

Demographic Data For Development

Overview Report

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“Data for development can be likened to money in an economy or blood in the system of a human being.”

INTRODUCTION

Demographic data provide an essential evidence base for the development and evaluation of policies. The bottom line is that “a country cannot develop without data.” Although the term “data” has technical overtones and there are important technical issues that need to be considered, the more fundamental connection is between good data and good governance. It is in part through the collection and inspection of data that nations and communities have defined themselves, identified inequities, challenged misconceptions, and justified their claims upon resources. Accessible data functions as a public good, benefitting citizens and the political system as a whole. It is not by accident that the world’s largest democracy—India—has adopted legislation giving citizens the right to demand information, and similar legislation is being developed in Ghana. Yet legislation alone ensures neither data-inspired policymakers nor a public empowered to hold them accountable.

The good news is that more data are being collected throughout the developing world than ever before; but how are these data being used? Is demand for data emerging from within the country or is it largely being expressed by outsiders? Of course, the evidence base is but one among many factors that influence policy development, not all of which can be addressed in this report.

The Data for Demographic Development case studies examined the demand for data in four sub-Saharan African countries. This project focused on the views of policymakers, what data they use, what data they want but do not receive, and what they might use but do not request. We further explored the underutilization of existing data and asked about the factors that limit the collection, use, and sharing of data. Our case studies sought to understand how access to data might be improved. The project’s objective was to create an intimate portrait of access and demand at the country level, thereby complementing the wide array of international initiatives (such as PARIS21 and the Health Metrics Network) that are underway. Although the emphasis was on demographic data, the project covered the range of data that are fundamental to developing and assessing policies in the areas of education, health, environment, income, employment, and other measures of development. Specifically, these case studies inquired about censuses, surveys, and both budget and service use statistics to determine whether policymakers are getting the data they need to develop sound policies.

Semi-structured interviews were conducted with over 100 policymakers, data producers, and data consumers in Ghana, Senegal, Ethiopia, and Uganda. In this report, the broad perspective from the four countries will be presented, with notes about where there were issues that were raised specifically for one country or another. These countries were selected based on their identified statistical capacity, upcoming censuses, active engagement in the production of data, and participation in international data initiatives. Illustrative quotations have been included, but identifying information has been omitted to preserve the anonymity of respondents. By reaching out to policymakers, government, civil society organizations, other NGOs, development partners, researchers, and the media, these case studies developed a broad view of the relevant issues.

DRIVERS OF DEMAND

Demand for data is perhaps the lynchpin of efforts to increase the quantity and quality of data. Assessing the level of demand for data is challenging given that there are different definitions of data as well as of demand. However, one thing is clear: demand for data is increasing. The case studies brought to light some significant drivers of demand: international influence, and decentralization and democratization.

International influence

Global initiatives to improve health and well-being in the developing world are increasingly quantified, relying on data to reveal trends and assess progress on development goals. Recent initiatives such as the Poverty Reduction Strategy Papers (PRSPs) are requiring major data collection efforts, which are effectively increasing demand. A government respondent emphasized that statistics have become particularly important in light of the need to monitor progress; “the pressure to report on the [Millennium Development Goals] MDGs in particular has influenced data priorities and heightened the...focus on monitoring and evaluation.”

The adoption of results-based budgeting by international donors has generally had a positive influence on demand; as one development partner said, “emphasis on measuring impact is really pushing demand and calls for sophisticated data collection and analysis.” In addition, international initiatives have created more awareness about demographic indicators such as maternal mortality: “some African countries would not have made maternal mortality a priority had it not been for the MDGs.” Within the case study countries, there is considerable reliance on the Demographic and Health

Surveys (DHS) and high regard for the quality of these data and the protocols the DHS has established for making the data easily available. Moreover, it appeared that the DHS had generally contributed to the development of local capabilities. One interviewee mentioned that his staff gained skills in study design, data collection, and analysis through participation in the DHS.

The case studies caution us that while international demand for data has had some benefits, sustainable data systems require strong internal demand. As one researcher noted, “much of the demand...is donor driven. Indigenous demand remains weak. Up to now, the main reason for collecting data was to satisfy donor demand, rather than for our own planning needs.” Externally driven and internationally funded surveys might, in the long term, divert resources away from activities or topics of local or national interest and could potentially undermine the development of core national data systems, such as the census. In one government interview, we heard that: “in [an international survey], we could not include some locally relevant indicators/variables onto the questionnaire, as it allowed only little flexibility and also because it was already overstuffed to accommodate more questions. That was a missed opportunity.” Interviewees throughout the case study countries perceived internal demand as essential: “indigenous demand is the only sustainable way to ensure better quality data, access, and use.” Since local investment in data is critical to the long term health of the system, this national-international tension bears watching.

The international approach of linking investments with measurable outcomes often places great pressure on developing countries. These countries may be ill-equipped to produce the requisite data, and the consequences can be severe. Interviewees reported that their country recently lost 30 million Euros in funding due to an inability to produce data showing that the relevant targets had been met.

Decentralization and Democratization

The international (external) demand exists alongside internal demand from the countries themselves. A move towards decentralization and democratization is underway in each of the countries studied and has catalyzed internal demands for data. Increasingly, governments are developing decentralized planning, budgeting, and budget execution strategies. In the words of one Parliamentarian, “fundamentally, the statistical system should adapt itself to the requirements of the new development (decentralization) framework.” In theory, decentralization frameworks move responsibilities to the municipal/district/local levels and reinforce the need for data. In reality, decentralization has proceeded by fits and starts, impeded by lack of capacity at the lower tiers of

government. Until these tiers of government develop their capacities, the motivation for national authorities to provide local level data may be minimal.

Meanwhile, democratization ideally creates a demand for data as a means to hold government officials accountable. It has the potential to create pressure from below for better data, more timely data, and data that can feed local as well as national decisions. Perhaps nowhere is the need for access

Government officials in Uganda participate in short courses on statistics in order to learn to use and appreciate the value of data.

to data so closely tied to the democratic process as with budget data.

Respondents continually referred to the need for transparency in budgetary information. As one government official noted, “the central government has been publishing releases of funds—showing amount of funds released—but this is not enough. The [government budget office] is trying to ensure [inclusion of] detailed information that can help the intended beneficiaries track the funds disseminated. For example, if the funds are for roads, the information should indicate which roads—not just a lump sum for roads.” This need for fine-grained budget data is an important means by which governments are held

accountable, and respondents perceived that significant changes are underway in what people want to know about budget data: “People now demand detailed information compared to the situation before...people just used to report ‘this is the budget’...but now people are asking ‘it was released to whom and for what?’”

IMPEDIMENTS TO DEMAND

Despite the number of opportunities to increase demand for demographic data, several factors still stand in the way. An overriding issue—indeed, one that is seen in rich and poor countries alike—is that policies are often driven by political views rather than by empirical analysis. In rich countries, however, quantitative data provide a means by which such ill-founded policies can be challenged. Only the beginnings of this role for data are evident in the four study countries, where we found lack of data, lack of awareness of and access to existing data, poor data quality and timeliness, inadequate resources, and missing links between data producers and users.

Political influence

In an ideal world, policy development would always take into account the evidence base. In reality, policymakers need to balance a wide range of factors and pressures. Data may be ignored if they

challenge policymakers' personal views or political needs. In the cases where policymakers do seek out data, it may occur after the fact to support policies already enacted. In one country, a research organization reported seeing the greatest demand for data during election season; another respondent seconded this notion by saying "it appears that data are quoted for the sake of elections rather than for planning." The consequences of not considering the evidence can be detrimental: "it is like crisis management. The policies are not well thought out and that is why sometimes we get policies that do not stand the test of time." Until a culture develops whereby data are used to inform policy, the demand for data collection and use will remain low among policymakers themselves.

Even when national policies become evidence-based (because at that stage many interested parties and key stakeholders are involved and the available data is reviewed), problems can arise during the process of policy implementation, when data are often completely ignored. As noted in one country: "Policies are made for the shelves. We hardly implement...You find that the two are not related at all...When it comes to the actual implementation of programs, there is very little or weak linkage with available data to inform those programs."

Lack of awareness

In some instances data are available, but users are unaware of their existence and/or their potential. As one respondent stated, "how can people use data if they don't know that the data exist?" Respondents pointed to poor dissemination as one cause. Another respondent mentioned a common complaint that foreigners often have greater access to a country's data than citizens themselves. However, the core concern here is that unlike local researchers, foreign researchers come from bureaucratic and statistical cultures in which access to data is a given. The respondent said, "outsiders get data because they look for it...as people we are not in the habit of finding and using data."

Respondents repeatedly mentioned the lack of a reading culture in their countries as another constraint to data awareness. In the words of one respondent, "people abhor in-depth reading," and this cultural tendency

deters them from actively seeking out information. Data awareness is further constrained by the fact that data are often not well-known in-country; consequently, additional data are collected to fill a

For most of 2008, the Central Statistics Agency in Ethiopia has been working on developing a National Strategy for Statistical Development (NSSD) to create a standardized framework for statistical reporting and increased statistical capacity. In October 2008, over 100 stakeholders met to assess the progress of the NSSD and actively began to implement the major recommendations of the strategy.

perceived void: “we usually rush to conduct surveys without exploring what data are available; we do not even know the institutions working in the area.” Case studies highlighted the fact that data are housed in multiple ministries and agencies, with no one organization acting as a clearinghouse.

The demand for data is also built on an awareness of their potential value, not just their existence. There is great power in creating a consciousness around data and their potential among not only the policymakers, but also the general public. As one respondent reported, data are “highly mystified in this country, often considered as something which is there only for the researchers and highly mathematical people. It has become something you have to evade and run away from.” However, once data are demystified, the general public can be empowered to seek out information and use it to hold policymakers accountable. This creates an internal pressure for data that could augment the growing external demand and reinforce the move toward democratization and decentralization.

Lack of access to existing data

Even when there is awareness that data exist, people do not always have access to them. A number of factors seem to have discouraged the release of routine reports and the distribution of micro-data: fears, a culture of secrecy, a need to maintain confidentiality, and a lack of advance planning for sharing. These factors curb the demand for data.

Interviewees cited fear of misuse of data as a constraint to sharing. One researcher voiced this concern by saying that if someone asked for his data, “I would definitely hesitate. The reason is that I think that the data could be wrongly used.” This view was taken to an extreme through the words of one respondent: “it is like a child asking you for a car key. You can’t give...because you don’t know what the kid is going to do with the engine.” Concurrent with, and perhaps underlying, this fear of misuse is a fear of being judged; another interviewee stated: “we seem to fear criticism, we fear to be scrutinized because it may work against us.” In addition, lack of confidence in the data, and in its reliability in particular, raises anxieties about sharing. Interestingly, although they repeatedly cited fears of misuse, our interviewees did not provide any concrete examples of such misuse.

Fears of data misuse and lack of confidence in data often co-exist in a culture of secrecy whereby data are kept behind closed doors. In two of the four countries respondents made reference to an institutional culture of secrecy that impedes sharing of information. Interviewees mentioned that in order to combat this secrecy, people must rely on personal contacts to access data. This was reported as

a special problem for the younger journalists (but no doubt researchers are also affected) who were shut out because they lacked a rich, dense network of personal contacts. A personalized approach may enable access for the better connected, but it does not constitute a coherent and transparent system.

Many interviewees noted that some data must be kept confidential to protect the privacy of individuals. That is a widely shared goal and a well-understood problem with data sharing. Suppressing identifying information may be difficult to implement after the data have been collected, thus making the resulting data set difficult to use. Strategies for sharing data must take costs into account.

Another factor limiting sharing is that sharing is often an afterthought, and that retrofitting can present many challenges. It is far easier and more cost-effective to plan data-sharing strategies in advance, so that issues of confidentiality, consent, documentation (including protocols, tools, tabulations, reports, and codebooks), and the appropriate file structure can be worked out. This is an approach used in some international surveys. Respondents in all four countries made reference to high staff turnover in statistical offices, which further underscores the need to support and document data access and management processes from the beginning.

In Ghana, Ghana Info strives to provide one-stop shopping for social and economic data. Data on this website is organized by sector goal and themes, and the data are disaggregated (by gender, rural/urban, district) wherever possible.

Quality and timeliness of data

Quality of data was reported to be uneven within and across the surveys conducted in the case study countries. Respondents were particularly dismayed by inconsistencies in age breakdowns, and by what seemed to be inexplicable gaps between waves of data collection. Clearly, the many efforts at improving data quality, harmonization of data elements, nomenclature, and standards that are currently underway are much needed: “the National Strategy for Statistical Development offers a valuable opportunity to strengthen data use as it addresses many of the issues that limit use—quality, accessibility, relevance, etc.” One common observation is that when data collectors themselves are unaware of the importance of sound data, both timeliness and quality may be compromised.

Delays in the collection and release of data can effectively extinguish the demand for data from policymakers and the media. Timeliness is essential to usefulness. As one government official said: “Timeliness is a serious problem. The interval between data collection to reporting often takes longer time in nation-wide surveys and census. By the time data are collected, analyzed, and findings released,

the context may have changed and the data become less useful.” Policymakers who are under pressure to produce a development plan may need an analysis more quickly than analysts can produce it. It is worth noting that timeliness is a particular concern for the media when they work on strict deadlines. A breaking story might be significantly enhanced by data, but the opportunity for doing so is lost when data producers are reluctant (or unable) to respond in the time available. Admittedly, the media and other data users often have unrealistic expectations about how quickly good-quality data can be produced and released. If producers of data appear nonresponsive, this may dampen policymakers’ enthusiasm for supporting the infrastructure and project costs for data collection.

Lack of data

Demand for data cannot be assessed in isolation; the supply of data inevitably affects its demand. Aside from the census, sub-national data is sparse in the data systems of these countries. While the DHS, the Multiple Indicator Cluster Survey (MICS), and similar surveys are valued, these nationally-representative surveys cannot go far in addressing sub-national data needs. To the extent that policymakers depend on such surveys, they may under-invest in (or fail to appreciate) the many data needs at local levels to monitor trends, provide the basis for supporting budget requests, or evaluate progress. When the data do not exist, or where the resources are not available to mine them, the fallback position may be to simply not use data at all in planning. If central governments lack useful data at the sub-national level, they may mechanically adjust the budgets of lower-level governments without taking into account the real needs at these lower levels. The benefits of decentralization and results-based budgeting are thereby lost. Without access to disaggregated data, the larger goals of democratization and decentralization are unlikely to be met.

Resources

It is well understood that the supply of data is inevitably affected by the available resources, both human and technical. Case study interviewees repeatedly mentioned insufficient skills among individuals who are involved in data collection and management. In one country, it was reported that only 2-3 competent statisticians are produced annually, and there are even fewer demographers trained. Furthermore, respondents in all four countries reported that not all trained individuals remain in government, let alone in the country.

In addition to these human resource constraints, technical difficulties arise. It was noted that surveys are often left in paper form and are therefore vulnerable to damage. Even when technology exists, the resources present a further challenge to the supply of data. Erratic power supplies, poor equipment, and unreliable bandwidth were reported to impede both access to and supply of data. There are tales of data that are sitting around but not available for those who make use of them, data that are allowed to deteriorate because of poor storage and maintenance, and data that are simply wrong or useless. In resource-constrained settings, it can be difficult to make a case for further data collection when previously collected data lie unused. A development partner stated the need to prioritize data needs and “collect data on few and critical indicators.” The importance of resources should not be understated. At the same time, one researcher noted that adequate resources tend to follow increased awareness: “resources are not the first problem. First you have to get people interested in data; if they are convinced, the means to support the research can be found.”

Missing links between producers and users

Often, data exist and are available, but the format in which they are provided prohibits full and easy use. Micro-data are rarely useful to policymakers and the general public; without having any training themselves in analysis, policymakers need to have the data translated for them into more comprehensible formats, such as tables or maps. One government official extolled the virtues of maps: “when it comes to our politicians...they need to look at this picture (map) on the back of the wall and see that in (one district) there are about 20 primary schools constructed by government and in (another district) there is only one, so there is justification to allocate to (the district) which has been marginalized for some time for all those years.”

For the media, the format in which information is made available is particularly critical. Journalists much prefer lay language to statistical language. As one media interviewee stated, “few people, even journalists, understand what the poverty index means, so instead of saying the poverty index is this or that, they could talk in terms of, for example, one in three Senegalese is poor, or half of the population cannot afford to eat.”

There was strong support for data provided in user-friendly formats so that multiple audiences can make effective use of the data. Few members of constituencies (media, civil society, parliamentarians) could be expected to seek out and manipulate micro-data. Nevertheless, micro-data

need to be made available to enable analyses associated with these different groups to make use of data and present it in meaningful ways.

If a policymaker is to use data successfully, a trusted intermediary organization with strong analytical skills must facilitate the process. We observed different ways to mediate the links between data analysts and users: a governmental entity (not unlike the Congressional Research Service in the US) could serve as a resource; or, as some respondents mentioned, policymakers could add research assistants to their staffs to ensure that their needs were met. It would be worthwhile to investigate whether such trusted intermediaries would only produce the data (or evidence or information) that the policymaker requests, or whether they would be empowered to help frame questions. Furthermore, while tools to empower policymakers may be necessary, this may not be sufficient in itself to truly accelerate demand for data.

Likewise, respondents repeatedly noted that there was little dialogue between the producers and consumers that could build a constructive understanding of each others' needs, strengths, values, and limitations. Strengthening this link would allow civil society to use data for advocacy purposes and to hold governments accountable. As one NGO interviewee said, "quality information used by the media is the most effective advocacy tool." And, a member of the media noted that budget data are important to them: "journalists and the public have no idea how much money is spent on poverty reduction, yet to appreciate the efforts being made to reduce poverty it is important to know how much is being spent."

In Senegal, the Statistics and Demographics Department within the National Institute for Applied Economics (DSD-ENEA) now falls under the purview of the national statistical agency. DSD-ENEA is in the process of becoming the École Nationale Supérieure de Statistique et d'Économie Appliquée (ENSEA), whose aim is to train statisticians to work in francophone countries.

IMPLICATIONS OF THE CASE STUDIES

The case studies highlighted two types of issues: those that require long term resources and those quite modest in terms of resources, but that require leadership and sometimes political will.

Doing more with what we have

Proactive dissemination of what already exists. In many settings, existing data are not being fully utilized—and may not even be widely known. A targeted initiative (focused on the most valuable data

sets) could get the data into the hands of consumers in forms they can use, help to bring data to policymakers, and enhance the awareness of the value and existence of data.

“One-stop shopping” was a frequent request. Even a modest approach that identifies what is available, what it contains, how to get it, and ideally even the data, would be widely welcomed and is probably a key step in changing the culture of data use and sharing. However, the diversity of potential users makes it unlikely that any single site (unless designed to have multiple “faces”) could reach all the communities. The analyst who needs complex data sets with weighted samples is so far removed from the reporter who wants to track politicians’ promises for budget allocation, that the nirvana of a “single site for all data” may be unattainable.

User-friendly formats. Demand may well come from those who are not, and not likely ever to become, sophisticated analysts and users. Therefore, initiatives to increase their appreciation and use of data will require ways to present data in summary form, user-friendly formats, and often, on paper. A request for “user-friendly” data is in essence a request for “middleware”—organizations and competent analysts that translate large, complex data sets into relatively simple displays without distortions, biases, and errors. One specific aspect of accessibility needing attention is the presentation of data through maps. Maps appear to be a way to make data accessible to the media who often have a low statistical literacy and to policymakers who typically have a good grasp of the geography of their country/locale and want to see how their constituencies are served relative to others.

Disaggregate data to the most useful levels. Data sets presented at a high level of aggregation frustrate many potential users. Perhaps the most urgently-needed form of disaggregation is geographic because it affects policymakers at sub-national levels, enabling them to access the evidence base. The map form of presentation requires that the country create digitized files of the boundaries of political and administrative units at a high degree of disaggregation. Many countries already have such files or are in the process of creating them. Once this up-front investment has been made, the boundary files can enable the display of many different types of data. Disaggregation by gender or other characteristics is also important and may make the difference as to whether a potential user finds data useful or not. In some cases, disaggregation can be done with existing data—even if it is not done routinely. In other cases, data need to be collected in different ways, sometimes with very simple additions or changes in the data collection activities. In other words, the cost of providing data in more useful ways may be minimal.

Facilitate communication between producers and consumers. Data producers, analysts, and consumers are not necessarily in close contact. There is a need for mechanisms and vehicles to bring them together to create a greater sense of the value of work in data creation; and in this way a realistic appreciation of the challenges in getting data could develop. Would such conversations help to breed a community of data people, regardless of where they sat on the continuum of production/use of data?

Sharing data as a retrospective activity. Many data collection activities do not begin with the idea that the data will be shared, or shared beyond a narrow range of users, and yet the data may be of more general value than the collectors realize. To be sure, retrofitting so that they are “accessible” can be costly and therefore should not be undertaken without an assessment of the benefits relative to the costs. However, data sets that are either ready for sharing or easy to make ready could be shared and their emergence might signal the beginnings of a new approach to data access and sharing.

How can we shift the paradigm?

Strengthening intermediaries. Many intermediaries stand between policymakers and data collectors. Some are close at hand and may possess considerable technical skills, such as the central statistics office and statistical units of some ministries. Others are more distant from the policymakers, but nevertheless quite salient, such as civil society groups. The academic research community may also serve this role when they are called upon—or take it upon themselves—to interpret the evidence base for policymakers. And the media can play a role in explaining policies, exploring their impact, and enhancing accountability. Repeatedly in the case studies such intermediaries surfaced as an entry point to support the greater use of data and the evidence base in the policy process. However, intermediary groups face many problems in getting access to data and applying appropriate skills to interpret data. Strengthening the skills of the intermediaries could be one strategy for developing stronger indigenous demand for data.

Would an “innovation fund” help? The case studies clearly demonstrated a high degree of interest in data and awareness of the challenges entailed in having data widely shared and used. Would an innovation fund help develop appropriate tools? While competition for funds can be cumbersome to manage, the benefits of such innovative, grass-roots approaches can be manifold. Internal demand can engender a sense of “local ownership” in the process of prioritizing data, creating data, and using data. Are we missing ways to advance innovative new approaches?

Can the talent pool be altered? There is always a need for trained personnel, and a myriad of interventions are designed to provide that training. Ideally these interventions would focus not only on the usual cadre of “data professionals” but also on individuals who work in a hands-on way with data—for example, in data collection and entry. It is unlikely that these positions would be filled completely within country in the short-term. As students look for meaningful activities, could a “Demographic Peace Corps” provide a greater bridge between the countries with greater pools of skilled workers and countries in sub-Saharan Africa which are in need?

How could we use really new technologies? The demographic sciences have an opportunity to take a step into new technologies such as the audio web. Such an approach recognizes that not all cultures are predominantly reading cultures. How can we bridge the often significant technological divide in linking policymakers, civil society, media, and other potential “consumers” to data? The value of data in advancing democratic processes is considerable, as is the gulf between traditional ways of presenting data and the new users.

Non-technical interventions

Establish access to data as a right. Policy level interventions can set the stage for expectations about data access and use. This is clearly the case in Ghana, where a Right to Information bill is pending, modeled on similar provisions in India. Of course, as important as this is in terms of setting the expectations for data accessibility, legislation still needs to be accompanied by many other steps (noted above) to make data functionally available.

Leadership among the donor community needed. Donors are increasingly requiring that data be made available from projects they fund. However, few are matching this requirement with specific support for the effort. Are there ways to create a culture of support to ensure effective sharing that focuses grantees on the use of available data? Requirements should be specific so as not to impede the collection of new data when needed, but to increase the value of existing data.

Will decentralization eventually force the data enterprise to change? Many countries are undergoing a decentralization of their policy and programmatic activities in ways that place greater pressure on sub-national regions (and leaders) to quantify their needs, their activities, and their impact. The problems that plague national-level data are greater at the sub-national levels, and the skills needed to make use of such data are generally scarcer. And, in some cases it is not clear that the devolution of responsibility has come with the authority to obtain the necessary data and support needed to sustain

an evidence-based approach to policy making and evaluation. Our observations about ways to create greater access apply at the sub-national level, but with greater intensity.

CONCLUSION

The case studies have painted a picture of considerable interest in data and growing demand for data, although in these and other countries the link from data to policy can be far from clear. Access to data is limited by characteristics of the data, knowledge of the users, and the systems to make data available. The challenge of greater access and demand for data is a social-cultural problem with many technical aspects. It is always difficult to determine where to begin on such complicated issues, but there are already a number of activities underway to address the technical constraints, such as the work of Steeve Ebener at WHO to support mapping of local data. It is more difficult to conceptualize and operationalize activities to inculcate a culture of sharing or a culture of data use. There are, however, promising entry points. For example, funders can require that data collected with their support be made available to others in forms that they could use for further analyses. A number of funders make this a requirement, but real advances would come only when requirements are accompanied by strategies to financially support such activities, share technical advice, and eventually publicize the resulting data sets. Providing research support that is restricted to those who make use of already-collected data would shift the incentives from collecting new data to maximizing the use of existing data. There are legitimate disincentives to sharing which must be overcome.

How can decision-makers be encouraged to make more use of data in the policy process? Clearly data must be made accessible in forms that are user-friendly to a wide array of policymakers who have no reason to have technical skills. An interface between the data producers, analysts, and policymakers can be created in different ways, each with technical, human, and resource considerations. Also, there are many potential voices in the process of policy development. Entities such as NGOs and civil society, the media, and a wide array of public and private interests could all be better informed by data that help to define problems, structure interventions, and assess impact. Just as with policymakers themselves, these entities need access to data in user-friendly formats.

Is there one ideal way to share data that will lead to increased use and eventually greater demand for data? No; while some would advocate that all data be made available through the internet, others will continue to face bandwidth and power problems. However, the more that data are made widely available in a variety of formats, the more intermediaries can be engaged. It is unlikely that any

one entity can provide data in ways to meet such a wide array of needs. Over and over our interviewees reinforced the sense that people simply do not know what data are available. Yet there are a number of useful data sources already in existence. It is equally unlikely that there is any one way to get the message across about what is available (along with sufficient technical support) and how to use it. However, there could be considerable value in looking at creative ways to build that sense of what can be done with what exists. This would also likely increase the constituencies who would lobby for more and better data and access to it. A virtuous circle has to begin somewhere.

The democratic process assumes that citizens are involved in the process of governance. Evidence about the population, the economy, health, education, welfare, and other development measures is fundamental to the processes of democratic engagement. Evidence about the ways government is allocating resources and the effects of those allocations is fundamental for voters to make informed decisions. Policymakers can—even with the best of intentions—make unwise allocations if they are not able to access accurate, timely information. In one country, an NGO noted that there was “demand for data by the various ministries and development partners in the country but that demand may not reflect the reality on the ground because there is no participatory process in deciding the data/indicators to monitor programs.”

For some, this issue is catalyzed by legislation (in Ghana, the Right to Information bill) or the view that access to data is a right that all citizens should enjoy. In other cases the plea was for the democratization of data. Data are key to accountability. In these cases there is a plea for an open marketplace of data, to support an open market place of ideas.

There are many technical issues, and most are being addressed by some level of effort already. The overarching challenge is not technical; it is the need for a cultural tipping point. The technical problems that underlie data sharing and access and use of data are fixable; but not without the political will to fix them. Political will is more likely forged through broad engagement in these issues, rather than through the technical data producers/users alone. The provision of data whets the appetite for data; and the use of data by policymakers bucks up the spirits of those who create data and probably supports them in more mundane ways such as financial support. When the lack of apparently useful data reduces the policymakers interest in data, and the lack of interest in data marginalizes the data producers in morale and resources, the stage is set for entropy. Is it possible to make minor adjustments to these feedback loops and have a “phase shifting” impact? Can the feedback be positive and the result be energizing? Can an aggressive move to make data available to wide audiences support the interface to

make it user-friendly, enhance incentives to make maximal use of existing data, and increase the exchange between producers and users feed an open marketplace of data? Does energizing part of the process help to pull along other parts of the process such as training, resources, and equipment? The four case study countries offered many insights about interest in data and stumbles in the path to getting and using data.