Review of National ID Programs

Prepared for the DFS Ecosystems Working Group
of the ITU's FG-DFS by the
UW Evans School of Public Policy and Governance, Seattle WA

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Agenda

Overview of Research Design

Literature Search Process and Results

National ID Program Characteristics and Implementation

Functions Linked to National ID Programs

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Overview of Research Design

Purpose of review; Research questions;

Review framework; Methods

Purpose of Review

Objectives of the review:

- To analyze coverage and key characteristics of developing countries' national identity programs; and

- To evaluate whether and how these programs are being connected to or used for service provision, focusing on financial, agricultural, and health services.

Scope:

- 43 countries with 2013 populations over 15 million and GDP per capita under US$10,000

- Focus Countries: Bangladesh, Ethiopia, India, Indonesia, Kenya, Malawi, Nigeria, Pakistan, Peru, Tanzania, Uganda, Zambia

Reviewed Countries
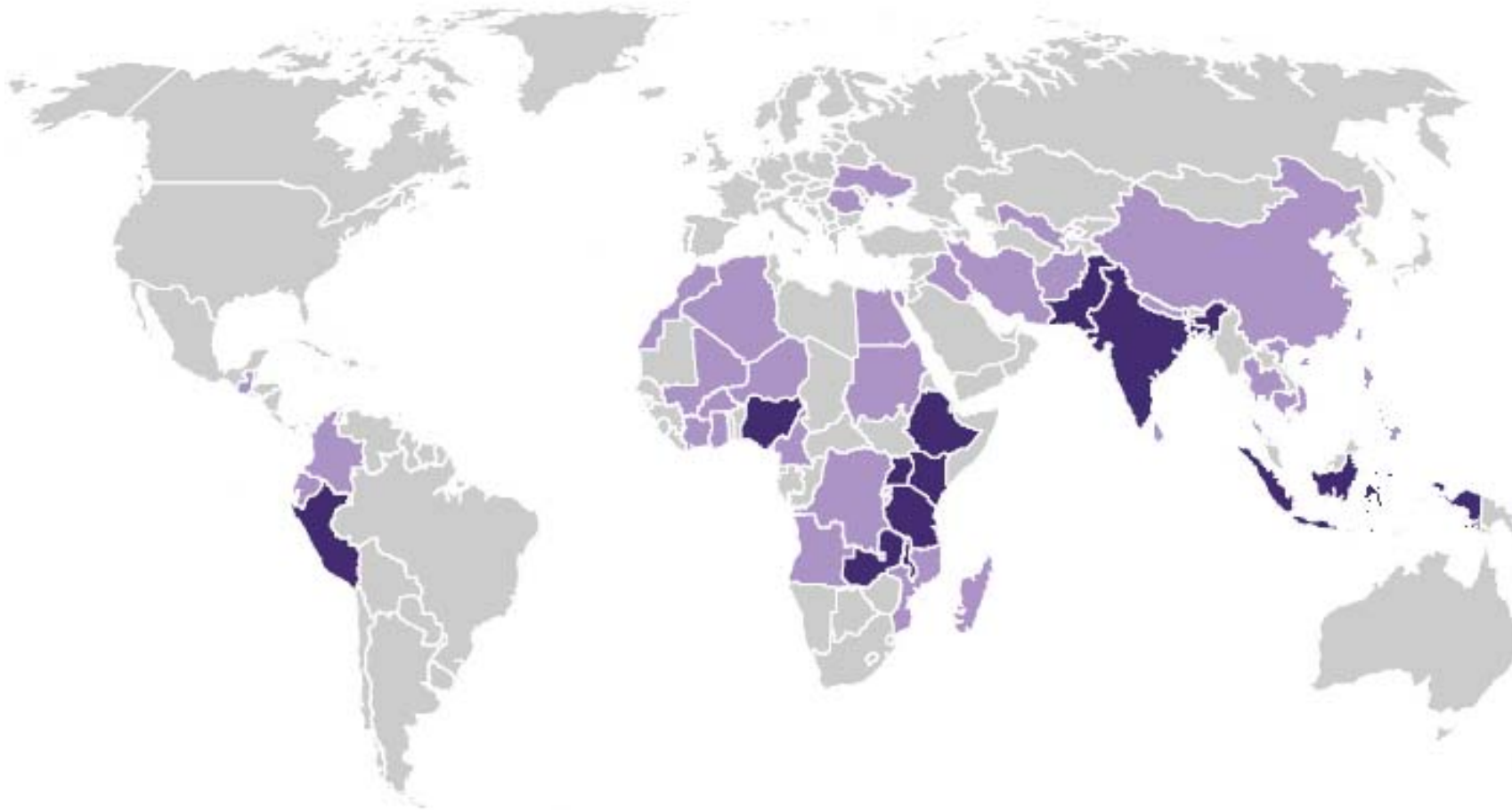
Light purple: reviewed national ID program

Dark purple: focus country, prepared separate case study for national ID program

Research Questions

Our review aimed to answer the following four core questions:

- What developing countries have national identity programs, and what are the characteristics of these programs?

- What is the level of penetration and coverage of these national identity programs, in terms of percentage of a country's overall population and of particular population groups (e.g. poor populations) included?

- To what extent are national identity programs being connected to and used to support provision of services and products, especially in the finance, agriculture, and health sectors?

- What characteristics of national identity programs are associated with connections to financial, agricultural, and health services?

Review Framework

For each national ID program, we reviewed the evidence for the following information:

Basic national identity program information

- Management
- Funding
- Target population
- General history

National identity program methodology

- Enrollment/registration methods
- Credentials used (e.g. biometrics)
- General operation of program

Implementation of program

- Implementation status
- Coverage/penetration of the program
- Costs of the program
- Implementation challenges

Functional uses of program

- Uses of the program for finance, social transfers, health, agriculture, elections, surveillance and security, among others

Methods

Products of the review include:

- Summary characteristics of national ID programs
  - By region, year of establishment, etc.

- Quantitative (where possible) and qualitative analysis of associations between characteristics of national ID programs
  - Especially characteristics associated with level of coverage and linkages with different types of services

- Case studies of 12 focus countries presenting an overview of findings for the main national ID program in each country

Literature Search Process and Results

Search Methodology; Summary of Search Results;

Number of Documents by Country

Search Methodology

For each of the 43 targeted countries, we conducted searches using combinations of the terms "national", "identity", "program", "system", "card", and the country name.

Search locations:

- Scopus Academic Database

- Google Scholar

- Center for Global Development

- Google (general search)

- Google (custom search of International Non-Governmental Organizations)
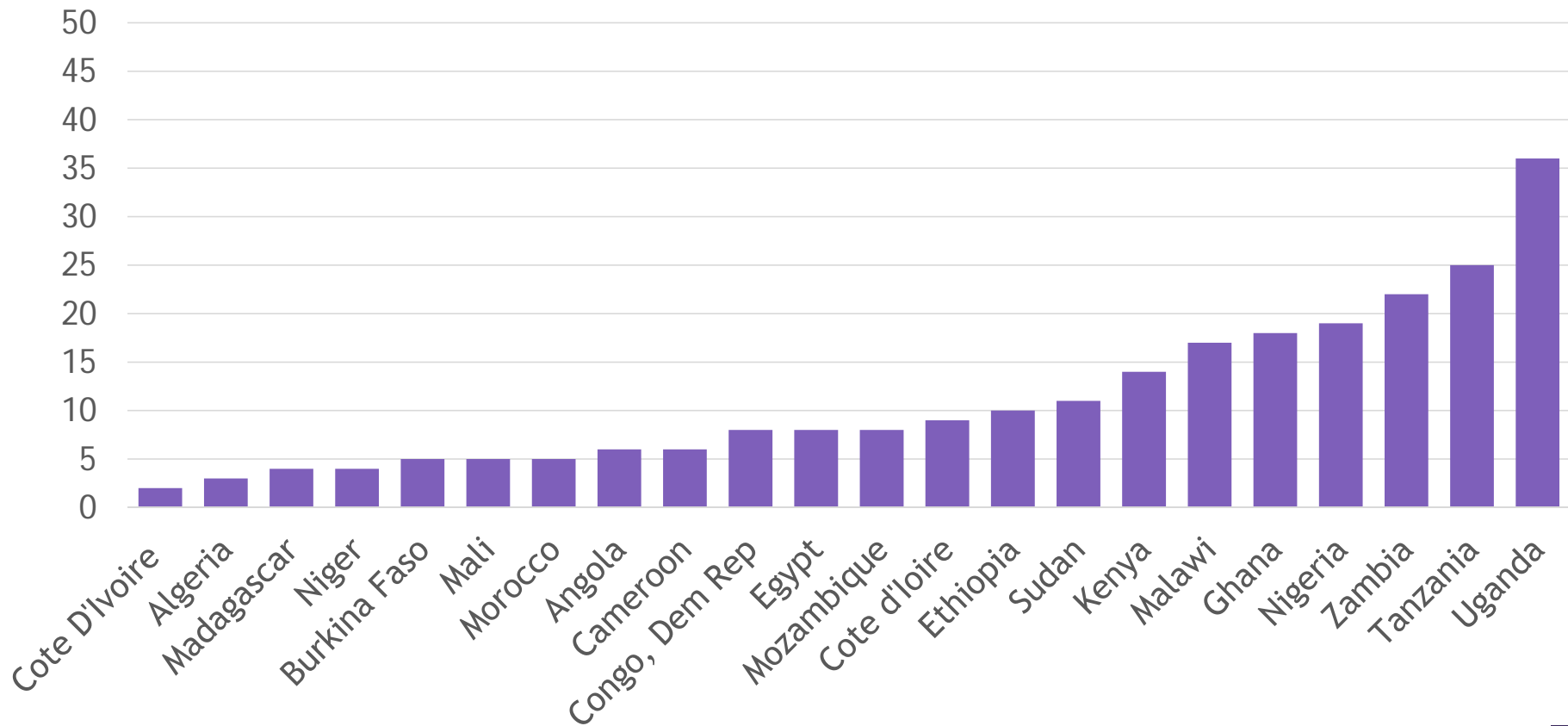
Summary of Search Results

Our initial and supplemental searches yielded **522 documents***
relevant to 48 different national identity programs in the 43
countries of interest.

- Scopus: 73 documents

- Google Scholar: 13 documents

- Center for Global Development: 40 documents

- Google general search: 290 documents
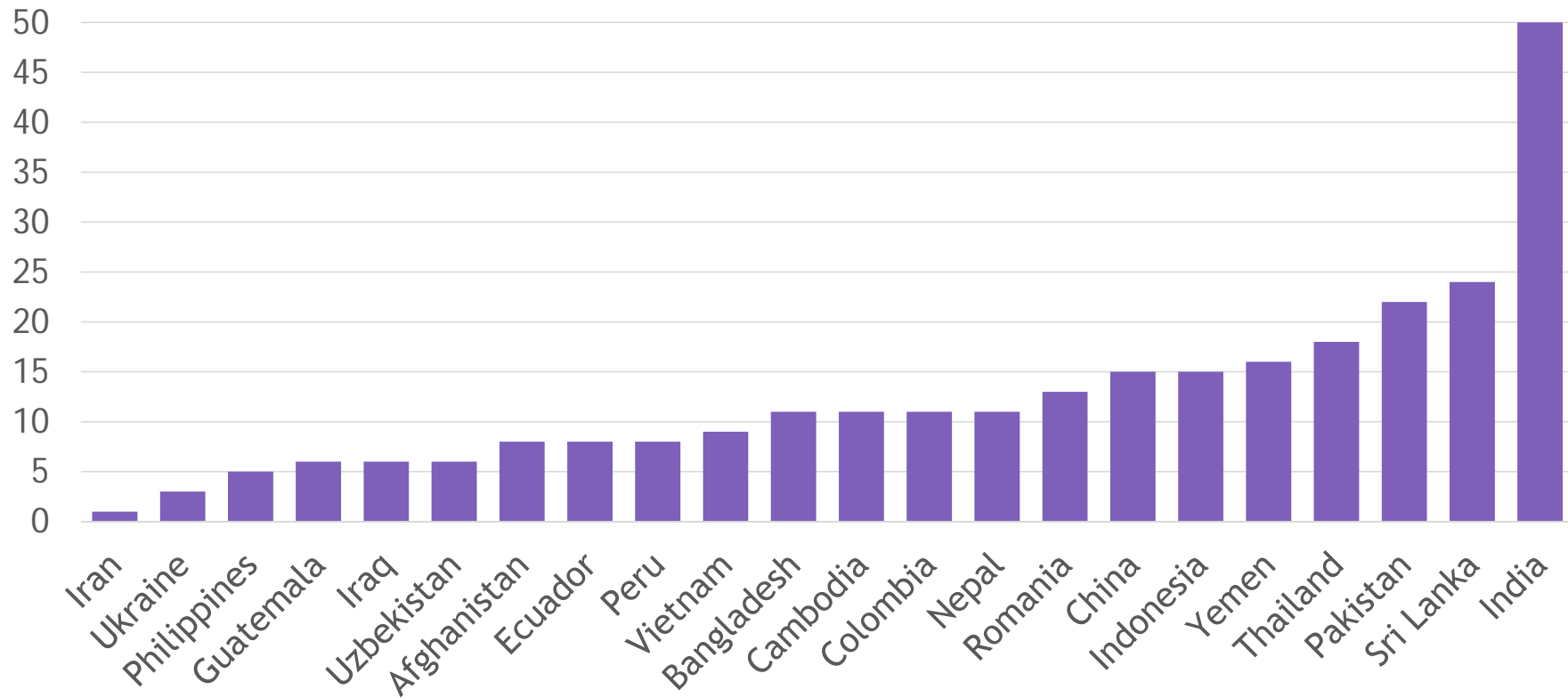
- Google custom search of INGOs: 106 documents

*During our review of each national ID program, we also conducted supplemental
searches to add to the body of evidence if the initial searches did not yield
sufficient evidence to answer the review questions.*

*Several documents report on national ID programs in multiple countries, so the number of unique
documents identified is lower than the number reported here.

Number of Documents by Country – All Other Countries

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Evans School Policy Analysis and Research Group (EPAR)

# National ID Program Characteristics and Implementation

Characteristics of National ID Programs; Program Implementation Status; Penetration of ID Programs; Implementation Challenges

Characteristics of National ID Programs

Government-issued national IDs are the most common form of national identity program (40 of 48 programs reviewed)

- **Program management**: Commonly overseen by government agencies, but some involvement of private firms (9 countries) in enrollment, card production, and database maintenance

- **Funding**: Govt. Agency (10), Govt. Agency/Donor (6), Other funding arrangement (7), Not specified (21)

Program Funding Sources

Technical Components
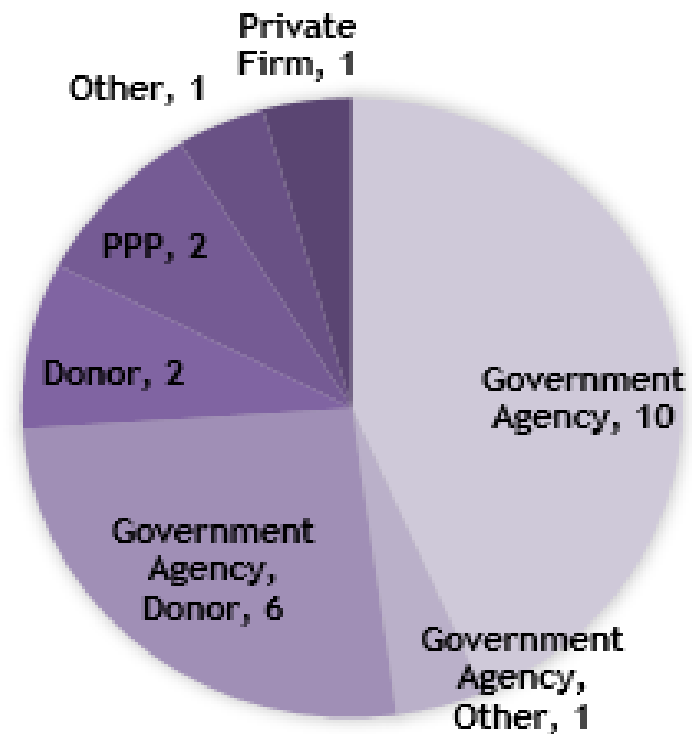
28 programs include an electronic component in their physical ID credentials (e.g., microchip, barcode)

- Initial evidence shows that 37 identity programs use **biometric technology**
  - o 34 Fingerprint
  - o 12 Face
  - o 16 Multiple

- We do not find evidence of countries widely using biometric databases for authentication, largely because of the high costs of setting up such systems
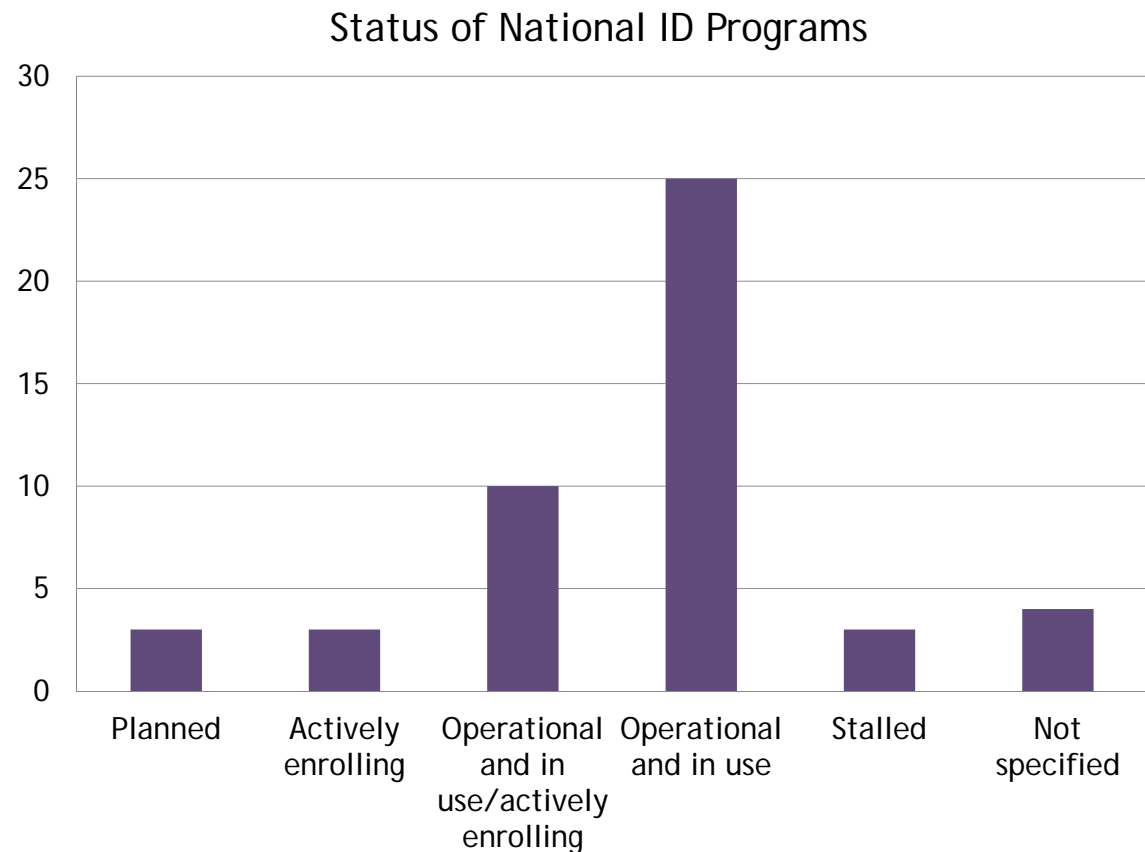
Number of Programs Capturing Different Biometric Information

Type of Biometric Information
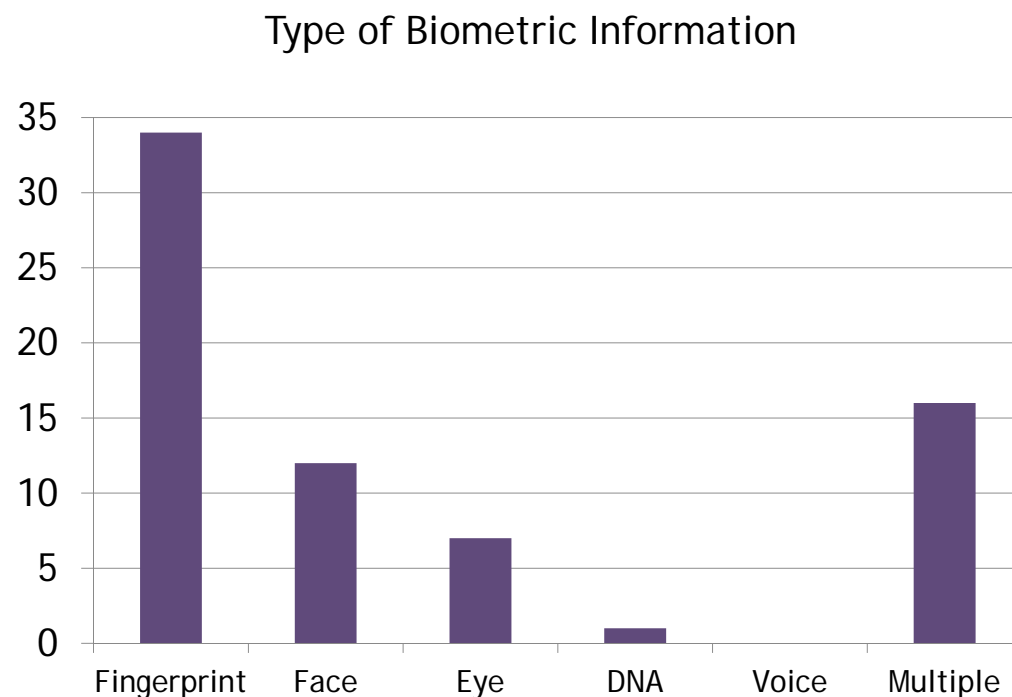
Program Implementation Status

- Three programs are planned but not yet begun (Malawi, Philippines, Nepal)

- Three are actively enrolling but not yet operational (Nigeria, Zambia)

- 35 programs are operational and in use, though ten of these are still actively enrolling new participants

  - Operational programs that are still actively enrolling have completed at least their initial or pilot phase of enrollment and issued ID credentials to a portion of the target population

- Three programs (Afghanistan, Algeria, Ukraine) are stalled

Status of National ID Programs

Bar chart showing (x-axis categories, approximate values):
- Planned: 3
- Actively enrolling: 3
- Operational and in use/actively enrolling: 10
- Operational and in use: 25
- Stalled: 3
- Not specified: 4

ID Program Inclusion

Overall level of coverage of ID programs (28 countries "Not specified")
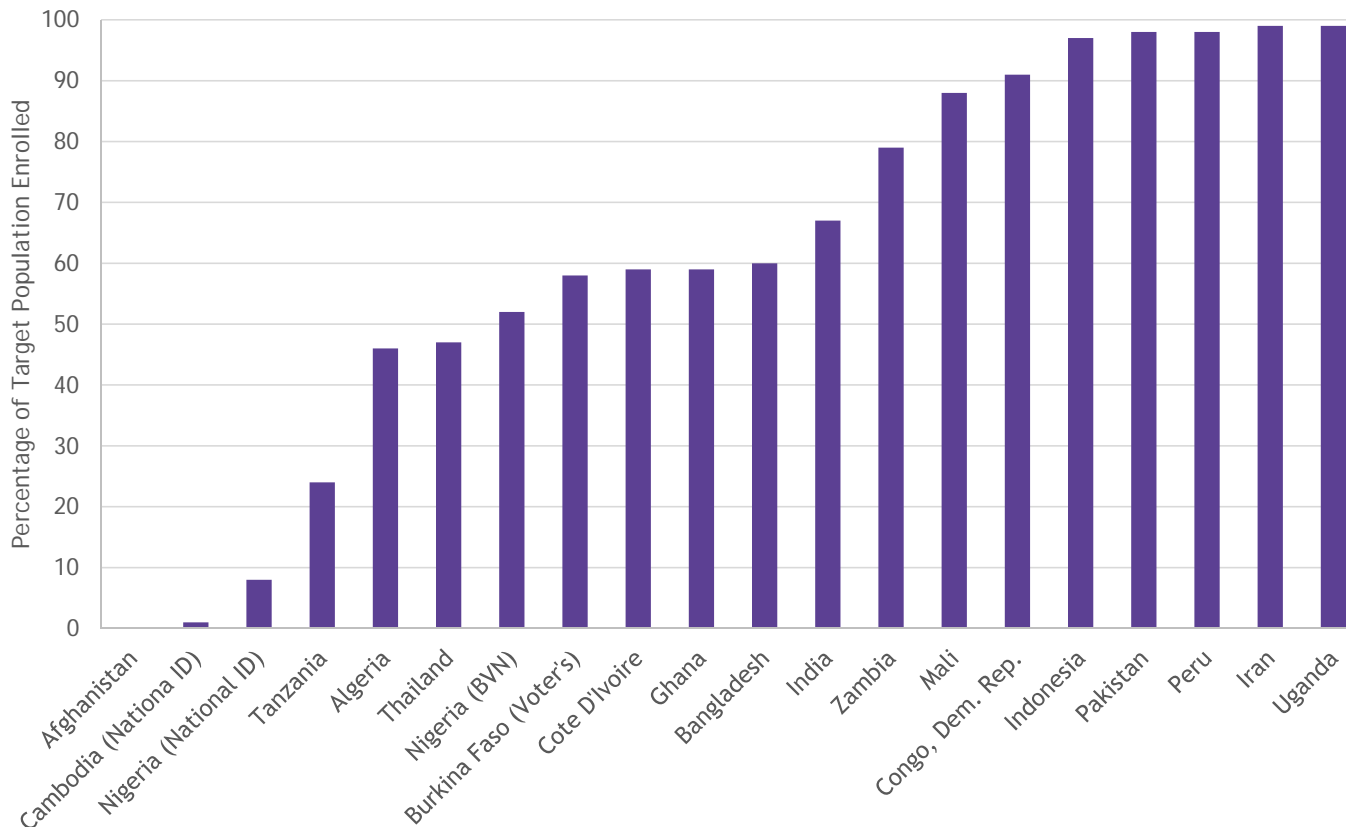
19 programs have evidence of limited coverage of particular demographic groups:

- The poor (10 programs)
- Rural populations (10)
- Women (3)
- Religious (4) and ethnic minorities (4)
- Refugees and undocumented individuals (3)

Implementation Challenges

We find evidence of implementation challenges in **39 programs**, including 20 reporting challenges in two or more areas.
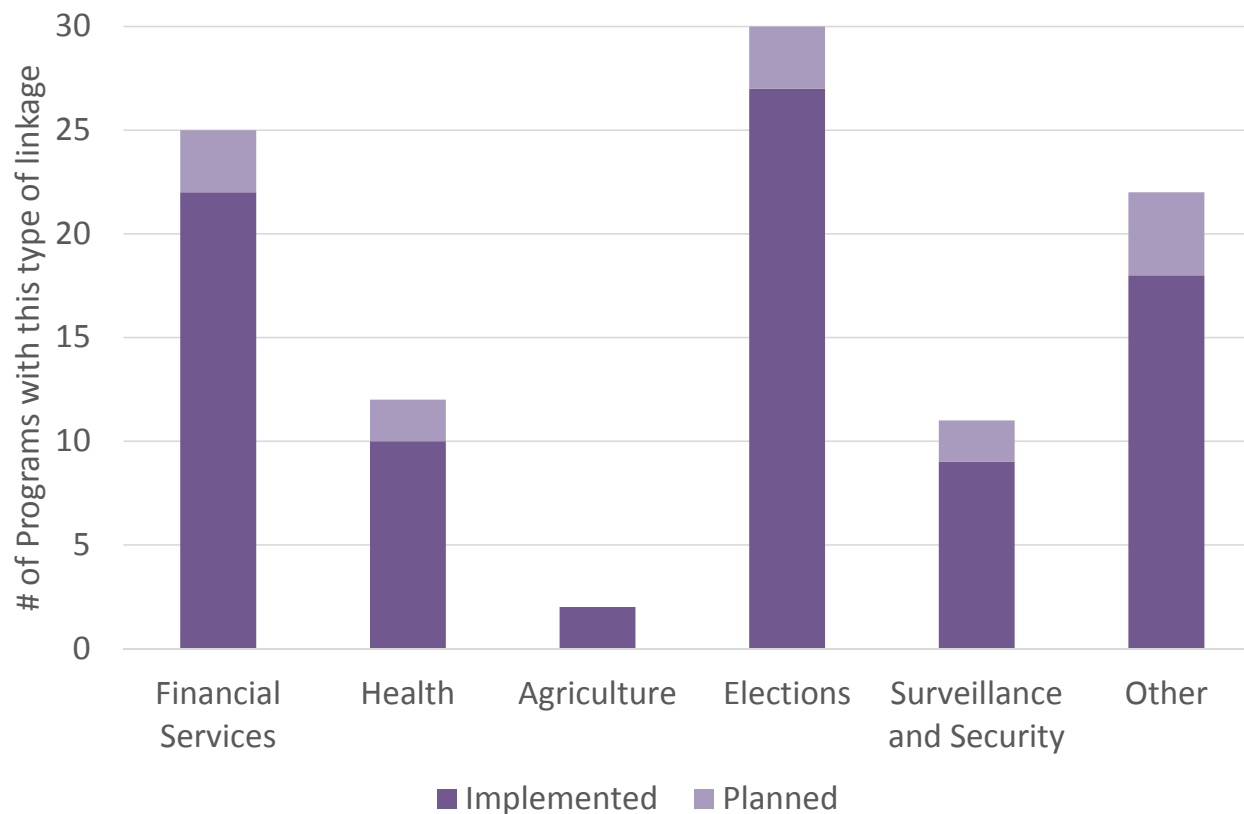
- **Accountability** (11): corruption at both the micro level (e.g., soliciting fees) and macro level (e.g., lack of transparency in contract or tender process for programs)

- **Privacy** (3): evidence of concern but no evidence of privacy abuses; some evidence of targeted security measures

- **Data management** (6): challenges with establishing databases, data maintenance, updating citizen information, and data protection

- **Enrollment** (14): limited access to resources and complexity or centralization of enrollment procedures

- **Coverage** (22): geographic barriers, lack of enrollment, printing, or distribution centers, enrollment costs

- **Cost** (8): delays or suspensions in enrollment, costs of technical features

- **Harmonization of ID programs** (4): lack of clear legal frameworks governing different ID programs

Functions Linked to National ID Programs

Links with Services; Financial Linkages;

Characteristics of ID Programs with Functional Linkages

Links with Services

Functional Links of the 48 National ID Programs

Chart: # of Programs with this type of linkage (y-axis, 0–30) by category. Legend: Implemented, Planned.

- Financial Services: Implemented ~22, Planned to 25
- Health: Implemented ~10, Planned to 12
- Agriculture: ~2
- Elections: Implemented ~27, Planned to 30
- Surveillance and Security: Implemented ~9, Planned to 11
- Other: Implemented ~18, Planned to 22

- **Programs connected with five or more categories of functions:** Bangladesh, Ghana, India, Nigeria, Pakistan, Peru, the Philippines, Tanzania and Uganda

- **No evidence of linkages:** Algeria, Malawi, Mozambique, Nepal, the Ukraine, and Vietnam.

Financial Linkages

We find references to financial connections in 25 of 48 programs

- 22 of these programs have connections that are KYC-related.

- Five National ID programs (India, Kenya, Nigeria e-ID, Pakistan, Zambia) are linked to digital banking, and four (DRC, Egypt, India, Kenya) have mobile money applications

- Another nine are linked with social transfers, such as government relief, social security, welfare, and other cash transfer programs

Financial Linkages of National ID Programs
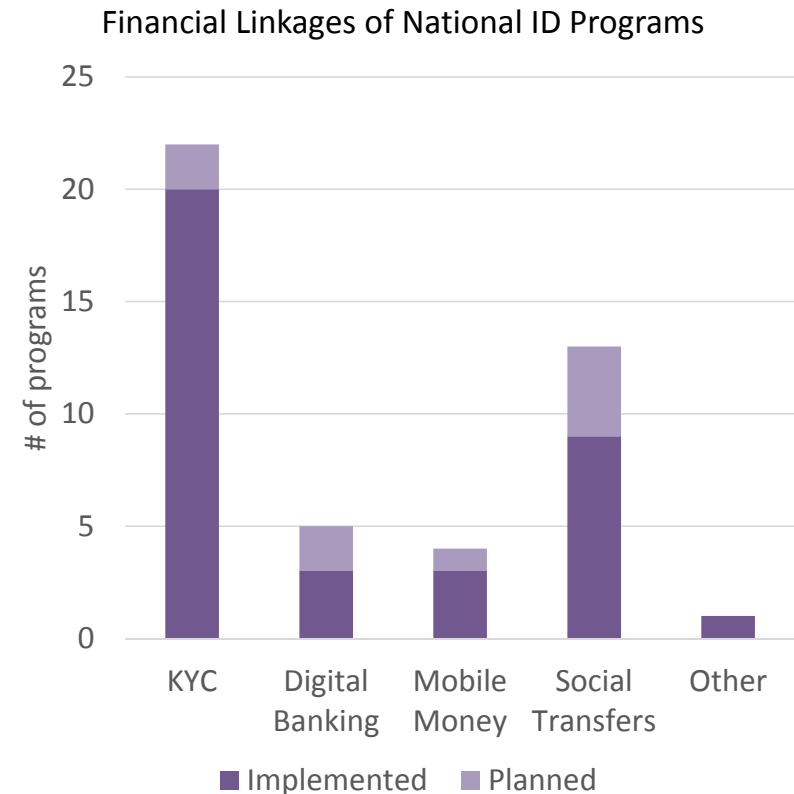
Financial Linkages, cont.

- **KYC** (22 programs)
  - IDs facilitate adherence to KYC regulations; Provide individuals with the credentials banks need in order to verify customer identities
  - In India, the Aadhaar national ID program database is expected to cut down bureaucratic processes for both financial institutions and customers

- **Digital Banking** (5 programs)
  - Linkages with social transfers, also providing direct relief to disaster victims
  - Increasing financial inclusion

- **Mobile Money** (4 programs)
  - Sign up for and access mobile money accounts
  - Link mobile money with other payment schemes

- **Social Transfers** (13 programs)
  - Streamlining government payments and targeting delivery of subsidies
  - Reducing leakage and improving delivery efficiency

Characteristics of ID Programs with Functional Linkages

- Difficult to assess extent of connection between ID programs and different services
  - Small sample size
  - Limited data on depth or impact of connections
- We find no association between **region** and number of functional linkages
  - In most regions, over half of national identity programs have or plan financial linkages
  - National ID programs in South Asia have the highest mean number of categories of service connections, driven by well-integrated programs in India and Pakistan
  - National identity programs in Sub-Saharan Africa are much more likely to be linked to financial services (62 percent) than health services (19 percent)
- We find no association with the **year** a program is introduced
  - Programs that are still actively enrolling members appear to be linked to more types of services
- Programs that incorporate cards with **electronic components or biometrics** are connected to a higher mean number of different service functions overall.
  - This association does not hold for linkages with financial services

Evans School Policy Analysis & Research Group (EPAR)

- Professor Leigh Anderson, Principal Investigator

- Pierre Biscaye, Sarah Coney, Eugenia Ho, Brian Hutchinson, Professor Travis Reynolds, & Professor C. Leigh Anderson

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Please direct comments or questions about this research to Leigh Anderson at eparx@u.washington.edu.