

## Development of Land Tenure Databases in Cambodia

**CDRI recently prepared a Cambodia case study in conjunction with an FAO study linking land tenure data to policy-making for agricultural and rural development in developing countries. Dr. Brett Ballard summarises some of the main observations concerning the development of land tenure databases in Cambodia.\***

### Introduction

Land tenure refers to access to and control over land resources, including ownership and customary use rights, as well as leasing and other contractual arrangements. Information about land tenure is central to the design, implementation and monitoring of public policies governing agricultural and rural development in developing countries. In the case of post-conflict countries such as Cambodia,<sup>1</sup> the capacity of the state to mobilise sufficient human and financial resources to collect and house such data is often diminished. As a result, other institutions such as civil society organisations, international donors and private companies may fill information gaps by conducting research that is specific to their own needs. Such activities, however, provide data that may be contradictory and which is invariably difficult to reconcile or integrate, undermining the ability of policy makers and others to formulate and assess agricultural and rural development policies. Poorly organised land tenure databases may also promote socially disruptive practices, such as land grabbing and encroachments upon public land.

This article examines the role that land tenure data can play in policy making, and identifies potential venues for collecting and housing such information in Cambodia. The article concludes that an agricultural census represents the most suitable option over time, but will require donor support for capacity building in data collection design and implementation, as well as analysis.

### Land Tenure Records

Many problems associated with land tenure data collection in Cambodia can be traced to civil conflict, war and the radical collectivisation policies implemented by the Khmer Rouge regime of Democratic Kampuchea (DK) during 1975–79.

Such problems include the mass dislocation of both urban and rural populations, the destruction of cadastral records and maps and the death or flight of most land management professionals.

It is commonly believed that during the post-DK period in the 1980s, agricultural land was farmed collectively in small groups under the *krom samaki* system. The implementation of the system, however, varied from place to place. In some areas, people returned to their original land as early as 1979, while in other areas was farmed collectively for just a few years before being informally divided among villagers. Some villages recorded land distribution outcomes, but in many cases such records were not kept or were subsequently lost.

With the enactment of the 1992 Land Law, people were able to apply for land certificates that confirmed occupancy and use rights to agricultural land. Not more than 14 percent of the estimated 4.5 million applicants have received formal certificates of ownership since then (Chan and Acharya, 2001). In some parts of the country, security was also a significant factor, as fighting between Khmer Rouge insurgents and government forces continued up until 1998. Government offices at the district and commune level, and the homes of village chiefs, were sometimes attacked, and in some cases cadastral records were again destroyed.

Instead of certificates, most people use other documents to demonstrate ownership, such as receipts for land certificate applications and/or land surveys. This system may work well enough in many areas as long as the parties involved accept this kind of documentation. However, in the absence of accurate land tenure records and clearly defined administrative roles and legal procedures, different levels of the administration sometimes provide different types of documents to various claimants. As a result, certain land parcels at any one time may have two or more rival claimants—all producing some kind of documentation to legitimise their claim. Such cases tend to occur more frequently in areas where land use is changing (e.g., agricultural land converting to commercial or industrial uses) and land values are increasing.

### Land Tenure Data and Policy Making

In addition to serving as a potential guarantor for ownership and tenure security, there are several other areas in which the systematic collection of land tenure data can be useful to Cambodian policy makers.

### Monitoring Poverty and Food Security

Approximately 36 percent of Cambodians live below the poverty line. Most live in rural areas and depend on farming for a substantial part of their livelihoods. For this reason, access to and control over productive land assets is an important indicator for food security and progress toward the government's poverty reduction goals, including

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those set out in the National Strategic Development Plan (NSDP) for 2006–2010 and Cambodia's Millennium Development Goals (CMDG). Other indicators concern the availability of household labour and capital assets, as well as income levels broken down by gender of household head. The collection and maintenance of land tenure data, as well as production data, will enable government planners and donors to more accurately target resources to improve food security and poverty reduction.

### ***State Land Management***

Two important components of state land management concern economic and social land concessions. One area in which land tenure and land use data may be relevant for the management of economic land concessions concerns local people's traditional access to and control over land resources, whether it is individual farming households claiming use and ownership rights, or indigenous communities claiming communal use and ownership rights. Many economic land concessions overlap with household or community claims to land. A land tenure database could be useful in planning and implementing economic land concessions, although only to the extent that it included data on potentially affected households and communities. The availability of such information could also help guide authorities in resolving fairly any ensuing conflicts.

Accurate land tenure and land use data are also required in order to plan and implement resettlements through social land concessions. Biddulph (2004), for example, has observed that there is a significant difference between "land being vacant and it being available and potentially desirable for social land concessions". In some cases involving urban resettlements, people were driven away by others who claimed the same land. In terms of desirability, some land that had been set aside was of poor quality and not fit for productive farming. Resettled people who could not develop sustainable incomes tended to return to their previous areas or migrated elsewhere.

### ***Fiscal Decentralisation and Local Service Delivery***

The Law on the Administration and Management of Communes/Sangkats authorises commune councils to establish own-source revenues from tax revenues, non-tax revenues and service fees. Among other potential own-source revenues, Eng and Rusten (2004) have suggested that commune councils could collect an annual service levy from every household residence and business based on (a) the categories of land owned, (b) land size and (c) the types and sizes of structures on the land. They observe that communes "must have access to

reliable data and records on land and property in the communes".

### ***Urban Planning and Development***

Land use planning and management in urban areas require accurate land tenure data. As a city's population grows and its area expands into rural and peri-urban regions, competition will increase among people, private companies and state institutions over access to and control over scarce land resources. The orderly and peaceful transfer of land from rural to urban land use, as well as from public to private uses, requires accurate and transparent data concerning land use and ownership. The capacity of local government to obtain revenues from such transfers through land transaction taxation also requires an accurate database. Another factor concerns the development of infrastructure for transport and other uses. This entails the use of state public land and in some cases the acquisition of private land. A just compensation for land acquisitions requires accurate data.

### ***Research and Policy***

One of the most crucial aspects of policy formulation is research that links land tenure security to various aspects of the development process. For example, it is widely believed that land tenure security promotes investment in productive agriculture practices, including land improvements and capital inputs. Secure tenure is also believed to promote better access to formal credit. As a result, land tenure databases should have the capacity to be linked to other databases, such as agricultural production data, productive assets and capital mobilisation. Strong links of this sort will enable policy makers to target better the allocation of scarce resources.

### ***Improving Land Tenure Data***

The improvement of land tenure data collection in Cambodia will depend on the supply of and demand for accurate, relevant and accessible data. The supply of land tenure data depends on the availability of financial resources and human capacities. The demand for land tenure data depends on user data literacy as well as the accessibility and utility of data in terms of the design, implementation and monitoring of public policy.

### ***Financial and Human Resources***

As one of the poorest countries in the world, the Cambodian government is not yet able to generate sufficient revenue with which to collect, process and maintain land tenure data on a sustainable basis. Cambodia also continues to face serious constraints in technical skills and knowledge, as well as motivation

and incentives, especially in the public sector. Some of these problems can be addressed through short-term interventions, such as training for specific data collection purposes. Such training efforts are, however, often ad hoc in nature and may not fit within the general context of data collection requirements. They are also sometimes constrained by ineffective training methodologies and a lack of training materials. In fact, the problems associated with human resource constraints will require considerable time to address, and will no doubt be costly.

### ***Transparency and Sharing Information***

Public administration in Cambodia is vertically structured and often fragmented. There are few institutional mechanisms that facilitate inter-ministerial or inter-departmental coordination at the national and provincial levels. For a variety of reasons, government officials are often reluctant to share data, which impedes the ability to use data for policy-making purposes. It should be noted, though, that such concerns are now receiving more attention from government officials and a variety of donors. For example, the Statistics Law of 2005, which defines the roles and responsibilities of the National Institute of Statistics (NIS) and other government agencies, represents an important step towards making data more easily accessible.

### ***Inter-operability and Spatial Linkages***

Despite all the work that is being done to develop accurate and reliable databases, data collection continues to be project-specific with a single use, and cannot be easily integrated into a comprehensive information system. The National Department of Geography has established a comprehensive system for coding administrative units (i.e., provinces and municipalities, districts, communes) and village points. This system of common codes makes it possible to join data sets as long as each data set uses the spatial reference codes correctly. Unfortunately, land tenure data sets do not always include geographic reference codes, or they use their own coding systems, which impedes the ability to link one data set with another.

### ***User Data Literacy and Evidence-based Policy***

Data is often perceived to be of limited utility to those who collect it. This factor, combined with low salaries and low education, undermines incentives to collect data in an accurate and reliable fashion. Data collection efforts are rarely if ever monitored, and there are no incentives to promote accuracy. The capacity of policy makers to make effective use of data in the design and monitoring of policy is also inconsistent. Part of the difficulty concerns the uneven experience of policy makers. There is also not a tradition of evidence-based policy making in Cambodia. Recent efforts

concerning national development planning may, however, have some impact on data literacy. As noted earlier, planning efforts such as the NSDP and CMDG place great emphasis on identifying indicators by which progress toward development objectives can be measured.

### ***Institutional Venues for Land Tenure Data***

Some of the criteria for assessing the suitability of potential institutional venues for data housing include (1) inter-operability across and linkages with other data sets, (2) reliability (i.e., optimal accuracy), (3) maximum policy relevance (i.e., utility), (4) comparability across location and over time, (5) capacity for updating and (6) cost effectiveness (e.g., human resources, finances).<sup>2</sup>

### ***Commune Council***

In the future, “own source” revenues will figure more prominently in decentralisation reforms that support greater authority and autonomy of commune councils. This suggests that a service levy system may become increasingly desirable, which would require an accurate land tenure database that could be regularly updated. In principle, then, the commune council may be a suitable institutional home for a land tenure database. This approach, however, is constrained by the lack of human and financial resources. Another shortcoming concerns the difficulty of standardising data collection and record keeping across all communes in a way that can be aggregated at upper levels of the administration. Commune-based land tenure data would probably also not be easily used in conjunction with other data, particularly at the local level, thus reducing its general utility. In this sense, then, the comparability and inter-operability of commune-based land tenure data may be low.

### ***Cadastral Office***

In its National Cadastral Office, the Ministry of Land Management, Urban Planning, and Construction currently maintains the most extensive land tenure database. This database aggregates information from all provinces, thus representing a more or less national database. As the ministry’s Land Management and Administration Project’s (LMAP) systematic land titling progresses, this database will expand significantly. The LMAP, however, is not comprehensive in its geographical reach, and as a result there will continue to be significant gaps in the cadastral records. Also, the cadastral and LMAP data focus solely on land ownership, and as a result do not provide a good sense of leasing arrangements. Moreover, many people involved in land transactions tend to avoid the official registry for various reasons. As a result, such a database may not be easily or consistently updated. It may also not be easily accessible to policy makers or other stakeholders due to concerns about confidentiality and

political sensitivities. These and other problems associated with transparency will require some time to sort out.

### *Agricultural Census*

The Statistics Law of 2005 mandates the NIS to carry out an agricultural census once every 10 years. An agricultural census would represent a single source, one-stop venue for land tenure data that could be linked with other data sets, such as population census data, land use data and GIS maps. This data should include a wide range of factors, including comprehensive land tenure and land use information, as well as other productive assets, and certain demographic information concerning available household labour. An agricultural census would be national in scope and could provide data consistency across administrative boundaries, thus promoting comparability.

There are, however, several concerns regarding an agricultural census. One is timing. The Statistical Master Plan (SMP) observes that it is best to carry out the agricultural census as soon after the population census as possible. Therefore, the population census could help prepare for the agricultural census, perhaps by identifying those households that are engaged in agriculture. Given that the population census is now scheduled for 2008, the SMP suggests that an agriculture census could take place in the second half of 2009.

A second concern is the cost. The current estimate for such a census is approximately \$3.3 million, although this amount could increase during the next several years. While the donor community appears to fully support the population census, it is not yet clear to what degree an agricultural census would enjoy similar donor support.

A third concern is the reliability of data. While many households may be inclined to provide accurate information, there may be a tendency to underestimate land holdings and productive assets, as well as other factors. Presumably, the impact of such problems can be minimised with good training, rigorous pre-testing and comparisons with other data surveys that are considered reliable. For this, there will need to be close collaboration between NIS and the Ministry of Agriculture, Fisheries and Forestry (MAFF) in building capacity in survey design and sampling techniques.

### **Conclusion**

In Cambodia, the state's capacity to collect, maintain and use land tenure data effectively has been severely diminished by years of war and civil conflict. Nevertheless, the development of a reliable and accessible land tenure database is essential for

informing a variety of important public policy matters, including monitoring food security and poverty reduction, state land management and urban planning. In the supply of data, the most serious constraints are human capacities and financial resources. On the demand side, Cambodia lacks a tradition of evidence-based policy making. Important progress is under way in building a professional national statistics and data collection service, but there are significant information gaps in areas concerning land tenure and land use data.

The most feasible institutional venue for land tenure and land use data at this point involves an agricultural census. Although Cambodia has never undertaken an agricultural census, the Statistics Law of 2005 now mandates the NIS to conduct such a census every 10 years. Such a census can and should include comprehensive sections on land tenure and land use data that can be linked to other demographic (i.e., household labour) and production (e.g., assets, yields) data. This will, however, require additional training for NIS and MAFF designers, enumerators and analysts. Given the lack of government resources, donors should be prepared to support this effort, including capacity development measures in data collection design, implementation and analysis.

### **Endnotes**

1. For example, the distribution and productive use of land are subject to fluctuations in prevailing socio-economic and political trends, as well as episodic events such as revolution and war. In this sense, the policy arrangements governing land tenure must be considered in the wider context of history.
2. See Wallace and Williamson (2004).

### **References**

- Biddulph, Robin (2004), *Poverty and Social Impact Assessment of Social Land Concessions in Cambodia: Landlessness Assessment* (Phnom Penh)
- Chan Sophal & Sarthi Acharya (2001) "An Assessment of Land Tenure in Rural Cambodia," *Cambodia Development Review*, October–December 2001 (Phnom Penh: Cambodia Development Resource Institute)
- Eng Netra & Caroline Rusten (forthcoming), *Fiscal Decentralisation: An Exploratory Study on Existing Taxation and Options for Commune/Sangkat Own-Source Revenues*, Cambodia Development Resource Institute Working Paper, draft, November 2004
- Wallace, Jude & Ian Williamson (2004), *Analysis of Statistical Rural Land Tenure Databases for Asia and the Pacific: Final Report* (FAO: University of Melbourne)