



## Information Brief

### USAID’s Use of Artificial Intelligence in Foreign Assistance

USAID is leaning into artificial intelligence (AI) and other advanced technologies to enhance the Agency’s ability to carry out its foreign assistance mandate around the world. According to the Agency, “promising applications funded by USAID are proliferating across various geographies and sectors, including agriculture, health and infectious diseases, civic spaces and democracy, education ... and humanitarian assistance.”<sup>1</sup>

This information brief describes USAID’s approach to using AI in foreign assistance programs as well as the associated benefits and risks of expanded AI use. We prepared this brief using public and nonpublic information.

### What Is Artificial Intelligence?

For this information brief, we define AI as a machine-based system designed to imitate intelligent human thinking. AI uses data to make predictions and automate decision making. Aspects of AI are used in a wide range of applications from medical devices to autonomous vehicles to communication tools.

Two Executive Orders guide Federal agencies’ increasing use of AI:

- A December 2020 order promotes AI use to improve Federal government operations while protecting privacy, civil rights, and other laws. The order also required agencies to submit their AI inventory annually to the Office of Management and Budget (OMB).<sup>2</sup>
- An October 2023 order establishes a government-wide effort to guide responsible AI development and deployment through industry regulations and engagement with international partners.<sup>3</sup>

### How Does USAID Use Artificial Intelligence?

In May 2023, USAID submitted an AI inventory to OMB that identified 14 AI systems, only 2 of which were in use. Table 1 shows the sectors associated with each AI system in USAID’s inventory.

USAID officials stated that, because distinguishing AI from other types of advanced technology can be difficult, the Agency uses a publicly available flowchart to identify which advanced technology to include in its annual AI inventory.<sup>4</sup>

Figure 1 describes the two AI systems USAID currently uses in foreign assistance programs related to illegal wildlife trade in South Africa and public health in Nigeria.

Table 1. AI System by Sector

Sector	# of AI Systems
Global Health	5
Economic Growth and Trade	3
Innovation, Technology, and Research	3
Democracy, Human Rights, and Governance	2
Environment, Energy, and Infrastructure	1
<b>Total</b>	<b>14</b>

Source: OIG developed based on USAID’s May 2023 AI system inventory.

Figure 1. AI Used in USAID’s Foreign Assistance Programs



In South Africa, the USAID-funded “Project Vikela” uses AI to scan X-ray machine data to detect rhino horns in airplane baggage. The project intends to expand to other wildlife and include scans of cargo shipments.



In Nigeria, the USAID-funded “Breakthrough RESEARCH” uses AI to analyze social media posts on gender-related topics and identify key trends, misinformation, attitudes, and social norms.

Source: OIG developed based on USAID’s May 2023 AI system inventory.

<sup>1</sup> USAID, *Artificial Intelligence Action Plan: Charting the Course for Responsible AI Use in USAID Programming*, May 2022.

<sup>2</sup> Executive Order 13960, *Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government*, December 3, 2020.

<sup>3</sup> Executive Order 14110, *Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*, October 30, 2023.

<sup>4</sup> Karen Hao, “*What is AI? We drew you a flowchart to work it out.*” *MIT Technology Review*, November 10, 2018.

## What Are the Benefits and Risks of Artificial Intelligence?

According to USAID, AI could help the Agency optimize its efforts across a range of programs and activities such as matching job candidates to vacancies, managing global health supply chains, monitoring of human rights abuses, and improving crop yield using “climate-smart” agriculture.

However, these potential benefits come with risks. The National Institute of Standards and Technology’s (NIST) AI risk management framework (NIST AI-100-1) cites significant organizational and societal risks that can undermine the benefits of AI, such as harmful biases and low-cost system attacks.<sup>5</sup> Increased use of AI creates cybersecurity risks, which can impact AI systems’ data functionality and trustworthiness. The complexity of AI also makes it difficult to immediately identify and respond to data breaches and misuse of the technology. Table 2 summarizes benefits and risks of AI.

**Table 2. Benefits and Risks of Artificial Intelligence**

Benefits	Risks
<ul style="list-style-type: none"> <li>• Reduce human error, save time, and economize resources.</li> <li>• Automate repetitive tasks and processes, like data collection and entry, email response, and software testing.</li> <li>• Facilitate quicker decision making when using large amounts of data.</li> <li>• Meet customer needs for timely and accurate information on demand.</li> <li>• Support risky and perilous tasks such as natural disaster response operations.</li> <li>• Maintain full-time accessibility and productivity.</li> </ul>	<ul style="list-style-type: none"> <li>• Failure to capture true or appropriate representation of the context or intended use due to unreliable data.</li> <li>• Harmful gender, race, and other bias.</li> <li>• Difficult to detect and respond to failures when they occur.</li> <li>• Data breaches and misuse.</li> <li>• Low-cost system attacks.</li> <li>• New threats and untraceable attacks.</li> <li>• Increased privacy risks with ability to pull data from multiple sources faster.</li> <li>• Underdeveloped testing standards.</li> </ul>

Source: OIG developed these lists based on publicly available information from NIST AI 100-1 and *Forbes Advisor*.<sup>6</sup>

USAID has developed resources to guide its AI use and risk mitigation including *Artificial Intelligence Action Plan: Charting the Course for Responsible AI in USAID Programming: Reflecting the Past, Shaping the Future: Making AI Work for International Development*; and *Managing Machine Learning Projects in International Development: A Practical Guide*.

The U.S. Government Accountability Office has urged Federal agencies to manage AI use responsibly “to minimize risk, achieve intended outcomes, and avoid unintended consequences.”<sup>7</sup> Similarly, USAID recognizes that it has additional hurdles to overcome in expanding its use of AI in foreign assistance. These include:

- Lack of a formal strategy to provide a roadmap for using AI. Agency officials stated they developed a limited AI strategy, but the draft document is not intended for Agency-wide use.
- Lack of a formal policy to establish rules for developing and implementing AI. Agency officials explained that they are awaiting further guidance from OMB—which may require an AI policy.
- Absence of a clear organizational structure with assigned roles and responsibilities over AI. Agency officials explained that USAID did not yet have a centralized management function to initiate, manage and monitor AI.
- Incomplete picture of the Agency’s AI inventory due to limited updates and inaccurate entries. USAID officials explained that they update the inventory annually, then review it to remove duplicates and technologies that do not meet their definition of AI.

“The Federal government must manage its use of AI in a responsible way to minimize risk, achieve intended outcomes, and avoid unintended consequences.”

—U.S. Government Accountability Office

## Future OIG Work on Artificial Intelligence

USAID OIG provides independent oversight of the Agency’s information technology systems through annual audits performed under the Federal Information Security Modernization Act of 2014. We anticipate performing future discretionary work to examine how USAID navigates the challenges associated with the use of AI in foreign assistance programs.

<sup>5</sup> NIST AI 100-1, *Artificial Intelligence Risk Management Framework (AI RMF 1.0)*, January 2023.

<sup>6</sup> Rashi Maheshwari, “Advantages Of Artificial Intelligence (AI) In 2024,” *Forbes Advisor*, August 24, 2023.

<sup>7</sup> U.S. Government Accountability Office, *Artificial Intelligence-Agencies Have Begun Implementation but Need to Complete Key Requirements* (GAO-24-105980), December 2023.