

Exploring the emerging impacts of open aid data and budget data in Nepal



Freedom Forum

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About Freedom Forum:

Freedom Forum is an independent, non-governmental and not-for-profit civil society organization working for the cause of democracy and human rights focused on press freedom, freedom of expression and right to information in Nepal.

Incepted in 2005, Freedom Forum has emerged as a prominent national organization in promoting access to information, freedom of expression and open development through dialogue, research, training, public advocacy and campaign and programme execution.

The organization is also working on the issues of open governance/open data, public finance management, budget/aid transparency and political and parliamentary accountability and electoral reform based on its on-hand experience and learning.

The Forum has brought out numerous books, research journals, newsletters, periodic reports and analytical papers on different dimensions of open development agenda and its effect and impact on empowerment and transformation



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Acknowledgements:

Freedom Forum is delighted to introduce this case study report as the outcome document of many months of rigorous qualitative research on open aid and budget data, undertaken during September 2013 to May 2014. The 'Exploring the emerging impacts of open aid data and open budget data in Nepal' study has gathered a baseline of the aid and budget data landscape in Nepal, has presented an understanding of interaction of key stakeholders working in the open data ecosystem, documented the governance context of Nepal, and discussed the particular challenges and incentives faced by aid and budget data users and potential data users. In addition, the report presents recommendations for intelligent action in future.

The outcome of this research, the first of its kind in Nepal from thematic perspectives, has added new knowledge and dimensions to openness initiatives taking place in Nepal by presenting a convergence model to best utilize the strengths of open data and Right to Information for the public good. This issue has become central to least developed and post conflict countries like Nepal, where greater transparency of data and better access to information on public resources can play a significant role in reducing poverty.

We express our sincere gratitude to all individuals and institutions that have extended direct contributions in undertaking the study and bringing the report to this shape. We owe our gratefulness to the World Wide Web Foundation-managed 'Exploring the Emerging Impacts of Open Data in Developing Countries (ODDC)' research project, supported by grant 107075 from Canada's International Development Research Centre (web.idrc.ca), for providing us the opportunity to study this new area and inducting us as a member of ODDC research network. We also thank ODDC Research Network members who have directly or indirectly contributed to sharpening our knowledge and skills to conduct the research projects.

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Taranath Dahal
Chairperson, Freedom Forum

1. Executive Summary

The Open Data in Developing Countries (ODDC) research programme is a multi-country, multi-year study working to understand how open data is being put to use in different countries and contexts across the developing world. It seeks evidence that can confirm or challenge the belief that open data holds the promise to improve transparency, accountability, citizen participation and economic activity. Coordinated by the World Wide Web Foundation and established with funding from the International Development Research Centre (IDRC, Canada), ODDC has conducted 17 southern-led independent case studies in 13 countries, offering the opportunity to compare different contexts to explore the emerging impacts of open data. This case study: “Exploring the emerging impacts of open aid data and open budget data in Nepal” was conducted by Freedom Forum with capacity support from Web Foundation, Development Initiatives and a research mentor during the months September 2013 to May 2014.

It is widely believed that greater openness in many areas of public life, including around budgets and aid, leads to greater civic participation in decision-making processes related to resources, greater government accountability and better public service delivery. A case study approach was used to explore these assumptions in the context of Nepal, by seeking empirical evidence of the types of budget and aid information that are available, and by testing the extent to which relevant stakeholders use, and are able to use, this information to deliver development outcomes. Given the early stage of development of open data on aid and budget in Nepal, developing strong evidence of impact was not possible. Instead the project sought to understand the interaction of key stakeholders and develop recommendations for intelligent action in future. The study focused on three groups of stakeholders within the open data ecosystem: data providers, data intermediaries and data users.

The project has combined a top-down look at the context of open data in Nepal with a bottom-up view of emerging uses and outcomes from open data. It has done this by looking at the experiences of different actors in the open data ecosystem, and in particular at journalists. The project was designed around a mixed-method approach, combining a literature review, participatory stakeholder mapping workshops, interviews (semi-structured, open ended and informal), participant observation (including during ‘open data days’ and training events), survey work and media monitoring. The methods were designed to gather data to build up a full picture of the demand for, and use of, data and information on budget and aid. To address the emerging outcomes of open data, the core components of the research framework were designed to study the context for open data, the supply of open data, the stakeholder governance of the open data ecosystem, the use of open data, and the potential impact of open data.

Nepal’s political, social, economic, technical, social and organisational context presents a complex environment of opportunities and challenges for the further emergence of open data in Nepal. With the prevalence of a vibrant civil society familiar with advocating for transparency and accountability, emerging government support, a governance-friendly legislative framework in place, and a burgeoning community interested in the issue, open data has a solid potential to strengthen the transparency and accountability regime and to deliver effective development outcomes. However, Nepal ranks low on many of the social and economic indicators reviewed, and it is unclear how open data will play out in an environment with limited financial resources for data infrastructure and sharing, and with high levels of inequality. Among other issues, the low internet penetration, lack of open data policy, political and bureaucratic resistance to innovation, limited financial resources, high levels of corruption, culture of secrecy, limited demand for open data and lack of collaboration between open data and the Right To Information legislative framework form a range of bottlenecks constraining the growth of open data in Nepal. Despite this, there is a committed and skilled group of Nepali technical and thematic experts who are proactively trying to improve Nepal’s supply of open data, stimulate demand for that data, and equip an ecosystem of actors with the skills to use that data.

In addition to the core research questions, over the course of the project, a number of other critical questions emerged. These were driven by themes emerging from key informant interviews, and relate more broadly to how the concept of open data can apply, or can best be applied, in Nepal. How can the concept, practice and culture of open aid and budget data be accepted in Nepal? What needs to happen for such initiatives to be implemented, and when implemented, what is the impact? Is open aid and budget data inevitably good for Nepal, and what needs to happen for open aid and budget data to be beneficial for Nepal as a country, and for the Nepali people? These questions add a critical aspect to the study and added, as an additional objective to the study, an exploration of how far concepts of open data need to be adapted to be relevant to Nepal, and how far open data ideas should be prioritized given the current context in Nepal. Discussions that responded to these set of questions gave rise to a series of further themes including whether open data further empowered the already empowered, the potential of open data to increase inequality and the information divide between groups of Nepali people, and the critical need for honesty, pureness and personal integrity if a culture of openness, and hence open data, is to be accepted.

The study revealed that there is a gap between open data efforts, and the information needs and practices of civil society and journalists in Nepal. In order to address this, the study concludes with a model for future action-oriented research, recommending the integration of open data and Right to Information along with networking, capacity building and a focus on common issues, including proactive transparency around public resources focused on budget and aid. Many networking and capacity building initiatives around open data are currently being undertaken in Nepal but in a fairly ad hoc way. Up to now, they have not been linked to a clear demand or a shared issue, and a key recommendation is that both RTI and open data initiatives need to be driven and shaped by demand. Through this model, together with dialogue and process, we believe that open data can play an important role in contributing to the empowerment of the people of Nepal.

Contents

1. *Executive Summary*..... 5

2. *Introduction* 8

3. *The context for open data in Nepal* 15

4. *Budget and aid data availability*..... 29

5. *The aid and budget situation: information flows and interactions* 34

6. *Uses of aid and budget data in Nepal*..... 42

7. *Exploring capacity building interventions: data journalism on aid and budget* 47

8. *Discussion* 53

9. *Recommendations for future action research* 59

10. *Appendices*..... 63

2. Introduction

Claiming the potential to improve transparency, accountability, citizen participation and economic activity, open data holds great promise for both the developed and the developing world. However, a review of the available literature shows that there is currently very limited evidence of impact or outcomes resulting from open data. This means that, despite the claimed impacts, it is not yet clear whether open data initiatives, particularly in the developing world, are delivering on their potential. This is, in part, due to short lag-time for impact resulting from the youthfulness of most open data initiatives, but it is also due to the lack of in-depth impact research that has so far taken place on this area.

The Open Data in Developing Countries (ODDC) research programme attempts to address this lack of evidence base. The programme uses a case study approach to deliver a detailed understanding of how open data operates in specific contexts and what impacts may result from the dynamics of its use. ODDC is a two-year research programme coordinated by the World Wide Web Foundation and established with funding from the International Development Research Centre (IDRC, Canada). The programme has conducted 17 southern-led independent case studies in 13 countries, drawing on diverse contexts to explore the emerging impacts of open data.

“Exploring the emerging impacts of open aid data and open budget data in Nepal” conducted by Freedom Forum is one of the 17 case studies. Research was conducted by Freedom Forum, with capacity support from Web Foundation, Development Initiatives, Open Nepal and research mentor Ineke Buskens, during the months September 2013 to May 2014. The lead researcher was Krishna Sapkota, Executive Director of Freedom Forum.

Currently Nepal is passing through a crucial process to sustain peace and frame a new Federal Democratic Republic Constitution. The first Constituent Assembly (CA) formed in 2008 following the end of the 240-year monarchy and the decade-long armed insurgency. This first CA disbanded in 2012 without yielding the anticipated Constitution after political parties failed to forge consensus on two contentious issues – the state restructuring and the forms of governance. The country underwent a second CA election in November 2013. The election of a democratic government and parliament was an important precursor for transparent and accountable governance.

The agenda for greater openness in many areas of public life, including around budgets and aid, has emerged through mechanisms such as open data initiatives and Right to Information laws. A recent flurry of civic initiatives on open data, accompanied by government and donor efforts to develop and sustain an Aid Management Platform (AMP), are gradually spurring the open development movement in Nepal. A civil society-initiated Open Data Portal, numerous capacity development initiatives, awareness-raising efforts, information request campaigns, and advocacy activities are putting pressure on public agencies to proactively disclose information and data. The celebration of International Open Data Day in Nepal in 2014 drew the attention of media, transparency activists, CSO representatives, government officials, international community actors and tech-savvy communities among others. However, for all this excitement about open data, little is currently understood about practices of data access and use amongst mainstream CSOs and the media.

Through parallel exploration of the demand for and use of data and information on budget and aid, this case study explores whether or not open data could make a relevant contribution to governance and inclusive citizen empowerment in Nepal today.

This project set out with four main objectives:

1. To gather and share a baseline of the aid and budget data landscape in Nepal, including a mapping of available data, demand for aid and budget data from civil society and capacity to analyse and use it, along with a mapping of information intermediaries.
2. To gather and share evidence of impact of open aid and budget data, with a particular goal of informing the development of aid data standards and their implementation in Nepal;
3. To understand and document the governance context of Nepal and the particular challenges and incentives faced by aid and budget data users and potential data users
4. To foster and nurture a community of organisations working on open aid and budget data in Nepal

As such, it was conceived of as an applied and problem-centered research project, carried out and supported by organisations active in the development of the open data landscape in Nepal. Over the course of the project, these objectives developed into a number of concrete research questions, namely:

- Q1: What is the context for open aid and budget data in Nepal?
- Q2: What sorts of budget and aid information is being made available in Nepal?
- Q3: What is the governance of open aid and budget data in Nepal?
- Q4: How are relevant stakeholders making use of open aid and budget data in Nepal?
- Q5: What are the emerging impacts of open aid and budget data in Nepal?

These questions were shaped by recognition from exploratory work that, given the early stage of development of open data on aid and budget in Nepal, developing strong evidence of impact would not be possible, whereas developing an understanding of the interaction of key stakeholders was possible, and could support more intelligent action in future. As a result, the study has focused on three groups of stakeholders within the open data ecosystem: data providers, data intermediaries and data users.

In addition to the core questions above, over the course of the project, a number of other critical questions arose. These were driven by themes emerging from key informant interviews, and relate more broadly to how the concept of open data can apply, or can best be applied, in Nepal. These questions can be stated as:

- How can the concept, practice and culture of open aid and budget data be accepted in Nepal? What needs to happen for such initiatives to be implemented, and when implemented, what is the impact?
- Is open aid and budget data inevitably good for Nepal, and what needs to happen for open aid and budget data to be beneficial for Nepal as a country, and for the Nepali people?

These questions add a critical aspect to the study, adding as an objective the exploration of how far concepts of open data need to be adapted to be relevant to Nepal, and how far open data ideas should be prioritized given the current political, legal, economic, technical, social and organisational context. The analysis of these questions is covered in the discussion section of this report.

Research process

Research reports often present research as a linear process, with one element following another. However, this is rarely how research takes place. In practice, action-focused research involves an ongoing journey of refining questions, data collection methods and analysis – iteratively putting the pieces together to build up an increasingly complete and coherent whole. The project combined a top-down view of the context of open data in Nepal, and a bottom-up view of the emerging impacts of open data by looking at the specific context of journalists reporting for accountability. Recognizing that open data is too early in its development to warrant a quantitative approach to impact measurement, the study has followed a qualitative approach to research. The project was designed using a mixed-method approach, combining a literature review, stakeholder mapping workshops, interviews (semi-structured, open ended, and informal), participant observation during events and training sessions, survey work and media monitoring.

In our research we have drawn on the input of a range of different partners and mentors, each bringing their own insights from different disciplinary backgrounds – from political science and sociology, to research methodology and computer science. Fitting together these different perspectives and pieces is not always easy, and there are inherently tensions to be addressed. Rather than try and hide these, and ignore the differences of perspective present around open aid and budget data in the developing country context of Nepal, we present data from each phase of the research below, showing and discussing different perspectives as we go, before seeking to draw on each in our conclusions.

Given the action-orientation of this research, the recommendations focus in particular on actions that government, intermediaries and data users should take with regard to the use of open aid and budget data in Nepal.

Framework

This study draws upon the Exploring the Emerging Impacts of Open Data in Developing Countries (ODDC) research framework¹, which outlines a number of core components to address in understanding the supply, use and impacts of open data. These are:

- **The context for open data** – including the political, organisational, legal, technical, social and economic context.
- **The supply of open data** – including data availability, legal frameworks for data, data licenses, and the stakeholders involved in providing data.
- **Technical platforms and standards** – including data formats and data standards use, and any data catalogues, APIs or analysis tools provided by an open data initiative
- **The context of the specific governance setting** – including a description and history of the issues in focus, details of key stakeholders, and analysis of how data plays a potential role in this setting
- **Intermediaries and data flow** – documenting the means by which data is made accessible in the governance setting: how, and by who?
- **Actions and impacts** – documenting the experience of those seeking to use data, and providing evidence of intended or unintended consequences

¹ Davies, T., Perini, F. & Alonso, J.M. (2013) *Researching the emerging impacts of open data*. World Wide Web Foundation: London.

The methods below were each designed to gather data on one or more elements of this framework, seeking to build up a full picture of demand for and use of data and information on budget and aid. Through the use of this framework across the various ODDC cases, cross-country comparison can be facilitated.

Methods

This section outlines the methods adopted during this research project.

Contextual analysis

After more than a decade of civil unrest and governance breakdown, Nepal is experiencing a period of constitution building. The nascent open data / open development movement has been spurred on by government and donor releases of aid data, and government sharing of budget information, as well as activities by a small core of CSOs developing the Open Nepal initiative and Open Data Platform. To identify the emerging impacts of open data, the influence of this contextual background must be understood. The contextual dimensions of Nepal's political, organizational, legal, economic, social, and technical environment will affect the success of initiatives to open up data – these contextual features form the factors that might help an open data initiative be successful, highlight factors which may pose a challenge to open data, and factors which may provide an opportunity. This section aims to provide a deeper understanding of Nepal's open data readiness, giving insight into the relative importance of issues such as Nepal's legislative framework, political support and technical capacity.

Researching Nepal's context for open data was centered on the ODDC template "Assessing Context - ODDC Case Study Tool"². This addressed six key dimensions of context - political, organizational, legal, economic, social, and technical. To populate the information in this template a review of online literature and web information was carried out. This desk-based internet research was supplemented by information gathered during key informant interviews and surveys.

Data supply assessment

To determine the emerging or potential impact of open data it is important to identify the current suppliers and availability of this information. This includes the openness of this information, including the legal frameworks for the data, the existence of data licenses, and the identification of the stakeholders involved in providing data. To answer this research question a technical assessment was conducted. This assesses the availability of open aid and budget data from official Government of Nepal sources, as these should be the most accurate and reliable. The available aid and budget data was assessed based on the ten questions in the ODDC template "ODDC Draft Framework Assessing Country Level Open Data Supply"³ to determine how open the available data was. Nepali technology firm Young Innovations carried out the Technical Assessment. A table providing responses to each question can be found in Appendix 1.

The technical assessment was supplemented by information gathered in interviews with data suppliers and intermediaries, to determine what datasets they were aware of and to develop an understanding of the history and processes behind this data availability.

² See <https://docs.google.com/document/d/1f4wfEkeguh5ZSj3z3R-YbAFz3PNR3DM9bRHVImEVLc/edit>

³ See https://docs.google.com/document/d/1z-T3QmmZTmWkFrKySi-x_EBDVqIt6Orr6z-C58gPGeg/edit

The aid and budget situation: information flows and interactions

In order to investigate the governance dynamics that open aid and budget data in Nepal are embedded within, an exercise was conducted to outline a framework for describing Nepal's aid and budget information polity. This aimed to map all the stakeholders, information flows, and governance relationships involved in the provision and use of data. Helbig et al describe the concept of an information polity as providing *"a way to identify the particular stakeholders and patterns of interaction that can influence or control the generation, flows, and uses of data and the governance relationships and interests in a particular initiative."*⁴ In order to map the information polities around particular potential uses of aid and budget data we drew upon stakeholder mapping methods, drawing upon tools developed by STEP Consulting for their ODDC case study⁵.

A half-day stakeholder mapping event was held in September 2013, the first of its kind in Nepal, inviting participants to trace the flow of data from suppliers to potential users, through a range of technical and social intermediaries. The workshop was planned and conducted by the research lead in collaboration with the research mentor. The workshop brought together 36 participants from diverse backgrounds, identified through networks of contacts and online research. These participants represented both the demand and supply sides of information, which included government bodies, civil society organizations, media, techies, academics and researchers.

The purpose of the event was to understand the landscape of key actors around budget and aid data (data providers, data users and decision makers) and their relationships with regard to the flow of open data in Nepal. The participants were taken through an exercise that invited them to map the informational linkages between actors, and identify where authority and decision-making are located in the system. It was hoped that this approach of identifying, describing and tracking information within Nepal's governance system would provide a route to understanding the different processes that influence where this information is used and has an impact.

Key informant interviews

The stakeholder mapping pointed to a number of potential uses of open aid and budget data, but did not provide an in-depth assessment of whether use was currently taking place, or what barriers and opportunities for open data use existed. To explore these themes in more depth we conducted a series of semi-structured interviews. These were carried by the lead researcher and targeted data suppliers, intermediaries and users. In addition a series of open-ended key informant interviews were conducted by the research mentor in collaboration with the research lead to seek out additional perspectives from stakeholders in Nepal's open data ecosystem.

For the structured interviews a series of questions were developed to determine who was using information on aid and budget, and where they were going for this information. This was grounded in the ODDC conceptual framework. The questions were developed to assess the current use of data, as well as to try to gain an understanding of the potential use – how stakeholders might use this information in future. Barriers and challenges faced by data users were discussed, as well as the gaps in information provision around budget and aid. In addition, interviewees were asked for their thoughts on how the provision and presentation of information could be improved in each sector. The questions used for the structured interviews are shown in Appendix 3. These interviews were conducted by the lead researcher in March 2014, with data suppliers, intermediaries and

⁴Helbig, N., Cresswell, A. M., Burke, G. B., & Luna-reyes, L. (2012). *The Dynamics of Opening Government Data*. New York.

⁵Canares, M. P., Guia, J. de, Narca, M., & Arawiran, J. (n.d.). *Opening the Gates: Will Open Data Initiatives Make Local Governments in the Philippines More Transparent?*

users of data, including members of the Ministry of Finance, the Central Bank of Nepal, National Planning Commission, and representatives of CSOs and media organizations. In total thirteen of these semi-structured interviews were carried out, transcribed and analyzed, as detailed in the table below.

Group	Number of interviewees
Civil society	4
Government	5
Media	3
Private sector	1

Additional open-ended interviews were conducted by the research mentor, in collaboration with the lead researcher, during her visit to Kathmandu in April 2014. Five open-ended interviews were conducted with a key informant from the Ministry of Finance, a financial journalist and several representatives of civil society organizations and the owner/founder of the first online Nepali newspaper. The interviews were conducted in a way so that respondents were free to give their perspectives and understandings of open aid and budget data, and to explain both their reservations and expectations. The interviewers checked and validated the interviewees understanding of the content after the interviews were completed through a triangulation check. Although these open-ended interviews were not recorded (occasional technological failure) and the interviewer notes are not available, the interviewers checked and validated their understanding of the content after the interviews were completed (researcher triangulation check).

Intervention and evaluation: journalists and open aid data

Recognizing that (a) informants suggested that greater use of open data could bring about positive impacts; and (b) that levels of open data use are, at present, very low, we identified the need to explore possible interventions to increase open data use. Given the scope of this research project, we could not work with all the possible stakeholders identified in our mapping, and so chose to focus in on one particular stakeholder group, and one particular set of mechanisms for bringing about change: transparency and accountability.

Our research aimed to trace the potential for emerging impacts of open data in general, and on transparency and accountability in particular. Transparency and accountability are not the same thing – although transparency is an essential ingredient for accountability to take place. For transparency to lead to accountability another set of intervening relationships need to be in place. In the context of open data, the existence of accountability requires external actors (citizens) to play a role in holding those with power to account. An important accountability channel is the media. For example, the use of open data by journalists has the potential to strengthen the ability of media in general to hold government to account, by increasing the extent to which reporting focuses on detailed budget and aid issues, and by making citizens more aware of issues they may wish to act upon. Our research was particularly interested in journalists as data intermediaries and data users, assessing the potential emerging impact that they can have on transparency and accountability when using open data.

Whilst identifying impact is a difficult task, this part of the project attempted to determine whether emerging impacts could be identified within a semi-controlled situation. An intervention was conducted with journalists to assist their use of open data, with the goal of getting a sense of whether journalists' use of open data would influence their style of reporting towards more critical and effective financial reporting. It was important to understand this dynamic, since it can be argued that 'data-based' reporting would increase journalists' capacity to

influence processes of decision making and governance regarding budget and aid, towards more transparency and accountability. Without claiming that this intervention would be able to test the hypothesis that “journalists’ increased access to and use of aid and budget data will lead to an emerging impact of more transparency and accountability which would in turn influence the whole financial budget and aid data eco-system”, it would be important to assess the viability of the first link in this logical chain: “will knowledge of and ability to use open data influence journalists’ reporting style?” –The intervention was planned and conducted by the lead researcher in partnership with the Open Nepal coordinator, Young Innovations and a trainer from the Nepal Aid Management Platform.

The intervention consisted of a pre-intervention survey with the journalists to understand their current use of aid and budget data, and their perceptions of the potential impact that open data could have on their work. This was followed by a training workshop that aimed to enhance the understanding of aid and budget data, improve the ability of journalists to access the aid and budget data they need, and develop stories from this data. The intervention was followed up with a post-intervention interview with the respondents to evaluate whether their attitudes, perception and use of open data had been impacted.

The intervention was delivered to a total of 13 journalists as indicated in the table below.

<i>Participant</i>	<i>Office/Media</i>	<i>Role</i>	<i>Remarks</i>
Sunil Dhungana	Freelance	Reporter	
Arun Karki	Nepal Television	Video Journalist	State-owned broadcaster
Shiba Pd Satyal	Rajdhani	Economic Reporter	Nepali national daily
Sabin Mishra	Ujyalo Network	Reporter	FM Radio
Nabin Aryal	Online Khabar	Reporter	Online News Media
Yagya Banjade	Abhiyan	Senior. Sub Editor	Dedicated business newspaper
Purna Duwal	Rajdhani	Senior Sub Editor	National daily
Kuver Chalise	Annapurna Post	Economic Bureau Chief	National daily
Modnath Dhakal	Aarthik Abhiyan	Chief Editor	Dedicated business daily
Sagar Ghimire	Republica Daily	Reporter	English national daily
Ashish Gyawali	Annapurna Post	Business Reporter	Nepali national daily
Pushpa Acharya	Republica Daily	Senior Reporter	English national daily
Shiva Bohara	Karobar	Reporter	Dedicated economic daily

Analysis

Findings from across these different research components have been compiled in the report below by the lead researcher. Through collaboration with other research partners and mentors, including Ineke Buskens (mentor), Tim Davies (Web Foundation), Louisa Dennison (Development Initiatives) and Victoria Room (Development Initiatives) a range of different findings have been drawn out, and checked against the evidence collected.

3. The context for open data in Nepal

Open data has emerged as an idea with global reach, sparking interest right across the world. The simple idea that information from governments, or other institutions, should be put on the internet, in machine-readable formats, and under permissions that let anyone re-use it for any purpose, has been the subject of advocacy and investment from a wide range of groups, with open data initiatives starting in numerous countries across the globe. However, the relevance of open data, the opportunities to put open data into practice, and the potential it has to create change, are all shaped by local context. In assessing the potential of open aid and budget information in Nepal - a country in transition - we have looked at the political, legal, technical, social, economic and organizational landscapes. We have also looked specifically at the landscape around aid and budget data respectively.

Political context

Both the supply and use of open data are shaped by the political context of a country. The political environment affects whether or not there are spaces where data can be used to generate the outcomes that citizens find desirable in their polity. Political commitment is furthermore needed to secure a sustainable supply of key datasets, and ensure that the capacity to participate in the open data eco-system is as evenly as possible spread over the population as a whole so as not to generate new divides and areas of exclusion.

Nepal's political situation is fragile. The country is undergoing a protracted transition following a decade-long violent conflict that ended in 2006. Having had 20 governments since the introduction of democracy in 1990, political instability has been a defining characteristic of the Nepali state. After the first Constituent Assembly, appointed in 2009, failed to come to agreement in their framing of a new constitution for Nepal, national elections were held to appoint a second Constituent Assembly. This new government, elected in November 2013, is now responsible for creating an enabling environment to promulgate a new constitution for Nepal and complete the peace processes. They recently launched a 13-page Common Minimum Programme (CMP) vowing to frame a new constitution within a year, complete remaining tasks of the peace process as soon as possible and fix a date for local elections. The government has promised that it will promote accountability, responsiveness and transparency, stating that it has a zero tolerance for corruption.⁶

According to the World Bank, the conflict and the prolonged transition to stability have contributed to a progressive erosion of the effectiveness of some state institutions⁷. In this context, the country system is weak, and due to the politics of constitution drafting, governance issues are not currently a top priority for politicians. The local tiers of government in districts, municipalities and villages, responsible for ensuring bottom-up participatory development and delivery of public services, have been without elected representatives for over one and a half decades. Local government bodies such as Village Development Committees and Municipalities have been run by informal coalition structures formed of the political parties active in that locality, with no opposition or tacit accountability mechanism. This has caused serious concern over the governance of local government budgets and programmes. In the absence of elected local government bodies, the government has made some efforts to include community representatives in decision-making. The recently created 'Ward Citizen Forums', at ward level, the lowest government unit, are an example of this. There are also guidelines for practices of regular social audits and public hearings at the local level⁸. The government has also appointed a Village Development

⁶ Himalayan News Service (2014) Govt Promises the Moon in CMP, Himalayan Times, 19 March 2014. Available at: <http://www.thehimalayantimes.com/fullNews.php?headline=Govt+promises+the+moon+in+CMP&NewsID=409098>

⁷ World Bank (2014), Nepal Overview, Available at <http://www.worldbank.org/en/country/nepal/overview> (accessed 12th March 2014),

⁸ From the speech "Talking points for March 18 MPG2" – need to find details from Krishna

Committee (VDC) Secretary to act as a Public Information Officer to address citizen's demands for information, adhering to the Right to Information Act-2007.

Partly due to the lack of local elected officials, Nepal ranks low in terms of its level of democracy. In the 2012 Democracy Index, Nepal scored 4.16 out of 10, giving it a country rank of 111. This score was based on its performance in the areas of electoral process and pluralism; civil liberties; the functioning of government; political participation; and political culture⁹. The 2013 Citizen Survey in Nepal, conducted by the Institute for Democratic and Electoral Assistance (IDEA) explored citizen's views on Nepal's democratic processes. Following the dissolution of the first Constituent Assembly, the 2013 level of support for democracy (53 percent) was found to be lower than the level of support (67 percent) during the immediate aftermath of the ten-year conflict. IDEA found that, whilst the majority of citizens support democracy and had a high level of trust (78 percent) in state institutions, they lacked trust in political parties and in political developments. In terms of political awareness, 51 percent of respondents were found to be up-to-date with contemporary politics; 57 percent were familiar with major national agendas; and 36 percent participated in public affairs. IDEA found that more respondents perceived the present state of affairs in the country to be 'undemocratic' (47 percent) than 'democratic' (17 percent). The majority of respondents (56 percent) were not satisfied with the way democracy works in Nepal (compared to 44 percent who were 'satisfied'). When asked to choose one among a list of attributes of democracy, respondents noted that they preferred 'economic opportunity' (34 percent) over 'political freedom' (28 percent), 'accountability' (24 percent), and 'process' (14 percent).¹⁰

Whereas transparency, accountability and good governance are on every political party's agenda in Nepal, the political parties have not necessarily been transparent about their own activities. The Enabling State Programme (ESP) reports that political parties have been unwilling to disclose their donations received, expenditures made, and decisions taken, and some of the major political parties have not submitted mandatory annual audits.¹¹ Nepal does not have disclosure laws that require public disclosure of income and assets for elected and senior public officials¹². Newly elected Prime Minister Sushil Koirala, in his first decision following assumption of office, announced a measure to further government transparency and curb government corruption and irregularities. This new initiative will require government entities, including the Office of Prime Minister and Council of Ministers, to publish every expenditure incurred (of more than NPR 5,000) on the government's website¹³. These expenditures will be listed on the website for a short period of three days. With this, citizens can more easily monitor the government from the perspective of public spending, although the short period of disclosure limits the analysis potential of this information. Evidence of the implementation of this initiative is not yet available online and it is not certain whether this information will be released in open format¹⁴.

Whereas political parties have not committed to open data officially, there is at least one emerging champion within the parliamentary sector. Gagan Thapa is a Nepali politician, belonging to the Nepali Congress party. He is, at present, a popular and influential youth political leader in Nepal widely followed in various social networking

⁹ The Economist Intelligence Unit (2012), Democracy index 2012, Available at <http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=Democracy-Index-2012.pdf&mode=wp&campaignid=DemocracyIndex12>

¹⁰ IDEA (2013) Citizen Survey 2013, Available at http://www.idea.int/asia_pacific/nepal/nepali-people-support-democracy-but-lack-trust-in-political-parties-and-political-developments.cfm

¹¹ Kasajoo (2013) Right to Information, A Think Piece, Enabling State Programme, Available at: <http://www.edgroup.com.au/wp-content/uploads/2014/03/ESP-RTI-Policy-Brief-Final.pdf>

¹² Djankov et al (2009), Disclosure by politicians, World Bank, Dartmouth College, EDHEC Business School, and Harvard University, Available at: <http://www.freedominfo.org/wp-content/uploads/documents/WBI-Djankov.pdf>

¹³ Ekantipur (2014) Koirala gov't moves against graft, Kathmandu Post, 13 February 2014, Available at: <http://www.ekantipur.com/2014/02/13/top-story/koirala-govt-moves-against-graft/385306.html>

¹⁴ From Krishna's writing of 25th February

sites. He has been a vocal proponent of open data, publically presenting how the government of Nepal can reap the benefits of open data and use it to enable active citizen engagement.

Legal context

Open data involves the proactive publication of data. In most countries it has so far been introduced through executive decisions of governments or the voluntary decisions of certain departments and agencies, and does not have an explicit legal basis. However, the potential for open data supply and use is shaped by a wider range of laws in a country, and laws also play an important role in shaping the bureaucratic culture of the state, which can affect open data initiatives.

Nepal's Right to Information (RTI) Act came into effect on 20 August 2007 as a law to implement the fundamental right recognized in the 1990 Constitution. The Right to Information Act aims to make the functions of the state open and transparent in accordance with the democratic system, to make state institutions responsible and accountable to Nepal's citizens, and to facilitate the access of citizens to the information held by public bodies. The RTI Act was the result of approximately 17 years worth of advocacy led by the media and civil society organizations. This development marked considerable progress in the enforcement of freedom of information in Nepal. The National Information Commission (NIC) was constituted six months after the enactment of the RTI Act and its regulations were enacted in 2009. The NIC is an independent body for the promotion, protection, and practice of the right to information.

The disclosure of a multi-million dollar Value Added Tax (VAT) scam is so far the most successful case of RTI use in Nepal. An information request was made by Nepali RTI activist Taranath Dahal under the RTI Act, asking the Ministry of Finance to provide copies of the internal report into faked VAT bills. After a six-month battle for the information, resulting in an intervention by the newly formed NIC, the Ministry eventually disclosed the report. The report revealed that fake invoices had been used by 518 companies to evade VAT payments of nearly NPR 10 billion. The RTI request brought knowledge of the corruption by business entities into the public domain.

Whereas Nepal now has the legal and institutional development of the RTI Act, its operational implementation has been relatively slow, although there have been some success stories on use of RTI in areas such as governance, public service delivery, rights and entitlements, and parliamentary accountability. According to a summary report from the Enabling State Program (ESP), there has been some indifference and resistance to the implementation of RTI across the range of stakeholders defined as public agencies, including political parties, government and civil society. An indicator to support this is the low numbers of information officers appointed in public bodies, despite their requirement under law. ESP experienced that many officers chose to retain information rather than share it. According to ESP, this was because the officers feared that opening information would result in their loss of power, interfere with their jobs, would enable others to take undue benefit from the information, and in some cases would obstruct the undue benefit taken by some officials. For more effective implementation of the right to information in Nepal there is a need to strengthen the government's record management system, train information officers and provide them with appropriate tools. Alongside this it is also necessary to increase citizens' awareness of their democratic rights and also to strengthen their demand for information. In their 2014 RTI Thematic Brief ESP highlighted that the demand side of RTI is still weak, noting that information seekers lacked awareness of RTI, the capacity to demand information, and the motivation to do so¹⁵. They found that potential

¹⁵ ESP (2014) Thematic Brief – Right to Information, Available at: <http://www.edgroup.com.au/wp-content/uploads/2014/01/ESP-RTI-thematic-brief.pdf>

users did not know about the scope and strength of RTI, and that motivation, support and capacity-building is needed to create demand for this information-seeking process.

According to ESP, it is common for government employees to be guided by an outdated piece of legislation - the Public Service Act. This Act promoted a culture of secrecy by containing provisions that evaluated government employee performance on the basis of their efficiency to maintain secrets. The Public Service Act has led to a work culture that values secrecy, and has become a tool of convenience for not following the RTI Act¹⁶. This has contributed to an apparent lack of political will to implement the Act¹⁷.

The right to privacy was addressed as a fundamental right for the first time in the 1990 Constitution – the same constitution that first included Right to Information. Article 28 of the Interim Constitution provides: “*Except in circumstances as provided by law, the privacy of the person, residence, property, document, statistics, correspondence, and character of anyone is inviolable.*” Although there is constitutional protection for the right to privacy, no law or acts have been made.¹⁸

Nepal has a Copyright Act (2002) and Regulation (2004), however intellectual property rights are considered weak by the Department of Industry, due to a general lack of awareness and technical problems, particularly with regards to patenting.¹⁹ Nepal has a Copyright Registrars Office - NCRO looks after copyrights of creative works of literature, art, science and in any other fields as well as the related rights of performances, phonogram productions and broadcastings²⁰.

A number of legal instruments have been created to develop the ICT sector and augment e-governance in Nepal. These include the IT Policy (2010), Electronic Transaction and Digital Signature Act (2000), Copyright Act (2002), Telecommunication Act (1997), National Communication Policy (1992), and National Strategy Paper on ICT (National Planning Commission)²¹. The increasing number of people using the internet resulted in the need for the Electronic Transaction Act (2006). Five years later, to support the law, the Nepali Police created the Communication, Information, and Technology (CIT) Crime Unit to deter cybercrimes in Nepal.²²

There are several acts aimed at improving systems of governance in Nepal. These include the Local Self Governance Act (1999). This requires there to be an information and record center in each District Development Committee (DDC) area, to identify the real situation of the district and enhance the planned development process. These centers have to collect and maintain information. The service delivery powers granted through this Act have, however, been fundamentally undermined by the lack of locally elected representatives. Since 2002 local governments have been administered by unelected interim bodies, which have, according to a German Development Institute report, allowed corruption amongst officials to thrive. This has meant that any progressive

¹⁶Kasajoo (2013) Right to Information, A Think Piece, Enabling State Programme, Available at: <http://www.edgroup.com.au/wp-content/uploads/2014/03/ESP-RTI-Policy-Brief-Final.pdf>

¹⁷ ESP (2014) Thematic Brief – Right to Information, Available at: <http://www.edgroup.com.au/wp-content/uploads/2014/01/ESP-RTI-thematic-brief.pdf>

¹⁸ Privacy International (2013), Nepal Report – Chapter 2, Legal Framework, Accessed 12 March 2014, Available at: <https://www.privacyinternational.org/reports/nepal/ii-legal-framework>

¹⁹Karobar (2013) Nepal weak in intellectual property rights, Karobar National Economic Daily, 12 August 2013, Available at: <http://www.karobardaily.com/news/2013/08/nepal-weak-in-intellectual-property-rights>

²⁰ Nepal Copyright Registrars Office (no date), Copyright Protection, Accessed on 12 March 2014, Available at: <http://www.nepalcopyright.gov.np/>

²¹Banepali R M (2013) E-readiness of citizens and communities for their active engagement with local governments. Available at: <http://endconflict.files.wordpress.com/2013/12/field-research-proposal-e-governance-cpds-rmb.pdf>

²²Privacy International (no date), Nepal Report, Chapter IV. Privacy Issues. Available at: <https://www.privacyinternational.org/reports/nepal/iv-privacy-issues>

powers granted to local government through the Local Self Governance Act have lost their legitimacy in the eyes of the Nepali people²³. The Financial Work Procedure Act (1999) is a legal arrangement that regulates the financial procedures of government. It contains legal provisions to improve the transparency of government expenditure, for example, relating to the formulation, sanction and spending of budget; maintaining accounts; and the making of arrangements for internal control and auditing. The Financial Working Procedure Act dictates that development assistance donated by international bodies should be incorporated in the annual budget and therefore channeled through budget processes rather than outside of government. This stipulation has not been adhered to by some donors, thereby undermining the transparency laid out by the FWPA. The new Development Cooperation Policy (2014) has addressed this issue, looking to mobilize foreign aid under the budgetary process and backing up the requirements of the Financial Work Procedure Act. The Good Governance (Management and Operation) Act (2008) aims to improve public administration so that it is accountable, transparent, inclusive and participatory. The Act promotes the adoption of the basic values of good governance such as rule of law, financial discipline, and efficient management of public resources. It puts citizens at the center of public policy debates, defines the roles and responsibilities of political and administrative actors in decision-making, and requires all central government entities to publish their achievements towards better governance.

Technical context

Many arguments for the potential of open data assume that, if data is placed online, then it will, in essence, be available to all citizens to use, either directly or through some technology intermediary. However, in many developing countries internet connectivity is limited, particularly the kinds of broadband connectivity needed to work with data. Similarly, the availability and capacity of technology intermediaries may be lower than in countries that have pioneered open data initiatives.

Estimates of internet penetration in Nepal vary widely, but all estimates agree that it is low yet increasing rapidly. According to the Nepal Telecom Authority (NTA), in April 2014 around 31 percent of Nepalis had access to some form of internet connection, up five percent from nine months before. The NTA's monthly Management Information System report, however, showed that only around five percent of the internet users have access to a trustworthy internet connection (wireless modem, optical fibre, cable modem, ADSL, CDMA 1X, EVDO and WiMAX). Ninety-five percent of the 8.4 million internet users in Nepal are using unreliable and low-quality internet connection based on GPRS, EDGE and WCDMA technologies, the form used by mobile telephones. Access to telephone and mobile telephone services is higher. According to the recent statistics made public by the NTA, more than 23 million people have access to telephone services. 80 percent of Nepalis have access to mobile services, and access to general telephone services in the country has exceeded 88 percent²⁴.

There is a significant digital divide within Nepal, with geography being a key factor dividing the people that have access to, use of, and knowledge of information and communications technologies and the people that do not. The 2011 Nepal Living Standards Survey found that urban access to internet facilities is far better compared with access in the rural areas²⁵. General computer literacy is low, and advanced ICT skills for analyzing information using

²³ Mallik, V (2013) Local and community governance for peace and development in Nepal, German Development Institute, http://www.die-gdi.de/uploads/media/Studies_75.pdf

²⁴ NTA (2014) NTA MIS 85, May 2014, Available at: <http://www.nta.gov.np/en/>

²⁵ Central Bureau of Statistics (2011) Nepal Living Standards Survey, 2010-2011, Available at: <http://microdata.worldbank.org/index.php/catalog/1000>

high-end technology is very limited to urban areas. Wireless technologies and education in schools are helping to bridge this digital divide.²⁶

Integrating ICT into education in Nepal is a priority of the Ministry of Education. In 2013 the government of Nepal (GoN) endorsed a Master Plan for ICT in Education 2013-2017 that included four major components - ICT infrastructure including internet connectivity, human resources, digital content development and system enhancement. The plan aims to effectively integrate ICT in teaching and learning processes across all education sub-sectors to increase access to education, quality of education and equity of education.²⁷ The Nepal Engineering Council estimates that there are nearly 3000 technical graduates from local engineering colleges each year²⁸.

The ITU's 2012 "Measuring the Information Society" report ranked Nepal 137 out of 155 countries with an ICT Development Index of 1.63. The report also highlighted that Nepal had high ICT prices, with an IPB (ICT Price Basket) of 27.2. The IPB provides information on the cost and affordability of telecommunication and information and communication technology (ICT) services. The IPB is composed of three distinct prices – for fixed-telephone, mobile-cellular and fixed-broadband services – and computed as a percentage of countries' average gross national income (GNI) per capita²⁹

Over the past two decades the government has been increasingly supportive of ICT use and of developing and promoting Nepal's information technology sector. The National Information Technology Centre (NITC) was established by the Ministry of Science and Technology in 2002, in line with IT policy announced in 2000, as the focal point for the implementation of government e-services³⁰. The NITC works as the government's central internet service provider, has established "telecenters" where the public can access e-services through a single national portal, and is providing basic and advanced IT training for government employees.

The government is implementing e-government services to enable efficient, effective and transparent interaction between government, citizens, and businesses³¹. Nepal has just started building its e-government efforts. Many lead government agencies have a web presence, and some have moved beyond on-line information provision to limited online transactions.³² For example, the Inland Revenue Office has started to use an online system for VAT submissions, and the Company Registrar Office has digitized its system and uses online forms to update its systems. The Department of Information is currently constructing an online hub – the Nepal government portal - <http://nepal.gov.np/> to provide information about the activities and decisions of the government.

e-Readiness is the ability to use Information and Communication Technologies (ICT) to develop one's economy and to foster one's welfare. Each year the Economist Intelligence Unit produces a ranking of e-readiness across several countries, based on six pillars of e-readiness: connectivity & technological infrastructure, business environment,

²⁶ Pun, Mahabir (no date) Bridging the Digital Divide, the case of Nepal wireless, Available at: <http://www.unapcict.org/ecohub/bridging-the-digital-divide-the-case-of-nepal-wireless>

²⁷ UNESCO (2013) Policies on ICT in Education in Nepal, Accessed 13th March 2014. Available at: <http://www.unescobkk.org/education/ict/online-resources/databases/ict-in-education-database/item/article/policies-on-ict-in-education-in-nepal/>

²⁸ National Engineering Council (2011) Welcome to NEC. Available at: http://nec.gov.np/index.php?action=home_page

²⁹ ITU (2012) Measuring the Information Society 2012, Available at: http://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2012/MIS2012_without_Annex_4.pdf

³⁰ National Information Technology Center (2014), Welcome to our official website, Available at: <http://www.nitc.gov.np/>

³¹ Privacy International (no date), Nepal Report, Chapter IV. Privacy Issues. Available at: <https://www.privacyinternational.org/reports/nepal/iv-privacy-issues>

³² Computer Association of Nepal-USA (2009) Progress and Challenges of ICT Development in Nepal, Available at: http://www.can-usa.org/downloads/Nepal_ICT_Sector_Note_March08.pdf

social & cultural environment, legal environment, government policy & vision and consumer & business adoption. With an e-readiness index of 0.2664 in 2012 Nepal is ranked 164th in the world³³.

Economic context

It has been argued that open data has the potential to bring about substantial economic benefits³⁴. However, scaling up the benefits of open data may also require economic resources, such as investment in technology and data industries. In seeking developmental benefits from open data, it is important to ask about whether potential economic returns from data are likely to be equitably distributed, or whether the distribution of income from open data is likely to disproportionately benefit one group over another, and to assess how far economic growth can be converted into developmental outcomes.

Nepal is committed to a programme of economic liberalization and has made progress towards sustainable economic growth since the 1950s. In 2012 Nepal had a GDP of USD 19.41 billion, and its population of 27 million had a per capita income of USD 750³⁵. Over the past three decades Nepal's GDP growth has averaged at 4 percent per annum, continuing to grow even during the decade-long conflict³⁶, however World Bank data shows that in 2013 economic growth in Nepal dipped to 3.6 percent with average inflation rising to 9.9 percent. This rise in inflation can be attributed to increased imports of food items throughout 2013 as a result of a poor harvest³⁷.

Agriculture is the principal economic activity (rice and wheat are the main food crops), employing two thirds of the population and providing 37 percent of GDP. Nepal has a small export base given its size. India accounts for 66 percent of all exports, most of which are iron and steel, knotted carpets, textiles, plastics, hollow tubes, beverages and vegetables³⁸. Nepal's top imports are refined petroleum, gold, petroleum gas, semi-finished iron and cement³⁹. Nepal has a deteriorating trade balance. 2013 saw an increased demand for fuel, and an increase in domestic demand driven by remittance inflows. This increased import growth to 20.6 percent. At the same time export growth slowed to 3.6 percent.⁴⁰

Weak investment constrains the economy's full growth potential. Foreign direct investment is increasing fast, but from a low base, averaging at only 0.1 percent between 2004 and 2009. The IFC's Enterprise Survey of 2013 states that the biggest environmental obstacles to business are political instability, electricity, and access to finance⁴¹. The World Bank add to this the issues caused by a challenging legal framework, poor governance and accounting practices, and poor implementation of property rights⁴². Nepal's energy constraints are also one of the most serious bottlenecks to economic growth, along with the poor physical connectivity from the low density, poor quality road network. The unreliability and inaccessibility of electricity sources have resulted in daily 16-hour load-

³³ United Nations (2012) E-Government Survey 2012, Department of Economic and Social Affairs, Available at: <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan048065.pdf>

³⁴ Manyika, J., Chui, M., Groves, P., Farrell, D., Kuiken, S. Van, & Doshi, E. A. (2013). Open data : Unlocking innovation and performance with liquid information; Gruen, N., Houghton, J., & Tooth, R. (2014). Open for Business: How Open Data Can Help Achieve the G20 Growth Target. Sydney, Australia; Gurin, J. (2014). Open Data Now. Open Data Now.

³⁵ World Bank (2014) Nepal Overview, Available at: <http://www.worldbank.org/en/country/nepal/overview>

³⁶ World Bank (2014) Nepal: Country Snapshot, Available at: <http://siteresources.worldbank.org/SOUTHASIAEXT/Resources/223546-1398285132254/Nepal-Country-Snapshot-Spring-Meetings-2014.pdf>

³⁷ World Bank (2013) Nepal Development Update October 2013, Available at <http://www.worldbank.org/en/news/feature/2013/10/31/nepal-development-update-october-2013>

³⁸ Trading Economics (2014), Nepal Exports, Available at: <http://www.tradingeconomics.com/nepal/exports>

³⁹ Observatory of Economic Complexity (no date), Trade in Nepal, Available at: <http://atlas.media.mit.edu/profile/country/npl/>

⁴⁰ World Bank (2013) Nepal Development Update October 2013, Available at <http://www.worldbank.org/en/news/feature/2013/10/31/nepal-development-update-october-2013>

⁴¹ IFC (2013) Enterprise Survey – Nepal Country Profile, Available at: <http://microdata.worldbank.org/index.php/catalog/1768>

⁴² World Bank (2014) Nepal Overview, Available at: <http://www.worldbank.org/en/country/nepal/overview>

shedding periods during the dry season, despite the fact that Nepal has significant unexploited hydropower potential, estimated at 83,000 MW.

When compared to domestic resources Nepal is highly dependent on external sources of finance. Many households are dependent on remittances from migrant workers abroad – these are now equivalent to 25 percent of GDP. In 2011, USD 4,217 million in remittances flowed to Nepal, forming around 78 percent of international resource flows to Nepal. USD 893 million came from overseas development assistance⁴³. Aid to Nepal has doubled since 2000. Despite this, aid dependency is falling – aid was 53 percent of government spending in 2000 and 34 percent in 2009. Meanwhile tax revenue stood at 15 percent in 2009⁴⁴

The Gini index measures the extent to which the distribution of income or consumption expenditure among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. In 2010 the World Bank measured Nepal's Gini coefficient as 32.8⁴⁵. This makes Nepal one of South Asia's most equal countries in terms of per capita consumption. Over the period 2004 to 2011 a rise in per capita consumption was experienced by every expenditure class with the poorer classes experiencing the greater increase, thereby lowering overall inequality. Despite this, poverty is significantly higher in rural areas (27.4 percent) than in urban areas (15.5 percent). Nearly 90 percent of the poor live in rural areas. The 2011 Nepal living standard survey shows that household income levels vary significantly across Nepal's five development regions⁴⁶. There is also a strong convergence between levels of poverty and the social hierarchy of caste and ethnicity. For example, poverty is more pronounced in the Dalit and Janajati groups than for the Newar and Brahman castes.⁴⁷

Nepal scores low on the Human Development Index with an HDI value of 0.463, GNI per capita (2005 PPP USD) of 1,137, ranking 157 out of 186 countries⁴⁸, however progress on poverty reduction and human development is strong. Between 1980 and 2010 the Human Development index has improved at a rate of 2.6 percent annually, and the World Bank estimates that Nepal has been reducing poverty at a rate of 2.5 percent per year since 2004, Nepal has already reached the first Millennium Development Goal (MDG) of halving extreme poverty during 1990-2015, leaving the percentage of the population living below the PPP USD 1.25 per capital poverty line at 25 percent, and has also made substantial progress in reaching several other MDG milestones related to key human development outcomes. This is despite modest economic performance.

Social context

The ODDC conceptual framework highlights the potential of open data to bring about greater inclusion and empowerment, through helping to address power imbalances that result from unequal access to information. However, existing social divides may affect who can contribute to, and benefit from, open data, and addressing 'data divides'⁴⁹ may require conscious effort.

⁴³ Development Initiatives (2013) Nepal Financial Resource Flows Profile, Available at:

<http://opennepal.net/sites/default/files/resources/Open%20Nepal%20Financial%20Resource%20Flows%20Profile.pdf>

⁴⁴ Action Aid (2011) Real Aid, Ending Aid Dependency. Available at: https://www.actionaid.org.uk/sites/default/files/doc_lib/real_aid_3.pdf

⁴⁵ World Bank (2014) Data- Gini Index. Available at: <http://data.worldbank.org/indicator/SI.POV.GINI>

⁴⁶ Central Bureau of Statistics (2011) Nepal Living Standards Survey, 2010-2011, Available at:

<http://microdata.worldbank.org/index.php/catalog/1000>

⁴⁷ Patel, S (2012) Poverty Incidence in Nepal by caste / ethnicity, Academic Voices, Vol 2.1.

⁴⁸ UNPD (2013) Human Development Report 2013, The Rise of the South. Available at:

http://hdr.undp.org/sites/default/files/reports/14/hdr2013_en_complete.pdf

⁴⁹ Gurstein, M. (2011). Open data: Empowering the empowered or effective data use for everyone? First Monday, 16(2).

Nepal has a population of 27.5 million, of which 11.6 million are under the age of 18⁵⁰. Nepal has over 103 recognized ethnic groups and castes, speaking over 92 languages⁵¹. Life expectancy at birth is 70 years for women and 68 years for men⁵², however this can vary according to caste. The Dalit Welfare Organisation has estimated the average life expectancy of Dalits to be nearly 8 years less than the Nepali average.⁵³ The average annual population growth rate is around 1.2 percent, with growth rates in urban areas significantly higher than in rural. Nepal's populations live predominantly in rural areas, with only 17 percent of the population living in urban areas⁵⁴.

At 57.4 percent, Nepal has low adult literacy rates. There is a low net secondary education enrollment rate, at 24 percent. Less than half of primary students enter secondary schools, and only one-half of these complete secondary schooling –the majority of which are boys⁵⁵. Malnutrition levels are high, although there has been progress on other health indicators over the past five years. The World Bank estimates that about 47 percent of children under 5 are stunted, 15 percent wasted, and 36 percent underweight.

The Transparency International Corruption Index 2013 ranked Nepal 116 out of 177 countries, giving it a score of 31 out of 100⁵⁶. A University of Australia study about Nepali digital native's trust level in government revealed unflattering public perception of government transparency. 32 percent of respondents believed that the government acted in the best interest of the citizens. 90 percent did not believe that the government was honest in its dealings, and just 11 percent felt that the government was transparent.⁵⁷

Lack of social inclusion of underprivileged ethnic groups and women is one of the key social issues facing Nepal. Throughout its recent and not-so recent history Nepal has had a structured hierarchy and power inequality between different social, cultural and linguistic groups. Although the caste system was officially dissolved in 1963, it remains deeply embedded in the national psyche. Status in society is determined almost entirely by birthplace, gender, caste and ethnicity. A Unesco report in 2011 found that there is a strong correlation between ethnic status and caste membership, poverty and development, with women and children the most exposed to discrimination, particularly in rural areas⁵⁸.

Nepal has a patriarchal society, and gender discrimination is common. The World Economic Forum's Global Gender Gap report quantifies the magnitude of gender based disparities, measuring the gap between men and women in four categories – economic participation and opportunity, educational attainment, health and survival and political empowerment. The report ranks Nepal at 121 out of 136 countries, giving Nepal one of the highest gender gaps in the world. The only Millennium Development Goal that UNDP has assessed Nepal as unlikely to achieve is goal three which addresses gender equality and empowerment of women⁵⁹. The World Economic Forum highlights that the political empowerment of women is improving⁶⁰. This is in part due to a requirement in

⁵⁰ Unicef (2013) Nepal Statistics, Available at: http://www.unicef.org/infobycountry/nepal_nepal_statistics.html

⁵¹ Unesco (2011) Country Programming Document for Nepal, Available at: <http://unesdoc.unesco.org/images/0021/002114/211447e.pdf>

⁵² UN Data (2014) Nepal Country Profile, Available at: <http://data.un.org/CountryProfile.aspx?crName=Nepal>

⁵³ Dalit Welfare Organisation (2010) Nepal Dalits, Available at: <http://www.dwo.org.np/dalit.php>

⁵⁴ World Bank (2013), Managing Nepal's Urban Transition, Available at: <http://www.worldbank.org/en/news/feature/2013/04/01/managing-nepals-urban-transition>

⁵⁵ World Bank (2014) Nepal Overview, Available at: <http://www.worldbank.org/en/country/nepal/overview>

⁵⁶ <http://www.transparency.org/country#NPL>

⁵⁷ Shah, B (2011) Increasing e-Government Adoption through Social Media: A case of Nepal, Available at: <http://www.diva-portal.org/smash/get/diva2:372485/FULLTEXT01.pdf>

⁵⁸ Unesco (2011) Country Programming Document for Nepal, Available at: <http://unesdoc.unesco.org/images/0021/002114/211447e.pdf>

⁵⁹ UNPD (2014) Where Nepal stands in terms of achieving the MDGs, Available at: <http://www.np.undp.org/content/nepal/en/home/mdgoverview/>

⁶⁰ World Economic Forum (2013) The Global Gender Gap, Available at: http://www3.weforum.org/docs/WEF_GenderGap_Report_2013.pdf#page=20

the Interim Constitution to have 33 percent female representation in the Constituent Assembly⁶¹. Despite this improvement, Nepal's women are far from gaining social, political and economic equality with men.

Organisational context

The main drivers of open data in Nepal have been civil society and technical activists. This is an interesting feature of the open data movement in Nepal, as in many other countries the movement has been led by either the government or the World Bank. The Nepali government has not been a key proponent as yet, and a lead has not yet been taken by any of the ministries usually involved in open data initiatives, such as the Ministry of Science and Technology, National Planning Commission, Department of Statistics, ICT Department, or National information Commission etc. The key Nepali organizations and initiatives involved in the open data movement in Nepal are as follows: (please note, this is sector that is growing fast so this list may not be comprehensive)

- [Open Nepal](#) is a collaborative initiative that works to create an ecosystem around open data. It is the joint initiative of four organizations – Freedom Forum, NGO Federation of Nepal, Young Innovations and Development Initiatives. Open Nepal works to increase access to better data and to provide tools, skills and support to analyse and use data to explore and understand the role of data in supporting development efforts. Via the [Open Data Portal](#) it increases the availability and accessibility of open data in Nepal. Via its awareness raising and capacity development programmes it aims to increase the use and demand for open data in Nepal and to learn and share how to help people to engage with open data.
- [Freedom Forum](#) is a Nepali non-governmental organization, working for institutionalization of democracy, protection and promotion of human rights, press freedom, freedom of expression and right to information in Nepal. They have conducted several open data scoping workshops, researched a number of open data case studies and are a partner in the Open Nepal initiative.
- [NGO Federation of Nepal \(NFN\)](#) is an umbrella organization of NGOs in Nepal with almost 6,000 NGO affiliates. NFN fights for the promotion of human rights, social justice and pro-poor development. They have conducted several open data scoping workshops, researched a number of open data case studies and are a partner in the Open Nepal initiative.
- [Young Innovations](#) is a company based in Nepal that provides innovative solutions in the areas of open development, integrated mobile solutions and web development. They have conducted training sessions about open data and opened up data on the Open Data Portal. They are a partner in the Open Nepal initiative.
- [Open Knowledge Foundation Nepal](#) is a non-profit network that uses advocacy, technology and training to unlock information and enable people to work with it to create and share knowledge. OKFN was formed in 2013, hosts regular open data hacking meet-ups and has made the budget data open through their [Open Spending Nepal](#) website.
- [Kathmandu Living Labs \(KLL\)](#) is a group of young people working to harnesses local knowledge, leverage open data and promote civic technology. They focus on participatory technologies that empower and engage citizens in working with government and development agencies to address problems collectively. KLL is help to build the [Open Street Map](#) of Nepal.

The key international organizations working in the open data movement in Nepal are:

⁶¹Unesco (2011) Country Programming Document for Nepal, Available at: <http://unesdoc.unesco.org/images/0021/002114/211447e.pdf>

- [Development Initiatives](#) is an international organisation working to reduce poverty by making data and information on poverty and resource flows transparent, accessible and useable. They are a partner in the Open Nepal Initiative
- [Development Gateway](#) is a non-profit organization that provides information tools and services to support international development. They supported the development of the Aid Management Platform. Their [AidData](#) initiative posts fellows with Nepali organizations to improve use of development finance data. They are the driving force behind the Open Data Working Group being set up at Kathmandu University.
- [World Bank Institute](#) – is a global connector of knowledge, learning and innovation for poverty reduction. They have coordinated two Data Boot Camps in Kathmandu, aimed at improving the use of open data by journalists, civil society actors and technologists. Through their [Open Aid Partnership](#) they have collected, opened up and mapped local development data.
- [Restless Development](#) – is a youth led development agency placing young people at the forefront of charitable development. They are piloting their Big Idea initiative in Nepal, working to improve the skills of young people to monitor the post-2015 settlement using open data.
- [Global Facility for Disaster Reduction and Recovery](#) – their Open Data for Resilience Initiative is piloting in Nepal. It aims to support evidence-based, innovative solutions to urban issues across South Asia by creating multi-hazard risk data that is open and accessible to the public.

There are many organizations and initiatives, both Nepali and international, working in Nepal in the area of openness, governance and accountability. These are not currently using open data, however have the potential to incorporate it into their work. The following lists just some of these organizations as an example of the potential in Nepal:

- [Local Interventions Group](#) is a Nepali non-profit working with data-driven solutions for smarter governance. They are promoting open government ethos in Nepal, working to enhance citizen access to government services, improve local input into development efforts and advocating for policy-making based on data and informatics. They are advocating for Nepal to join the Open Government Partnership.
- [GalliGalli](#) is an initiative that assists citizens, residents and visitors to navigate Kathmandu and government services. They use technology to gather, package, and share the information that impacts people's relationships with their streets, communities, and government's services
- [Transparency International Nepal](#) – is a national chapter of Transparency International. It is a civil society organisation dedicated to increasing public accountability and curbing corruption in all walks of life. They envision a Nepal in which government, politics, business, civil society and the people are free of corruption
- [Accountability Lab](#) – is an organization that works to empower citizens to build integrity. They partner with civil society organizations in the developing world to build sustainable tools for new and innovative approaches to bolster accountability. In Nepal they have set up the [Open Gov Hub](#).
- [Integrity Action](#) – is an organization that empowers citizens to act with and demand integrity. In Nepal they work with the Campaign for Human Rights and Social Transformation (CAHURAST) doing community integrity building projects to improve infrastructure, services and local governance.
- [World Bank PRAN](#) – the World Bank's Program for Accountability in Nepal (PRAN) is designed to provide practical training, action learning and networking opportunities aimed at developing the capacity of civil society and government actors to promote social accountability.
- [Good Governance Foundation](#) – is a Nepali non-governmental organization that works to promote good governance, anti-corruption, quality public service delivery, Right to Information, social accountability and

consumer rights by creating an informed citizenry and making the state and its governance process accountable, transparent and participatory.

The use of open budget and open aid data takes place against a backdrop of political debates about aid and budget, institutional arrangements and power structures, and in the context of existing advocacy, campaigning or scrutiny work. The following sections look in particular at the specific contexts for aid budget data.

Aid Context

Foreign aid plays an important role in Nepal, representing 22 percent of the national budget in FY 2013-14, and financing most of the development expenditures (IECCD)⁶². The main sectors receiving external support are education (15 percent), health (13 percent), local development (12 percent), roads (11 percent). The total volume of ODA disbursement recorded in FY 2012-13 was USD 0.96 billion (IECCD) – approximately 49 percent from multilateral donors, 41 percent from OECD-DAC bilateral donors and 10 percent from South-South cooperation partners – notably India and China although the latter is not well-reported.

In principle all donors working in Nepal prioritise aid effectiveness principles in their respective aid policy/strategy/programmes for the nation. In practice, attitudes towards aid effectiveness commitments vary significantly within the donor community⁶³. The Aid Management Platform (AMP), an online web-based information system was set-up in the Ministry of Finance in 2010 and was made public in June 2013. The information on this portal shows how misaligned donor priorities and government priorities are. The new Development Cooperation Policy currently undergoing cabinet approval aims to increase development effectiveness, replacing the Foreign Aid Policy of 2002. The new policy designates the finance ministry as the only government body that can negotiate with development partners for foreign assistance, and it sets thresholds for foreign loans, concessional loans and grants of USD 20 million, USD 10 million and USD 5 million respectively. The new policy also requires all international and national non-governmental organisations to report details about their funding and programmes to the Aid Management Platform⁶⁴. Some of the directives proposed by this policy have been met with resistance from development partners, including the restrictions for government employees on foreign travel and attendance of technical training without prior approval by the Ministry of Finance, and the restriction of investment in social sectors, including health research⁶⁵.

There is a demand from NGOs, journalists and others for more comprehensive, timely and detailed information on aid flows, particularly geographical information. In recent years several initiatives have started working to address this, for example Open Nepal's [Open Data Portal](#), [Aid Snapshot](#), and the [Open Aid Partnership](#).

⁶²IECCD (2014) Development Cooperation Report, Available at: http://www.Ministry of Finance.gov.np/uploads/publications/file/DCR_final_12_13_2014042507361_20140426023938.pdf

⁶³OECD (2011) Aid Effectiveness 2011, Progress in Implementing the Paris Declaration, Available at: <http://www.oecd.org/dac/effectiveness/Nepal%202.pdf>

⁶⁴Republica (2014) Development Cooperation Policy sets foreign aid threshold, available at http://www.myrepublica.com/portal/index.php?action=news_details&news_id=77898

⁶⁵Spotlight News Magazine (2014) Development Cooperation Policy – half baked, Available at <http://www.spotlightnepal.com/News/Article/DEVELOPMNET-COOPERATION-POLICY>

Nepal is one of 23 partner countries to have endorsed IATI – the International Aid Transparency Index. Nepal was amongst the first partner countries to endorse the IATI Accra statement. Nepal also sits on the IATI Steering Committee.⁶⁶

Budget Context

The national budget process is led by the Ministry of Finance and National Planning Commission (NPC). With the Central Bank, they estimate the total revenue and spending for the annual budget. They then determine annual expenditure limits for sector ministries and following feedback from the ministries negotiate the final allocation amounts based on the past expenditure levels, internal and external sources of funding of the ministries' departments, district offices and local bodies⁶⁷.

The sub-national budget process involves several tiers of government. The overall district level ceilings are set by the NPC. The Village Development Committees (VDC) hold council meetings to decide district level programmes, forwarding their budget requests to an intermediate body called the area council. These are compiled and sent to the District Development Committee (DDC), where they are discussed by sector committees formed of government officials and political party representatives. The DDC submits the requests to central level for budget allocation⁶⁸.

The Budget Transparency Initiative (BTI) aims to reduce waste and corruption, and to stimulate citizen demand for transparent budget information through promoting public dialogue around public expenditures. In 2011 they piloted an approach in three districts of Nepal to simplify, analyze, and disclose budgets at the sub-national level and to build the budget literacy of government officials and citizens. The study found that budget processes were predominantly top-down, lacked cost-benefit analysis, and that there were delays in the communication of budget limits and releases. The study also revealed the existence of several gaps between policy and practice in the formulation and execution of sub-national budgets⁶⁹.

The timely publication of essential budget documents forms the basic building blocks of budget accountability and an open budget system. Nepal scored 44 out of 100 on the 2012 Open Budget Index⁷⁰. The survey measures whether governments produce and disseminate to the public the eight key budget documents required by international good practices. Whilst Nepal has improved since the first survey in 2006, it still lags behind its neighbours in South Asia⁷¹. The survey examines effective budget oversight and public participation in national budget decision-making. Recommendations from the survey included that Nepal needs to publicize the Enacted Budget, produce and publish a Citizens Budget and Pre-Budget Statement, improve the comprehensiveness of the Executive's Budget Proposal, provide opportunities for the public to testify at legislative hearings on the budget,

⁶⁶ Khanal, Rameshore Prasad (2009) Closing speech by Finance Secretary, Ministry of Finance, Nepal at IATI conference, 21 Oct 2009, the Hague.

⁶⁷ Budget Transparency Initiative (2012) Subnational budget processes and practices in Nepal, Available at: <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1193949504055/4348035-1380737852287/BTI-Nepal-Budgetary-Processes-Note.pdf>

⁶⁸ Budget Transparency Initiative (2012) Subnational budget processes and practices in Nepal, Available at: <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1193949504055/4348035-1380737852287/BTI-Nepal-Budgetary-Processes-Note.pdf>

⁶⁹ Budget Transparency Initiative (2012) Subnational budget processes and practices in Nepal, Available at: <http://siteresources.worldbank.org/EXTSOCIALDEVELOPMENT/Resources/244362-1193949504055/4348035-1380737852287/BTI-Nepal-Budgetary-Processes-Note.pdf>

⁷⁰ International Budget Partnership (2012), Open Budget Survey 2012, Available at: <http://internationalbudget.org/wp-content/uploads/OBI2012-Report-English.pdf>

⁷¹ Nepal News (2013) Nepal is poor in budget transparency: Open budget survey 2012. Available at: <http://www.nepalnews.com/archive/2013/apr/apr15/news05.php>

and empower Social Accountability Institutions to make public the comprehensive audit reports, including reports on extra and budgetary funds⁷².

Budget execution is a concern in Nepal. There have been recent instances of delay in the release of the annual budget causing an under-spend of capital expenditures. In some instances, almost half the year passes before the development related bodies start to work after having invited bids and fulfilled all the provisions of the Public Procurement Act. This lack of mobilization of resources slows down the process of development in the country.

Conclusions

The research into Nepal's context for open data presents a complex environment of opportunities and challenges for the further emergence of open data in Nepal. On one hand, Nepal has a strong civil society having experience in advocating for transparency and accountability, improving technical capacity with strong technical leaders, and emerging government support for transparency and openness. On the other hand, Nepal has low levels of internet connectivity, limited financial resources, high level of corruption, a culture of secrecy within government agencies, and limited evidence of demand for open data.

Whereas the political context shows the government giving vocal support for the promotion of transparency, the lack of local level democratically elected people's representatives has prevented chains of accountability to citizens –and there is still some way to go for the initial commitment to openness to translate into useful measures for accountability. Party politics in Nepal is a divisive feature of Nepal's political landscape and people have a very low level of trust in them, but all parties have committed to transparency as a key issue. Despite this, political commitment towards open data appears almost non-existent; as the focus of Nepal's politicians is elsewhere at the moment as the country tries to stabilize and strengthen its institutions. Legally, the right to information is recognized in law and reinforced by the setup of an institutional mechanism – the National Information Commission - for its enforcement, and supported by information request campaigns led by some CSOs. However, there is still a long way to go before it is fully implemented in practice. The working culture of secrecy within the government has caused challenges for the acceptance and implementation of RTI, something that is likely to cause hurdles for open data too. Open data advocates will need to learn from the experiences of RTI, and could benefit from linking to the existing discourse of values surrounding RTI.

In many developed countries the open data movement has succeeded through the voluntary efforts of technically skilled individuals. This is less likely to happen in the context of Nepal, where economic constraints prevent people from working voluntarily, and where the populations' IT skills and infrastructure are less well developed. Internet penetration in Nepal is low, albeit rapidly growing, and there is a significant digital divide in Nepal. This presents a significant hurdle to the sharing of open data. Despite this, there is a committed and skilled group of Nepali technical experts based in Kathmandu who are proactively trying to improve Nepal's supply of open data, stimulate demand for that data, and equip an ecosystem of actors with the skills to use that data.

Nepal ranks low on many of the social and economic indicators reviewed, and it is unknown how open data could play out in an environment with limited financial resources for data infrastructure and sharing, and with high levels of inequality. Open data in many developed countries has formed from counter culture roots, however the strong social hierarchies seen in Nepal could quash similar attempts to challenge the mainstream. Whether the concept of openness through data sharing can thrive in an environment of social exclusion is an interesting question for Nepal.

⁷²Bhattarai, P (2012) Budget Transparency, The Rising Nepal, Available at: http://www.gorkhapatra.org.np/rising.detail.php?article_id=47069&cat_id=7

4. Budget and aid data availability

This section begins by outlining a brief history of open data in Nepal, before turning to look at data availability in two key sectors: aid and budget.

Availability in context – History of open data:

The open data concept is very new in Nepal but there is growing interest, from a range of actors, in how access and use of open data can be used to improve accountability and lead to more effective development. Until 2012, the two key drivers for greater openness and access to information were the Right to Information (RTI) and aid transparency movements.

The RTI act was adopted in July 2007 and has already proved a tried and tested tool to expose public and private sector corruption, and improve the meaningful participation of people in holding the government to account. This can be seen in the series of case studies⁷³ produced by Freedom Forum on how it RTI has supported work to improve livelihoods and the accountability system in Nepal.⁷⁴

In August 2011, an aid transparency workshop, initiated by Development Initiatives, brought together political parties, government organisations officials, donors and CSOs to raise awareness of aid transparency initiatives such as the International Aid Transparency Initiative (IATI)⁷⁵. It was at this event that discussions were first started about the potential of open data as a tool for increasing accountability. Following the interest generated by this event, an aid transparency hackathon was held, bringing together key actors in the local tech community to start working with open data.

Nepal is now seeing a growing number of open data-related initiatives and the emergence of an ecosystem of actors coming together to determine how best to increase availability and accessibility of data, and how to ensure it has impact. The level of interest and enthusiasm was highlighted during the first Open Data Day event held in Kathmandu in February 2013, where 400 attendees - researchers, CSO representatives, students, techies and the general public – participated in a week of events including a hackathon and a mapathon. For the second Kathmandu open data day in February 2014, there were events arranged by two separate groups demonstrating a rise in open data awareness.⁷⁶

The government of Nepal has previously made a commitment to aid transparency by being amongst the first to endorse IATI, and built on this commitment by launching the Aid Management Platform (AMP) public portal in June 2013⁷⁷. Although not, strictly speaking, an open data initiative (see sections below), it is seen by many as a significant step forward and as demonstrating aspirations to open up further.

⁷³Freedom Forum (2013) RTI Success stories from Nepal – Empowering citizens through Right to Information, Kathmandu, Nepal

⁷⁴Freedom Forum (2013), FF Releases RTI Publications, Available at: <http://www.freedomforum.org.np/content/news-and-events/282-ff-releases-rti-publications.html>

⁷⁵International Aid Transparency Initiative (2014), Available at: aidtransparency.net

⁷⁶Kathmandu Living Labs (2014) Open Data Day 2014, available at: <http://kathmandulivinglabs.org/blog/open-data-day-2014/> & Open

Knowledge Foundation Nepal (2014) Open Data Day 2014 in Nepal, Available at: <http://np.okfn.org/2014/02/20/open-data-day-2014-in-nepal/>

⁷⁷Development Gateway (2013), Nepal Aid Management Platform Goes Public, Available at: <http://www.developmentgateway.org/news/nepal-aid-management-platform-goes-public>

Also in June 2013, an initiative called Open Nepal was launched⁷⁸. Open Nepal is a CSO-led initiative that aims to increase the availability of open development data and promote and support the use of data. It aims to get journalists, CSOs and parliamentarians actively using data to increase the impact of their stories, advocacy or parliamentary scrutiny, and ultimately to increase accountability. The launch event brought together donors, government, civil society, journalists, and data activists to raise awareness and discuss how to work together to establish the open data ecosystem. The Open Nepal initiative has resulted in a number of open data-related initiatives, including:

- Establishing an open data portal that provides access to available open data
- Collaborating with World Bank to run a ‘data boot camp’ training session and hackathon
- With Young Innovations, launching an election open data portal
- With NGO Federation Nepal (NFN), launching a scoping study to engage district level NGOs in open data
- With Freedom Forum, running a series of open data workshops with journalists and parliamentarians

Open Nepal is becoming a hub for Nepal’s open development and open data community to communicate and coordinate, and in recent months has been involved in a second Open Aid Data Bootcamp, further journalist training sessions, and the development of an Open Data Working Group bringing together government officials, donors and CSOs.

Another key actor in the open data movement in Nepal is Open Knowledge Foundation Nepal⁷⁹ who are running regular events and initiatives that promote and advance the open data movement. They recently released a version of [open spending](#) populated with Nepal budget data. Open Spending Nepal are a group of volunteers who have recently worked to track down Nepal government budgets, spending, balance sheets, procurement and use the open spending platform to visualize these.

As well as the national initiatives mentioned above there are some international initiatives that are potentially important part of the Nepal open data movement: 1) International Aid Transparency Initiative (IATI); 2) Open Aid Partnership (OAP); 3) Open Contracting. All three initiatives are running pilot projects in Nepal and have the potential to contribute to the open data landscape.

- IATI is an initiative to encourage aid providers to publish details of their funding activities in an open, standard format. The government of Nepal was amongst the first countries to endorse the initiative, and there is an ongoing pilot to evaluate the potential to link the data outputs from IATI to the national AMP. IATI also provides a rich supply of open data about donor and NGO aid flows.
- The OAP is a collaborative effort to geo-code and map aid projects. During 2013, OAP ran a pilot in Nepal to geocode the projects held within the AMP. The data has been collected and is now available in the AMP. At the time of writing, this is not yet available as open data.
- The Open Contracting initiative aims to set principles and standards for transparency in public procurement and contracting. Nepal is also a pilot country for this initiative.

Current availability of open data

The availability of open data is limited for both aid and budget, but CSO-led initiatives such as Open Nepal’s open data portal, and Open Knowledge Foundation’s Open Spending are helping to make government data more

⁷⁸Open Nepal (2014), Available at: <http://opennepal.net/>

⁷⁹Open Knowledge Foundation Nepal (2014), Available at: <http://np.okfn.org/>

available. In addition, international initiatives such as IATI and Government Spending Watch can potentially provide additional sources of data, however, they may not be as reliable or detailed as government sources. The key sources of data are owned by the Ministry of Finance are:

- **Aid information:** the Ministry makes aid information available via its Aid Management Platform (AMP). The assessment was conducted using the AMP, focusing on specific donors as an example. A couple of projects were also looked into for more detailed analysis.
- **Budget information:** the Ministry makes budget information available via its Red Book, which can be downloaded in PDF format from the Ministry's website. The assessment was based on one edition of the Red Book.

Although, the data is at least partially available, there is a lack of openness. In both cases, there are limitations on how the data can be accessed and used. Firstly, neither source is openly licensed. Secondly, the format is not always machine-readable. Thirdly, where the data is machine readable, it is not detailed or bulk downloadable. The Open Data Technical Assessment is available in Appendix 1.

Status of Aid Data in Nepal

The AMP is an aid information management system (AIMS) operated by the International Economic Cooperation Coordination Division (IECCD) under the Ministry of Finance. The primary objective of the AMP is to enable the government to better manage, coordinate and utilize development assistance. The AMP data is made available through a website, enabling the public to see the details of all the listed projects.

- **Partially machine-readable data** - The AMP has listed around 900 projects in its online portal. The project data includes details on commitments, disbursements, results along with basic metadata (title, dates, status) etc. There are 73 organizations listed in the portal. The detailed project information is presented in HTML, which is downloadable as PDF format as well. The list of projects can be downloaded as an excel file, however the excel file does not contain all the details of the projects, just the basic project information (e.g. title, donors, sectors, dates, total disbursement), while the project pages on the website contain more detail (e.g. outputs, outcomes, impact, National Planning sector, detailed funding, implementing agencies). Similarly location information contains multiple districts and cities crammed into one cell. If there is a need of mapping the project, then the file needs to be cleaned and organized to make it usable for geo-mapping. Though the data is available in machine-readable format to certain extent, it does not meet the definition of open data as the data is not downloadable in excel in granular form.
- **Up to date data** -Looking into few specific donors, the information is consistent and updated on a regular basis. Out of 4 project data pages reviewed, three (DFID Enabling State Programme, DFID Livelihood and Forestry programme and WB Poverty Alleviation Fund) were updated very recently in 2014 and one (WB Micro Hydro Project) was in 2013.
- **Not openly licensed** -A key element of the open data definition is that commercial use of open data is allowed – there should be no restrictions on commercial, for-profit, use of open data. The AMP explicitly says in disclaimer that *“Users are restricted from reselling, redistributing or creating derivative works for commercial purposes without the written consent of the Ministry of Finance.”*
- **Accessibility** -The access to the portal is slow even when there is a good internet environment, possibly because the server housed in Ministry of Finance is not allocated enough bandwidth. An improvement in server response time is needed for users to be able to get the required data in a timely manner. The

website could be improved by giving information on various terms used in the project detail page, as many of the terms used would not be easily understandable to the general public. For example, terms like Gender Marker and Climate Change Relevance. Similarly there are various date fields, such as date of effectiveness, date of agreement, proposed start date, actual start date. The website could be improved by showing how these are linked.

- **Data quality** -Though the data is available in a usable format, there are still many projects where key information is not available. Almost 20 percent of the total projects in AMP do not have the start date; similarly 96 percent of them do not have an end date. There are closed projects for which disbursements have not been made so far. There are 105 projects which do not have any commitments or disbursements mentioned. When key information is missing, it becomes difficult to do useful analysis. It is not just the presence of data that is important; good data quality is critical.
- **International sources** -There is a wide range of data about aid flows to Nepal published as part of the IATI standard. The nature of IATI data is that is machine-readable, bulk downloadable and openly licensed. The data can be more detailed in some instances, and can cover aid from flows and organisations not represented in the AMP (e.g. off budget donor aid, NGOs). However, the data quality is currently variable between different organisations, and represents 'outflows' rather than what arrives in the country (as captured in the AMP), so may not be as reliable.

Status of Budget Data in Nepal

The budget (Red Book) data is available online in the form of PDF from the Ministry of Finance website. It lists the previous two years of expenditure and the current year's budget allocation. One can see the allocated budgets among various budget heads under any one Ministry.

- **Comprehensive information** -The data includes a summary of budgetary allocation for the fiscal year, budget summary for chargeable items, budget head wise estimates of chargeable expenditure, budget summary for appropriate items, and budget head wise estimates of expenditure appropriate for consolidated funds. Details of budget allocations are listed under recurrent, capital and financing budget headings for each ministry of Nepal along with actual expenditure (revised) and actual allocation and sources (government of Nepal or foreign). The Red Book is more than 631 pages long.
- **Not machine-readable** -The Red Book is not available in machine-readable format. There are tools available which could convert the PDF data into CSV format. However usage of such tools requires a lot of effort and are very time consuming, considering the volume of the document. There is no charge associated with the download of the budget data, but conversion of data into machine readable format is resource consuming.
- **Accessibility** -Because of the volume of the data, one cannot easily get the desired Ministry and/or project information in the Red Book quickly. There is a summary page at the beginning of the document, which is not linked with the detail page. It is difficult to follow the document with no proper navigation. Finding information in the PDF document is a difficult task.
- **Not openly licensed** -The document and data in the Ministry of Finance are not openly licensed. The website content is copyrighted by the Ministry of Finance and all the legal rights of use and distribution are only reserved to the Ministry of Finance.

- **International sources** -Government Spending Watch⁸⁰ is an initiative run by Oxfam and Development Finance International (DFI), which aims to gather planned, and actual budget expenditure and categorise it to align with the Millennium Development Goals (MDG). The data is aggregated to the MDG sectors, and split between capital and recurrent expenditure, so the data is not granular. The data is available in machine-readable format and bulk downloadable, and licensed for re-use. However, a request must be made to use it for commercial use, so it is not fully open. Because of the lack of granularity, and the use of MDG sectors, this source is not an alternative to the Red Book, but could be of use for some analysis.

Conclusions

In conclusion, the availability of official sources of open data measured against the Open Definition can be considered as largely non-existent. When a wider definition of open data is considered, for example one that does not include the specifications of an open license, aid data can be considered to be open but not the budget data. If a very broad view is taken of the openness of information, then budget data can be considered to be transparent at some level, as it is made available to the public, albeit in closed formats that do not enable re-use of the data.

In addition to this, there have been attempts by several groups to open up Nepal's data outside of official government routes. The Nepal chapter of the Open Knowledge Foundation has scraped the Ministry of Finance's Red Book, and are in the process of opening this data on an online portal. Open Nepal and its partners have opened up several other datasets, covering data from 19 sectors, and created an Open Data Portal to house this information and make it available to data users.

Therefore, through a combination of official and non-official routes, aid and budget data can be considered open to some extent, however the data audit shows that improvements can be made in data quality, level of disaggregation, and timeliness in order to make it more useful and useable to potential data users.

• ⁸⁰Government Spending Watch (2014) Available at: <http://www.governmentspendingwatch.org/>

5. The aid and budget situation: information flows and interactions

In this section we present the results of a stakeholder mapping activity, carried out in September 2013 with 36 participants. Through group work around a number of scenarios where data may be used to address social issues, this workshop identified the different ways in which information currently flows, and the way in which groups play different roles at different times, as intermediaries, end-users and data providers. This stakeholder mapping also informed the selection of interviewees for key informant interviews.

Process

The stakeholders' mapping workshop was conducted to open up a process to identify a community of data users, providers and intermediaries so that it will help put in place collective actions to promote data for development in Nepal. The main session of the workshop was the Stakeholders Mapping Exercise, which was done in an iterative and participatory manner.



A brief presentation highlighting the project's background and the contemporary development context of Nepal was made. The presentation made a clear statement that, despite decades of aid and considerable government spending, the state of development in Nepal is poor and the risk of sliding into development stagnation remains high. This situation can be attributed, in part, to a haphazard method of allocating and spending public money caused by lack of transparency, coordination and sharing of information. The presentation shared the theory that development efforts in Nepal could better succeed if the government became more accountable, more effective and less corrupt, and if donor money was spent in alignment with the priorities of Nepali people. Participants were presented with the idea that increased openness in budget and aid data could lead to greater transparency, accountability and participation. Transparency enables accountability and people's participation; accountability

enables safeguard against corruption and participation stimulates debate and rational decision-making. This theory of change acted as a backdrop to the following discussions and activities, which helped to unpack its validity.

The facilitators explained the three areas of focus for the interactive exercise, being a focus on the actors, issues and stakeholders, and clearly outlined the six steps of the exercise:

1. Identifying the issues;
2. Identifying the actors;
3. Identifying the connections between the actors;
4. Identifying important information and data sources;
5. Adding missing elements and users; and
6. Validating the map.

The stakeholders were divided into six groups and were asked to complete their own stakeholder maps, whilst identifying specific individuals and organizations and providing contact details where possible to support follow up data collection. The groups completed their assignment and presented their outcomes before the forum one after another. Feedback was provided by the group facilitator encouraging them to take their thinking further. The facilitator's question - *"Where do you see the opportunity of open data flow that can advance transparency, accountability and participation?"* – provoked much reflection in each group, and ensured the workshop was not only a data collection activity, but also contributed to the community and action building objectives of this research project.

Findings:

The mapping exercise attracted a considerable degree of interest among the stakeholders. It was very helpful to know their understanding and thoughts about open data and their motivation to collectively push the agenda. These six groups comprised a variety of stakeholder interests and organizations. Their maps and explanations laid the groundwork for the exploration of the question:

'What are the opportunities to establish open data (and information) flows, with regard to the money flows that are earmarked for development purposes in Nepal, so that more transparency, accountability and openness with regards to these money flows ensues?'

The stakeholder maps resulting from the exercise featured two prominent stakeholder groups that were absent from this meeting: representatives of the political parties and the foreign donors. No representatives of the political parties were invited so their absence was intentional. However, some leading bilateral and multi-lateral donor agencies working in Nepal were invited, of which some had committed to attend, but did not turn up during the process.

Stakeholders

The selection of stakeholders taking part in the mapping activity was based on the roster of institutions and individuals working on budget and aid transparency. Participants came from diverse backgrounds, representing both the demand and supply sides of information and included representatives of:

- Government bodies;
- Civil Society Organizations;
- Media and journalists;
- Technical specialists;
- Academics/researchers.

The participants were chosen given their important role in shaping up information polity and governance dynamics by enabling data flows. The list of participants involved in the mapping exercise can be found in Appendix 3.

The individual Stakeholder Maps generated in this workshop can be seen below. However, some general remarks can be made about the findings.

The government of Nepal is the sole body to produce and supply socio-economic data. As this information is disclosed to some extent through websites and other publications, it is considered by most as publicly available. But merely posting information and data on websites does not mean that this information is accessible to all citizens, particularly given the low internet penetration in Nepal. Discussions noted that government agencies should identify the needs of different groups of data users, and devise different measures and formats to provide data proactively to these different groups in different manners, in order to enable more effective data flows. The agencies should proactively disclose information based on the demand and the needs of the citizenry – particularly with respect to choice of formats such as online publication of data in open data formats. It became apparent that the government is concerned about data being misinterpreted. However, the disclosure of information online in multiple formats - both PDF and open formats - so that there is an authoritative copy, and an open copy, would serve both the users interest in re-usable data, and the providers concerns of avoiding manipulation of data. Nepal's Right to Information laws call for the proactive disclosure of a number of documents – this legislative strength, should be jointly capitalized upon with the technical and innovative strengths open data to increase data supply by government agencies.

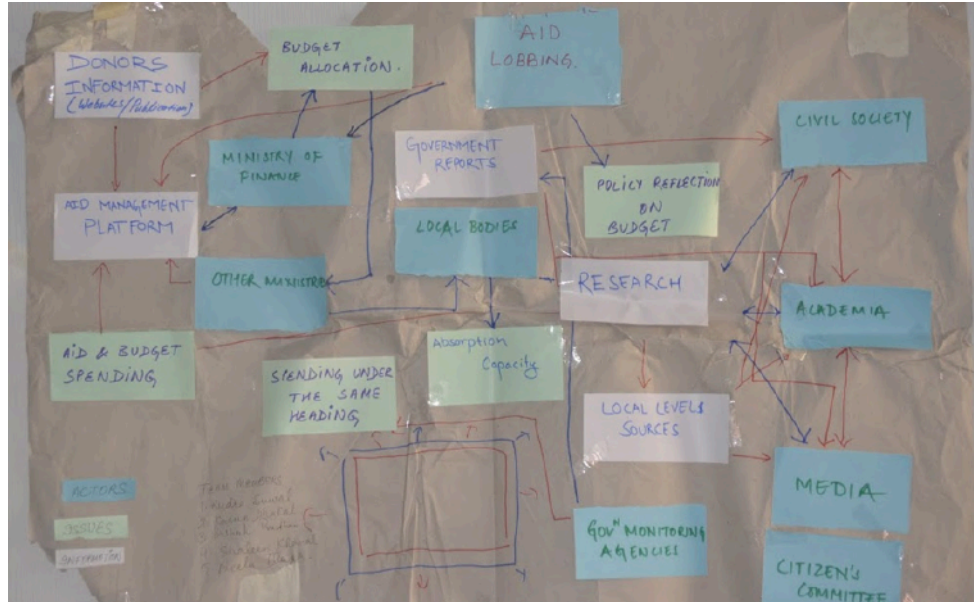
In our stakeholder maps, the important role of intermediaries (technical actors and civil society organizations) in demystify budget and aid data was stressed, and highlighted their critical role in facilitating citizens' understanding of the issues. With the flury of social media, the role of the intermediary has increased and widened, since anyone can become an intermediary today. Providing platforms to promote the availability, accessibility and use of better data, building awareness, developing capacity and bringing into use Nepal's existing information systems and processes (e.g. the AMP and RTI laws) were identified as the role of intermediaries. A diverse ecosystem of different actors is needed to access, analyze and use to data to maximum value: and there may be a need for a hub to help them work together. Intermediaries themselves differed in whether they saw their role as providing information, or supporting analysis and action. Technical intermediaries sometimes have no definite agenda for action, but can present dense data in understandable formats through developing apps and visualizations, and this accessible information can support other intermediaries.

Connecting open data to action also involves stakeholders engaging in policy-relevant research. A number of discussions noted that civil society and academics should undertake regular research and study and should provide evidence-based inputs to the government to support timely reforms. Likewise, media also has a vital role in monitoring aid and budget spending and developing healthy public awareness of public affairs. Research publications, AMP data, donors' publications and media products were all presented in our stakeholder mapping exercise as important information sources when dealing with governance issues. Ultimately, the discussions highlighted that citizens and citizens representatives, as the most important end users in the data ecosystem, should keep on demanding and using strategic data in their bid to hold government to account and to monitor public spending for better development outcomes.

Individual maps

The individual maps each looked at different issue areas.

Map 1: Aid and Budget Spending



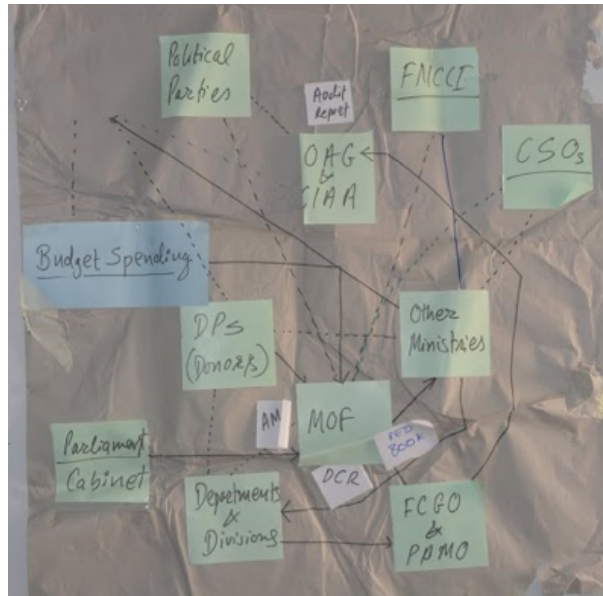
The map has clearly presented the issue, actors and information involved in the process of aid and budget allocation and spending in Nepal. It also showcases the chain of accountability and identifies decision-makers in the governance of public spending who are focused on aid and budget. The Ministry of Finance plays a central role in regard to budgetary allocation and spending, and in producing and disclosing relevant information through the online Aid Management Platform, where all key donor agencies based in Nepal report their aid information. Low absorbing capacity of public funds is also showcased as an issue for Nepal, for which line ministries and local bodies are mostly responsible. Repeated spending under the same heading is also a visible challenge that has remained unchecked due to the underperformance of government monitoring agencies.

The map suggests that CSOs and academics have an important role in lobbying the government to demand policy improvements around budget issues and to support the delivery timely reforms. Likewise, the media also has a role in monitoring aid and budget spending, and in stimulating accurate public opinion on public affairs. The research publications, AMP data, donors' publications and media products are presented as important information sources to deal with the governance issue.

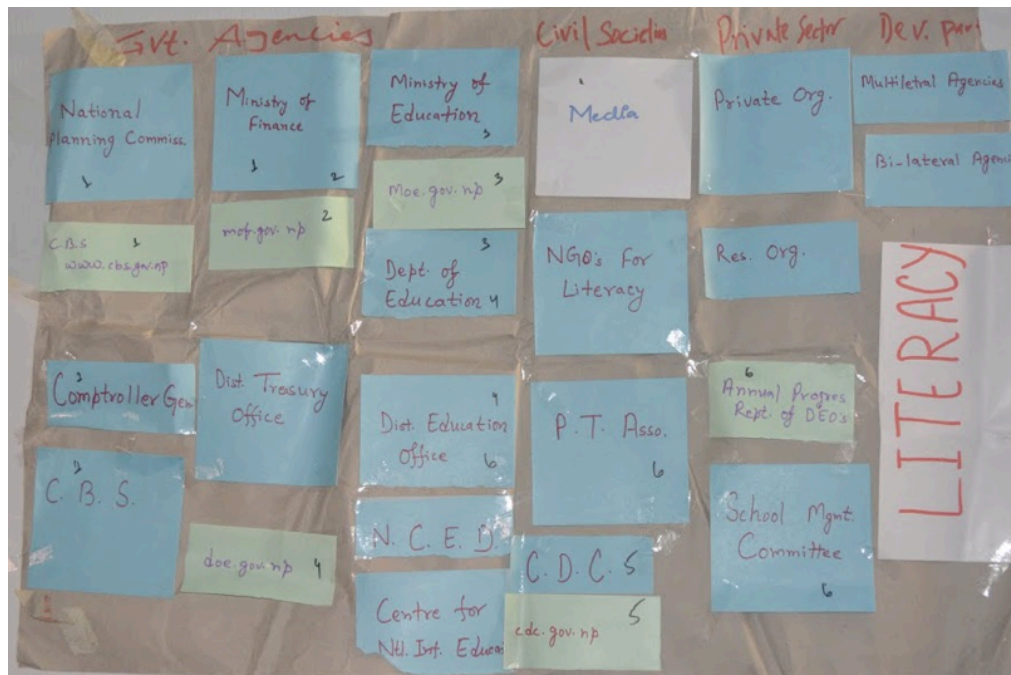
Map 2: Budget Spending

The group had identified budget spending as a key governance issue involving the Ministry of Finance, the Council of Ministers/Cabinet, Parliament, Line Ministries, the Office of the Auditor General, Development Partners, Media, anti-graft bodies and the private sector (Federation of Nepali Chambers of Commerce and Industry-FNCCI). There is direct relation between the Ministry of Finance and Parliament as the Public Accounts Committee (PAC) - a parliamentary oversight body - monitors and regulates the spending activities largely coordinated by the Ministry of Finance. The PAC report along with programme execution reports of line ministries could be important sources of information to deal with budget spending issue.

The development partners also have a direct connection with the Ministry of Finance when dealing with the funding and governance issue of budget spending. The Development Cooperation Report, based on the Aid Management Platform (AMP), is a very good source of information to understand the relationship dynamics between development partners and the Ministry of Finance. The presence of existing reporting processes, that existed prior to the introduction of open data, is an important feature to note. Other line ministries are in direct connection with the Ministry of Finance whereas private sector actors, represented by FNCCI, have an indirect relationship with the Ministry of Finance in regard to the governance issues of budget spending. The Budget Details (Red Book), the government's budget document, contains budget spending data from previous years while everyday budget spending can be retrieved from the Treasury Single Account (TSA) data maintained by the Financial Comptroller General Office. The map reveals that there is an indirect relation between the Ministry of Finance and CSOs, the Ministry of Finance and political parties, and the Ministry of Finance and the Commission for the Investigation of Abuse of Authority (CIAA). CSOs also lack a direct connection to the CIAA.



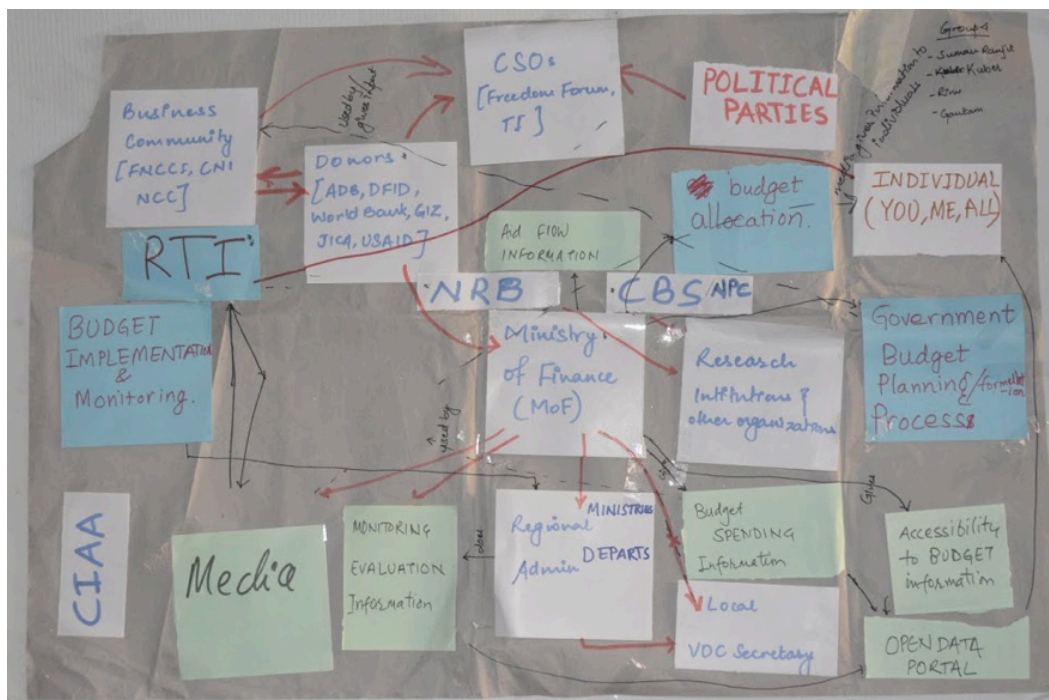
Map 3: Budget and literacy



The third group chose budget allocations and literacy as the core governance issue. The map prepared by the group showcased the role of stakeholders/actors and talked less about information flow. The group identified four

major agencies that could largely influence budget allocation and develop an information flow mechanism for more effective spending of public money. The actors identified were government agencies, civil society, the private sector and development partners. According to the map, the government agencies responsible in this connection include National Planning Commission, Ministry of Finance and Ministry of Education; civil society, media, NGOs working for literacy, and the Parent-Teacher Association. Likewise, the private sector has private organizations and foundations while development partners include bilateral and multilateral bodies working on the theme of education. The website, publications, spokespersons/information officers, Central Bureau of Statistics, Office of Comptroller General, District Treasury office, Aid Management Platform (AMP) and funding agencies were identified as major sources of data and information that stakeholders could use to deal with the governance issues identified. The data sources were taken as important in the process of rational decision-making as concrete evidence stimulates debate and reasoning. This highlights that data might have a role to play not only in transparency and accountability, but also in informing policy making, through the actions of different stakeholders.

Map 4: Budget Implementation and Monitoring



The forth group picked 'budget implementation and monitoring' as their key governance issue and also identified Right to Information (RTI) and the media as strong tools to address the issue. The issue is shown as directly associated to the government agencies (ministries, departments and sub national administration). It stipulates that there is very direct and effective relationship between the media and RTI to check wrongdoings and raise voice for improvements. The role of the anti-graft body, Commission for the Investigation of Abuse of Authority (CIAA), is also highlighted to prevent corruption and misuse of power. Again the CIAA sits outside of current information flows. There is a direct relation between RTI and citizens of the country suggesting that access to information should fall within the reach of every individual to build an informed and open society.

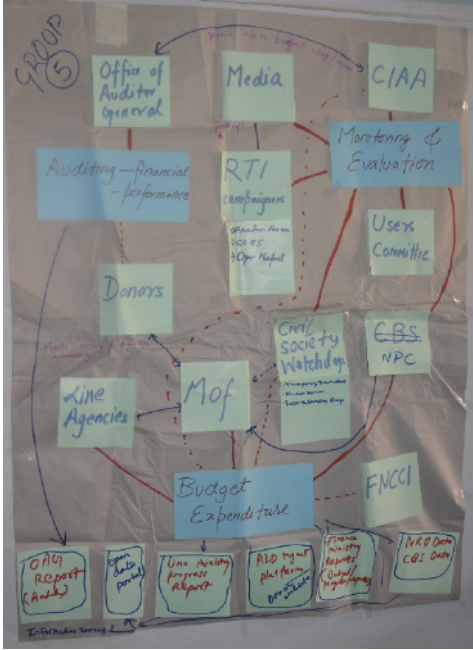
The Ministry of Finance is the focal agency that allocates and implements the national budget. It is monitored through central and local government bodies including line ministries, divisions and departments. The Ministry of

Finance has a direct connection with bilateral and multilateral donor agencies and works closely with National Planning Commission and Nepal Rastra Bank, the central bank of Nepal. The map also envisaged the setup of an open data portal where public spending information would be made available, fed by content from the Ministry of Finance, and by independent monitoring. The portal is presented in this map as a platform to increase individual citizen's access to budgetary information. The Ministry of Finance is also shown as obliged to produce and disseminate aid related information.

Map 5: Financial and performance audit and budget expenditure

The map has presents two key governance issues – auditing financial performance and budget expenditure. The Office of Auditor General (OAG) has the sole responsibility to carry out financial and performance audit. The annual report produced by the OAG has adequate audit information allowing stakeholders to monitor whether public expenditure is in accordance with allocation. OAG reports may be important to consider as a source of data in future, although the map does not show any direct use of these at present by civil society.

The Ministry of Finance deals with budget expenditure in collaboration with line agencies. It has direct relation with donors in regard to fund raising and with other ministries for execution. The CSOs working on public financial management are also monitoring the performance of public authorities on budget spending issue.



The anti-graft body has a direct working relation with the OAG and acts based on the cases of irregularities the oversight body raised through its report.

Media and RTI campaigns are also showcased as significant instruments for monitoring and evaluating spending performances. Ministry of Finance uses data produced by Central Bureau of Statistics (CBS)/National Planning Commission. Open Data Portal, line ministries' progress reports, AMP and CBS data are important data sources to analyze the governance issue and design interventions for resolving problems.

Map 6: Foreign Aid and Budget

Foreign aid and budget were presented as the key governance issue for this map. Among the key stakeholders identified were the government, donors, the Social Welfare Council, Central Bank, the Central Bureau of Statistics/National Planning Commission, the local government (District Development Committee, Village Development Committee and Municipality), implementing agencies, NGOs/ CSOs private sector and anti-graft and vigilant bodies and beneficiaries.



The Government and donor agencies are shown in direct relationship, while beneficiaries are presented with indirect working relationships with media and information communication technologies. Implementing agencies have a direct connection with donors, NGOs/CSOs and local bodies. Media is projected as an important tool for performing a watchdog role and in disseminating information. The map has recommended that the government data producers (Ministry of Finance, NPC and implementing agencies) open up data and establish automated user-friendly information sharing mechanisms.

Conclusions

This mapping exercise highlights that, where open data is introduced, it is introduced into a landscape with many existing relationships and information flows. Reports are being written, and audits conducted, and media produced, so the challenge may be identify how these can be enhanced through open data, rather than to design entirely new structures for transparency and accountability. However, there are also gaps in the current information flows identified, including limited flows of information to citizens, which a number of maps suggest open data may help to address. The maps also drew important connections between open data and the Right to Information, and emphasized the role of media in the information polity around aid and budget allocation.

A number of the maps highlight the Central Bureau of Statistics and National Planning Commission as important actors in the aid and budget allocation process, yet work to date on open data in Nepal has made just initial steps in encouraging these groups to engage with open data, being much more centered on aid and budget (potentially because of the interests of international donors supporting this work, and their existing connections). The absence of statistical agencies from the open data debate is something also noted in the 2013 Open Data Barometer as an issue needing attention⁸¹.

⁸¹ Davies, T. (2013). Open Data Barometer: 2013 Global Report

6. Uses of aid and budget data in Nepal

In this section we present the findings from a series of semi-structured and open interviews with data providers, users and intermediaries in Nepal. These interviews highlight current and desired uses of data, experienced and anticipated benefits of open data, and challenges of open data supply and use. The interviewees were drawn from across civil society, the media, government and the private sector.

Uses of data

Very few of our interviewees reported cases of directly using open data, although many were involved in the analysis of information on a day-to-day basis. A number of actors interviewed primarily see their role as intermediaries, enabling others to use data, rather than being end-users themselves. However, there were a number of cases of data use reported, although less of open data itself.

Civil Society Organizations reported using budget related information to track public revenue and expenditure, produce analysis for evidence-based advocacy and to prepare proposals and reports. The use of data and, in future, open data, on budget and aid was reportedly pursued in order to increase their functional efficiency, improve quality of their work and to reduce the costs of social accountability initiatives. The emerging use of open data can be foreseen as promoting accessibility and timeliness of information of public importance and *"it is currently being explored to minimize the gap between the supply side and demand side of information and strengthen chain of accountability through financial flow of information"*, said Anirudra Neupane, Programme Manager of Freedom Forum. He added the CSOs have increasingly used both open data and data extracted from locked up sources to produce sectoral budget analysis (e.g. health or education reports) and to create policy briefs from different policy perspectives such as pro-poor, gender and social inclusion in order to provide policy inputs to the government.

In the case of bilateral and multi-lateral development partners and I/NGOs there were reports of the use government data for programme planning, execution, monitoring and evaluation.

Government officials reported consuming data in the course of budgeting, decision-making, planning processes, budget forecasting, formulation and the design of interventions. Primarily the government offices use information to predict the situation of investment, set government priorities and ensure effective outreach of its plans and programmes for better outcomes.

Specifically, the Ministry of Finance uses data for formulating the overall government budget. In order to promote budget analysis and planning in a systematic manner without spending much time, the ministry has introduced an online budget request system and linked this up with all budgetary and financial management information systems and mechanisms, such as the Treasury Single Account. The ministry wants stakeholders to use government data in replicable (research-based and productive) rather than duplicable (presenting data in a way it was produced) manner. There are gaps in public spending and output, which could be traced through research as a part of the replicable use of data. *"Such innovative ideas would substantially help the ministry in designing interventions for reforms"*, said Baikuntha Aryal, Chief of Budget Formulation Division at the Ministry of Finance. There are big emerging opportunities for the use of open data in undertaking in-depth research that the government could use as inputs for its budgetary works. Open data would allow people to carry out such research from outside of government, as there is no functional agency within the Ministry to coordinate all these things.

Similarly, the National Planning Commission (NPC) commonly uses the data in the course of decision-making processes, budget forecasts, and formulation of multi-year budgets and intervention designs. Gopinath Mainali, Joint-Secretary of the NPC reported that the NPC primarily uses data to predict the situation of investment, set government priorities and ensure effective outreach of its plans and programmes for better outcomes, but that the NPC is also interested in civil society and journalists consuming NPC-generated data in their advocacy and accountability works, without any prejudice.

Likewise, the Nepal Rastra Bank uses data to regulate bank and financial institutions and to take action on fiscal irregularities. Besides this, the data are also used to support restructuring and reform of financial institutions. The main duty of the central bank is to protect the interest and welfare of depositors so it consumes data in order to make the fiscal system healthy, disciplined and transparent. *"We want the intermediaries and users to consume data in a responsible manner to produce evidence-based analysis, findings and recommendations. Making analysis go beyond the data does not serve trust and validity. Unfortunately, data interpretations are being made unwisely to distort the fact"*, said Bhaskar Mani Gyawali, Deputy Governor of the Nepal Rastra Bank. He was vocal against the chance for manipulation of open data, saying the Bank is convinced of the genuine need of disclosing data in open format based on demand.

The AMP and Development Cooperation Report (DCR) data have been widely used in policy formulation. These data are widely used in formulating a new foreign aid policy for Nepal. The data shows that there is wide aid fragmentation due to aid flows into small projects and show that aid does not come up with visible impacts. This situation has led to the policy of putting a threshold on receiving foreign aid: *"The government has to put a threshold to state that it will not to receive grants less than 5 million USD, concessional loans less than 10 million USD or hard-term loans under 20 million USD. This is the guidance provided by the AMP data"*, said Tilak Man Singh Bhandary, Senior Project Officer, Developing Capacities for Effective Aid Management and Coordination, Ministry of Finance.

A growing communities of techies reported that they are starting to use government PDF data and transforming this into open data formats such as CSV and XML, which is then used to develop apps and visualizations for accountability work. One example of this can be seen in the Open Nepal project - a collaborative platform to promote availability, accessibility and use of better data with a view to contributing to more effective development. The platform builds on Nepal's existing information systems and processes, including the Right to Information Act and the Aid Management Platform, to provide a hub that supports different actors to access, analyze and use the data/information to maximum value.

Journalists reported using central and sub-national level budget data from the Red Book. However, they reported that it is difficult to get information on public spending at the local level. There are almost 4,000 VDC (Village Development Committee) and each gets 1.5 million rupees, which is a substantial amount of public money. But, with the lack of an elected local government, the money is often spent randomly. *"The stories of irregularities and embezzlements of funds have not been largely covered by media due to unavailability of information. The information, like how much expenses spent in each sector at the local level, are not easily accessible for journalists to produce in-depth stories"*, said Kuvera Chalise, Economic News Bureau Chief of Annapurna Post Daily. However, the setup of the Aid Management Platform has facilitated journalists' access to donor-funded project information and they can now obtain information on aid from a one-stop site.

As the interview results above show, data use is widespread, and many actors are interested in the potential of open data to increase use and analysis. However, institutionally there is a lack of systematic and unified demand at present for information and data to be proactively published. The government officials interviewed suggest that

the mostly independent researchers, journalists and development partners ask for data and information for their specific purposes, using their informal relationships with the government.

Interview themes

Given the limited current use of open data, we also explored with the interviewees their ideas about how data could be used. Through an analysis of interview transcripts we have identified the following themes.

Open data is seen as time-saving – Interviewees reported that they believed the existence of open aid and budget data would save researchers (technical and social science), CSO's and journalists' time. At this stage these groups still have to go physically to demand data, visit libraries and make photocopies, all of which is time and resource consuming.

Open data allows for linkages between various data sets – Interviewees reported that granular data allows for linkages between data sets. Scraping data from different sources, and publishing these on, for instance, [Open Nepal's Open Data Portal](#), allows techies and intermediaries to develop visualizations and apps.

Open aid and budget data can make governance more effective – Interviewees reported that they believed that open aid and budget data will facilitate evidence-based advocacy for transparency and accountability. Sectors that would benefit from this would be infrastructure development, health and education. Interviewees stressed their belief that every penny needs to go to development and the critical role of government effectiveness in this. It was believed that open aid and budget data will increase the effectiveness of oversight agencies.

Open data is seen as unbiased data, whilst information is seen as potentially biased – Interviewees, mostly the technology intermediaries, were aware of the difference between data and information, believing that it is important to have the data as disaggregated as possible and to train people such as journalists in how to work with open data.

Open data needs advocacy, resources and expertise – One interviewee stated the following: *“All types of resource flows (aid, budget, remittance, capital flows, etc.) can be transformed into open data, but in order to do that we need to work on the supply side (i.e. by engaging concerned line agencies including ministries, the central bank, CBS etc.) and also the demand side (i.e. by engaging CSO's, media and other target groups). We need to develop strong user case scenarios for this to happen. For this we need to develop specific pilot projects on specific areas and sectors, which would require financial resources, technical expertise and capacity development.”*

There are challenges to acceptance of open data - A major challenge seen by some interviewees is that there is lack of strong evidence of impact from open data that could be taken as a means to convince stakeholders on the concept of 'openness'. The intermediaries interviewed have been working as both advocates and implementers of open philosophies. They reported a need for buy-in of the concept of openness from other stakeholders (e.g. traditional NGOs, government, etc.), which is a significant challenge.

Open data is not user friendly – Some interviewees, including the leader of a CSO and a journalist reported that they found open data to be difficult to use as a result of the need to process and interpret it before being able to use it.

The term “open data” is not always understood – It became clear from the interviews with intermediaries that they did not feel that the various aspects that qualify data as open data were clearly understood by certain government officials.

Relationship between RTI and open data – Several of the interviews included discussion of the links between RTI and open data. Interviewees reported that RTI comes from an emphasis on rights and open data comes from technology. It was believed that RTI creates hassles for governments whereas open data is easier to handle for governments, and that the two could work together, for example RTI can be used to get open aid and budget data from government.

Data may not be of good enough quality to be opened – there was a belief by some interviewees that government data was not currently of good enough quality to be shared. This is due to poor records, discrepancies between departments, and a culture of secrecy within government.

Emerging questions

Because interview respondents will give meaning to a specific knowledge quest they participate in from their own perspectives, they are inclined to interpret the questions they are asked according to their own framework, and hence hear their interpretation of questions, instead of the questions that were asked. The responses from the formal interviews suggest that the respondents spoke to two themes when answering about questions about open data in Nepal:

- How can the concept, practice and culture of open aid and budget data be accepted in Nepal, what needs to happen for such initiatives to be implemented and when implemented, what is the impact?
- Is open aid and budget data good for Nepal and what needs to happen for open aid and budget data to be beneficial for Nepal as a country and for the Nepali people?

Respondents would bring up different issues depending on the setting, the focus and the structure of the conversation and would either speak to the first or the second set of questions depending on the situation. Discussions that responded to this second set of questions gave rise to a series of further themes:

Open data: empowering the empowered? An interesting insight from the interviews was the concern from some interviewees that open data has the potential to increase inequality. As open data needs technical expertise to be used, a concern was raised about it enhancing the information divide between groups of Nepali people. The many years of civil war have stimulated reflection on the causes of unrest, inequality being one of them, and the resistance against traditions and dynamics that foster inequality is freely expressed. An important consideration for this study is how open data can be used in a way that it does not increase inequality.

Opening up government data may make Nepal vulnerable – One interviewee reported a concern that opening up budget data would reveal Nepal’s strengths in terms of trade and crafts, making Nepal economically vulnerable in a competitive global market. As Nepal is a small country with a precariously developing economy, it was perceived that powerful neighboring economies could use the information Nepal provides for their own benefit and to Nepal’s detriment.

In order to accept the culture of openness and hence open data, one needs to be very pure – In an open-ended interview one respondent explained their view as to why the idea of openness can be threatening for government

officials. Nepal has a history of government corruption, and opening up the data would shed light on financial discrepancies.

Conclusions

Though data providers, intermediaries and users are aware about the fundamental benefits of data openness for greater accountability and transparency, there was a lack of common understanding among the actors in regard to the basic concepts, use and impacts of open data.

The senior government officials serving in the Ministry of Finance, National Planning Commission, Prime Minister's Office and Nepal Rastra Bank interviewed for this research acknowledged the importance of data openness to improve governance of the country, particularly given the government has to deliver much with limited resources. They seem more conscious about the disclosure of information rather than data through the official websites, concerned about the risk of manipulation by users of the unprocessed data, and the potential for making wishful interpretations. The challenge is that, in many cases, Nepal's bureaucracy is not proactive enough to initiate innovations by itself. Rather, the bureaucracy's culture is that it will carry out works which have to be done only when mandatory. The concept of open data is very new for government, and they are wary of it because of this and hesitant to adopt it due to the perceived extra burden of adopting something new. A forward-looking attitude, so that innovative ideas of open data may become a priority for government, is lacking. However, as NPC Joint Secretary Gopinath Mainali suggested, *"proactive social pressure and CSOs demand for data may create much to this effect. There are several political and policy bottlenecks that can be removed only with social pressure. Leadership prevails much to take ahead the institution and institution-based reforms can only sustain such efforts"*.

Government data providers want users to be tech-savvy and sensitive to protect the integrity of the data they consume and re-use. Government officials said they should be provided with briefings and orientation to ensure their buy-in and ownership of the open data agenda. In addition, government officials were generally sensitive about potential negative consequences of openness of raw datasets, and argued that data should be disclosed reactively based on user requests.

To the contrary, journalists, CSOs and techies wanted to see greater proactive disclosure of data in open formats so that they could go to the root of corruption, mismanagement and problems in financial flows. They noted that the availability of and accessibility to disaggregated data would help them come up with different analysis and get people to easily understand the situation, making them better able to question authority as and when there is problem.

Taking stock their arguments and counterarguments regarding open data, there should be several interfaces and interactions to engage all potential actors to create the data ecosystem. An open and healthy discussion is needed to shape the customized model of data openness and disclosure in the specific context of Nepal. As there is no watertight understanding of open data, its policy and practice should be brought to public discourse to make it an innovative dimension of greater transparency, accountability and participation. In conclusion, the interview evidence points towards the need for the new movement to be braced in tandem with the earlier established RTI movement in order to help deliver better governance.

7. Exploring capacity building interventions: data journalism on aid and budget

In this section we report on an intervention designed to explore the idea that “increased access to and use of aid and budget data will lead to more critical and effective financial reporting” by providing training to journalists to support them to engage with aid and budget data. A pre-intervention survey and follow-up data collection were carried out either side of the training to explore the interest of journalists in using data and to look at effects of being exposed to new (open) data sources.

Process

A workshop with journalists from print, online and broadcast media was held. The aim of this workshop was to provide them with the skills to get more access to aid and budget data on a timely basis (mostly from online sources) as well as the skills to use those data to write news stories in a way that can arouse interest amongst civil society in demanding more information. Initially there had been plans to compare articles developed by the workshop participants before the intervention workshop with articles published afterwards, to see whether the skills taught had been utilized. However, the ongoing media monitoring required for this fell outside the scope and timetable of this study, and so instead pre-and-post intervention surveys were developed to understand participants' motivation and experience of using open financial data for more effective financial reporting.

The target group of 13 journalists was selected based on their reporting on economic issues and their interest in accessing budget and aid related information from different sources to develop their news reports. The participants included both interested individuals with no prior experience of open aid and budget data use, and those who had already undergone data literacy training to some extent.

Findings

Current data use

A pre-intervention survey was carried out with the participants. The questions asked can be found in Appendix 2.

We asked journalists about the sector their financial reporting contributed the most to. The majority of respondents marked *'Enhancing transparency, enabling accountability and improving development effectiveness'* as the options. *'Policy reforms'* and *'lowering corruption'* were other common options. *"Authorities are compelled to maintain transparency and they become more accountable once the data and is presented effectively"*, said Sagar Ghimire, a journalist of Republica National Daily, adding that data presentation on budget spending and service delivery helps improve development effectiveness.

In the pre-intervention survey journalists were asked about the sources of information they currently use. It was found that the Ministry of Finance website was the most frequently used source, followed by press releases and the government portal (Aid Management Platform). Likewise, in-person contact and budget and aid documents produced and published by government bodies were the third and fourth choice. However, none of the journalists surveyed were found to be using sophisticated data access tools, techniques and platforms such as IATI (the International Aid Transparency Initiative, showing donor-published data on aid) and the OECD DAC database which lists audited figures on aid spending. It seems that journalists rarely access data from international technology platforms, preferring to use domestic data sources, including the website of government agencies and personal contacts.

During the training we asked journalists how easy it was to understand and use the budget and aid data that is currently available and accessible. Participants explained that it is not difficult to access and use data, but the problem is that they often have to rely solely on the Ministry of Finance for data and information. *"The Ministry of Finance has put all the data base of foreign aid in its new website under AMP section so it has made the access to aid data easier"*, said Pushpa Raj Acharya, Finance New Chief of Republica National Daily. However, another journalist said, *"Easy access to data is still a big cry for journalists"* adding that *"budget data are easier to understand than aid data. The government publishes more comprehensive final report on budget side"*, indicating the reliance of journalists on the reports and analysis produced by government. Likewise, another participant said it is difficult to understand the technicalities of the data and analyze them in the news format. *"Sometimes it is tougher to write news due to technical problems and sometimes it is difficult to understand the data on budget and aid"*, responded another journalist. Senior journalist Kuvera Chalise said, *"Most of the time data availability is not that much of a problem, rather getting the required data and using it accordingly is not practical due to daily rush in the newsroom"* highlighting that even if information is available, unless it can be understood and used quickly it may not make it into media coverage. On another note, most of the journalists preferred *'budget details related to formulation, enactment, spending and audit'*. But some gave preference to both budget details and aid policy when asked about the areas where they need more open data.

We also explored journalists' expectations about the impact of more data in their reports and asked whether they think increased access to and use of data in their reporting would lead to more critical and effective financial reporting. They said timely access to data can help to develop relevant stories with the potential to stimulate debate and discussion before anything goes wrong on the part of authorities. It also helps analyze things in more detail, and provides an opportunity to present comparison and contrast, giving a clear picture that builds healthy opinion among the public. So, responses suggested that more data could support the public to distinguish what is wrong and what is right, and to hold the authorities to account. The readers themselves build their opinion going through the story, and with data could get more information in a lesser amount of time. The visualization of data will make stories catchy in ways that draws the attention of the public and of policy people, which can have a direct bearing on increased citizens monitoring of public funds and policy reforms. Respondents also expressed that data can make the news more readable and can simplify the presentation, facilitating readers understanding of the news without going through whole text.

However, for data to be used more in journalism, more technical know-how is required. It also requires a culture change, reversing the trend of current financial reporting in order to develop stories from the data, not moving from story to then search out data to back up a storyline already decided upon. Currently journalists search for data after planning story, but, our hypothesis has been that learning to play with and explore raw open data will reverse this trend, and will help develop more in-depth stories. This requires open data as an input, but open data is just one part of the picture.

In this context, the intervention was designed to assess use of data (rather than open data per se) and data sources by journalists, and at the same time develop and improve their skills in getting more access to aid and budget data from various national and international online sources: using them for creating effective and more critical news reporting.

Intervention:

The two-day training intervention was divided into eight small sessions including:

1. Introduction;
2. Visioning exercise;
3. Hands-on session on using the Aid Management Platform, and an overview of aid and budget data issues;
4. Data access exercises – focusing on climate change related budget and aid data;
5. Break-out group works on deconstructing news reporting;
6. Re-engineering of articles with data;
7. Exploring visualization of the data;
8. Reflections.

The sessions were delivered by a roster of trainers including lead researcher Krishna Sapkota, Bibhusan Bista and Anjesh Tuladhar from Young Innovations, Open Nepal Coordinator Pavitra Rana and Thakur Gaire from AMP Project. The participatory and interactive methods were used to make the intervention live and result-oriented. The training offered hand on skills and knowledge as how journalists could increase their access to open data around public resources, mainly budget and aid, through the use of technology.



Through the vision exercise we explored participants' motivations for being involved in the project. Most stated that they were motivated to be the part of the intervention in order to adopt modern journalism practices i.e. data journalism, and so as to better inform citizens the allocation, use and audit of public resources. Some of the participants, who were also the part of the open data stakeholders' mapping meeting, stated that their motivation was to contribute to the knowledge generation on the new theme of open data in Nepal. Generally, the journalists

were eager to know how they can reconstruct their financial news reporting with easy access and use of budget and aid data.



A training session on the Nepal Aid Management Platform (AMP) not only provided an opportunity to learn about routes to get hold of data, but also offered an interface between government people (AMP technical staff) and users (journalists), helping to build a shared understanding of data availability, and data needs. *"It took almost a month to gather information on annual aid flow to Nepal before 2010. With the AMP in operation, the job has become easier and efficient"*, explained the AMP staff member, adding that the aid data could be generated and uploaded to the portal based on the demand of users and stressing that the constant feedback from users would create space for timely improvements. Responding to the presentation, journalists asked the government to present aid data in a simplified way that can facilitate the understanding of the users, and to include a users' manual on the portal detailing how to use AMP data. The journalists shared their preference for published books and reports (e.g. Development Cooperation Report) for formal reporting on foreign aid, rather than using open data for analytical reporting. *"It may help change our working style and performance as well"*, said Arun Karki, a journalist with state-owned broadcaster, Nepal Television. The journalists also demanded data reflecting physical progress of the aid-funded projects, which is important for media people to develop stories, but is currently missing in the AMP.

The main session of the intervention was the data access exercise. It was deliberately focused on climate change budget data considering the current gravity of the issue in Nepal. Journalists were taught the skills to extract data using different domestic and international sources such as the AMP, the Ministry of Finance website, the IATI registry and OECD DAC, and develop a story out of the use of the data. The exercise was conducted on a news story about financial flows entitled 'Lawmakers against climate change loan' published by The Himalayan Times, a

broadsheet national daily, on February 18, 2011. The following steps were gone through in the session dedicated to deconstruct the news story:

- Listing out the strengths and weaknesses of the sample news reporting
- Identifying the useful data that could have made the reporting more effective and critical
- Identifying the sources of those identified data perceived as necessary to enhance the quality of reporting
- Searching for the required data sets in the online sources
- Using it in the sample news story with the help of visualizations

The process began with formulating a question, identifying relevant data to answer that question, taking journalists through the process of a data search, looking through the Red Book, donors website and so-on. The journalists were taken through the process of data cleaning, including copying PDF data and obtaining it in the XLS format (for this they would need to have applications such as JAVA to transform PDF data into XLS format already installed on their machines). After the data was ready in the open and usable format, they were taken through brief analysis using MS Excel. Through this we were able to build up an understanding of potential gaps between current journalists' skills, and the technical skills involved in data analysis, and to reflect on the need for intermediaries to provide analysis-ready data for journalism.

A process of news reengineering was practiced so as to involve journalists in making news reports more effective with the use of data. A gap analysis was done on the news articles the journalists produced and published in their newspapers. The following questions were used to identify the gaps in the news stories:

- What kind of data has been used to write the article?
- What is the source of the data? Why was this particular source used?
- Were there any other sources for the same data? If yes, why weren't they considered for use?
- Which format was the information available in?
- What steps did you follow in the process of identifying the information sources, accessing the information, and using it?
- Is the kind of information that you are getting sufficient and appropriate to construct a news story? What kind of information do you think should be provided by the relevant authorities in order to make your reporting full and factual?
- What kind of challenges do you face in getting the information that you require?

Feedback was given explaining how data could be used in articles to deliver a message more effectively. The journalists in the group had also presented their plan to access, use and analyze data in their media reporting on budget and aid. *"It gave us insight how data can be best used to make the piece of writing more appealing and worth-messaging"*, said Ashish Luitel, a participant of the training. He added it was eye-opening to develop a story out of data, shifting the paradigm of *'story first and data second'*.

Post-intervention:

The post-intervention survey was conducted several weeks after the workshop. The journalists reported that they had found the training useful, and that it had increased their interest in working with data. Their feedback showed that they felt they had learned useful new skills that enabled them to work with data more easily, and despite the short elapse of time since the training some journalists reported that they had already put these new skills to use. One journalist had been analyzing data in the Aid Management Platform, looking for stories, another had been preparing a story about trends in international development cooperation and most confirmed that they hope to

use these new skills in future. However, due to the short space of time and limitations in the research process, the intervention with journalists has been unable to establish hard evidence of impact, and our follow up survey also highlights some potential barriers to the translation of open data and training into more critical data-driven news stories. We have also not been able to follow the further steps of the theory of change to see how, if better data-driven stories are generated, this could lead to greater citizen demands for accountability. This is an issue for future research designs to address.

A number of factors appear to contribute to successful translation of the intervention into ongoing data journalism. These include: positive competition between journalists to take on data journalism; and civil society partnerships and ongoing mentoring and training for data journalism.

Arthik Abhiyan, a national daily dedicated to economic affairs, have engaged with data journalism by presenting facts and figures on public interest affairs in collaboration with Open Nepal. Though the newspaper had already started this initiative, a contract between Open Nepal and the media in regard to data production and use has had a visible impact on their ongoing data use. According to the contract, Open Nepal is obliged to produce and provide data, and the newspaper is to give this a space in the front page. *"The data literacy trainings imparted by Freedom Forum and Open Nepal in different time periods have encouraged us to keep up our efforts and propel journalism practices in a different fashion"*, said Yagya Banjade of Abhiyan Daily, who was one of the participants of the intervention.

Likewise, another national daily - the 'Annapurna Post' - has also started applying the data-to-story initiative, being inspired by the open data training on budget and aid. Kuvera Chalise, the Bureau Chief of the Post, who has been an avid learner of open data, made a good start using data in the newspaper. This has enabled competition among economic beat journalists to use and present data differently. He presented his perception and motivation for using open data in an interview. *"The training has increased interest towards data. Still the use is difficult. It has made me aware on the use of data in journalism. I see journalists should also put extra efforts to propel the data use despite time and everyday deadline pressure. The most important is willingness and motivation."* He gave his own examples of storing data, playing with data and developing stories based on data, rather than data based on stories. It seems he has internalized the importance of data, which is reflected in his day-to-day journalism practice. Our follow up engagement with journalists has shown that it takes time for media house to understand the thrust of data-driven journalism, and bring it into policy and action. In the Annapurna Post, however, there seems healthy competition within the media house for the use and presentation of data. When there is a good presentation of data it makes the page eye-catching, and this captures people's attention. The best practices are being replicated through peer-to-peer interaction. Colleagues from the political beat are also demanding the presentation of data visualizations, following the lead of the economic beat.

Conclusions

Journalists in the media were highlighted as key stakeholders in our stakeholder analysis. In a country like Nepal, where internet access rates are low, mainstream media are vital open data intermediaries. With sustained support, journalists can engage with data, and move towards data-driven journalism, where stories are developed from data. However, the complexity of data sources, a mismatch between the data that journalists want and the data that is provided, and a scarcity of technical skill in media organisations all act as barriers to wider use of data.

Even when data is used in media, more work is needed to understand how far this contributes to greater transparency and accountability in practice, following the next steps of an open data information flow, and theory of change.

8. Discussion

In this section we draw upon our findings, and upon critical literatures about open data, to explore a number of themes of importance to the future development of open aid and budget data in Nepal.

Our research set out with four main objectives:

1. To gather and share a baseline of the aid and budget data landscape in Nepal, including a mapping of available data, demand for aid and budget data from civil society and capacity to analyse and use it, along with a mapping of information intermediaries.
2. To gather and share evidence of impact of open aid and budget data, with a particular goal of informing the development of aid data standards and their implementation in Nepal;
3. To understand and document the governance context of Nepal and the particular challenges and incentives faced by aid and budget data users and potential data users
4. To foster and nurture a community of organisations working on open aid and budget data in Nepal

We have found that information and data can play an important role in addressing key social issues, and that whilst some aid and budget data is increasingly available, including in open data formats, there is not yet a sustainable supply of open data direct from official sources that meet the needs of the different stakeholders we consulted. We found expectations amongst government, civil society, media and private sector actors that open data could be a useful resource in improving governance, and we found some evidence of media making use of data to drive stories more when they had the right skills, incentives and support. However, we were not able to trace a full chain from open data to impacts on governance: this requires further research. The context of Nepal also highlights that a more critical perspective may be needed on the introduction of open data, understanding the specific opportunities and challenges for open data supply and use in a country that is currently undergoing a period of constitutional development, institution building and deepening democracy.

Is open aid and budget data good for Nepal?

There is a sense in which open data can be treated as a solution in search of problems. International advocacy for open data, drawing on claims about its economic, social and political benefits, can conflate different notions of open government⁸², and can try to apply an idea of open data without asking first whether open data is right for the context. Although the over-arching focus of the ODDC project has been on questions of the form “How can the concept, practice and culture of open data be adapted to specific developing world contexts? And what are the emerging impacts when successful implementation has been accomplished?” in some of our interviews in Nepal respondents were also asking the important question that should proceed this: “Is open aid and budget data good for Nepal?” and, if so, “What needs to happen for open aid and budget data to be beneficial for Nepal as a country and for the Nepali people?”.

The fact that some key informants and interview respondents raised and answered these alternative questions during the semi-structured interview sessions and open ended conversations could be located in the fact that, whilst open aid and budget data (by the Open Definition) are not yet available in Nepal, knowledge about open

⁸²Yu, H. & Robinson, D. G. (2012) The New Ambiguity of “Open Government”; UCLA Law Review Discourse 178 (2012); pp 180-208.11, No. 1, pp. 37-47. Yu and Robinson describe the difference between open government data (data released to support open, transparent and accountable government), and open government data (making data from government available in order to support innovation and enterprise, or simple commercial re-use of the data, with no necessary impact on the openness or accountability of government institutions).

data and its potential benefits does exist amongst groups of knowledge workers. This may be because groups such as Open Nepal and other stakeholders have organized a number of open data training events for journalists, politicians and government officials.

The use of open aid and budget data is therefore not a practical reality yet, but not merely theoretical either. Certain steps of (open) data-driven theories of change are being explored and tested, although generally only in partial or prototype forms. This situation creates the space for questioning, reflection and debate as to open data's usefulness, and how it fits with other existing institutional structures and opportunities for action on improved governance. From this will emerge either a strong need to support the concept and engage in advocacy for open data, and/or the need to raise concerns and caution about the relevance of open data, or the way in which it is to be implemented.

Linking open data and the Right to Information

Open data is often presented as a tool of proactive transparency, whereas the Right to Information (RTI) is regarded as a tool of reactive transparency. However, Nepal's Right to Information law, as many others, also encourages proactive transparency and the publication of key documents and data. RTI and open data have often been seen as working from different perspectives to achieve the same goal of improved access to information⁸³, with open data technology driven, whereas RTI is rights driven. However, there is an opportunity in Nepal to challenge this duality, and to build connections between RTI and open data.

Open aid and budget data in particular needs to be understood in terms of a relationship with RTI. The contextual history of budget and aid show they are not disclosed primarily to support building of businesses or for other entrepreneurial uses, but are disclosed as part of building accountable institutions, and engaging citizens and other stakeholders in the process of development. The history of RTI in Nepal shaped interview respondents' understanding of, and expectations towards, the use and usefulness of open aid and budget data. Articulating how open data and RTI can work together is important for the future development of aid and budget data use.

A basis in RTI establishes access to budget and aid data as a right. Adding the concept of open data establishes the idea that to put this right practically into action requires access not just to documents, but to datasets. Without data, widespread skills to use it, and a culture of data analysis, media may simply rely on governments own documents, or civil society have to invest considerable time and resources into converting information to data and carrying out analysis that could be much more streamlined.

Thinking about the re-use, rather than just access, to information and data, could help to increase the relevance of disclosures through reactive and proactive RTI channels. Dialogue with re-users can highlight the data they need, and help government to improve the data it provides: spaces for building this shared understanding between officials and data users can be created through open data in a way that does not happen with the RTI. But the backing of a Right to Information remains vital.

In Nepal, many networking and capacity building initiatives around open data are currently undertaken in a more or less haphazard way, building on available data, rather than connecting with identified needs. This may be a

⁸³Janssen, K. (2012). Open Government Data and the Right to Information: Opportunities and Obstacles. *The Journal of Community Informatics*, 8(2).

common first phase as countries explore open data, but it is important to move beyond, and to ensure open data is linked to demand or to shared issues.

Open data and inequality in Nepal

Because the striving towards social and gender equality has become an important political and social issue in Nepal, the concern around open data and inequality expressed by certain key informants should be explored further. In an article outlining four critiques of open data, Rob Kitchin⁸⁴ discusses the following: issues of funding and sustainability; risks of empowering the empowered; questions of data utility and usability; and the role of open data in neoliberalisation and the marketisation of public services. The first three concerns are clearly relevant for Nepal and were raised by research respondents. The fourth concern, that of neoliberalisation and the marketisation of public services, emerged during some of our research and is addressed in detail in the next section.

Jeffrey Johnson⁸⁵ has offered a reframing of the Open Government Data discussion in terms of ‘Information Justice’, discussing Gurstein’s seven-layer model for promoting effective use of open data⁸⁶. Johnson writes that “*This model identifies many of the most important complementary structures:*

1. *Sufficient internet access that data can be accessed by all users*
2. *Computers and software that can read and analyse data*
3. *Computer skills sufficient to use them to read and analyze data*
4. *Content and formatting that allows use at a variety of levels of computer skill and linguistic ability.*
5. *Interpretation and sense-making skills, including both analysis knowledge and local knowledge that adds value and relevance*
6. *Advocacy in order to translate knowledge into concrete benefits*
7. *Governance that establishes a regime for the other characteristics.*

In the absence of these conditions it is not likely that any open data will promote justice. Britz et al. (2012) argue that these conditions are required by Amartya Sen’s capabilities approach to justice; in the absence of these conditions diverse individuals are not able to use information to act on or become something that they value”. It is clear that these seven conditions are not currently met in Nepal and this is problematic in the context of open aid and budget data. Given Nepal’s current commitment to diminish inequality (social, gender, caste, ethnicity and class) after a period of deep political unrest and instability, the current political and academic discourses make the striving towards greater equality a pertinent issue.

The dark side of open data?

Thinking about open aid and budget data takes place within the context of a wider debate about open government data. As has been discussed, open data represents a merger of at least two traditions: the open government movement, and a technology innovation, or public sector information re-use industry. Discussions of Open Government Data as a concept are often characterized by this ambiguity⁸⁷. It may bring clarity back to the debates, and may support more critical engagement with elements of open data in Nepal, to acknowledge the multiple

⁸⁴Kitchin, R. (2013) Four Critiques of Open Data Initiatives; The Programmable City; <http://www.nuim.ie/progcity/2013/11/four-critiques-of-open-data-initiatives/>; accessed 4 June 2014

⁸⁵Johnson, J. A. (2013) “From Open Data to Information Justice” Paper presented at the Annual Conference of the Midwest Political Science Association, April 13, 2013 – Chicago. Illinois

⁸⁶Gurstein, M. (2011) Open data: Empowering the empowered or effective data use for everyone. First Monday 16(2)<http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3316/2764>(last accessed 30 June 2014)

⁸⁷Yu, H., & Robinson, D. G. (2012). *The New Ambiguity of “Open Government”* (pp. 1–24).

intellectual traditions that have informed current practices, and the fact that these two traditions emerged in response to very specific purposes, in particular political and economic contexts, and derived from very different intentionalities. On the one hand, open government can be said to have started as the democratic drive to open up public sector information to citizens and evolved into governments pro-actively opening up their public spending and procurements transactions as an expression of their commitment towards accountable, transparent and hence respectful governance. On the other hand, open government data can be understood as an evolution of the drive towards open data as a source of innovation and commercialization in late capitalist economies in the context of liberal democracies, to also open up government data for such purposes.

Open Government Data, as a concept and practice, will thus not only vary in terms of content, from data about the weather, to data about public transport, to data about national and international trade, to data about aid and budget, but also in terms of the purpose and intentions that those creating, publishing and using data have in mind. An uncritical use of the term open data can merge these different sets of purposes and intentionalities. Although aid and budget actors may be interested in ‘open data for budget/aid transparency’, they can quickly move to talk of ‘open budget data’, or ‘open aid data’ which clouds the explicit purpose and intention of pursuing a supply of data. The interests of actors in specific settings may overlap with, but not be entirely aligned with, those of a more general open data movement, that often is framed much more apolitically, as providing a foundation of data for any possible purpose of use, as in the framing: *“Government information and data are common resources, managed in trust by government. They provide a platform for public service provision, democratic engagement and accountability, and economic development and innovation. A commitment to open data involves making information and data resources accessible to all without discrimination; and actively engaging to ensure that information and data can be used in a wide range of ways”*⁸⁸.

However, opening government data as a platform in this way implies opening up national business and interests to the world, with many global role players potentially being able to make more advantageous use of such data than national ones: this dilemma was brought up by a prominent government official in our study, following reflection on his deep engagement with open data and anti-corruption activities in Nepal. Reflecting upon the issues implicit within the global nature of open data raises questions of governance, communities and boundaries: since open data, in a way, does away with national boundaries roles and responsibilities, and the flow of authority, in national governance are called into question. At the same time that open data may make it theoretically easier for citizens to observe aid and budget flows, it may also make it practically easier for donor governments or international firms to observe the state, or to provide alternative governance systems. Whilst it may be acceptable in late-capitalist neo-liberal democracies for governments to play a role as ‘knowledge broker’, since the social contract does not give the government the responsibility to protect and safeguard ‘the good life’ as understood by its people, in countries that have developed a different perspective on governance in interplay with the economy, the attitude of ‘steward of the people’ may be more natural and logical than that of ‘information broker’.

Therefore, whilst the high-level a-historical concept of Open Government Data may make sense from a theoretical and policy point of view and from specific political–economic perspectives and commercial interests of late-capitalist neo-liberal democracies, the inherent ambiguity of the concept of open data without specifying purposes to which data should be put, can make its use as an operational research concept applied in developing world contexts highly problematic. Different countries not only have developed different traditions and perspectives on governance and economy, but also find themselves bound to structurally unequal power relationships in a globalizing economy where the centers of power cannot be influenced in dialogue or drawn into a community of shared interests. Extrapolating on reservations expressed by one key informant in our study, the question needs to

⁸⁸ Davies, T, (2012) *Open Data Engagement website*, Available at <http://www.opendataimpacts.net/engagement/>

be raised as to whether, in the current global information economy, open aid and budget data would not lead to the scenario where Nepali citizens become mere data points or data objects for powerful global entrepreneurs. This stands in stark contradiction to the vision of open aid and budget data contributing directly to the empowerment of the common people in Nepal.

Demand driven and engaging open data

The thinking behind the model: “*Five Stars of Open Data Engagement*⁸⁹” seems to resonate with the issues brought up by the interview respondents in relation to the question about how open aid and budget data in Nepal could contribute to empowering the common people of Nepal. This model envisages open data as a locus for ongoing dialogue between citizens and state, and between various stakeholders within the state but also points to the significant work and culture change required to make this happen. Engaging open data should thus “be:

- ☆ *Demand driven - focusing attention on the data that citizens ask for and prioritizing data release based on demand*
- ☆☆ *Put data in context - with good metadata (i.e. descriptions of where the data came from, guidance on how to analyse them and examples of existing analysis)*
- ☆☆☆ *Support conversations around data - online and offline. These conversations should be able to involve people from inside government who know the dataset and it should be possible for citizens to communicate with the data owner*
- ☆☆☆☆ *Build capacity, skills and networks, - do not stop at just publishing data, but seek to build communities around the datasets and make sure all key stakeholders have the capabilities they need to work with them*
- ☆☆☆☆☆ *Collaborate on data as a common resource, recognising that government should be open to data coming in from citizens and giving data out; and that tools and services for working with data can be created collaboratively between citizens, state and private enterprise.”*

There was evidence in our research intervention with journalists that dialogue between data users and suppliers is important to ensure the data supplied is relevant, and to build shared understanding of the kinds of data products and resources needed.

Conclusion

Ideas of open data need to be adapted to the specific issues and contexts where they are applied. It is important for advocacy for open data to be specific about purpose and intention. Rather than talking of ‘open budget data’ or ‘open aid data’, discussing ‘open data for budget transparency’ or ‘open data for aid governance’ (for example) can help to make explicit the reason that information and data is being sought, and can recognize, as our stakeholder maps demonstrated, that the information and data needed for budget or aid analysis and advocacy might not only come from budget and aid datasets.

Our findings resonate with the need for a model of open data based on engagement, as presented in the five-stars of open data engagement above, and based on making connections between RTI and open data in ways that can strengthen both concepts and communities. Throughout work on open data for aid and budget transparency it is therefore important to be explicit that this should contribute to the empowerment of the common people of

⁸⁹Davies, T, (2012) Open Data Engagement website, Available at [Open Data Engagement | Exploring the engagement dimensions of open data](#):

Nepal, and to work to build shared understanding around the issues that data is there to address. Attentiveness of the potential dark sides of open data, or the way in which, in unequal settings, open data will not automatically overcome inequality, is vital.

It is important to take into account the fact Nepal has had a very unique history as a nation state, from its beginning as the end result of a unification process in response to British imperialism, to this moment in time where its internal political discussions between the Maoists and the Nepali Congress reflects its geo-political position between China and India. The understandings about the function and nature of the state in relation to the understanding of what a good life is, thus vary from the democratic liberal position where the state has to leave it to its citizens to define what the good life is, (whilst taking care of course that people treat each other fairly), to the more collectivist state that is committed to playing an important role in defining what the good life is and hence issues rules and regulations to create and protect the conditions for such for its citizens. Now that Nepal is beginning a new period of governance after a ten year period without effective government, a shared understanding of what good governance is, is probably still fluid and a definite Nepali approach towards the right kind of governance is still emerging; the approach that eventually will be endorsed will inevitably influence the emerging debates about open government and open government data and hence define whether and how open aid and budget data should be, and will be, implemented.

9. Recommendations for future action research

This report captures one stage in an ongoing research journey. These recommendations outline an approach for future action research that can build a deeper understanding of how to adapt, adopt and apply open data for budget and aid transparency in Nepal.

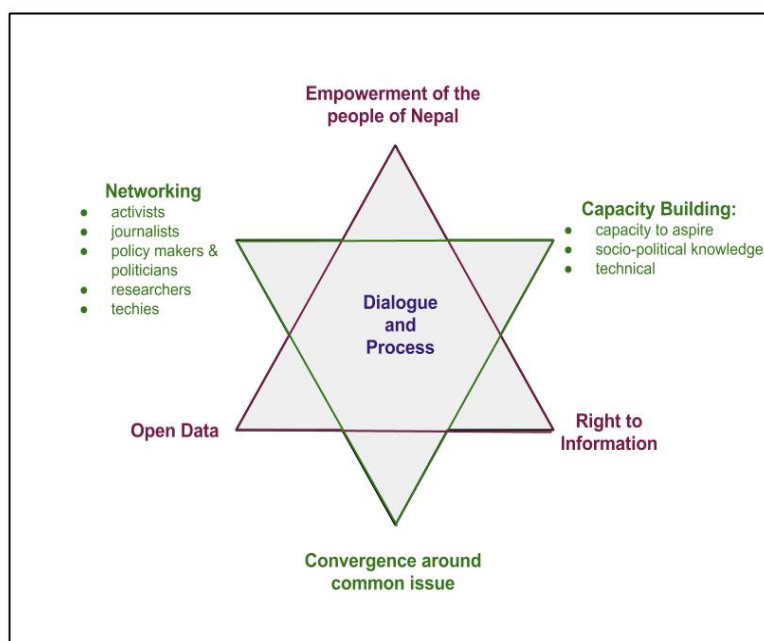
A holistic future-oriented perspective

Recommendations point towards action that should be taken, whether it is about more and different knowledge construction, policy formulation or intervention implementation. The recommendations are therefore grounded in a future-oriented, normative and pragmatic approach to knowledge and action, taking into account:

- The actors' perspectives on the desired reality,
- The actors' intentionalities and capacities and
- The actors' inter-relationships.

The recommendations form a holistic constellation of concepts that needs to be viewed and, if accepted, tried out in their entirety, since the concepts and practices derive their meaning in relationship with each other. The action-knowledge that this future oriented approach aims to generate is therefore fundamentally different from a causal research agenda that seeks to describe a problematic present. The propositional knowledge question: “*what is this?*” is replaced by the action question: “*what needs to happen in order for this to become reality?*”. Such normative action research can serve ‘*the twin aims of providing practical guidance to people faced with immediate problems and contributing towards the goals of social science*’⁹⁰.

The recommendations we put forward can be represented in the star model below:



⁹⁰Baburogul, O. N. and I. Ravn (1992) 'Normative action research', *Organization Studies*, 13(1): 19–34.

Unlike a common bullet point list of recommendations, some of which might be adopted whilst others are ignored, this six-point star emphasizes that the recommendations need to be addressed together. Focusing on open data without the Right to Information and an emphasis on empowerment, or networking and capacity building without building convergence around common issues, would be a failure to apply the model at all. To build shared understanding of this framework, we envisage it would be discussed in a workshop that brings together the various stakeholders, and that takes extra care to include groups that have been excluded in the process up to this point.

The aspects of the recommendation framework are outlined in more detail below:

Dialogue and process

The heart of the conceptual recommendation constellation is “*dialogue and process*” with the two triangles with their six points and 6 primary relationships representing the focus, direction and inter-relationship between clusters of knowledge construction and action taking place towards the desired future scenario: the empowerment of the common people of Nepal.

To see open aid and budget initiatives implemented in Nepal in alignment with positive outcomes that can be associated with such initiatives (such as enhanced democracy, citizen participation etc.), it is important that dialogue be fostered between all stakeholders. Through dialogue, all stakeholders’ thinking, relating, researching and acting needs to become aligned with shared purposes and an understanding of the future scenario that is being sought. Stakeholders also need to generate a shared understanding of the current context and local situations.

Empowerment of the people of Nepal, Open Data and the Right to Information

Alignment with a shared purpose provides the space within which the various stakeholders think and act in relationship to their commitments, knowledge constructions and actions. Alignment with this shared purpose will form and inform their intentionality towards knowledge construction and action and their relationships with each other.

The open aid and budget initiatives take place in a time when Nepal as a country is endeavoring to forge its own form of democratic governance. Open aid and budget initiatives speak directly to issues of governance and thus touch on issues of national sovereignty, both in a political sense of Nepal as a nation state as well as from a data sovereignty perspective. It is therefore pertinent to realise that the relevant context for the open aid and budget initiatives is the current democratization process in Nepal and that this process needs to be understood as a unique journey in the context of Nepal’s tumultuous colonial and current political history, its unique geo-political location and the current development needs and aspirations of its various peoples.

Networking, Capacity Building and Convergence around a common issue

Because of the sociopolitical and geo-political issues that will define in which way and to what degree Nepal can navigate its course towards open data without increasing internal inequalities and making itself vulnerable as a nation-state in a global force field of deeply unequally power relationships, the dialogue needs to include many stakeholders that are interested in and can contribute to these issues. It is therefore recommended that the networks involved in open data for aid and budget expand beyond the groups of RTI activists, open data activists, technologists and civil society currently engaged to reach a broader constituency of civil society organizations and

to also include political scientists and economists. Including such expertise will support capacity building in the thinking and analysis of issues that so far, only a few respondents have been able to fully conceptualize and discuss. Capacity building thus needs to include more than only technical training in relation to the use of (and possibly creation of) open data, but also socio-political and socio-economic understanding in relation to issues touching on the Information Society and Nepal's socio-political and geo-political situation.

Networking has been and is happening between open aid and budget data and RTI civil society activists, technologists, journalists, politicians, policy makers and researchers, but care needs to be taken that this networking stays aligned with the convergence around an actual issue. It is however pertinent to realise that the dialogue between the various stakeholders needs to be an open and inclusive process, and that provision needs to be made for inclusion of as yet unknown conversation partners. Every multi-stakeholder dialogical process is in essence a flawed endeavour because a multi-stakeholder conglomerate is most often a self appointed group, which, especially in the case of open aid and budget data will emerge from a developed elite, either from inside or outside of the country⁹¹. Amongst those excluded from such processes will be those who do not have the resources, the education or the capacity for voice to participate in such a process, as well as those who are not invited, or do not have the confidence to invite themselves. It is also important to consider that processes also inevitably exclude those who are not born yet, or who are too young to participate (such as the future citizens of Nepal) and those who do not have a human voice (such the natural environment).

Especially in Nepal, which endeavours to move away as a country from entrenched inequalities (in terms of gender, caste, class and ethnicity) it is important to realise that in order to foster more democratic and representative inclusion, capacity building of various sorts needs to accompany the networking endeavours. This is important not only to enhance the quality of participation of those who are already part of the networks, but also to enhance the inclusion of those who are not yet part of those networks. Including into the focus of capacity building an emphasis on developing the capacity to aspire may bring in hitherto excluded groups who, in the social and gender inequality of Nepali society, have not been able to develop their voice⁹².

The focus on a shared issue forms the meeting point between focus on and practice of both networking and capacity building: in other words, the meeting point between networking and capacity building actors is the convergence on the platform of a shared issue. Open aid and budget data initiatives and Right to Information activism which becomes demand driven, instead of generic, would not only infuse both networking and capacity building with a clear purpose to strive for, but would also be a rational choice of action in a resource constrained environment where human and practical resources have to be used optimally.

Through this model, together with dialogue and process, we believe that open data can play an important role in contributing to the empowerment of the people of Nepal.

⁹¹Gurstein, M. (2013) Community Innovation and Community Informatics, Journal of Community Informatics Vol.9 (3)

⁹²Appadurai, A. (2004) 'The Capacity to Aspire: Culture and the Terms of Recognition' in V. Rao & M. Walton (eds.), Culture and Public Action, pp. 59-85, Stanford University Press, Palo Alto, CA.

10. Appendices

Appendix 1: Technical Assessment of Data Availability

The table below presents an overview of the availability of data using the ODDC Technical Assessment Framework. The detailed findings of the data assessment can be seen in the following document: <http://bit.ly/1sGIVsk>.

Question	AID DATA	BUDGET DATA
Does the data exist?	Aid Data exists on the government's Aid Management Platform (AMP), The AMP has 309 projects with data on project title of sector, start date, end date, commitment amount and disbursement amount.	Budget Data is contained within the government's Red Book. This details estimates of expenditure in all ministries of Government of Nepal. The data includes a summary of budgetary allocation of fiscal year, budget summary for chargeable items, budget head wise estimates of chargeable expenditure, budget summary for appropriate items, and budget head wise estimates of expenditure appropriate for consolidated fund. Further, on integrated budget allocation and financing estimates of fiscal year heading, in which row contains budget data on source, mode of payment, actual expenditure, revised, total budget, GoN and foreign grant or loan. Similarly, in column expenditure (recurrent and capital) and financing (charged and appropriate) data are included. Likewise, detail of budget allocation are showed under recurrent, capital and financing budget heading each ministry of Nepal along with actual expenditure(revised and actual allocation and sources(GoN or foreign).
Is it available online [from government]?	The government provides this data online - (http://portal.mof.gov.np/). Data on project, commitment, disbursement, sector profile of disbursement, historical data, aid predictability, aid type, funding instrument and region profile can be downloaded in CSV, PDF and excel format.	The Red Book is available online on website of Ministry of Finance (MoF) (http://www.mof.gov.np/uploads/document/file/English_compl ee(1)_20130715044917.pdf)
Is the dataset provided in machine readable formats?	Data on project, commitment, disbursement, sector profile of disbursement, historical data, aid predictability, aid type, funding instrument and region profile can be downloaded in CSV, PDF and excel format. However many data and its description are given as text in website. Conversion of such data to machine reading format is not possible.	The Red Book is in PDF format. So, it is not machine readable format. However conversion tools such as tabula and pdf scraper can be used to convert pdf into machine readable format like CSV. In which, conversion could be difficult, time consuming and tedious because red book is 631 pages.
Is the machine readable data available in bulk?	Only partial data (CSV and excel) are machine readable. Most of information are given in pdf and website. Only few data are in excel form.	In Red Book, data on all estimate of expenditure including line item wise and source wise are given in bulk but data are not machine readable.
Is the dataset available free of charge?	The general description of the Project along with its budgetary information and transaction are public accessible and free of any charge. Whereas detail information could not be public accessed.	Red book is available free on website of MoF (http://www.mof.gov.np/uploads/document/file/English_compl ee(1)_20130715044917.pdf) but it is not machine readable. So, working on such data is costly because conversion of bulk data into machine readable format is time and resource consuming.
Is the data openly licensed?	No data is not openly licensed. It is not mention in anywhere.	Data is not openly licensed. It is copyrighted by MoF. All the legal rights of use and distribution are only reserved to MoF.

Is the dataset up to date?	Yes, most of the dataset are up to date.	Red book data set is up to date. It is recent publication of Government of Nepal, MoF in 2014
Is the publication of this dataset sustainable?	It is operated by the aid donor. There is question on sustainability.	Red book is all about estimates of government expenditure of all ministries of Nepal. Budget preparatory process is ongoing and is published in each year. So, dataset publication of dataset is sustainable in Nepal.
Was it easy to find information on this dataset?	Data portals/connectivity are really very slow. So download process very difficult and tedious.	Red book is pdf of 631 pages. So, accessing information on Red book is very difficult, time and resource consuming and tedious.
Are Linked Data URIs provided?	No, additional government links are not provided.	No additional URIs is provided for key data set in red book.

Appendix 2: Interview Guide

Government Department Officials of Government Departments that are producing information flows about funds (Ministry Of Finance Officials; Central Bank of Nepal officials; Office of the Comptroller General Officials)

- i) *What sort of budget and aid information is your department producing? What specific datasets does your department collect and what topics do these data sets relate to? Is your department making this data available to all citizens in Nepal?*
- ii) *In what format does your department make this data available? Pdf, hard copy, etc.? Is this information in open data format?*
 - a. *Is it available online [from government] in any digital form?*
 - b. *Is the dataset provided in machine-readable formats?*
 - c. *Is the machine-readable data available in bulk?*
 - d. *Is the dataset available free of charge?*
 - e. *Is the data openly licensed?*
 - f. *Is the dataset up to date?*
 - g. *Is the publication of this dataset sustainable?*
 - h. *Was it easy to find information on this dataset?*
- iii) *Do you feel that the existing datasets could be made open? If so, what steps would need to be taken to make this happen?*
- iv) *How do you yourself, use this data? What do you need this data for?*
- v) *How do intermediaries (like journalists, researchers, parliamentary staff, techies, civil society organizations), citizens, donors and other relevant stake-holders make use of the information your department provides? Have there been requests for this information to be delivered in open formats?*

- vi) *What are the gaps in information provision as you see it, and how could your department improve the provision and presentation of information? Which are the fields where the provision of open data could make a difference? In which areas would it have a bigger impact?*
- vii) *Has anybody requesting aid and budget information ever used the Right to Information Laws, as far as you know?*

Intermediaries: Media; Civil Society organizations (such as Freedom Forum and Open Nepal); Parliamentary Staff, Techies and Researchers

- i) *Where do you get budget or aid data from and in what format?*
- ii) *What type of open budget, aid data and info flows exist already?*
- iii) *Does the open data format meet your data requirements – is the data disaggregated, comparable? Which data do you use, where do you get it from and in what format does it come? Can you give me examples?*
- iv) *Has your organization turned existing budget, aid data and info flows into open data? How did you do that? (This would be applicable to intermediaries like techies and Open Nepal)*
- v) *Has your organisation used open data to convert it into information and / or key messages? (This would be applicable to intermediaries like journalists)*
- vi) *What need for open data do you see? Which areas would benefit from the creation of an open format in budget and aid data? Why do you need data, what do you currently use data for? What would easier access/more data enable you to achieve? In other words, what could you potentially use open data for in future?*
- vii) *What do you, as an intermediary see as the need of end-users for open aid and budget data? What groups of end-users are you currently working with? Who is seeing / using the data you worked with? Can you give me examples?*
- viii) *What other types of budget and aid data can be transformed into open data? How would you do that? What would you need in order to do this? (financial resources, technical training etc.) What are the challenges and the barriers you see for yourself and for end-users?*
- ix) *Have you ever used the Right to Information Laws of Nepal in requesting budget and aid information?*

End users of data - Financial Journalists

- i) *Did the data literacy training organized by Freedom Forum and Young Innovations result in more effective reporting from your side? Can you give me an example?*
- ii) *Does access to open data help you in effective reporting? How? Can you give examples?*
- iii) *What do you need to enhance your capacity to receive open data? Can you give me examples? Financial resources, technical training etc.*

- iv) What are the challenges and the barriers you see in accessing and using open aid and budget data? Can you give me examples?
- v) Have you ever used the Right to Information Laws of Nepal in requesting budget and aid information?

Appendix 3: Stakeholders Mapping Workshop Participants' List

SN	Full Name	Office/ Institution	Post
1	Thom Pd Pangeni	Ministry of Finance	V.S
2	Bishesh Kumar Pradhan	Ministry of Finance	Computer Engineer
3	Prakash Niroula	Ministry of Finance	Section Officer
4	Chandra Prasad Bhattra	New Era	Development Consultant
5	Tanka Aryal	Citizens Campaign for RTI	ED
6	Craig Beyerincce	Local Intervention Group	Program Coordinator
7	Tumburu Gautam	Transparency International Nepal	Cordinator
8	Dr. Rudra Suwal	Central Bureau of Statistics	Director
9	Bigyan Sijapati	National Information Commission	IT Consulatant
10	Goulochan Saiju	National Information Commission	Under Secretary
11	Nirjol Sharma Pokhrel	Square One H & T	Dir, Programmes
12	Pavitra Rana	Open Nepal Initiative	Coordinator
13	Kuvera Chalise	Annapurna Post	Economic Bureau Chief
14	Karun Dhakal	Annapurna Post	Senior Sub Editor
15	Narayan Adhikari	Accountability Lab	Country Representative
16	Hum Bhandari	NGO Federation	Info, Doc & commm. Officer
17	Sanjeeb Ghimire	Freedom Forum	Board Member
18	Nirmal Aryal	SEAPRED	Admin/Finance Manager
19	Bibhusan Bista	Young Innovations	CEO
20	Rinu Maharjan	Young Innovations	Project Lead
21	Nilu Thapa	SAWTEE	Social Accountability Practioner
22	Kedar Khadka	GoGo foudnation	President
23	Ganesh K. Paudel	Wikimedai Nepal	President
24	Suman Ranjit	Government Road Project-DoLIDAR	ICT - Officer
25	Shaleen Khanal	SAWTEE	Intern
26	Prakah Neupane	OKF Nepal	Ambassador
27	himalaya Raj Ghimire	Samuhik Abhiyan	Development Faci;itator
28	Pushpa Raj Acharya	Karobar Daily	Sr. Reporter
29	Sabin Mishra	Ujyalo 90 Network	Reporter
30	Dan Bahadur Karki	Freedom Forum	Assistant- Admin/Finance
31	Krishna Sapkota	Freedom Forum	ED
32	Aruna Adhikari	Freedom Forum	Finance Officer
33	Hari Binod Adhikari	Freedom Forum	Vice Chairman
34	Anirudra Neupane	Freedom Forum	Program Manager
35	Ineke Bushlus	RFF/Grace	Executive \director
36	Narayan Prasad Ghimire	National News Agency	Editor

Find further information about this project at <http://opendataresearch.org/project/2013/freedomforum>

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[Ends]