State of Land
in the Mekong Region

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State of Land in Cambodia: Marginalizing or Centering Smallholder Farmers?

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Introduction

Since the mid-1980s, after more than a decade of war and political instability, the development of Cambodia has profoundly transformed land resources and land-based social relations. Driven by a prolific and resilient peasantry, growth in the agricultural sector has been particularly astonishing in terms of production. But land is much more than capital to be mobilized in accumulation processes. It is also a resource that shapes and is shaped by social relations between farmers, the State and market actors. Recent changes in Cambodia's land sector have significantly altered land-based relations in ways that have pushed smallholder farmers into the margins of national development. Framed by the contradictions of contemporary development processes, this chapter endeavours to draw a multifaceted and updated picture of the Cambodian land tangle. The first section below provides an overview of key demographic and socio-economic conditions, and changes to these, surrounding the rural and agricultural population and its position within the national socio-economy. The second section provides a descriptive analysis of the land resources base upon which this population depends, including land use and land cover, key crops, and recent changes in these. The third section describes the ways in which these land resources are distributed across society, with a particular focus on smallholders. The remaining two sections describe and assess the status of tenure security and conditions of governance that surround the broader land issue in Cambodia.

The land and the people of Cambodia: A population 'on the move'

According to the latest inter-censal survey, the population figure in 2013 was 14,676,591 (NIS, 2013). Between 2008 and 2013 the annual demographic growth rate was 1.46 percent, somewhat lower than that during the 1998-2008 period (1.54 percent) but definitively higher than that of other countries in Southeast Asia. This decrease indicates that the Cambodian demography is in transition. The total fertility rate is in decline, due to improved education and changing economic conditions, and was estimated in 2013 at 2.8 births per woman (NIS, 2013). Infant mortality is also on the decline and estimated at 33 per 1000 live births (NIS, 2013).

Nationally, Cambodia's population density is 82 inhabitants per square kilometre (NIS, 2013) but the population has been concentrated in lowland areas around the Tonle Sap Great Lake and the Mekong River where population density is much higher than in the peripheral uplands (Diepart, 2015). While urbanization, measured as a percentage of the population living in urban areas[40] to the total population, has increased from 18.3 in 1998 to 19.5 in 2008, and 21.4 in 2013 (NIS, 2013), the vast majority of the population remains rural (Figure 18).

By far the greatest section of the population are of Khmer ethnicity (96.3 percent), with the most important ethnic minorities being Vietnamese (1.5 percent of the population) and Cham (0.5 percent). The proportion of indigenous peoples is generally estimated to range from 1 to 1.7 percent of the population as a whole, most of whom live in the Northeast plateau area where they practice swidden agriculture (Save Cambodia's Wildlife, 2014).

There is substantial evidence to suggest that an increase in the mobility of the population and its redistribution through migration, both within and beyond the national border, have been central to the recent development of Cambodia. According to the 2013 inter-censal survey, 28.9 percent of the population was considered to be internal migrants (in that they had changed their area of residence inside Cambodia) (NIS, 2013). A relatively important migration flow is the movement from rural villages to the city, mostly to Phnom Penh. According to the National Institute of Statistics (2013), rural-to-urban migrants represent 24.5 percent of the total migrant population. Migrants to Phnom Penh come from every corner of the country but migration follows a basic 'gravity model' in that there are concentrations of migrants from provinces with large populations that are close to the capital city (Ministry of Planning, 2012). Another migrant flow has, however, remained practically unnoticed in Cambodia over the past 15 years. This involves people moving from one rural area to another, very often from lowland to upland regions. The phenomenon is significant—nearly twice the rural-to-urban migration rate (representing 58.4 percent versus 24.5 percent of the total number of migrants) (NIS, 2013). To a large extent, these migrations can be seen as an expression of smallholder farmers' agency in responding to rural poverty and landlessness, which is particularly high in lowland regions (Diepart et al., 2014)

[40] Urban areas are designated according to criteria set by the National Institute of Statistics and have the following characteristics: (i) population density exceeding 200 per km^2; (ii) percentage of male employment in agriculture below 50 percent; and (iii) total population of each commune exceeding 2,000 people.

Figure 17: Sex ratio and age class distribution in Cambodia

Source: 2013 Inter-censal Population Survey (NIS 2013)

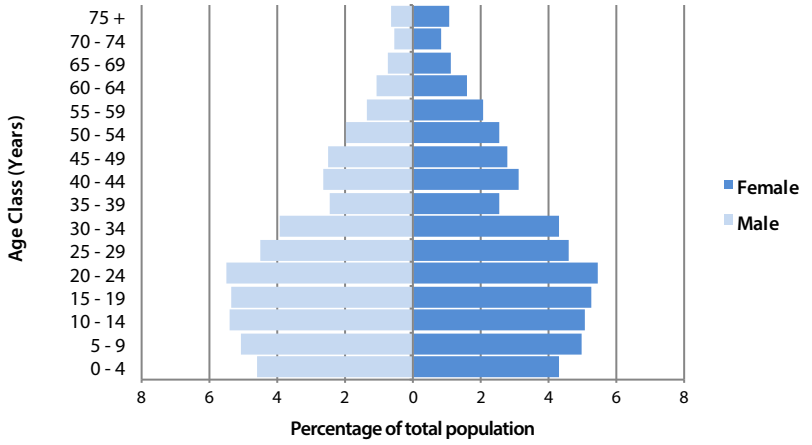
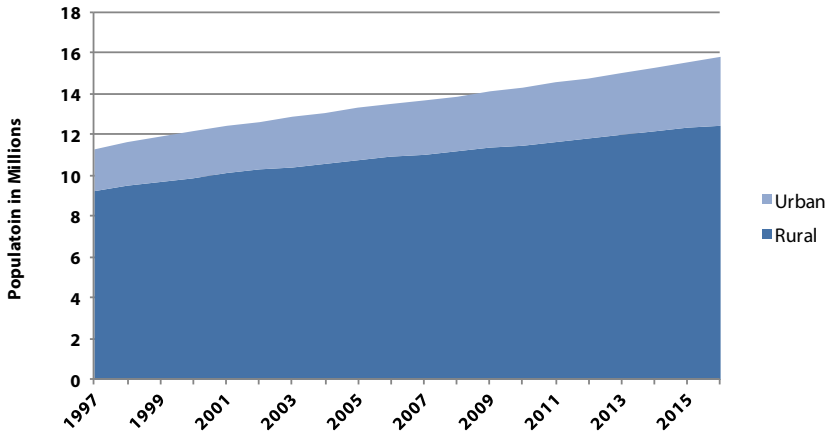


Figure 18: Change in urban and rural populations in Cambodia (1997-2016)

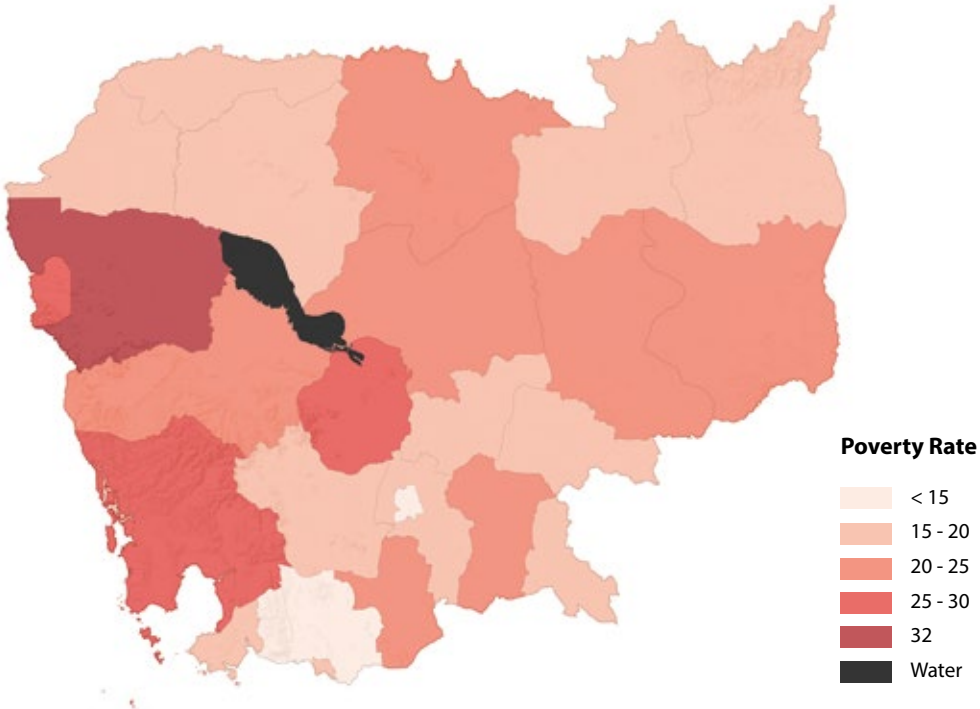
Data Source: World Bank Database



Although poverty in Cambodia has fallen sharply, the rate calculated in 2012 using the World Bank poverty line[41] was still considerable, at 18.6 percent, with almost 3 million people classed as 'poor' and more than 8.1 million in the 'near-poor' bracket (World Bank, 2013). Whereas the World Bank poverty line is essentially based on the level of consumption, the identification used by the Poor Households (IDPoor) Programme of the Ministry of Planning measures poverty based on socio-economic indicators relating to housing, ownership, productivity and food security characteristics (MoP and WFP, 2012). According to this programme, the poverty rate at national level is 20.5 percent. It is widespread across the country, despite important inter-provincial differences (Map 24).

Map 24: Incidence of poverty by province in Cambodia

Source: Ministry of Planning, Sine die



[41] Equivalent to 4,081 KHR per day.

About 90 percent of poor and near-poor people live in the countryside. The actual gap between the rich and the poor has increased in absolute terms, and the majority of households that have escaped poverty have done so by only a small margin—they remain highly vulnerable to falling back into poverty (World Bank, 2013). A key source of risk for slipping back into poverty is related to rural indebtedness, as an increasing number of rural households have borrowed from micro-finance institutions to finance their development (Liv, 2013; Bylander, 2015).

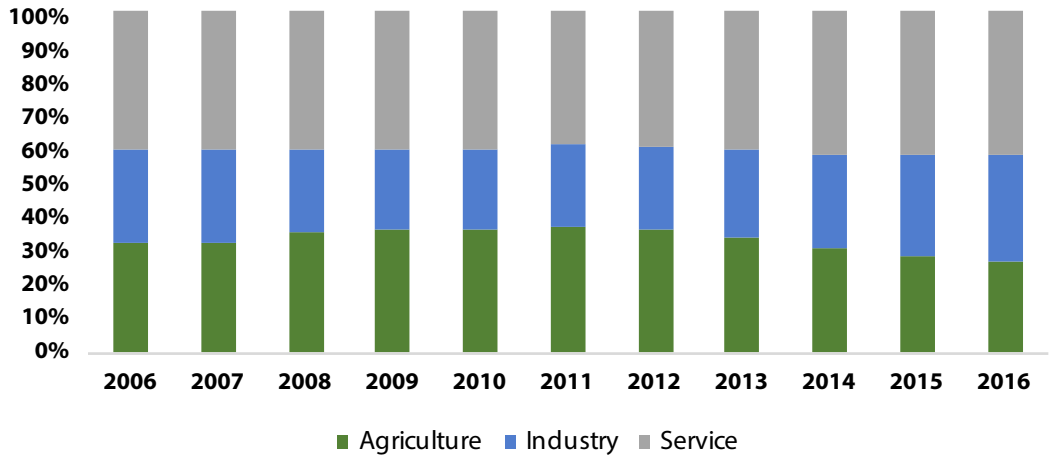
An incomplete agrarian transition

Cambodia remains one of Asia's poorest countries but has witnessed dynamic and sustained growth over the past two decades. Despite a challenging global economic environment, the annual growth in gross domestic product (GDP) between 2006 and 2016 was 6.9 percent. Agriculture is a central pillar of the economy representing 26.7 percent of the GDP (World Bank, 2017), compared with the industry and service sectors that accounted for 31.7 and 41.6 percent of GDP, respectively, in 2016 (Figure19).

The 2008 World Development Report (World Bank, 2007) classified Cambodia as a transforming country wherein the transition of people out of agriculture and rural areas is not keeping pace with the restructuring of the economy. Indeed, agriculture continues to provide the main employment for a majority of the total labour force. According to the commune database (NCDD, 2017), 50 percent of the population above 18 years old (54 percent for males and 47 percent for females) have their primary occupation in the farming, livestock, fisheries or forestry sectors[42]. In provinces with more important urban centres, such as Phnom Penh, Preah Sihanouk,

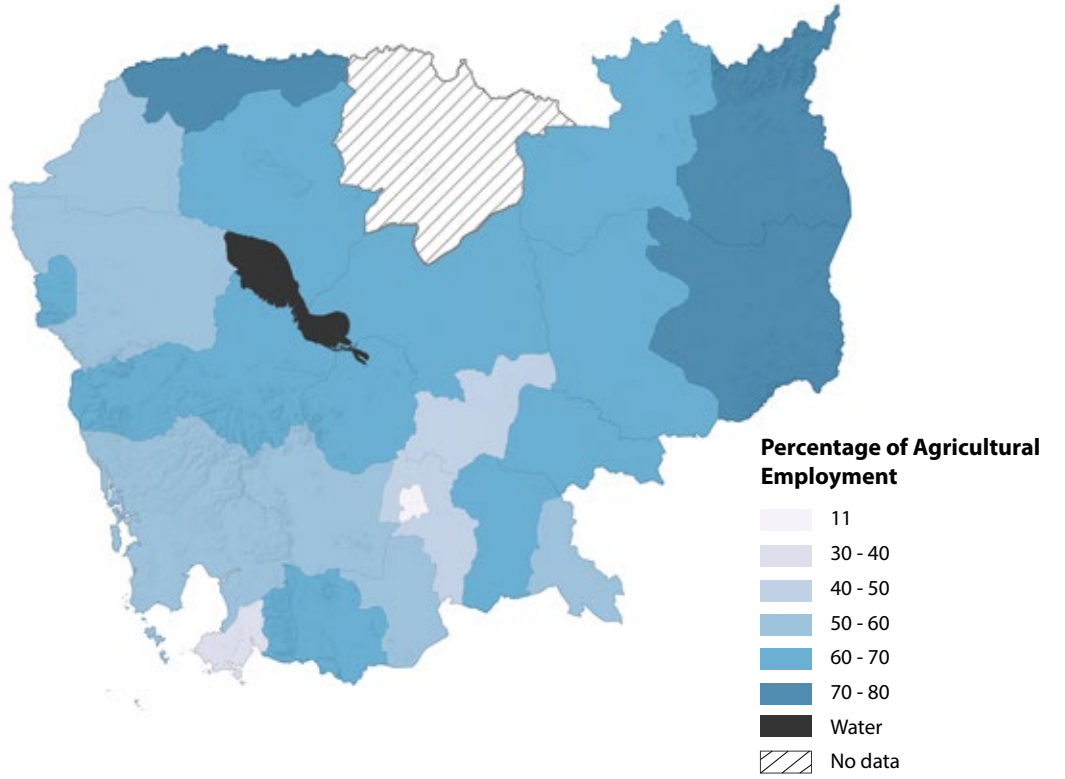
Figure 19: Change in GDP structure in Cambodia by sector

Source: World Bank Database



Map 25: Prevalence of employment in agriculture by province in Cambodia

Source: NCDD, 2017



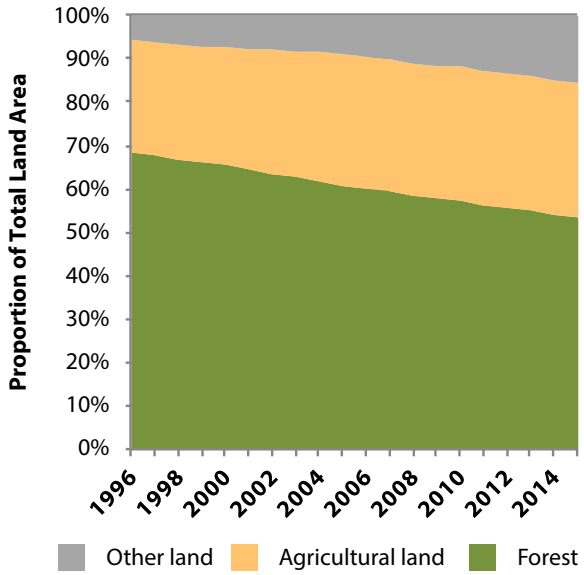
[42] 68.8 percent if both primary and secondary occupation are considered

Kandal, Kampong Cham and Battambang, this percentage is below national average (Map 25).

A recent study suggests that by 2030 the annual increase in the economic labour force in rural areas will be approximately 140,000 people (Diepart, 2016), which is lower than the annual increase that occurred between 1998 and 2004, 221,000 people/year (Lundström and Ronnas, 2006). Yet the transfer of unskilled labour from agriculture to industry and tertiary sectors will lag behind this increase in the active rural population as total job creation in non-agricultural sectors remains limited (Diepart, 2016)[43].

Figure 20: Land use and land cover change in Cambodia(1996-2015)

Source: FAOSTAT



At the same time, the decline of landholding size per household due to demographic pressure on land creates key challenges for farming households. Land markets, which are substantially wealth-biased, exacerbate the problem of access to land. As a result, the number of farmers living with less than 1 hectare has increased and agricultural landlessness was 29 percent in 2011 (Phann et al., 2015).

In this context, there is little doubt that the next generation of smallholder farmers will need agricultural land. And, in a wider perspective, job creation in the agricultural sector as well as an increase in agricultural productivity and income are among the core challenges that rural development policies need to tackle.

The land resource base: Rapid deforestation and agricultural expansion

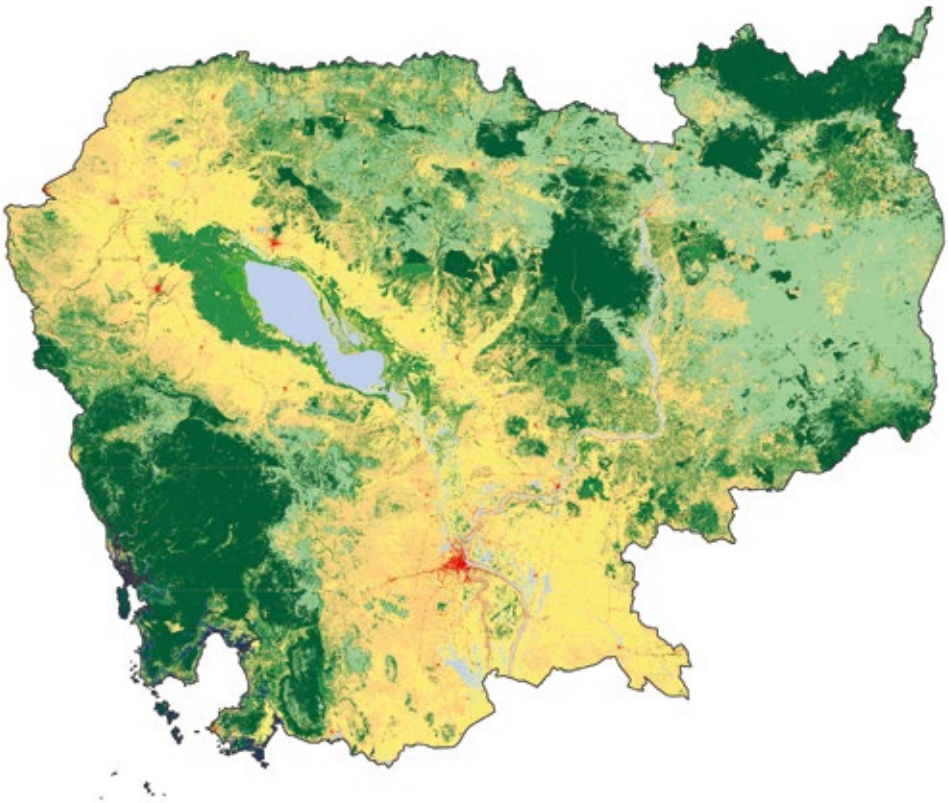
According to FAO land use statistics, Cambodian forest cover decreased by 22 percent between 1996 and 2015, currently around 53 percent of the total land area of the country (Map 26 and Figure 20). The decrease in forest cover, at a steady pace over time, is a contentious issue because illegal logging is regularly reported in the media and is also under the scrutiny of environmental lobbyists. Driven by the regional timber market, deforestation has made space for the expansion of agricultural land and built-up area. The area of agricultural land increased by 19 percent between 1996 and 2015 while the urban and built-up area increased nearly three-fold over the same period (Figure 20).

Map 26: Land use and land cover in Cambodia

Data source:
SERVIR-Mekong (2015)

Land use and land cover types

- Evergreen forest
- Mixed forest
- Flooded forest
- Deciduous forest
- Mangrove
- Grassland
- Urban and Built up
- Cropland
- Rice paddy
- Barren
- Wetlands
- Surface water
- Snow and Ice



[43] The study considers that 40,000 unskilled jobs were created per year between 2008 and 2014, including jobs in the industry and service sectors together. Another study, commissioned by ILO, indicates that between 2004 and 2009, the industry sector created 162,736 jobs (27,122 jobs per year) while the number of unskilled jobs created in the service sector did not significantly increase during the same period (Chandararot and Liv, 2013).

The expansion of agricultural area has been a key dimension of agrarian dynamics in Cambodia since the 1990s. The granting of large-scale land concessions for agro-industrial production (Economic Land Concessions - ELCs[44]) is a key driver of deforestation (Davis et al., 2015) in large part because ELCs have been granted to companies motivated not only by access to land but also—and sometimes as a primary motivation—timber (Ingalls et al. 2018). ELC contracts with the government have provided investors with the right to fell trees, allowing them to circumvent the 2001 timber logging ban (Milne, 2015). Additionally, the loss of forest has also been fuelled by smallholder farmers migrating from lowland to upland regions in search of agricultural land (as noted above). Smallholder migration has also been facilitated by the opening of land in peripheral frontiers and the development of transport infrastructures in previously less accessible areas.

Cropping patterns and diversity at smallholder farmer level

In 2013, family farmers cultivated a total of 3.3 million ha distributed across the different cropping seasons (NIS, 2015). The largest share of this area is dedicated to more than 100 types of annual crops that represent 91.6 percent (2.87 M. ha) of the total cultivated area. With a total area of 2.32 million ha[45] , rice is by far the most important crop cultivated in Cambodia (74 percent of total cultivated area), particularly in lowland regions. Far behind cereals, tuber and root crops comprise the second most important category or crops, followed by cultivated fruit trees, rubber/ tanning crops and edible nuts. Accounting for a smaller but more diverse share are fruit-bearing plants, oilseed crops, leguminous grain plants, spices and other crops (Figure 21).

In the early 2000s, the boom in flex crops[46] has embraced the upland regions of the country. From a marginal area cultivated in 2003, this crop type has now gained considerable traction among smallholder farmers who cultivated 0.29 M ha of cassava and 0.13 M. ha of corn in 2013. Other important annual crops are mung beans and soybeans, each accounting for about 20,000 ha.

Perennial crops represent only 8.4 percent of the total area cultivated by smallholder farmers. Rubber and cashew were the two most important crops totaling 2.6 and 1.9 percent, respectively, of the total. Mango and banana follow with 1.3 and 0.7 percent.

Crop diversity is an important dimension of agricultural systems. It plays a key role in rural well-being, particularly regarding nutrition-sensitive food security and resilience to changes associated with market shocks, climate change, and other drivers. In general, the commercialization of agricultural systems leads to agro-ecological simplification and the erosion of biodiversity and local knowledge, which are key in fostering social-ecological resilience. Diversity helps reduce vulnerability to economic and climate risks as a higher cropping diversity increases the sources of income and reduces the risks associated with changes in agricultural market conditions or with weather-related crop failure.

The Crop Diversity Index (CDI)[47] synthesizes the level of crop diversification of a given administrative or ecological area in a single value ranging between 0 and 1. For Cambodia as whole, the CDI is 0.44. However, as Map 27 reveals, there are important variations between provinces: those that are located in the lowland rice plain are less diversified because of the prevalence of rice in the overall cropping patterns and the resulting homogeneity in the agricultural landscape. The agricultural systems of the upland provinces have a higher CDI and are more engaged in cropping diversification away from rice[48].

Between 2002 and 2016, the yield of both rainy and dry season rice has increased respectively by 73 and 40 percent (Figure 23), not only as a result of the better control of water, but also because of the use of improved varieties that have been promoted for commercialization and export. The increased use of fertilizers and pesticides, and labour intensification on smaller landholdings, have also played a role.

In the upland regions, the advance of boom crops along the retreat of the forest frontier first took advantage of the natural fertility of soils. But heavy mechanization, repeated plough-based tillage (including on steep terrain), and the massive use of chemicals has resulted in rapid soil degradation (Belfield, Martin and Scott, 2013; Hok et al., 2018).

Overall, agricultural development in Cambodia has taken place at the expense of natural capital. According to the Global Land Degradation Information System, the lowland and upland regions in Cambodia are characterized by, respectively, a low and a high status in the provision of biophysical ecosystem services (biomass, soil, water and biodiversity) (Map 28). But in both areas, the provision of these ecosystem services has tended to decline (FAO, 2017).

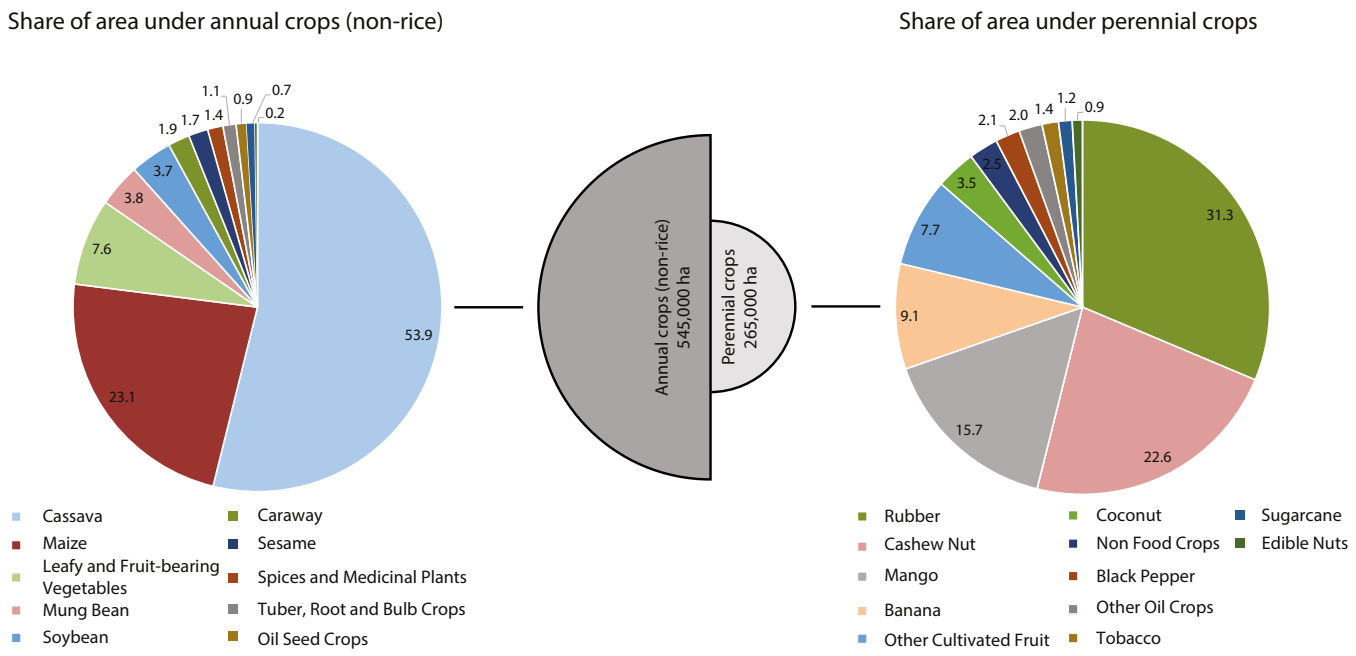
Distribution of the land resource: Asymmetries in the distribution of land resources

In a country like Cambodia where agriculture is vital to the majority of the population, the ways in which agricultural land is distributed is a central concern for

[44] For a more detailed discussion on the extent of ELC in Cambodia, see next section (Asymmetries in the distribution of land resources).
[45] With non-aromatic, aromatic and sticky rice varieties representing respectively 87, 12 and 1 percent of the total rice area.
[46] Flex crops are used for a variety of purposes, including, for example, human consumption, animal fodder, and industrial use.
[47] The formula of the index is: $1-\sum(\frac{ni}{N})^2$, where ni is the cultivated area for crops i and N is the total cultivated area. When the number and relative area of these crops increase, the value of the index increases towards 1. In reverse, a low diversification level is indicated by a value closer to 0 (Diepart et al., 2005).
[48] This Crop Diversity Index considers provincial level data and express the diversification of crops away from rice, mainly in commercial crops. It should be noted that the household level diversity in cropping, livestock and use of common pool resources is not captured in this CDI.

Figure 21: Distribution of main annual and perennial crop types in Cambodia

Source: NIS, 2015



Map 27: Crop Diversity Index by province in Cambodia

Source: NCDD, 2017

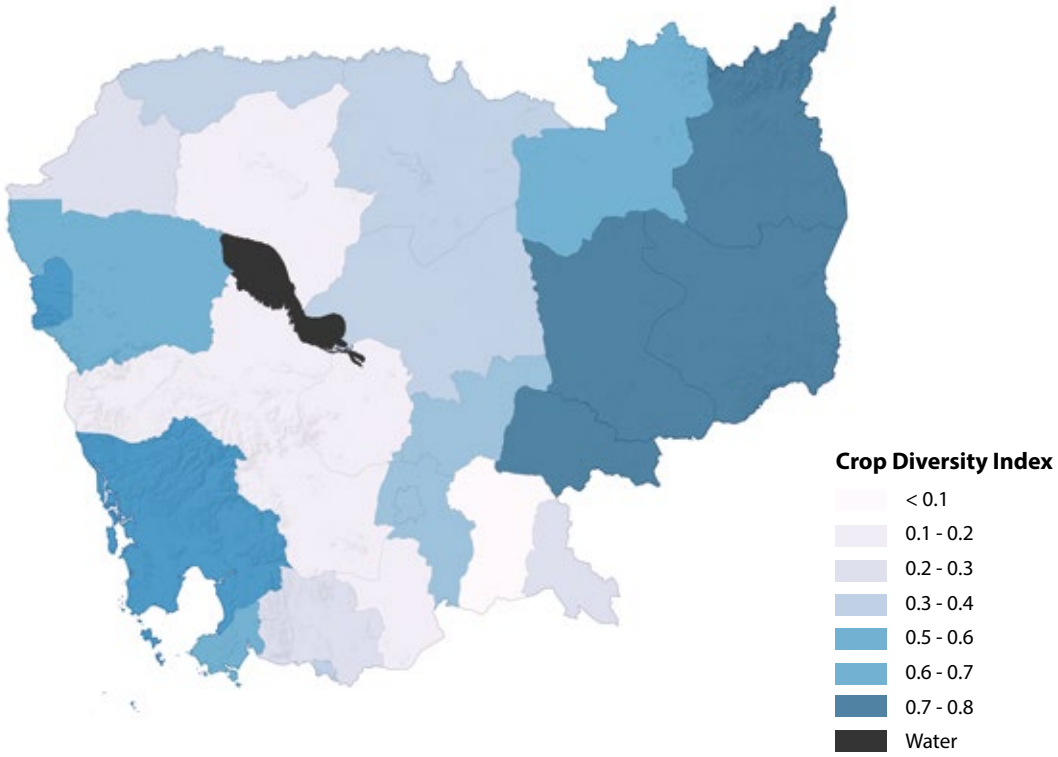


Figure 22: Change in rice cultivated area in Cambodia (2002-2016)

Source: MAFF 2016

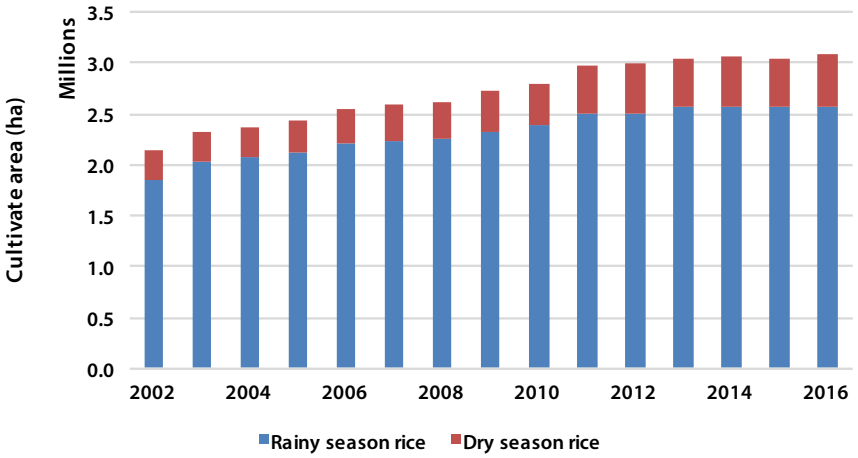
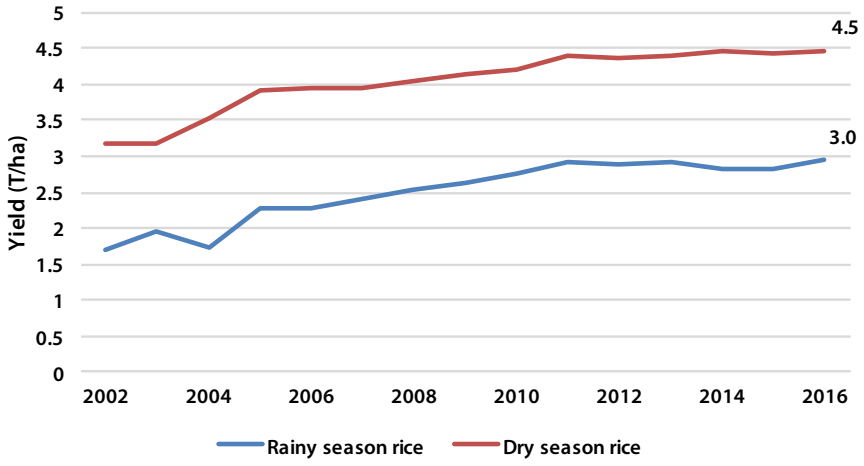


Figure 23: Change in rice yields in Cambodia (2002-2016)

Source: MAFF 2016



development, in terms of production and equity. While smallholders are the cornerstone of the country's agrarian history, recent choices by the government to focus on large-scale development, hydropower and protected areas place limitations on land use and tenure security for smallholder farmers.

Land of smallholder farmers

In Cambodia, agricultural production is predominantly conducted at household level. As of 2013, 85 percent of the total number of households were engaged in some form of agriculture-related activities, and 72 percent of the total number of households in Cambodia (n=2,129,149) managed a so-called agricultural holding[49], covering a total land area of 3.3 million hectares. The average agricultural land size per farming household is 1.6 ha. Among households with agricultural holdings, 73 percent are engaged in agriculture mainly to meet their personal consumption needs (NIS, 2015).

On average, households only have a small landholding area, but land is rather unequally distributed amongst smallholder farmers. The distribution of households per class of landholding size illustrates this inequality: 0.89 million households own less than 1 ha and 1.7 million own less than 4 ha. Only 851 households own more than 50 ha. The Gini Index[50] of smallholder farmers agricultural land distribution is 0.47[51].

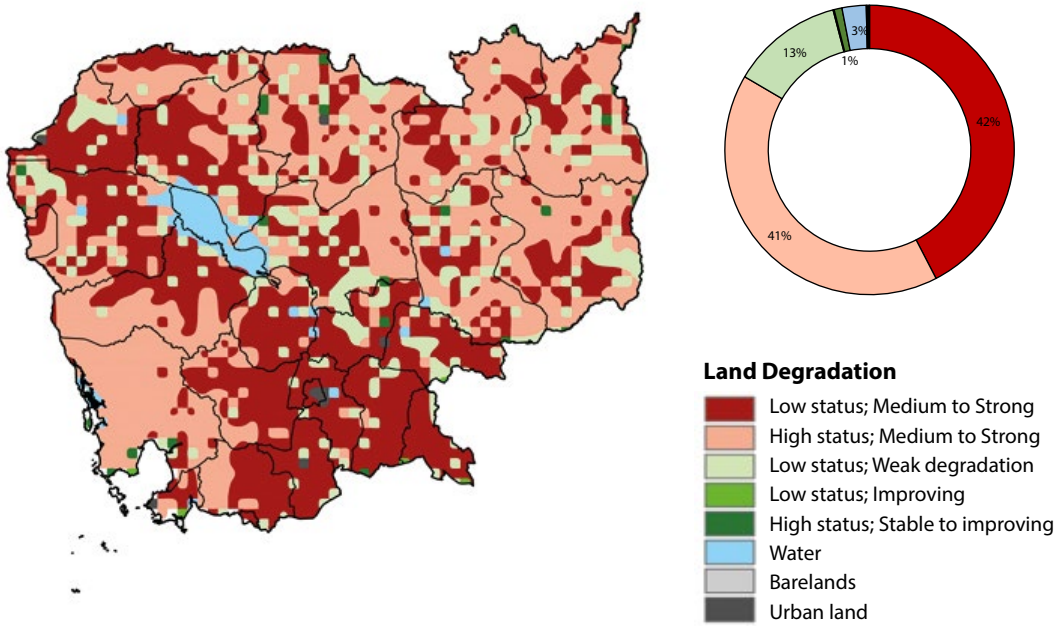
[49] Consisting of at least 0.03 ha and/or with a minimum of two large livestock animals, and/or three small ones and/or 25 poultry.

[50] The Gini Index measures the degree of equality in the distribution of land between land owners. The index values range from 0 (perfect equality) to 1 (perfect inequality). The higher the value, the more unequal the distribution. For more information to understand and interpret the Gini Index, the interested reader can refer to the methods annex.

[51] The calculation of the Gini Index is based on the data presented by the 2013 agricultural census taking into account landed households (and not the agricultural concessions). Agricultural landless households are under-represented, so that the actual value of the Gini Index is probably higher.

Map 28: Land degradation in Cambodia

Data source: FAO GLADIS



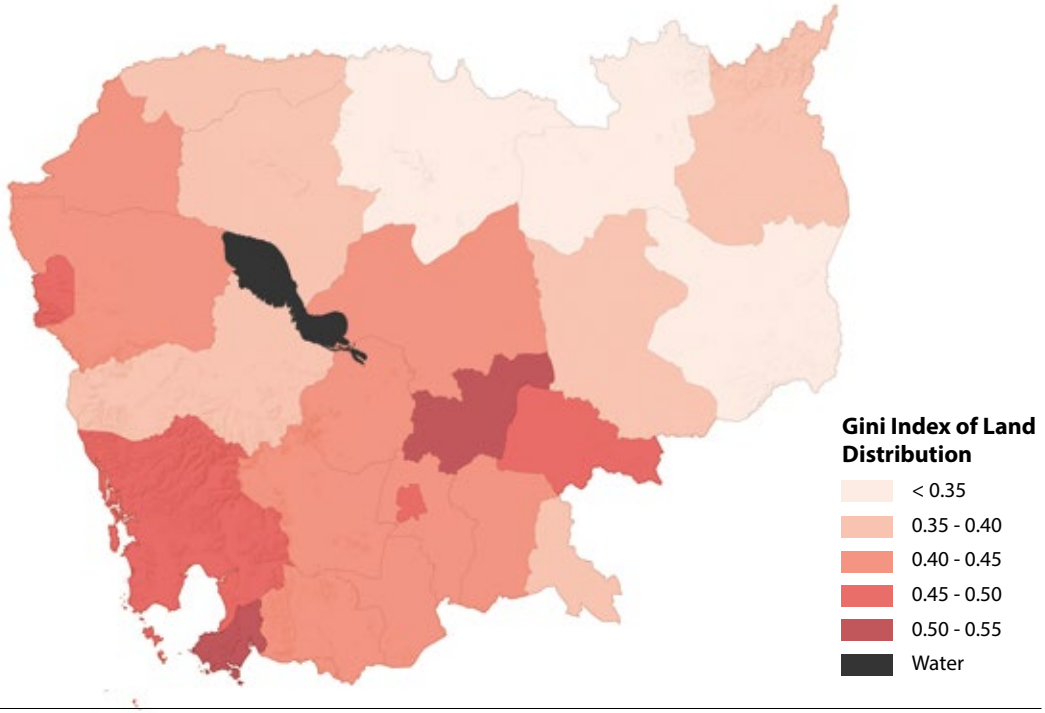
The provinces with important demographic density (e.g. Kampong Cham and Tbong Khmum), or that have come under high pressure from urbanization (e.g. Phnom Penh and Preah Sihanouk), and/or a high degree of agricultural commercialization (e.g. Pailin) each have a Gini Index score above the average (Map 29).

More generally, three processes of land access differentiation explain this relatively unequal land distribution among smallholder farmers. First, an age-based phenomenon of land concentration and atomization has placed households who acquired more land from the *Krom Samaki* [52] at an advantage compared with younger households who have acquired their land mainly through inheritance. Second, from the 1990s onwards, unregulated access to additional land in the forest periphery of the village was possible through either reclamation of land (secondary forestland) cultivated prior to the war or was contingent on good connections with village, commune and/or district authorities. Third, land purchase and sale markets have enabled some households to purchase land from those in financial crises that have forced them to sell part or all of their agricultural land base.

A more recent trend is the increasing role that new actors, very often outsiders to farmer communities, have played in appropriating land to establish medium size landholdings (50-500 ha). Local elites, businessmen, members of the military and entrepreneurs have acquired land through sale or grabbing of State land as speculative investment or to engage in agricultural production. These new acquisitions further challenge the access to and the control of land by smallholder farmers.

Map 29: Gini Index on smallholder farmers agricultural land distribution by province in Cambodia (excluding large scale land concessions)

Data source: NIS, 2015



[52] During the 1980s, a *Krom Samaki* comprised a small group of 10-15 families who used the land, agricultural equipment and draught animals collectively.

State land concessions

In Cambodia, State land is managed under different institutional arrangements including concessions, which provide the right to use State land for a specific purpose and a specific period of time enforced under a contract (East-West Management Institute, 2003).

Economic Land Concessions

Economic Land Concessions (ELCs) are large tracts of land granted by the government to domestic or foreign companies through specific contracts for agricultural and agro-industrial production. Contracts cover areas of up to 10,000 hectares (Royal Government of Cambodia, 2005) and the maximum concession period has reduced from 99 years to now 50 years (Civil Code 2007, Article 247).

The Ministry of Agriculture, Forestry and Fisheries (MAFF) chairs the Technical Secretariat on Economic Land Concessions and is the official body that manages data on ELCs. Most recent data published by MAFF provides an aggregate figure of 229 ELCs covering a total of 1,220,000 ha (MAFF 2018). These figures are official and have been recently updated to incorporate the latest data following a review of ELCs and the land titling campaign under Order 01, which excised lands out of ELC areas. Since the evaluation and registration of ELCs is not yet completed, it is likely that the total size of land under ELCs could eventually be reduced further.

ELCs were previously allocated through two different Ministries - the Ministry of Agriculture Forestry and Fisheries (MAFF) and the Ministry of Environment (MoE), but Sub-decree 69 (Royal Government of Cambodia, 2016) abolished this dual responsibility and the management of 73 ELCs has now been transferred from MoE to MAFF[53]. It is important to note that all ELCs originally allocated by MoE are located in a protected area as defined by the mandate of this ministry. Thirty seven percent of the total area of all ELCs is covered by rubber plantations, by far the most important crop. Other trees and crops in ELCs are mainly perennial (acacia, teak and palm oil) and some are temporary (sugar cane and cassava). All ELCs are located in the peripheral uplands, with a higher concentration in the Northeast.

The granting of ELCs was expected to stimulate agro-industrial activities requiring a large capital investment that the State did not have. They also aimed to develop so-called "under-utilized" land in order to increase employment in rural areas and generate State revenue at national and sub-national levels. But ELCs have not met these expectations: they often overlapped land that was already cultivated or used by smallholder farmers, resulting in land conflicts on farmland or common pool resources and thus exerting a direct, negative impact on the livelihoods of these farmers. These conflicts are exacerbated by the movement of land-poor migrants from lowland areas seeking available lands in the peripheral uplands for their livelihoods. These internal migrations clearly demonstrate the genuine need for land by smallholder farmers, a phenomenon that has not been adequately addressed in the land reform (Diepart, 2016).

Well aware of these problems, the government issued an important directive in 2012, Order 01, with three measures aiming to strengthen and increase the effectiveness of the management of ELCs (Royal Government of Cambodia, 2012). Order 01 established a moratorium on the granting of new ELCs, a titling campaign (see below) as well as a full review of existing ELCs in an effort to discover which companies were in violation of the contract they signed with the government. A contract typically requires the companies to properly demarcate their land, sort out social conflicts peacefully, and effectively operate their ELCs within one year of their approved Master Plan. Since Order 01 was issued, there has been a real effort by the government to improve the management of ELCs in the country. The work conducted under this reform is still ongoing.

In order to offer more specific details to the public, a few organizations are monitoring ELC development based on data available in the public domain (Royal Gazette, Sub-decrees, business registration, and contract, etc.). But the recent evaluation of concessions initiated in 2012 has considerably changed the agro-industrial development landscape in Cambodia and has made the work of these organizations rather tedious.

Table 4: Number and area of ELC before and after Order 01 in Cambodia

	Number	Area (ha)	Source
Total ELC before Order 01	257	2,004,592	Author's computation based on ODC dataset
Reduction of ELC under Order 01	126	779,338	Author's computation based on ODC dataset
Total ELC after Order 01	227	1,225,254	Author's computation based on ODC dataset
Total ELC after Order 01	229	1,220,000	MAFF official report (MAFF 2018)

[53] The MoE retained jurisdiction over 13 concession areas (89,253 ha) focusing on eco-tourism, hotels and resorts.

The figures on ELCs that are presented here result from the authors' consolidation, correction and analysis of the Open Development Cambodia (ODC) dataset[54] that goes back to 1996. ODC data has the advantage of being very detailed and spatially explicit but might not fully capture the changes such as downsizing or revocation of ELCs that have occurred both before and after 2012. So, in the event that a concession was cancelled and reattributed to another company, the concession area is double counted. Our computation of ODC data suggests that by mid-2012, just after the promulgation of Order 01, Economic Land Concessions had been granted on a total area of 2,004,592 ha. However, when we compute the area based on geographic attribute of the concession provided in the ODC dataset, the total land area is rather 2,407,831 ha. This suggests that companies may have occupied a larger land area than specified in their concession contract. And as explained above, these figures are likely an overestimation of the actual area granted as ELC due to the double counting problem in the dataset.

To capture the development of ELC reform in the aftermath of Order 01, we computed the tracking of area change carried out by ODC. The computation indicates that 131 ELCs do not appear to have been adjusted while 126 ELCs have been revised implying a total area decrease of 779,338 ha. This includes 96 ELCs that have been downsized by a total of 620,667 ha and 30 ELCs have simply been revoked (158,671 ha). As a result, after the Order 01 reform, the total number of ELC contracts amounts to 227, covering a total area of 1,225,254 ha (1,598,165 ha based on geographic attributes). The figure is quasi equivalent to MAFF's official data reporting 229 active ELC projects covering a total area of 1,220,000 ha (Table 4). Both data sources are almost fully matching. The difference is probably due to the fact that ODC data might have missed the latest legal documents of the ELC evaluation and ongoing registration of state land. Following the ELC cancellation, there was a question regarding how the cancelled ELCs should be managed in the future. A particular point of concern revolves around the extent to which cancelled areas will be maintained as State Land (thus allocated to other State-managed functions) or redistributed to smallholder farmers. There were some studies and interests to stimulate discussions about State Land Management and the policies to deliberate these competing interests, but it was somehow explicit that MoE only transferred the remaining active ELCs to MAFF while cancelled ELCs inside protected areas will remain under MoE jurisdiction for conservation. On the other hand, MAFF was instructed[55] to implement a reforestation program on cancelled ELC under its jurisdiction. Also, unpublished case studies by NGO Forum (Ung, 2017) and MRLG (Ngin et al., 2017) have showed that parts of these cancelled ELC areas were being occupied by smallholders and other private land uses. This still indicates a competition for lands between smallholders and state managed functions.

When these ELCs are included in the distribution of land, the Gini Index of land distribution in Cambodia reaches the value of 0.60, which indicates higher inequality than the land distribution among smallholder farmers only (Gini Index of 0.47). If we factor in the area of ELC based on their geographic attribute and other agro-industrial development schemes (non-ELC plantations), the Gini Index of land distribution goes up to 0.64.

Social Land Concessions

Social Land Concessions (SLCs) are tools the government has promoted to address the problem of landlessness and near landlessness. They constitute a legal mechanism to transfer private State land for social purposes to the poor who lack land for residential and/or family farming purposes. The national SLC programme differentiates between three types of concessions: one managed by the government to address civil poor landlessness; a second managed by the government to address the demobilization of soldiers from the Royal Armed Forces; and a third co-managed between the government and donor organizations also to address civil poor landlessness. Full ownership rights to SLC land are only acquired after 5 years and full occupation and use of the allocated land.

According to the Ministry of Land Management, Urban Planning and Construction (MLMUPC), as of June 2014 the total number of recipients of Social Land Concessions for all three programmes was 12,374 families in respect of 113,167 ha of land registered (for settlement, infrastructure and agriculture) (MLMUPC, 2014). This represents only 5 percent of the total area granted as Economic Land Concessions.

Mining concessions

The mining sector in Cambodia is in its infancy. The granting of licenses is managed by the Ministry of Mines and Energy under the 2001 Law on Mineral Resource Management and Exploitation. Most of the licenses granted so far are for exploration only but an important milestone was reached in 2017 when the government issued exploitation licenses to four companies covering a total area of 52,500 ha (Sum, 2017).

The information on mining concessions is highly fragmented. A recent government report suggests that mining exploration and exploitation licenses consist of 366 projects and cover a total area of 819,451 ha (Ung, 2018). On the other hand, the compilation made by the Open Development Cambodia team[56] of all exploration licenses granted from 1995 to 2014 includes a list of projects covering a total area of 2.7 M ha[57] (Map 30). Among this, a total area of 885,180 ha is referred to as 'Government Data'. The rest (1,884,456 ha) is referred to as 'Other data' and consists of other mining licenses reported

[54] https://opendevelopmentcambodia.net/dataset/?id=economiclandconcessions (with latest updated as of November 2017)
[55] SCN 120 (08/02/2017) whereby the senior minister in charge of Council of Ministers authorizes the Ministry of MAFF to implement the policy of re-foresting degraded forest along Private Public Partnership
[56] https://opendevelopmentcambodia.net/dataset/?id=mining-license-in-cambodia-1995-2014-type-dataset
[57] The specific measurement of areas is missing for 85 licences.

Chan Sophal,
Director,
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Perspectives: Unequal distribution of land

Cambodia has been changing rapidly from a closed, poor and war-torn but forest rich country to one that is very open to foreign investment and trade. The pressures on land and natural resources that impact more than two-thirds of the country's area come from multiple sides, ranging from poor to rich, and local to international firms. With both poor state capacity and loose governance, the distribution of state land tends to be skewed to those who can pay. Even the smallholder farmers have received a fairly large chunk of public land, much more was allocated as large-scale concessions to domestic and foreign investors. As a result, there tend to be either too-large or too-small landholdings. In this globalized world, a more efficient, viable and competitive farm size could be between these two for smallholders to operate.

in media, company profiles, NGO reports and other publications. Given the magnitude of the area at stake and the volatility of mineral prices on the global market, there is little doubt that the mining sector will have a significant impact on smallholder farmers in the years to come. In addition to the area dug up, externalities such as dust and water pollution will potentially impact smallholders.

Protected Areas

In an effort to promote nature conservation, a royal decree for Protected Areas was issued in 1993 to empower the Ministry of Environment to lead, manage and develop a Protected Area (PA) system to preserve Cambodia's land, forest, wildlife, wetlands and coastal zones (Royal Government of Cambodia, 1993). The decree encompassed twenty-four areas and a total of 3.2 million ha (Royal Government of Cambodia, 1993), including three Ramsar sites signifying the global importance of Cambodian wetlands (Save Cambodia's Wildlife, 2006). This decree distinguished four different types of protected natural areas: national parks; wildlife reserves; protected scenic view areas; and multi-purpose areas. To these should be added the protected forests managed under the mandate of the Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries that cover a total area of 1,531,357 ha.

As a result of sub-decree 69, however, the management of nine protected forest areas was transferred to MoE in 2016. The sub-decree has also officially created eight new Protected Areas but two PAs have recently been cancelled (Royal Government of Cambodia, 2018). In 2017, three new biodiversity conservation corridors covering a total of 1.5 M ha were added to the system of Protected Areas (RGC 2017). Altogether, the total land under Protected Area management now equals 7.5 million ha (41 percent of Cambodia's total national territory).

A law on Protected Areas has provided clearer information about the management of Cambodia's nature conservation areas (Royal Government of Cambodia, 2008). Among other things, it proposes that each Protected Area is structured into four different spatial zones: a core zone; a conservation zone; a sustainable use zone; and a community zone, which embraces area(s) to be used for the socio-economic development of local communities.

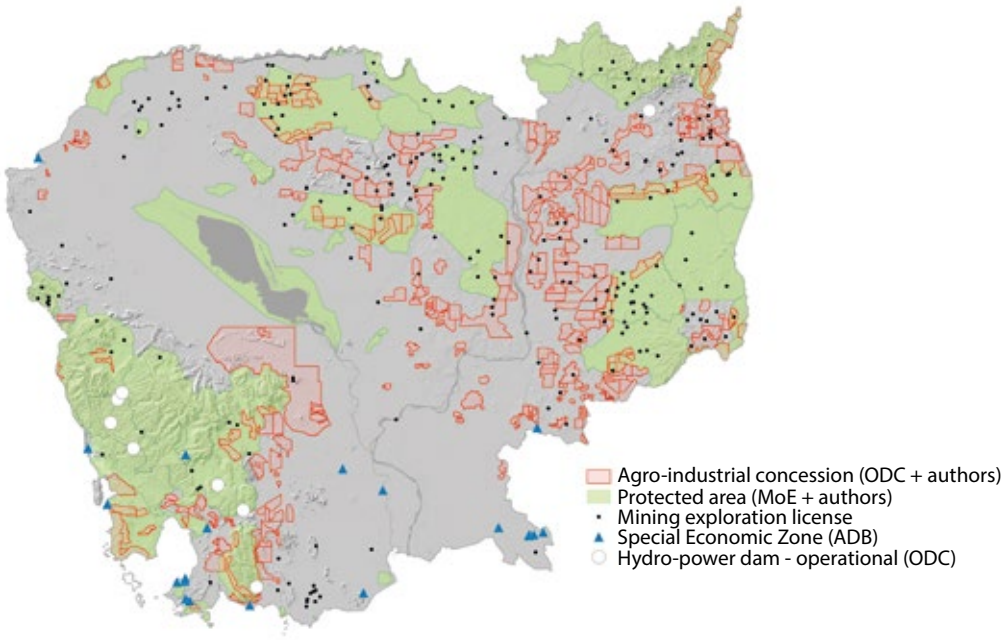
Hydropower dams and reservoirs

The Ministry of Mines and Energy is the main government body responsible for the development of the Cambodian hydropower sector. The State power company Electricité du Cambodge (EdC) is responsible for the daily management of the electricity generated. The granting of licences is not regulated under one, but multiple sector laws. A 2003 report by the government (MIME, 2003) identified 60 potential sites for the construction of hydropower dams and plants, and the list has been upgraded to 73 areas located on the mainstream of the Mekong River, on its tributaries and in the southwest of the country (Map 30). Eight hydropower dams and plants are now operational and connected to the national grid or provincial power systems.

There is, however, considerable controversy related to the development of dams and reservoirs due to the massive resettlements they initiate, the direct negative impact they have on fisheries (disruption in fish migrations and decline in fish stocks), and the loss in forest resources that harm local livelihoods and reduce biodiveristy. A constant criticism is that impact assessment studies are not properly conducted, thus the externalities associated with the construction of the dams and reservoirs are not properly mitigated. Set against the dramatic increase in the production of electricity these hydropower plants generate, the risks associated with development of all these potential sites is considerable (Koponen, Paiboonvorachat and Munoz, 2017).

Map 30: ELCs, Protected Areas, mining concessions, hydropower dams and Special Economic Zones in Cambodia

Note: The map shows the original areas covered by ELCs that were not revoked as a result of Order 01. Mapping by the authors



The rapid development of hydropower dams in Cambodia, particularly on the Mekong and its tributaries (e.g. the 3S dams) puts water resources under stress and threatens the ecosystems downstream. The Tonle Sap hydrological system is notably at risk. Its unique flood-pulse system and annual flow reversal creates an area of high biodiversity and productivity, which are conspicuous in the fish catches and the large number of livelihoods that are sustained around the lake (Arias et al., 2014). Scenarios predict that the disruption of the natural hydrological pattern of the Mekong River due to hydropower would change the flood-pulse system of the lake: the dry-season water level would rise and wet-season water levels would be lower. These alterations would affect ecological interactions and erode the productivity basis of the ecosystem (Kummu and Sarkukula, 2008).

Recognition and formalization of smallholder land rights: An incomplete and fragmented process

In a context of uneven distribution of land resources, the ways in which smallholder farmers' land rights are recognized and formalized are crucial to secure their access to land and natural resources.

Securing land tenure by titling

An important element of the current market-based redistributive land reform implemented world-wide is the implementation of land titling which rests on the assumption that private property rights should be granted to people in order to increase the security of their tenure. In Cambodia, land titling is based on the possession of land—recognized with a land certificate signed by local authorities—that started before the promulgation of the 2001 Land Law. In practice, it means that any parcels of land cleared or put under cultivation after 2001 cannot be legally possessed, thus are not eligible for a land title.

According to a 2017 report from the Ministry of Land Management, Urban Planning and Construction (MLMUPC, 2017), 4,881,063 titles[58] were granted to urban and rural families, which constitute about 66 percent of the total estimated number of land parcels to be titled. Of these, 3,626,158 titles were granted under the so-called Systematic Land Registration scheme (SLR). Even if SLR teams are now deployed throughout the country, the areas targeted by SLR are exclusively located in the central lowland plain where the decentralized and locally driven distribution of land to the households by the *Krom Samaki* allowed for the peaceful creation of secured land tenure arrangements (So, 2009). A considerable number of private land titles have been delivered through a second form of titling process, the so-called sporadic land registration. The latest update from MLMUPC suggests that 613,282 titles have been issued through this procedure (MLMUPC, 2017).

As part of Order 01 released by Prime Minister Hun Sen on 7 May 2012, an unprecedented land titling campaign was conducted in those areas where the land rights of people and companies overlapped with State land. The campaign specifically tried to address land security inside or adjacent to ELCs through private land titling. However, the implementation diverged from this objective as the areas for the Order 01 titling scheme were largely expanded to include other land categories such as forest concessions, Protected Areas, forest rehabilitation warrants from provincial authorities and even Social Land Concessions.

[58] This number includes titles issued under the systematic and sporadic land registrations as well as Order 01 land titling campaign

According to the ministry, a total of 641,623 titles were issued during the Order 01 land titling initiative (MLMUPC, 2017), covering a total surveyed area of 1,010,429 ha of which 92 percent (927,848 ha) was formally recognized for 317,444 families. The most important share (30 percent) of land excised from State land came from uncategorized forest areas based on a 2010 Forest Cover Assessment, while only 25 percent came from ELCs. It seems clear from these results that the Order 01 titling scheme was a comprehensive attempt to address the problem of tenure insecurity associated with the occupation of State land in the Cambodian uplands. It was also a recognition (sparking an effective response) by the government that land appropriations resulting from the lowland/upland migration movements described above had resulted in a huge population of people who were living on land that they appropriated after 2001, and in respect of which they had virtually no land tenure security under the 2001 Land Law institutions (Diepart, 2015).

Recognition of Customary Tenure

Communal land titling for indigenous peoples (IPs)

The possibility offered by the 2001 Land Law to grant a collective title on communal land is particularly significant as it was the first time in Cambodian history that this had occurred (Save Cambodia's Wildlife, 2014). Communal land titling was conceived to provide indigenous peoples communities (IPCs) with legal rights over their land in order to preserve their identity, culture and customary practices. Communal land titling applies to a variety of land uses: residential, or for use in swidden agriculture including fallow land, as well as for spiritual and burial forests (Royal Government of Cambodia, 2009). The process implies the recognition of the indigenous communities by the Ministry of Rural Development, the recognition of the Indigenous Peoples Community as a legal entity by Ministry of Interior, and the issuance of the collective land title by the Ministry of Land Management, Urban Planning and Construction. According to a recent update, a total of 166 communities have engaged in the process of applying for a collective land title. Of these, 117 indigenous communities have been recognized by the Ministry of Rural Development and 111 have been recognized as IPCs by the Ministry of Interior. Among them, only 19 communities (1,784 households) have completed the process and received land titles covering an area of 16,271 ha (MLMUPC, 2017).

The co-management of forest and fishery resources

In the early 2000s, the idea of co-management gained traction in Cambodia in order to ensure the sustainable management of natural resources, biodiversity conservation and the protection of smallholder farmers' production systems. The approach rests on the premise that local communities living close to forest and fishery resources are best suited to manage these sustainably: locals know the local ecosystems better than anyone else, and they are in a better position to identify management problems affecting those ecosystems and to identify possible solutions (Li, 2002).

In early 2000, the overall area of forest concessions had been drastically reduced from the initial high of 7,084,215 ha to 2,163,600 ha (Save Cambodia's Wildlife, 2006). As an alternative, the Forestry Administration and donors alike started to encourage the establishment of Community Forestry management arrangements, schemes through which a community-based association co-manages a determined area of forest in cooperation with the local Forestry Administration for a period of fifteen years, which is renewable. Fifteen years after the release of the sub-decree on the Community Forestry initiative (Royal Government of Cambodia, 2003), the contribution of community forests remains modest. The most recent data indicates that there are 485 Community Forestry schemes in the country covering a total surface area of 410,025 ha (Forestry Administration, 2015). However, most Community Forestry areas are located in severely degraded forest, while the best forest areas are often turned into Economic Land Concessions.

Similarly, the area covered by fishing lots was reduced by 56 percent in 2001 (Mom, 2009). In areas released from fishing lots, the Fisheries Administration and donors have encouraged the establishment of Community Fisheries, mainly on the Tonle Sap flood plain but also along the Mekong River and in the Mekong delta. In 2012, the remaining fishing lot system was totally abolished. According to recent statistics, there are 358 Community Fisheries (537,837 ha)[59] officially registered by the Fisheries Administration involving 115,000 families (Save Cambodia's Wildlife, 2014).

These co-management schemes have introduced State rules in resource management that are at odds with the endogenous logic of land and resource management of the commons (Diepart, 2015). However, the development of co-management was an important response to the general outcry against the fragmentation of territories that accompanied the enclosure of common pool resources across the country.

Communities in Protected Areas

Protected Area management offers room for the recognition of land (use) rights of smallholder farmers. As part of Protected Area zoning (see above), the community zone entails area(s) used for the socio-economic development of local communities. It might contain residential land, rice fields and field gardens (chamkar), and should protect the rights of indigenous people. The release of land titles is possible in these areas but there should be authorisation by the Ministry of Environment in compliance with the Land Law.

[59] Area size available for only 235 Community Fisheries.

In the sustainable use zone, an agreement can be signed between the Ministry of Environment and local communities to give them the right to co-manage and exploit the so-called Community Protected Area for a period of 15 years. According to statistics from the Ministry of Environment, there are 151 Community Protected Areas in Cambodia covering a total land area of 255,076 ha (Ministry of Environment, 2018).

Land governance: The gap between statutory rules and practices

The land governance assessment below is based on consultation with 10 land experts in Cambodia who were selected to represent a variety of organizations and land-based sectors[60]. The discussion was structured in accordance with a framework consisting of 12 indicators[61]. Figure 24 shows the average scoring of each indicator.

Clear legislation but narrow support for smallholder tenure security on State land

In Cambodia, the existing legal framework is thought to be generally strong and provides relatively clear recognition of the tenure rights of smallholder farmers in terms of their access to land and natural resources. The legislation that recognizes the agricultural and cultural practices of indigenous peoples is particularly advanced as it prescribes a distinct titling process that is unique within the region.

Where feasible, possession rights are upgraded to ownership rights through titling. On State land, however, smallholder tenure rights are weak with regard to Land Law institutions and they are often not scrupulously implemented, especially in cases where land is of high value and is sought after for development. A particular concern is the lack of coordination between State institutions who compete for State land and do not seem to tackle private interests that are at odds with laws and regulations relating to State land management.

Public consultation to support the formulation of policy and law has improved considerably over the years, but has tended to be limited to donors and NGOs, and has excluded farmer communities. Another concern is that the feed-back provided during public consultations lacks clarity and, as a result, is not obviously used in decision-making.

Asymmetry of power between smallholder farmers and other actors

An asymmetry of power structures is evident in land-based social relations in Cambodia. When faced with competing claims by powerful actors, smallholder farmers are often unable to exert their rights.

Land conflicts between smallholder farmers and well-connected actors are widespread, particularly on State land. The figures released about land conflicts are divergent because the methodologies and criteria used to compute them are based on different definitions of conflicts and rely on different sources of information. However, they all suggest that the magnitude of the problem is not small. During the period 2000-2013, land conflicts and resultant evictions affected 770,000 people (ADHOC, 2014). According to data collected by LICADHO (2014), the number of people affected by State-involved land conflicts between 2000 and 2014 passed the half-million mark. Based on a monitoring of media sources and reports from network members, the NGO Forum on Cambodia (2015) reports that a cumulated number of 352 land disputes broke out between 1990 and 2014, of which 77percent of cases are still unresolved.

In cases of expropriation and eviction, there are regulations pertaining to compensation but these are not fully implemented. Smallholder farmers with ownership titles tend to receive better compensation than others who have possession certificates (soft titles) while both are better positioned than farmers who do not have any documentation covering the land they occupy. When it is paid, compensation is often inadequate, below market values and usually does not allow the household evicted to buy an equivalent piece of land in a new location.

Mom Sary,
Staff officer at the Department of Community Livelihoods, Ministry of Environment

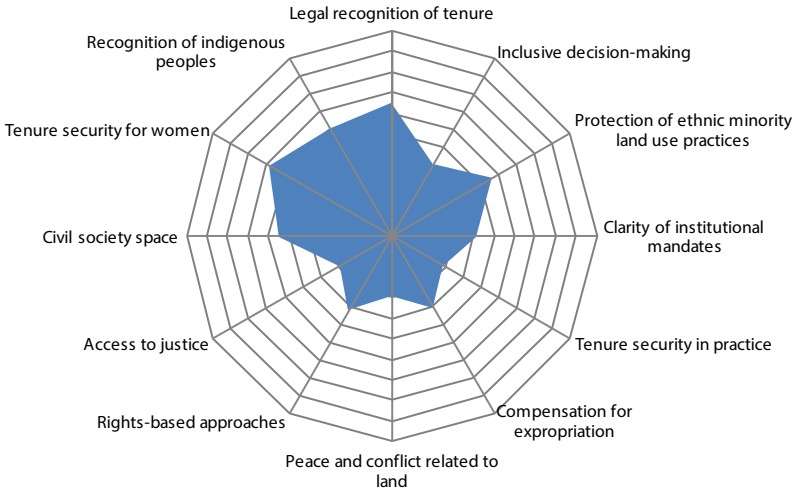
Perspectives: Community Protected Areas

In implementing CPAs I see challenges directly relating to a lack of clear land tenure designations, land registration, and the effective implementation of co-management and zoning plans. These complex challenges result in land use conflicts in and around PAs. CPAs are a key component of the PA process in Cambodia. They can play an important role for involving communities to better identify and address the challenges of sustainable PA management. To date CPA members have been involved in identifying CPAs boundaries, CPA management needs and use zoning, which are significant for sustainable use of forest resources. To ensure sustainable management of PAs, clearer land tenure designations, land registration, management and zoning plans should involve key stakeholders including indigenous people from the beginning. The government should work with the local people and authorities to provide land titles, and work with them to develop technical rice farming skills and other sources of livelihoods.

[60] The methodology used for the land governance assessment is presented in the methods annex.
[61] Each expert was invited to provide a score on a five-point Likert scale from very poor to very good.

Figure 24: Land governance assessment in Cambodia

Source: Expert consultation, Phnom Penh



Limited ability of smallholder farmers to claim and defend their tenure rights

Rights-based claims are the basis for titling under the systematic land registration system, but these are recognized and applied only in certain contexts. When possession of the land started before the promulgation of the Land Law in 2001, rights-based claims are fully recognized. However, these claims are often overridden when the people occupy State land where they are considered to be illegal occupants. When it comes to IP communities, rights are often overridden despite the existence of laws and processes for granting collective titles.

The avenues through which smallholder farmers can lodge complaints are somewhat limited. Courts and cadastral commissions exist but are not efficient in resolving cases, and smallholder farmers often cannot afford these services. To fill the gap, a significant number of NGOs work on land rights in Cambodia, providing important support for the communities who are affected. Strategies are not always streamlined and effective, and cooperation is often lacking. However, non-governmental and civil society organizations continue to play an important role in monitoring land issues and providing community support.

Gender-sensitive land tenure rights

The Ministry of Land Management, Urban Planning and Construction, which is directly in charge of titling, now ensures that land is registered in the names of both spouses. This change in the titling procedures has refocused the position of women in terms of land tenure security as they are now recognized as equal to men in eligibility for a land title. This is reflected in recent statistics relating to land titling, which show that 63 percent of all titles are conjugal, 18 percent of all titles belong to women only, 11 percent to men only and 9 percent represent joint ownership (ML-MUPC, 2017).

Conclusion: Centering the role of smallholder farmers

Despite the important structural transformation of its economy, Cambodia remains predominately rural, and agriculture occupies the vast majority of its population. The agrarian transition has remained largely incomplete as the creation of jobs in industries and services do not keep up with the increase of the active population in rural areas. In this context, there is little doubt that the next generation of smallholder farmers will need agricultural land.

Agricultural systems have evolved at an impressive rate. The intensification of rice production has been effective and agrarian expansion has contributed to the formidable growth and diversification of agricultural systems. Smallholders have been a cornerstone of this evolution. Nevertheless, the recognition of full ownership rights through titling, which started from the lowlands and has more recently expanded to upland areas, has not been able to keep up with the demand for secure tenure rights and still leaves many smallholder farmers in a state of insecurity.

Rural poverty is still prevalent. It particularly hits the central rice-growing lowlands where demographic pressure on land results in the atomization of agricultural land holdings. A key response by smallholder farmers has been mobility, which has considerably modified the balance between land and labour. People are moving to cities but, due to the limited capacity of the non-agricultural sectors to create sufficient labour for a growing population, people have mainly migrated to upland areas in search of land and employment.

Florian Rock,
Independent consultant

Perspectives: Insecure land tenure

Due to inconsistencies in the Land Law 2001 today millions of Cambodian smallholder farmers live on and make use of what is considered under the law as State land. This leaves them in a precarious situation! The only legal options to transform this land to privately owned land are by declaring this land a Social Land Concession area (which prescribes a very lengthy process) or by allocating the land as a donation by the state to the smallholder (as applied in Order 01). In both cases the land user remains dependent on actions to be taken by the state, on the benevolence of the Government and has no possibility to activate this process himself or herself. If the situation of these smallholders is not fairly regularized and regulated, profound tenure insecurity will limit investments in land and uncontrolled appropriation of large areas of land by migrating families and powerful, well-connected individuals will continue.

This movement has conveyed contradictions as these migrations have been completely at odds with the Land Law institutions. In fact, land appropriated is deemed State land and smallholder farmers have had virtually no land tenure security on it. This contradiction has been particularly problematic because the government has granted Economic Land Concessions on large tracts of State land. The lack of coordination between both processes has resulted in an overlap of land claims and conflicts.

The government has provided some key responses to these issues. The Order 01 initiative, aiming to title land appropriated by smallholder farmers on State land and to a complete revision of Economic Land Concessions, has partly addressed the associated difficulties. However, the nature of the problem has not changed as the implementation of Order 01 was stopped short and has left out most areas where smallholder farmers occupy State land. Yet, smallholder farmers continue to take centre stage in the development of the country. Their inclusion remains a central concern in the conversation about the future development of Cambodian agriculture.

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State of Land
in the Mekong Region

The Mekong region is in the midst of profound social and environmental change. Despite rapid urbanization, the region remains predominantly rural with more than 60 percent of its population living in rural areas, the vast majority of whom are engaged in agriculture. This population not only continues to grow, but is also disproportionately poor and reliant on land and forest resources. Due to the rapid growth of its agricultural sector, the Mekong region has become a global centre of production and trade for commodities such as rubber, rice, cassava, wood, sugar cane and oil palm. While accelerated flows of global investment and the trade of land-intensive commodities have contributed to growing GDP and the enrichment of some societal actors, outcomes have been highly unequal. The benefits of development have largely accrued to the urban elite, while costs have largely been borne by the rural poor, transforming rural land relations and presenting new insecurities for land tenure. The Mekong region may be at a tipping-point, and transformational change is imperative to sustainably address the needs of agricultural smallholders.

Data and information are urgently needed to understand these changes, to inform more equitable and innovative decision-making, and to monitor the outcomes of these decisions. The State of Land in the Mekong Region thus brings together key data and information on current status and trajectories of change with regard to land resources, their social distribution, and the conditions of governance that shape them.

The **Centre for Development and Environment (CDE)** was founded as an interdisciplinary research centre of the University of Bern in 2009. CDE's commitment is to advance innovative approaches in research and education that are appropriate for transforming highly complex sustainability problems into widely supported sustainable development pathways. For this purpose, CDE engages in social learning and co-production of knowledge in several world regions, invests in long-term partnerships, and connects local realities to global debates. CDE employs around 100 people from 17 disciplines, has activities in the Mekong region and four other regions of the global South as well as in Switzerland and Europe.

The **Mekong Region Land Governance Project (MRLG)** aims to improve land tenure security for smallholder farmers in the Mekong Region through contributing to the design and implementation of appropriate land policies and practices. It responds to national priorities in support of smallholder farmers, so that they can be secure and make good decisions on land use and land management. The project has been operating in Cambodia, Laos, Myanmar and Vietnam since April 2014. MRLG is a project of the Government of Switzerland, through the Swiss Agency for Development and Cooperation (SDC), with co-financing from the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Government of Luxembourg. The MRLG project is implemented by Land Equity International (LEI) in partnership with GRET Professionals for Fair Development and supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

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