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Opening Information  
on Development Efforts

Michael P. Canares, Andrew Young, Stefaan Verhulst

JULY 2017



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# OPEN DEVELOPMENT CAMBODIA: Opening Information on Development Efforts

## SUMMARY

Cambodia has shown impressive improvements in political, economic, and social conditions over the last 10 years. The country has managed to end long years of civil war, grow the economy by at least 7 percent annually, and improve health and education outcomes, especially for children. Despite this, there are underlying weaknesses in Cambodia's political institutions that constrain its economic, social, and cultural development. These include a growing opacity in decision-making and a lack of information regarding different development efforts sweeping across the country. Open Development Cambodia (ODC) was born out of a desire to address these issues. Its goal is to provide "access to current and historical information about Cambodia's development trends in an online 'open data' platform compiling freely available data from a wide range of public sources." Launched in 2011, ODC's online portal (<https://opendevelopmentcambodia.net/data/>) has been instrumental in providing information to different users from government, civil society, media, and the public sector.

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## CONTEXT AND BACKGROUND

### PROBLEM FOCUS/COUNTRY CONTEXT

Cambodia has shown impressive improvements in political, economic, and social conditions over the last 10 years. The country has managed to end long years of civil war, grow the economy by at least 7 percent annually, and improve health and education outcomes, especially for children. Despite this, there are underlying weaknesses in Cambodia's political institutions that constrain its economic, social, and cultural development. Entrenched patterns of political patronage limit governance reforms; the government's intent to be more transparent is overshadowed by a growing opacity in decision-making in governmental transactions; civil society's ability to question and hold government officials accountable remains constricted; and corruption is still prevalent.

Many of these issues could be addressed by increased public access to governmental information. However, Cambodia does not have a freedom of information law, and many legal provisions restrict information disclosure. For example, in the exploration of natural resources, where corruption is reported to be rampant, a legal provision treats applications, reports, plans and notices as confidential. In addition, civil society organizations have questioned the government's failure to disclose details about the national budget for outside scrutiny.<sup>1</sup> In general, there is limited availability of governance information in Cambodia. Even when information is available, it is stored in formats that prohibit easy sharing and re-use. In addition, the little information that does exist online is disorganized, not linked, and hard to locate.

<sup>1</sup> Erin Handley and Bun Sengkong, "Civil Society, Opposition Criticise Budget's Opacity," Phnom Penh Post, November 4, 2016, <http://www.phnompenhpost.com/national/civil-society-opposition-criticise-budgets-opacity>.

## OPEN DATA IN CAMBODIA

In 2015, Open Knowledge Index rated Cambodia as 12 percent open<sup>2</sup>—a rating that means there is very little data available online and in open format. Key critical datasets such as company registers, land ownership, national maps, government spending, national statistics, and weather forecasts are not available online.

To date, there exists no central government repository for government information in the country, and the government does not implement any comprehensive open data initiative. For example, there exists no national directive to disclose government data on websites (though a few agencies publish some datasets on their own initiative). Some encouraging signs are evident in the birth of a few civil society organizations now advocating for open data in the country. Cambodia is one of many countries studied as part of this series where civil society and international organizations stepped up to drive the open data movement as a result of governmental failure to provide easy access to important datasets. Some of the increasingly active civil society actors in Cambodia include Open Data Cambodia (ODC), the founder of the project under study here, and discussed further below; Open Knowledge, a global open data non-profit organization; the local offices of the World Bank; and a few transparency organizations and international non-governmental organizations advocating for more inclusive information disclosure practices.

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2 . Open Knowledge, “Global Open Data Index: Cambodia,” <http://index.okfn.org/place/cambodia/> .

## KEY ACTORS

### KEY DATA PROVIDERS

ODC gathers data from at least five major sources—government, non-governmental, private sector, academics, and from internal local newsrooms and major Cambodian newspapers. ODC gathers data from these various sources (e.g. from websites or printed documents), and converts them into open formats to be published in the ODC portal.

### KEY DATA USERS AND INTERMEDIARIES

ODC acts as an aggregator of the different data and information obtained from these various sources. Its portal has a broad range of users, with the largest category coming from the academic community and non-governmental organizations. Professors and students, for example, cite ODC’s database in their research papers, journal articles, and books. Some international non-governmental organizations use map layers and other related geo-referenced documents to analyze development projects. In addition, members of the media also use the data to analyze development trends, projects and patterns.

### INTENDED BENEFICIARIES

ODC’s intended beneficiaries, besides the researchers and academics who directly use the data, can be grouped into four categories. First, government agencies or policy makers who may use the data analyzed by media or NGOs in crafting their policies or in conducting development planning. Second, the business sector, which benefits from looking at maps and geo-referenced data on natural assets and resources, as well as demographic data that may be useful in business decision-making. Third, civil society and community-based organizations use the datasets on the portal for their for development work or to advocate for greater transparency. Finally, average citizens who may be able to access the data from ODC or from the outputs of intermediaries mentioned above.

# PROJECT DESCRIPTION

## INITIATION OF THE OPEN DATA ACTIVITY

Open Development Cambodia (ODC) was born out of a need felt by local grassroots land and natural resource activists working in Cambodia. Terry Pernel, a long-time American resident in Cambodia who worked with different grassroots organizations, including the East West Management Institute (EWMI), a civil society organization seeking “to build accountable, capable and transparent institutions,” found that getting access to useful data in Cambodia was often difficult if not impossible. Accessing government data, in particular, was a challenge, and meant going from one office to another, dealing with bureaucracy at each step.<sup>3</sup> As noted, Cambodia does not have a central repository of government data that one can physically visit or consult online.

ODC was developed with the goal of aggregating information about the country from different sources—not only government, but also international organizations, civil society groups, private sector, universities, academic institutions, and individual researchers who had been studying the country for decades. The vision was to create a central repository, to be hosted online, that would consist of raw data,

independently collected, edited, and aggregated. The group that would manage it needed to be independent and without political bias—its main role would be to provide information and let those who seek data and information use it for their own purposes. The site was officially launched in August 2011. After almost four years of being implemented as a project of EWMI, it became registered as a non-governmental organization in August 2015.<sup>4</sup>

The platform now houses data-driven information on three central topic areas: Environment and Land (e.g., disaster and emergency response and extractive industries); Economy (e.g., industry and labor) and People (e.g., aid and development and law and judiciary). As of early 2017, raw data is directly available for download on laws, policies and agreements, while other topics feature detailed Wikipedia-like write-ups aggregating a diversity primary datasets, charts and graphs, policies and other relevant information. ODC also offers a number of interactive maps that allow users to deploy and combine layers built from, for example, agriculture, demographic and infrastructure data. It also provides a mapping toolkit and guide using the Harvard WorldMap interface.

3 Kyle James, “Cambodia sets pace with open data,” DW Akademie, December 20, 2013, <http://onmedia.dw-akademie.com/english/?p=16857>.

4 Interview with Thy Try, Executive Director, Open Development Cambodia, and Penhleak Chan, Regional Network and Partnership Support Manager of EWMI, November 17, 2016.

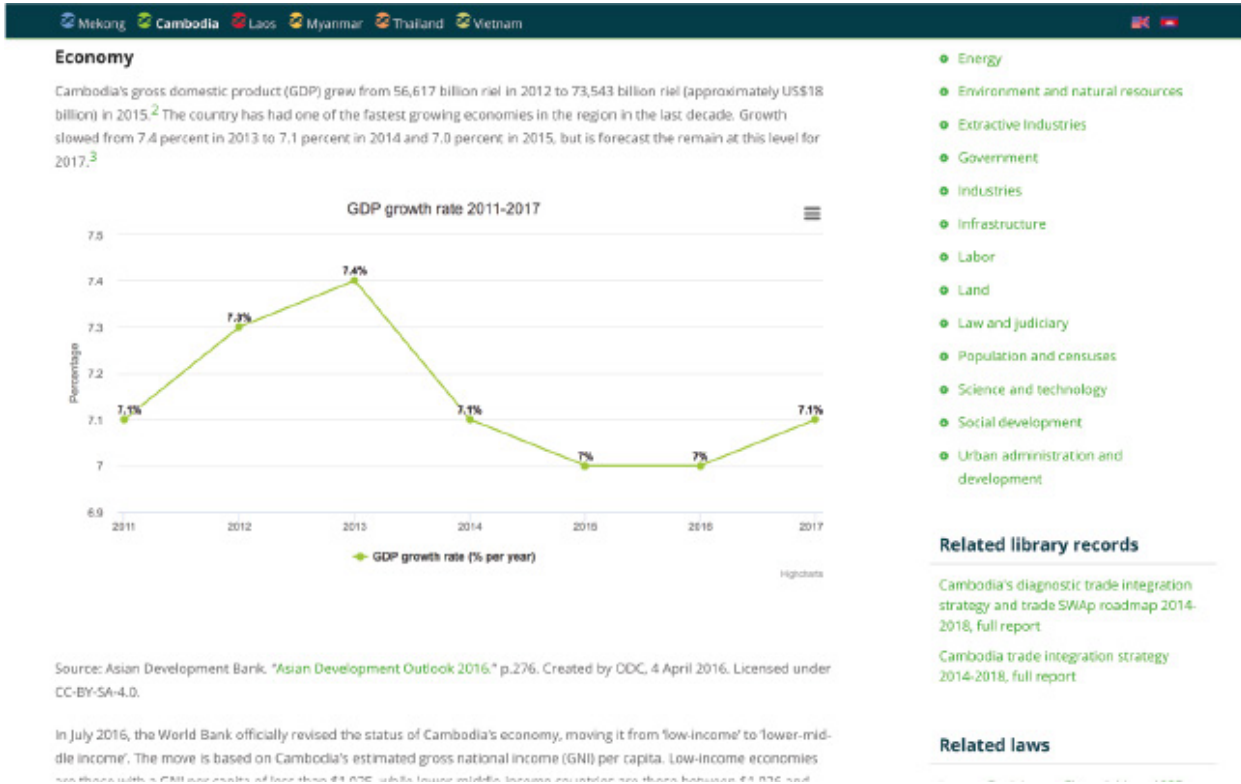


Figure 1: Information on the ODC Economy and Commerce Topic Page

## FUNDING

Initiated by EWMI in 2011 as a part of its US-AID-funded Program on Rights and Justice, ODC received its first grant from the Swedish Program for ICT in Developing Regions (SPIDER) in 2012. With a total budget of around 230,000 USD, SPIDER contributed slightly more than 55,000 USD "to develop the existing Proof of Concept site (<http://ww.opendevelopmentcambodia.net>) into a fully function-

al open data online platform that will facilitate a network of civil society actors to share, analyze, and publish their data in a coordinated, egalitarian, and secure way."<sup>5</sup> Since then, ODC has received funding support from other USAID-funded projects, American Jewish World Service, Open Society Foundation, and other funders.

5 SPIDER, "Open Development Cambodia: Promoting transparency through open data," <http://spidercenter.org/2.31936/project-overview/open-development-cambodia-promoting-transparency-through-open-data-1.149787>.

# DEMAND AND SUPPLY OF DATA TYPE(S) AND SOURCES

ODC collects data based on what is already available in the “public domain.” By public domain, ODC means data that are generally available for public access and not specifically prohibited by law to be shared widely. Its sources of data include (1) Royal Gazettes, (2) official websites of governmental institutions, (3) published reports from government, (4) De-

velopers/Company websites, (5) information released to the Media (i.e. news and press releases), (6) published reports from NGOs, and (7) academic research reports and other reports from NGOs. ODC researchers collect the data, submit it to editors for review, and convert this into open formats for publication on its portal.

## OPEN DATA USE

While ODC draws information from a variety of sources, open government data is a key driver of the sites offerings. The interactive maps on the site, the raw datasets available for download and

the information on topics like the quality of Cambodian governance, environmental policy and construction codes would not be possible without government data being made accessible.



Figure 1. ODC’s Open Data Portal



# IMPACT

ODC’s mission is to “strengthen public knowledge and analysis of development issues to enable constructive dialogue between public, private, civil society, and international sectors to support development of effective policies and practices bearing on sustainable resource use.”<sup>6</sup> The organization has been striving to

achieve these goals now for some three years. Although always difficult to clearly measure impact, particularly for relatively young projects, our research indicates at least four ways in which ODC has taken early steps toward having a concrete effect on Cambodian society and development.

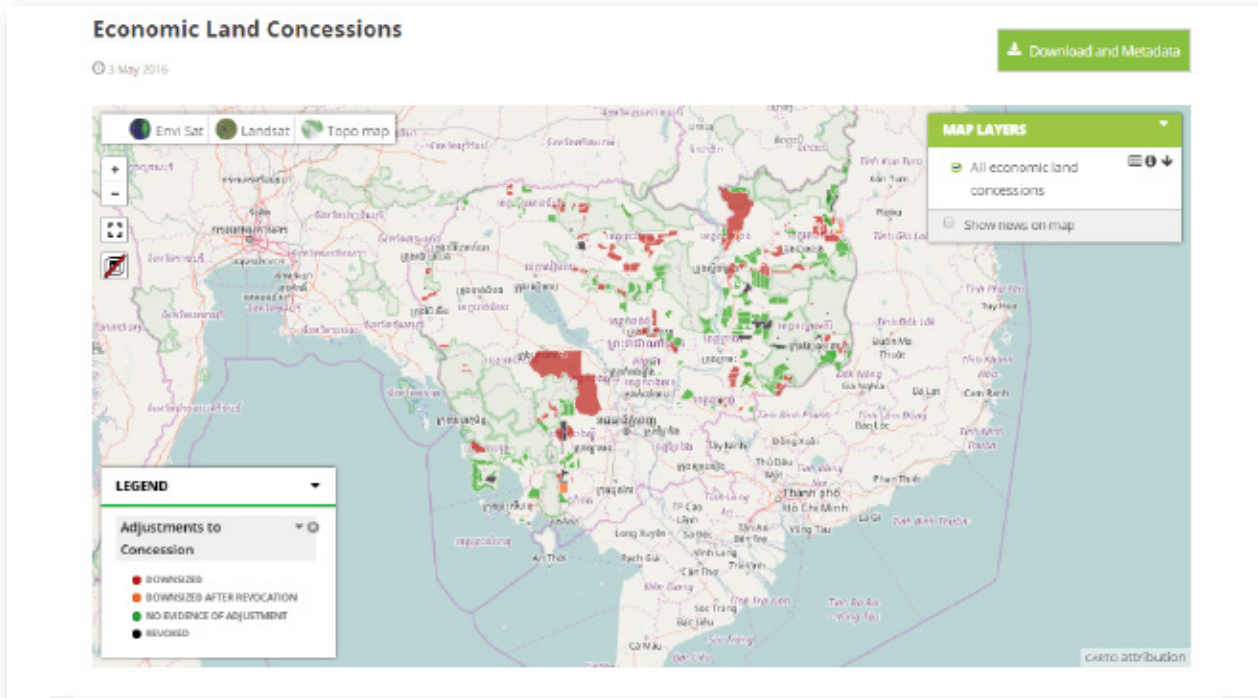


Figure 2. Map of Economic Land Concessions

## SEEDING INTEREST CAMBODIAN OPEN DATA

The ODC portal is gaining increasing attention from a number of different kinds of users. As of October 2016, it has an average of 70,000 pageviews per month. Since the launch of the portal, a total of 35,000 users per month, mostly from within Cambodia, have visited the site, with approximately 80 percent be-

ing unique visitors. The ODC team based in Phnom Penh has received numerous personal inquiries and interview appointments from journalists and researchers, and the portal has been increasingly quoted as a source in both local and international research publications and media reports.<sup>7</sup>

6 . Interview with Thy Try, Executive Editor, Open Development Cambodia, and Penhleak Chan, Regional Network and Partnership Support Manager of EWMI, November 17, 2016.

7 . Interview with Thy Try, Executive Director, Open Development Cambodia, and Penhleak Chan, Regional Network and Partnership Support Manager of EWMI, November 17, 2016.

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*Quite often, maps attract the most attention from media and GIS persons while the database tracking the investment and concessions projects along with references is usually used by advocates and workers from NGOs and community-based organization. In this sense, it seems that the tracking database on specific development projects is gradually helping the work of these organizations. However, this requires key persons of the communities to have a better understanding of the development trends and data/data tools in order to use it with the most impact, either through their own direct work or through their knowledge sharing with their community members.*

**Thy Try**

Executive Director, ODC

According to Thy Try, ODC’s Executive Director, “Quite often, maps attract the most attention from media and GIS persons while the database tracking the investment and concessions projects along with references is usually used by advocates and workers from NGOs and community-based organization. In this sense, it seems that the tracking database on specific development projects is gradually helping the work of these organizations. However, this requires key persons of the communities to have a better understanding of the development trends and data/data tools in order to use it with the most impact, either through their own direct work or through their knowledge sharing with their community members.”<sup>8</sup>

Journalists from the outlets like The Guardian,<sup>9</sup> Tech President,<sup>10</sup> and The New York Times,<sup>11</sup> among others, have written about ODC’s efforts and/or drawn upon the data and information it makes available. They also include agencies such as the United Nations, The Mekong River Commission, and the International Land Coalition. In addition, ODC says that government agencies have also used the site – perhaps not surprising given its focus on bringing together useful datasets from across sectors, not just data already held by the government.

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- 8 Interview with Thy Try, Executive Director, Open Development Cambodia, November 24, 2016.
  - 9 Naly Pilorge, Virak Yeng, Vuthy Eang, “Think of Cambodia before you add sugar to your coffee,” The Guardian, July 12, 2013, <https://www.theguardian.com/commentisfree/2013/jul/12/cambodia-sugar-eu-policy>.
  - 10 Faine Greenwood, “As the Internet Raises Civic Voices in Cambodia, a Struggle Brews Over Net Control,” Tech President, March 27, 2013, <http://techpresident.com/news/wegov/23659/internet-civic-voices-cambodia-struggle-net-control/>
  - 11 Julia Wallace, “Development and Its Discontent,” The New York Times, April 12, 2013, [https://latitude.blogs.nytimes.com/2013/04/12/development-and-its-discontent/?\\_r=0](https://latitude.blogs.nytimes.com/2013/04/12/development-and-its-discontent/?_r=0).

## STRENGTHENING ISSUE ADVOCACY THROUGH COLLABORATION

ODC has played an important role in strengthening advocacy on issues surrounding open data, a role whose impact has been particularly evident in the way land is granted by the government. Before the emergence of ODC, civil society advocates that monitored the government's grant of land concessions collected their own data and did not coordinate with each other. This fragmentation resulted in inconsistencies in the data presented by these different actors, a weakening of advocacy messages, and a lack of attention from

the concerned government agencies. ODC facilitated the process of data sharing, cleaned the data to get rid of inconsistencies, and provided the data on its secure, centralized platform.<sup>12</sup> With a unified basis and voice, coupled with international media coverage and pressure, the government postponed the grant of land concessions to the private sector and hastened the grant of social land concessions to the poor. While these results cannot be directly attributed to ODC, it is quite apparent that ODC contributed to the process.

## INCREASING ACCESS TO IMPORTANT, PREVIOUSLY INACCESSIBLE DATA

In Cambodia, Environmental Impact Assessment (EIA) reports are not made publicly available. EIAs are required by law, but several agencies do not seem to place importance on the practice. ODC made available EIA reports on its portal and has made an analysis of currently available EIA data. The resultant increase in public awareness around the topic, particularly among civil society actors, has the potential to push the government to take further action, though there has not been clear evidence that they have done so at this point.

Additionally, natural resource data, including information related to agriculture—one of Cambodia's competitive advantages—is hard to come by. ODC had numerous requests in the past to get data on soil type published on its portal and was able to do so recently. This information was used by the private sector, more particularly by the Cambodian Rice Federation, to determine potential growth areas in crop production. Anecdotal evidence also shows that resource data at the ODC portal has been used by international organizations, such as the World Bank and ANZ.

12 Nicolas Mansfield, "Open Development Cambodia: How open data can promote land use transparency," Devex, September 20, 2013, <https://www.devex.com/news/open-development-cambodia-how-open-data-can-promote-land-use-transparency-81848>

## RISKS

Since its inception, ODC has faced numerous challenges, among them lack of support and even resistance from government agencies and certain private sector players. For example, when ODC published forest cover data in 2013, the Forestry Administration, the governmental body under the Ministry of Agriculture, Forestry, and Fisheries, refuted the ODC data that showed a significant decrease in forest cover—from 72 percent in 1973 to 46 percent in 2013—and alleged that the organization did not have a credible applied methodology on forest classification. Attempts to discredit ODC, such as this one, will likely happen again, especially when government is harmed by the narratives that arise from the analysis of sensitive data.

As ODC transitions to a registered civil society organization in Cambodia, it may face several

challenges brought about by the adoption of new laws that could potentially impose restrictions on ODC's work. For example, the Law on Association and Non-Governmental Organizations requires all NGOs to report their activities to the government—resulting in additional workloads and restricting freedom of movement via surveillance. Also, the Sub-Decree on Publication of Maps and the use of Produced Maps introduces a new requirement that any organization which produces maps must get a license from the government. Furthermore, a draft law on Cyber Crime can potentially harm some of the activities of ODC. All of these represent commonly seen risks for an organization seeking to introduce greater transparency and work against vested interests. In a sense, the scale of the risks (and opposition) is also an indication of the project's success or at least potential.



# LESSONS LEARNED

Several important lessons with wider applicability emerge from this particular case study. These can broadly be categorized by consid-

ering the key enablers of the project, as well as the most important barriers or challenges to its success.

## ENABLERS

### TRUST OF DIFFERENT ACTORS IN ODC'S WORK AND CAPACITY

ODC's ability to tap into an existing ecosystem greatly accelerated its move from idea to implementation. The fact that ODC started as a project under EWMI, and with the support of several international donors, strengthened its reputation as an organization that has the capacity to deliver on its commitments—its vision and mission. The “independent” stance of ODC, presenting the data and factual information it aggregates without necessarily attaching itself to any political agenda or ideology, worked both on the part of government and other actors. In general, government stakeholders do not project animosity against ODC and even use its data, despite initial questions on data integrity. Advocacy groups also view ODC as an independent organization, and not necessarily a mechanism of government.

This increased trust from different actors also made possible ODC's ability to get grants to fund its work and operations.

### VOLUNTEERISM OF DIFFERENT ACTORS IN THE OPEN DATA SPACE

Like any new technology that relies on the generosity not only of donors but also of volunteers, ODC benefitted from different individuals who participate in ODC's efforts on proactive disclosure without costs, and from organizations and universities which send interns to ODC to

assist them in research and editing processes. ODC has a very lean team—nine people dabbling in work on research, editing, infographics, mapping, writing, finance, among others—and in order to increase breadth and depth in its work, it has to advertise volunteer opportunities and take in as many volunteers as necessary.

### COLLABORATION AMONG DIFFERENT ACTORS FROM WITHIN CAMBODIA

As earlier indicated, ODC relied on different data sources to be able to publish quality and comprehensive information in its portal. Non-governmental organizations, advocacy groups, researchers, universities, and government agencies shared data with ODC for it to clean, edit, and publish. Without the collaboration of these actors, data at the ODC portal would be lesser in scope than its current state, and probably less meaningful to the user.

Lack of information fuels the need for this collaboration. Currently, more and more people are interested in data on land, water, and forest governance and have been asking ODC to make these datasets accessible to the public.

ODC also participated in shorter-term collaborations with Columbia University's School of International and Public Affairs (SIPA) toward developing a greater understanding of international development efforts in Cambodia.<sup>13</sup>

13 “Columbia SIPA,” Open Development Cambodia, <https://opendevdevelopmentcambodia.net/about/partnerships/columbia-sipa/>

A partnership with Save Cambodia's Wildlife produced the 2014 Atlas of Cambodia, which provides detailed information and maps on the "changing spatial structures of Cambodia's geography as well as its economic and social development, especially natural resource and environment management"<sup>14</sup> – the elements found in the Atlas are downloadable on ODC and available as layers on its interactive maps.

## BARRIERS

### FORMAT AND DATA QUALITY

ODC acknowledges that data and information in the public domain are difficult to obtain as sometimes some data have strong restrictions in terms redistribution, reproduction, and reuse. Several of the government data sources are inconsistent, not up to date, and in closed formats (e.g., PDFs). According to Penhleak Chan, Regional Network and Partnership Support Manager of EWMI's Open Development Initiative:

"One challenge is that many of the documents released by the government into the public domain are not machine-readable, and so digitizing and analyzing them is very time-consuming. Another challenge is that data and information are not always consistent so there's a need to have a neutral and independent review team that makes sense of the data. For instance, in a project where we looked at reports on rubber production in Cambodia, the numbers provided by two different ministries on the same indicator greatly differed."<sup>15</sup>

These limitations make the work of ODC more difficult and resource-intensive.

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*Another challenge is that data and information are not always consistent so there's a need to have a neutral and independent review team that makes sense of the data. For instance, in a project where we looked at reports on rubber production in Cambodia, the numbers provided by two different ministries on the same indicator greatly differed.*

**Penhleak Chan**

Regional Network and Partnership Support Manager, EWMI's Open Development Initiative

14 "Save Cambodia's Wildlife," Open Development Cambodia, <https://opendevelopmentcambodia.net/about/partnerships/save-cambodias-wildlife-scw/>

15 "DW Global Media Forum: Open Data in Cambodia," DW Akademie, July 3, 2014, <http://www.dw.com/en/dw-global-media-forum-open-data-in-cambodia/a-17755220>.

## LOW DATA LITERACY ON THE PART OF LOCAL USERS

As earlier indicated, the ones that benefitted largely from information availability are organizations that already have the capacity to access and use data—international media outfits

## LOOKING FORWARD

ODC believes that its work likely has impacted indirectly on the Cambodian government's recent policies and reforms in the forestry sector and land concessions. This can be observed in the growing number of established natural protected areas, the development of the protected areas management plan, the introduction of eco-tourism, the downsizing of around 1 million hectares of economic land concessions from inactive investors and granting land ownership to the poor through social land concessions. These recent events have inspired ODC to work even harder to make more data more accessible to the public and to those stakeholders in need.<sup>16</sup>

But ODC acknowledges that there are significant challenges to achieving these results—especially with the increasingly limited space for civil society within Cambodian political processes. As ODC wants to maintain its independent stance, it relies largely on other organizations that will take the data that ODC is able

and international non-governmental organizations. This is largely because there is low data literacy on the part of local users. To address this, ODC has been doing several capacity building trainings across the country but, given the lack of resources, the ability to cover different sectors across the country is limited.

to demystify and proactively disclose into processes that influence the way development in Cambodia unfolds. This can be civil society organizations, advocacy groups, or community-based organizations interested in particular issues, such as natural resource governance. It can be transparency watch groups that seek to unravel corruption in the public sector. It can even be champions from within government that want to see a more sustainable development model for the country.<sup>17</sup>

Within these processes, ODC has to play at least two roles—that of an advocate for greater openness in public-interest data, and that of a resource institution that builds the capacity of local actors to use data more effectively in decision-making. ODC is committed to ensuring that data-based decision-making processes are institutionalized not only within the halls of government but also in every community in the country.

16 . Interview with Thy Try, Executive Director, Open Development Cambodia, and Penhleak Chan, Regional Network and Partnership Support Manager of EWMI, November 17, 2016.

17 . Interview with Thy Try, Executive Director, Open Development Cambodia, and Penhleak Chan, Regional Network and Partnership Support Manager of EWMI, November 17, 2016.



## CONCLUSION

While Cambodia's open data ecosystem is still in its infancy, Open Development Cambodia is acting as an important leader in pushing the country toward a more transparent, collaborative and data-driven approach to governance. Beyond demonstrating the importance of making important government data available to the public – from open contracts and other legal information to census and demographic data to insight into shifts in forest cover in the country – ODC makes clear the value of taking a broader view

of what types of data could be beneficial if made more open and accessible. Rather than relying strictly on government data for its offerings of data and maps, ODC, from the start, sought to aggregate relevant information from across sectors to provide a more multi-faceted view of topics of concern to Cambodians. As the site and Cambodian open data ecosystem continue to mature, we will gain a better sense of whether ODC's still largely aspirational impact will have a larger positive effect on public life in the country.