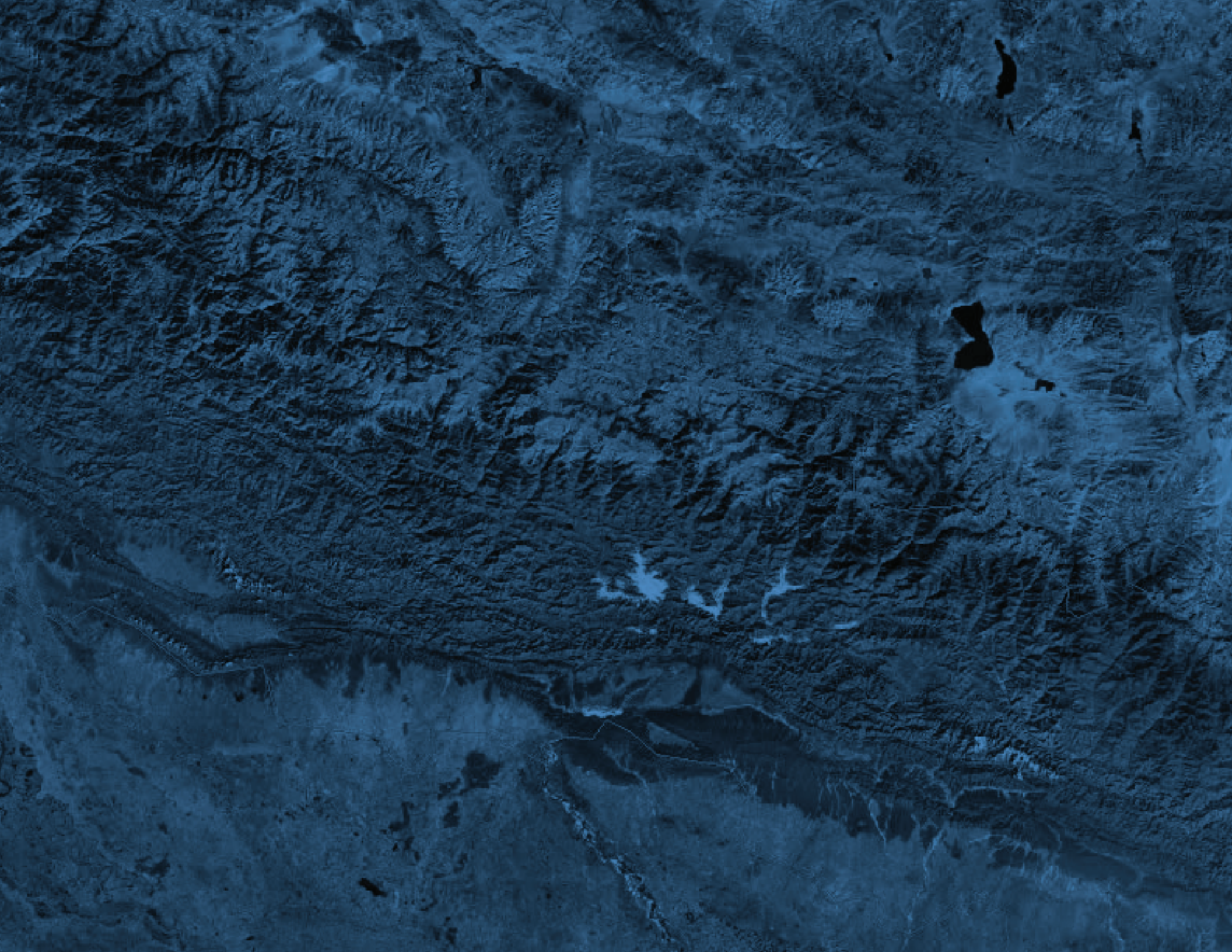


2014

Understanding Government Data Use in Nepal

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Acronyms

CBS	Central Bureau of Statistics	DG	Development Gateway
DAO	District Agriculture Office	GoN	Government of Nepal
DDC	District Development Committee	LM	Line Ministry
DEO	District Education Office	MDAC	Ministerial Development Action Committee
DFID	Department for International Development	MoAD	Ministry of Agricultural Development
DoA	Department of Agriculture	MoE	Ministry of Education
DoE	Department of Education	MoF	Ministry of Finance
DoI	Department of Information	MoFALD	Ministry of Federal Affairs and Local Development
DoLIDAR	Department of Local Infrastructure Development and Agricultural Roads	MoH	Ministry of Health
DoWCSW	Department of Women, Children and Social Welfare	MoIC	Ministry of Information and Communication
DPHO	District Public Health Office	MoL	Ministry of Labour
DPMAS	District Planning Monitoring and Analysis System	MWCSW	Ministry of Women, Children and Social Welfare
		NDAC	National Development Action Committee
		NPC	National Planning Commission
		VDC	Village Development Committee

The post-2015 development agenda calls for a

DATA REVOLUTION

asserting that a worldwide commitment to providing more high-quality, open data is the key to sustained global development.¹ But in practical terms, how do governments use development data to inform decisions? And how can such data be used more effectively? We attempt to answer these questions with insights from Nepali government officials.

Across the GoN, officials spend a significant proportion of their time collecting, compiling, and reporting on official data, including administrative, financial, and statistical information. Outside of the government, demand for information consistently grows among donors, academia, the private sector, and civil society, as evidenced by Nepal's rapidly growing [Open Data movement](#).² In this context, [DFID Nepal and Development Gateway \(DG\)](#) conducted a detailed study of the demand for, supply of, and uses of official data in Nepal, seeking to clarify:

1. How government data³ are collected and shared
2. How these data are used by government and other stakeholders
3. What opportunities exist for using government data more effectively

Our findings strongly suggest that GoN officials can derive more value from existing government data by improving data uptake and demand efforts through three general tactics:

1. Building up “champions” who promote evidence-based decision-making across the GoN
2. Increasing the data analysis capacity of key government actors
3. Improving the accessibility of government data in Nepal

1. See <http://post2015.org/category/data-revolution-2/> 2. See <http://opennepal.net/> 3. In particular, we refer to sector-specific administrative and statistical data

The Study Incorporated Over

60

Semi-Structured Interviews

with key informants from central government agencies, donor organizations, civil society organizations, and one district government (Parsa).

70%

Government Agencies

25%

Donor Organizations

5%

Civil Society Organizations



Data Quality vs. Data Use

Recent literature on development data emphasizes the need to improve government data quality, production, and sharing. These studies highlight significant inaccuracies in statistical and administrative data, cite concerns about statistical capacity, and elaborate on the potential consequences of such “poor numbers.”⁴

In the same vein, both donor- and government-sponsored studies in Nepal have explored how the effectiveness, reliability, and relevance of government data can be improved. These reports have outlined quality concerns, highlighted successes, and charted a course for improving statistical systems. But our study takes a different tack. By largely setting aside issues of data quality, we seek to understand [how these development data are actually shared and used by the government itself – and to what end.](#)

4. Jerven, Morten. *Poor Numbers: How We Are Misled by African Development Statistics and What to Do About It*. Cornell University Press, 2013.

The Government Data Ecosystem - Data Sharing

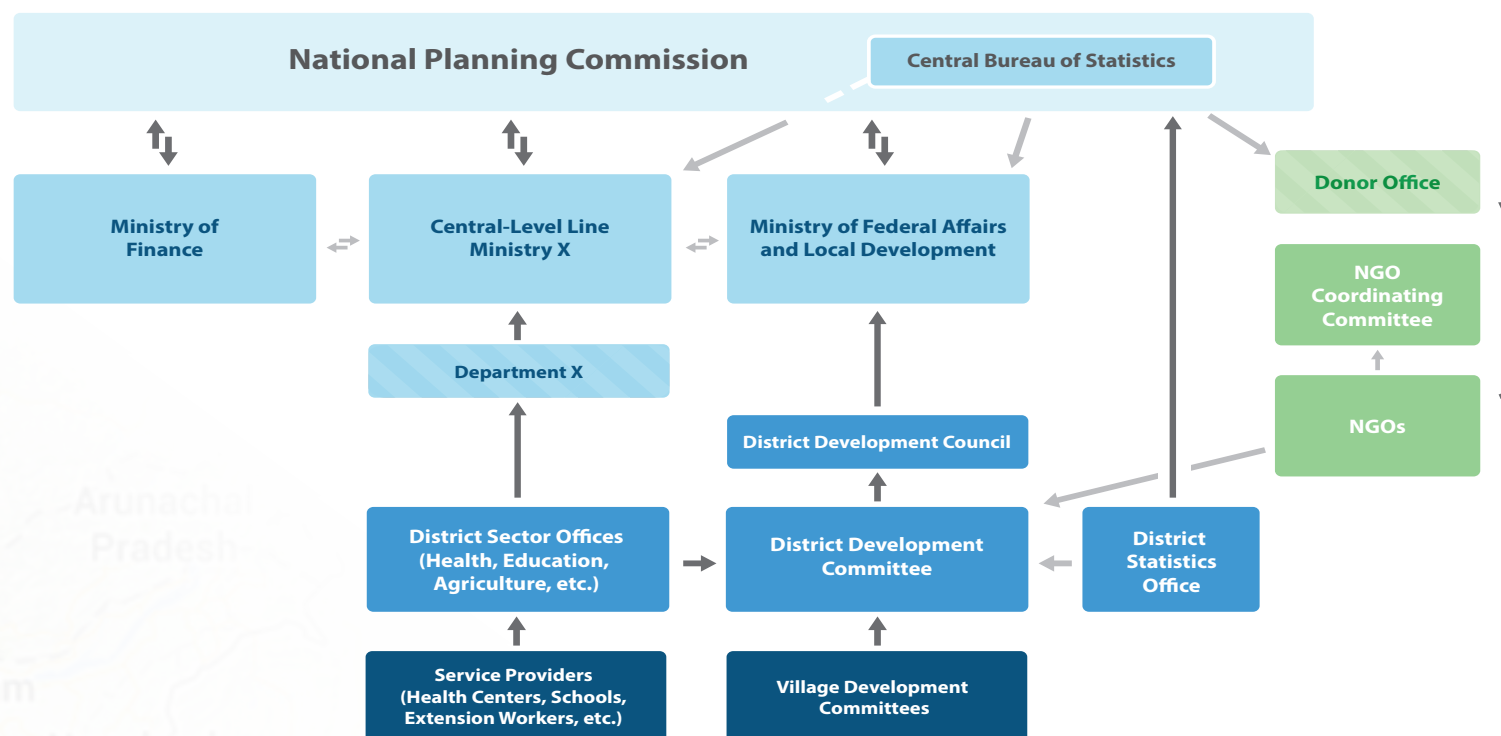
Mapping Government Data Flows

To begin with, we endeavor to map the [government data “ecosystem”](#) in Nepal by capturing how information is collected and shared by development-focused government agencies. This map was constructed from interviews with over [40 government staff](#) from multiple ministries and administrative levels. *Figure 1* lays out the big-picture flow of data between the central and district level:

figure

#1

Government
Data Ecosystem



As Figure 1 outlines, financial and administrative data are collected at the village and district level, then aggregated and reported upward to implementing government departments (e.g., the Department of Agriculture or the Department of Education). Sector-specific data are typically collected by government staff at the district or village level (generally, only CBS employs trained enumerators). Departments then aggregate data and report to the responsible sector agency (such as the Ministry of Agricultural Development or the Ministry of Education). Each district also has a central coordinating body, known as a District Development Committee (DDC), which reports on district progress to the local development ministry (MoFALD). These reports are similarly aggregated, summarized, and reported upward.

Once obtained from implementing districts and departments, sector ministries use their data to report via clear and mandated channels to the Ministry of Finance (MoF) and the National Planning Commission (NPC). These data typically result in hard-copy reports and/or a meeting between senior sector ministry officials and NPC or MoF to discuss overall progress. Feedback from the central government down to sector ministries is typically limited to a select group of high-profile programs which receive special government oversight.

CBS generally works in parallel to other ministries, with several independent district statistics offices placed strategically around Nepal. Local CBS offices have limited interaction with other district officials. In addition to primary data collected directly by CBS, sector-specific secondary statistics are collected from sector ministries and are incorporated into the annual statistical yearbook.

In sum, GoN agencies have strong official incentives to report information upward, but mechanisms for sharing data laterally (e.g., between departments of equal status) are quite informal. Data sharing between ministries occurs on a case-by-case basis, usually while implementing cross-sector development programs. Some sector ministry officials do report accessing CBS statistics, either via the CBS website or through personal contacts, to inform reports.

Disseminating Government Data

Depending on the respective ministry's capacity (both human and technical), data is either shared via hardcopy or on a website. GoN still relies heavily on hard-copy reports and data catalogs which are easier to share with officials in rural districts with limited connectivity. Hard-copy data reports are circulated annually by CBS, MoF, and most sector ministries.

If information is shared on a GoN website, it is usually shared as a PDF rather than in a machine-readable or accessible (.xls, .csv, .xml) format. Several respondents revealed that server space constraints and limited in-house technical and data management capacity were the main reason that PDFs remain the primary format for data-sharing.

Data and the Planning Process

Planning processes begin in the district, where the leading development role is played by the Local Development Officer, who serves as DDC chairperson. District planning and resource allocation decisions are formulated during an annual District Development Council meeting. Status reports and recommendations to inform this Council are created by DDC staff using sector-specific data. After agreements are reached, an annual plan and budget is submitted to MoFALD for approval. While local budgets are always subject to national approval, district officers do seem to have considerable autonomy in allocating budgets within their districts. These budgets, while not especially large, are also not insignificant – in Parsa district, for example, the DDC budget is NPR 1.3 billion, which is comparable to the entire annual budget for the Ministry of Energy (1.6 billion) or the Ministry of Commerce (1.3 billion).

Parsa District DDC budget is

NPR 1.3 billion

comparable to the entire annual budget
Ministry of Energy & Ministry of Commerce

At the same time, each district sector office conducts its own planning process, using its own data to set annual goals and submit a budget proposal to the relevant implementing department. Departments will often revise district-level objectives and budgets before sending them upward for approval.

Final budget proposals are then prepared by each government ministry. The National Planning Commission signs off on all ministerial plans, and the final budget is announced each year by the Minister of Finance. Local-level DDCs and sector offices then receive their working budgets and final objectives for the coming year.

NAUKAILAWA

PARSA

The Government Data Ecosystem - Data Use

We have so far described how data is collected and shared by GoN officials at each level, illuminating where data should be used to inform planning and decision-making. Here, we relate our findings about how data is actually used to inform government processes. We also seek to understand which barriers prevent data uptake. These findings are summarized into four broad points, as follows:

1. Government lacks resources and capacity for adequate data analysis

Nearly all of the 40+ government staff included in the study reported that resources and data analysis capacity are their primary constraints to using data more often and/or more effectively for planning and decision-making. While basic reporting needs seem to be satisfied for many government staff, respondents generally suggested that it is difficult for officials to “get from raw to final data” in their analyses. Interviews and document review further indicate that the vast majority of government data products are tabular reports, incorporating limited analysis and few recommendations.

The presence of an institutionalized information management system, as in DoHS and DoE, seems to improve the quality, level of detail, and ease of access of data when compared to Departments without an MIS. But even agencies equipped with an MIS report the same challenges to using and analyzing data.

Our findings in aggregate suggest there are clear needs for: [a](#)) better-equipped staff to handle data analysis, [b](#)) more reliable data, and [c](#)) better data management processes and systems. Respondents indicate a fairly high level of general demand for these kinds of analytical skills and resources. Capacity constraints are apparent, but most respondents cited promising aspirations for data use, suggesting that better analytical skills really could enhance the effectiveness of government planning.

However, not all officials express an urgent need for greater analytical capacity. More senior officials suggest that they have adequate capacity to meet data collection and reporting needs. Ministry-level respondents self-report as data “aggregators” and quality controllers, not users. At the same time, local and department-level staff expressed stronger demand for better analytical skills. Thus most pressing capacity constraints seem to be at the local (district) level and department level.

2. Data quality, accessibility, and dissemination are problems – particularly for non-government users


Government data producers clearly see professors, students, and other external users as the primary consumers of their data – not other government officials. Qualitatively, many government officials field a fairly high volume of data requests from these external users, which may explain why academics, NGOs and others are at least seen as leading data users. But interestingly, these external users report that they often have to rely on personal contacts to get government statistical data, since appropriately detailed or formatted data are often not available through more formal channels. Our findings indicate that informal data sharing mechanisms within the government are generally adequate, but external users encounter real frustration when trying to obtain and analyze government data. Unpredictable data release schedules also create significant friction, particularly for donors and other users outside the government.

Despite some accessibility challenges, it is important to note that there are no serious “competitors” to official government data in Nepal. Among both government and donors, GoN-produced data, with all its caveats, is still the primary source of development data. But opportunities exist to disseminate this information more effectively to an energetic community of non-government development stakeholders.

3. Donors still play a significant role in official data production and use, but efforts are often narrow in scope and poorly coordinated

Though there has been a considerable level of donor assistance and interest in building the statistical capacity of the government in Nepal, there have been missed opportunities for fostering long-term data production and use within the government. Donors often support statistical activities that address immediate, program-specific data needs. However, these efforts are frequently duplicated, and resulting datasets may be less relevant to government priorities and unlikely to be maintained.

Still, it seems that nearly all of the substantive analytical reports produced by GoN agencies rely on significant donor assistance, and donors will continue to sponsor data collection activities and provide analytical support for the foreseeable future. But these efforts will be most effective if conducted in response to clear GoN demand and under a coordinated, long-term plan for enhancing government data capacity.



4. At every level of government, management culture and existing incentives do not promote evidence-based decision-making

Some senior officials went so far as to suggest that “data use is [a] formality” in the planning process. Though GoN officials spend a great deal of time collecting and reporting data, much more effort goes into report production than goes into actual data use. Current cultural and managerial incentives within GoN do not encourage robust use of data for planning and decision-making. Still, many laudable data collection and dissemination efforts are currently taking place within key government departments – like Health and Education – but they need more clear incentives to conduct analysis, promote evidence-based planning and have a greater impact on resource allocation.

It is also critical to note that political pressure clearly has a great deal of influence on local allocation decisions, and in the current political climate, this kind of pressure is likely to trump decisions that may otherwise be more evidence-based.

Despite these challenges, many interviews yielded calls for management to better support, both verbally and materially, statistical development and data use in the government. General consensus is that high-level rhetoric about evidence-based decision-making is the first important step toward changing workplace norms to incentivize more comprehensive data use.

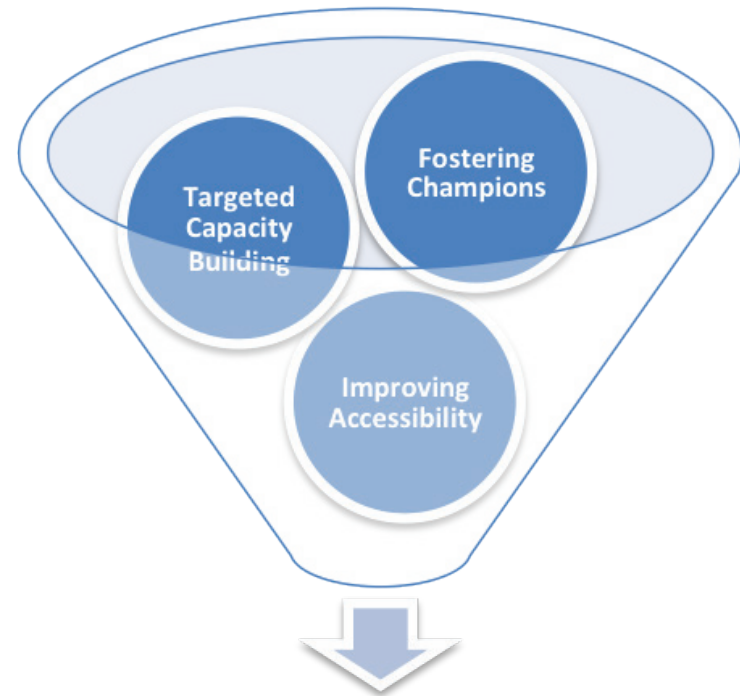
“Data Use Is a Formality”

Senior GoN Official

Recommendations - Enhancing the Impact of Data

Our study makes one point clear: data production, by itself, does not necessarily promote evidence-based decision-making. While improving quality, timeliness, and coverage is important, more should be done to enhance the ability of government officials to [use their data effectively](#). Our findings strongly suggest that GoN officials can get more value from existing government data than they currently do. In sum, if the “Data Revolution” is going to improve development in Nepal, it will also need to be a Data Literacy Revolution.

Drawing on these findings, we conclude by elaborating on three specific, actionable approaches that the development community can take to promote more effective uptake of government data in Nepal:



Constructive Environment for Evidence-Based
Decision-Making in Nepal

Recommendation 1: Foster Champions

Across the board, government officials lack both the capacity and incentives to use data more effectively. It is beyond our scope here to recommend structural changes to the public service, and we recognize that incentives are an extraordinarily difficult issue to address. However, we posit that a few well-placed data “champions” within the GoN may do much to change this mindset.

High-level dialogue, promoted and bolstered by senior officials within each sector, should focus on the importance of incorporating data analysis into planning and budgeting processes. These champions can praise and reward the officials who are best-poised to lead data uptake efforts and employ evidence-based decision-making. We suggest that these champions should include the Directors-General of implementing departments, the M&E and Planning chiefs of key sector ministries, and senior officials at NPC and MoF.

Recommendation 2: Targeted Capacity Building

Carefully targeted training activities are the next important step toward enhancing effective use of data within GoN. The majority of study respondents stated clear demand for more analytical training. Such training could take a number of forms, but we sought to identify the sub-groups within GoN that stand to benefit the most from enhanced analytical skills. These groups are listed in priority order, as follows:

At the Local Level

1. Local Development Officers

Training on data use and analytics for LDOs may have the greatest immediate potential influence on development planning and resource allocation, since these officials have considerable autonomy in allocating development budgets

2. DDC Staff

Other DDC staff, including District Planning Officers and District Information Officers, play critical roles in data collection and use at the district level. These officers directly coordinate and support the broader district planning process, collecting data and creating reports that ought to inform these critical decisions.

3. District Sector Officers

Third priority for analytical training should be given to the government officers who coordinate the local efforts of each sector development ministry. These officers propose budgets and targets. While some priorities are dictated by central ministries, these sector officers have varying degrees of autonomy and are responsible for the successful execution of sector-specific development agendas within their districts.

At the Department Level

4. Information Management Staff

While the local officers described above should receive highest priority, we also recommend targeting the capacity of the Department-based managing units of information management systems, as they hold a strong potential to issue indicators, benchmarks, and feedback for district planning and development.

At the Central Level

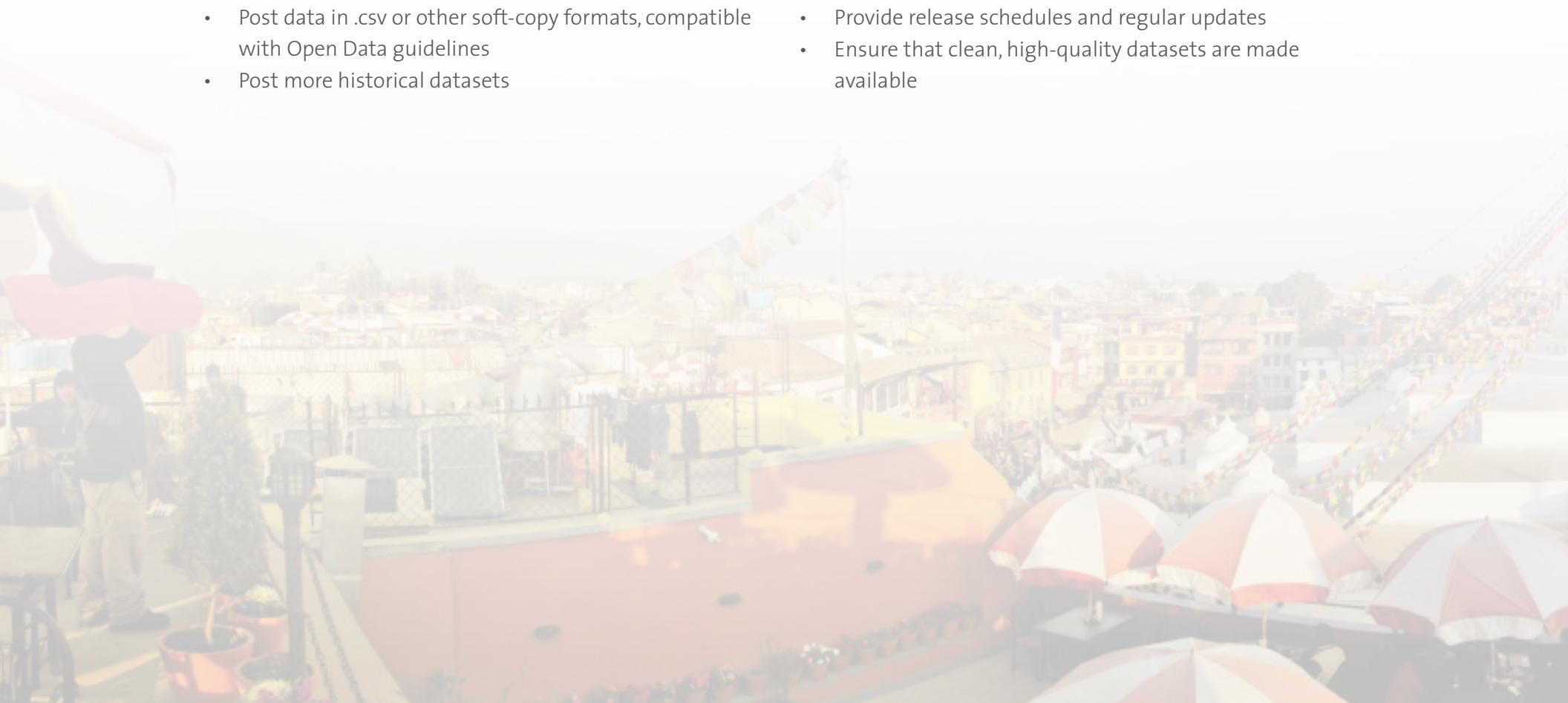
5. Ministry M&E/Planning Sections

Finally, Ministry-level staff should be provided with opportunities to enhance analytical capacity. These officials are ultimately responsible for high-level reporting in each sector and should be included in any comprehensive data capacity building program. Specifically, the Planning and Monitoring and Evaluation sections of respective ministries should be targeted.

Recommendation 3: Improve Accessibility

Our findings strongly indicate that external users play a critical role in the consumption and analysis of official government data in Nepal, and that a great deal of perceived demand for data is outside the government. Data accessibility is limited both by staff time and by physical resources (e.g., server space). With some support, CBS and sector ministries could make their data resources more widely and easily available to the general public, feeding broader (and growing) demand for government information from academia, donors, civil society, the private sector, and even other government agencies. Improved accessibility may not enhance government decision-making right away, but it will feed into the important analyses conducted by external actors, which will improve the evidence-based ecosystem in Nepal writ large. Specifically, support can be provided to GoN to:

- Post data in .csv or other soft-copy formats, compatible with Open Data guidelines
- Post more historical datasets
- Provide release schedules and regular updates
- Ensure that clean, high-quality datasets are made available



Organizations Included in the Study

National Government Offices

- Central Bureau of Statistics
- National Planning Commission
- Ministry of Finance
- Nepal Rastra Bank
- Ministry of Education
- Ministry of Health and Population
- Ministry of Agricultural Development
- Department of Local Infrastructure Development and Agricultural Roads
- Ministry of Labour
- Ministry of Women, Children and Social Welfare
- Ministry of Information and Communication

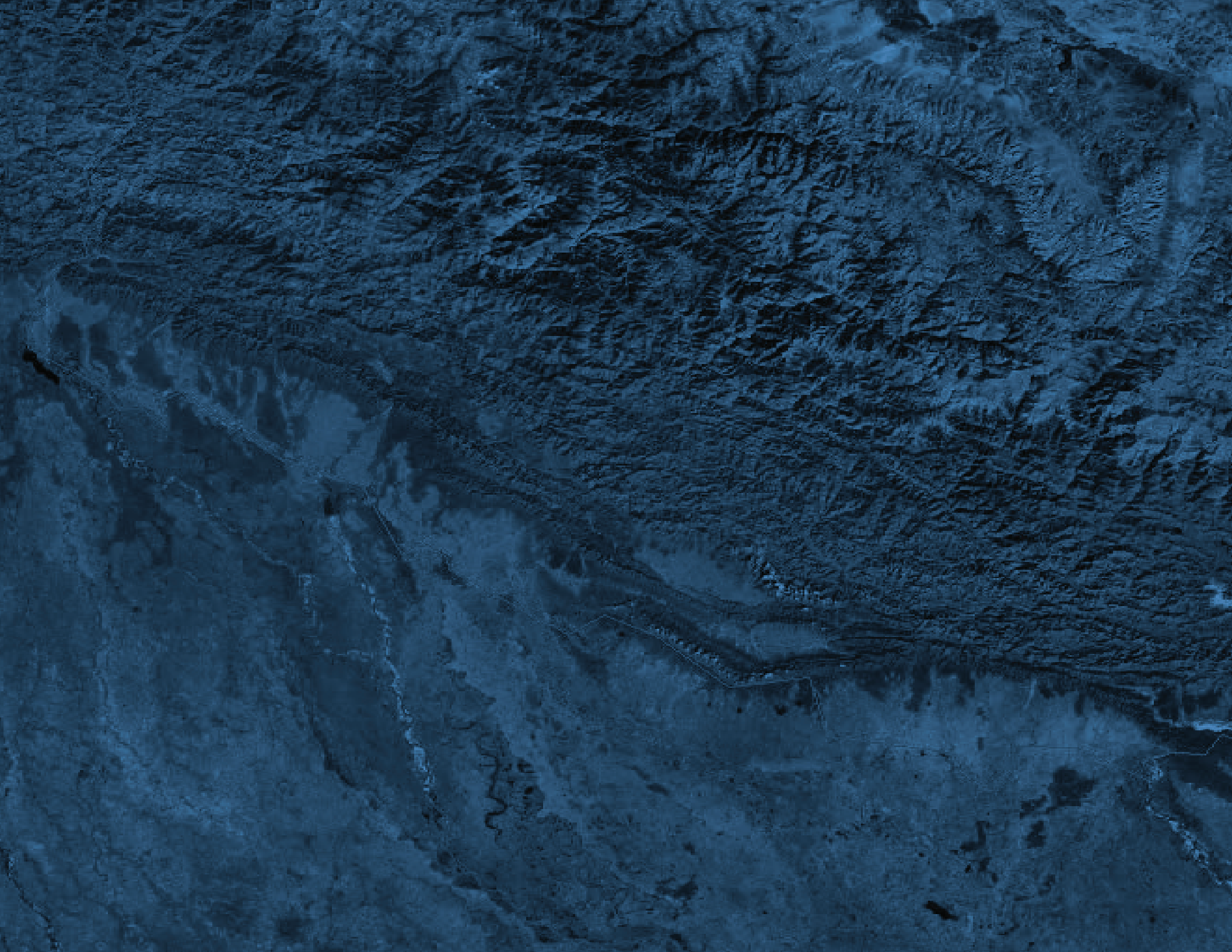
Donor Organizations

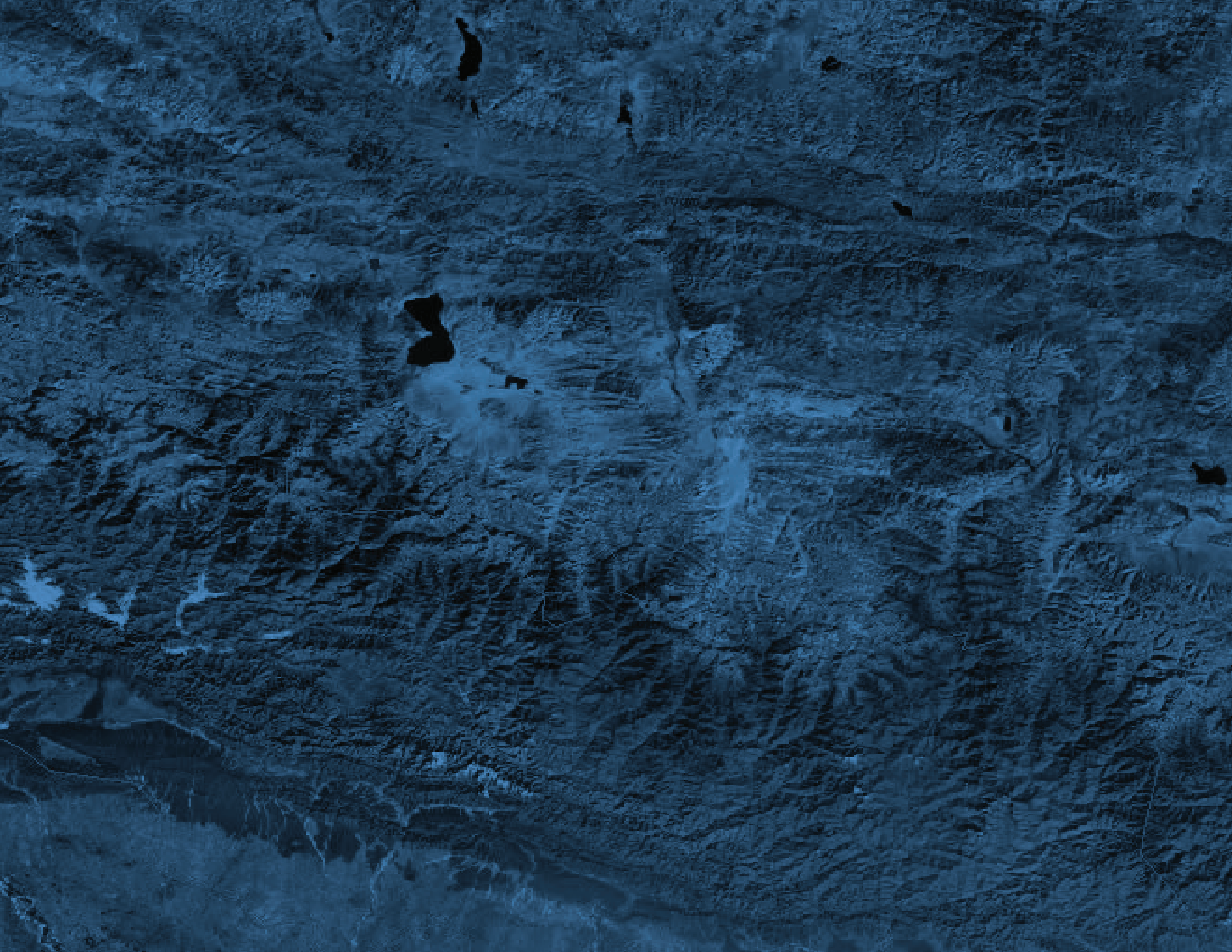
- International Labour Organization
- United Nations Population Fund
- United Nations Children's Fund
- World Bank
- Asian Development Bank
- U.S. Agency for International Development

Academic and Civil Society Actors

- Open Nepal
- Young Innovations, Pvt. Ltd.
- Accountability Lab
- Kathmandu University School of Arts







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