

### **SDG Dashboards**

The role of information tools in the implementation of the 2030 Agenda

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Draft for comments



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#### **List of Acronyms**

AMEXCID Mexican Cooperation Agency (Mexico)
CONAPO National Population Council (Mexico)

CONPES National Council for Economic and Social Policy (Colombia)

CTE-SIODM Specialized Technical Committee for the MDG Information System (Mexico)

DANE National Statistical Office (Colombia)

DGEEC Dirección General de Estadísticas, Encuestas y Censos (Paraguay)

DNP Department of National Planning (Colombia)

ECLAC United Nations Economic Commission for Latin America and the Caribbean

HDI Human Development Index HLPF High-Level Political Forum

IAEG-SDG Inter-Agency and Expert Group on SDG Indicators
IBGE Brazilian Institute of Geography and Statistics (Brazil)

ICT Information and communication technologies
INEC National Statistics and Census Institute (Panama)
INEGI National Institute of Statistics and Geography (Mexico)

INFOLAC Information Society Programme for Latin America and the Caribbean

IPEA Institute for Applied Economic Research (Brazil)

IT Information technologies
 KPIs Key performance indicators
 M&E Monitoring and evaluation
 MDGs Millennium Development Goals

MHDI Municipal Human Development Index

NGO Non-governmental organization
OGP Open Government Platform

OPWG Open Working Group

SDGs Sustainable Development Goals

SDSN Sustainable Development Solutions Network

SEA/PR Strategic Affairs of the Presidency of the Republic (Brazil)
SESI Social Services of the Business Association of Parana (Brazil)

SID Integrated System of Development Indicators (Panama)
SIDA Swedish International Development Cooperation Agency

SIGOB Systems for Governance, sometimes also referred as UNDP-SIGOB SINERGIA National performance monitoring and evaluation system (Colombia)

SI-ODM MDG Information System (Mexico)

STP Secretaría Técnica de Planificación (Paraguay)

UNDG United Nations Development Group

UNDP United Nations Development Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UNICEF United Nations International Children's Emergency Fund

The 2030 Agenda was adopted in September 2015 by all UN member states as an ambitious global development program that aims to protect people and the planet, and achieve prosperity for all. The agenda includes a result framework with 17 Sustainable Development Goals (SDGs) and 169 targets across three dimensions of sustainable development: economic development, social inclusion, and environmental sustainability, all underpinned by good governance. Compared to the previous development agenda of the Millennium Declaration and the Millennium Development Goals (MDGs), the 2030 Agenda is broader in scope, universally applicable, more complex and with bolder targets. The implementation of the 2030 Agenda carries significant challenges and it is important to build on the lessons learned during the implementation of the MDGs. One of those lessons is the catalyzing role that dashboards can have on a development agenda, both as a government management tool and as a platform for engaging local governments, and stakeholders.

Information dashboards are tools at the tip of the iceberg in a system that produces and uses information. We can expect that SDG dashboards will be at the crux of monitoring and implementation challenges of the 2030 Agenda for at least two reasons. First, countries are expected to adapt SDG targets and indicators to their national contexts<sup>1</sup>. The monitoring and reporting requirements for this framework<sup>2</sup> are prompting countries to review their statistical systems and capacities, improve interoperability between different data systems, and better integrate data from external sources. Second, effective implementation of the 2030 Agenda will require countries to use whole-of-government approaches as well as leveraging real engagement from national stakeholders in parliament, civil society, and the private sector.

We are in a time of experimentation on how to bring people together around the 2030 Agenda and countries around the world are expressing interest in setting up dashboards as information tools to support the implementation of the SDGs. In times like this it is important to learn from the past and also to be inspired by new technologies and possibilities. In Latin America, countries have experimented with different ways to make MDG data more widely available, and developed dashboards and online platforms to increase the impact of the development agenda. In recent years, emerging trends in information and communication technologies (ICTs) and big data have pushed the frontier of data use. All these create opportunities to expand the role of information tools for the implementation of the 2030 Agenda.

This paper is a collaboration between UNDP's Bangkok Regional Hub and the UNDP-SIGOB regional project of the UNDP Panama Hub for Latin America and the Caribbean to provide lessons learnt and emerging practices from setting up dashboards to support the implementation of the 2030 Agenda in Latin America. This work is based on analysis of five country-level experiences: Brazil, Colombia, Mexico, Panama and Paraguay. These cases were selected out of an initial scoping of ten cases based on their innovations, results, and scalability. The document is organized into three sections. First, we set up the scope of the work, review its basic concepts and present the initial scoping exercise. Second, we present in detail each of the five experiences.

<sup>&</sup>lt;sup>1</sup> UN Economic and Social Council <u>E/CN.3/2016/2/Rev.1\*</u>

<sup>&</sup>lt;sup>2</sup> For more information on the guidelines to develop the monitoring and reporting framework, see UNDG,

<sup>&</sup>quot;Mainstreaming the 2030 Agenda for Sustainable Development, Reference Guide to UN Country Teams", February 2016, p.77

Finally, we discuss key insights that emerge from the cases and bring in elements of the state-of-the-art in dashboard design.

## A closer look at the evolution of information dashboards

An information dashboard is "a visual display of the most important information needed to achieve certain objectives, that has been consolidated into a single screen so it can be monitored at a glance" (Few 2013). The term "dashboard" originates from the automobile dashboard where drivers monitor at-a-glance the major functions of their vehicle via a cluster of instruments. Historically, the dashboard was a board in front of a carriage that protected the driver from specks and dashes of mud.

Figure 1: Dashboard, definition

#### dash-board

/'daSHbôrd/

noun

noun: dashboard; plural noun: dashboards

- the panel facing the driver of a vehicle or the pilot of an aircraft, containing instruments and controls.
  - COMPUTING
    - a graphical summary of various pieces of important information, typically used to give an overview of a business.
    - "an executive dashboard enables a CEO to see bank balances, the top five customers, accounts receivable, and accounts payable"
  - a home page on a website giving access to different elements of the site's functionality.
     "the main line graph in the dashboard shows daily traffic to our side over the past 30 days"
- 2. historical
  - a board of wood or leather in front of a carriage, to keep out mud.

A dashboard is a form of delivering a progress report. Sometimes also referred to or known as management dashboard or business intelligence dashboard, they are data visualization tools that display status of metrics and key performance indicators (KPIs) for a country, an organization or a project. Unlike periodic extensive written reports, dashboards are designed and used to maintain situation awareness on real-time and provide **snapshots of performance**.

In today's world of information overload, dashboard design has turned into an art of how to display data for at-a-glance monitoring as they consolidate numbers, metrics, and sometimes performance scorecards on a single screen. Among all the information tools, what is specific about dashboards is that (1) they are **linked to a database** with the ability to pull real-time data from multiple sources and (2) they are designed to provide an **at-a-glance view** of vast amounts of information synthesized through graphs, indicators, symbols and others.

Often the terms **dashboards and scorecards** are used interchangeably, but they are not the same. Like the dashboard in a car, an information dashboard is a display of various meters,

gauges, and lights that give **up-to-date information** of an initiative. Metrics do not inherently tell you whether the results are positive or negative. Performance scorecards use a prescriptive format that employs spotlight indicators (for example, red, yellow or green) to indicate the quality of performance, **comparing results with goals**. Like a school report card, the scorecard usually measures periodic results (weekly, monthly, quarterly, annually) against a predetermined goal, allowing users to gauge how their performance stacks up against expectations. A dashboard may -but need not- include performance scorecards.

Nowadays dashboards are essential in the business management toolkit. The popularity of dashboards as management tool was the result of the adoption of a business approach that involved the identification and use of *key performance indicators* (KPIs). Introduced by Kaplan and Norton in the late 1990s, the approach relied on the now well-known *balanced scorecard*, a special type of dashboard. Later, the increased pressure for corporate accountability fostered wide adoption of dashboards a tool to help keep an eye on performance on real time.

Dashboards emerged as a tool to navigate available but cumbersome, large and often complex databases that had been used almost exclusively by those highly proficient in data analysis. Hence, information dashboards are the tip of the iceberg in a system that produces and uses data for management purposes.

#### Information dashboards in the development agendas

The field of development has been ripe for the adoption of information dashboards, if nothing else, because of the availability of large and complex databases such as those of the World Development Indicators and the Human Development Reports and even more with the roll out of the MDG as the first highly-structured development agenda at the beginning of the millennium. Still, dashboards were not part of the development toolbox in the first half of the MDG period. For example, it was not until 2013 that the World Bank launched its MDG Dashboard<sup>3</sup>, with a set of six interactive dashboards to explore progress status and trends on a small set of MDG indicators from the World Development Indicator database.

In contrast, dashboards have been at the core of the 2030 Agenda from its inception, both at the global and national levels. For example, the World Bank's SDG Dashboard<sup>4</sup> has been available since 2015 and the Sustainable Development Solutions Network (SDSN)/Bertelsmann Stiftung's SDG Index & Dashboards<sup>5</sup> was launched in 2016. At the national level, México presented its SDG pilot dashboard as a side event to the 2015 UN General Assembly.

This evolution is the result of a time of intense experimentation in developing new methodologies to explore, develop and make information available to different development stakeholders. The MDGs posed an enormous challenge for statistical development in terms of monitoring and reporting on progress using a standardized system of indicators. In Latin America, most countries

<sup>&</sup>lt;sup>3</sup> http://datatopics.worldbank.org/mdgs/

<sup>&</sup>lt;sup>4</sup> http://datatopics.worldbank.org/sdgs/

<sup>&</sup>lt;sup>5</sup> http://www.sdgindex.org/data/

began to report their progress on the MDGs in the middle of the 2000s and by 2015 had several publications available.

In the transition to the 2030 Agenda, a number of countries in Latin America are rolling out the implementation of the new framework with new and revamped development information dashboards. These experiences may be of interest for other countries in their own endeavors to leverage new information tools in the implementation of the SDGs.

#### Mapping of SDG/MDG information dashboards in Latin America

This report reviews emerging practices in development information dashboards across the Latin American region. It looks at how dashboards have been set up, what data was included, what was the IT architecture, what were the institutional and governance arrangements, what were the considerations around sustainability and, most importantly, what are the lessons learned to develop the new generation of SDG dashboards (see research questions in Annex 1)

The first stage was a scoping exercise where we identified MDG and SDG dashboards through literature review and consultation with experts and then compiled basic information on each of them. In all, we found MDG/SDG dashboards in 10 countries (Argentina, Bolivia, Brazil, Colombia, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, and Panama), later an additional country was added to the group (Paraguay). We explored the different dashboards and carried out a summary desk review on them. There were important differences in their structure, data, and institutional arrangements (see summary table in Annex 2). Through a process of internal discussion and consultation with experts, five cases were chosen based on their features, results, and scalability.

#### Five country-level experiences of SDG dashboards<sup>6</sup>

The five cases selected for the case studies are very different from each other. Brazil, Mexico, and Colombia have been powerhouses in innovation for the MDG/SDG agendas, each country with a different angle. Panama and Paraguay, on the other hand, are smaller countries, without the legacy and depth of institutional capacities, but with early pilot SDG dashboards. In those countries we identified 12 different development dashboards. Together, the five cases and twelve dashboard experiences will help to illuminate the different approaches and trade-offs in setting up information dashboards to support the implementation of the SDGs (see figure 2)

Figure 2: Summary table of development information tools

Name and link	Country	Inception Status	Framework	Data
Relatorios Dinamicos, MDG Observatory <a href="http://www.relatoriosdinamicos.com.br/portalodm/">http://www.relatoriosdinamicos.com.br/portalodm/</a>	Brazil	2009 Active	MDG	Results

<sup>&</sup>lt;sup>6</sup> Experiences were documented based on interviews and desk research. Initial research was conducted between August and October of 2016, and updated between January and March of 2017. The cases are presented in alphabetical order.

Atlas do Desenvolvimiento Humano http://www.atlasbrasil.org.br/	Brazil	2013 Active	MDG/SDG	Results
2030 Agenda Platform http://www.agenda2030.com.br	Brazil	2017 Active	SDG	Results
Sinergia http://sinergiapp.dnp.gov.co/#HomeSeguimiento	Colombia	2004 Active	NDP	Process & results
SDG Portal In development, link not available for public access	Colombia	2017 (e) In dev.	SDG	
SI-ODM http://www.objetivosdedesarrollodelmilenio.org.mx/	Mexico	2011 Active	MDG	Results
SDG Pilot Dashboard Pilot platform, link not available	Mexico	2015 Inactive	SDG	Results
Beta version SI-ODS http://agenda2030.mx	Mexico	2017 Active	SDG	Results
SID www.contraloria.gob.pa/inec/sid	Panama	2003 Active	MDG	Results
SDG pilot platform Pilot platform, link not available	Panama	2017 (e) In dev.	SDG	Process & results
ParInfo Link no longer available	Paraguay	2005 Inactive	MDG	Results
SDG platform Link not yet available for public access	Paraguay	2017 Active	SDG	Process & results

#### Brazil

Brazil was the cradle for the 2030 Agenda with its hosting of the United National Conference on Sustainable Development (UNCSD), also known as Rio+20 or Earth Summit 2012. The primary result of the conference was the nonbinding document, "The Future We Want," where heads of state of the 192 governments in attendance renewed their political commitment to sustainable development and declared their commitment to the promotion of a sustainable future. The document included language supporting what later would be known as the Sustainable Development Goals (SDGs). Brazil was a force throughout the post-2015 process.

However, the launch of the 2030 Agenda coincided in Brazil with times of political turmoil during 2015-16, and albeit slowly, Brazil is gearing up for the implementation of the SDGs. In October 2016, The National Commission for the Sustainable Development Goals was created as the main institutional mechanism for the implementation of the 2030 Agenda. As explained in Brazil's voluntary review at the UN High Level Political Forum, the Commission functions as "an advisory and parity body, aiming to internalize, disseminate and confer transparency to the 2030 Agenda implementation process, constituting the space for integration [of initiatives beyond the federal government], engagement and dialogue with federate entities and civil society" (Brazil 2017).

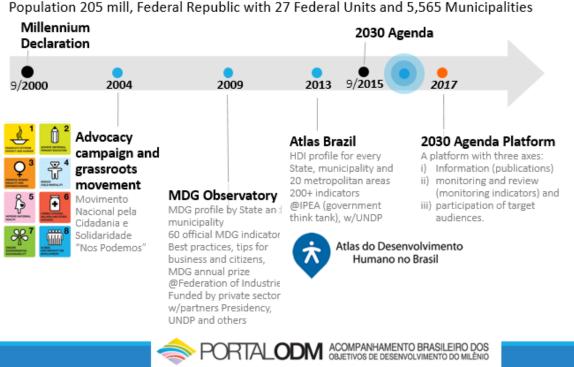
Another important step toward the implementation of the SDG in Brazil was the partnering with existing civil society organization networks towards the implementation of the 2030 Agenda. Brazil

was a powerhouse in the implementation of the MDG and there were lessons learned on the importance of social participation in the dissemination and implementation of an international agenda. This factor was so important that one of the main guidelines adopted at the Rio + 20 Conference defined that Agenda 2030 would be built "from the bottom up" and in consultation with civil society on its priorities. As a result of this process in Brazil, a broad network of civil society organizations was formed, including 5 major national networks that are now involved in the SDGs: the national movement *ODS Nós Podemos* created in 2004 to promote the MDGs, the Civil Society Working Group Agenda 2030, created in preparation for Rio+20 and participant in the negotiations on the SDGs, the Sustainable Cities Program, the SDG Network of public and private institutions, civil society organizations, social movements, indigenous peoples, and traditional communities working on human rights and sustainable development goals; and the SDG Strategy -an inter-sectoral coalition of entities promoting debate on ways to implement the Sustainable Development Objectives and search for solutions to reach them.

For the purposes of this research, in Brazil there are three information tool of interest: two MDG dashboards, the MDG Observatory and Atlas-Brazil, and the brand-new 2030 Agenda Platform (see timeline in figure 3).

Brazil
Population 205 mill, Federal Republic with 27 Federal Units and 5,565 Municipalities
Millennium
2030 Agenda

Figure 3: Summary infographic: development dashboards in Brazil



Source: UNDP-SIGOB with information from different sources

Brazil institutionalized the MDGs in 2004 and made early strides in advocacy and mainstreaming. With a population of 205 million people and a federal government with 27 States and 5,570 municipalities, in Brazil the main challenge of any development agenda is mainstreaming the priorities to subnational and local levels as local governments have a broad degree of autonomy.

To encourage civil society and local governments' participation in the MDGs, the federal government with the support of UNDP Brazil, created in 2004 the national Movement for Civic Action and Solidarity, a non-partisan and pluralistic movement of volunteers devoted to achieving the MDGs in Brazil. This movement pulled talents and resources into achieving the MDGs. For example, the well-known MDG icons were designed in Brazil as part of this 2004 national advocacy campaign and were later adopted at the global level (see figure 4). Also in 2004, the MDG Award was created to encourage, value and give visibility to civil society organizations and municipalities which contributed to achieving the MDGs. It was awarded every two years until 2014 and mobilized thousands of individuals in Brazil.



Figure 4: The MDGs icons before and after the Brazilian 2004 campaign



Circa 2004

The municipalities also organized their own MDG network (Rede ODM Brasil) and in 2009 launched the **MDG Observatory**<sup>7</sup>. The portal was developed and maintained by the *Servicio Social de Industria* SESI, a branch of the Federation of Industries of the State of Paraná, and coordinated with UNDP. The initiative also received support from UNICEF, civil society groups, private firms and from the National Ministry of Planning, Budget, and Management. The MDG observatory was a multi-functional portal which provided access to the interactive dashboard

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<sup>&</sup>lt;sup>7</sup> http://www.portalodm.com.br/

Relatorios Dinamicos<sup>8</sup> as well as a library of publications, progress reports, news bulletin boards, tips for citizens and businesses to contribute to the MDGs, and a database on good practices of high-impact municipal policies. The dashboard provides access to official public data on the 60 MDG indicators and produces state and municipal MDG profiles (see in figure 5 the MDG report for one municipality). Both the MDG Portal and the Relatorios Dinamicos dashboard are still online and active.

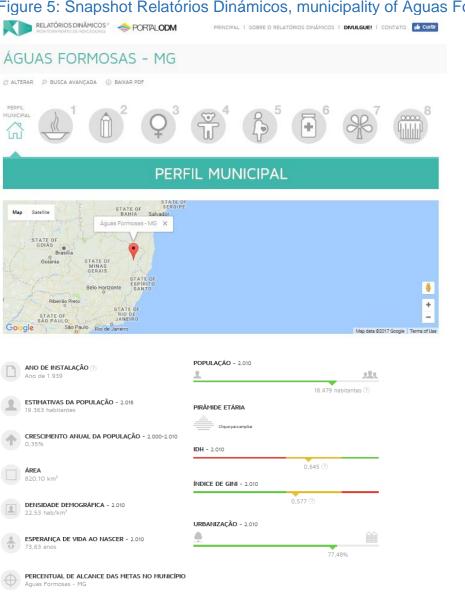
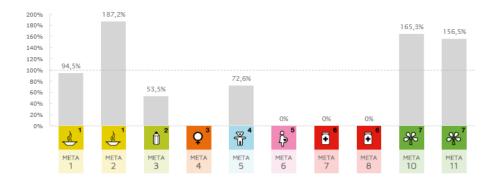


Figure 5: Snapshot Relatórios Dinámicos, municipality of Aguas Formosas

<sup>&</sup>lt;sup>8</sup> <a href="http://www.relatoriosdinamicos.com.br/portalodm/">http://www.relatoriosdinamicos.com.br/portalodm/</a>



Source: http://www.relatoriosdinamicos.com.br/portalodm/, consulted January 2017

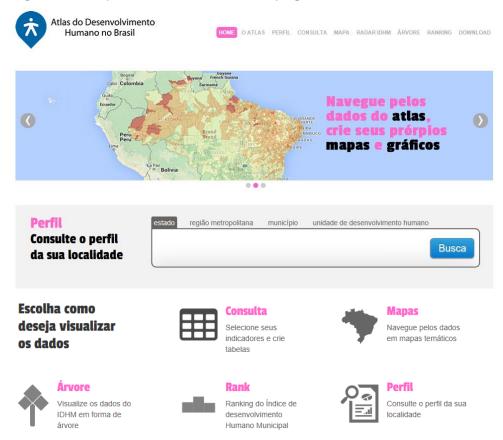
The other dashboard is the **Atlas of Human Development Brazil**<sup>9</sup> which focuses on the human development index (HDI) and includes the MDGs. Atlas Brazil is an initiative of the government think tank Institute for Applied Economic Research IPEA, the public-sector foundation Joao Pinheiro Foundation, and UNDP. Atlas Brazil was part of a larger research project to localize HDI and popularize the concept of development centered on people. Since its first edition, the MHDI has produced insightful results by exposing the wide territorial disparities in Brazil.

Available since 2011 and relaunched in 2013 with a broader set of indicators, the Atlas of Human Development in Brazil is an online consultation platform for the Municipal Human Development Index (MHDI) of the 5,565 Brazilian municipalities and for over 200 indicators on population, education, housing, health, work, income and vulnerability, with data extracted from the Demographic Censuses of 1991, 2000 and 2010 (see Figure 6). As time went by, additional dataset were made available through this information tool; for example, in 2014, the MHDI for the Metropolitan Regions; and more recently, in 2016, disaggregated data by gender, urbanization and ethnicity (see Figure 7).

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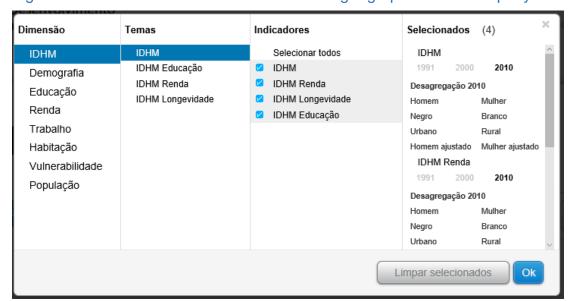
<sup>&</sup>lt;sup>9</sup> http://www.atlasbrasil.org.br/

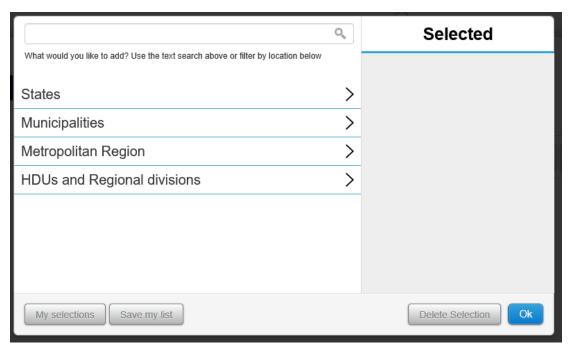
Figure 6: Snapshot Atlas Brazil, front page



Source: http://www.atlasbrasil.org.br/, consulted January 2017

Figure 7: Atlas Brazil: Choice of variables and geographical units in query





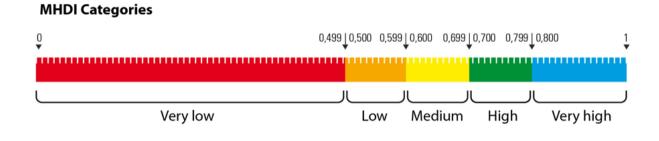
Source: http://www.atlasbrasil.org.br/, consulted August 2017

Atlas Brazil offers the user the choice of looking at profiles (full reports), maps, radar graphs, HDI trees and HDI ranking. While, profiles are longer and heavier in text and data than the usual dashboard aesthetics<sup>10</sup>, Atlas Brazil offers a single dimension ranking on the the MHDI, making possible comparison between Brazilian municipalities over time.

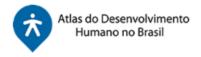
Figure 8: Atlas Brazil, MHDI scorecard ranking

#### How to read the MHDI 2010

The MHDI is a number that varies between 0 and 1. The closer to 1, the greater the human development in a state, municipality, metropolitan region or HDU.



<sup>&</sup>lt;sup>10</sup> A municipal profile is an 11-page report with information on HDI, demography, health, education, income, labor force, housing and social vulnerability.



# Ranking - Todo o Brasil





It is important to understand some elements of the data ecosystem in Brazil. First, the country has a strong statistical institute, Instituto Brasileiro de Geografia e Estatística IBGE, that produces a regular and reliable census every 10 years, household surveys and other instruments. Second, there is IPEA, a government think-tank that is part of the Presidency<sup>11</sup>. With its cadres of economists and analysts, IPEA is a powerhouse of analytical capacities. Among its other tasks, IPEA was responsible for reporting on the MDGs. Third, UNDP Brazil strategy on its HDR, emphasizing disaggregation of data and adopting the format of an Atlas rather than a conventional report, had made the human development products very influential in government policy making (UNDP Evaluation Office 2006). When the online information tool Atlas was launched in 2011, UNDP and its partners had the experience of producing 3 previous Atlases in earlier electronic

<sup>&</sup>lt;sup>11</sup> The Institute for Applied Economic Research (IPEA) is a federal public foundation linked to the Secretariat of Strategic Affairs of the Presidency of the Republic (SEA/PR). It provides technical and institutional support to government actions – enabling the formulation and reformulation of public policies and Brazilian development programs. Its work is made available to society through numerous regular publications and seminars. IPEA's mission is to "enhance public policies that are essential to Brazilian development by producing and disseminating knowledge and by advising the state in its strategic decisions." Its structure is divided into departments dedicated to different studies and policies.

forms. In this context, the value added of the MDG Observatory was to popularize statistical data along the lines of the social movement *Nos Podemos*. Meanwhile, the value added of Atlas Brazil was to add layers of analysis and to push the frontiers of measuring development.

In the transition to the SDGs, dashboards are expected to continue playing an important role in Brazil and the **2030 Agenda Platform** was just launched in August 2017. According to people involved, there are two key challenges in constructing an SDG dashboard in Brazil. First, there are significant gaps in data availability to monitor across targets, even more gaps in data disaggregated at the municipal level. Second, there are challenges at the level of institutional arrangements. Atlas Brazil benefited from a three-way partnership but was hindered by problems and delays in decision making. This new platform is part of a suite of six online tools<sup>12</sup> and focuses on information and monitoring on the SDG framework.

At the time of inception, the 2030 Agenda Platform provides access to general information on the 2030 Agenda and data for a group of global, regional and national indicators. As suggested in earlier interviews, this 2030 Agenda dashboard is housed at IPEA and structured as a two-way collaboration between IPEA and UNDP, and institutional support from a group of private and state-owned companies. As it is customary in dashboards and other information tools, the 2030 Agenda Platform will evolve quickly as background research and new information becomes available.



Figure 9: Snapshot, 2030 Agenda Platform (Brazil)

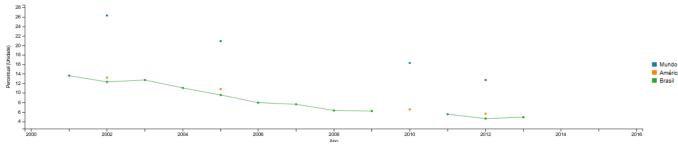
<sup>&</sup>lt;sup>12</sup> **DialogaBrasil** – a digital participation platform, **Participa.br Portal** -a social media instrument, **SDGs Strategy** – a website, **The 2030 Agenda Platform**, the **Map of Civil Society Organizations** -a georeferenced platform with data on civil society organizations, and the **Municipal Vulnerability Atlas** -a platform comprising the Social Vulnerability Index (IVS), based on indicators of the Human Development Atlas. See more information about the online suite in

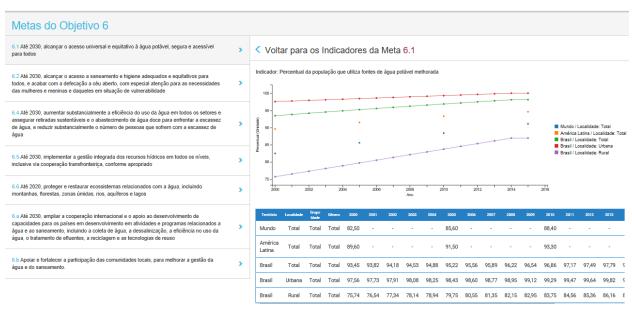
#### Objetivo 1.

#### Erradicação da Pobreza

Meta 1.1 Até 2030, erradicar a pobreza extrema para todas as pessoas em todos os lugares, atualmente medida como pessoas vivendo com menos de US\$ 1,25 por dia Indicador: Percentual da população abaixo da linha internacional de pobreza de US\$1.90 por dia - Unidade: Percentual (Unidade)

Território	Localidade	Grupo Idade	Gênero	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Histograma
Mundo	Total	Total	Total	-	-	26,30	-	-	20,90	-	-	-	-	16,30	-	12,70	-	-	-	-	Trans
América Latina	Total	Total	Total	-	-	13,20	-	-	10,80	-	-	-	-	6,50	-	5,60	-	-	-	-	Ir
Brasil	Total	Total	Total	-	13,62	12,31	12,71	11,04	9,55	7,94	7,60	6,29	6,18	-	5,50	4,59	4,87	-	-	-	lilium





Currently, the three Brazilian dashboards are available online for public consultation.

#### Colombia

Colombia was a thought leader in the definition of the 2030 Agenda, the first proponent of the SDG framework and a true innovator in the process of early adoption of the 2030 Agenda. During the UN General Assembly in 2011, the Government of Colombia presented a proposal to establish the Sustainable Development Goals as part of the results of Rio+20. This was the first step in the process of the post-2015 debate and agreement on the 2030 Agenda. In the original proposal, the goals would be based on the Agenda 21<sup>13</sup> main guidelines. The Government of Guatemala endorsed the proposal and convened an informal consultation meeting that took place in Bogotá in November 2011. Two years later and with the post-2015 debate underway, the Governments of Colombia and Guatemala presented their "Dashboard Proposal" for an agenda with a single set of goals and a set of internationally agreed-on targets and indicators.

At home, Colombia set up the institutional mechanisms for the implementation of the 2030 Agenda well before it was approved at the UN. This early staging had two components: an adhoc commission, and a quick roll-out of the agenda into a very sophisticated planning process. In February 2015, President Juan Manuel Santos of Colombia approved Decree (No.280) establishing the creation of a high-level inter-institutional commission for preparation and effective implementation of the post-2015 development agenda and the SDGs <sup>15</sup>. Among the early moves of the commission were to launch a multi-stakeholder consultative process to identify priorities and to help design the national monitoring process; to launch a process for localizing the agenda to different regions and municipalities, and to focus much of the attention on designing a comprehensive national monitoring framework.

The second component for the early rollout of the SDGs was their incorporation into the four-year planning cycle. Colombia's National Development Plan (NDP) "All for a new country" was signed into law in June of 2015 and incorporated 92 of the 169 targets of the SDG framework<sup>16</sup>. The National Planning Department (DNP) included that SDGs in the cascade of sub-national and municipal development planning across its 32 departments and 1,102 municipalities. Colombia has a remarkable national planning system with a National Council for Economic and Social Policy (CONPES), a strong planning office (the DNP), and robust M&E capacities. "All for a New Country" is the 15<sup>th</sup> consecutive four-year development plan of Colombia. The key for the mainstreaming of the SDGs into the regular planning cycle is the concept that the NDP plan is nested within the SDGs and in relationship with all concurrent major strategies (see figure 6)

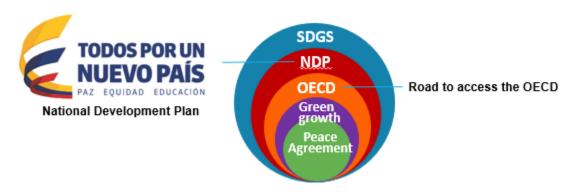
Agenda 21 is a non-binding, voluntarily implemented action plan of the UN with regard to sustainable development. It is a product of the Earth Summit (UN Conference on Environment and Development) held in Rio de Janeiro in 1992. The "21" in Agenda 21 refers to the 21st Century.

http://www.sustainabledevelopment2015.org/index.php/blog/1393-the-dashboard-concept-an-approach-to-the-post-2015-development-agenda-by-colombia-and-guatemala

http://wp.presidencia.gov.co/sitios/normativa/decretos/2015/Decretos2015/DECRETO%20280%20DEL%2018%20DE%20FEBRERO%20DE%202015.pdf

<sup>&</sup>lt;sup>16</sup> All documents of the NDP available in: <a href="https://www.dnp.gov.co/Plan-Nacional-de-Desarrollo/Paginas/Que-es-el-Plan-Nacional-de-Desarrollo.aspx">https://www.dnp.gov.co/Plan-Nacional-de-Desarrollo/Paginas/Que-es-el-Plan-Nacional-de-Desarrollo.aspx</a>

Figure 10: Colombia's NDP in relationship to the SDGs



Source: DNP

In the 2016 process, the DNP visited the 32 departments, meeting with governors and mayors to support their processes for formulating Territorial Development Plans. Also, the planning tool for localizing national priorities and SDGs, **Kit Territorial**, was launched<sup>17</sup>. From these efforts, the incorporation of the Sustainable Development Objectives into 100% of the Development Plans formulated by the 32 departments (second planning tierl) and the capital cities of the country (third planning tier) for the period 2016-2019. See figure 7. All this was reported in the Voluntary National Review to the HLPF in 2016.

Figure 11: Colombia's tiered planning system and planning tool for localizing priorities



In the early stages of SDG implementation, Colombia has leveraged its strong planning and monitoring system and has quickly moved to develop from scratch an SDG dashboard, as they never had an MDG dashboard. Two of Colombia's information tools are of interest for this research: the DNP/SINERGIA National Development Plan dashboard and the SDG Portal currently in development (see timeline in Figure 7).

<sup>&</sup>lt;sup>17</sup> http://kiterritorial.co/

Colombia Population 49 mill (5mill IDP), 32 Departments and 1,102 Municipalities Millenium 2030 Agenda Declaration 2004 9/2000 Strong national RBM and M&E System 20-year cumulative work. Monitoring the National Development Strategy. Culture of evidence-based decision making and transparency. Since 2004 a public access platform "Sinergia"

9

42

195

998

Figure 12: Summary infographic: development dashboards in Colombia

Source: UNDP-SIGOB with information from different sources

Todos por un Nuevo País

@DNP (National Department of Planning)

Colombia has a high-quality national development plan dashboard in SINERGIA<sup>18</sup>. It is the tip of the iceberg of a whole-of-government monitoring and evaluation system of government performance that is the cumulative work of 20-years and is considered among the best practices for monitoring development plans. Colombia's National Management and Results Evaluation System SINERGIA is the specialized M&E office of the DNP. The origins of SINERGIA are in the 1991 Constitution that create a national evaluation system as a way to modernize the State, improve the use of public resources and democratize public administration through a permanent and complete monitoring and evaluation of public policies. SINERGIA was formally created in 1994. At the beginning, it had support from the World Bank as a Public Finance Management initiative, and from 2001 onwards, it also had support from the IADB. But it was UNDP cooperation with the Presidency for establishing an executive results-based management system (using UNDP-SIGOB methods) what brought enough political traction to complete the M&E system (see mode details in MacKay 2007). SINERGIA has three building blocks: monitoring the national development plan, carrying out the evaluation plan and strengthening of the culture of managing by results in the public sector (see figure 13), the bulk of the costs come from SINERGIA Evaluations. Setting up SINERGIA was an investment of about USD. 15 million, funded through cooperation loans and grants, now it has budgetary allocations.

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<sup>18</sup> http://sinergiapp.dnp.gov.co/#HomeSeguimiento

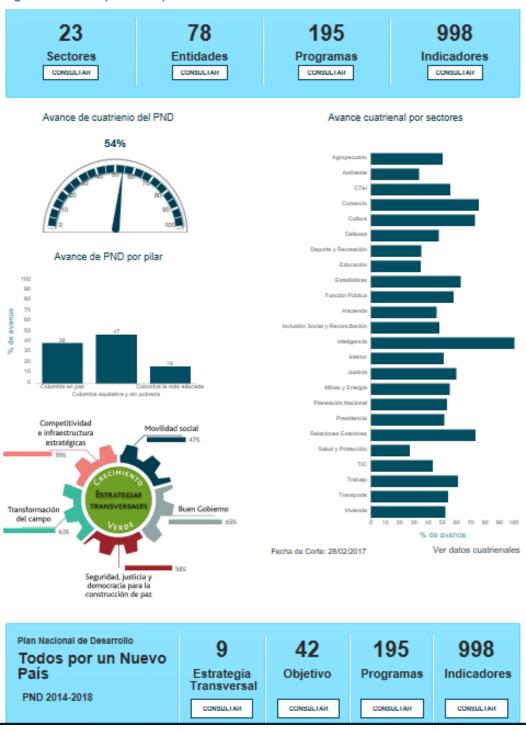
Figure 13: SINERGIA building blocks



Fuente: Dirección de Evaluación de Políticas Públicas - DNP

The SINERGIA dashboard itself sits at the top a massive data network that involves government offices involved in planning and implementing public policies on one side, and other offices involved in measuring outcomes of those policies. The dashboard provides access to a performance information database containing 998 performance indicators to track the government's performance in 195 programs against 42 presidential goals in the "All for a new Country" development plan. For each performance indicator, the publicly available database records the objective, the strategy to achieve the objective, baseline performance, annual targets, and the amount spent by the government. Nowadays, the dashboard has summary information on overall progress, progress by pillar (3), cross-cutting themes (5) and sector (23). The tool helps drill down and navigate the database by strategy (9), goals (42), program (195), indicator (998), sector (23) and institution (78). See figure in 8 the snapshot of the SINERGIA top dashboard.

Figure 14: Snapshot top dashboard of SINERGIA, Colombia



Source: http://sinergiapp.dnp.gov.co/#HomeSeguimiento, consulted January 2017

While the SINERGIA dashboard was never set up as an MDG dashboard, still it constitutes an important precedent in the design of Colombia **SDG Digital Portal** that is currently in development and a prototype is expected to be launched by the end of 2017. According to the DNP, 86% of SDG targets are somehow addressed by current policies and programs, and the country currently

has information to report on 54% of indicators (130 of the 240) and at least partial information on another 30% (72). The vision for this new platform is that it is a key tool to raise awareness on measuring what matters and being transparent about how things are going. At the same time, the vision is that the SDG platform should bring visibility to the contribution from the public sector and from the private sector. Therefore, it is being developed as a stand-alone, separate from the national development plan dashboard, and containing only result indicators. The SDG Digital Portal is being developed by DNP and the National Statistics Authority DANE and the company DataActLab. The project is funded by SIDA through the Swedish Embassy in Bogota.

#### Mexico

Mexico was also among the countries that participated actively in the negotiations for the definition of the 2030 Agenda, and their efforts at home and abroad had a strong focus on the role of data, monitoring and reporting for a successful implementation of a development agenda. Abroad, Mexico advanced its approach through diplomatic efforts in the Open Working Group (OPWG) for the definition of the SDGs, in its leading role in the Open Government Partnership (OGP) and as a member of the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs). At home, the first steps into the 2030 Agenda involved a pilot study on measuring social inclusion, a pilot SDG dashboard, and a voluntary report to the 2016 High-Level Political Forum.

To understand the specifics of the SDG dashboard initiative in Mexico it important to place it within its relevant context. During 2014-15, Mexico presided the OGP<sup>19</sup> and promoted the Joint Declaration of Open Government and the SDG that was signed together with the 2030 Agenda in September 2015. It commits governments to use the open government platform to advance the global goals.

Also, in 2015 and on a separate track, Mexico became one of the members of the IAEG-SDG<sup>20</sup>, Mexico was involved in pilot work on the definition, mapping and sources for SDG indicators through collaboration between the Presidency of Mexico, the Mexican Cooperation Agency AMEXCID and UNDP. On the one hand, the project involved a study on the measurement of social inclusion and was commissioned to inform a proposal to the global framework and pinpoint

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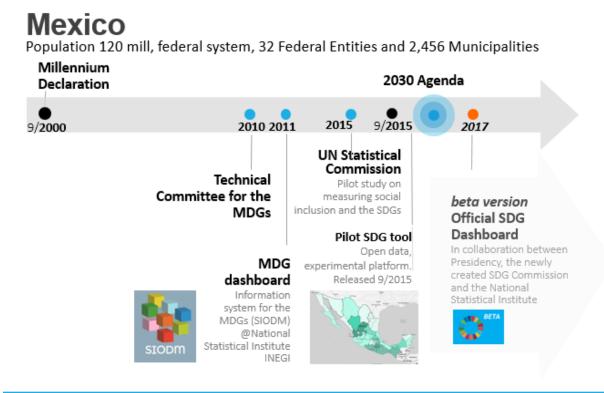
<sup>&</sup>lt;sup>19</sup> The Open Government Partnership is a multilateral initiative that aims to secure concrete commitments from governments to promote transparency, empower citizens, fight corruption, and harness new technologies to strengthen governance. In the spirit of multi-stakeholder collaboration, OGP is overseen by a Steering Committee including representatives of governments and civil society organizations. To become a member of OGP, participating countries must endorse a high-level <u>Open Government Declaration</u>, deliver a country action plan developed with public consultation, and commit to independent reporting on their progress going forward. The Open Government Partnership formally launched on September 20, 2011, when the 8 founding governments (Brazil, Indonesia, Mexico, Norway, the Philippines, South Africa, the United Kingdom and the United States) endorsed the Open Government Declaration, and announced their country action plans. Since 2011, OGP has welcomed the commitment of 67 additional governments to join the Partnership. In total, 75 OGP participating countries have made over 2,500 commitments to make their governments more open and accountable.

<sup>&</sup>lt;sup>20</sup> Created by the UN Statistical Commission, the IAEG-SDG was tasked to develop the indicator framework for the goals and targets of the 2030 Agenda. The group consists of 28 representatives of national statistical offices and include, as observers, representatives of regional commissions and regional and international agencies.

specific data gaps in Mexico.<sup>21</sup> The process of the study served to coordinate information sharing across a network of state agencies. One the other hand, there was the development of a pilot SDG platform and dashboard.

Throughout 2016 and 2017, Mexico worked on setting up the permanent institutional arrangements for the implementation of the SDGs, in the transition to the SDG at the level of the Technical Commission in February 2016, creating a National Council for the Implementation of the SDGs in April 2017, localizing SDG efforts at the level of sub-national government through SDG State Commissions, and developing an official public SDG dashboard which is still in development. Based on the scope of this research, three of Mexico's information tools and their institutional arrangements are of interest: the MDG portal, the SDG pilot portal and the beta version of the official SDG portal (see Figure 9)

Figure 15: Summary infographic: development dashboards in Mexico



Source: UNDP-SIGOB with information from different sources

<sup>21</sup> Document available at: <a href="http://www.mx.undp.org/content/mexico/es/home/library/poverty/inclusion-social-marco-teorico-conceptual-para-la-generacion-de.html">http://www.mx.undp.org/content/mexico/es/home/library/poverty/inclusion-social-marco-teorico-conceptual-para-la-generacion-de.html</a>

Mexico's MDG Information System (SI-ODM)<sup>22</sup> is a portal hosted by the National institute of Statistics and Geography (INEGI) that was introduced in 2011 as part of a series of new institutional arrangements to strengthen coordination and work towards Mexico's MDG commitments. In 2010 and by the initiative of the Office of the Presidency, INEGI created the Specialized Technical Committee for the Millennium Development Goals Information System (CTE SI-ODM). It is chaired by the Office of the President, with the INEGI and the National Population Council (CONAPO) as members sharing the technical secretariat, and an array state agencies responsible for measuring and achieving the MDGs.<sup>23</sup> The portal was designed as a tool for government officials, development program managers, specialized users and general public to navigate a database of 81 indicators at the national, sub-national and local level. However, the portal does not have a proper dashboard, but technical report tables (see in Figure 10 segment of a report table and maps in Figure 11). The data can be explored by indicator and geographical location, and displayed in tables or maps.

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<sup>&</sup>lt;sup>22</sup> Sistema de Información de los ODM (SI-ODM), site: <a href="http://www.objetivosdedesarrollodelmilenio.org.mx/">http://www.objetivosdedesarrollodelmilenio.org.mx/</a>

<sup>&</sup>lt;sup>23</sup> Ministries of Health, Labor and Social Protection, Social Development, Public Education, Environment and Natural Resources, Foreign Relations, Territorial Development, as well as the Federal Institute of Telecommunications, the National Council for the Evaluation of Social Development Policy (CONEVAL), and the National Institute of Women. The Ministry of Energy, the Mexican Agency for International Development (AMEXCID), the Mexican Youth Institute and the United Nations Development Program (UNDP) are permanent guests at the Committee.

Figure 16: Screenshot SI-ODM, municipality of Asientos, State of Aguascalientes



















State:

Aguascalientes

Municipality: Asientos

Indicators: 17

Indicators		Estados Unid	los Mexicanos		alientes cutity)	Asie	Target	
		Baseline	Most recent data	Baseline	Most recent data	Baseline	Most recent data	Mexico
2. ACHIE	VE UNIVERSAL PRIMARY EDUCATION							
	Ensure that, by 2015, children everywhere, boys to complete a full course of primary schooling	and girls alik	e, will be able	9				
	Net enrollment ratio in primary education (6 to 11 years old) - UN official NEW	97.6 (1990/1991)	98.4 (2016/2017)	90.3 (1990/1991)	96.6 (2016/2017)	ND (1990/1991)	92.7 (2016/2017)	National target 2015 100.0
2.2.	Proportion of pupils starting grade 1 who reach last grade of primary - UN official NEW	75.1 (1991/1992)	96.5 (2016/2017)	94.0 (1991/1992)	99.3 (2016/2017)	ND (1991/1992)	101.3 (2016/2017)	National target 2015 100.0
6.4.	Completion rate in primary education - Suggested by Mexico NEV	70.1 (1990/1991)	98.3 (2015/2016)	82.5 (1990/1991)	99.5 (2015/2016)	ND (1990/1991)	99.4 (2015/2016)	National target 2019 100.0
	School attendance rate (6 to 11 year-olds) - Beyond the Millennium Targets (BMI) NEW	99.8 (1990/1991)	102.5 (2016/2017)	92.0 (1990/1991)	100.9 (2016/2017)	ND (1990/1991)	97.1 (2016/2017)	Does not apply

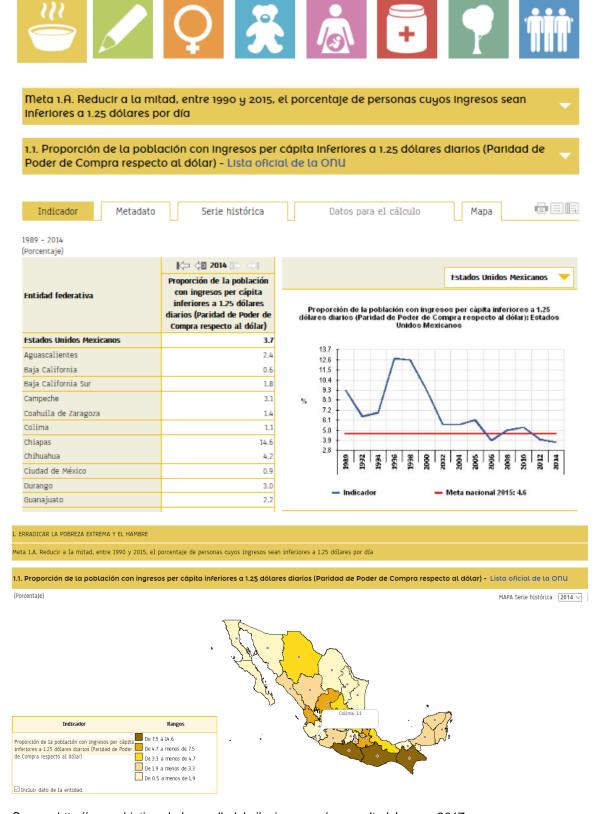
BMT Ensure that, by 2015, all children between the 3		-					
2.B. a pre-school education and complete it in the o							
BMT Net rate of enrollment ratio in pre-school	40.5	74.3	39.6	71.0	ND ()	81.3	National
2.1. education (3 to 5 years of age) - Beyond the	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2015:
Millennium Targets (BMT) NEW							100.0
BMT Ensure that, by 2015, all children aged 12 enter							
2.C. the 12-14 age group receives secondary educati	on and that 90	% complete					
it in the official period (three years)			-	-			
BMT Net rate of enrollment ratio in secondary	49.6	86.2	46.4	85.6	ND	92.1	National
2.2. school education (12 to 14 years of age) -	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2015: 100.0
Beyond the Millennium Targets (BMT) NEW							
BMT Net rate of new entry to secondary school	51.1	65.6	57.1	67.0	ND ()	69.3	National
2.3. education (12 years of age) - Beyond the	(2000/2001)	(2016/2017)	(2000/2001)	(2016/2017)	(2000/2001)	(2016/2017)	target 2015:
Millennium Targets (BMT) NEW			_				100.0
BMT Absorption rate of primary education graduates		97.1	76.8	98.8	ND ()	103.7	National
2.4 Beyond the Millennium Targets (BMT) NEW	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2015:
F-malation and in constitution and a second					N.C.	200	100.0
BMT Completion rate in secondary school education	73.9 (1990/1991)	87.7 (2015/2016)	72.7 (1990/1991)	83.1 (2015/2016)	ND (1990/1991)	86.6 (2015/2016)	National target 2015:
2.5 Beyond the Millennium Targets (BMT) NEW	(1990/1991)	(2013/2010)	(1990/1991)	(2013/2010)	(1990/1991)	(2013/2010)	90.0
PROMOTE GENDER EQUALITY AND EMPOWER WOMEN							90.0
3.A. Eliminate gender disparity in primary and second	ndary educatio	nn nreferably					
by 2005, and in all levels of education no later		on, preferably					
3.1.a Ratio of girls to boys in primary education -	0.943	0.964	0.962	0.953	ND	0.974	National
UN official NEW	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2005:
ON OTICIAL	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(,	(,	(,	(,	(,	0.96
3.1.b Ratio of girls to boys in secondary education	0.950	0.978	1.001	0.980	ND	0.980	National
- UN official NEW	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2005:
							0.96
3.1.c. Ratio of girls to boys in upper secondary	0.936	1.017	0.931	1.026	ND	1.010	National
education - Reformulated NEW	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	(1990/1991)	(2016/2017)	target 2015:
							0.96
. ENSURE ENVIRONMENTAL SUSTAINABILITY							
7.B. Reduce biodiversity loss, achieving, by 2010, a	significant re	duction in the					
rate of loss							
7.11. Proportion of inhabitants of private homes	ND	18.6	ND	ND	17.9	ND	Does not
using charcoal or wood for cooking -	(1990)	(2014)	(1990)	(2014)	(1990)	(2014)	apply
Suggested by Mexico NEW							
7.C. Halve, by 2015, the proportion of people withou	t sustainable	access to safe	!				
drinking water and basic sanitation							
7.8. Proportion of population with regular access to	78.4	95.3	95.5	99.7	91.0	99.2	National
an improved drinking water source -	(1990)	(2015)	(1990)	(2015)	(1990)	(2015)	target 2015
Reformulated NEW							89.2
7.9 Proportion of population using an improved	58.6	91.4	83.9	98.5	47.3	93.0	National
sanitation facility - Reformulated NEW	(1990)	(2015)	(1990)	(2015)	(1990)	(2015)	target 2019
The second of th	'			' '		'	79.3
7.D. By 2020, to have achieved a significant improv	ement in the	lives of at					
least 100 million slum dwellers							
7.10. Proportion of urban population living in slums	35.68	13.05	ND	5.76	ND	ND	Monitoring
- Reformulated NEW	(1992)	(2014)	(1992)	(2014)	(1992)	(2014)	indicator

Note:In the consultation of each indicator will find additional information accordingly.

ND Not available.

National, breakdown by entity and municipality.

Figure 17: Snapshot SI-ODM, municipality of Asientos, State of Aguascalientes



Source: http://www.objetivosdedesarrollodelmilenio.org.mx/ , consulted January 2017

In the transition to the 2030 Agenda, the Presidency, AMEXCID, and UNDP-Mexico worked on a pilot SDG dashboard<sup>24</sup> to experiment on a new generation information tool that would leverage the strong statistical data system of Mexico, with enhanced interactivity, summary dashboard and graphical outputs that would be more appealing for larger audiences. This pilot SDG Platform experimented with open data and decentralized data upload. It was presented in a side event at the UN General Assembly in 2015, was used for internal discussion and has closed down in 2016 as a pilot initiative to start developing the official dashboard. There were important lessons in the experiment of the pilot SDG dashboard, including the significant data gaps to monitor the SDG framework and the trade-offs between decentralized data updates and data quality. Because the pilot dashboard came out of a mapping exercise that intended to expand the availability of data, it used a model to expand the frontier of availability of data inspired in the open data initiative of Mexico which currently provides access to information to more than 27,000 data resources from 237 institutions (https://datos.gob.mx/). The data for the pilot platform was a subset corresponding to the SDG framework which came from more than 300 data resources provided by 12 institutions to monitor more than 100 indicators for 11 of the SDGs. However, open data is not certified nor complies with the standards for international comparison and other data quality criteria. Also, Mexican national statistical system has a strong legal framework which gives INEGI the mandate on reporting.

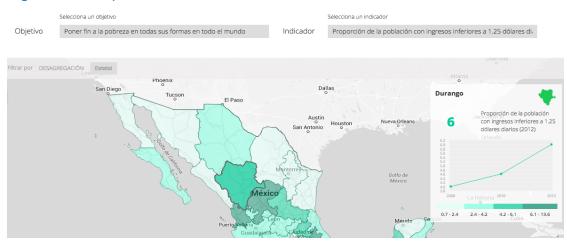
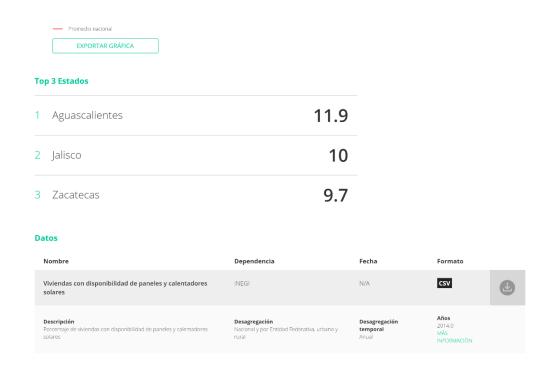


Figure 18: Snapshot Pilot SDG Dashboard, Mexico

<sup>24</sup> <a href="http://agenda2030.datos.gob.mx/">http://agenda2030.datos.gob.mx/</a>. The pilot SDG dashboard is no longer online. An introductory video can be found a <a href="http://www.onu.org.mx/una-plataforma-piloto-que-permitira-monitorear-los-ods/">http://agenda2030.datos.gob.mx/</a>. The pilot SDG dashboard is no longer online. An introductory video can be found a <a href="http://www.onu.org.mx/una-plataforma-piloto-que-permitira-monitorear-los-ods/">http://www.onu.org.mx/una-plataforma-piloto-que-permitira-monitorear-los-ods/</a>

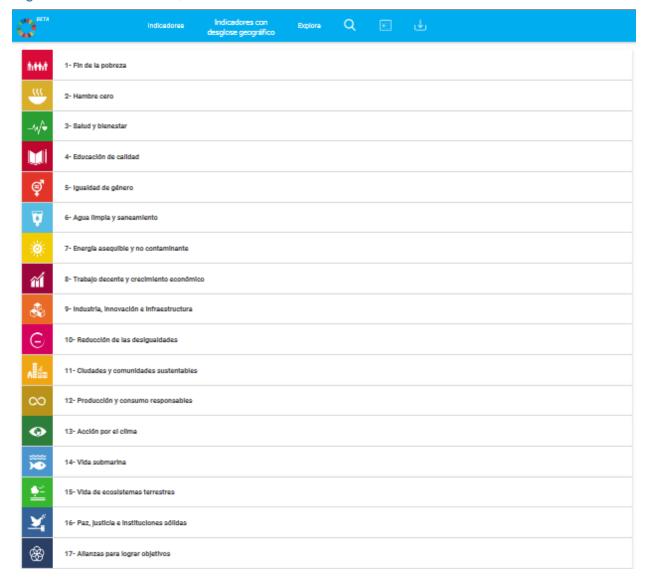


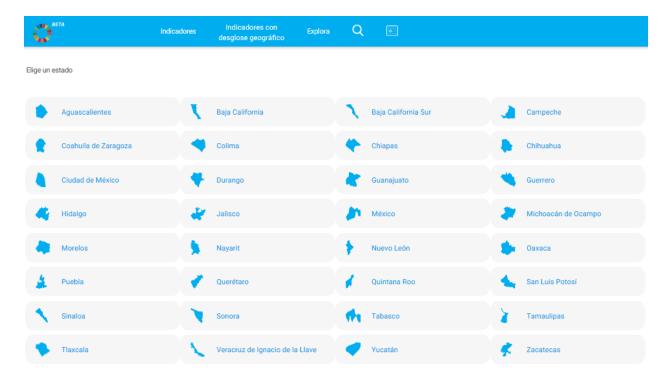
The third dashboard to review is the brand-new Mexico's **SDG Information System (SI-ODS)**<sup>25</sup>. Developed jointly by the Coordination of National Digital Strategy of the Presidency of the Republic and the National institute of Statistics and Geography (INEGI), and hosted at the latter, the SI-ODS offers official data to inform policy making, reporting and public accountability. This system was made recently available in its beta version. So far it allows consultation by goal and state, it provides data on indicators and their metadata, offers visualization in dynamic graphs, allows export in different formats, and has a calendar for updating the indicators. As it exists now, the SI-ODS draws heavily form its predecessor the SI-ODM in its concept and intended general audience, with an updated design.

As it stands nowadays, the SI-ODS has information for about 65 indicators in 15 of the SDGs with a stronger profile on the social component of the 2030 Agenda. Although active, the platform is still in its early stages as the developing team is working on the information tool itself and on the arrangements with the network of institutions that produce the data. SI-ODS is still smaller than SI-ODM in number of indicators and network of institutions (65 indicators and 3 institutions versus 81 indicators and 10 institutions). Given than the legal arrangements for the SI-ODS have already transition to the SDG framework, and that the Specialized Technical Committee has expanded from 17 to 25 institutions, it is foreseeable that the SI-ODS will grow quickly.

<sup>&</sup>lt;sup>25</sup> Sistema de Información de los ODS (SI-ODS), site: http://agenda2030.mx/acerca.html

Figure 19: Beta version, official dashboard SI-ODS





Source: http://agenda2030.mx/, consulted August 2017

#### Panama

This case is relevant for this research because –in comparison with Brazil, Colombia, and Mexico– Panama does not have the legacy, depth of institutional capacities and resources, yet still was able to move quickly in the early steps of SDG implementation and develop a pilot SDG dashboard.

In September 2015, just before the UN Sustainable Development Summit, President Juan Carlos Varela issued an Executive Decree adopting the 17 goals and 169 targets as a guide for national development strategy and creating the Inter-Institutional Commission for Support and Monitoring of the SDGs (Panama 2017). The Commission is made by the Ministry of Social Development (MIDES); the Presidential Monitoring Unit (*Secretaría de Metas*), and the Council for National Dialogue for Development (*Concertación*) –a multi-stakeholder institutional dialogue mechanism that convenes private sector, labor organizations, NGOs, religious organizations, academia, indigenous people, political parties and the national government<sup>26</sup>. The Commission has an executive and a technical level.

In 2016 and 2017, the Government of Panama worked in public awareness on the 2030 Agenda, mainstreaming the SDG goals across the administration and launched a political multistakeholder process, Panama 2030, through the *Concertación* Through the *Concertación*, Panama went through a dialogue process to produce a National Plan aligned with the SDGs. In March of 2017 the full document was presented for consultations and the process is on-going. In

<sup>26</sup> Concertación was originally created for the consultations for the Panama Canal expansion project. More information in Consejo de la Concertación Nacional para el Desarrollo, <a href="https://www.concertacion.org.pa">www.concertacion.org.pa</a>

2017 Panama also presented its voluntary report to the HLPF (Panama 2017).

For the purpose of this research, two information tools are of interest in Panama: the SID Platform for monitoring the MDGs developed with UNFPA and ECLAC, and the SDG Pilot Platform developed with UNDP (see Figure 14).

Population 4 mill, 10 Provinces & 5 "indigenous shires", 66 districts Millennium 2030 Agenda Declaration 2014 2003 2017 9/**2015** 9/2000 Presidential Decree, Integrated Steering Committee RBM at the Development Multi-stakeholder Center-of-SDG Platform dialogue Indicator System Government @Min. Social Dev. Panamá 2030 by dec 2016 using institutional With the support of (SIID) Development that UNDP, in 2014-2015 dialogue mechanism serves as the the Government of Panama moved to a Secretariat of the SDG Platform result-based Steering Commission Uses big data management system Focus on on-going for government initiatives and flagship programs and investments projects. Alignment exercise of 2,000+ government initiatives & \$21bill · Inc

Figure 20: Summary infographic: development dashboards in Panama

Source: UNDP-SIGOB with information from different sources

Panama has had since 2003 an **Integrated System of Development Indicators (SID).**<sup>27</sup> It was originally developed by the Social Cabinet and what is now the National Statistics and Census Institute of Panama (INEC) with assistance from UNFPA and ECLAC. SID is a platform of national development indicators at the national and province level and a navigation tool that produces statistical tables, metadata on indicators, thematic maps and graphs. The SID platform also has a digital library of documents that include the MDG reports, monitoring reports of international agreements, the human development reports and others. Again, the portal does not have a proper dashboard, but tabular presentation of data (see Figure 15).

<sup>&</sup>lt;sup>27</sup> www.contraloria.gob.pa/inec/sid

Figure 21: Screenshot of the Integrated System of Development Indicators SID, Panama



Source: www.contraloria.gob.pa/inec/sid, consulted January 2017

In January of 2016, the Government of Panama requested its UN Country Team<sup>28</sup> to provide support on mainstreaming and acceleration of SDG implementation. The agreed program encompassed six areas of work (an alignment exercise, a gap analysis, institutional strengthening of the newly created SDG Commission, support to the Vision 2030 process, support to dialogue and consultations, and support to the public communication strategy), the first of them eventually led to the **Panama pilot SDG Platform** developed by the UNDP-SIGOB team with the Presidency and the Ministry of Social Development. Work on the platform started in April 2016, it included an alignment exercise of government programs and projects to the SDGs and the development of an information tool that would serve the SDG steering group to keep tabs on progress of the SDGs and to engage non-government actors around the 2030 Agenda (see screenshots in figure 16).

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<sup>&</sup>lt;sup>28</sup> In Panama, there are 18 UN agencies and programmes. Panama also serves as a UN hub for Latin America and the Caribbean hosting regional offices of a number of agencies, including the UNDP regional hub. The UN and the UNDP have a strong partnership with the Government of Panama which was revamped since the election of President Juan Carlos Varela in July 2014.

Figure 22: Screenshot of the Pilot SDG Platform, Panama

Source: Panama Pilot SDG Platform by UNDP-SIGOB, not available for public consultation.

The Panama SDG pilot platform is a massive aggregator of data that combines data from ongoing initiatives that contribute to the delivery of the SDGs, and results indicators from official statistics. In its first pillar, "the initiatives", the platform takes information from public programs, projects and services aligned to the SDGs and builds a summary dashboard from where users can drill down into the data. In the second pillar, "the indicators", the platform is an adaptation of a well-established UNDP-SIGOB indicator tool that is already currently in use in several public institutions throughout Latin America. In the dashboard data is shown in ranks, tables and maps. The platform has an alignment tool for the administrator and capacity to produce automated reports. The pilot SDG platform is designed mainly for policy makers, thus the strong focus on information from the process to deliver, although it will be available for public consultation once it becomes the official SDG platform.

The pilot SDG platform sits at the Social Cabinet, a coordination body within the Presidency that serves as the Secretariat for the SDG Commission. It feeds information from the results-based management (RBM) system at the Special Monitoring Unit of the Presidency (*Secretaría de Metas*). Unlike in Colombia, the whole-of-government RBM system in Panama is fairly recent. It was created through a UNDP project with the Presidency of Panama that started in 2014 and within the year, using UNDP-SIGOB methods, had the delivery methodology and information mechanism set up across all key institutions within the executive. Direct total investment in the RBM system was about USD.250,000.

The SDG Platform automatically compiles information from more than 2,000 on-going government initiatives that are under the supervision of the Special Monitoring Unit of the Presidency and are

part of the government priorities. Through a methodology of alignment, each of the initiatives in the database is aligned to the SDG goal(s) and target(s) it contributes to, allowing for interconnectedness as each may contribute to more than one goal and target. Each initiative is also georeferenced by municipality, tagged by whether the initiative incorporates a gender approach, and by life-cycle and vulnerable group(s) targeted. The platform also captures information on multi-annual public investment budgets, and the public and private institutions involved in the delivery of the initiative. All pieces of information are extracted from selected fields in the RBM system.

The Panama pilot SDG Platform allows to "discover" from existing data, total government investment on the SDGs, the SDG profiles at national and sub-national levels, and the mapping of SDG delivery partners. Initial results of the SDG platform showed that total SDG investment in Panama amount to USD. 25+ billion and there is a SDG delivery network with 48 governments institutions and 416 private sectors contractors in government funded projects. More than other information tools in the group, this dashboard is oriented to management teams directly involved in the implementation of the SDGs. The mapping of the SDG delivery networks from government data is a path towards identifying and engaging delivery partners and SDG communities at the level of individual goals and targets (see figure 17).

Figure 23: Conceptual diagram of the Panama pilot SDG Platform: framework, indicators, initiatives and people



Source: UNDP-SIGOB

The Panama SDG Platform is expected to be released by the end of 2017. At the moment, the developing team at the Social Cabinet is working on bringing in the results indicator data, and in finding a way to portray SDG-related initiatives funded by the private sector.

## **Paraguay**

This case was added into the sample as way to explore, in real-time, the process of setting up an SDG dashboard. Paraguay is a country with a population of 6.7 million, land-locked among Brazil, Argentina and Bolivia. Like Panama, it doesn't have the legacy or depth of institutional capacities of the other countries in the study, but the Paraguayan experience shows how a small group of SDG champions, at the right moment in the political cycle and with support from international cooperation, can achieve much in little time.

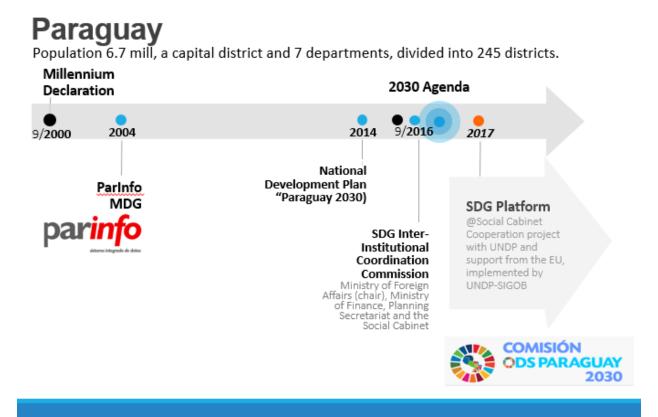
By the time the post-2015 debate was going strong, Paraguay was preparing its national development plan "Paraguay 2030: Country of Opportunities" which was approved in December of 2014. While the final SDG framework was not yet available, the Paraguayan NDP was very in tune with the ideas of the global development agenda.

Paraguay didn't have any special institutional arrangements for the implementation of the MDGs, but for the SDGs an ad-hoc mechanism was created. The MDGs were handled as a work stream of the Social Cabinet, a center-of-government coordination body created in 2003 to articulate Ministries and public institutions with responsibilities in areas of socioeconomic development. Experience in the consultations and debates to prepare country-led MDG reports (in 2010 and 2015) showed the need to improve coordination. In September of 2016, the Inter-Institutional Coordination Commission for the Implementation, Monitoring and Monitoring of ODS was created by Presidential Decree No. 5887/16. This commission is chaired by the Ministry of Foreign Affairs and has the participation of representatives of the Ministry of Finance, the Technical Secretariat for Planning and Economic and Social Development (STP) and the Technical Unit of the Social Cabinet (UTGS).

For the purposes of this research, two development information tools are of interest: **ParInfo ODM** and the **Paraguay SDG platform**. See timeline in figure 18.

<sup>&</sup>lt;sup>29</sup> http://www.stp.gov.py/pnd/

Figure 24: Summary infographic: development dashboards in Paraguay



Source: UNDP-SIGOB with information from different sources

In 2004, Paraguay started setting-up the information system ParInfo, that was designed to have a special MDG monitoring tool, ParInfo ODM. Implemented and housed at the national statistics bureau, the Dirección General de Estadísticas, Encuestas y Censos DGEEC, using the Redatam software from ECLAC, the database system DevInfo from UNICEF and in the framework of the INFOLAC initiative of UNESCO<sup>30</sup>. The timeline for the project was originally two years, but as difficulties in populating the information system piled up, the timeframe was extended to 5 years and eventually abandoned. By 2010, when the team from the Social Cabinet started working on the country-led report, the information tool had profuse indicator metadata, but was almost empty of information.

The experience provides important lessons learnt from an example of a failed information tool. While the DGEEC had its own statistical data (e.g. household surveys collected every-other year), it did not have enough gravitas to compel the big ministries (e.g. Health, Education) to report their administrative records into the system. The issue was not availability of data but rather traction from the requests of the information tool champion. Instead, a couple of years later while preparing

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<sup>&</sup>lt;sup>30</sup> http://www.unesco.org/new/en/communication-and-information/about-us/how-we-work/networks/infolac/

the 2010 MDG report, the technical unit of the Social Cabinet was able to summon Ministries and institutions into working groups and to collect data reports. This same labor intensive process was used in 2015 for producing the final MDG report.

Learning from that experience, the Paraguayan SDG Commission was keen to set up an information tool that would improve and expedite data gathering for SDG implementation. From there comes the **Paraguay SDG Platform** the SDG Commission in collaboration with UNDP<sup>31</sup>, funding from the European Union, as part of a larger agreement to support the work of the SDG Commission. Work on the platform started in March 2017, the internal version was launched in July 2017 and the publicly accessible is scheduled for October 2017.

The Paraguay SDG Platform was implemented by UNDP-SIGOB adapting the design used in Panama (see Panama pilot SDG platform pages 24-28), with important adaptations on how the platform in connected to the different sources of government data. The platform adapts the design developed originally in Panama which brings together information on results indicators in the SDG framework on public programs, and information on projects and services aligned to the SDGs, georeferenced and tagged by whether the initiative incorporates a gender approach, and by life-cycle and vulnerable group(s) targeted. However, the Paraguay SDG Platform relies on a broader network of information sources. The platform is automatically linked to existing databases in the Planning Secretariat (development projects and their descriptors), Ministry of Finance (allocated budget), the National Directorate of Public Procurement (weekly updated expenditures) and the General Directorate of Statistics. All data exchanges are framed by inter-institutional data sharing agreements. See screenshot in Figure 25.

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<sup>&</sup>lt;sup>31</sup>http://www.py.undp.org/content/paraguay/es/home/presscenter/pressreleases/2017/03/02/se-firma-apoyo-interinstitucional-de-coordinaci-n-de-los-ods.html

Figure 25: Screenshot of the Paraguay SDG Platform AGENDA 2030 DE DESARROLLO SOSTENIBLE
OBJETIVOS DE DESARROLLO SOSTENIBLE J 1.070 71,238,502,835,852 118 <sup>ADD</sup> 26.223.957 OBJETIVOS DE DESARROLLO SOSTENIBLE Concentración Iniciativa 1 Fin de la Pobreza 117 San Pedro iniciativas : 94 | 14.99 % 3 Salud y Bienestar 158 19 🦸 5 Igual de Género 7 Energía Asequible y no Contaminante 21 243 http://gabinetesocial.sigob.org/ Rio Grande Leaflet | ons sigos o SIGOB 11 Ciudades y Comunidades Sostenibles 95 **O** 13 Acción por el Clima 66 15 Vida de Ecosistemas Terrestres 83 16 Paz, Justicia e Instituciones Sólidas 208 Grupo Vulnerable 17 Alianzas para Lograr los Objetivos 627 Iniciactivas Alineadas por Departamento Θ 7,096,942,683,686,001 Adultos mayores Personas en situación de pobreza y pobreza extrema

Source: Paraguay SDG Platform by UNDP-SIGOB, consulted August 2017. Website is not yet available for public consultation, expected public release in October 2017

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16,681,146,918,185

The Paraguay SDG platform allows to "see" in existing government data the breadth, profile and scope of SDG activity. An initial exercise showed alignment of 1,070 initiatives to the SDGs, an SDG budget allocation of USD 12.5 billion, disbursement of USD. 4.5 billion (as of September 2017), and a rich SDG delivery network of 118 public institutions and 320 enterprises and civil society organizations.

# Findings and emerging insights

We reviewed a group of 12 development dashboards or information tools from 5 different countries. It is a small and diverse group that helped to think through the fundamentals of development dashboards. Several insights come into sight from this review, informed by the research questions and open to emerging themes. Here a summary of those findings along eight key issues.

# #1: Three cohorts of development dashboards

Looking at dates of inception and the feel of the different information tools, there seems to be three distinct cohorts of dashboards. The first generation of dashboards is from the early 2000s: in our sample, SID from Panama and Parlnfo from Paraguay, and many others in the region. They all are online tools to explore very large statistical databases (i.e. censuses, household surveys) by geographical locations. They use software tools developed by UNICEF and ECLAC, and were part of a large UNESCO regional initiative, The Information Society Program for Latina America and the Caribbean (INFOLAC). It was active from the mid-1980s to the late 2000s. Dashboards in this first group were originally part of a large endeavor to turn libraries into digital libraries and to widen dissemination of development information.

The second generation of dashboards has inception dates around 2010: SI-ODM, Relatorios Dinamicos, and Atlas-Brazil. At the time, the MDGs were entering their last five year and there was a special push for the 2010 UN Summit on the MDGs. Many countries from the region presented MDG reports that year, a number took over the UN agencies the responsibility of reporting on the MDGs (e.g. Paraguay) and others revamped their institutional arrangements (e.g. Mexico). It seems that the momentum also pushed the frontier of online access to MDG data. Dashboards in this group are visually much more refined and with extensive research-oriented capabilities.

The third generation are the SGD dashboards. They are all more sophisticated in their visualizations and user-interaction; they also seem to be more different from one another. Looking at the SDG dashboards, we can say that this is a time of experimentation in how to merge different traditions of using data and how to adapt to a development agenda that in broader in scope. While the MDGs were an agenda of social issues within the conventional scope of public policies, the SDGs address a broader set of issues which require whole-of-government coordination with a broader set of institutions and stakeholders. This requires broader coordination across government institutions, challenging the conventional coordination mechanism on social policies

that were often the seat for MDG implementation like the Social Cabinet in Panama or the Directorate for Social Development in Colombia's DNP. In some countries, like Mexico and Colombia, the transition to the SDGs has also been an opportunity to innovate in the coordination and mainstreaming mechanisms of the agenda to sub-national and local governments. And beyond the public sector, successful SDG implementation will require innovations in coordinating with the private sector, civil society, parliaments, academia, and others. Not surprisingly, the SDG dashboards have also evolved.

Throughout these different times, two driving forcers remain: the UN system and the beliefs in the power of information to catalyze change. The UN System, through its different agencies, has been a constant presence along the process. At least in this sample, UNESCO, UNICEF and ECLAC were more actively involved in the earlier dashboards; UNDP was more involved in the later ones. In the five countries, there are expectations that the SDG dashboards will help catalyze progress towards the 2030 Agenda. A Colombian government official offers one important lesson: "Measuring was not as key in the launch of the MDGs, it took us 4 or 5 years to bring the MDGs into our development plan. If we learned something, it was not to take too long to start measuring and to look for measuring tools that are faster that the five-year cycles of some of our statistical surveys." SDG dashboards are a way to bring measurement to the fore-front and kick-start the agenda.

➤ Check out what existed before to learn from the past, make sure to have the eyes on the future and know the state-of-the-art in development dashboards.

# #2: Dashboards for what purpose

In the group of 12, there are noticeable streams of dashboards based on the type of information they include. Some focus on <u>result indicators or output data</u>, for example, the number of children enrolled in primary education and number of years of schooling. Sometime that information is organized in <u>rankings for benchmarking</u>. Others also include information about the <u>activities that move the indicators or input data</u>, for example, programs to build new schools, to train elementary school teachers or to provide school lunches and their budgets. This distinction emerged clearly from the initial scoping exercise. Among the experiences reviewed, dashboards in Brazil and Mexico have the strongest focus on result indicators, and Atlas Brazil with a benchmarking approach; and dashboards in Colombia, Panama and Paraguay used a hybrid approach to incorporate information on government programs, services, and projects that are set to contribute to a goal.

What is at play in this distinction is the core concept of what is a dashboard and, for teams involved in setting up one, what is the main purpose of the specific information tool being developed: **is it a library for general use?** Is it a benchmarking tool? Is it for specific decision-makers? When the focus of a dashboard is the dissemination of information, it is more often designed for a range of users, namely "policy makers, researchers, students and any person interested in getting to know the 2030 Agenda". Thus, the information tool functions more like a search engine in a library of data. In these dashboards functionalities like queries are critical to multiple uses it is intended to perform. On occasion, these information tools are less refined in figuring out how the dashboard will be use and for what.

Another take on the dashboards is to focus on facilitating comparisons across units using ratings and rankings. These are usually fostering change through benchmarking, or learning through monitoring and comparing. What is interesting about these dashboards (e.g. Atlas Brazil and its ranking by MHDI) is that they are produced by some agents to affect the behavior of others, in the case of Brazil local governments in a decentralized federal system. This approach is akin to the global HDI that ranks countries, or the over 150 city benchmarking initiatives that seek to compare cities across the world. In a sense, the main purpose of these dashboard is to support mainstreaming across entities with executive power. Along these lines, the Brazilian information tools were intended as a communication platform to engage with local governments and civil society, providing access to information that would help to make comparisons, create insight and foster dialogue.

There is yet another stream of development dashboard and information tools that come from public management and focuses in tools for decision-makers. Here the difference is that the decision-makers will not only need to make decisions on what to prioritize (for which they would use results indicators), but also decisions about inputs (program design and budgeting) and course-corrections along the extended implementation phase of public policy. While these dashboards also have interest for public audiences, they are design to engage core users throughout the year. Dashboard reporting in this approach is a strategy for gathering data from multiple information sources to create a report useful for monitoring and evidence-based decisions. Here, dashboards are action-oriented, with information on the issues and at the time when a policy makers need to make decisions. In the case of the SDG dashboards, one specific challenge is executive coordination across a wide range of offices and implementing bodies requiring

The development dashboards seem to be at the juncture between these different traditions. The insight for teams working to set up dashboards is to clarify, from the very begging, the purpose as dashboards must be designed with their use in mind. An important learning is that the more executive the dashboard is, the more important is to create together with the tool a <u>systematic process for discussing and using the dashboard among the target users</u>. For example, who, how and when the information will be used. Thinking for the perspective of the users will help clarify in one dashboard tool can serve all different purposes or if different dashboards will need to be in place.

- Clarify the main users and purpose of the information tool.
- > Discuss how much the information tools need to contribute to mainstreaming across local governments and how much they need to contribute to executive coordination.
- > Decide if all functions can be combine in one dashboard or if different interfaces will be needed.
- Leverage all available data sources, including development outputs and inputs, for decision-oriented monitoring.

# #3: Supply-side traction: Where does the dashboard sit

Development dashboards are not a road to travel alone, they require both institutional partnerships and leadership. To understand the institutional arrangements underpinning the SDG dashboards it is important to differentiate the roles of executive bodies, statistical agencies, delivery partners, and social audit partners and how they play out in a particular institutional arrangement (see figure 25). These considerations are even more important as open data and dashboard initiatives can change the relationship between government and the public, and dynamics between different business units within governments responsible for delivering the services being measured (Kitchin et al, 2015)

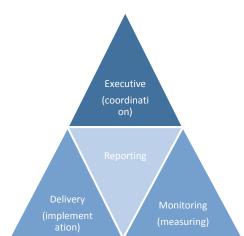


Figure 26: Actors in a dashboard initiative

The operative question to be successful in setting up a dashboard is **who in an institutional context has enough muscle or political capital to pull everyone else involved into the information platform? This we will call supply-side traction.** In our group of 12 dashboards there were different institutional arrangements, and the leading role was recognized in who hosts in the initiative. In Mexico's SI-ODM or Panama's SID, it was the National Statistical Institution who was the lead and host for the information tool. In Colombia, instead, MDG reporting was subsumed into the mandate of the DNP which is the hub for the whole-of-government results management system; their dashboard involves DANE, the national statistical institutions, but not on a leading role. It is the same in Brazil, IBGE was a key player in expanding statistical capacities for measuring MDG-related indicators at the municipal level (for a discussion see Westphal et al, 2011), but it was never the lead agency on the MDG information platform; that was the role of IPEA and other non-governmental stakeholders. Transitioning to the 2030 Agenda, the lead players are institutions at the center-of-government who have executive coordination capacity. In Mexico, the SDG pilot platform was led by the Office of the Presidency. In Paraguay and Panama, the Social Cabinet are leading and hosting the dashboards.

It is possible that the institutional arrangements for the SDG dashboards will evolve, as it happened with Mexico's SI-ODS (reverted to the statistical institution), but so far it seems that

center-of-government bodies are taking a leading role in the design and governance of the agenda and its information tools. The Voluntary National Reviews (VNRs) seem to have an influence on this trend as they involve Heads of State and Ministries of Foreign Affairs much earlier in the process of implementation, and has given a more executive spin to the process of reporting. Within the group of countries in the study, Colombia and Mexico presented their VNRs in 2016, Brazil and Panamá did so in 2017, Paraguay is scheduled for 2018.<sup>32</sup>

Supply-side traction is important because dashboard and information tools are not always successful. Those experiences are harder to encounter because of the usual sampling bias in case studies: only those that were successful are there to be seen. In the case of development dashboards that need to pull data from across different institutions, having supply-side traction in a necessary condition for populating the information tool. Many others tools were designed but never saw the light of day as they lacked the traction to get data. We found about the case of ParInfo by chance as a reference to the hurdles of producing the MDG reports. When the Social Cabinet prepared the first government-led report in 2010, they and MDG data platform, fully structured but with little data. The problem was not availability of data, but that the implementing ministries were not reporting. It took the intervention of the center-of-government (in this case, the Presidency and the Social Cabinet) to get traction for collecting the data.

The key insight here is that any entry point for an information dashboard would work, as long as the host institution has political muscle to convene across the institutions that need to provide data. The case of ParInfo MDG highlights the need for proper institutional analysis to inform the setup of a development dashboard, as behind any initiative to pull together government information there is a political economy of the production and sharing of data. One way to address those challenges is with the involvement of a center-of-government office.

- Consider the role of executive, statistical agencies, delivery, measuring, reporting and social audit partners in the partnership;
- ➤ Host the dashboard in an institution that has political muscle to pull in necessary data so there is supply-side traction.

## #4: Demand-side traction: Is the dashboard interesting enough

Another emerging finding is that the **development dashboards need to capture the interest of their users, this we will call demand-side traction**. It is not enough that the information is available for it to be used. There are different strategies to create interest in development information presented in a dashboard format, from communications campaigns, developing the

regular reviews by the high-level political forum (HLPF), meeting under the auspices of ECOSOC.

https://sustainabledevelopment.un.org/hlpf

<sup>&</sup>lt;sup>32</sup> As part of its follow-up and review mechanisms, the 2030 Agenda for Sustainable Development encourages member states to "conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven" (paragraph 79). These national reviews are expected to serve as a basis for the

dashboard as a reference, to elements of dashboard design. Unfortunately, we were not able to find much hard data on the actual use of the different platforms, but we can piece together a story based on isolated references and our team's experience in setting up dashboards.

Brazil is a prime example of how dashboards within an **advocacy campaign** achieve demand-side traction. For example, UNDP Brazil has been praised for achieving great visibility and extensive media coverage for their HD products (UNDP Evaluation Office 2006), with strategies that later benefited Atlas-Brazil. As a piece of information, UNDP-Brazil reported that the Portuguese version of the Atlas platform had registered over 5 million access in the first 5 months online (UNDP Brazil, 2014). Being part of a movement, Relatorios Dinamicos also has constituency.

A different example is Colombia, where the national development plan dashboard SINERGIA in **embedded into a political discourse** about the quality of government. In their dashboard concept, government officials are the primary target and they differentiate different types of users (see figure 27). For example, reporting that "between January 2012 and December 2014, the number of visits to the monitoring dashboards by government officials increased from 13,627 to 80,687; and citizen use of the monitoring dashboards increased 44,932 to 325,276 visits" (World Bank 2015).

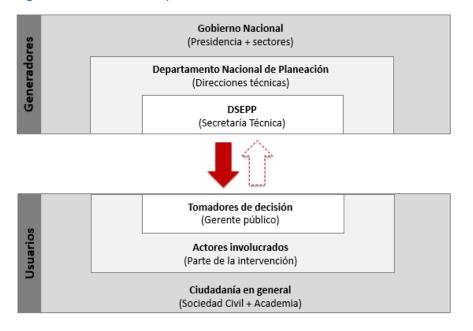


Figure 27: Users and producers of information in the SINERGIA dashboard (Colombia)

Another dimension to get demand-side traction is to produce a dashboard that is dynamic enough to have repeated visitors, by including a mix of data based on **frequency of updates**. An information dashboard is a form to deliver a progress report. At one extreme, if the data that underlies a dashboard is updated every 10 years (e.g. census data), then the dashboard will be a static infographic, no different from a printed report. At the other extreme, if the data is captured

and displayed in real-time, the dashboard will be changing just as the dashboard of a car. The problem with a dashboard that does not change is that it is unlikely to engage users over time. In the study, the dashboard with the fastest rate of change was the Paraguay SDG platform that linked to government expenditure data updated weekly. Among the cases in the study, the dashboards with the slowest rate of change were the ones from Brazil that were both based on census data that is updated every ten years. Among them, the Repositorios Dinamicos dashboard is part of a larger online platform with sections that drive regular user engagement, for example the biannual MDG prize, the database of best practices, and others. Atlas-Brazil has expanded the datasets it connects to add variety and novelty.

- Support the dashboard with strategies to foster engagement among the target audiences
- > Create a mix of data that updates frequently enough to create demand-side traction; and.

# #5: Issues of data quality

As happens in all the field of development data, the **quality and reliability of data** are of great concern. Here there is a natural tension between users and producers of information. While data users require information for making decisions, coordinating, articulating and setting in motion the activities that will lead to change. Producers want to have tested and reliable information. The compromise between these two forces is specific to the institutional arrangement in each country.

How much confidence is there on the data available for an SDG dashboard will be an important factor to consider in new initiatives. The countries that looked at were spaced out along the World Banks's Statistical Capacity Indicator, with Mexico at the forefront (98.89 points), followed by Colombia (88.89 point) and later Brazil, Panama and Paraguay in that order.<sup>33</sup> Although Paraguay was well below the regional average, it was still mid-range in a global comparison.

For SDG dashboards, questions concerning data veracity and quality revolve around how accurately (precision) and faithfully (fidelity) the data represent what they are meant to (especially when using samples and proxies), and how clean (error and gap free), untainted (bias free), consistent (few discrepancies), and reliable (the measurement instrument consistently produces the same quality of results) the data are (Goodchild, 2009; Kitchin, 2014a). For administrative records, in particular, fears are that the more public managers must expose their work to public scrutiny, the more they are tempted to spin the data to make their performance appear more positive than it is. Within statistical agencies and research team considerable attention is thus directed at minimizing and assessing the level of uncertainty in data.

There are also important trade-offs between precision and **timing of the information**, this will reflected in how fast the information tools will be available and the flexibility of their initial design. Users of data value timing and immediate availability of at least proxy data, particularly elected and appointed officials that are under great pressure to delivery fast. Whoever works on

<sup>33</sup> http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx

development dashboards for SDG steering groups and other offices of the center-of-government needs to find the right balance.

In any case, development dashboards cannot go beyond the ecosystem where they belong. Dashboards they can make visible the data gaps and help catalyze change in data ecosystems. They also can innovate in sources of proxy data using new technologies. This is, of course, work that will require political and institutional capital.

- Strive for a balance between data quality and data availability, and data quality and timing.
- Dare to start without the perfect solution.

# #6: The cost and software architecture for setting up a dashboard

It was not easy to collect information on the cost of setting up development dashboards but it was certainly not a salient concern in discussions and interviews with the teams involved with the different dashboards. We found of at least three reasons for this.

First, the development dashboards are often a by-product or relatively small investment in of much larger information-related initiatives such as a program to strengthen the national statistical system or the center-of-government. This happens because information dashboards are the tip of the iceberg in a system that produces and uses data for other purposes, Second, over time, the costs of running a dashboard quickly diminish, making the initial set up costs lose importance. Third, when looking at dashboards as a dissemination tool, the comparison is with the cost of printing and distributing a physical report, for example a research report (e.g. HDR) or an accountability report. This is particularly relevant for countries for large countries were an online platform has online access in the millions.

Finally, our direct experience implementing the SDG Dashboard in Paraguay showed that there is much that can be done with existing information *as it is*, as long as there is appetite for innovation. In the case of Paraguay, all the information that is plugged into the dashboard so far was already available, and costs were offset by adapting an existing software tool instead of designing a dashboard tool from scratch.

Looking at the group of 12 dashboards, particularly in smaller countries, new information tools have relied heavily on the technical support of international cooperation agencies. In this field, it is a mechanism to share costs of software development that can be prohibitive. Through this sample of 12 dashboards, we saw the footprint of DevInfo from UNICEF, REDATAM from CELADE the population division of ECLAC, and the UNDP-SIGOB software tools that are part of the UNDP corporate offer in LAC together with the SIGOB advisory services in core government functions.

With respect to the software architecture itself, dashboards are automatic dynamic report generators that can interact with relational databases, and virtually all relational database systems use SQL (Structured Query Language). A summary review of the tools showed that, at the moment, there is no gold standard.

# #7: Sustainability of dashboards

Of the twelve dashboards reviewed in detail, 8 are fully functional, two are no longer active, and two are in development; of course, all of the SDG dashboards are in their early stages. It is important to recognize that initial steps are still on-going. In some countries like Brazil and Panama, the process to set national targets is still underway. All countries in the study have significant gaps in the availability of data for measuring at least 1/3 of the targets.

We did find that there is a critical period (an opportunity window) for dashboards to get traction, otherwise they are likely to be abandoned. Like in any other development project, dashboard initiative needs to look for momentum and milestones to contribute in the process of getting traction.

As well as the MDG dashboard evolved over the span of the agenda, we can expect that the SDG dashboards will transform in the years to come. In a sense, information tools are never completely done, and much of the change will come about through experimentation and user feed-back (and complaints). This is the role of a bet version, when the developer team is still hands-on and the dashboard is offered for exploration by users, like at this moment Mexico's SI-ODS.

- > All the SDG dashboard are still in development.
- > Pay attention to
- Successful dashboards will continue to evolve so it is advisable to release a beta (experimental) version

## **Conclusions**

We set up to find what was the state-of-the-art in development information dashboards in Latin America, we reviewed in depth 12 information tools. Then we discussed findings and emerging insights along seven issues. First, there are three cohorts of development dashboards. Second, purpose us what defines a dashboard, and they can be used for specific decision-making, for benchmarking and for providing citizens with access to information. Third, issues of supply-side traction and the institutional arrangements are key for the success of a dashboard. Fourth, on the other hand, dashboard need also to look at demand-side traction and look for design elements and supporting strategies to engage target audiences. Fifth, discussions on data quality and the trade-offs between quality, availability and timing are unavoidable in setting up development dashboards. Sixth, dashboards are often a by-product of other initiative; also costs can be offset by partnering with international cooperation agencies that developed and maintain specialized information tools. Finally, all SDG dashboards and in development at the moment and will continue to evolve over the span of the 2030 Agenda.

Still, delving into the world of development dashboards has confirmed our views that they are a tool in the development toolkit that ought to be considered as a way to make development tangible, to bring information out of the computers of specialists, and to foster the debate on development ideas.

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#### **Annexes**

## **Annex 1: Research Questions**

#### Setting-up of Dashboard

- 1. What was the original intention/ purpose for setting up the dashboard? Has this evolved over time? If yes, what has trigged this 'evolution'? For instance, have there been MDG related dashboards? Are these now being upgraded/ expanded? If so, how?
- 2. Who has been driving/ leading the development of the dashboard? How has the setup and implementation of the dashboard been coordinated across government departments and with other stakeholders?
- 3. How does the dashboard link to other reform efforts?
- 4. How has the establishment of the dashboard been financed? Has there been TA from a development partner? If yes, a copy of the TORs for such TA should be included in the report.
- 5. Where is the dashboard housed? Who has access to it?
- 6. Who are the primary users of the dashboard? Has there been any evaluation/ user feedback survey? If so, what have been the key takeaways?

#### Data

- 7. What type of data is part of the dashboard? (MDG/SDG related indicators? At what level of disaggregation? Financial flows (public and private)? Lists/updates on programmatic interventions, etc?). Is it mainly survey based data? Administrative data? Or also other forms of data? What is the process and criteria by which these decisions have been made?
- 8. What is the process for populating and updating the data? Who is responsible? At what level (national, subnational, sectoral ministries, other stakeholders) is the data being fed in? What are the quality control mechanisms in place/ who is responsible for ensuring consistency, quality control?
- 9. How is data being visualized? Through maps? Graphs? Other forms?
- 10. For more sophisticated dashboards: how have thresholds been established? Who was involved in this process? How is information appearing on the dashboards being prioritized?
- 11. Is the dashboard linked/ could it be linked to other platforms including regional/ global platforms?
- 12. How will the data included in the dashboard be selected? What is the data expected to show?

#### Software

- 13. What type of database underlies the dashboard? What is the database architecture?
- 14. Development software

#### Governance Arrangements/ Legal Framework

- 15. What are the institutional arrangements?
- 16. Were any legislative or institutional changes required to establish setting up the dashboard? If yes, please document these.
- 17. For dashboards that have already been set up for a longer period, has the process of setting up the dashboard triggered/ facilitated any institutional reform? Has it improved overall stakeholder coordination and participation? If so, how?
- 18. Has the dashboard enhanced evidence-based policy-making? If so, please describe how.
- 19. Has the dashboard enhanced accountability? If so, please describe how and what were the main factors in promoting accountability.
- 20. Has the dashboard enhanced the transparency in the monitoring process of the data analyzed? If so, please describe how.

# 21. Has data been regularly updated? If not, what have been the bottlenecks? 22. What incentives are there for ensuring that data is regularly updated? 23. For dashboards that have been in operation for a while, what is the evidence of actual use by different types of users? 24. For dashboards that have relied heavily on external TA/ donor support – what arrangements have been made to ensure longer term sustainability? Moving forward/ Lessons learnt 25. Has the dashboard met its goals? Why or why not? 26. What would have made the dashboard more effective? 27. What are some key lessons for other countries looking to adopt similar instruments? 28. Has there been any obstacles in the design or implementation of the dashboard? Could they have been avoided? If so, how?