Building equity with digital tools: illuminating large-scale land acquisition and leasing for public view in Cambodia using a suite of online open-data tools

Keywords:

> Cambodia
> Digital tools
> Open data innovation
> Large-scale land acquisition

SUMMARY
In developing countries with an enormous difference in power between wealthy, connected interests and ordinary people working small plots of land, vulnerable communities risk losing their lands and forests. In Cambodia, large-scale land acquisition and leasing has placed over a fifth of the land area in the control of elites, often for periods of up to 99 years.

Online information, data and tools are a valuable resource for people struggling to retain equity in land ownership. Digital maps are critically important in a country where there is no comprehensive system of land titles. They can identify traditionally owned lands – for example, of indigenous peoples – areas of environmental vulnerability, and so on. One Cambodian organisation has built an online platform with interactive tools and map, freely accessible, that is helping address the power imbalance between rich and poor. This successful model has potential uses far beyond Cambodia.

PAPER
In a developing country where there is an enormous difference in power between wealthy and connected interests and ordinary people working small plots of land, vulnerable communities are at risk of losing their lands and forests. Digital tools are an increasingly valuable resource for people struggling to retain equity in land ownership and control. One Cambodian organisation, staffed and managed by a local team, has built an online platform that is attracting a wide range of users from all sectors of society.

A study of Cambodia's large-scale land acquisition and leasing found that 3.9 million hectares, or 22 percent of the country, is now controlled by the private sector and particularly the local elites. For agro-industrial businesses, mining and energy generation, vast swathes of land have been handed to private control for periods of up to 99 years.

There are numerous instances of land disputes where small communities and indigenous communities claim their property has been taken and their forests cut down. Land ownership in Cambodia is not yet covered by a comprehensive system of hard title, so vulnerable communities are often at risk.

Cambodia's systems of governance were largely destroyed during the Khmer Rouge regime and civil war in the 1970s and 1980s. Today, Cambodia's central, regional and local governments have tight resourcing limitations. This and the incomplete land titling system mean that vulnerable communities cannot rely on the state to guarantee them continuing

occupation of their land and ownership of their natural assets. Commercial growth in Cambodia, particularly around the exploitation of natural resources, has been explosive.

Civil society organisations (CSOs) play a key role in supporting at-risk communities. It would be extremely difficult – virtually impossible – for families and small communities to take effective action themselves because of their lack of resources. Of all land-owning farmers, 41% own less than 0.8 hectares (ha) of land, with one fifth owning less than 0.4 ha. Many have extremely limited education and no funds to travel to fight for their case.

The most vulnerable include 24 groups of indigenous peoples whose communities are often located in isolated rural areas. They are the traditional managers of an estimated 4 million hectares of forests. The timber in these forests and underground resources such as gold are very attractive to large scale commercial interests.

The actions that are required in maintaining equity are defining the areas that have traditionally been in the ownership of local communities (in the absence of a comprehensive land titling system) and protecting these against land-grabs by companies and powerful individuals.

In some cases, equity may be achieved by prompting government action. There have been cases where the government, pushed into action, has downsized or cancelled leases, or put pressure on companies to take a particular action to end the dispute. There have been other instances where the government has brought the parties together to negotiate.

In some cases, some form of equity is achieved by people being able to negotiate compensation for loss. This means identifying the boundaries of ownership, identifying actors behind large-scale developments, and then setting down a framework of information to use as a basis for discussion.

Open Development Cambodia (ODC), a locally-registered and staffed NGO based in Phnom Penh, has built a platform with digital resources that can be used by anyone with an interest in equity in land ownership and control.

An example is the use of digital mapping resources and online, searchable data sets. With the online maps, multiple layers can be switched on and off to see, for example, potential overlaps of ownership claims. The ODC dataset for community forests, for example, lists 337 different forests, from those less than 10 hectares to one over 5000 hectares. ODC is continuing to develop a map and dataset for indigenous communities that provides data such as family numbers and land size for different communities.

ODC's digital tools can be used together to:
- identify potential land conflicts. This may be between local communities and areas outlined in mining exploration licences or leased to a company for agro-industry. It may also show potential overlaps with protected forest or wildlife sanctuaries.
- identify who has traditional claims to ownership in an area and who is behind particular initiatives. A company can see at an early stage of planning the communities it may need to negotiate with. Communities know who they are dealing with.
- support business planning and budgeting – ODC's map layers include rainfall figures, flood risk, soil type and other data as an indication of the likely productivity of land.

These obviously have a significant value for anyone wishing to assess the potential productivity/profitability of a business.

Of course much of this data is held by government, but it is often incomplete, may not have been updated for many years and may not be in a format that is publicly accessible. CSOs like Open Development Cambodia played a significant role in producing data and making it accessible. In many cases, ODC's online data has been used by government agencies themselves.

While its own team develop the tools and resources and put them online, this is only part of the work. ODC staff work in many different regions of Cambodia, sometimes with other organisations and sometimes directly with community groups, providing training workshops on the use of the resources.

ODC's data is collected and managed in a single database using a web-based, open-source data management system. Data is available online and downloadable in a very wide range of formats that include PDF, JPG, SHP, GeoJSON, CSV, KML and HTML. One of the key advantages of ODC's platform is that it is not just presenting static information of a single viewpoint or agenda, but it allows users to synthesize the data to their own particular requirements.

ODC has partnered with different bodies, including other NGOs (local and international), universities (local and international) and Cambodian government agencies to share expertise and develop new content. ODC was the first open data initiative of this type in Southeast Asia. It is strongly connected with other open data organisations around the world. What it has built offers significant potential for other developing states in both Asia and the wider world.