded tools, including the platform for viewing daily electricity generation, but no key informants or FGD participants shared instances of ERO making decisions using the tool. Indeed, staff of beneficiary institutions interviewed for this evaluation did not report having used analytical outputs from KODC-funded solutions to adjust policies or processes.

**Stakeholders cited somewhat opaque decision-making processes and institutional norm as two factors potentially explaining the lack of evidence of GoK institutions using CSO-produced analyses to inform decisions.** One MFK staff member described the difficulties in obtaining enough information to review government decisions and determine whether and how staff and leaders used data and analyses from civil society. This interviewee also noted it was not MFK's role to act as a government watchdog. Meanwhile, a key informant from a nonbeneficiary GoK institution felt that institutional norms inside government agencies makes it difficult for them to make data-driven decisions. According to this interviewee, the practicalities of governance sometimes mean policymakers must make decisions so quickly that they rely on ad hoc decision-making processes and cannot consider the latest evidence.

Box IV.2 contains the second of three case studies of KODC grantees and their work. It provides a deep dive into the implementation and results of the INJECT project under the Judicial Challenge and shows how this grantee sought to deliver data-driven solutions to both relevant government institutions and vulnerable segments of the population.

### Box IV.2. KODC grant case study: INJECT

**Shedding light on domestic violence in Kosovo's legal system and improving services to survivors**

| Grantee name | Grant amount | DigData Challenge | Grant timeline |
|---|---|---|---|
| INJECT | €40,142 | Judicial | January 2022 to August 2( |

**What problem did the grant seek to address?** Victims and survivors of domestic violence face a set of compounding challenges. In many cases, they have limited access to financial resources to escape their situations. If they seek help from the authorities, they risk their abuser learning about what they are trying to do and becoming more violent. Some legal experts in Kosovo also contend that the legal system is ineffective in bringing abusers to justice.

**Scope of the grant.** To address these problems, INJECT proposed a multifaceted project that would (1) offer digital legal resources to support domestic violence victims and (2) bring attention to the legal system's inadequacies in addressing domestic violence.

What the grant achieved, and what enabled it. Beginning in January 2022, INJECT hired a developer to build a web chat feature on its website that would enable domestic abuse victims to obtain discrete legal aid for their unique circumstances and began promoting the tool. INJECT launched the web chat in March 2022. By the end of the grant, at least 20 people used the web chat to get support and legal advice about issues related to domestic violence, such as divorce and custody proceedings and accessing social assistance. The web chat developer agreed to host the feature for free for one year after the completion of the grant. During that year, usership steadily increased: the web page received more than 8,000 page views and enabled 55 conversations with people seeking help.

Meanwhile, INJECT analyzed 600 legal cases of domestic violence in Pristina to assess the judicial system's efficacy in holding abusers accountable. In May 2022, INJECT published a report that demonstrated that 80 percent of people convicted of domestic abuse had their sentences suspended, meaning they faced minimal consequences for their actions. INJECT publicized the report findings on KTV (a major television channel in Kosovo) and held a conference with stakeholders from MoJ and KPC to encourage use of the research findings to inform changes to the penal code. As of this evaluation, it was unclear the degree to which MoJ took up the report findings to inform its work.

**Barriers to success.** Despite INJECT's success in launching the web chat, the grant did not include resources for advertising the web chat broadly, which might be why only 20 people used the feature over the course of the grant. For the research component of the project, INJECT found that court systems across the country had inconsistent and non-harmonized data, which forced the team to limit its research to Pristina. Also, despite INJECT's success in getting members of GoK's judiciary to attend its conference, one INJECT staff member noted frequent difficulties in gaining traction with the judiciary, and that it had not seen any changes to the penal code since the release of the research.

Where the grant-funded solution stands now. The INJECT website still has a live web chat feature and its research report is still available for download (though some browsers flag the website as unsafe). ◢

*EQ 4. How has the project contributed to residents' use of open data in advocating for change?*

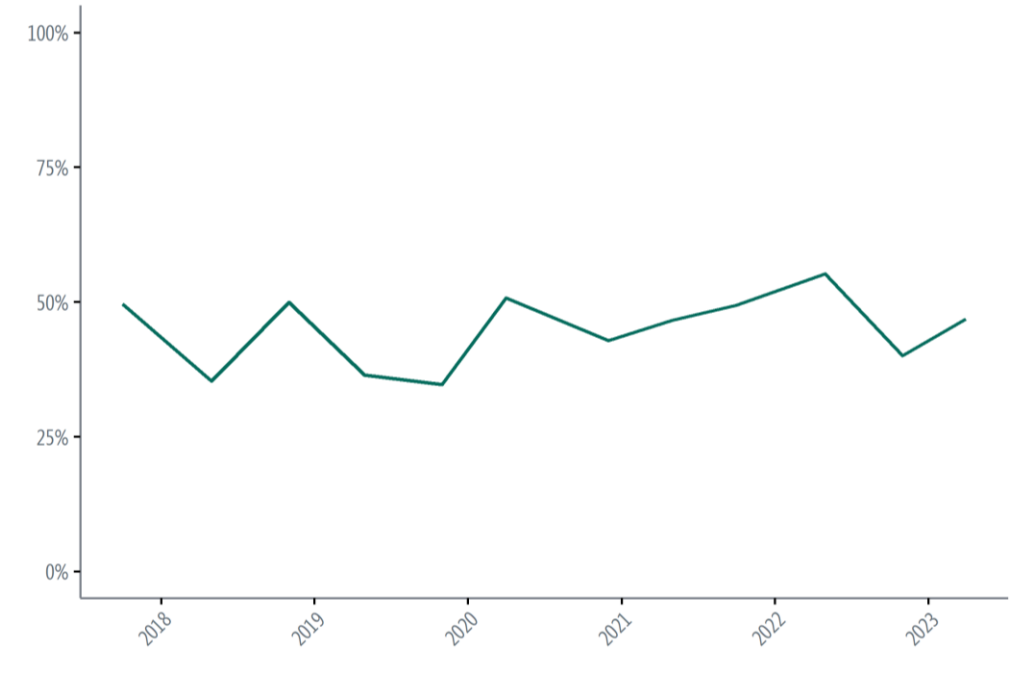
**Many of the grantees were successful in getting members of the public, researchers and the private sector to use their tools, capitalizing on helpful design features or alignment with public interest.** In the case of an application used to monitor household energy use, the app developer relayed that the sharp

rise in energy prices during COVID-19 led to a spike in the public's use of the tool to curb their household costs, and private sector entities sought to access the data using the system's application programming interface. The five videos the grantee produced explaining how to access and use the platform also supported the platform's success. In the case of one grantee that used judicial data to build a public data set on domestic violence, the organization's staff noted high interest among researchers and the media.

**Quantitative data suggest that KODC grantees attracted users to their tools and analyses, but the impact at the population level was modest.** Few grantees could provide data showing how widely their apps were used. Of those grantees that did track their reach, Bonevet, which built the FRYMO AQ monitoring system, showed people downloaded its app slightly more than 700 times during the first two years after launch. KosovoData, an app developed by an independent data analyst, received 5,000 page views in the first two months and another 5,000 page views over the nine months that followed.

**KODC grantees made strides toward providing the public with access to data on important issues, but there was little evidence to suggest the public used data to advocate for change or inform their decisions.** The highest level of public engagement appeared to be in the judicial sector, where grantees engaged with the public through their projects. For example, the DigData Judicial grantee that developed an online chat feature to support and advise domestic violence survivors indicated the confidential nature of the portal enabled people—mostly women—to safely access legal support. In the case of DigData Energy, one grantee produced a tool to help people identify and buy energy-efficient household appliances so they could reduce their emission footprint and energy bills. The grantee found the tool had little impact on people's purchasing decisions. The relatively low number of KODC grantees that could promote the use of their products for public advocacy might relate to public satisfaction with CSOs in Kosovo, which has hovered between 30 and 50 percent since 2018 (Figure IV.21)

**Figure IV.21. Level of public satisfaction with CSOs**




Source: UNDP PPS.

**Focusing on technology-based solutions also might have limited the extent of the reach of KODC grantees and their activities.** For example, one DigData Air Quality grantee built a mobile application for monitoring AQ with some subscription-based features and noted that people in middle- and upper-income groups were more likely to download apps to their cell phones, especially apps based on a subscription model. As a result, these socioeconomic groups would benefit from the KODC grant, and the grantee noted they had not seen any signs of app use or behavior change among lower-income groups. In its post-project assessment, MCC recommended that the GoK increase resources for education of the public on data use, but this evaluation found no clear evidence of that increase.

Box IV.3 contains the third of three case studies of KODC grantees and their work. It provides a deep dive into the implementation and results of the Loop SMC docuseries and shows how to disseminate technology-based solutions beyond apps or specific web platforms to broader audiences through traditional media outlets, including television stations.

### Box IV.3. KODC grant case study: Loop SMC

## Bringing attention to energy generation and use

| Grantee name | Grant amount | DigData Challenge | Grant timeline |
|---|---|---|---|
| Loop SMC | €49,760 | Energy | September 2021 to April 2 |

**What problem did the grant seek to address?** Most of Kosovo's energy generation comes from burning lignite, a form of coal that produces low heat and release large amounts of pollutants when burned, presenting hazards to human health. Kosovo relies on lignite because the country has one of the largest lignite deposits on earth, and—according to Loop SMC—there was low awareness among the general populace about the deleterious effects of lignite on air quality and human health.

**Scope of the grant.** Loop SMC sought to use DigData funds to produce an innovative television docuseries to raise awareness of how Kosovo generates energy with lignite, its role in driving Kosovo's economy, its effects on health, how people can manage their own emission footprints and alternative pathways for Kosovo's energy future.

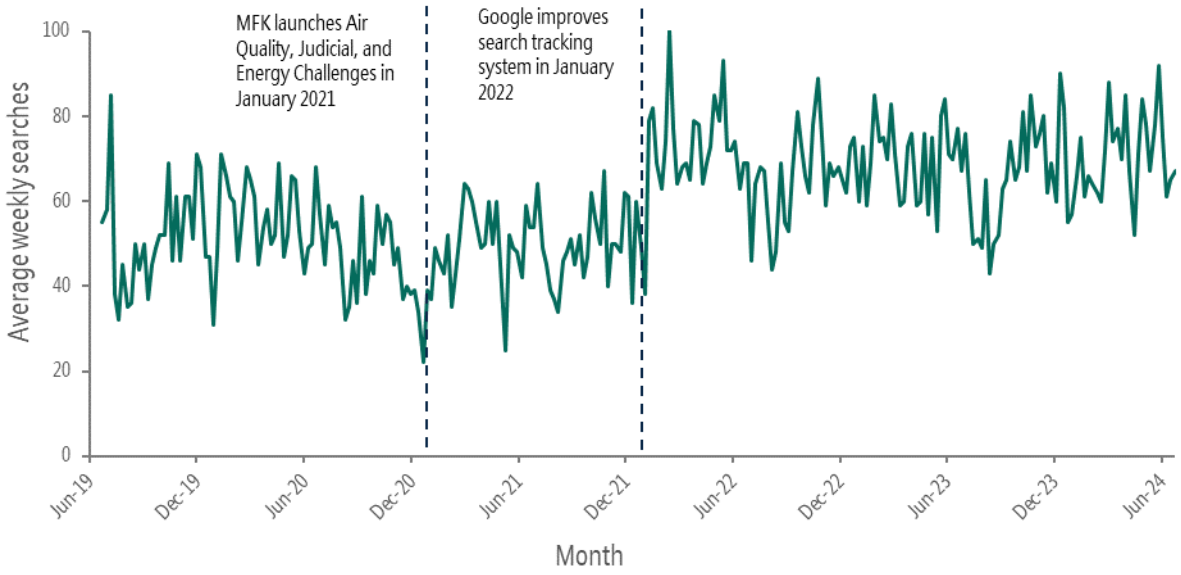
**What the grant achieved, and what enabled it.** Using Netflix and Vice mini-documentaries as inspiration, Loop SMC worked to develop a data-driven and professionally produced five-part docuseries. Loop SMC worked with ERO to obtain energy system data and Kosovo Energy Corporation (KEK) to access the Kosovo A and B power plants in Obiliq for filming. Loop SMC began publicizing the docuseries in November and December 2021 through boosted social media posts, gaining a total of more than 2 million impressions and about 7,000 likes, comments, and shares. The grantee struck a deal with TV Dukagjini, a national television channel and media outlet, to air the series; it broadcast episodes on a weekly basis during May and June 2022. According to viewership data, 2,000 to 3,000 households viewed each episode. The episodes covered the principles of energy, energy in Kosovo, non-coal source energy, energy efficiency and AQ (particularly as it relates to energy generation in Kosovo). Loop SMC uploaded the episodes to its YouTube channel, where the videos received a more than 4,700 views by the end of the grant.

**Barriers to success.** Although Loop SMC succeeded in establishing contact with ERO and gaining access to data, the grantee was unable to do the same with the Ministry of the Economy. Loop SMC hoped to include an analysis of how energy production and consumption related to economic productivity but had to curtail that area of analysis in its final docuseries because of unresponsiveness from the Ministry of the Economy. The grantee also noted MFK was slow to respond on contracting issues, which caused bottlenecks and delayed production timelines by several weeks.

**Where the grant-funded solution stands now.** Loop SMC's YouTube channel still hosts the episodes, which households have viewed more than 8,500 times. ◢

**Public interest in open data did not appear to increase dramatically over the life of the KODC activity, according to Google search data in Kosovo**. If public interest in (and pursuit of) open data increased during (or because of) KODC, we might expect to see additional Google searches in Kosovo for phrases such as the term "data." However, the Google Trends tool shows that searches for phrases including the term "data" appear to be consistent across the KODC planning, implementation and post-activity period (Figure IV.22). Note that Google improved its search tracking system on January 1, 2022, likely causing the step-change increase in searches including "data."

**Figure IV.212. Average weekly searches for phrases including the word "data" in Kosovo**




Source: Google Trends.

Note: Google improved its search tracking system on January 1, 2022. In Google Trends, "numbers represent search interest relative to the highest point on the chart for the given region and time. A value of 100 is the peak popularity for the term. A value of 50 means that the term is half as popular. A score of 0 means there was not enough data for this term" (Google).

*EQ 5. Did KODC contribute to increasing trust and understanding of the government's function?*

**Stakeholders reported observing improvements to government transparency resulting from KODC, but the activity's effects on trust and understanding of the government's function are less evident.** Some stakeholders pointed to existing trends within Kosovo's government toward greater transparency, and a beneficiary institution stakeholder reflected on the fact that Kosovo is more advanced in data-sharing than neighboring western Balkan countries. One DigData Judicial grantee noted that despite some resistance to sharing data within the GoK, the situation today is far better than in the past, when CSOs had to fight just to be able to monitor court cases. According to one MFK leader, relatively easy access to data through DigData Challenges increased grantees' trust in government over the course of their work. In terms of whether KODC improved the public's trust in the GoK, one stakeholder from a nonbeneficiary GoK institution highlighted that the public in Kosovo already tends to trust that the government releases data that are truthful and accurate, even if they do not trust the government to make the best decisions for them. The UNDP PPS might reflect this opinion: it indicated that although the public's satisfaction in the GoK has improved in recent years, it is still at or below 50 percent (Figure IV.23), and a much smaller proportion of respondents believed the GoK's decision-making processes were responsive. Pointing to the complex relationship between government transparency and public satisfaction, one MFK staff member said, "The focus is … improving the perception of the government through opening data, which is a little weird because perception … could be harmed if the data that you open is talking about how bad things are." Finally, as our earlier review of the literature found, open data interventions designed to increase trust in government tend to be more effective when paired with public engagement strategies, and most KODC grants had limited funding and time to build and maintain public engagement around the solutions built with GoK data.

**Figure IV.223. Public perceptions of the GoK and its decision-making**


Source: UNDP PPS rounds 8–24.

Notes on important dates: MFK launched the Labor Force Challenge in July 2018. The global COVID-19 pandemic struck Europe in early 2020. MFK launched the Air Quality, Judicial and Energy Challenges in January 2021. Kosovo's parliamentary elections in February 2021 saw the Vetëvendosje party increase its share of seats in the assembly from about one-quarter to nearly half. These factors might contribute to the changes in respondents' satisfaction and beliefs, but the Public Pulse data set does not ask respondents *why* they are or are not satisfied with the GoK's performance or believe or do not believe the GoK's decision-making is responsive.

## D. Cross-cutting findings

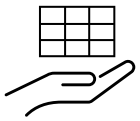
### Key takeaways

- TAG partially succeeded in improving availability of data for the public and fostering the analytical use of those data by civil society and government actors. TAG created avenues for direct engagement between the GoK and civil society during the project, but this evaluation found no clear evidence of increasing engagement between GoK institutions and CSOs and media organizations after the end of TAG.
- This evaluation found little evidence that the TAG contributed to an increase in government use of nongovernment analyses, and multiple stakeholders point to the GoK's institutional norm as a barrier to evidence uptake in decision-making.
- Multiple GoK stakeholders expressed commitment to—and satisfaction with the results of—their new data-sharing practices. However, this evaluation did not identify systematic efforts by GoK institutions after the Threshold Program to share data with the public.
- The TAG made limited progress in improving the alignment of public perceptions of government with reality, and limited progress in increasing trust in and understanding of the GoK's functions.
- The TAG did produce valuable benefits for the GoK, civil society and the public across the three activities. However, many of these benefits did not persist after the project, which suggests the project costs might not have been justified.
- The following generalized pathway of activity implementation and outcomes shows where TAG encountered cross-cutting challenges.


*EQ 1: Did the program achieve its targeted outcomes, particularly its stated objective, in the time frame and magnitude expected? Why or why not?*

This evaluation found that TAG did not achieve substantial progress across its cross-cutting target outcomes by October 2022 (cross-cutting outcomes had no target magnitudes specified). The project did, however, achieve its objective, *which was to improve the public availability and analytical use of judicial, air quality, and labor force data by civil society, business, and the Government, thus promoting data driven decision-making* in the time frame (by October 2022) and magnitude expected, given that "the only expectation is that there is a change, no matter how small" (MFK M&E Plan, 2021, pp. 22, 31). The evaluation found evidence that the project did contribute to limited changes in civil society and private sector actors using open government judicial and air quality data in their work.

We can organize the objective of the TAG project into three related but distinct components: to improve the (1) public availability; and (2) analytical use of judicial, air quality and labor force data by civil society, business and the government; thus (3) promoting data-driven decision making. Our cross-cutting evaluation of TAG produced the following findings on those project objective components.



The project **partially succeeded in improving the availability of data to the public.** Opening the data was a relatively straightforward process across all three activities, though minor challenges delayed the publication of certain data sets (under KODC) and launch of certain platforms (under PAJI). However, maintaining the availability of air quality data to the public proved more difficult when the EDC activity formally closed. As detailed in the EDC findings chapter of this report, contractual and capacity-related issues caused lapses in the function of the KHMI AQ platform, diminishing the availability of data and threatening the results made during MFK's implementation. As described in the EDC and PAJI chapters of this evaluation, the interfaces of the NIPH microsite and the ODP and are also not entirely user friendly, likely affecting the level of data uptake and use by residents and civil society.

The project **partially succeeded in fostering the analytical use of those data** by civil society and government. Through trainings for civil society and government, along with awareness campaigns and grants to CSOs, the TAG project connected a variety of potential data users to newly developed data sets and platforms. PAJI was not able to complete planned trainings for CSOs on the platforms after their launch, but EDC did succeed in training a variety of actors, including nongovernment and government leaders and technical staff involved in AQ issues. Academics, CSOs and the media took up the AQ data to conduct their own analyses and dissemination activities. Under KODC, civil society and residents analyzed government data sets to innovate new products and programs. Speaking across TAG activities, one MFK stakeholder suggested that the project contributed to a stronger uptake of data use in Kosovo. However, this stakeholder and others indicated that efforts to stimulate analytical use of the data (including trainings and awareness-raising) should have been maintained and integrated across all activities. Along those lines, both CSOs and government stakeholders expressed they could benefit from additional or longer-term hands-on training on the platforms. An MFK stakeholder added that the three TAG activities would have made a greater impact if they were more integrated—for example, if the KODC DigData initiative had been designed and timed to require grantees to use the ODP (for the Judicial Challenge), the KHMI AQ platform (for AQ) or the NIRAS-led energy inventory (for Energy) to build their solutions, rather than the smaller one-off DigData data sets that MFK collated. This could have scaled up the exposure of the PAJI and EDC outputs to nongovernmental audiences, thus contributing to achieving long-term outcomes in terms of CSOs' analytical production and GoK and non-GoK engagement. Finally, multiple users noted that the open data platforms (such as the KHMI AQ platform) must be maintained and continuously improved for potential users to maintain interest (and trust) in the open data offerings.

The project had only **limited success in promoting data-driven decision-making** processes in government. Although some government staff reported their institutions (or other institutions) increasingly used data and analyses in making decisions, there is little evidence that data-driven decision-making processes are now the norm or that TAG substantively changed the robustness of those processes. Several factors likely inhibited advancement in this outcome area. First, it takes agency staff time and resources to set up robust processes for integrating data and analyses into decision-making (time and resources that many agencies might not have and which TAG did not directly increase). Second, the urgency of some decisions can impede policymakers and government staff from taking time to interpret and apply data and analyses, even on an ad hoc basis. Third, using data to drive decision is a norm, not just a process, and several stakeholders (including from MFK) described how that shift takes more than just a few years to take place (EQ 3a provides more details).

The broad framing of EQ 1 encompasses EQs 2–4, which each focus on a cross-cutting TAG outcome under the program logic. For EQ 1, we present findings on the outcomes *not* covered in other EQs and explain the reasons why grantees did or did not meet the targets.

The program logic anticipates four cross-cutting, downstream outcomes flowing from the main objective assessed above:

- **Cross-cutting outcome target:** Government views data as a public resource to be shared (EQ 4).
- **Cross-cutting outcome target:** Increased consumption by the GoK of analyses and products generated by civil society and private sector using publicly available data (EQ 3a).
- **Cross-cutting outcome target:** *Perception aligns with reality and thus there is greater trust in and understanding of the GoK's functions* (no corresponding EQ). This evaluation found evidence of limited progress on this outcome. Residents participating in focus groups expressed a mix of hope, unfamiliarity, and pessimism regarding the influence of open data platforms on trust and understanding of government functions.[23] Along those lines, UNDP PPS data show a slight increase during the project period in the proportion of respondents in Kosovo who believed corruption was prevalent in the courts (37.7 percent as of April 2023). However, several of the indicators used in the MCC scorecard system related to government function actually showed improvement over the TAG project period.[24] Much like changes toward data-driven decision-making, it is likely that positive changes in public trust and understanding will take more than five years to manifest.
- **Cross-cutting outcome target:** *Increased investment in Kosovo by businesses* (no corresponding EQ). Business investments in Kosovo declined slightly from 2017 to 2020 (the latest period for which data are available), but foreign direct investment increased by 34 percent over the same period.[25] These changes cannot be attributed to the TAG project.

*EQ 2: Do the results of the program justify the allocation of resources for it?*

Neither MCC nor Mathematica conducted a cost-benefit analysis (CBA) for the TAG project of the Threshold Program. In lieu of that CBA, we present a high-level qualitative assessment of the benefits that flow from project results. (Appendix C presents and discusses the utility of an exercise to

[23] Some residents in evaluation focus groups expressed hope that the open data platforms would make corruption harder to hide (and thus less likely). Others simply had not heard of TAG-funded open data portals, despite their interest in the issues for which data were opened, signaling a gap in understanding of the GoK's functions. Meanwhile, some residents believed relations between government and nongovernment actors were generally sour and remained unchanged during the project.

[24] Government effectiveness, an indicator drawn from World Bank data (2024b), increased relative to other countries in its income group during the project's implementation (from a percentile rank of 38.1 to 44.3). Public voice and accountability (another World Bank governance indicator, but not one that forms part of the MCC scorecards) also rose increased from a percentile rank of 38.9 in 2018 to 43.5 in 2022. Meanwhile, control of corruption increased the most, from a percentile rank of 33.8 to 47.2 over the same five-year period.

[25] The MFK ITT shows investments by businesses in Kosovo (TAG indicator 1.0) declined from the 2017 project baseline of €1.82 billion to €1.71 billion in late 2020. That decline could be a sign of an economic downturn early in the pandemic. However, the ITT provides only two values for this indicator (baseline and 2020), and the data on which the indicator relied are no longer published in the same format. The Kosovo Agency of Statistics (2021) shows foreign direct investment in Kosovo increasing from €255 million to €341 million in the same four-year period, with no decrease from 2019 to 2020. The last Statistical Yearbook of the Republic of Kosovo was published in 2021.

quantitatively estimate one benefit stream of the TAG project.) We then compare benefits to project costs, assuming that MCC would consider costs justified if the program reached all main target outcomes.

According to MFK's December 2022 financial documents, TAG expended 100 percent of the funds ($7,179,671) committed to the project. Nearly 38 percent of funding went to PAJI, almost 44 percent to EDC and just over 19 percent to KODC. Expenditures supported efforts from MFK, contractors and beneficiary institutions in three general categories of work: opening data to the public using new platforms and data sets, building awareness among the public and civil society of data availability and the data's value and convening government and nongovernment entities on data-related projects to stimulate engagement and collaboration. The three TAG activities produced benefits across these categories in different ways.

**PAJI** produced results that accrued several important benefits to the public, civil society and government. It is unclear whether the availability of open judicial data also generated benefits for foreign or domestic businesses. First, this evaluation suggests the CTM produces valuable time savings for thousands of case parties. Specifically, residents with cases in the justice system experience less waiting time to access their records and must make fewer visits to the courts to check those records. CTM likely also enables court staff to spend less time responding to in-person visitors. Similarly, ODP likely also generates savings by reducing the burden on KJC staff to respond to data-related questions from CSOs and the media—even despite the activity skipping the CSO trainings on ODP—and the platform produces diffuse benefits for Kosovar society by increasing transparency of the judiciary and informing public debate about trends in crime, judicial processes and judicial outcomes.

Disseminating and socializing the open air quality data through **EDC** likely caused some residents, including residents especially vulnerable to poor AQ, to change their behaviors to reduce their health burden from pollution exposure. Similarly, trainings with nongovernmental actors during the project likely stimulated additional debate and advocacy across civil society, which could yield long-term benefits in terms of stronger pollution policies in the future. However, when the project concluded, the achievements of the activity diminished due to post-project interruptions to the AQ platform function, relatively low web traffic to KHMI and NIPH sites and a dormant mobile app.

**"For new projects, it is important to work closely with beneficiary institutions so they can share what capacities they have and what their needs are."**

***MFK staff member***

Similarly, although some of the solutions and relationships built with **KODC** support faded after the project closed, the DigData Challenges and associated dissemination work likely strengthened the open data ecosystem in three ways. First, KODC helped change data-sharing mindsets and practices of some GoK actors. Second, grantee organizations and companies gained experience and capacity in accessing, analyzing and using government data in support of their missions. Third, uptake of KODC analyses varied from solution to solution, but some grantees engaged public audiences and provided them with useful information and services, from judicial analysis and advice to action-oriented energy-saving tips.

**MCC's investments contributed decisively to the generation of these benefits.** If MCC had not funded these work streams, it is possible the GoK or other donors could have invested in similar activities. However, delivering these benefits would likely have cost the GoK millions of dollars, likely a prohibitive sum given competing priorities and resource constraints. Other donors, such as JICA,

NORAD or GIZ, might have funded similar work in MCC's absence, but this evaluation found no evidence that other donors planned the same work before MCC stepped in.

**Results achieved through the TAG project might fade, however, diminishing some long-term benefits.** As detailed in EQ 1, the funding allocated to activities was adequate to open up government data as planned, but the funding and supports were not adequate to build the capacity of GoK institutions to the level where they could reliably maintain and improve the open data systems beyond the life of the project. Similarly, resources allocated to efforts to stimulate engagement between GoK and non-GoK actors did help foster new and stronger relationships, but several key stakeholder groups expressed concerns about those relationships when the funding ended and the convener of some of those relationships (MFK) dissolved.

Given these considerations, the answer to the question of whether the project results justified the costs depends partly on whether MCC considers *planned results achieved* adequate or if instead *planned results must persist beyond the life of the project*. If we principally care that the grantees reached most targeted outcomes during the project, then the project costs were largely justified because most outcomes were indeed reached (despite some implementation delays and quality issues with ODP). However, if we argue that costs are justified only if outcome achievements persist beyond the life of the project, then the allocations of resources for TAG activities might not have been justified.

*EQ 3b: Has engagement between government and civil society and the media increased?*

**The TAG project created avenues for direct engagement between GoK entities and civil society and the media.** These avenues included data-sharing agreements under the DigData challenges, CTM and ODP platform launch events and trainings for CSOs and the media on the EDC-funded AQ platform. In several cases, the project funded civil society and media organizations' efforts to engage directly with the government in the form of conferences and workshops as part of DigData grants. However, not all TAG efforts to stimulate engagement between GoK entities and civil society or media outlets were successful. In the case of the KODC, some CSOs were unable to obtain data-sharing agreements with their GoK counterparts (such as the Ministry of Education) or had sluggish communication that hindered their ability to make progress on their projects. As other open data challenge organizers have found, enthusiasm of partners across sectors is vital for innovations to gain traction and succeed (DataKind 2021).

**Data platforms have become a way for CSOs and media organizations to engage with the GoK beneficiary institutions' work, potentially increasing data use by CSOs and the media while reducing direct engagement between the organizations and GoK institutions.** One judicial beneficiary institution stakeholder noted that data requests inundated their office before the launch of ODP, but data requests had subsided significantly after the platform's launch. According to this individual, this decline was an indication that CSOs and the media obtained data from the platform instead of via direct requests. CSOs and media stakeholders shared similar sentiments, despite some complaints about the design of the platforms. One MFK stakeholder suggested GoK actors might continue publishing open data to reduce their need to respond to burdensome individual data requests from CSOs, the media and others.

**However, some active CSOs and media organizations either do not know about the platforms or do not use them.** When asked about their use of ODP, one CSO active in the judicial sector responded that they had not heard of the platform (even though it had been live for more than one year). One journalist interviewed for the evaluation knew about the ODP but indicated they still relied on direct outreach to

contacts in judicial institutions to make sure they accessed the latest and most accurate information. In the case of EDC, persistent issues with the AQ monitoring and forecasting platform have likely prevented KHMI from attracting and engaging users, including those from CSOs and media organizations.

**This evaluation found no clear evidence of increasing engagement between GoK institutions and CSOs and media organizations after the end of the TAG.** In the judicial sector, MoJ set up working groups with CSO and media stakeholders to inform policy, but no judiciary-focused CSOs interviewed for this evaluation reported participating in such working groups. KODC grantees also did not describe improvements in their working relationships with GoK institutions.

*EQ 3a: Is there any increase in the GoK's use of analyses done by nongovernment entities, both analyses supported by MFK and those in general? Is there any evidence these types of analyses can factor into any policy decision-making?*

**This evaluation found little evidence that the project contributed to an increase in government use of nongovernment analyses.** One GoK beneficiary institution stakeholder mentioned that some of their colleagues pay attention to what CSOs post on social media, including analyses that they publicize, but we did not identify specific instances of this kind of behavior among policymakers. Multiple stakeholders from CSOs and media organizations mentioned they have shared their analyses with government decision-makers, but they did not know whether those analyses have informed any decision-making and had not seen instances of government policy shifts that align with their data-driven recommendations.

**Multiple stakeholders pointed to GoK institutional norm as a barrier to evidence uptake in decision-making.** One GoK stakeholder (not affiliated with a beneficiary institution) pointed out that urgency in government institutions has created a situation in which decision-makers do not have time or incentives to gather and consider evidence in their decisions. One MFK stakeholder shared strong views on this issue in the following quote:

**"The hardest part of the project is getting government to use NGO and CSO analyses. The project did not do enough to build capacities required to affect decision-making. This connection should have happened within and as part of the project. We should have been approaching high officials in charge of policymaking to be more involved in project implementation. To get them used to using the data for decision-making. It's not happening because it takes a lot to change from inside the institutions. For example, we invited policymakers to an end-of-project event about data use, and only 5 percent came.**

*MFK staff member*

*EQ 4: Is there a change in government employees' perceptions of government data as a public good or as a resource to be shared? If yes, how do government employees share data with the public (open data, website or reports)? If no, why?*

**Multiple GoK stakeholders expressed commitment to—and satisfaction with the results of—their new data-sharing practices.** In the judicial sector, KJC staff were pleased that the ODP launch had reduced their workload related to fulfilling data requests. One stakeholder from a beneficiary institution suggested that judicial transparency and public access to judicial data have risen more quickly in Kosovo compared to neighboring countries, though they did not describe a metric for measuring relative transparency. Of note is that KJC respondents did not express that they highly valued the analyses

produced by outside parties that resulted from opening their data. In the case of KODC, ERO described how impressed it was with a partnering grantee's data visualization solution that had used the office's data sets, and office staff described their ambition to maintain the grantee's solution, pending availability of resources. Related to the EDC activity, KHMI allocated funding to maintain the AQ monitoring platform for at least three years following the project's closure, and people from the agency expressed their commitment to sharing air quality data as a public good. One stakeholder from MFK pointed out there have been several cases of the government publishing more open data on its own (outside donors' interventions) since the TAG project, but this evaluation could not independently verify these claims of change and we did not find evidence enabling us to determine the extent to which these changes are attributable to the TAG. Other stakeholders expressed skepticism that agencies not directly involved in the TAG would invest the time and resources to create public-access data portals or otherwise make their data public on their own.

**However, this evaluation did not identify systematic efforts by GoK institutions after the Threshold Program to share data with the public.** Multiple GoK stakeholders expressed their interest in continuing the work and expanding or creating new open data portals, but we did not identify new open data offerings from beneficiary institutions after the project. In 2018, the parliament of Kosovo published a nonbinding charter of open data principles, but it has not yet fully updated laws, regulations and norms regarding open data. For example, the MCC post-project assessment noted that "most of the institutions that MFK collaborated with during DigData challenges only published the data that MFK helped to structure," and did not establish a broader open data practice. From 2018 to 2022, Kosovo's overall Open Data Inventory score, assessed by the NGO Open Data Watch, stayed relatively stable, but with substantial variation across data types. Summary scores for openness and coverage of data in terms of social statistics saw a small increase (43 to 48), economic data a strong increase (52 to 67) and air pollution statistics a substantial decrease (54 to 30). This suggests GoK institutions open their data at different rates and with different levels of success.

**"KODC grants, if they were integrated [with other activities], could be a contributing part of making open data a practice. It's the replication of efforts across activities that could make a difference."**

***MFK staff member***

## E. Implications for policy and practice

The findings from PAJI, EDC, KODC and cross-cutting evaluation components can inform updates to the policies and practices of funders such as MCC, beneficiary institutions and implementers. This section presents these implications and offers suggestions that could help stakeholders prevent or address some potential challenges in future work, such as the new MCC Compact with Kosovo

### Cross-cutting implications

*Integrating activities*

**Projects with activities that are not well integrated with one another might miss potential synergies and mutual reinforcement of outcomes.** When project activities are siloed, beneficiary institutions engaged in different activities are not as able to share useful lessons with one another, which could help these stakeholders solve common challenges they face, from contractual challenges to barriers to user-friendliness of open data platforms. Similarly, if activities do not rely on (or connect to) one another's outputs, they miss opportunities to stimulate longer-term interest in and demand for those outputs. For

example, the Judicial and AQ Challenge grantees in the KODC activity could not use PAJI's ODP and EDC's AQ platform, respectively, in part because of PAJI's early delay. Instead, the grantees used earlier versions of the GoK's data portals, or even static data sets. This meant that KODC grantees missed opportunities to (1) learn about the actual open data platforms that would be available to the public going forward, (2) give feedback to the other activities' implementing partners that could have strengthened the platforms' operation and usefulness and (3) become super-users of the platforms and champions for their use among civil society and the public. These lost opportunities likely limited the persistence of key outcomes across activities, including those related to GoK–CSO engagement, GoK uptake of CSO analyses and larger shifts in GoK open data practices. In contrast, well-planned connections between project activities and outputs (such as the open data platforms) could reinforce the achievement and persistence of both activity and program-level outcomes. Given this, MCC might wish to review policies and guidelines on designing multi-activity projects to encourage cross-activity connections. In doing so, MCC may also wish to "plan for delays", allowing adequate time in project plans for activities which depend on one another to catch up and re-integrate if they run into early challenges.

*Supports for strengthening institutional capacity*

**Without dedicated supports, beneficiary institutions might not be able to maintain and improve the outputs they co-developed during the project.** For example, a variety of EDC stakeholders commented that KHMI's inadequate IT capacity limited the institute's ability to negotiate the AQ platform transfer and support the new contractor in rebuilding the forecast model. Similarly, in terms of PAJI, the ODP user interface issues suggest KJC struggles to improve its data cleaning and visualization processes without ongoing contractor support. In KODC, several of the GoK bodies that provided data for the activity did not continue publishing open data after the Challenges were complete, likely due to capacity or resource constraints. Stakeholders also noted that because many relationships and agreements between government institutions are informal and not well documented, staff struggle to maintain collaboration and institutional knowledge over time. These cases suggest future projects should work with beneficiary institutions to identify capacity gaps in and plan interventions that address those gaps—for example, staff trainings, knowledge management supports or exploration of potential funding sources projects could tap to maintain and improve the project outputs after the project has ended. Accordingly, MCC might wish to review policies and processes for providing longer-term capacity building supports to beneficiary institutions.

> **"The willingness to solve problems should come from all parties. We can push. But the institutions have authority and should also push."**
>
> ***Contractor staff member***

*Procuring services in a timely manner*

**Late procurement processes and slow contract scope negotiations can threaten project achievements.** For example, KHMI launched the procurement process for AQ platform maintenance close to the end of the TAG project, late enough to affect the platform's functionality. By the time the procurement was contested and resolved, and before the new contractor began work, the project had ended and the AQ platform had lapsed into nonfunctionality. An earlier procurement process could have enabled the maintenance contractor to be in place and prepared for the platform's transfer at the end of the project, limiting interruptions to the platform's function. To prevent this from happening in other projects, beneficiary governments might wish to review and strengthen internal policies governing procurement

processes. As one stakeholder suggested, MCC can also get "hands-on" with government actors, helping them plan when and how they will procure contractors to minimize interruptions of project-funded services.

**Similarly, MFK's longer-than-anticipated negotiations with the multiple PAJI contractors about the scope of their work set back the start of the activity.** This delay contributed to MFK's decision to skip trainings for CSOs, which likely hindered the overall impacts of PAJI. MCC might wish to update its contracting procedures to help prevent or address delays from negotiations on scope. Specifically, MCC might wish to plan additional time for contract negotiations or instead establish exceptions to certain contract and scope deliberation processes for procurements below a certain amount.

*Planning for continuity*

**As evidenced by the months-long negotiations over access to the original AQ platform forecast source code, EDC did not have a clear continuity plan that all stakeholders had agreed on.** For example, unlike KHMI and Cacttus, NIRAS thought the AQ forecast was a *service*, not a *deliverable,* and believed it was under no obligation to deliver the source code that it and its partner Atmoterm had used to generate forecasts during the contract. MCC might wish to clarify its requirements for post-projects' plans, perhaps developing a straightforward template to capture details on which project outputs to transfer, to whom, and when. All relevant stakeholders for each project would have to jointly complete such a tool. MCC could then publish this filled-out continuity plan and disseminate it to project stakeholders—and other actors, if relevant—to improve each party's accountability for their commitments. For projects involving outputs such as open data platforms, it might also help to have an IT specialist review the continuity plans alongside the project's technical team to make sure there is uniform understanding of the code-sharing, server access and other factors needed. These plans might also include details on how agencies involved in the project can maintain formal touchpoints for coordination after the funder and convener has departed.[26]

**Implications related to open data challenges**

**Grantees under the KODC activity built useful technology-based solutions using GoK-provided data sets, but the solutions generally achieved relatively low levels—and brief periods—of usership, with implications for other outcomes**. KODC grants included funding and supports that enabled grantees to develop their solutions, but those resources were insufficient for most grantees to conduct ongoing awareness-raising or marketing efforts to build usership of their solutions. This is in contrast to the similar challenge referenced in this report's literature review, which selected fewer organizations; assessed their capacity across data, talent, technology and partnerships; and offered each organization tailored supports to build its capacity and the persistence of its work (Datakind 2021; Data.org 2023). Many of the KODC-funded products and platforms had limited publicity and uptake, and most KODC-funded platforms and online tools are no longer available or are out of date. Even though the target outcomes of KODC did not include the longevity of individual grantees' products, allowing those products to atrophy might have negatively affected KODC target outcomes: the relationships between CSOs and GoK agencies and the potential mindset shifts among GoK staff about open data.

[26] MCC's 2023 post-project assessment found no indication that donor coordination meetings related to the EDC platforms and AQ more generally continued after MFK wrapped up the Threshold Program (Amponsah 2023).

**Hosts of open data challenges might wish to explore assumptions about the innovations more deeply, and adjust the size, number and supports of grants accordingly.** In the design phase, grantors might wish probe (and make explicit) any assumptions or expectations about the long-term purpose and durability of funded innovations. This exercise might influence the structure of the grant facility—for example, offering fewer, larger grants with more generous allocations for grantees to identify follow-on financing or revenue models to support their solutions at scale. Probing assumptions might also help MCC frame expectations around collaboration for government institutions involved in providing data and potentially using grantees' solutions. As suggested, MCC and other funders might also wish to examine how they can link challenges such as KODC to other project activities to reinforce outcome achievements and improve the likelihood of persistence. Similarly, open data challenges might have more durable outputs if donors and implementers develop a demand-focused orientation by consulting potential users of the solutions, including government agencies and members of the public, to identify their specific data-related needs. Donors might also wish to develop specialized monitoring and learning processes for open data challenges. For example, organizers could work with grantees that develop online platforms to automate the process for collecting and reporting data on reach and influence of the platforms. This could help streamline the challenge's measurement, evaluation and learning work and enable donors to synthesize and share the effort's successes in real time.

# V. Next Steps

After approving the report, MCC will publish this evaluation on its website along with an evaluation brief. Both the evaluation brief and executive summary of this report will be published and disseminated to relevant audiences in Kosovo. The evaluation team will also present findings to MCC and separately to local stakeholders in Kosovo as appropriate, with the aim of sharing key findings and contextualizing them with any additional information MCC or other stakeholders can provide.

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# Appendix A.
# Evaluation Design Report

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# Appendix B.
# Additional Figures

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Figure B.1 shows the main countries from which visitors accessed the case tracking mechanism (CTM) and online data platform (ODP) sites from March 2023 to March 2024. Note that the geography of users does not necessarily reflect the countries of origin or residence of platform users. People traveling in other countries or using virtual private networks (VPNs) that route Internet traffic through servers in other countries could obscure the true geographic distribution of platform usership.

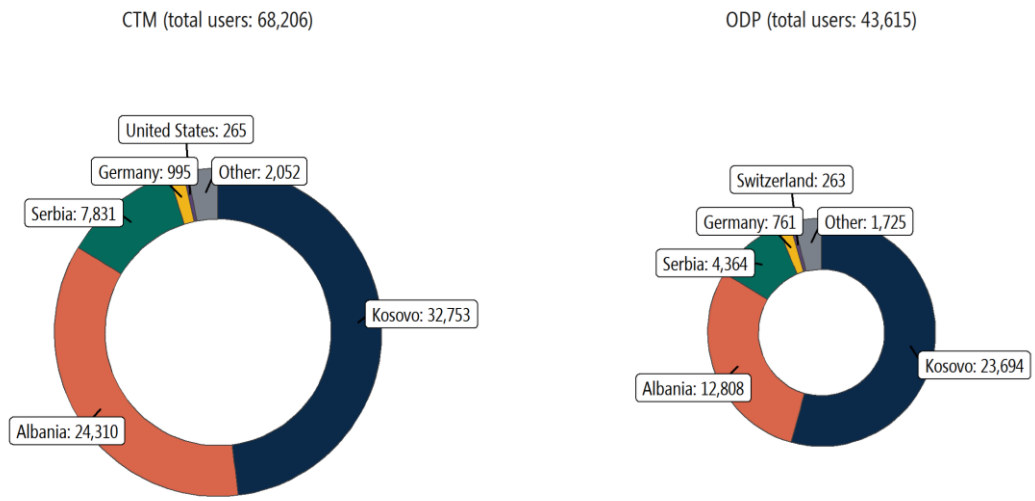
Figures B.2, B.3 and B.4 depict air quality conditions in Kosovo. B.2 highlights the temporal variation of pollution in Kosovo over a calendar year and shows that $PM_{2.5}$ concentrations tend to be highest in the south and west of the country. Figure B.3 depicts population density and transportation arteries across Kosovo and reveals that this pollution is not driven exclusively by the country's power plants, which are located near Pristina. Population centers and transportation arteries across the country contribute to pollution. Many residents burn wood and coal for indoor heating during the winter. That practice—along with general transportation emissions and Kosovo's meteorological patterns—extend air quality issues countrywide. Figure B.4 shows a persistent spatial pattern of locations with relatively higher concentration of $PM_{2.5}$ from 2019 to 2022. Note that over this period, pollution levels have decreased, with no parts of the country exceeding annual levels of 25 micrograms/$m^3$ in 2022, and the majority of the country's territory experiencing annual levels less than 20 micrograms/$m^3$ in 2021 and 2022.

Figure B.5 shows the degree of AQ monitoring data missingness for each KHMI station, per month, by pollutant. It reinforces our finding that there are inadequate station reports to confidently calculate exceedances of AQ thresholds.

Figure B.6 shows the negligible level of association between Pristina PM2.5 concentrations and NIPH microsite daily visitors, which suggests that higher levels of pollution are not driving large amounts of traffic to the site.

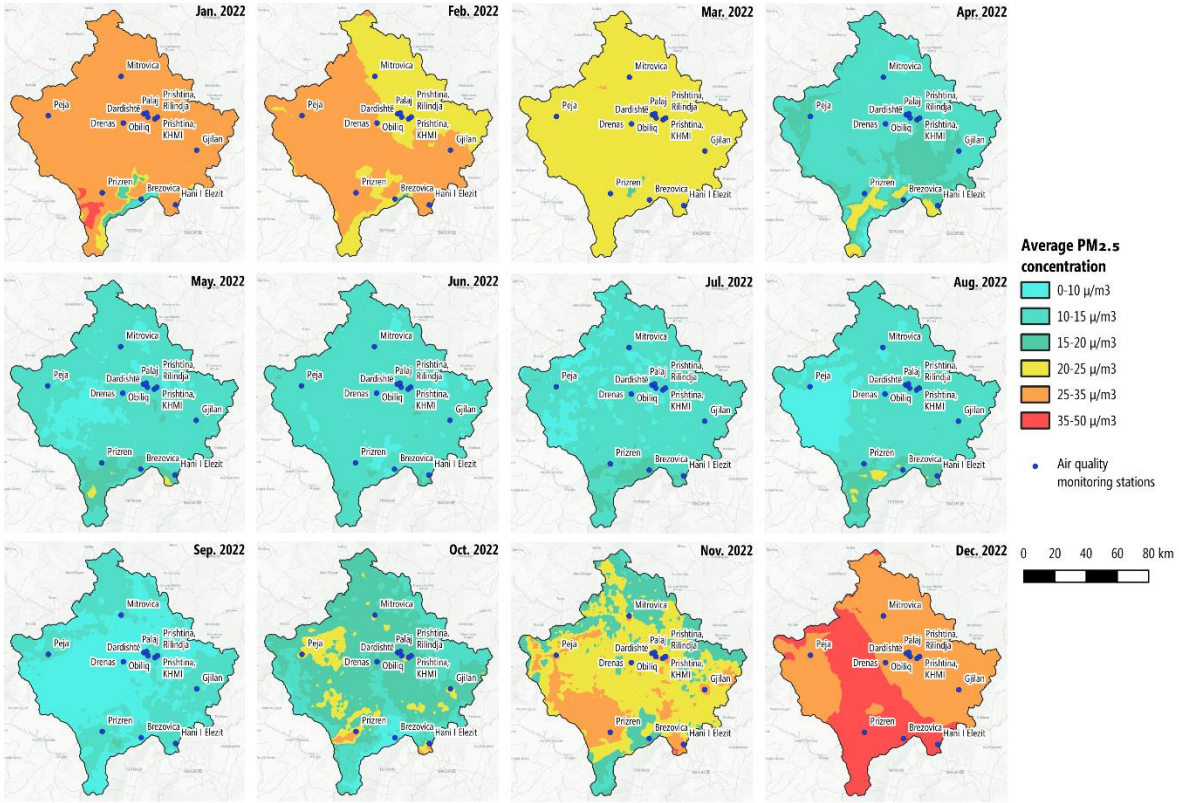
Figure B.7 shows KHMI AQ platform users by country, with most users coming from Albania and Kosovo. Similarly, Figure B.8 shows NIPH AQ microsite users by country. VPN masking may influence these data and cause them to not represent the actual countries from which users are navigating.

**Figure B.1. CTM and ODP visitors, by country, from March 2023 to March 2024, according to Google Analytics**



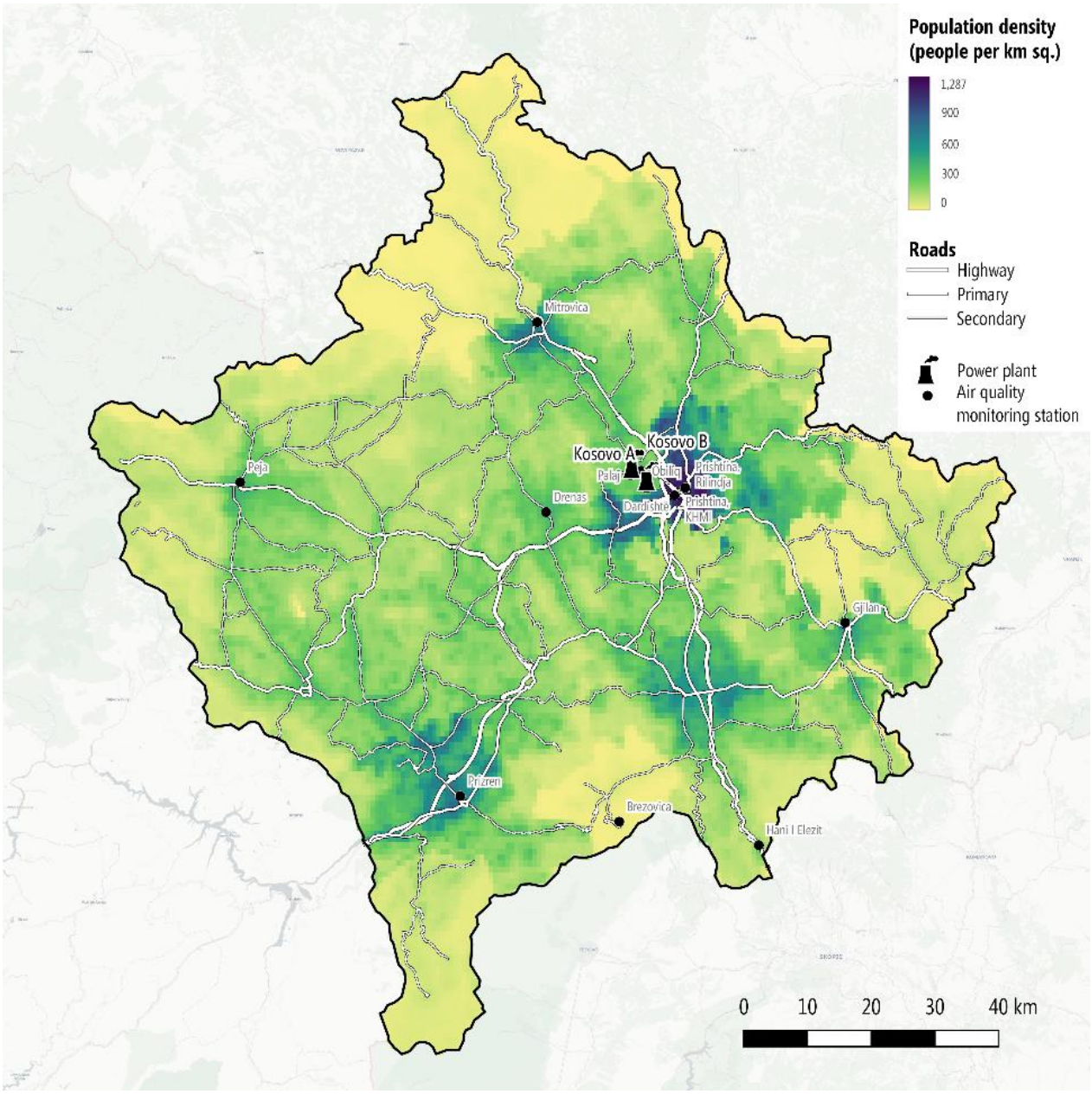

Source: Mathematica's calculations based on Google Analytics data from the CTM and ODP platforms.
Note: CTM = case tracking mechanism; ODP = online data platform; VPN = virtual private network.

**Figure B.2. $PM_{2.5}$ concentrations by month for 2022**



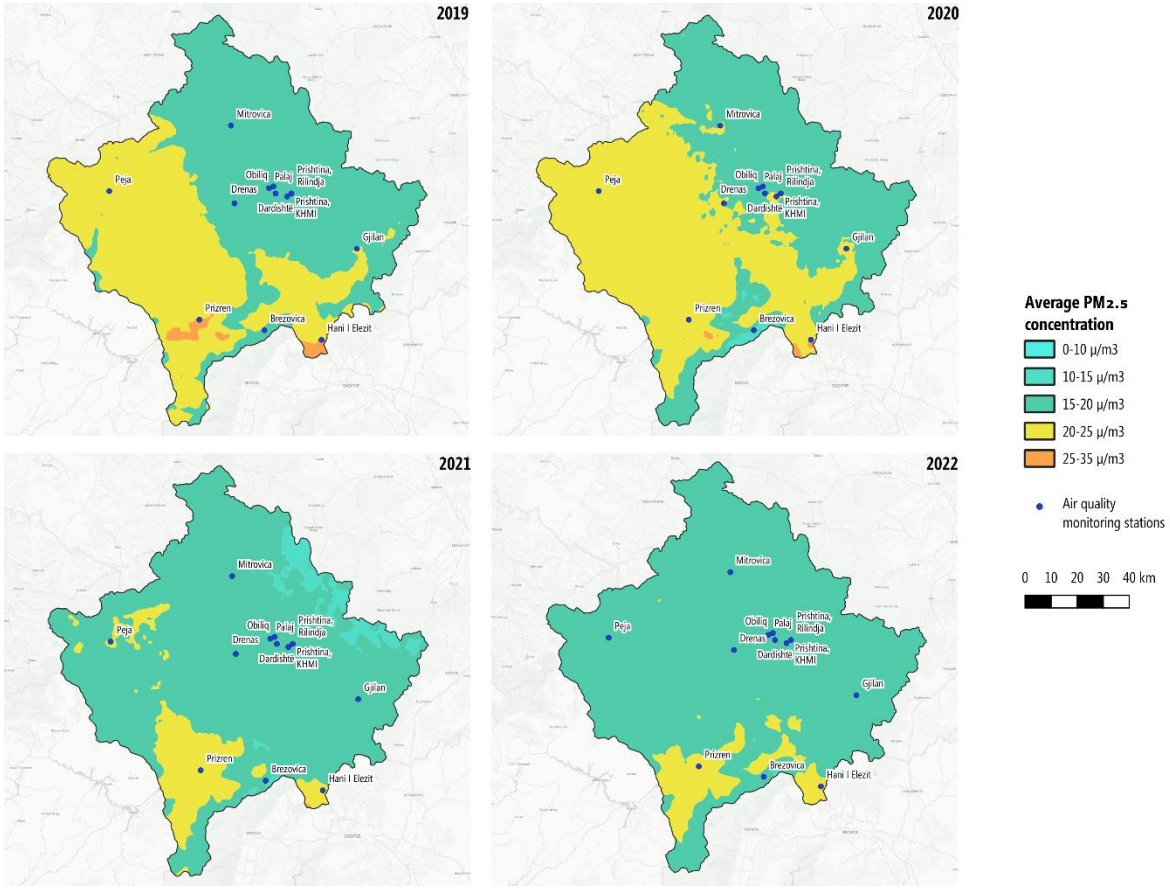

Source: Mathematica's analysis using data from van Donkelaar (2023).

**Figure B.3. Population density and locations of key emissions sources**



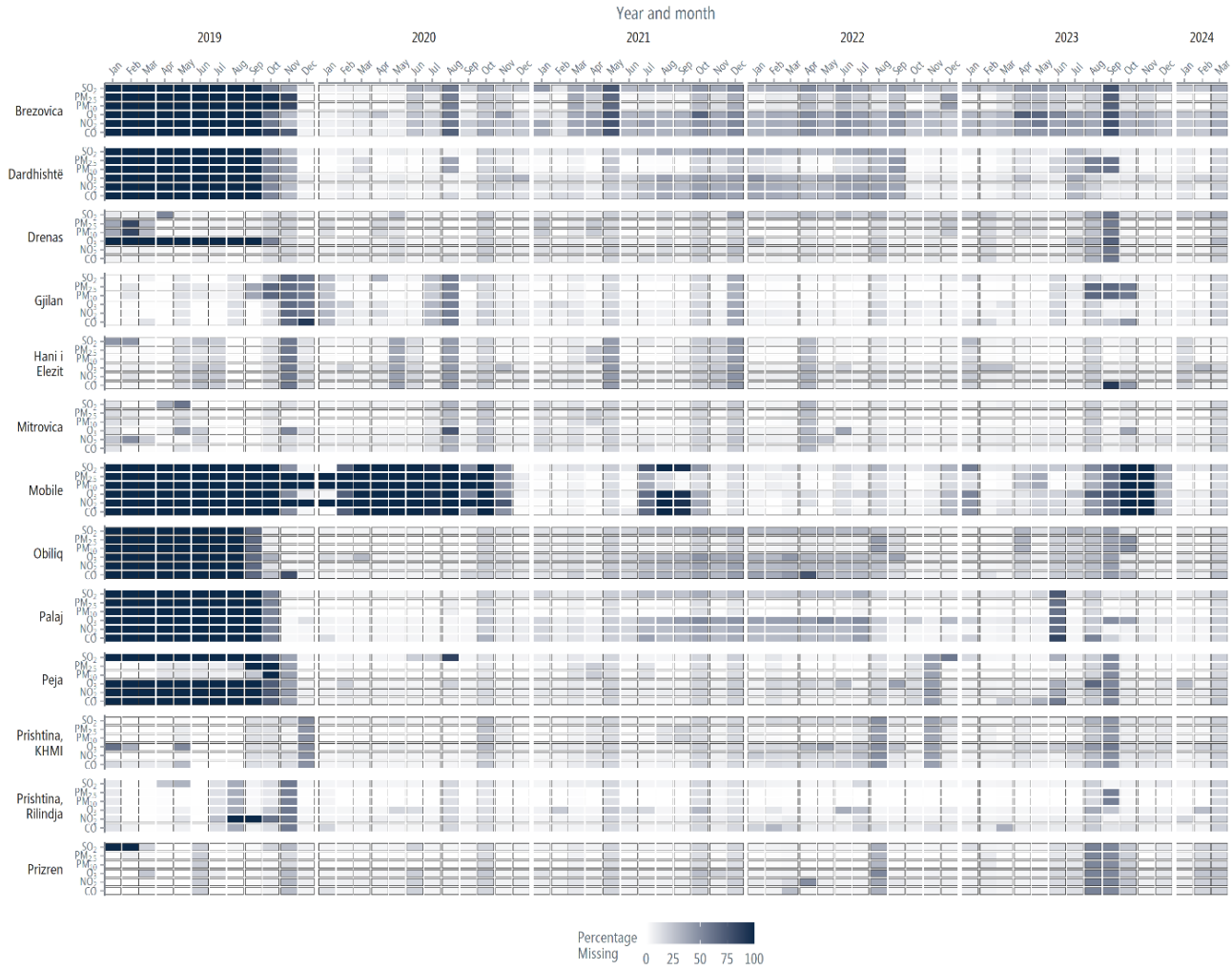

Source: Mathematica's analysis using data from WorldPop (2018), Global Roads Inventory Project (Meijer et al. 2018), and Google Maps.

**Figure B.4. Annual average $PM_{2.5}$ levels in Kosovo for 2019—2022**




Source: Mathematica analysis using data from van Donkelaar (2023).

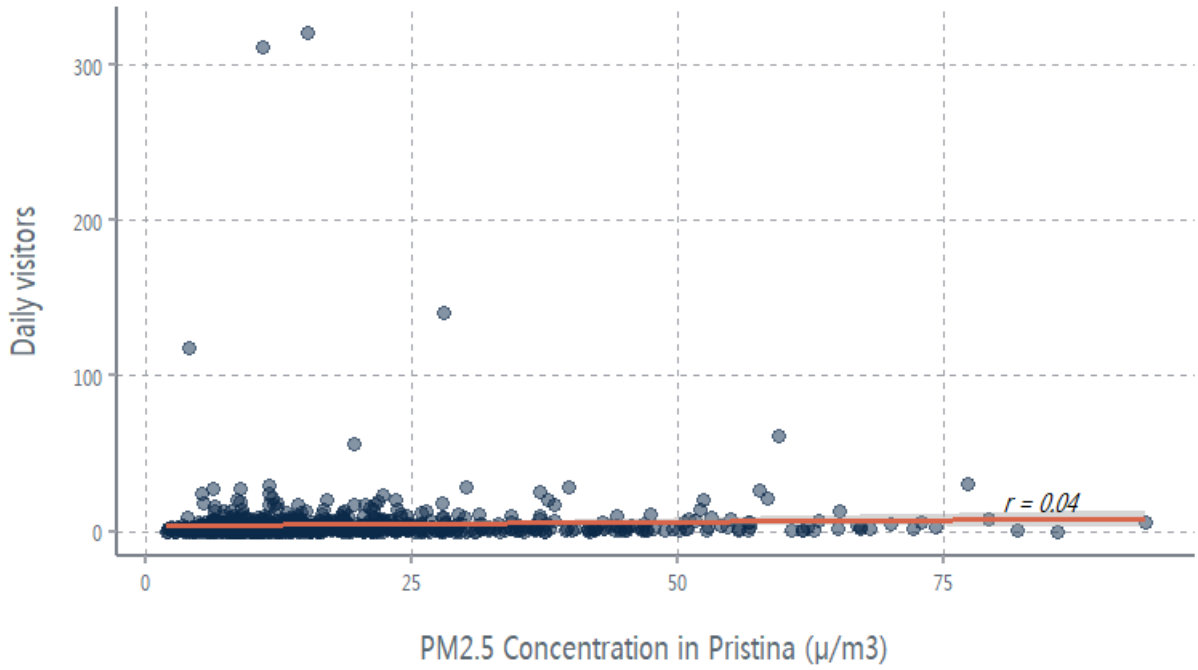
**Figure B.5. Percentage of missing air quality station reports per month, by station and pollutant**




Source: Mathematica's calculations using hourly air quality monitoring values obtained from the KHMI air quality monitoring platform.

KHMI = Kosovo Hydrometeorological Institute.

**Figure B.6. Association between Pristina $PM_{2.5}$ concentration and NIPH microsite daily visitors**

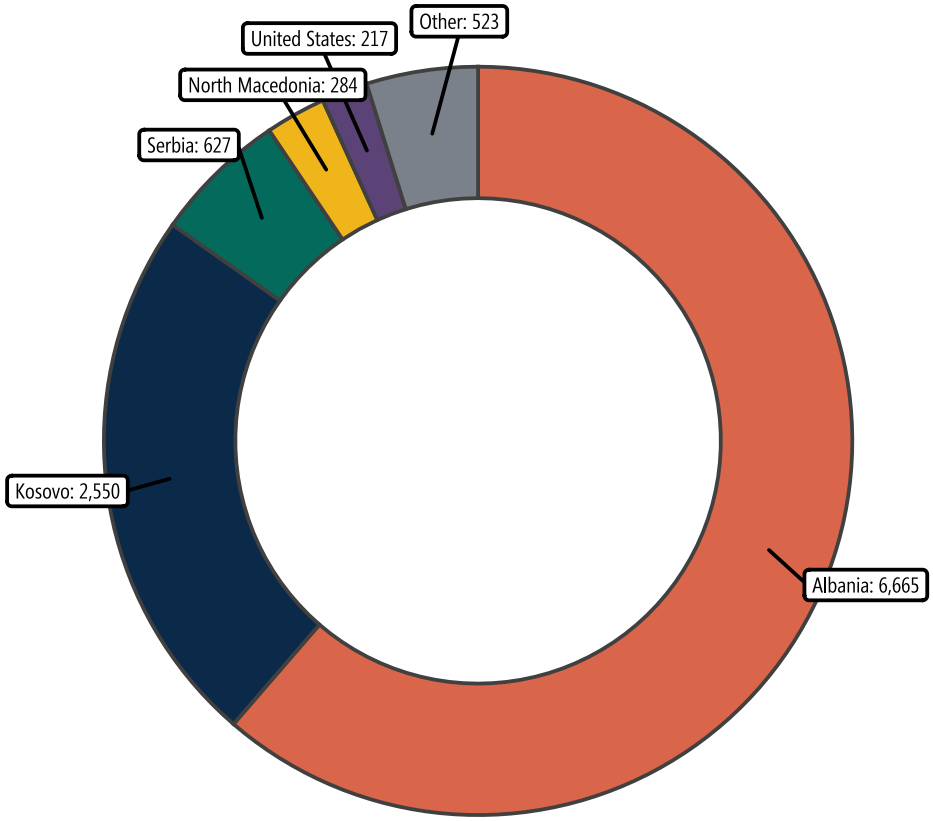



Source: Mathematica's calculations using Google Analytics data shared by NIPH and $PM_{2.5}$ data from KHMI.

Note: Trend line represents a linear model between the two variables with no controls or weights.

KHMI = Kosovo Hydrometeorological Institute; NIPH = National Institute of Public Health.

**Figure B.7. KHMI AQ platform users, by country**

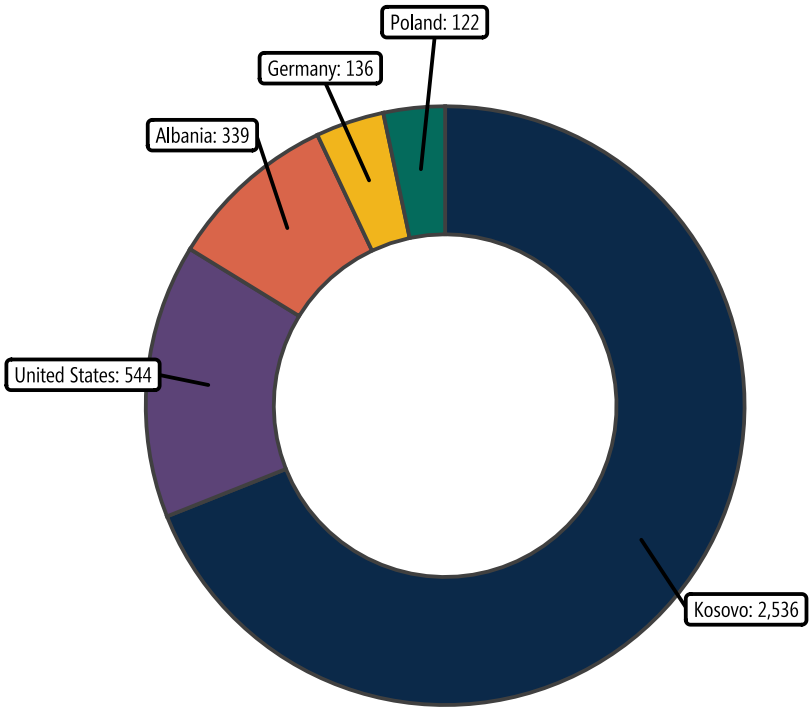



Source: Mathematica's calculations based on Google Analytics data from the KHMI platform.

Note: The geography of users does not necessarily reflect the countries of origin or residence of platform users. People traveling in other countries or using VPNs that route Internet traffic through servers in other countries could obscure the true geographic distribution of platform usership.

AQ = air quality; KHMI = Kosovo Hydrometeorological Institute; VPN = virtual private network.

**Figure B.8. NIPH AQ microsite users by country**




Source: Mathematica's calculations based on Google Analytics data from the NIPH platform.

Note: The geography of users does not necessarily reflect the countries of origin or residence of platform users. People traveling in other countries or using VPNs that route Internet traffic through servers in other countries could obscure the true geographic distribution of platform usership.

AQ = air quality; NPHI = National Institute of Public Health; VPN = virtual private network.

# Appendix C.
# Estimating Benefits of the TAG Project Using a Single PAJI Work Stream

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## Estimating Benefits of the TAG Project Using a Single PAJI Work Stream

Conducting a formal cost-benefit analysis is outside the scope of this study, but Mathematica can estimate a single benefit stream associated with Transparent and Accountable Governance (TAG) programming—the impact of access to a case tracking mechanism (CTM) on people's time savings—to gather a rough sense of whether the magnitude of benefit streams accruing from project delivery justifies TAG costs.

Qualitative data have shown that delivery of CTM through the Public Access to Judicial Information (PAJI) means residents with cases in the justice system experience less waiting time to access their records and must make fewer visits to the courts to check those records. To assess the benefits of that access, we must make a series of assumptions.

- First, we can start by assuming an average of 600 people log into CTM per day (as was the case in April 2024), many of whom might otherwise have visited courts in person to access paper records of their case status.
- Given the ease of accessing court records on CTM—which takes less than five minutes to access via eKosova and check the case status—we might also assume case parties log into CTM more frequently than they would visit the court. Assuming they might log on three times as often as they would physically visit the court, we can suggest that CTM saves case parties 200 trips[1] to the courthouse per weekday (of which there were about 250 in 2024 when accounting for holidays in Kosovo).
- Each courthouse visit could reasonably have taken 20 minutes to an hour (perhaps averaging 40 minutes), depending on proximity of the visitor to the court, the crowdedness of the court, the preparedness of the court clerk and the familiarity of the visitor with the court system, among other factors.
- Using those assumptions, we might estimate that the CTM could save Kosovars 50,000 courthouse trips per year,[2] and with each skipped trip saving the person 40 minutes (of which they only spent five minutes accessing CTM), CTM could save about 29,000 user-hours.
- Assuming in this model that each case party's time is worth at least $10 per hour, the CTM could generate at least $290,000 annually in savings for the users alone.

CTM also saves the judiciary an unknown amount of time and money, given a lower need for personnel to respond to individual case status questions. Similarly, despite its limitations related to the user interface, ODP also generates savings by reducing the burden on Kosovo Judicial Council (KJC) staff to respond to data-related questions from civil society organizations (CSOs) and the media, and the platform produces unknown diffuse value for Kosovar society by increasing transparency of the judiciary and informing public debate.

The project's other activities also generated benefits for stakeholders, even given their post-project challenges. For example, the Environmental Data Collection (EDC) area faced post-project interruptions to the air quality (AQ) platform function, relatively low web traffic and a dormant mobile app. Nonetheless, the marketing and socialization of the open air quality data during the project likely caused

[1] To our knowledge, courts in Kosovo did not track visits by case parties to check on case status, so we do not have concrete data on average daily visits before CTM. We also do not have concrete data on the time it might take a case party to visit the courthouse to check their case status.

[2] Kosovar residents with active cases would likely still need to appear in court for case proceedings; here, we consider only trips to the courthouse to check on case status.

some residents to change their behaviors to reduce their health burden from pollution exposure and likely stimulated additional debate and advocacy across civil society, which could yield dividends in terms of stronger pollution policies in the future. Similarly, although some of the solutions and relationships built with KODC support faded after the project closed, the DigData Challenges and associated dissemination work likely strengthened the open data ecosystem by changing mindsets and practices of the Government of Kosovo (GoK), civil society and public stakeholders.

Considering the benefits produced by these other activities, we might suggest that CTM's benefits for case parties alone (earlier estimated at $290,000) represent 20 percent of the total benefits from TAG. Given that estimation, all TAG work streams would together generate $7.25 million in benefits over a five-year period. Of course, these benefits likely accrue in a nonlinear pattern and could increase or diminish over time, but those patterns are not possible to determine given the data available. Further, each additional assumption we add compounds the uncertainty associated with each assumption necessary to build this estimate of benefits, so this exercise should be considered just that—a practice to help evaluators and decision-makers identify the data and assumptions they need to secure in future projects to credibly estimate benefits.

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# Appendix D.
# MCC Comments and Evaluators' Responses

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**Table D.2. MCC comments and evaluators' responses**

| Page number (please reference the number at the bottom of the page) | Reviewer comment | Evaluator responses |
|---|---|---|
| ES Page 10 -Table E.1 | Renovating and upgrading a network of AQ sensors…. Should replace "installing". The network was installed by other donors. | Thank you. Revised. |
| ES Findings | The EDC project transitioned the website and app to be government hosted/run before end of project. Please include how that process stalled or was interrupted and that lead to that if possible | Thank you. Yes, our understanding is that the process to transfer the website and app ownership to KHMI toward the end of the activity was successful, but that the platform function interruptions occurred when the project closed, the government procured a third-party maintenance operator, NIRAS extricated themselves and their proprietary code, and the new operator was not prepared to rebuild the site's functionality. We've added additional detail to the ES Findings on this piece. |
| ES Page 10 -Table E.1 | KODC produced "data analysis products for government agencies and/or the public to promote data based decision-making | Thank you. Revised. |
| ES Page 13 | EDC - summary uses the word "generally", making it sound like there were exceptions. Suggest simply say "produced planned outputs" vs. "generally produced planned outputs". | Thank you. Revised. |
| ES Page 13 | EDC - Important to specify that delays and confusion in the GoK process of procuring and contracting an AQ platform maintenance operator caused lapses..... Need to add GOK process. I believe the root cause of the problem might be better summarized as "However, the GoK had difficulty funding and procuring an AQ platform maintenance operator, a project Conditions Precedent from MCC, causing lapses in the platform's functionality after the project concluded. | Thank you. We have incorporated that language into the activity-specific research question answer on why there were lapses in EDC data availability. |
| ES Page 14 | KODC delivered planned outputs, not "generally". While it's correct to say KODC grantees were generally successful… because the degree of success varied | Thank you. Revised. |
| ES General | Great description of the TAG results | We appreciate that. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
|---|---|---|
| ES Implications | Integrating activities – this paragraph implies integration was not planned and should have been. The PAJI ODP was very late in development. The reason the Judicial challenge was the last one, was because KODC kept waiting for PAJI's ODP to become available. When it became evident that the PAJI ODP would only become available in the last year of the Threshold Program, KODC decided to run a competition using other data. I think the problem is more that MCC needs to be realistic about procurement timelines and plan for delays, often making integration unrealistic or impossible. These issues are captured well on pg. 13 in the "procuring services in a timely manner"<br>The "planning for continuity" recommendation are good. I think it's important to mention the Conditions Precedent (CP) from MCC , that required the GOK to maintain the platform. There was a continuity plan from day one, yet it was still difficult to implement. | Thank you, these points are well taken. We've revised the paragraph to indicate that reason for KODC not using ODP and have revised the takeaway recommendation to include a suggestion about allowing extra time when there are dependencies across activities for unforeseen challenges that produce delays.<br>We've added your point on CP to the "Planning for continuity" paragraph with some context. |
| ES Implications | "Procuring Services in a timely manner" says "MCC might wish to update its contracting procedures to help prevent or address delays from negotiations on scope, perhaps by allowing exceptions from certain contracting steps for procurements under a certain amount."<br>This seems overly broad a recommendation without knowing what the particular issue with these procurement negotiations was. Maybe this information was omitted since procurements are sensitive, but I wonder if it is appropriate to keep this recommendation as-is, since "allowing exceptions for certain contracting steps" isn't something MCC can realistically act on without more specific information. | Thank you, good point. As you signaled, we don't know much more about the nature of the procurement and contracting negotiations, nor the details of MCC's contracting requirements. Our general suggestion is meant to stimulate MCC and beneficiary governments to take a closer look at how their contracting practices could allow or produce delays. We've reframed along those lines, but we can strike or refine this recommendation if you feel it is not useful as is. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
|---|---|---|
| General | Table names in the text/table links are missing formatting of images and their titles is broken in places. | Thank you. We are looking at the referencing and links with our production team. We're also looking at the overlapping text in figures with our production team. It looks like the text in the graphics of the file MCC returned to Mathematica was a different typeface in the file we sent to MCC. It appears that MCC's Word program may have tried to "read" that text in a different font, which took up more space and led to overlapping. We are replacing all graphics with this problem with an image type that won't have this issue when you open the file. Our production team will take a full review of all links and graphics when they do 508 compliance. |
| Table E2 | Specify the project objective, time frame and magnitude expected when stating the evaluation question. | Could you clarify what you mean here? Are you asking for us to mention the overall project objective? If you're asking for a question-level addition, not every question has a clear magnitude. For example, "How has the activity contributed to residents' use of government data in advocating for change?" does not have a specific time frame or magnitude. |
| ES Section B | We have this evaluation listed as pre-post in our internal documentation. Is that not the case? Please clarify the analysis methodology and the data collection to support it, and when that data collection was timed for. The methodology section of the ES needs to be strengthened considerably. | Thank you. After discussion, we agree that pre-post is an appropriate label, though we did not collect any primary data before any interventions or activities were conducted. We did use UNDP PPS data and Google Trends data that convey residents' perspectives and behaviors before the project. We also clarified where readers can find the analysis methodology, and where and how the data collection was conducted. |
| ES Cross Cutting | This sentence is very puzzling. Can you answer the question more clearly, instead of posing a question back to us? "These project-generated benefits justify the project costs if MCC considers the achievement of most targeted results during the project period as adequate. But if planned outcomes must persist beyond the life of the project, the costs might not have been justified." | Thank you. We were providing two perspectives, because we do not know what MCC's standard is for cost justification. If merely achieving planned results during the period of performance justifies a project's costs, then the project was justified. But if MCC insists that achievements outlast the project, then the costs were not justified. We've clarified the text in the ES and section IV.D to follow the second standard. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
|---|---|---|
| ES | The findings are well presented. I like the figures. Please add a section answering the evaluation questions explicitly - list each question with a 1-2 sentence that very clearly responds. All except #4 are yes/no questions so should start with a yes or a no. | Thank you. While the questions are yes/no, the answers cannot always be summarized as a clean "yes" or "no". In some cases, the best answer is "partially" or "generally", which is why we used those terms in the narrative of the ES. It sounds like you need the answers to start with a firm "Yes" or "No", so I am cutting the narrative sections and summarizing the responses for each question for each activity. Following the "Yes" or "No", I am adding in nuance and specificity to explain and complement the overarching sentiment of each answer. You will find this as a new table in the ES. Please note the table does not have tracked changes because its formatting would not work properly until we accepted its addition. |
| III Evaluation Design | specify the evaluation methodology (pre-post is my understanding) in the first paragraph | Thank you. We've added in "pre-post" where appropriate in the narrative. After discussion, we agree that pre-post is an appropriate label. Though we did not collect any primary data before any interventions or activities were conducted, we did use UNDP PPS data and Google Trends data that convey residents' perspectives and behaviors before the project. |
| III Evaluation Design, table on EQs, data sources, methods, indicators | Can you pull out the question "did the activity achieve its targeted outcomes..." for each activity and the overall project, and specify in question what the "targeted outcome" is (for the overall project it is the project objective) and give the timeframe (year) and magnitude? then list the relevant methods, data sources, and key indicators | Thank you. There is not one "targeted outcome" for each activity. PAJI has 11 outcomes, EDC has 9, KODC 9, and TAG overall has 1. We don't think it is feasible to include the timeframe, magnitude, methods, data sources for each of the 30 outcome indicators in the Executive Summary. Instead, Table III.1 in the report also provides a complete list of evaluation questions, methods, data sources, and key indicators for each activity. Also, the Indicator Tracking Table (ITT) maintained by MFK lists out indicators with space for baselines, yearly targets, quarterly actual values, and cumulative targets and values. However, the latest ITT ("closeout", Jan 2023) does not include actuals for all the indicators it says it should report. So, we produced our own assessments, often drawing from our primary qualitative data, of the achievement of each indicator. These assessments are available in more detail in the main body of the report. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
|---|---|---|
| III Evaluation Design, table on EQs, data sources, methods, indicators | I think many of the methods fall within those in the MCC Evaluation Management Guidance. Can you make those linkages where applicable? For example, "qualitative thematic analysis and triangulation (ex-post)" or pre-post, if that is what you did | Thank you. We've added in "pre-post" where appropriate in that table and in the narrative. |
| Page 30 | Format - Half the page is footnotes on figure B which I think belong elsewhere? | I'm not seeing a half page of footnotes or a Figure B. If you still see that issue in the file we are sending back, let us know. Thanks. |
| General | Double check tables, figures and links. There is an error in the referencing and figures are overlapped and not always clear to read | Thank you. We are looking at the referencing and links with our production team. We're also looking at the overlapping text in figures with our production team. It looks like the text in the graphics of the file MCC returned to Mathematica was a different typeface in the file we sent to MCC. It appears that MCC's Word program may have tried to "read" that text in a different font, which took up more space and led to overlapping. We are replacing all graphics with this problem with an image type that won't have this issue when you open the file. Our production team will take a full review of all links and graphics when they do 508 compliance. |
| ES, Page xii | Figure E.1 - Some details in this figure seem to differ from Figure I.1 in the EDR. In some cases it advances the theory of change beyond what was stated in project documents and M&E plan. Could we indicate that, the shift from outputs in the EDR to outcome focused is relevant for answering evaluation questions EQ3 and beyond? Or reference the need for updating this figure from the version in the EDR? | Thank you. Yes, this version of the figure focuses more on the medium- and long-term outcomes that we focus on in the latter EQs. We've added a figure note to reflect and explain that change. |
| Page 5 | The second paragraph of Theory of Change. Transparency was the goal so suggest removing "transparent" for clarity as the TOC was along the lines of promoting public access and use of data from government agencies to improve transparency / improve perceptions of government effectiveness and responsiveness. | Thank you. Revised. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
|---|---|---|
| Page 15 | Table 3 - To support intent behind web visits, it might be helpful to include what google defines as a visit, user or engagement. Do they concern duration of time on page or number of clicks. | Thank you. We have added a footnote to define those terms. |
| Page 17 | Define PPS | Thank you. Revised. |
| Page 17 | First Paragraph - *The survey question do not perfectly align with research objectives of TAG evaluation…(IDRA 2022)*<br>Since this was from an MCA DQR, it might be better to specifically talk about MFK contracted data quality review by IDRA or cite with context regarding MFK data quality review findings | Thank you. We've added more detail to that section to contextualize the IDRA citation. |
| Page 18 | We might have to define "beneficiary institutions and non-beneficiary institutions" as it pertains to TAG first. Also, might be best to use "other relevant organizations" since the contributional analysis doesn't distinguish between institutions | Thank you. We've added in a box with a definition of beneficiary institutions. I think it's important to specify the beneficiary institutions separately since they are mentioned with regard to specific project outputs and outcomes. |
| Page 25 | Figure IV.4 - With ASHI embedding CTM on the eKosova platform, should that lead to an improvement in the GoK norms of data transparency and evidence based policy? | For page 25, I believe this should be a comment on Figure IV.1, not IV.4. For IV.1: The short answer is no. CTM's availability on the eKosova platform is not so much about data transparency and evidence-based policy as it is about providing case parties with easier access to court records and case details they could also (and previously) obtain in person at the relevant court. Having those records online does not directly contribute to GoK norms of transparency and developing policy based on evidence. |
| Page 25 | PAJI Successfully conducted training and capacity - building among beneficiary institution….<br>The ODP site and KJC had been provided with instructional "how-to" manuals for internal and external use. Is there any evidence of that being used by staff or other users? | We have no data that might indicate the degree to which the user manual was used by KJC staff or others. However, we are adding in a note that the manual is available in Albanian, Serbian, and English to any users who navigate to the portal. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
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| Page 26 | *Paragraph four…...but the activity did not deliver its planned trainings on the platforms to members of civil society.*<br>Suggest adding "media and relevant stakeholders" members of the civil society | Thank you. Added. |
| Page 26 | *Paragraph four…...The post-project memorandum of understanding (MOU) between MFK and KJC stipulated that the council would assume responsibility for further awareness-raising activities for both platforms, but one year after project closeout, most interviewees said KJC had done little or no work in that area.*<br>Suggest adding "KJC were suppose to embed the ODP on their site but a year later the data dashboard on KJCs website does not align with the ODP" | Thank you for bringing this to our attention. We checked this and agree that the statistics for the same indicators do not align from the Judicial Performance Dashboard to the Open Data Platform. Further digging reveals that this is likely because, as the Judicial Performance Dashboard indicates in its notes, "Tables and graphs represent ... major case types, criminal, serious crimes, juveniles, civil contested, commercial and administrative," whereas ODP covers only criminal offenses. We have added a note to this effect on what is currently page 27. |
| Page 29 | EQ 3b - Several CSOs and media outlets are adapting to using the ODP platform…....<br>Similar to previous comment - it will be helpful to include how we are distinguishing user/usage from interactions? | Thank you. We've offered a definition in a footnote there. |
| Page 30 | *CTM has seen stronger daily use patterns than ODP*<br>Given that CTM is embedded in eKosova, is it possible to tease out if the access to CTM were direct searches or redirected from other websites. Additionally for both ODP and CTM since awareness campaigns night not have been effective do we have a sense of how users land on the homepage or page of interest? | Thank you. Unfortunately, the user traffic data provided to the evaluation by the GoK did not include origins of the visits to CTM or ODP (whether from searches, redirects, bookmarks, etc.). Even including qualitative data, we are unable to draw firm conclusions on how users might be accessing the platforms' homepages, given that the few focus group participants who had accessed ODP and/or CTM users were not necessarily representative of the user pool. |
| Page 42 | Paragraph two - *As part of the EDC activity*<br>Suggest adding that maintenance of the AQ platform was a requirement of GoK from MCC | Thank you. Added to the top of that paragraph. |

| **Page number** (please reference the number at the bottom of the page) | **Reviewer comment** | **Evaluator responses** |
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| Page 52 | *The mobile application also has low uptake. For example, as of February 2024, the app on Android had fewer than 5000 downloads and was no longer available for download or use.*<br>Do we have tabulations for all app downloads? The total number of downloads at close-out/ as of March 2022 was 1640 for Google Play store /android and 644 for App Store/ iOS. Did it change since then? | Thank you. We do not have current tabulations for all app downloads. We use the "fewer than 5000 downloads" figure because Google Play lists its app download statistics as 1000+, 5000+, and so on. The app was listed with 1000+ downloads, which means it had fewer than the next threshold, 5000. Because this February 2024 estimate, while general, is more current than the March 2022 figures you provided, we believe it is more valuable in showing the lack of downloads over a longer period of time. |
| Page 42 | Please note that this is the first time Kosovo have AQ monitoring forecast platform and open AQ data and is a major achievement | Thank you for this observation. We have added a note to this section to reflect that the AQ platform was unprecedented in Kosovo. |

| Page number (please reference the number at the bottom of the page) | Reviewer comment | Evaluator responses |
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| xiv | Fatal Flaw comment: Please add the magnitude and time frame for the project-level objective to the answer to Evaluation Question 2. | Our response requires some explanation.<br>First, the M&E Plan notes TAG's "stated objective is 'to improve the public availability and analytical use of judicial, air quality, and labor force data by civil society, business, and the Government, thus promoting data driven decision-making', per Section 1.2 (b) of the Threshold Agreement, and the associated indicator is in the M&E Plan. We expect to see movement towards this objective by October 2022. In terms of magnitude, the only expectation is that there is a change, no matter how small." (MFK M&E Plan, 2021, p. 31).<br>However, there is no singular "associated indicator" for that project-level objective in the M&E Plan. The only project-level outcome indicator laid out in the TAG monitoring and evaluation plan (M&E Plan) and the indicator tracking table (ITT) is *Increased investment by businesses in Kosovo*, which does not have an associated target (or what the evaluation question refers to as "expected magnitude").<br>Instead, in the M&E Plan, MFK broke the project objective into two outcome indicators, one for the PAJI activity (PA 12) and one for the EDC activity (EDC 13). In the M&E Plan, the indicators both read: "Objective: Judicial, air quality, and labor force data is used by civil society and private sector (Objective)", defined as the "number of analytical articles/reports generated by domestic civil society and NGOs based on the air quality data that has been made public." (pp. 53, 55). But the project's last (closeout) ITT still has no target identified (magnitude expected) for either indicator, which are listed as PA 12: Judicial public data is used" and "EDC 13: Public Data Used (Air Quality)." Instead, the indicators tally the number of mentions in the media of the PAJI and EDC data portals' use. The ITT reports 0 as the cumulative total of PAJI data media mentions and 93 for EDC at the end of the project.<br>We're drawing on this information to make the response to EQ 2 more explicit and clear in the ES and in the main body of the report. |
| xiv | Fatal Flaw comment: Please answer Evaluation Question 2 separately in the executive summary for the cross-cutting (all-project) component of the evaluation. | Thank you. We have done this in the ES and have also added the relevant information (to what is actually cross-cutting EQ1) in the main body of the report. |

M&E = monitoring and evaluation; MCC = Millennium Challenge Corporation.

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