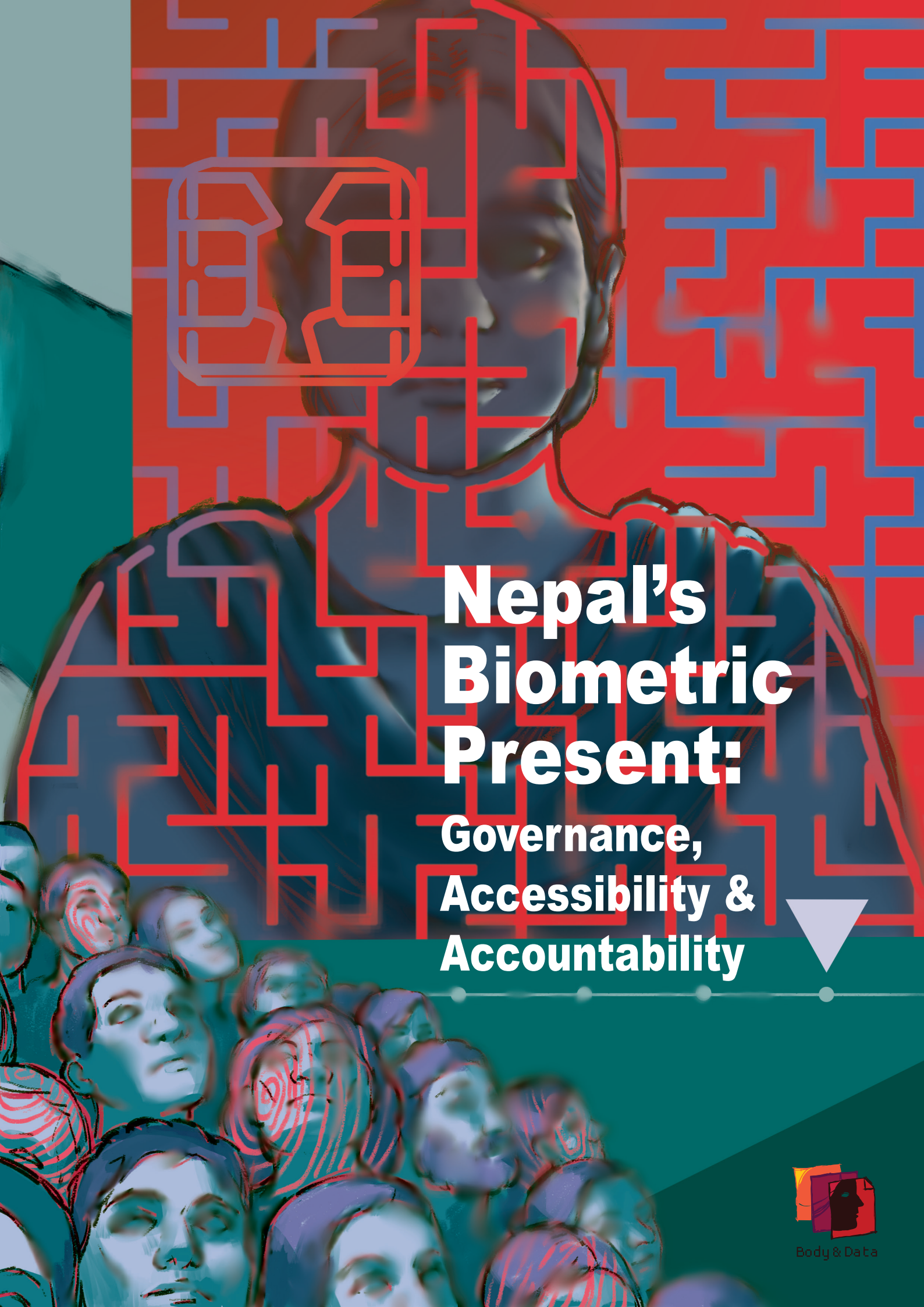

Nepal's Biometric Present:

Governance, Accessibility & Accountability

Body & Data

Nepal's Biometric Present:

Governance, Accessibility & Accountability

Nepal's Biometric Present: Governance, Accessibility & Accountability

This report is based on a study conducted by Body & Data in the districts of Sarlahi, Khotang, and Kathmandu in Nepal. The study would not have been possible without the contributions of time and knowledge from all the interviewees, including end-users, government officials at both local and central levels, government-contracted data collectors, private sector practitioners, and multilateral representatives.

About Body & Data

Established in 2017, Body & Data works to enhance understanding of and access to information on digital rights among women, queer people, and marginalized groups, enabling them to exercise their rights in a safe and just digital space. We work toward the vision of accessible, safe, and just digital spaces for all through cross-movement building, facilitating access to information, and building and disseminating knowledge on digital rights in the context of Nepal.

Research Contribution
Bhaskar Gautam
Rita Baramu
Sapana Sanjeevani

Research Assistants/Local Coordinators
Irshat Khatoon, Malangwa Municipality, Sarlahi District
Barsha Rai, Diktel Municipality, Khotang District

Editing
Shafali Uprety

Cover Illustration
Supriya Manandhar

Layout and Design
Shrijit Rajbhandari

Financial Support
Open Society Foundation (OSF)

Contents

Acronyms

BPL	Below Poverty Line
CBO	Civil Society Based Organization
CDO	Chief District Officer
CSO	Civil Society Organization
DAO	District Administration Office
DoNIDCR	Department of National Identity and Civil Registration
DPI	Digital Public Infrastructure
GDPR	General Data Protection Regulation
ICT	Information and Communications Technology
ID	Identification, Identity Document
IDEEA	ID Enabling Environment Assessment
NID	National Identity
NIN	National Identity Number
NIDMIS	National Identity Management Information System
NGO	Non-governmental Organization
PIN	Personal Identification Number
PWD	People with Disabilities
SDG	Sustainable Development Goal
UIDAI	Unique Identification Authority of India
UIN	Unique ID/identity number
WPF	World Privacy Forum

Terminologies used

The following terms have been used in this study based on the meanings outlined below. We have drawn from multiple sources, including global legislation such as the General Data Protection Regulation (GDPR), definitions from consumer and cybersecurity industry leaders, academics, and civil society organizations (CSOs).

- **Aadhaar Card/Aadhaar Number**: A 12-digit random number issued by the Unique Identification Authority of India (UIDAI) to residents of India after fulfilling the verification process defined by UIDAI. Any individual, regardless of age or gender, who is a resident of India may voluntarily enroll to obtain an Aadhaar number. The Aadhaar number serves as proof of identity but does not confer citizenship or domicile rights. *(Source: UIDAI website)*
- **Biometric Data**: Personal data related to the physical, physiological, or behavioral characteristics of an individual that has undergone technological processing and can be used to confirm their unique identity. This may include, but is not limited to, voice recognition, fingerprint scanning, facial recognition, iris recognition, and heart-rate sensors. The digital capture and use of biometric data without adequate legal safeguards can lead to extrajudicial surveillance by state and private actors, raising critical data privacy concerns, as individuals' bodies become measurable aspects of their personal lives.
- **Cybersecurity**: The application of technologies, processes, and controls to protect systems, networks, programs, devices, and data from cyber-attacks, and to prevent unauthorized access or exploitation. *(Sources: IT Governance UK & CISCO)*
- **Data Breach**: A cybersecurity incident in which information is stolen or accessed from a system without the knowledge or authorization of its owner. It results in the exposure of confidential, sensitive, or protected data to unauthorized entities. The compromised files may be viewed, shared, or altered without permission. Data breaches can affect individuals, businesses, and governments, and anyone lacking proper safeguards can also inadvertently endanger others.
- **Datafication**: The process of transforming various aspects of human life and activity into quantifiable data, such as facial recognition, fingerprints, iris patterns, and more.
- **Demographic Data**: Socioeconomic information or variables including name, age, gender, address, marital status, religion, caste, ethnicity, race, employment status, and income level. These variables can be statistically expressed to represent different population groups.

- **Digital Literacy**: Builds on basic literacy skills to provide an understanding of how digital technology works and how to use it effectively. It includes critical thinking, information evaluation, familiarity with digital devices, internet navigation skills, and awareness of digital issues such as privacy, cybersecurity, informed consent, and data breaches. *(Source: ScienceDirect)*
- **Digital Identity (Digital ID)**: An online representation of an individual constructed from explicit data (e.g., account sign-ups, posts, photos) and implicit data (e.g., browsing history, purchase behavior).
- **Digitalization**: The use of digitized information to reform public and private policies under the assumption that digital systems are more efficient than traditional, manual processes.
- **Digitization**: The conversion of analog information, records, or objects into a digital format.
- **Digital Public Infrastructure (DPI)**: It refers to the basic capabilities – mainly identification, payments, and data sharing – that are the building blocks for developing digital services and serves as an intermediate layers in the digital ecosystem.
- **Digital Privacy**: The principle that individuals should control how their digital information is collected and used. Digital privacy should be protected by law to at least the same extent as offline privacy.
- **E-Passport (Electronic or Biometric Passport)**: An international travel document that includes identity information such as passport number, name, nationality, and date of birth, along with a microprocessor chip containing biometric data like fingerprints, photos, and signatures. These passports are scanned using specialized devices.
- **Information Security**: The tools and processes used to safeguard sensitive digital information from unauthorized access, modification, destruction, or disruption. It ensures the confidentiality, integrity, and availability of data. *(Sources: Kaspersky & CISCO)*
- **Personal Data**: Any information related to an identifiable individual, including names, identification numbers, location data, online identifiers, and characteristics such as physiological, genetic, mental, economic, cultural, or social identity.
- **Profiling**: Any automated processing of personal data to evaluate or predict aspects of an individual's life, including job performance, economic status, health, preferences, interests, reliability, behavior, and location. *(Source: GDPR)*
- **Sensitive Data**: A subset of personal data that includes information on racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic and biometric data (especially when used for identification). This type of data requires heightened security measures.
- **Social Exclusion**: A complex, multi-dimensional process involving the denial of access to resources, rights, goods, and services. It also entails exclusion from participation in social, economic, cultural, and political activities available to the majority. Social exclusion affects individual well-being and undermines social equity and cohesion. *(Source: PSE UK)*
- **Unique Identification Number (UIN)**: A number that uniquely identifies an individual and can be used to link their identity across public and private databases. National identity providers may assign a UIN to residents or citizens for lifetime use.

Executive Summary

In November 2018, the Government of Nepal launched the 'National ID' (NID), a system designed to provide digital identification for its citizens. That same year, the government ambitiously claimed that by 2023, all Nepali residents would be biometrically enrolled. Once enrolled, each resident would receive a unique 10-digit identification number, which would serve as their "National ID" or Unique Identity. This number would be linked to a record containing their personal biometric data—such as a digital photograph, fingerprints, and iris scans—as well as social data, including name, address, and gender. Although the National ID is designed for online identity verification anytime and anywhere, it has yet to take off in terms of digital usage since its rollout in 2018.

This study examines the social consequences and on-the-ground effects of the National ID. It explores three key aspects: public understanding of the National ID, the political ambitions of the Nepali state associated with biometric projects, and users' experiences while enrolling for the Digital ID. The scope of this study is confined to answering three questions:

a) Why is the Nepali state pursuing digital identification?

b) How is the government executing its digital identification scheme?

c) How are Nepali citizens engaging with this ambitious biometric initiative?

Given that National ID cards are not in widespread digital use—due to the absence of card-reading machines in public offices or other public stations—this study provides a snapshot of the project's design, planning, and implementation related to enrollment. It builds on Body & Data's previous research on the pilot phase of the identification project.

As of late 2024, the mandatory enrollment of citizens has surpassed 16 million. The distribution of ID cards, which began in 2022, has recently accelerated, surpassing 1.5 million. While the NID serves as proof of identity, it does not confer citizenship rights. Only residents with citizenship certificates are eligible to access the NID, thereby automatically excluding millions of residents—particularly the landless, marginalized groups, and children of single mothers—who lack such documentation.

The National ID functions as proof of identity but not as proof of citizenship. At this stage, rather than delivering welfare benefits, the digitization program aims to standardize the fragmented system of existing documents—citizenship certificates, driving licenses, election IDs, Below Poverty Line (BPL) cards, etc.—into a singular ID. The NID is intended to serve as personal identification and to interoperate across both

public and private sectors as a digital ID.

The study found that policymakers expect the NID to promote efficient governance through "digital solutions" by ensuring interoperability and improved access to services. However, the digital policy is top-down in nature, and the government appears to be rushing to implement what it calls "smart" governance without adequate investments in digital public infrastructure (DPI). Limited investment in digital foundations, technology adoption, and efforts to bridge the digital divide have resulted in a weak DPI.

A shift in administrative orientation to support digital transformation was neither systematically designed nor promoted, so traditional implementation arrangements have prevailed. This situation is exacerbated by inadequate education, training, and awareness programs related to information and communications technology (ICT) and biometric systems. The overall implementation has lacked proactive outreach and educational campaigns, particularly regarding privacy and data protection.

Citizens emphasized that mandatory enrollment in the National ID system is merely an added burden, requiring them to obtain yet another form of ID. While the government plans to link NID with social security allowances, there is currently no guarantee of additional welfare services. For citizens, this translates into bureaucratic burden; for the government, identifying citizens without offering services suggests a greater emphasis on surveillance and public security rather than on social security and inclusion.

During the enrollment process, the federal government engaged in limited intergovernmental consultation and coordination. The role of municipalities and District Administration Offices has been reduced to basic implementation. Reports indicate that local authorities received only brief orientation sessions focused on how to operate enrollment stations and collect citizens' data. As a result, local government officials themselves lacked clarity about the potential digital uses of the NID. This has significantly impacted end-users, who were given little information about its use, as well as about privacy and biometric data protection.

The NID card has become an integral part of existing bureaucratic procedures, but any transition toward "smart" governance lacks systematic planning. Combined with the prevailing traditional administrative mindset, the enrollment process has suffered due to weak digital infrastructure, poor connectivity, uneven internet access, and frequent power outages. These challenges have created difficulties for citizens, especially women, the poor, and marginalized groups. Although existing policies recognize the physical challenges faced by persons with disabilities, in practice, they have experienced administrative discrimination.

Civil Society Organizations (CSOs), including those in the private sector, are still relatively new to digital literacy and digital rights, and are therefore less informed about the National ID and its biometric implications. They were not consulted during the project's planning and implementation. Public participation and consultation were notably absent from any cross-sectoral discussions about biometric data. This highlights the critical role that digital rights organizations can play in holding governments and multilateral agencies accountable. It also reveals that the discourse around digital solutions for enhancing governance and inclusivity is largely rhetorical.

I. INTRODUCTION

Nepal's new digital identification system is considered a "game changer" within state institutions, especially by government authorities.[1] Launched in November 2018, this system is called the "National ID" with the main purpose of digitizing the identification of Nepali citizens. The digitization programs reflect universal claims that the absence of a universal identity creates conditions of insecurity and exclusion. Nepal's Digital ID framework, with an emphasis on security and inclusion has been modelled on the World Bank's D4D document.[2]

While the National ID process began earlier, the National ID and Civil Registration Act came into effect in August 2019. According to the Preamble of the Act access to the National ID for citizens is mandatory. Only Nepali residents with citizenship certificates are eligible to acquire the National ID, as stated in Article 4 of the National ID and Civil Registration Act.[3] This provision automatically excludes millions of people without citizenship certificates, which are issued at age 16 or later. Citizenship certificates enable access to birth or marriage registration, higher education or professional examinations, civil service, employment, voting rights, land and property ownership; state social benefits, and the ability to open a bank account or obtain credit.[4] Historically, residents denied access to citizenship certificates due to caste/ethnic discrimination, being the child of a single mother, poverty or internal displacement, are also denied access to the National ID.

Since 2006, many citizens who were conferred citizenship certificates based on birth right or children of a single mother were also denied access to citizenship certificates. Until recently, their offspring, approximately 1.2 million in number, were excluded from the digital enrollment. In June 2023, the Supreme Court cleared the way for the Nepal Citizenship First Amendment Act, which was delayed for years. With the amendments, their access to citizenship certificates and subsequently to the national ID has been granted.[5] When accessing citizenship certificates individuals can disclose their gender identity, including LGBTQI+ community members.

With the launch of the NID, the government ambitiously claimed that is by 2023, all Nepali residents would be biometrically enrolled. Each resident would receive a unique 10-digit identification number, serving as their "National Identity" number, connected to a record containing their personal biometric data and a set of social data. While biometric data capture a

1 (DoNIDCR, 2024b: 2).
2 (The World Bank 2016a)
3 (DoNIDCR, 2020).
4 (Buggeland, Ann, 1999).
5 (Phone-based interview, 30 December 2024).

digital photograph, fingerprints, and an iris-scan record, social data includes name, address, and gender. The NID is designed for online identity verification at anytime and anywhere.

Nepal's ability to advance its digital identification measures will be tested in the coming years. This "internationally celebrated" system promises cost-efficient and secure identification,[6] with strength in maximizing "interoperability" across various sectors like security operations, welfare projects, and commercial applications.[7]

Like in other countries, Nepal's investment in a digital ID system aims to address accountability in public security and accessibility to social services with rights for citizens. The government emphasizes on its official website that biometric technology has become a trusted "digital solution" for "smart" governance,[8] shaping new security spaces.[9] Automated surveillance is provided to ensure public security, preventing "unwanted entrants" through facial recognition, biometric verification, and authentication of demographic information when necessary.[10] The goal is to maintain peaceful order and improve the efficiency of public services, by digitizing citizen identification.

The study found that, despite claims of gains in digital governance, there are tradeoffs, as the digital shift introduces new forms of surveillance, exploitation, and exclusions.[11] It was also found that, amidst existing digital divides and lack of digital literacy, rights-based organizations and informed citizens are working to critically engage with proposed digital solutions and their discriminatory measures.

The concern for social services and the rights of citizens is gaining traction within developmental sectors, including the World Bank and the United Nations. The Sustainable Development Goal (SDG), for example, is a case in point. SDG 16.9 states that "legal identity, including birth registration" is a key foundation on which to build "peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels."[12] The promise here is to ensure access to participation in elections, social security measures, and financial services, as well as to ease access to employment opportunities. Development experiments with new forms of digital IDs have gained widespread policy acceptance along these understandings, as they are marketed as cost-saving measures. Development partners and civil society, including NGOs and CBOs, are expected to deepen such understandings. Through these new policy measures, state agencies and donor agencies seek new forms of collaboration with private companies. In this process, at times, they de-link identification from established citizenship rights with claims of making access to services more secure, effective and inclusive.[13]

For citizens, however, issuing proof of their identity to access any service is not a new thing. So far, citizens have used a range of documents issued by the state to prove their identity, ranging from the Citizenship Certificate to driving licenses, from election identity cards to the Below Poverty Line (BPL) cards. The digitization program that will produce NID is supposed to standardize this messy mix of documents by producing a

6 (Gelb and Diofasi Metz, 2017).
7 (Gelb, Alan and Julia Clark, 2013); (Zelazny, Frances, 2012).
8 (NID Portal accessed: Feb 2023).
9 (Albro, Marcus, McNamara and Schoch-Spana, eds, 2012).
10 (Ajana, 2012).
11 (Breckenridge, 2019); (Ziewitz, 2016).
12 (SDG 16, UN, 2015).
13 (Gelb and Metz, 2017).

singular ID. Across the country, this new identity card would be accepted as proof of personal identity. By interoperating a standard national identity in the public sector, and by interlinking it in the private sectors, the government seeks to achieve the stated goals of fraud prevention, cost saving, and transparency. However, citizens are questioning the necessity of the National ID, as highlighted by a respondent from Khotang: "Why should the National ID be required when we already have a citizenship certificate? It's too much work and is not needed at all, given that the government hardly provides any subsidies or allowances following that."[14]

About this study

This study examines the social consequences and real-world impacts of the National ID. It does so by delving into the concept of the National ID, the political goals of the Nepali state related to biometric projects, and the experiences of users with this digital technology. The focus of this study is narrowed down to three main questions:

a) Why is the Nepali state pursuing digital identification,

b) How is the Nepali government implementing its digital identification program, and

c) In what ways are Nepali citizens navigating the government's ambitious biometric initiative?

Since biometric cards have not yet been widely adopted for regular digital use, this study just provides a snapshot of the National ID. It also expands on Body and Data's previous research on the National ID (see Box 1), which concentrated solely on the pilot phase of the identification project.

The National ID cards had not been distributed while the field work for this study was ongoing outside of Kathmandu. However, in the recent months the distribution of ID cards has been rapidly increasing.

The study for this report was conducted in Kathmandu, Sarlahi, and Khotang between September 2022 and November 2023, with an additional round of interviews in Kathmandu in November 2024. In Kathmandu, government officers, political representatives, policy practitioners, civil society actors, and rights based advocates were interviewed and consulted. Khotang and Sarlahi were selected based on

14 (Interview, 31 October 2022).

Box 1: Body & Data's Digitization of Identity in Nepal: Efforts, Experience and Effects

Digitization of Identity in Nepal examines the premise above against Nepal's National Identity Card (NID), primarily focusing on the end-users' efforts to register, their experiences, and the effects of the program on their lived realities. The findings support other global studies of national digital ID programs, revealing significant gaps between the promise and reality of implementing these systems.

When promoting the benefits of digital IDs, governments and multilateral organizations often exaggerate the effectiveness of tech solutions by linking legal identification goals with inclusive growth and development, while underestimating the negative impacts on the most vulnerable members of our communities.

The use of biometric IDs, beyond simple identity verification and authentication, has the potential to continuously monitor people's daily lives through the collection, processing, and sharing of their unique bodily data. International digital rights organizations have reported that this can worsen existing social inequalities or marginalized groups such as women (especially in patriarchal societies), people with disabilities, migrants, and transgender communities, leading to further exclusion.

When the government launched Nepal's national ID program following the global trend of maximizing citizen data collection through various public policies, it did so without multistakeholder consultations, increasing multipurpose usage with public and private organizations, and relying on a centralized database.

As an organization, Body & Data has been researching the digital space since 2017 with a focus on digital rights for individuals, especially marginalized and vulnerable communities. Studying Nepal's National ID Card, from an end-user perspective, aligns with our objectives. Since this was an exploratory pilot, we utilized a qualitative research methodology and conducted semi-structured interviews to gather rich, contextual, primary data. We analyzed this data thematically in conjunction with existing research, policy documents, and media reports. Our commitment to multistakeholder consultations led us to seek perspectives from government officials, government-contracted data collectors, the private sector, and multilateral agencies – particularly those involved in the pilot phases of the program.

the government's enrollment assessment, with the former listed as a "successful" district and the latter as a "difficult" one. Only two districts were selected due to time, resources, and government implementing phases. In both districts, political representatives, government officers, professionals, civil society actors, and media practitioners were interviewed. Focus Group Discussions (FGDs) were conducted particularly among women, ethnicities, religious minorities, and the poor and vulnerable. FGDs were also conducted in Kathmandu with civil society organizations and specific interest groups such as differently-abled people and queer groups.

Drawing on primary government records, field based observations, in-depth interviews, consultative meetings, and FGDs, the qualitative study for this report was conducted by a three-member team with additional support from two research assistants, one in Sarlahi and one in Khotang. In total, 357 individuals were consulted, including 45 individual interviews

and 312 group participants in eight FGDs. Seven consultative meetings were held with CSOs, media practitioners, private sector professionals and rights based advocates. Interviews were conducted with government authorities, former directors, senior officers, implementing officers, concerned staff, technical in-charge and actors involved in drafting digital bills.

The organization of this report is divided into four sections, covering the origins of the National ID, its implementation, disputes and differences, and citizens' concerns for privacy. The origin section seeks to understand how policy priorities were conceived and plans were designed. The implementation section examines how the Nepali state's political ambition is unfolding and the hurdles it must overcome while executing its plans. The disputes and differences section aims to capture the governing conditions under which citizens are accessing the National ID, how access to rights for citizens is operating, and how civil society actors and organizations are engaging with changing digital priorities. The final section on citizens' concerns for privacy attempts to identify existing gaps between inclusion and surveillance, and the issues faced by marginalized and vulnerable people.

II. THE BIRTH OF NATIONAL IDENTITY CARD

In 2010, the government proposed an "integrated" Information Technology Policy 2010 to regulate the exponentially expanding digital sector. The aim of the policy was to make technology accessible and inclusive to all by investing in digital public infrastructure and services. However, policy attempts by the government, even at the level of devising secured access and inclusive digital platforms have not made significant progress. On 31 January 2023, for example, the Nepal Government cyber system faced a significant "dos attack", exposing digital insecurities. The Ministry of Home Affairs immediately stated that cyber-attacks against government and private systems were increasing, with attempts to secure "illegitimate access or interrupt services", particularly within government defense, finance, and other important systems.[15] Echoing these concerns, a spokesperson at the Ministry of Information acknowledged that the bill on cyber-security was still under discussion and yet to be finalized. While the digital sector has been expanding its access, policy measures are still not in place, and digital security from both the perspective of "national security" and citizen's data protection is considered to be "very weak".[16]

Against this backdrop of operating and regulating digital systems, Nepal's biometric measures and national identification project are underway. The government's policy and program mentioned a national digital identity for the first time in July 2009 with an ambition to shift from "paper" to e-Governance. In the budget speech that year, it was stated that a "biometric smart card with a photo would be distributed to all Nepali citizens as their National ID that can also be used to vote."[17] Starting from elections, the ID card would also be linked to social security allowances and other commercial services. In 2010, a cabinet decision was made to issue a biometric "smart" card. In July 2011, the government established the National ID Management Centre (NIDMC) to run its digitized identification measures and civil registrations.

With support from the Asian Development Bank, in 2012, the government announced the pilot of its biometric project worth USD 14 million.[18] This project, with its Unique Identity number, would be piloted to 110,000 citizens in Panchthar District and 7,000 civil servants in Singha Durbar.[19] Subsequently, the first phase of the plan was to cover 15 districts, followed by 25, and then the remaining 35 districts.

15 (Phone-based interview, 27 January 2023).
16 (Quote in Nayapatriak, 2023).
17 (DoNIDCR, 2023b).
18 (Ibid).
19 (Body & Data, 2023).

Between 2012 and 2015, the project did not progress. It was then realized that there was a need for a new law anchoring the biometric identification program. After the Nepali Constitution was promulgated in 2015, the digitization program gained its constitutional footing. Article 15 of the Constitution has a provision to issue a record where each citizen has to have "clear" identity. As stated in Article 51(f) (7), an "integrated national identity management information system" would be developed to "manage all kinds of information and data of the citizens in an integrated manner," linking with "the services and facilities provided by the State and with… development plans."[20] As an eligibility threshold, the distribution of digital IDs was further tied up with citizenship certification, implying that only those who have citizenship cards will be enrolled.

Building on the constitutional provision, in 2016, the government granted the contract to a French company, Morpho Safran (now Idemia). The award was based solely on a technical assessment, stating that this was the only company "technically eligible."[21] For the pilot phase, Morpho Safran was asked with providing 117,000 citizens with a biometric ID within a span of two years. Once the collection of biometric data and personal records was completed, the Department began printing National ID cards for citizens who were enrolled during the pilot phase in 2018. By that date, the government spending had reached an estimated USD 4,878,698.[22]

Despite this progress, the legal status of the project was unclear. In 2019, the project faced major controversy for the first time. The major opposition party, Nepali Congress, demanded the immediate suspension of ID distribution by questioning its legal status. The party claimed that the printing and distribution of the National ID card were "illegal" since no Act had been passed specifying the status of biometric ID cards and their use.

Nepali Congress MP Dilendra Prasad Badu further accused the government of violating the Public Procurement Act by awarding the lucrative contract to Morpho, solely based on a technical assessment rather than through public bidding for which the legal cap is below NRS 2 million.[23] Seconding Badu, MP Amresh Kumar Singh added that moving forward with the National ID program while the citizenship bill was still under discussion was likely to invite problems in the future.[24]

The Nepali Congress MPs criticized the government's actions. Despite Article 15 of the Constitution, stating that "the Act" would be developed to "manage and implement" the biometric project, no act had been developed. In response to criticism from various quarters, the government passed the National Identity Card and Civil Registration Act in 2019.

Drawing on global acceptance, the twin aims of the Act were to improve security and transparency and to ensure citizens' access to rights.[25] The National Identity Card Management Regulations prepared the same year defined the purpose of the National ID, stating that the ID would be the "primary basis" for obtaining all government services, including social security measures.[26] It would also be interlinked with "certain private services", such as banking.[27]

20 (DoNIDCR, 2023a).
21 (The Kathmandu Post, 2016).
22 (DoNIDCR, 2024b).
23 (Himalayan News Service, 2019).
24 (Ibid).
25 (The Constitution of Nepal, 2015).
26 (The National Identity Card Management Regulations, 2019).
27 (Ibid).

Box 2: **About Nation ID from the Department of National ID and Civil Registration's website:** https://donidcr.gov.np/Home/NationalIDDetails

National Identity Card of Nepal is a federal level Identity card with unique identity number for each person that can be obtained by citizens of Nepal, based on their biometric and demographic data.

The data is collected by the Department of National ID and Civil Registration (DONIDCR), under the jurisdiction of Home ministry.

The contract to process and deliver the cards was signed in 2018 with IDEMIA.

Features

- Unique Identification Number (UIN): Every individual is assigned a unique number for life.
- Biometric Information: Includes fingerprints, facial recognition, and iris scans.
- Demographic Details: Stores personal details like name, date of birth, gender, address, and citizenship information.

Upon full implementation, this card is to replace the current "Nepalese Citizenship" and it will be used for National Identity, personal identity, as Voter ID Card and as a Social Security Card through its unique number.

This card will not replace other documents like Passport, Driver License.

The project began in the fiscal year 2075/76, with initial distributions in districts like Panchthar and to government employees.

Enrollment Process

To apply for the National ID Card, individuals must be at least 16 years old and provide the following documents:

- Original citizenship card
- Migration certificate (if applicable)
- Marriage certificate (if spouse's name is not on the citizenship card)
- Passport (if available)

Legal Framework

To systematically advance the National Identity Card program, strategies like the **"National Identity Card Management Strategic Plan 2075"** and the **"Procedures for Registering Details of Nepali Citizens Eligible for National Identity Cards and Their Distribution, 2075"** have been implemented. Following numerous decisions by the **Council of Ministers** and various ministries, the legal foundation for the program was established with the issuance of the **National Identity Card and Registration Act on February 11, 2020 (2076/10/28 B.S.)**.

Slogan

Technology-friendly, well-governed, and robust service delivery is Nepal's pride; the multi-purpose National ID is our identity.

Mission

To promote quality public service, peace, security, and good governance through the National ID and Civil Registration Management Information System.

Values

Supporting Nepal's Prosperous Nepal, Happy Nepali campaign through technology-based identity and registration systems.

While implementing this law, the Act states that "personal privacy will be assured".[28] Yet it simultaneously claims that the biometric and personal data collected by the Department will be used as an integrated system to maximize interoperability. While concerns of data theft and privacy issues are growing, a new security space that is not as safe as claimed is already in the making. Body and Data conducted a separate study of this pilot and published a report in 2023, demonstrating that there are "distributing gaps" between the promises of digitization and its actual implementation.[29]

The gap is illustrated as the NID was rolled out without much technological assessment and administrative preparedness. In 2018, the government announced that the enrollment of all citizens would be completed in five years, by 2023. By the end of 2024, the total enrollment was approximately 16.3 million, with only 1.6 million National ID cards issued to Nepali citizens. Among them, 1,61,113 NID cards were rejected by the user citing a "mistake" in their identifying information.[30]

A New Security Space

National ID is a fundamental aspect of a new surveillance culture. Unlike in India, where *Aadhaar* enrollment remains voluntary with the goal of accurately identifying beneficiaries for various social sector schemes, National ID is mandatory in Nepal primarily for digital identification.[31] The surveillance focus becomes evident when considering the perspective of users, who see the National ID as adding another layer of bureaucracy and surveillance to an already challenging system. Users, who already face a complex application process, anticipate uneven access to obtaining the National ID. While they view it as a tool for customer due diligence, they are uncertain about what essential services will be combined with beneficiary due diligence.

Due to historical controversies surrounding who qualifies as a Nepali citizen, millions of residents lack access to citizenship certification. Recent disputes regarding children of parents with "birth right" citizenship cards have exacerbated past exclusion on a larger scale. The National ID will further perpetuate uneven access and exclusion, as its distribution will not bridge traditional social divisions based on caste, class, gender, and ethnicity, while digitizing identification. Instead, new instances of exclusion and discrimination will arise from digitization.

Box 3: Stated Purpose, Motivations and Context

Nationalism and Nation Building
Prosperity and Efficiency

The NID aims to streamline government services, enhance administrative efficiency, and reduce fraud. It supports digital governance by integrating multiple government databases for various services.

Benefits

Improved Public Services: Facilitates access to health, education, and social security programs.

Election and Voter Registration: Simplifies voter registration and enhances electoral transparency.

Digital Economy: Enables integration with digital banking and e-commerce platforms.
Security: Helps reduce identity fraud and fake document creation.

28 (The National Identity Card and Civil Registration Act, 2019).
29 (Body & Data, 2023).
30 (Interview, 12 December 2024).
31 (Aiyar, 2017).

As seen in the *Aadhaar* case in India, traditional social divisions are already being reinforced.[32] Due to its mandatory nature in Nepal social divisions are already being perpetuated. Several settlements in Sarlahi districts are home to individuals who lack Citizenship cards, rendering them ineligible for NID enrollment. Estimates suggest that this number reach millions nationwide.

In the long run term, as the demand for a functional biometric ID system increases, the service culture may lean towards "normalizing suspicion", with the National ID becoming a key surveillance technology. For state actors, it already serves as a surveillance tool, focusing on "controlling crime" and "regulating embezzlement".[33] State actors are hopeful that the National ID's digital network could establish a default infrastructure for a new security landscape.

Transparency claims by the government regarding this project are already under scrutiny. The ongoing digitization project has once again violated public procurement laws by awarding a lucrative contract to Idemia (formerly Morpho) without public tender.[34] In 2021, the same French company was awarded a contract to supply an additional 12 million NID cards without public procurement.[35]

Idemia touts itself as a "renowned expert in civil identity solutions" globally, managing "the entire identity value chain from citizen enrollment to identity document" production, including upgrading "digital ID ecosystems".[36]

Beyond its work in India with Aadhaar, Idemia has undertaken over 100 active projects worldwide, including collaborations with various countries and organizations. Despite controversies surrounding political influence in securing contracts." Nepal's political class has repeatedly awarded lucrative contracts to Idemia merely on technical assessments.

Collaborating with a private company for biometric identification poses challenges to safeguarding citizens' fundamental freedoms and privacy. The design of the Idemia system and its potential privacy infringements remain unclear even at higher government levels.[37] While senior officers at NIDMC believe privacy infringements are unlikely, concerns persist about possible data breaches and privacy violations by private companies like Idemia. Citizens' insecurity often stems from the government's attempts to prioritize commercial interests over fundamental freedoms and constitutional rights. Nepali citizens and civil society organizations appear ill-prepared to address Nepal's political ambition for biometric initiatives, as expressed by many users.

Many people have echoed the sentiment succinctly articulated by a man in Khotang, that, the nation will benefit more from the National ID system, rather than just the general public. He stated, "maybe this is for the convenience of the nation by making the system more systematic. With the National Identity Card, it makes it easier to do various activities, I guess. So, I think it is easy for citizens and it's much easier for the nation. The Government has many advantages, like controlling the citizens for its own use."

32 (Rao, 2019).
33 (Interviews and policy documents).
34 (Morpho Safran was renamed as Idemia in 2017).
35 (DoNIDCR, 2023b).
36 (Idemia Official website, accessed 21 February 2023).
37 (Interview, February 2023).

III. HOW GOVERNMENT IS WORKING

The National ID system is a centralized program. The role of District Administration Offices and Municipalities has been limited to following instructions, only to ensure enrollment or necessary implementation. The local units of governments were not involved in the consultative processes of planning and forming policy, assessing difficulties of digital governance. Their experiences of challenges associated with digital knowledge and skills on the ground were deemed unnecessary, at least in practice. They were not even consulted to measure institution capacities or assess social contexts that could act as hurdles in a society where "smart" governance is a new buzz word and digital public infrastructure is weak.

The NID system started with a promise to integrate public services through interoperability. It is reported that the Department of Immigration, Social Security Allowances Distribution System, Civil Registration System, Company Registration Office, and Pension Management Office are already integrated to generate a digital effect. With the Department of Inland Revenue, Health Insurance Board, Department of Transportation Management, and Nagarik App System integration is completed but operation is yet to be in effect. With NIDMIS integration of NTC, Ncell and Credit Information Bureau is in process. Yet, integration is just a new process which has just started and its digital interoperability will be tested with time.

Box 4: **Proposed multipurpose use of National ID Card**

- Person's national identity for verification
- Vital registrations like birth, marriage, death, and legal cases
- Basic identity to verify other identity such as passport and driving license
- Voter ID card
- Registering land, vehicle and other property
- Social security card
- Taxation
- Financial transactions
- Medical information
- Border and security management or immigration control

Until now, the growing e-governance experiences of the public staff were key in helping Local Governments and District Administration Offices to collect biometric data for National ID cards. Local Governments' exposure to e-Governance and digital literacy has been increasing in recent years. Across the country, the "universal" digital system used by almost all Local Governments is the Public Finance Management (PFM) system. Widely known as SuTRA, which stands for Sub-National Treasury Regulatory Application, this financial software developed by the Treasury and Accounts Control Office at the federal level, now in use by Local Governments. The Treasury and Accounts

Control Office developed this system for releasing payments and tracking expenditure, and the Local Government uses SuTRA for accounting purposes. Among other issues, the system seeks to improve intergovernmental fiscal relations and transparency of public finance. Yet, in the absence of adequate citizen participation, lack of social audit, and ineffective public audit, the digitalized accounting system is far from being transparent.

Along with SuTRA, the use of technologies is rapidly increasing within government agencies. Across the country, the Land Management Office, Survey Department, and Statistics Department have already shifted from "traditional" to digital services. But digital transformation is far from easy.

A government officer from Sarlahi claimed that the NID program would be a "game changer" in the future, once linked to all governmental services, from land and revenue, driving license, Nepal Telecom, bank accounts, voter IDs, social allowances, and many more. He added that people would no longer have to carry different cards for different purposes, making the government's service delivery efficient and ultimately maintaining good governance if effectively implemented. A CSO representative believed that there are no disadvantages of the NID card. He further added, "...it is disadvantageous to the people who are frauds and criminals, because they can be tracked from the number on their NID. It is beneficial for the community."[38]

In the beginning, the Department created thirty-three posts to steer this operation, with an understanding that additional technical support would be recruited on a contractual basis. In February 2018, the piloting of biometric projects in Paanchthar and Kathmandu went without much controversy. Following this, in 2018, the mobile station for biometric enrollment began in 15 districts[39] by setting up sixty-two enrollment stations. Then, it was expanded to the next 22 districts.[40] Subsequently, enrollment stations were set up in all districts, except the eleven – Udayapur, Siraha, Bara, Parsa, Ratahat, Sarlahi, Danusha, Dolpa, Humla, Mugu, and Manag.[41] In these remaining districts, a station for biometric enrollment for data collection began in 2021, excluding Dolpa, Humla, and Mugu.[42]

When the operation began in each district, the team from Kathmandu organized a day-long orientation program at the district headquarters. Local representatives, Chief District Officers, Local Government officers, political representatives, and journalists were oriented about the biometric projects and their objectives. Additionally, a separate orientation program was held for elected representatives. In each district, there was a several as well as several mobile camps to collect biometric data from all residents.

In Khotang, seventeen mobile camps operated for a month in 2020 to speed up data collection. During that phase, 126,856 citizens were enrolled to issue ID cards, with 102,587 through mobile camps and the rest at a biometric station at the CDO office. Due to its population size, Sarlahi had twenty-six mobile camps in operation

38 (FGD with local CSO, 23 September 2022).

39 Jhapa, Sankhuwasabha, Saptari, Mahotari, Lalitpur, Rasuwa, Chitwan, Tanahu, Sangya, Kapilvastu, Gulmi, Salyan, Jumla, Kanchanpur, and Acham.

40 (Khotang, Okhaldhunga, Solukhumbu, Puthan, Rolpa, Dang, Bake, Bardiya, Kailali, Sunsari, Morang, Dhankuta, Terathum, Bhojpur, Illam, Taplejung, Surkhet, East Rukum, West Rukum, Dailekh, Jagarkot, and Kalikot.)

41 (DoNIDCR, 2024b)

42 (Ibid).

for four to six weeks in 2021. While 19,272 residents were enrolled through mobile camps, an additional 16,299 were enrolled at biometric stations at the CDO office, by November 2023.[43] By the end of 2024, enrollment had reached approximately 300,000.[44]

By November 2024, out of 16.35 million enrollments, the government had distributed National IDs to 1.65 million citizens. During the collection of their ID cards, 161,113 users rejected their cards due to errors in their information.[45] Before reissuing their ID cards, a request form submitted to correct information would be confirmed by an operator and verified by a verifying officer. [46] Enrollment in the National ID was initiated in the third phase in 28 out of 77 districts, where the enrollment was in full swing.

In June 2024, it was reported that the government was receiving data from around 4,000 registrations per day. Around the same time, the government had distributed 4,200 card-readers machines in 333 local units across 28 districts to interoperate with social security allowances.[47]

The government's push to make the use of NID cards mandatory faced significant opposition. A writ was filed against this government decision leading the Supreme Court to issue an interim order against immediately enforcing the decision to make national identity cards mandatory for accessing public services, including social security allowances. Responding to public and elderly people's concerns, the division bench of Justices Dr Manoj Kumar Sharma and Til Prasad Shrestha issued the order against the decision made by the Ministry of Home Affairs on June 24, claiming the government was delaying the issuance of the ID card.[48]

In an effort to give a mandatory push to its digital identification project, the government is now "informally" providing the NIN to newly born children, averaging 2,000 per day.[49] Access to NIN is made mandatory to appear for licensing examination at the Nepal Medical Council.[50]

In several instances, registering to obtain ID cards was not as straightforward as it seemed. Due to a lack of essential services in place, the government caused inconvenience for service users. In Sarlahi, users were required to pay anywhere from Rs. 200 to Rs. 500 by cyber operators to complete an online form that was supposed to be free. Many users who had to fill out the form expressed confusion, stating they, "didn't understand why the service wasn't available at the district office and why they had to fill it out elsewhere."[51] When residents learned or were informed that the service was meant to be free, many complained about the inconsistent pricing. As complaints from end users increased, a significant number of them went as a delegation to the CDO. In response to their concerns about free and fair service, the CDO explained that the office lacked the necessary human resources and administrative capacity to provide free services. Instead, the CDO summoned all the cyber operators to the office to "warn them to charge a nominal fee of Rs. 200 and if they were found overcharging,

43 (This figure is from the mid-September 2022)
44 (Phone-based interview with IT officer, 15 January 2024)
45 (DoNIDCR, 2024b)
46 (Interview, 12 December 2024).
47 (Bhusal, Thira Lal 2024).
48 (Supreme Court Interim Order 080-WO-1524, Ram Bahadur Raut vs Prime Minister of Nepal)
49 (Shrestha, Prithivi Man, 2024).
50 (DoNIDCR 2023b).
51 (Highlighted in all FGDs in Sarlahi, 23-25 September 2022).

action would be taken against them."[52] In cases of excessive pricing, users were encouraged to file complaints at the DAO office to take action against cyber operators. Following this, arbitrary pricing was regulated; in the event of overcharging, users could file complaints against cyber operators at the CDO office. It was reported that no such complaints had been filed since then.

Grievances against government inefficiency are widespread, with the following sentiment from users being common:

> "People are conducting illegal businesses in this district under the guise of electronics and digitization. Citizens have to spend a lot of money on all this and are suffering greatly. The government promises ease due to digitization and e-commerce, but people are facing numerous challenges. Additionally, if you have to visit a cyber cafe to fill out a form, you may miss deadlines or struggle to complete the work because they set specific times to fill out the form. A citizen from a rural area may not be aware of these deadlines. How are we supposed to know?"

For citizens, the challenges didn't stop at having limited information, exposing personal data to cyber operators, paying fees for supposedly free services, and spending days outside or making multiple trips just to get enrolled for an NID. Even after overcoming these obstacles, citizens had to wait for hours to submit and verify their applications. The DAO in Sarlahi could only process a maximum of 85 applications daily, while number of applicants exceeded this capacity every day. In Khotang, although the flow of applicants was around 100-120, the capacity to process applications at around 80-85. The waiting process was more organized in Khotang, as the DAO implemented a coupon system early on. The introduction of the coupon system to manage the queue of citizens arrived late in Sarlahi.

With few exceptions, citizens filled out the online form in advance. Operators at the DAO only needed to verify details before capturing a digital photo, fingerprints, and an iris scan. A process that less than 10 minutes. When elderly or illiterate citizens were in the queue, operators typically assisted them in filling out the form.

Due to poor digital infrastructure, the capacity to process fewer than around 85 applications was further affected by a number of factors. The irregular power supply, system function, and material supplies tend to have a greater impact than other issues. A system failure meant all processes were halted until restoration. In both districts it was reported that the online system gets hung at least twice a day. Accessibility and the supply of technical materials were reported to be huge challenges in both districts. Even in places as connected as Sarlahi, minor technical problems or a lack of material supplies would sometimes take days to be fixed, leading to a shutdown of every computer related service. If technical problems were slightly more serious, services would be interrupted for weeks.

Getting enrolled for the National ID doesn't mean citizens have received their biometric cards. Initially users were told that they would receive their ID cards within six months. But in Sarlahi and Khotang, where it had been more than 18 months since this field work was conducted, most users have no clue as to why there is such a delay. They have not even checked the whereabouts of the ID card in the ward office or at the CDO office. They were not

52 (Interviews, 21 September 2022).

even informed about its status by their local officers or local representatives. Citizens who have checked regarding the whereabouts of their ID card have said that even local officers and representatives have "no clue" about the delay, hence they are not in a position to give specific answers regarding when and how the ID card will be distributed.

The information vacuum exemplifies the very top-down approach of the project, where even concerned authorities at local levels are not informed on NID processing status and use. As the biometric project is being conceived, designed, and owned by the federal government, local officers and representatives appear hapless for existing delays. The CDO in Sarlahi said that digital programs are "decided and designed by the federal government" and the role of provincial and local government is "limited only to implement those programs".[53] He further added that even the implementation of online systems at local and provincial levels is "confined", due to limited digital infrastructure and poor human resources.

In terms of district level digital programs, LGs are just part of the implementation. They are not directly involved in "developing any technologies, updating them or making them user friendly," as all of these things are done at the federal level.[54] The CDO office can only apply the use of these technologies that are provided by the federal government. They often experience that the "feedback" provided from the district level regarding the technologies is not taken seriously by the decision makers at the center.[55]

Difficulties within

The proponents of the new digital technology within government agencies envision equal ownership once the system is implemented. However, there is currently a degree of resistance from traditional human resources within the civil service who either lack IT skills and digital literacy or are unable to acquire such skills. Without robust mechanisms and clear policy measures in place, the debate between "paper" versus "digital" is likely to continue. CDOs in both districts emphasized that those involved in financial irregularities are hesitant to embrace the digital shift, indicating that they are also playing a key role in delaying the transition. Reports of regular sabotage of IT systems by "cutting off wires" have been made.[56]

Although the government has shifted to e-procurement measures, the system faces significant challenges due to its lack of robustness. The government lacks the technical human resources necessary for constant maintenance. A senior officer in Khotang pointed out that sending e-procurement to the PPMO is always "problematic". The system is "difficult to manage" due to poor digital infrastructure, including basics elements like wiring systems. The digital tax system in use faces regular problems as well. Due to a shortage of technical manpower, the Ministry of Finance has to hire outside consultants to manage the system. Many officers in Sarlahi and Khotang reported "constant disruptions", emphasizing that a government lacking the basic capacity to manage a robust digital system will struggle to transition biometric measures.

A senior officer with experience working in tax and ICT systems stated that an "integrated" online system may look good on paper but

53 (Ibid).
54 (Ibid).
55 (Interviews, 22 September 2022 and 30 October 2022, in Sarlahi and Khotang, respectively).
56 (Interviews, 21 September 2022)

in reality it is not feasible.[57] He believes that within its current practices, the government will struggle to attract competent human resources. If someone is hired in the IT department, their salary would be equivalent to that of a deputy-secretary. However, their market value and opportunity cost would be higher. Their salary at a government office would be around NRS 40,000, which is lower that what they could earn outside the government. Even if they choose to work for government offices, they are unlikely to stay for long.

Digital administrative promises cannot be efficiently fulfilled through traditional arrangement in public administration. According to CDO in Sarlahi, for success, the federal government must consider their tech-heavy projects separately. Without launching separate incentive packages to attract tech-friendly human resources, the officer predicts challenges in implementing digital projects like the National ID.[58] Officers and frontline staff at District Administration Office in Sarlahi and Khotang voiced concerns that the federal government's expectations to transition digitally without investing in administrative arrangements and human resources is "unconvincing" and only makes their work more difficult. Echoing these concerns, the IT director at the National ID Department stated that even within his department, the existing workforce holds onto a traditional mindset, hindering the digital transformation. To achieve its transformative goals the government "must create a separate administrative arrangement rather than operating through existing offices."[59]

Box 5: Disruptions in Bishnupur, Sarlahi

Sarlahi is one of the districts where enrollment was delayed due to various disruptions, including a theft of computers from the enrollment station. The incident took place in Bishnu Rural Municipality during a mobile camp. An enrollment station was set up at a building where a bank was located with a security guard present. A group of cadres form oppositional groups, citing that the house was owned by a political leader, opposed getting enrolled. They refused to submit digital and biometric details for the National ID at a private residence. They created problems and tried to disrupt the enrollment process by discouraging people from getting enrolled. The ongoing disruption, led to the theft of two computers from the station. With support from the local government, the district office issued several public warnings stating that whoever had stolen the computers should return them immediately, or they would face severe punishment once identified. The public warnings continued for two days through loudspeakers. Eventually, the stolen computers were found in a paddy field, but the culprits were not identified. It was assumed that the thieves had secretly placed them there during the night. The responsible officers retrieved the computers and set them up in the same place. Upon inspection, it was found that the biometric data collected earlier was not damaged. The enrollment process continued, but no individuals were identified as guilty.

According to the CDO, every district and society has its own local work culture and leadership practices. Meeting an enrollment target set at the ministry level is challenging at the district level due to the local context. In addition to the theft of computers, in Sarlahi district, there were challenges in implementing enrollment because data entry operators and office personnel often refused to cooperate. Instead, they pressurized the authority, citing political connections or

57 (Interviews, CDO Sarlahi, ICT officers in Sarlahi and Khotang also second this perspective, 21 September 2022).

58 (Interview, 21 September 2022).

59 (Interview, 12 December 2024).

leverage and demanded more facilities and allowances. They were inconsistent in showing up for work and disobeyed orders. Initially, they worked as expected, but gradually became reluctant. These issues delayed meeting the minimum enrollment target at the mobile camps. When the timeline for the mobile camps was 15 days, on the 14th day, leaders from the area visited the district office to request an extension. After several discussions, the CDO made it clear that they would not be paid if basic requirements were not met. Despite repeated postponements, the enrollment work gained momentum thereafter.

During the study, it was observed that even after multiple mobile camps in villages, there was a significant daily queue of people visiting district offices to enroll because they had not been able to do so earlier. They needed the National ID, especially for travel abroad. The CDO noted, that there was an assumption that pressure on the DAO would decrease after the mobile camps, but this was not the case. The daily pressure at the CDO office remained high.

Digital literacy

Unlike Sarlahi and Khotang, in order to envision a "Digital Nepal", one must imagine a country where digital governance is robust, and where service providers and users have the ability to utilize digital technologies for accessing information, communication, and collaboration. Without a robust digital system, efficient broadband, a wider network, and a regular supply of electricity, the foundations of digital governance would not fall into place. Lack of knowledge and skills, and a consistent commitment to improvement, would also hinder the effective use of digital information. While power outages and system failures were reported to be concerning in Sarlahi, they were seen as normal in Khotang. In both districts, service providers and end-users are said to be in the early stages of running and using digital services.

A policy on "Digital Nepal" asserts that new technology will "empower citizens by enhancing connectivity, increasing the availability of e-services, boosting e-commerce, and creating job opportunities in the digital economy."[60] However, the IT officer at the district office mentioned that digital literacy is a significant issue among users, including within the government system. In Sarlahi, it is estimated that about 70 percent of the district population has access to Facebook and TikTok, but less than 20 percent visit government websites. Civil servants are also reportedly unaware of the digital content available on their office website. The CDO office relies on less trained human resources who are still learning to navigate digital systems, despite efforts to enhance their digital skills.

In the public domain, numerous private institutions and NGOs offer educational training and programs to help people acquire skills in reading, writing, using computers, operating portals, and handling smartphones. However, these activities are situated in a complex socio-technical environment that presents multiple challenges to using digitally enhanced services. Being digitally literate involves not just knowing how to use computers or gadgets but also understanding when to utilize digital tools and when to seek human assistance.

Understanding the network of relevant institutions and confidently communicating with authorities when the digital system is not functioning efficiently is crucial. Civil society and media can play a significant role in this regard. In both Sarlahi and Khotang, it was noted that journalists and civil society members

60 (Government of Nepal, 2010).

lacked digital literacy and were uninformed about ongoing digital initiatives in their areas, including National ID measures. They were not well-equipped to address the needs of users.

Regular observation can also improve the ability to comprehend and evaluate digital skills. A lawyer in Khotang, who frequently visits the District Administration Office, mentioned that he has learned a great deal about technology by closely observing "a section that handles photos, biometrics, stamps, form filling, and more." He believes that providing user-friendly promotional material about the importance and usage of ID cards is crucial, as verbal information and one-time orientations are insufficient. He expressed skepticism towards the government's traditional instructions delivered in a rush manner, stating that they do not effectively educate users on biometric technology and its applications.[61]

Poor infrastructure

The Digital Public Infrastructure (DPI) is very weak, contributing to uneven access to patchy computer networks. In places like Sarlahi and Khotang, online networks experience irregular breakdowns, commonly referred to as "system failures." ICT staff at DAO face "frustrating interruptions" due to gaps in electricity supply. Both in Khotang and Sarlahi, the CDO the need to overcome multiple breakdowns, emphasizing the importance of addressing gaps in infrastructure and maintenance. They also noted that while the federal government should invest in DPI, its focus has been on setting ambitious targets rather than investing in the basics.

Poor infrastructure directly impacts the quality of services. In Khotang, there were numerous issues with processing and verifying ID enrollments, often resulting in "system failures" preventing people from enrolling. Many individuals has to wait in long queues, only to return home without being enrolled. While a coupon system was introduced to alleviate wait times, technical issues prevented its successful implementation. Limited computers and staff mean that citizens had to pay additional service charge to private computer operators to complete their forms.

Junior officers repeatedly raised DPI concerns with the CDO, urging urgent action to address technical issues. However, their efforts were not taken seriously and government officers showed little consideration for the problems faced by their subordinates. The CDO cited the challenges of working in a rural area with limited technological resources and skilled personnerl, making it difficult to utilize technology effectively.

In Sarlahi and Khotang, mobile stations were established for biometric enrollment, but most data collection occurred offline, leading to errors in enrollment data.

This highlights the limitations of DPI and the additional burden it places on District Administration Offices requiring non-technical staff to assist with enrollment process.

Due to a history of chronic governance issues in Nepal, there is a prevailing negativity surrounding technical problems. For example, when services at the DAO in Sarlahi were shut down for three days due to technical issues, many locals doubted the validity of the shutdown, attributing it to corruption or lack of transparent communication. Participants in focus group discussions expressed frustration, with one noting that technical problems were often used as excuses for bribery. Another participant highlighted the lack of transparency, noting that users may not be aware of legitimate technical issues versus fabricated excuses.

61 (Interview, lawyer, 1 November 2022, Khotang)

IV. DISPUTES AND DIFFERENCES

The National ID system is based on the World Bank D4D model. Despite its universal approach and the Nepal government's commitment to make it mandatory for all residents, the Digital ID is only given to citizens with citizenship certificates. This excludes millions of residents, including single mothers, who have been denied access to citizenship certificates. In the National ID enrollment process if there are unclear records regarding citizenship certificates other official documents such as licenses, educational records, or land records can be used to verify individual data. However, these documents only serve as supporting documents for cross identifying individual records, rather than being eligible for enrollment for an NID. The National ID and Civil Registration Act and Regulations clearly state that no government authority or local officer can grant an NID to a resident without citizenship certificates.

Since the Digital ID system is closely linked to citizenship laws and is limited to nationals, it will not address the legislative gaps related to discrimination based on membership. Due to the high entry requirements, residents without citizenship cards are automatically excluded from accessing digital rights and services.

The National ID is designed to be a functional ID with its main objective being the digital identification of all citizens.[62] Once digitized, citizenship status and rights are linked to citizenship certification, allowing interoperability for accessing public services such as land registration, transportation, and social security benefits; for accessing private services in commercial banks; and for official offline use when necessary.[63] For the government, its primary function is to enhance surveillance for public security and crime control, including immigration regulations.

Immigration was a convenient starting point to make enrollment mandatory. When the government made NID compulsory for obtaining passports in November 2021, the Office of Immigration began requiring a NIN number. This added another bureaucratic hurdle to the already complex passport application process. The high numbers of Nepali migrants means there is significant demand for passports, and the NIN requirement led to a substantial increase in enrollment. While making the National ID mandatory for foreign travel naturally increased enrollment pressure, the government was not equipped to handle the enrollments and distribute NID cards at that pace. In 2021, the mandatory enrollment for NID to obtain passports came at a time, when even citizens who enrolled in 2019 had not yet received their Digital IDs in Sarlahi, Khotang, and other parts of the country.

62 (DoNIDCR, 2024a)

63 Ibid.

Box 6: Mandatory Provision

"The government had mandated the NID for accessing several services such as bank accounts, social security allowances, and public service exams.

In **July 2024**, Nepal's Supreme Court issued an interim order suspending the mandatory requirement of the NID for accessing public services.

Starting January 2025, the **NID number is mandatory for opening new bank accounts** as per the directive from Nepal Rastra Bank.

Following public criticism, the government reversed its earlier decision to require the NID for social security allowances, recognizing the barriers citizens faced in obtaining the card.

The mandatory nature of the NID raised concerns about inclusivity and data privacy. Many civil rights groups and citizens have expressed worries over how biometric data is stored and protected."

Pending Verification

During the enrollment process one common problem faced by many citizens was pending verification. Their data was unverified for reasons unknow to them. In addition, several particular cases pending verification had two common patterns.

The first common pattern was tied to the administrative history of the distribution of citizenship certification. It is common to find mistakes and variations in dates of birth and spelling of last names, particularly among the poor, less educated, and illiterate. Due to these variations, they are either barred from applying, or their online entries are often rejected with a "pending" status. They were then required to go through a bureaucratic procedure that they have already completed in the past to issue a new citizenship certificate. This has not only added additional burden for users, but has created unnecessary pressure at the District Administration Office, where there is always a long queue of migrant laborers aspiring to issue a citizenship certificate. During our visit to the DAO in Sarlahi, the unceasing administrative pressure and cumbersome service was starkly visible, among other things, due to gaps between existing service points and the flow of residents accessing services like citizenship certificates and National IDs.

The second pattern was tied to different kinds of human errors while filling out forms, and also to the mechanism where mobile stations processed offline application. Once the mistakes were detected, the enrollment form went into pending status.

In both situations, citizens were supposed to redo the whole process to verify their application for enrollment.

Missing proper information

The users, who should be at the center of the project, seemed to be either misinformed or uninformed about the real use of the NID. Many government officials at the central level shared that end-users are ill informed due to limited discussion even at the higher level and hasty implementation.

The FGDs and interviews with citizens in Sarlahi indicated that most citizens were not properly informed by the authorities about the purpose and usage of the National ID. Questions like why NID, how does the biometric card look like,

and how NID works. In all the FGDs that were conducted in Sarlahi and Khotang, most of them said that they enrolled for NID because they were told that it is "mandatory" and that NID will replace the citizenship certificate in future. When asked, who told them it will replace the citizenship certificate, the answer leaned more towards hearsay than authentic information.

Compared to Khotang, in Sarlahi, some of them thought that it would be similar to an Indian *Aadhaar* card that would give them several benefits. When asked who talked about *Aadhaar* and what kind of information was shared, again, the answers were vague and based on hearsay. FGDs participants also pointed out the fact that to inspire locals to fill up quickly this kind of noise was spread out [*staniyalai chhito bharnako lagi yasto halla chalaye*].

In all three FGDs conducted with women and marginalized individuals in Sarlahi it was found that the reference of *Aadhaar* was used by local leaders considering that people would see an incentive in enrolling immediately, but citizens only found out later that no additional services would be available. The users, who are said to be the main beneficiaries of biometric identification, were either misinformed or uninformed about the real use of the NID. It was found that beside running a brief orientation to local staff and concerned authorities, and providing quick guidance to citizens at the enrollment station, the government had not invested in biometric sensitization.

Government officials at the central level shared that end-users are ill informed due to limited discussion and a rush for hasty implementation even at the higher level. This hurriedness without a real assessment of digital public infrastructures and basic commitment to education and outreach programs has shaped the communication landscape, opening spaces for disinformation.

Both in Sarlahi and Khotang, it was also found that in comparison to men, women were less informed about the NID. Most of them went to enroll just because the men in their family took them along or asked them to go. Upon asking an FGD comprising women participants if they knew about the NID mobile team in Godaita, Sarlahi, two said, "We don't know. We are daughters-in-law of this village so we don't know about that." In further discussion it turned out that they were not conferred with citizenship certificates, so they were not informed about it. A respondent in Khotang responded with a scenario where, for example, an orphan kid who grew up without family, "might not know the name of their own mother, let alone that of their grandfather and grandmother."

Information about being "mandatory for all" is misleading for residents who are Nepali citizens but are denied access to citizenship certificates based on birth, marriage, or other reasons. Despite all this, the "mandatory" aspect of the National ID is overwhelming, and people are being enrolled to access the NID Cards, even with poor or limited information.

Standardizing Bodies

Biometric tools in use are attempting to standardize both bodies and social divides. Simply developing "general" technological tools should not perpetuate discrimination.

It has been noted that class and ethnic divisions are being perpetuated during the implementation of biometric enrollment. Workers who regularly handle coarse materials, such as sand and iron, or work with different chemicals in paddy fields or factories, have

experienced issues with biometric machines not properly recording their fingerprints. The machines often require multiple attempts to recognize the fingerprints of workers who engage in physical labor. In Khotang, it was reported that,

"the system struggles to record the fingerprints of those who have been working outside in the village, especially those in the construction field, who are exposed to cement and sand."

An officer at the DAO office mentioned that, due to the mandate to make the card enrollment mandatory, he categorizes those with difficulty as "damaged" to ensure their enrollment. Sometimes, using sanitizers and pressing the users' hands together can help with biometric authentication, but in many cases, it does not work. When data is marked as "damaged" their "passport verification is also affected as the fingerprints do not align," making it difficult to access their passport or resulting in rejection.

Workers are concerned that if their fingerprints become rougher in the future, the machines may fail to verify their fingerprints. Officers do not have a satisfactory answer to this issue other than consoling the users.

Citizens who have not been officially identified due to a "pending" status, and those who have difficulty verifying their identity on the spot, often through fingerprints, are frequently excluded. Reports of migrants being unable to travel abroad for employment due to being "not verified" for NID registration because of faded fingerprints or "pending" verification status are increasing.

Respondents reported experiencing ethnic discrimination due to the use of technology. In Khotang, there are numerous cases where ethnic individuals have to undergo multiple rounds of iris scans due to the application of generic technology. The iris scanner more easily recognizes the bodily features of dominant groups than those of marginalized communities. Ethnic individuals in Khotang experienced discrimination, especially verbal, while undergoing multiple iris scans.

An officer responsible for taking biometric records at the CDO office admitted that there are difficulties in taking retinal scan of local citizens with diverse features, especially senior citizens."[64] The officer mentioned that due to the "specific eye features of ethnic individuals, they sometimes have to assist them during iris-scans."[65] This issue was reported to be more common in Khotang, especially among senior citizens with no such problems recorded in Sarlahi.

During a research consultation program organized with differently-abled individuals and activists reports of "ill treatment by government officials" were shared. Differently-abled individuals, who may be slower due to their physical condition were mistreated while submitting biometric data. This sharing program highlighted the lack of sensitivity and awareness among government officers about providing fair and just service.

Lack of Public Consultations

Biometric identification is the digital ID directly linked to every citizen. It is one of the largest digital projects in Nepal aimed at digitizing identification, to improve the efficiency of public services. The digital ID allows accesse to basic services such as public identification, social

64 (Interview, 30 October 2022, Khotang).
65 (Ibid.)

security allowances, migration opportunities, banking facilities, and more, all directly impacting people's lives.

When developing its legislations and guidelines, the government did not show commitment to follow rigorous and transparent parliamentary deliberations to inform the nation about this project of foundational importance to society. There were no consultations with stakeholders from various backgrounds to increase public ownership or inform citizens. The lack of systematic public consultations and involvement of NGOs during implementation hindered the project's transparency.

Our consultations with CSOs in Sarlahi, Khotang and Kathmandu revealed that government agencies did not provide sufficient information on the National ID. Information on digital identification, biometric data, and how the National ID was not effectively produced, promoted, or distributed. The information available on the DoNIDCR website was limited to "frequently asked questions" and only in Nepali. When enrollment began in places like Khotang and Sarlahi, citizens were not adequately informed, contradicting the government's claims of transparency. Millions of residents without access to citizenship certificates were excluded from enrollment, failing the promise of including all residents for digital identification.

In a consultative meeting with people with disabilities, the lack of proper information highlighted. There were no special mobile camps organized for persons with disabilities to enroll, leading to additional physical and bureaucratic hurdles. User-friendly information accessible to persons with disabilities was lacking, making it difficult for them to access information through visual and auditory means. Additionally, there were instances of mistreatment and discrimination towards people with disabilities at enrollment stations and the DAO.[66] Many reported "feeling ill treated by government officials" due to their physical condition affecting their pace while submitting biometric data.

Misinformation or the lack of proper information was reported in both Khotang and Sarlahi. In both districts separate consultations with media practitioners, FNCCI members, and civil society actors reported similar experiences. They were not invited to any public consultation when the enrollment for the National ID started in their district. They lacked basic information about the digital system and how the digital ID would be used. They highlighted the need for digital sensitization and acknowledged their lack of awareness about the biometric database and its use.

In contract to Sarlahi and Khotang, consultations with CSOs in Kathmandu, indicated that, depending on their engagement, orientation and interest people had different kinds of information and various levels of understanding about digitization and the function of the National ID. They also expressed unanimous concerns, doubting how the government would ensure data authentication while maintaining individual privacy of the database. In the absence of public consultations and at the stage where the National ID cards were not yet distributed, they expressed confusion about how the digital ID would contribute to transparency and good governance. Echoing similar concerns raised by people with disabilities, they voiced that the government is not committed to sensitizing public officials by providing technological training that is friendly to demographic diversity and LGBTQI+ community. Almost unanimously, CSOs expressed serious concerns about

66 (FGD with people-with disabilities, 20 July 2024).

tendencies to prevent them from facilitating digital platforms and public information that could have benefited end-users.

FGDs in Sarlahi and Khotang illustrated that the lack of public consultations had a direct impact on the limited understanding of citizens and on limiting the active role of CSOs. The study also found that end-users are mostly uninformed about the function of the National ID and the benefits would receive once the digital ID is implemented. Many were misinformed about the program, led to believe that they would receive rations or relief funds once enrolling for their NID. Poor communication and circulation of misinformation led them to perceive the NID as similar to the Indian *Aadhaar,* indicating the spread of misinformation. Reference to *Aadhaar* was more common in Sarlahi. All these questionable actions in relation to transparency highlight how the dissemination of authentic information remains a crucial step to enable good governance. The government could have provided information through different mediums, and where necessary produced and circulated it in different local languages. To maximize such actions, the government could have also collaborated with civil society organizations.

V. RIGHT TO PRIVACY

Article 28 of the Constitution of Nepal guarantees the right to privacy and protection of personal information. The Privacy Act 2075 was authenticated in September 2018 and the Individual Privacy Regulation 2077 was enacted in 2020 to give effect to the provisions related to privacy and data protection. Regarding data security of the individual the government claims that the data system is impressive. It uses an AES-256 encrypted data system and its safeguard measures are of "global standard". By enabling a secured use of databases the individual's data remains locked inside a tiny chip and nobody else can pretend to be anybody to manipulate data.

Given that the use of NID has not gone digital so far, how operational and technical controls will follow a "security-and-privacy-by-design" approach is yet to be seen. It was found that even staff at DoNIDCR are not clear how privacy and security controls are built into NID technology and processes. Together with a "secured approach," basic minimum information on the system function at the higher level has not been properly shared. A section officer responsible for data verification at DONIDCR mentioned that even officers of his level are not properly educated, trained, and sensitized about information and communications technology (ICT). The connection between the secured mode of biometric data and its public uses is not well shared with those who need to understand it better. It was found that pro-active consultations and communication within the DoNIDCR to design and implement outreach and education campaigns while NID was rolling out its implementation were as limited as they could be. The absence of such outreach and campaigns early on to consult with the public on privacy and data protection issues mean the uses of the NID system and the protection they offer by giving people more control over their data are in question.

During the field work it was found that due to a lack of systematic outreach and information campaigns the users have a very low level of digital literacy. No transparent communication about privacy and protection of data and the use of these systems was on offer. It was found that people have no clue or are less aware of the threat to privacy, which is implicit in the personal data they have submitted. They said they submitted biometric details because they were asked to do so; they did so without knowing about its immediate function and potential use. Many of them have hardly considered risks associated with privacy and data breach, expressing cluelessness about how various controls will help mitigate such risks. Many others are skeptical and "have a feeling" about data risks but "do not know how to put it into words."

In the past, and even now, it was common to give one's Citizenship Certificates to family members, trusted friends or neighbors when in need. The sharing of this foundational document would span all kinds of official uses in public and private sectors, from setting up small enterprises to purchasing shares or property, from taking debt to obtaining memberships in community groups. Due to such practices, for many users, sharing personal information, even in a digital sphere, is considered "normal". At the same time, many also shared instances of violation of property, data, and correspondence by taking control of their citizenship certificates.

Under the section of fundamental rights in the Constitution of Nepal the word "privacy" is coded once. It captures the right to privacy as "inviolable" of any person's "residence, property, document, data, correspondence, and matter relating to the character" but "except in accordance with the law."[67] The explicit reference to the right to privacy is a significant step towards upholding privacy rights. But the apparent flexibility of the meaning of privacy, and its legal accordance in the constitution, makes it more difficult to define what privacy means and what measures should be developed to protect the right to privacy. This difficulty is growing as Nepali society is facing new technological realities and the government is rapidly pushing towards digital governance.

Biometrics is a new technological reality for Nepal. From the immigration office to smartphones, both the public and private sectors are making extensive use of biometrics for human recognition purposes. The promise is to provide better security, with improved and efficient services. As technology becomes economically viable and technically advanced, the use of biometrics is likely to change the way Nepalis engage in the new world of personal information. Nepali society has grown more complex and people have become more interconnected in every way. In the face of new technological realities, everyone needs to learn a new way to respect the privacy and dignity of a fellow citizen. The country needs to work harder to ensure citizens' privacy and freedom.

Understanding biometrics and the possibility of infringing on the personal data of citizens is essential for elected officials and policymakers. They are likely to shape a policy domain determining how this new technology would be used. An apprehension of biometrics is important for business, legal, and policy advocates, so that they can meaningfully participate in the debate related to biometrics. In the legal and policy spheres, new technological realities will spearhead new laws, while old legal doctrines will be rekindled and rethought by policy makers. However, the government has invested in and engaged with new technology in a very confined manner.

While issues around privacy are being discussed, private companies such as Idemia hardly feature in Nepal's biometric debates. This is because in today's new technological reality of biometrics, what is required to safeguard the public interest and to ensure citizens' freedom is a difficult question. A report titled *Exposing Idemia: The Push for National Biometric IDs in America* not only indicates that Idemia is ever-assertive lobbying for national biometric identification in the global north, but also how a private company such as this is a threat to individual freedom.

In an attempt to "acquaint Americans and their elected representatives with Idemia and biometric ID cards," Twila Brase and Matt Flanders write, "current or future augmented

67 (The Constitution of Nepal, 2015).

identification requirements could negatively impact individual freedom and patient access to medical services".[68] The concern comes from a doubt that any private company that "make the rules" behind the walls can also hold the data hostage.

This is the same private company that is providing all technical support to Nepal's biometric data. If a private company can collect or have access to personal data on Nepalis without consent, like in America, "they also have the power to use that data to interfere in the personal lives and private choices of individuals".[69] Beyond the renewal of the Idemia contract, their potential use and abuse of data demands serious public debates in Nepal.

A joint-secretary at the Ministry of Communication and Information Technology, who was earlier involved in the making of the National ID bill, accepts the fact that while the government is capable of ensuring physical security and secure data access, it is technically not well-equipped to develop its protection system. If such situation remains for long, as stated by the officer, "growing interference in the personal lives and private choices of Nepalis" would invite many problems in the future.[70]

Those already vulnerable and marginalized are likely to face more threats to their privacy and fundamental freedom. Inhabitants of both Khotang and Sarlahi go abroad to work in high numbers. Due to their precarious living conditions, migrants and vulnerable people have a history of storing their personal records and documents poorly. Documents are often in bad order, condition, or have incorrect records. These practices have already been linked to exploitation and abuse by agents and private companies, added with pre-required submission of personal documents, including travel ID such as a passport.

With the additional demand for digital ID, migrants and vulnerable are once again forced to rely on private cyber cafes to fill enrollment forms. To fill digital forms for citizens several application processing centers and/or cyber cafes are usually located nearby CDO offices and immigration offices. The privacy risks are enormous as the poor and vulnerable are forced to rely on these private services, where their personal information is instantaneously accessible to the third party. Instances where migrant workers realize that they have been cheated, sold, or subject to abuse, only on arrival at their foreign destination, but because they had earlier submitted all their personal information without confirming the details of their employment are plenty.[71] Also, there are many examples of sim-card users having their personal information used against them because they shared it without being cautious. While this exploitation seems to have been "normalized" in Nepal's public life, several outgoing migrants said that forcing them to submit their personal information at random cyber cafes has put their lives at additional risk.

These enormous security risks need to be immediately checked by providing free and secured enrollment services. However, the government's "rush" to implement the national ID project, without enough preparation and adequate resources has continuously created openings of privacy violations, as citizens are once again exposed to unsafe data sharing.

68 (Brase and Flanders, 2018, accessed 2 March 2023).
69 (Ibid.)
70 (Nayapatrika, 2079 v.s.)
71 (Baniya et al, 2023).

While districts like Sarlahi are recording several cases of cyber-crime, in smaller hill towns like Dikhtel in Khotang, instances of cyber-crime are relatively low. A lawyer in Khotang mentioned, such cases are not even recorded here. Only cases like someone berating someone on social media, or publicizing someone's personal information are recorded, and these cases are very limited in number. He further explained that, "maybe because the cases of cyber-crimes are not registered in the district office, we don't see them often; instead they are registered as cases of indecent behavior, where depositing bail and setting a court date to reach an agreement to not repeat indecent behavior is the norm". He added, "the person is let free like that because there is no mention of the nature of the cyber-crime in a written form." A case of indecent behavior would entail swearing, usage of abusive language, bad treatment, etc. and these are resolved by facilitating an agreement between the two parties with a promise to not repeat this kind of behavior again."

Security vs privacy

Privacy rights of citizens are often compromised or ignored, especially during times of crisis or in the name of "national" security. The Privacy Act Nepal 2018, also provides exceptions to privacy rights during emergency security checks, health treatments, health examinations, disaster management, and authorized interceptions. Due to these loopholes, citizens are forced to prioritize their security over privacy, creating a complex situation, particularly for disadvantaged and vulnerable individuals and groups.

For example, voters' privacy was jeopardized by the Election Commission citing "public disclosure" and "transparency".[72] Body & Data's analysis of privacy laws explains these loopholes that violate the privacy of women, children, or people with disabilities in the name of health emergencies, treatments, or women's privacy in legal proceedings such as divorce cases. In cases where women's sexuality is stigmatized, their privacy regarding sexual health, STIs, or pregnancy/abortion must be protected at all costs, as the impact could be severe among vulnerable groups.

Given that our laws are patriarchal and contain loopholes, the use of biometric information authorized by law and justified by security or development narratives can jeopardize vulnerable groups. Narratives of security and development should not come at the expense of the rights, security and freedom of disadvantaged and vulnerable individuals and groups.

During a consultative meeting with civil society representatives, a member expressed concern about safety and privacy, noting that the government had not provided enough information about data privacy, data security, and its public use. FGDs in Sarlahi and Khotang revealed that there had been inadequate dissemination of information about biometric data collection and data protection, indicating that people were being enrolled without a basic understanding of data privacy and security.

72 (The Kathmandu Post, 2022).

VI. MOVING FORWARD

The focus of this report has been on the processes of designing the NID, its legislative measures, implementation practices, and citizens' concerns. Body & Data found that the National ID program has remained top-down and ambitious, with policy processes that were less consultative and non-participatory. All major procurements went to the same company. Prior to enrollment citizens were not properly informed about biometric information and its use. It was also found that even civil society organizations and local communities were the least informed about digital enrollment, issues surrounding digital privacy and security, and its impact on the poor and marginalized. Building on the previous work and recommendations by Body & Data (see Box 7), the report proposes a range of recommendations, from broad to specific, for the government, private sectors, and civil society organizations.

Box 7: **Findings and Recommendations from *Digitization of Identity in Nepal*: Efforts, Experiences, and Effects**

Body & Data is hopeful that Nepal's policymakers will acknowledge that mandatory national digital ID systems collecting excessive amounts of personal demographic and biometric data from citizens must have robust governance and accountability protocols in place to protect the human rights of individuals, especially those from marginalized communities. For example, Nepal's NID card duplicated itself with other data collection initiatives at the state and municipal levels and shared centralized databases with public and private sector organizations in a manner that a leading digital rights organization, Access Now, calls a 'heedless collect-it-all or link-it-all approach.' These approaches pose unnecessary data privacy and information security risks for those whose data is collected and shared. We recommend the government of Nepal to adopt fair, accountable, and transparent digital policy processes that embrace multistakeholder consultations and conduct regular impact and risk assessment surveys of these policies ensure that legal safeguards and necessary laws are revised to plug loopholes and clarify ambiguous exceptions to protect such data and minimize its extra-judicial use. Along with strict governance standards, the government must adopt a strategic communication policy that credibly and completely informs all aspects of the program to prevent misinformation. While we appreciate and understand the benefits of using technological solutions to enhance public service delivery mechanisms, private sector identity verifications, and reduce leakages and corruption in existing service delivery mechanisms, we also recognize from our work with grassroots and vulnerable communities in the online space that deep-rooted socio-cultural structures marginalize them and their challenges. These social barriers require more contextual and nuanced interventions for their upliftment and inclusion. It has been found that biometric-based digital IDs tend to exclude such groups rather than include them. Therefore, we strongly recommend that the government not exclude people from services regardless of possession of NID.

The first set of recommendations is for civil society organizations and researchers. The second set of recommendations is for our policymakers to adopt a framework that includes adequate attention to accountable and transparent procedures and governance, data protection, digital privacy, and information security. In conclusion, we appeal to all readers of this report to engage with us on any issues we may have missed, so that together we can build a digital Nepal that is safe, just, and fully representative of all citizens.

Recommendations for researchers and civil society organizations

- Follow up with an in-depth, mixed-methods study
- Collaborate with other civil society organizations working on digital rights
- Collaborate with other CSOs working at the intersection of social justice and digital policies
- Engage with government and private sector actors to inform about grassroots challenges
-

Recommendations for policymakers

- Adopt fair, accountable, and transparent digital policymaking and governance processes
- Protect data and digital privacy of citizens
- Ensure robust cybersecurity standards and protocols
- Reevaluate the use of technological solutions
- Create a national digital literacy mission

Ensure a universally accessible foundation for the Digital ID system for all residents, free from discrimination. The National ID system designed for digital identification, by linking with civil registration and social security, has not been inclusive for all. It is only given to citizens with access to citizenship certificates, automatically excluding millions of residents from digital services. Claiming to be the core identity source is questionable as the NID is not a marker of citizenship. By relying on citizenship certificate eligibility, it creates discriminatory and unequal digital access for all residents.

Enable integration and interoperability of identity systems. The NID has made progress by creating unique identity numbers linking identification records and civil registration. It aims to provide a unique identifier from birth. To use the NID for services or issuing a functional ID, verification of multiple credentials must be digital by integrating foundational databases. Without true national population registers and real-time record updates, both the integration and interoperability will remain low.

Improve digital public infrastructure for better service delivery. Government commitment to interoperate social security through the National ID requires secure digital verification and authentication. This necessitates robust, long-term investment in digital public infrastructures. Top-down digitalization ambition without improving these infrastructures won't enhance efficiency, accessibility, or security. Creating a responsive interoperable platform, and preparing agencies to overcome digital divides are essential.

Ensure a secure system of authentication and data use. The National ID system aims to allow service providers, to authenticate credentials against a central database. Nepal lacks infrastructure for secure biometric authentication. Biometric use must ensure secure storage, management, and authentication to prevent data breaches. The state needs to secure a database of this magnitude for accessibility, compatibility, and reliability.

Upskill the public workforce for effective digital governance. Government agencies need significant preparation and investment for digital services in a society with weak digital infrastructure and deep digital divide. Local government agencies need consultation to measure capacity and assess social context for improving digital services. Upskilling the public workforce is crucial for serving urban and rural populations effectively.

CSOs can play a critical role by collaborating with vulnerable groups to ensure data privacy and social justice. The National ID system and its biometric databases have not yet been implemented for interoperable digital use. There is a significant concern regarding data privacy and secure authentication, and civil society organizations need to take on a crucial role in protecting data and privacy, as well as promoting social justice. This includes holding government agencies and private institutions accountable. CSOs can also enhance digital literacy by helping individuals acquire the skills needed to utilize digitally enhanced services.

Promote evidence based public discussions for a robust digital sphere. Lack of clarity on digitized inclusive practices and welfare measures can exclude millions of residents, especially those without citizenship certificates. Vulnerable groups face higher exclusion rates due to poor digital infrastructure accessibility. Evidence-based public discussions, from CSOs and academics are crucial to hold government and private companies accountable. These discussions can improve meaningful citizen participation, mitigate exclusion risks, and ensure data protection.

Nepal aims to benefit from improved civil registration and National ID systems. By providing citizens with a digitized legal identity, Nepal seeks cost savings, fairer elections, efficient social protection programs, improved fraud detection, reduced transaction costs and quality data for decision making. However, with the NID document's coverage far from universal, Nepal's ambition to benefit from digital databases has a long way to go.

References

Aiyar, Shankkar. 2017. Aadhar: A Biometric History of India's 12-Digit Revolution. Chennai: Westland Publications.

Ajana, Btihaj. 2012. Biometric citizenship. *Citizenship Studies* 16 (7): 851–870.

Albro, R., G. E. Marcus, L. McNamara and M. Schoch-Spana, eds. 2012. *Anthropologists in the Securityscape: Ethics, Practice, and Professional Identity*. Walnut Creek, CA: Left Coast Press.

Baniya, Jeevan, Sanjita Shrestha, Sadikshya Bhattarai, Dogendra Tumsa, Bipin Upsdhyaya, Rajeb Neupane and Prasansa Thapa. 2023. *Unscrupulous Recruitment And Precarious Employment of Nepali Migrant Workers.* Kathmandu.

Bhusal Thira Lal. 2024. National ID number is sufficient; you don't need a hard copy. Interview with Yubaraj Katel. https://kathmandupost.com/interviews/2024/06/16/national-id-number-is-sufficient-you-don-t-need-a-hard-copy

Body & Data. 2022. *Nepal's Biometric National Identity Card: Experiences and Expectations from the Community.* Kathmandu.

Breckenridge, K. 2019. The Global Ambitions of the Biometric Anti-Bank: Net1, Lockin and the Technologies of African Financialisation. *International Review of Applied Economics* 33 (1): 93–118.

Brase, Twila and Matt Flanders. 2018. Exposing Idemia: The Push for National Biometric IDs in America. *Policy Insights*, February https://www.cchfreedom.org/files/files/Policy%20Insights%20-%20Idemia.pdf (accessed 2 March 2023).

Buggeland, Anne. 1999. Citizenship, Tenancy Rights and Identity: The Case of the Santals/Satars of Jhapa. In *Nepal: Tharu and Tarai Neighbours.* Harold O Skar, ed., pp. 97-117. Kathmandu: Bibliotheca Himalayica.

DoNIDCR. 2024a. *Annual Progress Report (Fiscal Year 2023/24).* Kathmandu: Department of National ID and Civil Registration (DoNIDCR).

DoNIDCR, 2024b. Second Quarterly Report of Department of National ID and Civil Registration 2024/25 [In Nepali]; https://donidcr.gov.np/Files/DOC-1be14c7d3-7216-445b-898a-a845ffd2de27.pdf (accessed 27 December 2024).

DoNIDCR. 2023a. FAQ: National ID. https://donidcr.gov.np/Home/NationalIDFaq (accessed 21 February, 2023).

DoNIDCR, 2023b. First Quarterly Report of Department of National ID and Civil Registration 2024/25 [In Nepali], (accessed 27 December 2024).

Fuller, Gillian. 2003. Perfect Match: Biometrics and Body Patterning in a Networked World. *Fibreculture* 2 (1): http://one.fibreculture- journal.org/fcj002/print

Gelb, Alan and Anna Diofasi Metz. 2017. *Identification Revolution. Can Digital ID be harnessed for Development?* Center for Global Development.

Gelb, Alan and Julia Clark. 2013. Identification for Development: The Biometrics Revolution. Washington, DC: Center for Global Development, Working Paper 315.

Government of Nepal. The Privacy Act 2075 (2018), Pub. L. No. Act Number 14 of the year 2075 (2018).

Harsha Man Mahajan. Privacy, Security Issues Of National ID Card. Martin Chautari (blog), March 6, 2021. http://www.martinchautari.org.np/blogs/1059

Himalayan News Service. 2019. Govt told to halt distribution of National ID cards. The Himalayan Times, https://thehimalayantimes.com/nepal/government-told-to-halt-distribution-of-national-id-cards, (accesses 21 February 2023).

Lal, Abha. 2022. Nepal's Biometric Future. *Himal South Aisan* https://www.himalmag.com/biometric-future-identification-nepal-2022/ (accessed 2 March 2023).

Lebovic, Nitzan. 2015. Biometrics, or the Power of the Radical Center. *Critical Inquiry* 41(4): 841-868.

Maguire, Mark. 2009. The birth of biometric security. *Anthropology Today* 25 (2): 9–14.

Pandey, Romkant and Suresh Bahadur Diyal. 2023. A Study on the Situation of National Identify Card in Nepal: implications and challenges. *Educational Journal* 2(2): 10-26.

Rao, Ursula. 2019. Re-Spatializing Social Security in India. In *Spaces of Security*, edited by S. Low and M. Maguire, 231–252. New York: New York University Press.

Sigdel Santosh. 2023. National ID Card System: A misguided priority. https://www.nepallivetoday.com/2023/06/29/national-id-card-system-a-misguided-priority/

Shrestha, Prithivi Man. 2024. Digital identification to be assigned during birth registration. The Kathmandu Post, March 4, https://kathmandupost.com/national/2024/03/04/digital-identification-to-be-assigned-during-birth-registration, accessed 9 January 2025.

The Kathmandu Post. 2024. Ideate before implementing [editorial]. https://kathmandupost.com/editorial/2024/08/21/ideate-before-implementing

The Kathmandu Post. 2024. Government backtracks on plan to make National ID cards mandatory for social security allowance. https://kathmandupost.com/national/2024/07/11/government-backtracks-on-plan-to-make-national-id-cards-mandatory-for-social-security-allowance

The Kathmandu Post. 2024. Digital identification to be assigned during birth registration. https://kathmandupost.com/national/2024/03/04/digital-identification-to-be-assigned-during-birth-registration

World Bank. 2016a. World Development Report 2016: Digital Dividends: Overview. The World Bank Group.

World Bank. 2016b. *Digital Identity: Towards Shared Principles for Public and Private Sector Cooperation: A joint World Bank Group – GSMA – Secured Identity Alliance Discussion Paper.* GSMA, World Bank Group and Secure Identity Alliance.

Zelazny, Frances. 2012. *The Evolution of India's UID Program: Lessons Learned and Implications for Other Developing Countries*. CGD Policy Paper 008. Center for Global Development, Washington. https://www.cgdev.org/publication/evolution-in- dia%E2%80%99s-uid-program-lessons-learned-and-implications-other-developing

Ziewitz, Malte. 2016. Governing Algorithms: Myth, Mess, and Methods. *Science, Technology, and Human Values* 41 (1): 3–16.

Nepal's Biometric Present:
Governance, Accessibility & Accountability

Body & Data is a digital rights organization in Nepal that aims to increase women and queer persons' engagement in digital spaces through suitable strategies for expression, autonomy and agency.

bodyanddata.org