

World Bank presentation

World Bank Land and Poverty Conference 2019 – Catalyzing Innovation

Potential priority topic:

11. New ways of land data capture & analysis (incl. machine learning)

BIO

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Try is currently working with government ministries, especially the Ministry of Planning, to promote localization and capacity building to implement the UN's SDGs in Cambodia.

Try previously worked for an NGO looking at the social and environmental impacts of the extractives industry, helping to build the capacity of indigenous and other communities and NGOs to monitor natural resource management. He has worked as an investigator with the human right organization ADHOC and the private company Indochina Research Limited.

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Open EIA reporting and contracting for sustainable land and natural resource development in Cambodia

ABSTRACT

Environmental impact assessment (EIA) considers potential effects – positive and negative – of proposed large-scale development projects, such as hydro dam construction or gold mining. Cambodian law requires EIA reports for most large development projects, but the general public's access to these reports is limited.

New ways of capturing and analyzing the data in EIA reports could turn the situation around. The data can be digitized, summarized under key categories, translated as required and analyzed. Effective metadata can be developed. Digital maps and visualizations can be being created to make the data accessible.

Making this data accessible online allows local communities that may be affected by a development to better understand what is involved, and act on that understanding.

Greater transparency may lead to growing confidence between the government, citizens and the private sector, greater investment stability and enhanced revenue collection for government. There may be less space for corruption.

PRESENTATION

Environmental impact assessment (EIA) is a process for evaluating key effects of proposed large-scale development projects, often involving the extraction of natural resources or construction of infrastructure. EIA reports can identify positive benefits of a development as well as potentially negative impacts on the environment and local communities.

A key element of an effective EIA process is that it involves all the affected communities. Firstly, how they will be impacted by a potential development and what they think about it is considered. Secondly, they can access information about a project from the EIA report itself.

Public participation in Cambodia is established as a right in the Cambodian Constitution, with speech and association rights, public access to administrative processes and participation in the social, economic, and cultural life of the nation.ⁱ

Article 35, for example, states that:

“Khmer citizens of either sex shall have the right to participate actively in the political, economic, social and cultural life of the nation. All suggestions from the people shall be given full consideration by the grant of the state.”ⁱⁱ

Article 41 includes the sentence:

“Khmer citizens shall have freedom of expression, press, publication and assembly.”ⁱⁱⁱ

Cambodian law requires environmental impact assessment to be carried out and a number of EIA reports have been completed.

The Law on Environmental Protection and Natural Resource Management 1996 included in its general objectives:^{iv}

- to assess the environmental impact of all proposed projects before the government makes a decision on a project

- to encourage and make possible public participation in the protection of the environment and the management of natural resources
- to suppress acts that may affect the environment.

The law specifically requires environmental impact assessment to be carried out on every project, whether public or private. It places responsibility with the Ministry for Environment for considering and then making recommendations based on the assessments.

An Environmental Impact Assessment Department was established within the Ministry for Environment by a sub-decree in 1997.^v

In 1999, further guidance on the required EIA process was provided. Sub-decree No. 72 on Environmental Impact Assessment Process repeated the overall objectives of the law itself, requiring assessments to be carried out and encouraging public participation.^{vi} It specifically requires that the input and suggestions of the public be taken into account.

The sub-decree places responsibility on project owner to conduct an “Initial Environmental Impact Assessment (IEIA)” and then, if required, a full EIA report. Project owners must apply to the Ministry to review a full EIA report and pre-feasibility study where a project “tends to cause a serious impact to the natural resources, ecosystem, health and public welfare”.^{vii}

The Ministry will review the EIA report and will provide findings and recommendations back to the project owner and to the relevant ministry/institution within 30 working days. If the Ministry fails to respond its findings and recommendations as required, the project approval ministry/institution “will assume that the revised IEIA or EIA report has complied with the criteria of this sub-decree”.

The sub-decree also covers existing activities, giving project owners a year to compile an IEIA report and submit it to the Ministry for review and approval. If required, owners of existing projects must compile a full EIA report within 6 months.

The sub-decree required the Ministry to “follow up, monitor and take appropriate measures to ensure a Project Owner will follow the Environmental Management Plan (EMP) while project construction is taking place and accede to their EIA report's approval”.

There were still some big gaps in the legislation and documentation, and these were partly addressed in 2009 by the Prakas (a regulation issued by a minister)

on General Guidelines for Preparing Initial Environmental Impact Assessment and Full Environmental Impact Assessment Reports.^{viii}

Despite the good intentions behind the law and the sub-decrees and a considerable amount of work done, the Ministry did not have the experience or capacity to implement the process comprehensively. Perhaps this is not surprising – the 1996 environment law came barely 5 years after the Paris Peace Accords were signed, marking the end of many years of conflict, and the first general election organized by United Nations. Cambodia was in a considerably weakened state. There was widespread poverty among the population and health statistics were grim. The focus of government was understandably on encouraging development that would lift people out of poverty and boost the economy (and it has had considerable success in these areas).

Some significant development projects went ahead without the required EIA process being implemented, however, and with little obvious regard for the impacts on environmentally sensitive areas or indigenous populations. Mineral exploration licenses were granted, for example, that overlapped protected natural areas.^{ix}

Other projects that could have had positive benefits for the country did not proceed because the process and the way it was implemented created delays and uncertainty.

In 2012 the government began work on updating environmental laws, including preparing a draft Environmental Impact Assessment Law that would update and develop the 1999 sub-decree. While good progress was made on this, in 2015 the government decided to take a much more ambitious step forward and develop an Environment and Natural Resources Code for Cambodia.^x In practical terms this would address wider issues of environmental protection and biodiversity, climate resilience, natural resources management and renewable energy. It would also be relevant to Cambodia's cities, steering them to build sustainable urban environments with effective waste management and pollution plans. It would involve all the ministries that had an interest in sustainable development. Principles behind the development of the Code include public participation, access to information, access to effective remedies, land use planning, collaborative management, and EIA. The Code was also seen as being a mechanism that could help with the implementation of the United Nations' Sustainable Development Goals (SDGs).

The Code is now in its 11th draft. There have been many rounds of consultation at both the national and subnational level. The new draft revises the Ministry of Environment's authority and the overall review obligations into a more sustainable and implementable process. In the new draft, the "EIA Unit"

strengthens the monitoring and reporting system and increases the accountability of the project proponents to ensure effective monitoring and reporting. An Expert Review Committee will be established, which includes officials from the Ministry, other relevant ministries and institutions, as well as independent experts.

The Code contains provisions that are intended to expand access to environmental information for the public generally, including access to EIA documents. Responsibility is explicitly placed on the project owners and government to provide such information, rather than requiring the public to request the information. However, the Code envisions the potential for the public's need to request information as well, and so has enshrined the right of the public to request information in its provisions. Expanding on existing laws, the Code contains details on what information should be provided and what information can be considered confidential.

In fact the Code will go beyond EIAs, which often take place after a considerable amount of work has been done (and when a project may be a *fait accompli*), to consider Strategic Environment Assessment (SEA). SEA is carried out before significant decisions around a project are made. SEA therefore has the potential to influence the outcomes throughout the project's lifespan, instead of providing just a limited review of specific effects and thus a restricted number of options. Decision-makers can consider a wider range of alternatives and minimize potential environmental problems at an early stage. The assessment elements in the draft Code also recognize that some locations are particularly sensitive, such as coastal areas. It also incorporates consideration of health impacts and the potential impact of climate change.

When the Environment and Natural Resources Code will be implemented is not known. Questions around budget remain. Once it is introduced there will be enormous training and capacity building requirements. There will also be a need to carefully link it to the government's existing decentralization programs.

Public Access to EIA Reports

While developments in the law may move the process of producing, considering and enforcing EIA reports in coming years, a major issue has always been the fact that the general public's access to these reports is limited at both national and local levels. What reports have been produced over the years can be hard to find and difficult to understand. The government has given NGO Forum on Cambodia and other civil society organisations (CSO) draft reports to comment on, but frequently the timeframes allowed for response have been tight. There

has been limited technical capacity among CSOs in some cases. Where formats are not consistent this can make responding difficult. Finding out what became of CSO feedback, and whether it had any impact on decisions made or conditions applied to developments, has been difficult as the Ministry of Environment has not shared the final version of EIA reports.

The potential for this process to ensure each development is sustainable and to minimise the harm done to people or the environment is not being realized. The larger potential for it to drive more transparent and accountable governance has not been fulfilled.

This last issue is a crucial one. With limited transparency and accountability, a high level of corruption and many decisions being influenced by considerations of private gain, Cambodia is very poorly placed to effectively deal with the challenges.

To give an indication of the situation, in Transparency International's 2017 Corruption Perceptions Index Cambodia ranked at 161st place out of 180 countries.^{xi} Together with North Korea and Afghanistan, it is one of the poorest performers in the Asia-Pacific region.

The World Bank's Worldwide Governance Indicators show that rankings for Cambodia's control of corruption, rule of law, voice and accountability and government effectiveness have stayed relatively low over the past 20 years.^{xii}

Large development projects in a country with this background can bring consequences on multiple levels. Locally, numerous small communities have had little input into decisions that have a major impact on their lives and livelihoods. Environmental degradation is seen nationally as a problem, and is a serious concern among citizens, but they have limited inputs into policy decisions.

To give just two examples of the impacts, or potential impacts, of development projects:

- Hydro dams could have an enormous impact on the fishery of the Mekong River Basin, the biggest inland fishery in the world. Scientists modelling fish migration have found that: "Planned dams will block critical fish migration routes between the river's downstream floodplains and upstream tributaries." They found that dams on tributaries that had not been subject to this analysis before "would have catastrophic impacts on fish productivity and biodiversity."^{xiii}
- Construction of the Lower Sesan II hydro dam in northern Cambodia meant that more than 5,000 people, mostly indigenous and ethnic minority groups, were displaced from their villages.^{xiv}

Development across Cambodia is underway on an extraordinary scale, often backed by Chinese companies or the Chinese government. Consider just one

project alone: Union Development Group Co Ltd. has a project covering 45,000 hectares of Kiri Sakor district and Botum Sakor in Koh Kong province. The project, which has already broken ground, includes tourism resorts and complexes, a deep sea port and an international airport. The investment, strongly supported by the Cambodian government, is reportedly worth US\$4 billion.^{xv}

Environmental impact assessment is more crucial in Cambodia now than it has ever been. There is a considerable opportunity now to not only make existing EIA reports accessible to people, but to develop a digital resource that can pick up the greater number of reports that will presumably be produced in the future.

New ways of capturing and analyzing the data involved in EIA reports could help. The EIA processes currently taking place deal with large amounts of valuable information, some of it highly technical. But if the current process now or in the future does not make information public in a way that all interested parties can access and understand, then the process risks being 'window dressing' rather than being genuinely fit-for-purpose.

Similar issues apply to government contracts with private companies for development projects. The concept of contract transparency is gaining traction with some industry groups who see it as a means of building trust with communities. A move to open contracting can only lead to greater transparency and accountability in development and governance.

An initiative is now underway in Cambodia to locate, analyze and publish EIA and contracting data so that it is accessible to local communities, government agencies, civil society organisations, investors, donors and international agencies. The objectives range from giving local communities the information about development work that may affect them, to enhancing how development projects are managed at regional and national levels.

Open Development Cambodia (ODC), a locally-registered non-governmental organization that makes a wide range of independent, non-partisan data accessible on its website, is behind the initiative.^{xvi} ODC aggregates data from many sources and creates interactive digital maps and datasets, opening a space for informed discussion of Cambodian development issues. ODC's accessible data is published with a Creative Commons license, so visitors can use the information they find. Data is published in both English and the Khmer language. When ODC was launched in 2011 it was the first open data organization of its kind in Southeast Asia.

ODC's use of open data has actually played two roles in this process: developing the law and then making EIAs accessible for wider use.

NGOs have been able to have an effective and informed input into development of the new draft Environmental Code because of the resources available to them

on ODC's online open-data platform. As a practical way of assessing progress and development of the drafts, ODC published each released version of the draft law with a searchable document archive reaching back to the sub-decree in 1999.

ODC has also digitized thousands of pages of environmental impact assessments that the Ministry of Environment had released only in hard copy. By publishing these reports, NGOs working on the new Code had the background information necessary to make their own analysis of exactly what was happening now and what was required in the new legislation. In its pilot project, ODC has made 10 EIA reports available on its website, complete with translations, summaries and analyses. The next step is to expand the database to 30 documents. (To give an idea of the potential, NGO Forum on Cambodia says it has seen 400 EIA draft reports.)^{xvii}

ODC's EIA Database

The ODC team is working in close collaboration with government, private parties and civil society organisations to obtain hard copies of as many EIA reports as possible. The data is being digitized, summarized under key categories and analyzed. Metadata is developed for effective management. Digital maps and visualizations are being created to present the data in an accessible way. Different map layers can be combined by researchers for their own needs. Interactive tools can be developed. It is translated as required into English and Khmer (a large number of rural Cambodians do not read English, so having everything in their own language is crucial).

Everything is available on the internet. Given the lack of precedents for the undertaking and the broad range of interested audiences, the initiative is likely to have a significantly greater impact on Cambodian society than previously-published reports.

ODC's aim is to eventually build a comprehensive national resource. Sectors where EIA reports can be found include concessions for development of extractive industries (including mining, oil and gas), hydropower dam construction and operation, infrastructure construction (building bridges, roads, railways and so on) and economic land concessions, of which Cambodia has many.

The process will require building relationships with many organizations to acquire all the reports and access the data behind them. While environmental impact assessments are overseen by the Ministry of Environment, most extractive industries are overseen by the Ministry of Mines and Energy. Petroleum activities are overseen mainly by the Cambodian National Petroleum

Authority. The Ministry of Agriculture, Forestry and Fisheries grants economic land concessions.

Breaking down what is in an EIA

There is a wide range of content in environmental impact reports that can be of considerable interest and use to anyone affected by an intended project. ODC's breakdown of the data covers:

- The company behind the proposed project. As well as the full company name - which is the key to other searches - the ODC profile includes a thumbnail company profile. This can include the specific areas of business the company works in and the countries where it operates. (In some cases, knowing this can allow an examination of how a company has worked in those other countries.)
- The company's registration date. There is a significant difference between a company of very long standing carrying out a project and one set up just for the project, with the possibility that it will not be long-lived after the project has been completed.
- The director(s). Again, this allows further research to be done. What is the track record for the individuals concerned? What sort of business reputations do they have?
- The specific location of the project. This gets down to the level of village and commune. This is critical information, obviously for the residents of that village and commune in the first instance. It also has significance for bodies with specific areas of interest. Will the project be on the edge (or even within) a protected area or area of special significance? What are the risks of the project being constructed in that location?
- The size of the area covered by the proposal (in hectares). Again this is critical information, for both the people living in the vicinity and for people with particular interest in protected areas, indigenous communities etc.
- The nature of the land covered by the proposal. The data will include, where available, the areas (in hectares) of evergreen forest, semi-evergreen forest, deciduous forest, non-forest areas and so on.
- Expenditures and revenues. This can give an indication of the scale of what is proposed.
- What plans the project company has. This should obviously include an environmental management plan, environmental monitoring and audit and so on. In some instances a development plan will be appropriate, with information about infrastructure to be developed, support for a healthcare center, schools and so on.
- What environmental and social funds will be provided.
- The contract duration.

- The responsible government entity – for example, the Ministry of Mines and Energy.
- Employment opportunities that may be available for local people.
- Social and environmental impacts. This is crucial information once again for both local communities and wider society in Cambodia.
- Public participation in the EIA process. Who has been consulted? Have the chiefs of affected villages been consulted?
- The name of the company that put together the EIA report. Interested parties will want to know what sort of background the company has, what its track record and level of expertise are, who owns it, and so on. Are there any potential conflicts of interest? Does this company (and the people behind it) truly stand at arms' length from the project company and its team? Where background information about the EIA company is available it is included in the ODC data.
- The address and contact details of the company that put together the EIA report.

In addition to setting out this data in a standardised format, making it much easier to find specific pieces of information, ODC's content also links to PDF copies of the original EIA reports for people who want to dig into the detail in the documents themselves.

The Benefits of Digitizing EIA Reports

Potential benefits include:

- At the local level, communities that may be affected by a development can better understand the findings of an environmental impact report and act on that understanding.
- Greater transparency has the potential to steer government to support projects with more visibly desirable outcomes for communities and the country.
- A more transparent approach may lead to growing confidence between the government, citizens and the private sector, greater investment stability and enhanced revenue collection for government.
- Transparency in contracting brings competitive benefits for government.
- Potential economic benefits can be difficult to assess, but research by McKinsey and others indicate that they could be substantial.
- There may be less space for corruption. The old saying that 'sunlight is the best disinfectant' applies here: corruption thrives more easily where information and transactions are hidden from public view.

(On a side note, ODC published information on strategic environmental assessments and presented a comparative analysis of Greater Mekong Subregion countries and implications for Sustainable Development Goals at the 3rd

Mekong River Commission summit in April 2018. Held in Siem Reap, the summit was attended by the prime ministers/senior ministers from all the Mekong countries. The information that was collated and made accessible online had previously been scattered among many stakeholders in many different forms. The availability and accessibility of the information allowed advocacy groups involved to analyze environmental issues and to develop informed, evidence-based policy and advocacy.)

ODC's initiative is well aligned with other open data projects, such as the Columbia Centre on Sustainable Investment's platform on open land contracts. This online repository aggregates investment contracts around the world related to land investment, including agriculture and forestry. Since its launch in 2015, it has grown to more than 480 documents (including environmental impact assessments) and around 130 contracts from 18 countries.^{xviii}

Conclusion

Cambodia's environment and natural resources are intimately intertwined with the everyday livelihoods and the future of its citizens. In the face of the challenges that Cambodia faces on many fronts, encouraging transparent and accountable governance is vital.

The requirement for environmental impact assessment for large infrastructure or resource extraction projects is well established in Cambodian law but there have been considerable gaps in the implementation. A new Environment and Natural Resources Code is being developed and an advanced version of EIA is included in this. There is no clear indication of when this will become law however.

Until very recently, EIA reports have not been easily accessed. Very often they have existed in hard copy and not been searchable online. It has been difficult for communities affected by large projects to locate information and have a voice and very often there has been significant environmental degradation.

Open Development Cambodia, a local NGO that aggregates development data and makes it accessible online, has begun to digitize EIA reports and make them accessible to everyone with internet access. The potential benefits from this are considerable. Communities affected by projects can better understand the potential impacts and have information they can use to make their views known. At a wider level, greater transparency has the potential to lead to greater support for projects with more obvious public benefits. The environment could be better protected and natural resources better managed. Corruption is less easily sustained where information is more accessible by the public.

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